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2019 Annual Ground Water Monitoring Report

Midco I and II Sites
Gary, Indiana

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ACRONYMS AND ABBREVIATIONS

AS	air sparge
AWQCxF	site-specific chronic ambient water quality criteria
CALs	clean-up action levels
CFR	Code of Federal Regulations
DCA	dichloroethane
DCE	dichloroethene
ERM	Environmental Resources Management, Inc.
ESD	Explanation of Significant Differences
GWETS	ground water extraction and treatment system
I&MP	Investigation and Monitoring Plan
IDEM	Indiana Department of Environmental Management
IDW	investigation-derived wastes
LNAPL	light non-aqueous phase liquid
MCLs	maximum contaminant levels
mg/L	milligrams per liter
MIBK	methyl isobutyl ketone
MNA	monitored natural attenuation
MRC	Midco Remedial Corporation
TOC	total organic carbon
PCE	tetrachloroethene
PSQLs	project-specific quantitation limits
QAPP	Quality Assurance Project Plan
Ramboll	Ramboll US Corporation
SIM	selected ion monitoring
SM	Standard Method
SOW	Statement of Work
SVE	soil vapor extraction
SVOC	semivolatile organic compound
TCE	trichloroethene
TestAmerica	TestAmerica Laboratories, Inc.
TOC	total organic carbon
ug/L	micrograms per liter
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOCs	volatile organic compounds

1. INTRODUCTION

On behalf of the Midco Remedial Corporation (MRC), Ramboll US Corporation (Ramboll) conducted the 2019 annual ground water monitoring event at the Midco I and Midco II Sites located in Gary, Indiana from November 12 to 21, 2019. This monitoring event was conducted in accordance with the ground water monitoring program presented in the Midco I and Midco II Groundwater Monitoring Plans as specified in the *Groundwater Remedy Prefinal Design, Midco I and II Sites* (AECOM Technical Services, Inc., May 2013). The revised ground water monitoring plan for the annual events, including the list of monitoring wells to be sampled and the parameters to be analyzed at each monitoring well, is presented in Tables 1-1 through 1-4. To assist in the evaluation of natural attenuation trends, methane and total organic carbon (TOC) were also analyzed in samples at select monitoring locations at the Midco II Site.

At the Midco I Site, ground water samples were collected from 26 monitoring wells and 1 extraction well, as presented in Table 1-1, on November 19 through 21, 2019 as part of the 2019 annual ground water monitoring event. To assist in the evaluation of the distribution of 1,4-dioxane at the Midco I site, a ground water sample was collected for analysis of 1,4-dioxane from an additional two monitoring wells. Monitoring locations G-30, K-30, O-10, O-30, and EW-2 could not be sampled in November 2019 due to standing water that restricted access to the monitoring locations.

At the Midco II Site, ground water samples were collected from 50 monitoring wells and 4 piezometers as presented in Table 1-3 on November 12 through 18, 2019 as part of the 2019 annual ground water monitoring event. To assist in the evaluation of the distribution of cyanide; 1,4-dioxane; and monitored natural attenuation (MNA), the following additional monitoring locations were sampled:

- Ground water samples were collected for the analysis of cyanide from the four piezometers (PT-5, PT-10, PT-11, and PT-12) and one monitoring well (AB-10) associated with the Midco II Cyanide Area near monitoring well MW-1R on November 13 and 14, 2019.
- Ground water samples were collected for the analysis of 1,4-dioxane from monitoring wells P-30 and P-50 and piezometers P-1, P-2, P-3, and P-4 on November 14 through 18, 2019.
- Ground water samples were collected for the analysis of methane and TOC at the designated MNA wells presented in Table 1-3.

The analytical results from the 2019 annual ground water monitoring event are presented in this report. A detailed discussion of historical trends and the MNA results from the previous annual ground water monitoring reports has been presented in the MNA Groundwater Remedy Demonstration Report (November 2018).

1.1 Sampling and Data Validation Procedures

The sampling procedures followed during the monitoring event are described in Section 3.3 and Appendix B of the Investigation and Monitoring Plan (I&MP) for the monitoring wells, and an Environmental Resources Management, Inc. (ERM) letter[1] as modified by the United States Environmental Protection Agency's (USEPA's) approval letter[2] for the piezometers.

[1] Letter from ERM, dated April 13, 2000.

[2] Letter from USEPA, dated April 18, 2000.

In 2005, dedicated bladder pumps were installed in the monitoring wells and piezometers.[3] The revised sampling protocol was transmitted to USEPA on June 13, 2005.[4] Peristaltic pumps were used to sample the following: 1) the Midco I monitoring wells that are located within the containment barrier wall area; 2) those wells where the depth-to-water was below the bladder pump intake; 3) those monitoring wells that do not have dedicated bladder pumps; 4) monitoring wells with dedicated pumps that were frozen and inoperable; and 5) the piezometers and extraction wells. New polyethylene tubing was used at each monitoring location to avoid cross-contamination between monitoring locations. Peristaltic pumps were used to sample the following monitoring wells, piezometers, and extraction wells:

Midco I Site: MW-2S, MW-2D, MW-3S, MW-3D, MW-4D, MW-5S, MW-5D, MW-6S, MW-6D, C-30, D-10, H-30, P-10, S-10, S-30, and EW-4

Midco II Site: MW-1R, MW-50R, MW-2I, MW-3S, C-10, H-10, N-30, P-30, R-10, S-50, V-10, W-10, W-30, W-50, Z-10, AA-10, AC-30, AD-10, GA-50, P-1, P-2, and P-3

The monitoring well and piezometers associated with the Midco II cyanide area (AB-10, PT-5, PT-10, PT-11, and PT-12) were also sampled using peristaltic pumps.

The locations of the monitoring wells, piezometers, and extraction wells for the Midco I and Midco II Sites are shown on Figures 1-1 and 1-2, respectively. The parameters for which the collected ground water samples were analyzed and the project-specific quantitation limits (PSQLs) are presented in Tables 1-2 and 1-4. TestAmerica Laboratories, Inc. (TestAmerica) of University Park, Illinois, conducted the analysis of ground water samples. The annual list of parameters (and their associated analytical methods) as presented in Tables 1-2 and 1-4 included: Volatile organic compounds (VOCs; USEPA SW-846 Method 8260B); 1,4-dioxane (USEPA SW-846 Method 8260B Selected Ion Monitoring [SIM]); select metals (USEPA SW-846 Method 6020A),[5] and cyanide (USEPA SW-846 Method 9014). At the Midco I Site, the ground water sample collected from monitoring well MW-4S was also analyzed for pentachlorophenol (semivolatile organic compounds [SVOC], USEPA SW-846 Method 8270C) as elevated concentrations of the analyte were detected in this monitoring well during the 2010 through 2012 annual ground water monitoring events. In addition, ground water samples from select monitoring wells were analyzed for MNA parameters, which included alkalinity (Standard Method [SM] 2320B), total and dissolved iron, dissolved manganese (USEPA SW-846 Method 6020A), nitrate (SM 4500 NO3 F/ SM4500 NO2 B/calculation), and sulfate (USEPA SW-846 Method 300.0).[6] Monitoring wells sampled for MNA parameters at Midco II were also analyzed for dissolved methane (USEPA Method RSK175) and total organic carbon (TOC; USEPA SW-846 Method 9060A).

Laboratory Data Consultants, Inc. performed the data validation of the Level IV reports. The validation and analytical procedures are described in the 1993 Part 1 Quality Assurance Project Plan (QAPP), the 1996 QAPP Addendum, and the 2009 QAPP Addendum. The data validator randomly selected 10% of the data for validation. Revisions to the data qualifiers suggested by the data validator were applied to the data. As no major issues were identified during the 10% data validation process, additional validation of the remaining 90% of the data was not conducted and the data qualifiers of the non-validated data were

[3] Fresh Teflon bladders and Teflon-lined polyethylene tubing was used at each monitoring location to avoid cross-contamination.

[4] Electronic mail transmittal from Felix Moran, Ramboll, to Richard Boice, USEPA, dated June 13, 2005.

[5] The Midco I Site list of metals included cadmium, copper, nickel, and zinc; and the Midco II list of metals included copper and nickel identified in the May 9, 2013 Groundwater Remedy Pre-Final Design, Midco I and II Sites, Gary, Indiana by AECOM Technical Services, Inc.

[6] The dissolved metals samples were filtered by the TestAmerica laboratory.

not revised. Ramboll received the validation reports for the Midco I and Midco II samples in January 2020. The data validation results are incorporated in the analytical data tables.

1.2 Remediation Systems Operations

In September 2010, per approval of the USEPA, the ground water extraction and treatment systems (GWETSs) at both the Midco I and Midco II Sites were shut down. As of this 2019 Annual Ground Water Monitoring Report and per approval of the USEPA, both GWETSs remain shut down indefinitely.[7] The soil vapor extraction system (SVE) at the Midco I Site was shut down in May 2013. The SVE/air sparge (AS) system at the Midco II Site was shut down in April 2013. In 2014, the SVE and SVE/AS systems were decommissioned and removed from the sites.

2. LNAPL IN MIDCO II MONITORING WELL Z-10

In December 2015, light nonaqueous phase liquid (LNAPL) was discovered in Midco II monitoring well Z-10 during the collection of site-wide depth-to-water measurements.[8] Field personnel observed dark petroleum material, similar to diesel fuel, which also had a strong petroleum odor. During the initial December 2015 LNAPL removal activities, approximately 1.5 feet of LNAPL was observed in the monitoring well and approximately 10 gallons of LNAPL/water mixture was removed from the monitoring well resulting in a residual LNAPL thickness of less than 1 inch. Following the initial discovery, a sample of the LNAPL was collected for laboratory fingerprint analysis. The results of the fingerprint analysis stated the hydrocarbon pattern of the LNAPL sample most closely resembled a Diesel Fuel #2 product used by the laboratory for quantitative purposes. See the 2015 Annual Ground Water Monitoring Report for further details regarding the initial LNAPL investigation activities.

On February 10, 2017, a passive product recovery canister (Geotech PRC Passive Skimmer) was installed in monitoring well Z-10 to render a more efficient and constant LNAPL removal approach. The passive skimmer separates and recovers light hydrocarbons from groundwater with a floating intake that fluctuates with groundwater level. The skimmer equipped with a canister collects floating product down to a sheen and can be emptied through a discharge valve at the bottom of the canister after being raised to the surface. Since the installation of passive product skimmer in monitoring well Z-10, field personnel performed skimmer inspection and product discharge on a regular basis. The results of the LNAPL removal activities conducted through November 14, 2019 are presented in Table 2-1. As presented in Table 2-1, only small quantities of LNAPL recharged into the monitoring well following the LNAPL removal activities. The total 2019 passive recovery fluid volume for 2019 was 1.23 liters of oil-water mixture.

As discussed with USEPA and the Indiana Department of Environmental Management (IDEM) personnel, Ramboll will continue to monitor Z-10 on a periodic basis and will continue manual LNAPL removal activities using the passive skimmer, as necessary.

3. FIELD MEASUREMENTS

Field documentation for the monitoring event, including copies of the field notebook pages, the ground water field data sheets, and the chain-of-custody records are presented in Appendix A.

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[7] Letter from Richard Boice, USEPA, to William Bow, ARCADIS, dated March 14, 2011.

[8] USEPA and IDEM personnel were notified of the LNAPL in Midco II monitoring well Z-10 on December 17, 2015 via electronic email by Barbara Coughlin, Ramboll.

3.1 Ground Water Elevation Data

The depth-to-water level was measured, prior to sampling, at each monitoring well in accordance with the procedures described in Appendix B of the I&MP and Appendix B of the Operation and Maintenance Plan. A complete round of depth-to-water level measurements was collected at the Midco I and Midco II Sites November 12 , 2019. Water level elevations for the Midco I and Midco II Sites are presented in Tables 3-1 and 3-2, respectively.

To account for the high salinity ground water in the deep wells, density corrections were applied to the water level elevations for the deep wells. During this and other recent monitoring events, ground water samples from the deep wells at the Midco I and Midco II Sites were collected for density analyses. For each deep well, the analytical density value was used to calculate the piezometric surface elevation. The piezometric surface elevation for each deep well was calculated using the following equation:

$$P_z = E_{SC} + \rho_w\left(E_{Casing} - E_{SC} - D_{Casing}\right)$$

Where:

P_z = Piezometer surface elevation (feet above mean sea level)

E_{Casing} = Elevation of top of casing (feet)

D_{Water} = Depth to water (feet)

ρ_w = Water density measured in the laboratory and corrected for water temperature (grams per cubic centimeter)

E_{SC} = Elevation of the midpoint of screen (feet)

Ground water contour maps for the Midco I[9] and Midco II Sites are presented on Figures 3-1 through 3-4.

3.2 Well Purging Data

In accordance with Appendix B of the I&MP, a ground water sample was collected after purging the monitoring location and obtaining stable values for the indicator field parameters.[10] Field data collected at the end of the water stabilization period and prior to obtaining the ground water samples from Midco I and II are presented in Table 3-3 and Table 3-4, respectively. Due to very cold below freezing air temperatures, the turbidity sensors periodically malfunctioned. Some wells were sampled without stable turbidity readings due to this malfunction (purge logs available in Appendix A).

3.3 Management of Investigation-Derived Wastes

Investigation-derived wastes (IDW) generated during the collection of ground water samples included personal protective equipment, used tubing, and purge water. IDW generated during the on-going monitoring activities will be managed as hazardous waste and transported offsite to an USEPA-approved facility for disposal.

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[9] The depth-to-water measurements collected from the monitoring wells located inside the containment barrier wall were not used in the generation of the ground water contour maps as the ground water table within the containment is influenced by the barrier wall.

[10] Indicator field parameters included: depth-to-water, pH, conductance, turbidity, temperature, dissolved oxygen, and oxidation/reduction potential.

4. CLEAN-UP ACTION LEVELS

As established in Section II.C and Attachment 2 of the Midco I and II Sites' Statement of Work (SOW), clean-up action levels (CALs) for the Sites are determined by consideration of:

- A cumulative lifetime carcinogenic risk of 1 x 10^{-5};
- A cumulative chronic noncarcinogenic hazard index of 1;
- The most current primary maximum contaminant levels (MCLs) included in 40 Code of Federal Regulations (CFR) 141; and
- The site-specific chronic ambient water quality criteria (AWQCxF) for aquatic life in Table 2 of Attachment 2 of the SOW, as listed under the column heading "WQC to be Met."

CALs do not include limits for total dissolved solids/salinity, chlorides, sodium, or potassium and cannot be less than the site-specific background concentrations for the constituents listed in Table 1 of Attachment 2 of the SOW. In addition, per the *Groundwater Remedy Prefinal Design for Midco I and II Sites* and USEPA's 2015 Explanation of Significant Differences (ESD) #4 documents for each site, select analytes are excluded from well-by-well CAL requirements as they were determined to be background-related constituents.[11] Background concentrations, PSQLs, AWQCxF, the current MCLs, the risk-based carcinogenic and noncarcinogenic concentrations, and parameter-specific CALs calculated for each individual parameter are presented in Tables 4-1 and 4-2.

5. MIDCO I SITE RESULTS

The following information is provided for the Midco I Site:

- A summary of the 2019 analytical results are presented in Table 5-1 through Table 5-5;
- Comparisons of 2019 ground water analytical results with historical results (1993 through 2018) are presented in Tables 5-6 through 5-9;
- Total VOC concentration maps for shallow and deep monitoring wells are presented on Figures 5-1 and 5-2, respectively;
- Concentration maps for 1,4-dioxane in shallow and deep monitoring wells are presented on Figures 5-3 and 5-4, respectively;
- The laboratory data reports and the data validation report are presented in Appendix B; and
- Validated data tables are presented in Appendix C.

A detailed discussion of historical trends and the previous MNA results has been presented in the MNA Groundwater Remedy Demonstration Report (November 2018).

[11] The following Midco I Site analytes are excluded from well-by-well CAL requirements as they were determined to be background-related constituents: antimony, arsenic, barium, cadmium, cyanide, iron, lead, mercury nickel, silver, sulfide, vanadium, and zinc; and the following Midco II Site analytes are excluded from well-by-well CAL requirements as they were determined to be background-related constituents: arsenic, barium, cadmium, chromium, iron, manganese, mercury, selenium, thallium, and vanadium.

5.1 Annual Monitoring Parameters

Volatile Organic Compounds

- Nineteen (19) VOCs, not including 1,4-dioxane, were detected in ground water collected from the Midco I monitoring locations sampled during the 2019 annual ground water monitoring event (see Tables 5-1 and 5-6).[12] One or more of the VOCs (excluding acetone; a known lab contaminant) were detected in 16 of the 24 annual monitoring locations.
- Of the 19 detected VOCs with parameter-specific CALs, one VOC (benzene) was detected at concentrations above its respective parameter-specific CAL (see Table 5-1). Of the 24 monitoring locations sampled, two had one or more VOCs detected above its respective CAL (see Table 5-1). All monitoring locations with VOC CAL exceedances are located within the containment barrier wall.
- Total VOC concentrations, excluding 1,4-dioxane, for the Midco I Site shallow and deep monitoring well networks are presented on Figures 5-1 and 5-2, respectively.
- 1,4-Dioxane was detected in ground water collected from 14 of the 27 monitoring locations (24 annual and 3 supplemental monitoring locations) sampled for 1,4-dioxane during the 2019 annual ground water monitoring event. In samples collected from monitoring locations located outside the containment barrier wall, the detected 1,4-dioxane concentrations ranged from an estimated concentration of 1.1 micrograms per liter [ug/L] to 100 ug/L.
- 1,4-Dioxane concentrations, for the Midco I Site shallow and deep monitoring well networks are presented on Figures 5-3 and 5-4, respectively. A detailed discussion of historic 1,4-dioxane concentrations, including the site-specific CAL, has been presented in the MNA Groundwater Remedy Demonstration Report (November 2018). Based on the 2019 results, 1,4-dioxane source mass assumptions in the MNA Groundwater Remedy Demonstration (Revision 1, November 2018) will be reviewed and results reported in a separate transmittal in 2020.

Semivolatile Organic Compounds - Pentachlorophenol

- Only the ground water sample collected from monitoring well MW-4S was analyzed for pentachlorophenol during the 2019 annual ground water monitoring event (see Tables 5-3 and 5-7).
- Pentachlorophenol was not detected in monitoring well MW-4S or the duplicate collected. In 2014 through 2019, pentachlorophenol was detected in monitoring well MW-4S at concentrations ranging from 9.2 J ug/L to 39 J ug/L and was not detected in 2017 and 2019 (Table 5-7). The concentrations from 2014 through present are considerably less than concentrations in years 2010 through 2012, when concentrations ranged from 810 J ug/L to 1,900 ug/L.

Inorganic Analytes

- One or more of the five inorganic analytes sampled for during the 2019 annual ground water monitoring event were detected in the 11 monitoring locations that were sampled for the inorganic parameters (see Tables 5-4 and 5-8).[13]
- Of the five inorganic analytes analyzed, only copper has a CAL (50.7 ug/L). In two of the 11 monitoring locations sampled, copper was detected at a concentration above its CAL (see Table 5-4). The copper CAL exceedances were located within the containment barrier wall.

[12] Detected VOCs included: acetone; benzene; carbon disulfide; chlorobenzene; chloroethane; chloroform; 1,1-dichloroethane (1,1-DCA); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-DCE; 1,2-dichloropropane; ethylbenzene; methylene chloride; styrene; tetrachloroethene (PCE); 1,2,4-trichlorobenzene; trichloroethene (TCE); vinyl chloride (VC); and xylenes (total).

[13] Detected inorganic analytes included: cadmium, copper, cyanide, nickel, and zinc.

5.2 Monitored Natural Attenuation

This is the sixth annual monitoring event for the MNA parameters as specified in the *Groundwater Remedy Prefinal Design for Midco I and II Sites*. Analytical results are presented in Tables 5-5 and 5-9.

Alkalinity

- In MNA samples collected from monitoring wells located inside the containment barrier wall, the alkalinity concentrations ranged from 340 milligrams per liter (mg/L) to 2,300 mg/L. In samples collected from monitoring locations located outside the containment barrier wall, the alkalinity concentrations ranged from 330 mg/L to 1,000 mg/L.

Total and Dissolved Metals

- Total iron and dissolved manganese were detected in the 13 monitoring locations that were sampled for MNA parameters. Dissolved iron was detected in 10 of the 13 monitoring locations.

Nitrate and Sulfate

- Nitrate was detected in 1 of the 13 monitoring locations that were sampled for MNA parameters.
- Sulfate was detected in the 13 monitoring locations that were sampled for MNA parameters. In MNA samples collected from monitoring locations located inside the containment barrier wall, sulfate concentrations ranged from 19 mg/L to 370 mg/L. In samples collected from monitoring locations located outside the containment barrier wall, sulfate concentrations ranged from 13 mg/L to 260 mg/L.

6. MIDCO II SITE RESULTS

The following information is provided for the Midco II Site:

- A summary of the 2019 analytical results are presented in Table 6-1 through Table 6-4;
- Comparisons of 2019 ground water analytical results with historical results (1993 through 2018) are presented in Tables 6-5 through 6-7;
- A summary of the November 2019 cyanide analytical results for the monitoring locations in the Midco II Cyanide Area near monitoring well MW-1R are presented in Table 6-8;
- Total VOC concentration maps, excluding 1,4-dioxane, for shallow and intermediate/deep monitoring wells are presented on Figures 6-1 and 6-2, respectively;
- Concentration maps for 1,4-dioxane in shallow and intermediate/deep monitoring wells are presented on Figures 6-3 and 6-4, respectively;
- Historical cyanide concentrations in the Midco II Cyanide Area near monitoring well MW-1R are presented on Figure 6-5;
- The laboratory data reports and the data validation report are presented in Appendix B; and
- Validated data tables are presented in Appendix D.

A detailed discussion of historical trends and the previous MNA results has been presented in the MNA Groundwater Remedy Demonstration Report (November 2018).

6.1 Annual Monitoring Parameters

Volatile Organic Compounds

- Twenty-one (21) VOCs, not including 1,4-dioxane, were detected in ground water collected from the Midco II Site monitoring locations sampled during the 2019 annual ground water monitoring event (see Tables 6-1 and 6-5).[14] One or more of the VOCs (excluding acetone, a known lab contaminant) were detected in 31 of the 42 monitoring locations sampled for VOCs.
- Of the 20 detected VOCs with parameter-specific CALs, four VOCs (benzene; 1,2-DCA; TCE; and VC) were detected at concentrations above their respective parameter-specific CALs. Of the 42 monitoring locations sampled for VOCs, six had one or more VOCs detected above their respective CALs (see Table 6-1).
- Five VOCs (acetone, benzene, carbon disulfide, chloroform, and toluene) and 1,4-dioxane were detected in the ground water sample collected from monitoring well Z-10. Three VOCs (benzene, toluene, and total xylenes) were detected in the ground water sample collected from monitoring well AD-10; 1,4-dioxane was not analyzed in the sample from AD-10. The concentration of benzene in the ground water sample collected from monitoring well AD-10 were slightly higher than the concentration observed in the ground water sample collected from monitoring well Z-10. VOC analytical results for monitoring well Z-10 were similar to historical results for this monitoring well (see Table 6-5). VOC analytical results for monitoring well AD-10 were slightly less than their respective VOC concentrations observed in the ground water sample collected from this monitoring well during the 2018 annual ground water monitoring event.
- Total VOC concentrations for the Midco II Site shallow and intermediate/deep well monitoring networks, excluding 1,4-dioxane, are presented on Figures 6-1 and 6-2, respectively.
- 1,4-Dioxane was detected in ground water collected from 33 of the 43 monitoring locations sampled for 1,4-dioxane (see Tables 6-1 and 6-2). 1,4-Dioxane was detected at concentrations ranging from 1.0 J ug/L (estimated) to 2,000 ug/L. The maximum detected concentration of 1,4-dioxane in shallow groundwater was 35 ug/L from monitoring well G-10. The maximum detected concentration of 1,4-dioxane in intermediate and deep groundwater was 2,000 ug/L at monitoring well Q-50 south of the Midco II site boundary.
- 1,4-Dioxane concentrations for the Midco II Site shallow and intermediate/deep well monitoring networks are presented on Figures 6-3 and 6-4, respectively. A detailed discussion of historic 1,4-dioxane concentrations, including the site-specific CAL, has been presented in the MNA Groundwater Remedy Demonstration Report (November 2018). Based on the 2019 results, 1,4-dioxane source mass assumptions in the MNA Groundwater Remedy Demonstration (Revision 1, November 2018) will be reviewed and results reported in a separate transmittal in 2020.

Inorganic Analytes

- One or more of the three inorganic analytes sampled for during the 2019 annual ground water monitoring event were detected in all of 37 the monitoring locations that were sampled for inorganic analytes (see Tables 6-3 and 6-6).[15]
- Each of the three inorganic analytes analyzed has a CAL. The copper CAL (120 ug/L) was only exceeded in the sample from monitoring location G-10 (1,100 ug/L) (see Table 6-3). A detailed

[14] Detected VOCs included: acetone; benzene; 2-butanone; carbon disulfide; chlorobenzene; chloroform; 1,4-dichlorobenzene; 1,1-DCA; 1,1-DCA; cis-1,2-DCE; trans-1,2-DCE; 1,2-dichloropropane; ethylbenzene; methylene chloride; 4-methyl-2-pentanone; styrene; PCE; toluene; TCE; VC; and xylenes (total).

[15] Detected inorganic analytes included: copper, cyanide, and nickel.

discussion of historic copper concentrations was presented in the MNA Groundwater Remedy Demonstration Report (November 2018).

- Cyanide concentrations in the monitoring locations sampled during the 2019 annual ground water monitoring event were detected at concentrations less than the CAL (158 ug/L). However, cyanide concentration of 370 ug/L in one piezometer sampled during the 2019 monitoring event for the Midco II Cyanide Area near monitoring well MW-1R exceeded the CAL of 158 ug/L (see Table 6-8 and Figure 6-5). A detailed discussion of cyanide was presented in the MNA Groundwater Remedy Demonstration Report (November 2018).

6.2 Monitored Natural Attenuation

This is the sixth annual monitoring event for the MNA parameters as specified in the *Groundwater Remedy Prefinal Design for Midco I and II Sites*. Analytical results are presented in Tables 6-4 and 6-7. To assist in the evaluation of natural attenuation trends, methane and TOC were also analyzed in at the MNA monitoring locations at the Midco II Site. The methane and TOC results are presented in Table 6-4.

Alkalinity

- In MNA samples collected from the Midco II Site monitoring locations, the alkalinity concentrations ranged from 230 mg/L to 4,400 mg/L.

Total and Dissolved Metals

- Dissolved manganese was detected in all of the monitoring locations that were sampled for MNA parameters. Total and dissolved iron were detected in 21 and 7, respectively, of the 24 monitoring locations that were sampled for MNA parameters.

Nitrate and Sulfate

- Nitrate was detected in the 10 of the 24 monitoring locations that were sampled for MNA parameters. The nitrate concentrations ranged from non-detect to 320 mg/L.
- Sulfate was detected in all of the monitoring locations that were sampled for MNA parameters. The sulfate concentrations ranged from 36 mg/L to 1,400 mg/L.

Methane and Total Organic Carbon

- Methane was detected in all of the 24 monitoring locations at the Midco II Site that were sampled for MNA parameters. The methane concentrations ranged from 4.1 ug/L to 23,000 ug/L.
- TOC was detected in all of the 24 monitoring locations at the Midco II Site that were sampled for MNA parameters. The TOC concentrations ranged from 1.7 mg/L to 60 mg/L.

TABLES

TABLE 1-1

2019 Annual Ground Water Monitoring Plan
Midco I Site
Gary, Indiana

Monitoring Location	Annual Monitoring[1]				
	VOCs	1,4-Dioxane	Pentachlorophenol	Inorganic Parameters	MNA Parameters
Monitoring Locations Inside the Containment Barrier Wall					
MW-2S	√	√		√	√
MW-2D	√	√		√	
MW-3S	√	√		√	√
MW-3D	√	√		√	
MW-4D	√	√		√	
MW-5S	√	√		√	√
MW-5D	√	√		√	
MW-6S	√	√		√	√
MW-6D	√	√		√	
C-10[2]	NS	NS		NS	NS
C-30	√	√		√	
D-10	√	√		√	√
D-30[2]	NS	NS		NS	
Monitoring Locations Outside the Containment Barrier Wall					
A-10	*	*			
A-30	*	√**			
B-10[3]	√	√			√
B-30[3]	√	√			√
G-10	*	*			
G-30[4]	*	NS			
H-10	*	*			
H-30	*	√**			
K-10[4]	*	*			
K-30[4]	*	NS			
L-10	*	*			
L-30	*	*			
M-10	*	*			
M-30	*	√**			
MW-4S[5]	√	√	√		√
MW-11S	√	√			
MW-11D[6]	NS	NS			
N-10	*	*			
N-30	*	*			
O-10[4]	NS	NS			NS

TABLE 1-1

2019 Annual Ground Water Monitoring Plan
Midco I Site
Gary, Indiana

Monitoring Location	Annual Monitoring[1]				
	VOCs	1,4-Dioxane	Pentachlorophenol	Inorganic Parameters	MNA Parameters
O-30[4]	NS	NS			NS
P-10[3]	√	√			
P-30[3]	√	√			
Q-10[5]	√	√			√
Q-30[5]	√	√			√
R-10[3]	√	√			
R-30[3]	√	√			
S-10	√	√			√
S-30	√	√			√
EW-2[4,7]	*	NS			
EW-4[7]	√	√			√
P-3	*	*			
P-4[4]	*	*			

Abbreviations:

VOCs = Volatile Organic Compounds

MNA = Monitored Natural Attenuation

NS = Not Sampled

Notes:

Locations to be monitored for a given parameter are indicated by √.

*Less than Cleanup Action Levels (CALs) for three consecutive years, excluding iron and manganese, not included in analytical sampling activities.

**Non-annual monitoring well. Only sampled for 1,4-Dioxane.

[1] Annual Monitoring Parameters and MNA Parameters for the Midco I Site are presented in Table 1-2.

[2] Monitoring wells abandoned in 2017.

[3] Less than CALs for three consecutive years, but identified as Barrier Wall Sentinel Monitoring Well.

[4] Monitoring wells G-30, K-30, O-10, O-30, and EW-2 were not sampled in November 2019 as the as the monitoring wells were not accessible due to standing water.

[5] MNA Background well.

[6] Monitoring well MW-11D inadvertently destroyed in 2014.

[7] Extraction well will be closed after three consecutive years with concentrations less than CALs.

TABLE 1-2

List of Parameters Analyzed and Project-Specific Quantitation Limits[1]
Midco I Site
Gary, Indiana

Parameter[2]	Project-Specific Quantitation Limit ug/L	Parameter	Project-Specific Quantitation Limit ug/L
Volatile Organic Compounds		**Semivolatile Organic Compounds**	
Acetone	10	Pentachlorophenol	25
Benzene	1		
Bromochloromethane	1		
Bromodichloromethane	1		
Bromoform	1		
Bromomethane	1		
2-Butanone	10	**Inorganic Analytes**	
Carbon disulfide	1	Cadmium	1
Carbon tetrachloride	1	Copper	1
Chlorobenzene	1	Cyanide	10
Chlorodibromomethane	1	Nickel	7
Chloroethane	1	Zinc	10
Chloroform	1		
Chloromethane	1		
1,2-Dibromo-3-chloropropane (DBCP)	1	**Monitored Natural Attenuation Parameters**	
1,2-Dibromoethane (Ethylene dibromide)	1	Alkalinity	2,000
1,2-Dichlorobenzene	1	Iron - Total	50
1,3-Dichlorobenzene	1	Iron - Dissolved	50
1,4-Dichlorobenzene	1	Manganese - Dissolved	25
1,1-Dichloroethane	1	Nitrate	100
1,2-Dichloroethane	1	Sulfate	1,000
1,1-Dichloroethene	1	pH	Field
cis-1,2-Dichloroethene	1	Conductivity	Field
trans-1,2-Dichloroethene	1	Oxidation reduction potential (ORP)	Field
1,2-Dichloropropane	1	Dissolved oxygen (DO)	Field
cis-1,3-Dichloropropene	1	Temperature	Field
trans-1,3-Dichloropropene	1		
Ethylbenzene	1		
2-Hexanone	10		
Methylene chloride	1		
4-Methyl-2-pentanone	10		
Styrene	1		
1,1,2,2-Tetrachloroethane	1		
Tetrachloroethene	1		
Toluene	1		
1,2,4-Trichlorobenzene	1		
1,1,1-Trichloroethane	1		
1,1,2-Trichloroethane	1		
Trichloroethene	1		
Vinyl chloride	1		
Xylenes (Total)	5		
1,4-Dioxane			
1,4-Dioxane	2		

Abbreviation:
ug/L = micrograms per liter

Notes:
[1] Detection limits are highly matrix dependent. Limits provided herein may not always be achievable.
[2] List of parameters analyzed varied by monitoring location.
See Table 1-1 for list of parameters analyzed per monitoring location.

TABLE 1-3

2019 Annual Ground Water Monitoring Plan
Midco II Site
Gary, Indiana

Monitoring Location	Annual Monitoring[1]			
	VOCs	1,4-Dioxane	Inorganic Parameters	MNA Parameters
MW-1R	√	√	√	
MW-50R	√	√	√	
MW-2S	*		*	
MW-2I	√	√	√	√
MW-2D	√	√	√	√
MW-3S	√	√	√	√
MW-3D	√	√	√	√
MW-4S	*	*	*	
MW-4D	√	√	√	
B-10	√[2]			
B-30	√[2]			
C-10	√	√	√	√
C-30	*	*	*	
D-10	√	√	√	√
D-30	√	√	√	
E-10	√	√	√	
E-50	*	*	*	
F-10	*	*	*	
F-30	√	√	√	√
G-10	√	√	√	√
G-30	√	√	√	√
H-10	√	√	√	
H-30	√	√	√	
N-10	√	√	√	√
N-30	√	√	√	√
N-50	√	√	√	
P-10	*	*	*	√
P-50	*	√**	*	√
Q-10	√*	√	√*	√
Q-50	√*	√	√*	√
R-10	√	√	√	√
R-50	√	√	√	
S-10	√ [2]			
S-50	√ [2]			
T-10	√	√	√	√
T-50	√	√	√	

TABLE 1-3

2019 Annual Ground Water Monitoring Plan
Midco II Site
Gary, Indiana

Monitoring Location	Annual Monitoring[1]			
	VOCs	1,4-Dioxane	Inorganic Parameters	MNA Parameters
U-10	√	√	√	
U-50	√	√	√	
V-10	√	√	√	
V-30	*	√**	*	
V-50	√	√	√	
W-10	√	√	√	√
W-30	√	√	√	√
W-50	√	√	√	√
Z-10	√	√	√	√
AA-10	√	√	√	√
AC-30	√	√	√	
AD-10	√**			
GA-50	√	√	√	√
P-1	*	√**	*	
P-2	*	√**	*	
P-3	√	√	√	
P-4	*	√**	*	
P-5[3]	NS	NS	NS	NS

Abbreviations:

MNA = Monitored Natural Attenuation

NS = Not Sampled

VOCs = Volatile Organic Compounds

Notes:

Locations to be monitored for given parameter are indicated by √.

*Less than Cleanup Action Level (CAL) for three consecutive years, excluding fluoride and not including in analytical sampling activities.

**Non-annual monitoring well.

[1] Annual Monitoring Parameters and MNA Parameters for the Midco II Site are presented in Table 1-4.

[2] Quarterly sentinel monitoring well for VOCs only.

[3] Not sampled as piezometer inadvertently destroyed in 2015.

TABLE 1-4

List of Parameters Analyzed and Project-Specific Quantitation Limits[1]
Midco II Site
Gary, Indiana

Parameter[2]	Project-Specific Quantitation Limit ug/L	Parameter[2]	Project-Specific Quantitation Limit ug/L
Volatile Organic Compounds		**Inorganic Analytes**	
Acetone	10	Copper	1
Benzene	1	Cyanide	10
Bromochloromethane	1	Nickel	7
Bromodichloromethane	1		
Bromoform	1		
Bromomethane	1		
2-Butanone	10		
Carbon disulfide	1		
Carbon tetrachloride	1		
Chlorobenzene	1		
Chlorodibromomethane	1		
Chloroethane	1		
Chloroform	1		
Chloromethane	1		
1,2-Dibromo-3-chloropropane (DBCP)	1	**Monitored Natural Attenuation Parameters**	
1,2-Dibromoethane (Ethylene dibromide)	1	Alkalinity	2,000
1,2-Dichlorobenzene	1	Iron - Total	50
1,3-Dichlorobenzene	1	Iron - Dissolved	50
1,4-Dichlorobenzene	1	Manganese - Dissolved	25
1,1-Dichloroethane	1	Nitrate	100
1,2-Dichloroethane	1	Sulfate	1,000
1,1-Dichloroethene	1	pH	Field
cis-1,2-Dichloroethene	1	Conductivity	Field
trans-1,2-Dichloroethene	1	Oxidation reduction potential (ORP)	Field
1,2-Dichloropropane	1	Dissolved oxygen (DO)	Field
cis-1,3-Dichloropropene	1	Temperature	Field
trans-1,3-Dichloropropene	1		
Ethylbenzene	1		
2-Hexanone	10		
Methylene chloride	1		
4-Methyl-2-pentanone	10		
Styrene	1		
1,1,2,2-Tetrachloroethane	1		
Tetrachloroethene	1		
Toluene	1		
1,2,4-Trichlorobenzene	1		
1,1,1-Trichloroethane	1		
1,1,2-Trichloroethane	1		
Trichloroethene	1		
Vinyl chloride	1		
Xylenes (Total)	5		
1,4-Dioxane			
1,4-Dioxane	2		

Notes:
ug/L = micrograms per liter
[1] Detection limits are highly matrix dependent. Limits provided herein may not always be achievable.
[2] List of parameters analyzed varied by monitoring location. See Table 1-3 for list of parameters analyzed per monitoring location.

TABLE 2-1

LNAPL Bailing Activities - Monitoring Well Z-10
Midco II Site
Gary, Indiana

Date	Measured LNAPL Thickness in Well (inches)	DTW (ft BTOC)	Estimated Volume Removed by Bailing[1] (gallons)	Thickness of LNAPL in Well after Bailing (inches)
12/16/15	18 - 24	--	10	less than 1 inch
12/17/15	1.5	--	5	less than 1/4 inch
12/19/15	0.5	--	3	bailed to no sheen
12/22/15	0.25	--	3	bailed to no sheen
01/06/16	1.5	--	2.5	less than 1/16 inch
01/19/16	5 to 6	--	2.5	less than 1/16 inch
02/01/16	10.5	--	5	less than 1/16 inch
02/02/16	1.5	--	2	less than 1/16 inch
02/19/16	0.375	--	3	bailed to no sheen
03/03/16	1	--	4.5	less than 1/16 inch
03/18/16	9	--	5	less than 1/16 inch
03/30/16	1	--	4	less than 1/16 inch
04/18/16	5	--	4	less than 1/16 inch
04/29/16	10.5	--	5	less than 1/16 inch
05/13/16	0.5	--	3	less than 1/16 inch
05/26/16	3	8.60	4.5	less than 1/16 inch
06/13/16	10.5	9.17	5	less than 1/16 inch
06/24/16	1.5	9.41	4.5	less than 1/16 inch
07/08/16	1.5	9.65	4.5	less than 1/16 inch
07/22/16	0.5	9.73	4.5	less than 1/16 inch
08/05/16	1.5	9.56	4.5	less than 1/16 inch
08/22/16	Sheen only	9.16	3	bailed to no sheen
09/06/16	1	9.26	4.5	less than 1/16 inch
09/19/16	9	9.64	5	less than 1/16 inch
10/03/16	1.5	9.67	4.5	less than 1/16 inch
10/11/16	1.25	9.55	5	less than 1/16 inch
11/04/16	0.25	9.45	4	bailed to no sheen
11/18/16	2	9.53	4	bailed to no sheen
12/02/16	0.75	9.45	5	bailed to no sheen
12/23/16	2.5	9.57	4	bailed to no sheen
01/13/17	1.5	9.52	4	bailed to no sheen
02/10/17	Sheen only	8.74	3	bailed to no sheen

Product Skimmer Installed on 2/10/2017[2]

TABLE 2-1

LNAPL Bailing Activities - Monitoring Well Z-10
Midco II Site
Gary, Indiana

Date	Equivalent LNAPL Thickness in Well[3] (inches)	DTW (ft BTOC)	Estimated Volume of LNAPL-Water Mixture Removed from Skimmer Tube (mL)	LNAPL Thickness in Well Without Skimmer in Well[4] (inches)
02/17/17	0.00	8.98	0	LNAPL not observed
03/10/17	4.38	8.48	150	LNAPL not observed
03/17/17	0.44	8.50	25	LNAPL not observed
04/14/17	0.00	7.93	0	LNAPL not observed
05/05/17	5.25	7.71	250	LNAPL not observed
06/02/17	4.38	8.48	150	LNAPL not observed
07/31/17	sheen only	9.96	10	LNAPL not observed
09/29/17	sheen only	--	20	LNAPL not observed
11/24/17	0.00	8.96	0	LNAPL not observed
12/08/17	0.44	9.57	10	LNAPL not observed
12/20/17	1.75	10.13	40	LNAPL not observed
01/26/18	6.00	9.60	200	LNAPL not observed
02/26/18	0.00	8.31	75	LNAPL not observed
02/27/18	1.00	8.30	20	LNAPL not observed
04/08/18	sheen only	8.94	10	LNAPL not observed
06/09/18	6.00	9.30	250	LNAPL not observed
07/13/18	sheen only	9.50	150	LNAPL not observed
09/08/18	sheen only	9.58	20	LNAPL not observed
10/06/18	0.00	9.89	0	LNAPL not observed
11/23/18	0.00	9.89	100	LNAPL not observed
01/11/19	0.25	9.54	100	LNAPL not observed
03/30/19	0.25	8.70	200	LNAPL not observed
06/14/19	0.25	8.33	275	LNAPL not observed
08/23/19	0.25	9.87	300	LNAPL not observed
10/24/19	0.25	9.36	300	LNAPL not observed
11/14/19	0.00	9.69	50	LNAPL not observed

Notes

-- = not measured
LNAPL = light non-aqueous phase liquid
ft BTOC = feet below top of casing
mL = milliliters
PID = photoionization detector (10.6 eV lamp)
ppm = parts per million

[1] LNAPL was removed using a 2-inch diameter bailer. Volume removed is a mixture of water and
[2] GeoTech skimmer, 2", 1L, PRC, 100 Mesh
[3] Equivalent LNAPL thickness in the well is based on the thickness of LNAPL observed in the skimmer accounting for the difference between the diameter of the skimmer and the diameter of the well.
[4] Thickness of LNAPL in Z-10 measured while the skimmer has been taken out of the well to empty the skimmer tube. Skimmer placed back in well following emptying of skimmer tube.

TABLE 3-1

2019 Ground Water Elevations[1]
Midco I Site
Gary, Indiana

Monitoring Location	Depth to Water (feet below TOC)	Density Corrected for Water Temperature (g/cm^3)	Ground Water Elevation Corrected for Density (feet above MSL)
Shallow Monitoring Wells			
MW-2S [2]	8.58	*	600.83
MW-3S [2]	9.68	*	600.85
MW-4S	4.46	*	602.24
MW-5S [2]	7.72	*	600.59
MW-6S [2]	7.88	*	600.82
MW-11S	2.32	*	600.33
A-10	2.58	*	600.00
B-10	1.60	*	600.06
D-10 [2]	7.02	*	600.76
G-10 [3]	NM	*	--
H-10 [3]	NM	*	--
K-10 [3]	NM	*	--
L-10	4.18	*	600.20
M-10	1.07	*	600.03
O-10 [3]	NM	*	--
P-10	3.56	*	600.34
Q-10	1.20	*	599.96
R-10	4.89	*	600.47
S-10	7.16	*	598.21
Deep Monitoring Wells			
MW-2D [2]	8.21	1.0029	600.94
MW-3D [2]	9.51	1.0032	600.94
MW-4D [2]	7.79	1.0039	600.94
MW-5D [2]	7.27	1.0052	600.86
MW-6D [2]	7.72	1.0038	600.89
A-30 [4]	2.43	1.0145	600.40
B-30	2.80	1.0111/1.0104	600.24
C-30 [2]	6.18	1.0072	600.76
G-30 [3]	NM	*	--
H-30	2.45	1.0148	600.32
K-30 [3]	NM	*	--

TABLE 3-1

2019 Ground Water Elevations[1]
Midco I Site
Gary, Indiana

Monitoring Location	Depth to Water (feet below TOC)	Density Corrected for Water Temperature (g/cm^3)	Ground Water Elevation Corrected for Density (feet above MSL)
Deep Monitoring Wells (continued)			
L-30 [4]	3.98	1.0021	600.28
M-30	2.50	1.0139	600.36
O-30 [3]	NM	*	--
P-30	3.66	1.0032/1.0025	600.11
Q-30	2.16	1.0198	600.54
R-30	4.94	1.0024	600.49
S-30	6.92	1.0020	598.21
Piezometers			
P-1 [3]	NM	*	--
P-3 [4]	6.36	1.0110	597.52
P-4 [3]	NM	*	--

Abbreviations:

g/cm^3 = grams per cubic centimeter
MSL = mean sea level based on 1929 NGVD
TOC = top of casing
0.0/0.0 = original sample / duplicate sample
NM = Not measured
* = Density measurements were not conducted for these wells.

Notes:

[1] Water level measurements collected on November 12, 2019.
[2] Monitoring well is located inside the containment barrier wall.
[3] Wells not accessible due to standing water.
[4] Density corrections utilized density and temperature data from previous sampling event.

TABLE 3-2

2019 Ground Water Elevations[1]
Midco II Site
Gary, Indiana

Monitoring Location	Depth-to-Water (feet below TOC)	Density Corrected for Water Temperature (g/cm^3)	Ground Water Elevation Corrected for Density (feet above MSL)
Shallow Monitoring Wells			
MW-1	8.06	*	589.45
MW-2S	5.61	*	589.19
MW-3S	6.71	*	589.73
MW-4S [2]	NM	*	--
B-10	10.98	*	590.14
C-10	8.95	*	590.00
D-10	7.78	*	590.57
E-10	6.25	*	590.15
F-10	7.31	*	590.03
G-10	9.80	*	590.04
H-10	8.22	*	589.13
N-10	5.85	*	589.68
P-10	4.97	*	589.20
Q-10	5.15	*	587.39
R-10	9.07	*	589.21
S-10	5.72	*	589.88
T-10	6.10	*	589.87
U-10	5.57	*	589.82
V-10	5.33	*	589.06
W-10	7.66	*	589.06
Z-10	9.10	*	589.99
AA-10	4.31	*	590.15
AD-10	10.29	*	590.45
Intermediate Monitoring Wells			
MW-2I	7.00	1.0049	589.71
N-30	7.09	1.0083	589.64
P-30	5.00	1.0037	589.29
V-30 [3]	5.30	1.0085	590.01
W-30	7.94	1.005/1.0047	589.16
AC-30	5.70	1.0052	589.66
Deep Monitoring Wells			
MW-50R	8.53	1.0137/1.0145	589.95
MW-2D	5.40	1.0139	590.09
MW-3D	7.25	1.0122/1.0115	590.18
MW-4D	7.79	1.0168	590.48
B-30	11.65	1.0382	590.89
C-30 [3]	9.18	1.011/1.016	590.37

TABLE 3-2

2019 Ground Water Elevations[1]
Midco II Site
Gary, Indiana

Monitoring Location	Depth-to-Water (feet below TOC)	Density Corrected for Water Temperature (g/cm^3)	Ground Water Elevation Corrected for Density (feet above MSL)
Deep Monitoring Wells (continued)			
D-30	8.86	1.0064	590.37
E-50 [3]	8.40	1.0155	588.85
F-30	7.71	1.031/1.0292	590.85
G-30	10.13	1.0239	590.97
H-30	7.87	1.0233	589.99
N-50	6.13	1.0109	589.88
P-50	6.15	1.0039	588.17
Q-50	5.20	1.0144	587.67
R-50	9.04	1.0188	590.23
S-50	5.74	1.0062	590.16
T-50	5.80	1.0089	590.19
U-50	5.40	1.0083	590.22
V-50	5.30	1.0085	589.31
W-50	7.79	1.0107	589.41
GA-50	1.12	1.0050	585.58
Piezometers			
P-1	3.80	1.0044	587.79
P-2 [2]	NM	1.0031	NM
P-3 [2]	NM	1.0091	NM
P-4	6.42	1.0024	590.45

Abbreviations:

g/cm^3 = grams per cubic centimeter
MSL = Mean sea level based on 1929 NGVD
NM = Not measured
TOC = top of casing
0.0/0.0 = original sample/field duplicate sample
* = Density measurements were not conducted for these wells

Notes:

[1] Water level measurements collected on November 12, 2019.

[2] Depth to water measurements not collected from MW-4S and P-3 due to problems with casing, and P-2 due to equipment issues.

[3] Density samples not collected. Density corrections utilized density and temperature data from previous sampling event.

TABLE 3-3

2019 Ground Water Sampling Final Stabilization Data
Midco I Site
Gary, Indiana

Monitoring Location	Cumulative Volume (liters)	pH (s.u.)	Conductance (mS/cm)	Turbidity (NTU)	Temperature (℃)
MW-2S	8.0	6.66	1.09	11.0	13.60
MW-2D	7.0	7.20	0.95	30.7	12.55
MW-3S	6.0	6.45	1.09	10.2	13.15
MW-3D	12.0	6.92	1.66	23.0	11.91
MW-4S	14.0	6.88	0.62	0.00	12.01
MW-4D	8.0	7.01	2.80	1.23	11.66
MW-5S	17.0	7.37	2.49	4.25	11.89
MW-5D	19.0	6.98	4.25	34.9	11.40
MW-6S	6.0	7.45	5.84	13.6	12.69
MW-6D	11.0	7.98	7.57	15.0	12.30
MW-11S	19.0	7.71	2.56	12.0	12.95
A-30	6.0	7.13	33.31	1.39	11.28
B-10	6.0	7.33	0.54	17.9	10.66
B-30	5.0	7.13	25.18	32.7	11.96
C-30	11.0	6.99	13.47	19.1	11.33
D-10	6.0	6.64	1.36	0.95	13.60
G-30	--	--	--	--	--
H-30	20.0	7.39	30.64	37.8	11.29
M-30	7.0	7.14	30.25	0.00	11.78
O-10	--	--	--	--	--
O-30	--	--	--	--	--
P-10	5.0	7.36	1.50	0.00	10.68
P-30	5.0	7.44	1.74	0.00	11.06
Q-10	11.0	7.88	3.94	21.2	10.54
Q-30	9.9	6.93	41.87	0.00	12.64
R-10	5.0	7.33	1.21	0.00	11.65
R-30	6.0	7.22	0.97	1.03	11.29
S-10	9.0	7.17	1.75	6.12	12.92
S-30	7.0	7.34	1.72	0.00	12.00
EW-2	--	--	--	--	--
EW-4	11.0	7.15	19.40	3.45	12.66

Abbreviations:

s.u. = standard units
mS/cm = millisiemens per centimeter
℃ = degrees Centigrade
NTU = Nephelometric turbidity units
-- = Not sampled, location inaccessible due to standing water

TABLE 3-4

2019 Ground Water Sampling Final Stabilization Data
Midco II Site
Gary, Indiana

Monitoring Location	Cumulative Volume (liters)	pH (s.u.)	Conductance (mS/cm)	Turbidity (NTU)	Temperature (°C)
MW-1R	21.3	6.85	1.10	144	12.54
MW-50R	7.8	7.11	23.18	113	12.56
MW-2I	12.0	6.75	2.54	244	11.14
MW-2D	13.0	7.11	25.79	214	11.58
MW-3S	15.0	7.34	1.78	0.00	9.59
MW-3D	12.1	7.03	22.50	5.77	10.62
MW-4D	9.0	7.24	34.84	0.00	10.77
B-10	6.0	7.30	3.34	0.00	12.46
B-30	10.0	--	86.87	342	11.13
C-10	15.6	7.01	1.65	216	13.34
D-10	5.4	7.43	4.26	0.00	13.59
D-30	7.5	7.71	6.53	2.89	12.74
E-10	6.0	7.15	2.28	5.71	13.47
F-30	7.0	7.78	65.72	0.00	11.32
G-10	5.3	7.18	3.54	0.00	13.27
G-30	15.0	8.07	54.38	12.9	10.65
H-10	7.8	7.55	1.10	0.92	13.07
H-30	18.0	7.54	48.98	24.5	12.08
N-10	23.0	7.03	1.11	28.6	10.22
N-30	21.0	7.12	1.89	127	11.13
N-50	12.0	7.07	20.46	233	11.54
P-10	5.0	7.29	0.94	1.38	13.46
P-30	21.0	7.14	1.51	24.0	12.13
P-50	11.0	7.00	9.75	372	12.10
Q-10	11.4	7.27	1.88	39.9	11.31
Q-50	12.0	7.30	28.57	173	11.41
R-10	8.0	7.20	1.09	4.58	10.79
R-50	7.8	6.88	30.83	1.90	12.93
S-10	5.5	7.37	0.58	2.34	8.38
S-50	5.0	7.51	6.43	6.73	10.70
T-10	6.6	7.16	1.40	2.81	12.74
T-50	9.6	7.72	17.60	0.00	12.11
U-10	7.0	6.87	1.96	1.91	10.72
U-50	6.0	7.21	10.68	283	11.20
V-10	11.0	7.59	1.36	0.00	11.62
V-30	10.8	6.92	0.78	690	10.35
V-50	28.4	7.03	10.43	41.5	11.29
W-10	9.4	7.09	1.24	0.00	12.46
W-30	7.8	6.75	2.72	979	12.20
W-50	12.4	6.71	21.50	411	10.98
Z-10	5.4	7.43	5.49	0.10	13.79
AA-10	18.0	7.11	0.96	11.8	9.84
AB-10	6.0	7.00	1.07	2.54	10.84
AC-30	4.5	7.35	3.90	0.00	12.32
AD-10	7.6	7.50	4.90	0.00	14.00
GA-50	9.0	7.20	1.28	1.51	12.20
P-1	17.0	7.14	2.10	20.9	14.13
P-2	6.0	7.31	0.76	0.00	12.72
P-3	19.4	7.17	14.95	238	11.05
P-4	16.0	7.06	2.57	39.8	10.92
PT-5	4.7	7.01	1.15	1.08	12.22
PT-10	14.4	6.98	1.18	168	12.16
PT-11	5.9	7.00	1.07	2.47	11.70
PT-12	8.6	7.08	1.20	164	11.64

Abbreviations:

s.u. = standard units
mS/cm = millisiemens per centimeter
°C = degrees Centigrade
NTU = Nephelometric turbidity units
-- pH not measured due equipment malfunction

TABLE 4-1

Parameter-Specific Clean-Up Action Levels[1]
Midco I Site
Gary, Indiana

Parameter	Midco I Background	Project-Specific QL	MCL	Midco I AWQC x F	Risk-Based Carc.	Risk-Based Noncarc.	Midco I Parameter-Specific CAL[2]
Volatile Organic Compounds							
Acetone	--	5	--	--	--	22,060	22,060
Benzene	--	1	5	--	2.3	52	2.3
2-Butanone	--	5	--	--	--	8,356	8,356
Carbon tetrachloride	--	1	5	--	2.4	90	2.4
Chlorobenzene	--	1	100	--	--	120	100
Chloroform	--	1	--	--	1.1	152	1.1
1,2-Dibromo-3-chloropropane	--	1	0.2	--	--	--	1
1,2-Dibromoethane	--	1	--	--	--	--	1
1,2-Dichlorobenzene	--	1	600	--	--	488	488
1,4-Dichlorobenzene	--	1	75	--	2.6	1,153	2.6
1,1-Dichloroethane	--	1	--	--	14	6,472	14
1,2-Dichloroethane	--	1	5	--	0.86	19	1
1,1-Dichloroethene	--	1	7	--	--	431	7
cis-1,2-Dichloroethene	--	1	70	--	--	--	70
trans-1,2-Dichloroethene	0.16	1	100	--	--	--	100
1,2-Dichloropropane	--	1	5	--	2.2	12	2.2
Ethylbenzene	--	1	700	--	8.4	1,539	8.4
Methylene chloride	1.3	1	5	--	26	1,168	5
4-Methyl-2-pentanone	--	5	--	--	--	2,000	2,000
Styrene	--	1	100	--	--	--	100
1,1,2,2-Tetrachloroethane	--	1	--	--	0.39	647	1
Tetrachloroethene	--	1	5	--	0.53	230	1
Toluene	--	1	1,000	--	--	2,201	1,000
1,2,4-Trichlorobenzene	--	1	70	--	11	5.8	5.8
1,1,1-Trichloroethane	--	1	200	--	--	11,957	200
1,1,2-Trichloroethane	--	1	5	--	1.4	0.58	1.00
Trichloroethene	--	1	5	--	12	29	5
Vinyl chloride	1.32	1	2	--	0.42	73	1.32
Xylenes (total)	--	5	10,000	--	--	281	281
Semivolatile Organic Compounds							
Pentachlorophenol (inside barrier wall only)[3]	--	25	1	50.7	0.81	162	25

TABLE 4-1

Parameter-Specific Clean-Up Action Levels[1]
Midco I Site
Gary, Indiana

Parameter	Midco I Background	Project-Specific QL	MCL	Midco I AWQC x F	Risk-Based Carc.	Risk-Based Noncarc.	Midco I Parameter-Specific CAL[2]
Inorganic Analytes[4]							
Beryllium	--	1	4	20.7	--	65	4
Chromium (III)	8	1	100	858	--	48,544	100
Chromium (VI)	8	10	--	42.9	0.65	97	10
Copper	--	1	--	50.7	--	--	50.7
Iron (inside barrier wall only)[3]	3,880	50	--	3,900	--	--	3,900
Manganese (inside barrier wall only)[3]	1,400	25	--	--	--	777	1,400
Selenium	--	2	50	137	--	162	50
Thallium	--	3	2	156	--	0.32	3

Abbreviations:

MCL = Primary maximum contaminant level, from 40 CFR 141 (verified January 2017).
AWQC x F = Site-specific chronic ambient water quality criteria (AWQC), equal to the federal AWQC for protection of aquatic life times the site-specific factor F; from Table 2 of Attachment 2 of the Midco I and II Statement of Work, dated June 1992 ("SOW").
Background = Site-specific background ground water concentrations; from Table 1 of Attachment 2 of the SOW.
QL = Quantitation Limit
Carc. = Carcinogenic risk-based concentration equivalent to 1E-05 carcinogenic risk for the individual parameter using updated risk factors for those parameters with risk factors in Table 2 of Attachment 2 of the SOW.
Noncarc. = Noncarcinogenic risk-based concentration equivalent to 1 noncarcinogenic hazard index for the individual parameter using updated risk factors for those parameters with risk factors in Table 2 of Attachment 2 of the SOW
CAL = Clean-up Action Level
-- = Value not specified or not calculated
USEPA = United States Environmental Protection Agency

Notes:

[1] All concentrations are given in micrograms per liter.

[2] Lowest value between the MCL, AWQC, and the risk-based concentrations calculated as if the parameter was the only parameter detected in the sample, but not less than the project-specific detection limit or the site-specific background concentration.

[3] Per AECOM's May 2013 Groundwater Remedy Prefinal Design report ("2013 GW Design Report"), the CALs for pentachlorophenol, iron, and manganese only pertain to ground water monitoring wells located inside the Barrier Wall.

[4] Per the 2013 GW Design Report and USEPA's 2015 Explanation of Significant Differences #4 for the Midco I Site, the following inorganic analytes are excluded from well-by-well CAL requirements as they were determined to be background-related constituents: antimony, arsenic, barium, cadmium, cyanide, iron, lead, mercury, nickel, silver, sulfide, vanadium, and zinc.

TABLE 4-2

Parameter-Specific Clean-Up Action Levels[1]
Midco II Site
Gary, Indiana

Parameter	Midco II Background	Project-Specific QL	MCL	Midco II AWQC x F	Risk-Based Carc.	Risk-Based Noncarc.	Midco II Parameter-Specific CAL[2]
Volatile Organic Compounds							
Acetone	6.9	5	--	--	--	22,060	22,060
Benzene	0.04	1	5	--	2.3	52	2.3
2-Butanone	--	5	--	--	--	8,356	8,356
Carbon tetrachloride	--	1	5	--	2.4	90	2.4
Chlorobenzene	--	1	100	--	--	120	100
Chloroform	--	1	--	--	1.1	152	1.1
1,2-Dibromo-3-chloropropane	--	1	0.2	--	--	--	1
1,2-Dibromoethane	--	1	--	--	--	--	1
1,2-Dichlorobenzene	--	1	600	--	--	488	488
1,4-Dichlorobenzene	--	1	75	--	2.6	1,153	2.6
1,1-Dichloroethane	--	1	--	--	14	6,472	14
1,2-Dichloroethane	--	1	5	--	0.86	19	1
1,1-Dichloroethene	--	1	7	--	--	431	7
cis-1,2-Dichloroethene	--	1	70	--	--	--	70
trans-1,2-Dichloroethene	6.1	1	100	--	--	--	100
1,2-Dichloropropane	--	1	5	--	2.2	12	2.2
Ethylbenzene	--	1	700	--	8.4	1,539	8.4
Methylene chloride	1.9	1	5	--	26	1,168	5
4-Methyl-2-pentanone	--	5	--	--	--	2,000	2,000
Styrene	--	1	100	--	--	--	100
1,1,2,2-Tetrachloroethane	--	1	--	--	0.39	647	1
Tetrachloroethene	--	1	5	--	0.53	230	1
Toluene	--	1	1,000	--	--	2,201	1,000
1,2,4-Trichlorobenzene	--	1	70	--	11	5.8	5.8
1,1,1-Trichloroethane	--	1	200	--	--	11,957	200
1,1,2-Trichloroethane	--	1	5	--	1.4	0.58	1
Trichloroethene	--	1	5	--	12	29	5
Vinyl chloride	2.2	1	2	--	0.42	73	2.2
Xylenes (total)	--	5	10,000	--	--	281	281

TABLE 4-2

Parameter-Specific Clean-Up Action Levels[1]
Midco II Site
Gary, Indiana

Parameter	Midco II Background	Project-Specific QL	MCL	Midco II AWQC x F	Risk-Based Carc.	Risk-Based Noncarc.	Midco II Parameter-Specific CAL[2]
Inorganic Analytes[3]							
Antimony	--	1	6	--	--	12.9	6
Beryllium	--	1	4	19.1	--	65	4
Copper	25.2	1	--	120	--	--	120
Cyanide	158	10	200	18.7	--	647	158
Lead	5.6	1	--	53.6	--	--	53.6
Nickel	12.3	7	--	1,580	--	647	647
Silver	4.6	1	--	0.432	--	--	4.6
Zinc	1,470	1	--	3,160	--	9,709	3,160

Abbreviations:

MCL = Primary maximum contaminant level, from 40 CFR 141 (verified January 2017).

AWQC x F = Site-specific chronic ambient water quality criteria (AWQC), equal to the federal AWQC for protection of aquatic life, times the site-specific factor F; from Table 2 of Attachment 2 of the Midco I and II Statement of Work, dated June 1992 ("SOW").

Background = Site-specific background ground water concentrations; from Table 1 of Attachment 2 of the SOW.

QL = Quantitation Limit

Carc. = Carcinogenic risk-based concentration equivalent to 1E-05 carcinogenic risk for the individual parameter using updated risk factors for those parameters with risk factors in Table 2 of Attachment 2 of the SOW.

Noncarc. = Noncarcinogenic risk-based concentration equivalent to 1 noncarcinogenic hazard index for the individual parameter using updated risk factors for those parameters with risk factors in Table 2 of Attachment 2 of the SOW.

CAL = Clean-up Action Level

-- = Value not specified or not calculated

USEPA = United States Environmental Protection Agency

Notes:

[1] All concentrations are given in micrograms per liter.

[2] Lowest value between the MCL, AWQC, and the risk-based concentrations calculated as if the parameter was the only parameter detected in the sample, but not less than the project-specific detection limit or the site-specific background concentrations.

[3] Per AECOM's May 2013 Groundwater Remedy Prefinal Design report and USEPA's 2015 Explanation of Significant Differences #4 for the Midco II Site, the following inorganic analytes are excluded from well-by-well CAL requirements as they were determined to be background-related constituents: arsenic, barium, cadmium, chromium, iron, manganese, mercury, selenium, thallium, and vanadium.

TABLE 5-1

Volatile Organic Compounds[1,2]
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	Midco I Parameter-Specific CAL	MW-2S	MW-2D	MW-3S		MW-3D	MW-4S		MW-4D	MW-5S
Sample ID		1WMW2S21M	1WMW2D21	1WMW3S21	1WMW3S21D	1WMW3D21	1WMW4S21	1WMW4S21D	1WMW4D21	1WMW5S21
Sample Date		11/20/2019	11/20/2019	11/19/2019	11/19/2019	11/19/2019	11/20/2019	11/20/2019	11/19/2019	11/20/2019
Sample Type		MS/MSD			FD			FD		
Acetone	22,060	2.2 J	2.6 J	10 UJ	1.7 J	10 U	3.8 J	4.3 J	10 U	1.9 J
Benzene	2.3	1.2	0.50 U	0.18 J	0.17 J	0.50 U	0.50 U	0.50 U	0.50 U	**13**
Carbon disulfide	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9
Chloroethane	--	0.51 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.7
Chloroform	1.1	2.0 U	2.0 U	2.0 U	0.81 J	2.0 U	2.0 U	0.55 J	2.0 U	2.0 U
1,1-Dichloroethane	14	5.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	2.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	0.89 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.2	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8.4	0.35 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	8.8
Methylene Chloride	5	5.0 U	2.5 J	5.0 U	5.0 U	5.0 U	2.2 J	2.3 J	5.0 U	5.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	0.47 J	1.0 U	0.48 J	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1	1.0 U	1.0 U	0.57 J	0.56 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	0.19 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.7
1,2,4-Trichlorobenzene	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35 J	1.0 U	1.0 U	1.0 U
Trichloroethene	5	0.71	0.50 U	1.5	1.4	0.50 U	0.19 J	0.50 U	0.50 U	0.50 U
Vinyl chloride	1	0.47 J	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	281	0.69 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	25
1,4-Dioxane	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	71

Notes:
CAL = Clean-up Action Level
-- = No CAL established
BOLD = Analyte present at a concentration greater than its CAL.
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
UJ = The associated quantitation limit should be considered estimated based on a bias identified during the quality assurance.
[1] Only those analytes that are detected in one or more samples are presented. All results reported in micrograms per liter (ug/L).
[2] Monitoring wells O-10 and O-30 were not sampled as the wells were not accessible due to standing water.

TABLE 5-1

Volatile Organic Compounds[1,2]
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	Midco I Parameter-Specific CAL	MW-5D	MW-6S	MW-6D	MW-11S	B-10	B-30	C-30	D-10	
Sample ID		1WMW5D21	1WMW6S21	1WMW6D21	1WMW11S21	1WB1021	1WB3021	1WC3021	1WD1021	1WD1021D
Sample Date		11/20/2019	11/21/2019	11/21/2019	11/20/2019	11/20/2019	11/20/2019	11/19/2020	11/20/2019	11/20/2019
Sample Type										FD
Acetone	22,060	10 U	10 UJ	10 U	5.0 J	3.1 J	3.2 J	10 U	2.9 J	5.3 J
Benzene	2.3	2.0	**23**	0.50 U	1.6	0.50 U	0.50 U	0.50 U	0.41 J	0.39 J
Carbon disulfide	--	2.0 U	2.0 U	2.0 U	1.4 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	100	1.0 U	1.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.64 J	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	14	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8.4	0.50 U	0.93	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	2.0 J	2.3 J	2.2 J	5.0 U	2.4 J	2.6 J
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J	0.49 J
Tetrachloroethene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	0.50 U	0.26 J	0.50 U	0.16 J	0.50 U	0.50 U	0.50 U	0.35 J	0.50 U
1,2,4-Trichlorobenzene	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	0.50 U	0.50 U	0.50 U	0.17 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	1	3.0	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	281	1.0 U	32	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.30 J	1.0 U
1,4-Dioxane	--	57	320	110	2.0 U	2.0 U	22	4.0	1.0 J	1.1 J

Notes:
CAL = Clean-up Action Level
-- = No CAL established
BOLD = Analyte present at a concentration greater than its CAL.
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
UJ = The associated quantitation limit should be considered estimated based on a bias identified during the quality assurance.
[1] Only those analytes that are detected in one or more samples are presented. All results reported in micrograms per liter (ug/L).
[2] Monitoring wells O-10 and O-30 were not sampled as the wells were not accessible due to standing water.

TABLE 5-1

Volatile Organic Compounds[1,2]
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	Midco I Parameter-Specific CAL	P-10	P-30		Q-10	Q-30	R-10	R-30	S-10	S-30	EW-4
Sample ID		1WP1021	1WP3021	1WP3021D	1WQ1021	1WQ3021M	1WR1021	1WR3021	1WS1021	1WS3021	1WEW421
Sample Date		11/21/2019	11/21/2019	11/21/2019	11/20/2019	11/20/2019	11/20/2019	11/20/2019	11/20/2019	11/20/2019	11/21/2019
Sample Type				FD		MS/MSD					
Acetone	22,060	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	4.5 J	3.9 J	10 U
Benzene	2.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon disulfide	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.1	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J
1,2-Dichloropropane	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.2 J	2.0 J	5.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	0.50 U	0.50 U	0.19 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Xylenes, Total	281	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	--	24	18	18	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.1 J	15

Notes:
CAL = Clean-up Action Level
-- = No CAL established
BOLD = Analyte present at a concentration greater than its CAL.
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
UJ = The associated quantitation limit should be considered estimated based on a bias identified during the quality assurance.
[1] Only those analytes that are detected in one or more samples are presented. All results reported in micrograms per liter (ug/L).
[2] Monitoring wells O-10 and O-30 were not sampled as the wells were not accessible due to standing water.

TABLE 5-2

1,4-Dioxane Results from Selected Non-Annual Monitoring Wells[1]
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	Midco I Parameter-Specific CAL	A-30	H-30	M-30
Sample ID		1WA3021	1WH3021	1WM3021
Sample Date		11/20/2019	11/21/2019	11/21/2019
1,4-Dioxane	--	16	100	16

Notes:
CAL = Clean-up Action Level
-- = No CAL established
All results reported in micrograms per liter (ug/L).
[1] Monitoring locations G-30, K-30, and EW-2 were not sampled as the wells were not accessible due to standing water.

TABLE 5-3

Semivolatile Organic Compound - Pentachlorophenol
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	**Midco I Parameter-Specific CAL[1]**	**MW-4S**	
Sample ID		1WMW4S21	1WMW4S21D
Sample Date		11/20/19	11/20/19
Sample Type			**FD**
Pentachlorophenol	--	16 U	16 U

Notes:
CAL = Clean-up Action Level
-- = No CAL established
FD = Field Duplicate
All results reported in micrograms per liter (ug/L).
[1] CAL (25 ug/L) only applies to monitoring wells located inside barrier wall.

TABLE 5-4

Inorganic Analytes
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	**Midco I Parameter-Specific CAL**	**MW-2S**	**MW-2D**	**MW-3S**		**MW-3D**	**MW-4D**
Sample ID		1WMW2S21M	1WMW2D21	1WMW3S21	1WMW3S21D	1WMW3D21	1WMW4D21
Sample Date		11/20/2019	11/20/2019	11/19/2019	11/19/2019	11/19/2019	11/19/2019
Sample Type		**MS/MSD**			**FD**		
Cadmium	--	1.0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Copper	50.7	46	1.0 J	1.5 J	1.3 J	2.0 U	2.0 U
Cyanide	--	10 U	12	10 U	10 U	10 U	10 U
Nickel	--	350	1.4 J	9.3	9.6	8.7	1.4 J
Zinc	--	32	20 U	37	20 U	55	20 U

Notes:

CAL = Clean-up Action Level

-- = No CAL established

BOLD = Analyte present at a concentration greater than its CAL.

FD = Field Duplicate

MS/MSD = Matrix Spike/Matrix Spike Duplicate

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Compound was analyzed for but was not detected at or above the associated numerical value.

All results reported in micrograms per liter (ug/L).

TABLE 5-4

Inorganic Analytes
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	Midco I Parameter-Specific CAL	MW-5S	MW-5D	MW-6S	MW-6D	C-30	D-10	
Sample ID		1WMW5S21	1WMW5D21	1WMW6S21	1WMW6D21	1WC3021	1WD1021	1WD1021D
Sample Date		11/20/2019	11/20/2019	11/21/2019	11/21/2019	11/19/2019	11/20/2019	11/20/2019
Sample Type								FD
Cadmium	--	0.95	0.50 U	2.5 U	0.50 U	0.50 U	0.81	0.59
Copper	50.7	**290**	0.96 J	5.1 J	1.5 J	2.0	**1,100**	**1,100**
Cyanide	--	10 U	10 U	8.1 J	4.5 J	10 U	79	100
Nickel	--	640	25	290	120	8.9	580	620
Zinc	--	82	11 J	100 U	7.7 J	20 U	100	110

Notes:

CAL = Clean-up Action Level

-- = No CAL established

BOLD = Analyte present at a concentration greater than its CAL.

FD = Field Duplicate

MS/MSD = Matrix Spike/Matrix Spike Duplicate

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Compound was analyzed for but was not detected at or above the associated numerical value.

All results reported in micrograms per liter (ug/L).

TABLE 5-5

Monitored Natural Attenuation Parameters[1]
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	**MW-2S**	**MW-3S**		**MW-4S**		**MW-5S**	**MW-6S**	**B-10**
Sample ID	1WMW2S21M	1WMW3S21	1WMW3S21D	1WMW4S21	1WMW4S21D	1WMW5S21	1WMW6S21	1WB1021
Sample Date	11/20/2019	11/19/2019	11/19/2019	11/20/2019	11/20/2019	11/20/2019	11/21/2019	11/20/2019
Sample Type	**MS/MSD**		**FD**		**FD**			
Alkalinity (mg/L)	360	340	340	820	770	1,400	2,300 J	330
Iron, total (ug/L)	60,000	23,000	25,000	120	120	23,000	4,000	1,400
Iron, Dissolved (ug/L)	82 J	100 U	100 U	100 U	48 J	220	3,700	100 U
Manganese, Dissolved (ug/L)	900	190	180	15	13	120	420 J	390
Nitrate as Nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	120	180	180	21	21	19	190	13

Notes:
ug/L = micrograms per liter
mg/L = milligrams per liter
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
All results reported in micrograms per liter (ug/L).
[1] Monitoring wells O-10 and O-30 were not sampled as the wells were not accessible due to standing water.

TABLE 5-5

Monitored Natural Attenuation Parameters[1]
2019 Annual Ground Water Monitoring Event
Midco I Site
Gary, Indiana

Location	**B-30**	**D-10**		**Q-10**	**Q-30**	**S-10**	**S-30**	**EW-4**
Sample ID	1WB3021	1WD1021	1WD1021D	1WQ1021	1WQ3021M	1WS1021	1WS3021	1WEW421
Sample Date	11/20/2019	11/20/2019	11/20/2019	11/20/2019	11/20/2019	11/20/2019	11/20/2019	11/21/2019
Sample Type			**FD**		**MS/MSD**			
Alkalinity (mg/L)	950	880	850	840	1,000	980	830	940
Iron, total (ug/L)	7,600	100 U	100 U	1,000	9,000	8,900	1,200	2,900
Iron, Dissolved (ug/L)	51 J	100 U	100 U	100	110	49 J	470	84 J
Manganese, Dissolved (ug/L)	250	2,400	2,500	240	960 J	1,400	200	410
Nitrate as Nitrogen (mg/L)	0.10 U	0.39	0.38	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	120	370	370	240	260	110	65	63

Notes:

ug/L = micrograms per liter
mg/L = milligrams per liter
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
All results reported in micrograms per liter (ug/L).
[1] Monitoring wells O-10 and O-30 were not sampled as the wells were not accessible due to standing water.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-2S																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	3,800 UR	R	R	R	R	5.0 U*	50 U*	5.0 U	NS	NS	NS	NS	NS	10 U	5.7 J	7.8	5.0 U	11	12	17 UJ	2.2 J
Benzene	77 U	3.0 J	7.0 J	8.0 J	3.0 J	1.0	7.0 J	2.0	NS	NS	NS	NS	NS	10 U	1.0 U	0.50 U	0.50 U	0.63	0.88	1.1	1.2
Bromochloromethane		5.0 U	25 U	12 U	4.0 U	1.0 U	10 UJ	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	38 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	77 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 UJ	1.0 U	NS	NS	NS	NS	NS	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	380 U	5.0 UJ	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	770 UR	R	R	R	R	R	R	5.0 U	NS	NS	NS	NS	NS	1.0 U	2.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	190 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	0.20 J	5.0 U	0.58 J	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	38 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	190 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	190 U	3.0 J	25 U	12 UJ	2.0 J	0.10 J	0.90 J	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.51 J
Chloroform	38 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	380 UJ	5.0 UJ	25 U	12 U	4.0 UJ	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2-Dibromo-3-chloropropane	150 UR	R	R	12 UJ	4.0 U	1.0 U	R	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	2.0 U	1.0 U	5.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	77 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 UJ	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	38 U	5.0 U	25 UJ	12 U	4.0 U	1.0 U	10 UJ	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	380 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	0.10 J	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	190 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	190 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	29 J	11	7.0 J	12 U	4.0 U	2.0	13	4.0	NS	NS	NS	NS	NS	1.0 U	1.0	12	10.0	12	10	6.9	5.0
1,2-Dichloroethane	23 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	0.40 J	0.78 J	1.0 U	1.4	1.3	0.98 J	1.0 U
1,1-Dichloroethene	38 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	290	1.0 J	10 J	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	13	40	30	51	13	4.0	2.1
trans-1,2-Dichloroethene	190 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	0.70 J	NS	NS	NS	NS	NS	1.0 U	1.0	1.5	2.1	3.0	2.2	1.2	0.89 J
1,2-Dichloropropane	77 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	10 U	1.0 U	0.73 J	1.1	1.6	1.4	1.3	1.1
cis-1,3-Dichloropropene	38 UJ	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	38 UJ	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	200	45	120	120	36	0.40 J	78	25	NS	NS	NS	NS	NS	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.27 J	0.35 J
2-Hexanone	1,900 UR	25 U	R	R	18 U	5.0 U	50 UJ	5.0 U	NS	NS	NS	NS	NS	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	190 U*	10 U	25 U	25 U	7.0 U*	2.0 U*	20 UJ	2.0 U	NS	NS	NS	NS	NS	1.0 U	0.27 J	5.0 U	6.7 U*	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	190 UJ	25 U	R	62 U	18 U	5.0 U	50 UJ	5.0 U	NS	NS	NS	NS	NS	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	38 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	19 U	5.0 U	25 UJ	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	77 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	590	80	260	190	25	1.0 U*	41	2.0 J	NS	NS	NS	NS	NS	1.0 U	0.20 J	0.50 U	0.50 U	0.44 J	0.88	0.50 U	0.19 J
1,2,4-Trichlorobenzene	10 U	5.0 U	5.0 UJ	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	190 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	19 U	5.0 U	25 UJ	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	120 U	5.0 U	25 U	12 U	4.0 U	1.0 U	10 U	1.0 U	NS	NS	NS	NS	NS	1.0 U	0.31 J	1.1	1.1	1.1	0.60	0.40 J	0.71
Vinyl chloride	120	5.0	10 J	12 U	4.0 U	1.0 U	1.0 J	0.20 J	NS	NS	NS	NS	NS	1.0 U	3.8	1.7	0.50 U	18	4.5	1.0 U	0.47 J
Xylenes (total)	410	90	290	230	56	0.60 J	81	30 J	NS	NS	NS	NS	NS	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	0.49 J	0.41 J	0.69 J
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	NS	NS	NS	NS	2.8 J	1.9 J	1.4 J	1.1 J	1.7 J	1.4 J	1.3 J	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-2D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	5.0 J	R	R	5.0 U*	7.0 U*	5.0 U	NS	NS	NS	5.7 J	10 U	10 U	5.1 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.6 J
Benzene	2.0 U	1.0 U	1.0 U	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	0.35 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 J	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.70 J	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U*	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UJ	R	1.0 U	1.0 UJ	1.0 U	1.0 U	R	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.58 J	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 J	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	1.0 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	2.0 U	1.0 U	2.0 U	2.0 U*	2.0 U*	3.0 J	2.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 J
4-Methyl-2-pentanone	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	15	1.0 U	1.0 U	1.0 J	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	3.0 U*	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	0.80 J	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	0.20 J	2.0	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	7.0	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	NS	NS	20 U	20 U	2.0 J	3.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-3S																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	1,400 UR	R	6.0 U*	R	R	5.0 U*	5.0 U*	5.0 U	NS	NS	NS	NS	NS	NS	10 U	5.2	5.0 U	5.0 U	6.7	6.3	10 UJ
Benzene	370 J	620	0.20 J	1.0 UJ	1.0 U	0.30 J	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.18 J
Bromochloromethane		50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
Bromodichloromethane	14 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
Bromoform	28 UJ	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	0.18 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
Bromomethane	140 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	3.0 U
2-Butanone	280 UR	R	R	R	R	R	R	5.0 U	NS	NS	NS	NS	NS	NS	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Carbon disulfide	69 U	50 U	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	14 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
Chlorobenzene	69 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U
Chloroethane	69 U	50 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1 U
Chloroform	14 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	140 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	56 UR	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 UJ
Dibromochloromethane	28 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	5.0 U	5.0 U	5.0 UJ	1.0 U	1.0 U
1,2-Dibromoethane	14 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	140 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	69 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	69 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	28 U	50 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	8.0 U	50 U	0.40 J	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	14 U	50 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	69 U	50 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	69 U	50 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	28 UJ	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	14 UJ	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	14 UJ	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	69 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	690 U	250 U	R	R	5.0 U	R	5.0 UJ	5.0 U	NS	NS	NS	NS	NS	NS	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Methylene chloride	69 U*	100 U	1.0 U*	2.0 U	3.0 U*	2.0 U*	0.50 J	2.0 U	NS	NS	NS	NS	NS	NS	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	69 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	NS	NS	NS	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Styrene	14 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	7.0 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	28 U	50 U	0.40 J	1.0 U	1.0 U	9.0	0.80 J	1.0	NS	NS	NS	NS	NS	NS	1.0 U	0.98 J	1.0 U	1.2	0.84 J	0.61 J	0.57 J
Toluene	28 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	69 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	7.0 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	42 U	50 U	0.70 J	1.0 U	1.0 U	0.40 J	0.60 J	0.40 J	NS	NS	NS	NS	NS	NS	1.0 U	1.2	1.1	1.8	1.6	0.50 U	1.5
Vinyl chloride	28 U	50 U	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 UJ
Xylenes (total)	69 U	50 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	NS	NS	NS	NS	NS	3.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-3D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	R	R	7.0 J	6.0 U*	5.0 U*	5.0 U	NS	NS	NS	5.3 J	4.2 J	10 U	10 U	5.0 U	5.0 U	5.0 U	8.9	6.0	10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	0.15 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	2.0 J	R	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	0.33 J	1.0 U	1.0 U	0.34 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	0.50 J	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 UJ	1.0 U	0.30 J	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	1.0 U	0.40 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	R	5.0 U	2.0 J	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	2.0 U	1.0 U	2.0 U	2.0 U*	2.0 U*	2.0 UJ	2.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 UR	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.30 J	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 J
1,2,4-Trichlorobenzene	10 U	25 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	NS	NS	20 U	20 U	3.0 U	3.0 U	2.4	2.0 U	2.0 U	0.67 J	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-4S																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	R	R	5.0 J	5.0 U*	5.0 U*	5.0 U	NS	R	5.0 U	10 U	4.2 J	10 U	8.3 J	5.0 U	5.0 U	5.0 U	5.0 U	5.4	3.8 J
Benzene	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	0.13 J	10 U	0.12 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	5.0 U	NS	R	5.0 U	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Carbon disulfide	5.0 U	0.40 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	NS	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	2.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Ethyl benzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	5.0 U	5.0 U	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Methylene chloride	5.0 U*	4.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	0.70 J	2.0 U	NS	0.19 U*	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.2 J
4-Methyl-2-pentanone	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	5.0 U	5.0 U	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Styrene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J
1,1,2,2-Tetrachloroethane	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	2.0 U	0.10 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	NS	0.11 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35 J
1,1,1-Trichloroethane	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.19 J
Vinyl chloride	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	0.80 J	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	20,000 U		20 U	50	3.0 U	3.0 U	2.0 U	0.47 J	2.0 U	2.0 U	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-4D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	5.0 U*	R	4.0 J	5.0 U*	5.0 U*	R	NS	NS	NS	10 U	4.7 J	10 U	5.2 J	5.0 U	5.0 U	5.0 U	5.0 U	6.0	10.0 U
Benzene	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	R	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	0.20 J	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	0.60 J	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	R	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	1.0 UJ	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	4.0	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 UJ	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 UJ	1.0 U	2.0 U	2.0 U*	2.0 U*	2.0 UJ	2.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.0	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	15 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	NS	NS	20 U	20 U	3.0 U	3.0 U	2.0 U	0.51 J	1.2 J	2.0 U	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-5S																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	120,000 UR	R	R	22,000 U*	11,000 J	2,900	2,500 J	14,000 U*	NS	NS	NS	NS	NS	10 U	4.1 J	14	8.0	8.0	13	5.5	1.9 J
Benzene	2,500 U	1,000 U	920 J	2,500 U	2,500 U	83 J	140	230 J	NS	NS	NS	NS	NS	7.6 J	0.91 J	3.3	5.5	4.7	8.2	13	13
Bromochloromethane		1,000 U	2,500 U	2,500 U	2,500 U			3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U		NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2,500 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 UJ	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	12,000 U	1,000 U	2,500 UJ	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	25,000 UR	3,700 J	18,000 J	18,000 U*	11,000 J	3,000 J	2,100	17,000	NS	NS	NS	NS	NS	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	6,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	11 J	3,300 U	NS	NS	NS	NS	NS	1.0 U	0.30 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	6,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	0.57 J	0.99 J	1.0 U	0.95 J	1.2	2.0	1.9
Chloroethane	6,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	3.1	1.0 U	3.8	1.0 U	3.7
Chloroform	1,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U*	3,300 U	NS	NS	NS	NS	NS	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	12,000 U	1,000 U	250 J	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	5,000 UR	R	2,500 U	2,500 U	2,500 U	500 U	100 UJ	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2,500 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	0.50 J	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	12,000 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	6,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	6,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2,500 U	1,000 U	320 J	2,500 U	2,500 U	110 J	260	450 J	NS	NS	NS	NS	NS	1.0 U	1.4	6.5	1.5	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	750 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	860 J	1,000 U	620 J	2,500	2,500 U	500 U	110	310 J	NS	NS	NS	NS	NS	1.0 U	0.95 J	8.4	1.2	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	6,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	17 J	3,300 U	NS	NS	NS	NS	NS	1.0 U	0.20 J	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2,500 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	38 J	3,300 U	NS	NS	NS	NS	NS	10 U	0.50 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	2,700 J	1,700	2,700	2,500	2,900	1,600	1,800	2,000 J	NS	NS	NS	NS	NS	1.0 U	1.0 U	0.81	6.0	4.7	7.4	10	8.8
2-Hexanone	62,000 UR	5,000 U	R	R	12,000 U	230 J	430	3,300 U	NS	NS	NS	NS	NS	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	9,200 U*	2,000 U	2,500 U*	5,000 U*	2,500 U	500 U	380	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.1	5.0 U	6.9 U*	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	13,000	3,000 J	14,000	13,000	8,300 J	3,400	3,700	14,000	NS	NS	NS	NS	NS	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	620 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	0.43 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2,500 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	10 U	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	52,000 J	14,000	30,000	44,000	34,000	13,000	12,000	35,000	NS	NS	NS	NS	NS	0.22 J	1.0 U	0.81	1.9	2.8	4.6	2.8	4.7
1,2,4-Trichlorobenzene	10 U	250 U	1,500 UJ	2,500 U	2,500 U	500 U	100 UJ	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	6,200 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	620 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	0.33 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3,800 U	1,000 U	2,500 U	2,500 U	2,500 U	500 U	100 U	3,300 U	NS	NS	NS	NS	NS	1.0 U	0.33 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2,200 J	1,000 U	650 J	2,500 U	2,500 U	120 J	250	1,000 J	NS	NS	NS	NS	NS	1.0 U	0.54 J	5.2	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	14,000	8,700	12,000	13,000	16,000	9,900	11,000	12,000	NS	NS	NS	NS	NS	5.0 U	0.26 J	0.98 J	4.0	6.5	11	15	25
1,4-Dioxane	1,500 J	10,000 U	10,000 UJ						NS	NS	NS	NS	NS	81	130	150	63	43	40	87	71

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-5D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	7.0 J	R	7.0 U*	R	R	5.0 U*	5.0 U*	5.0 U	NS	NS	NS	10 U	10 U	10 U	5.7 J	5.1	5.0 U	5.0 U	14	6.2	10 U
Benzene	3.0	0.80 J	1.0	1.0	1.0	1.0	1.0	1.0	NS	NS	NS	1.0 U	0.70 J	10 U	1.0 U	0.40 J	0.77	0.56	1.1	2.0	2.0
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	2.0 J	R	2.0 J	R	R	R	10 U	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	0.16 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	19 J	4.0	6.0 J	3.0 J	8.0	7.0	6.0 J	1.0	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.40 J	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	0.10 J	1.0 U	1.0 UJ	1.0 U	1.0 U*	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	0.17 J	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	0.34 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	0.48 J	1.0 U	0.17 J	0.49 J	2.2	1.3	1.5	2.5	2.2
1,2-Dichloroethane	0.60 U	1.0 U	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	0.70 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	2.2	1.0 U	0.31 J	2.3	11	3.6	7.4	12	14
trans-1,2-Dichloroethene	5.0 U	0.40 J	0.50 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	0.26 J	1.0 U	1.0 U	1.0 U	1.4	1.0 U	0.96 J	1.5	1.6
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	3.0 J	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	7.0 U*	2.0 U*	1.0 U*	2.0 U*	2.0 U*	2.0 U*	1.0 J	0.10 J	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	6.5 U*	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	1.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	17	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U*	0.10 J	0.20 U*	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	10 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	0.80 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	2.3	1.0 U	1.0 U	0.50 U	0.50 U	1.4	3.0	3.6	3.0
Xylenes (total)	17	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 UJ	10,000 U	10,000 UJ						NS	NS	NS	20 U	20 U	29	36	73	83	50	56	59	57

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-6S																				
Collection Date	1993	1996	1997	1988	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	1,400 J	2,500 J	2,300 U*	2,700 U*	4,100 J	1,200	410 U*	620 U*	NS	NS	NS	NS	NS	NS	8.4 J	12	5.0 U	5.0 U	7.2	7.4 U	10 UJ
Benzene	200 UR	340 J	270	180 J	180 J	100 J	150 J	130 J	NS	NS	NS	NS	NS	NS	9.6	3.8	9.3	17	25	17	23
Bromochloromethane		100 U	120 U	310 U	250 U			170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100 UR	100 U	120 U	310 U	250 U	500 U	250 U		NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	200 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1,000 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	3.0 U
2-Butanone	4,200 J	4,100 J	4,200 J	4,600 U*	8,200 J	3,100 J	1,000	1,700 J	NS	NS	NS	NS	NS	NS	2.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Carbon disulfide	500 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	100 UR	100 U	120 U	310 U	250 U	500 U	250 UJ	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	500 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	0.70 J	1.0 U	1.0 U	1.3	1.9	1.2	1.7
Chloroethane	500 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	100 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	1,000 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dibromo-3-chloropropane	400 UR	R	120 U	310 U	250 U	500 U	250 U	170 UJ	NS	NS	NS	NS	NS	NS	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 UJ
Dibromochloromethane	200 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	100 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1,000 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	500 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	500 UR	100 U	120 U	310 U	250 U	500 U	250 U*	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	200 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	60 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	100 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	500 UR	13 J	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	0.16 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	500 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	200 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	100 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	100 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	140 J	340 J	240	330	400	200 J	220 J	170	NS	NS	NS	NS	NS	NS	0.94 J	0.50 U	0.50 U	0.50 U	0.50 U	0.72	0.93
2-Hexanone	5,000 UR	500 U	R	R	1,200 U	500 U	R	170 UJ	NS	NS	NS	NS	NS	NS	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Methylene chloride	500 U*	200 U*	120 U	620 U	250 U	500 U	250 U*	170 U	NS	NS	NS	NS	NS	NS	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	2,900 J	2,900 J	2,500	3,600	9,200	2,500	2,200	1,900	NS	NS	NS	NS	NS	NS	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Styrene	100 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	0.36 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	200 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2,300 J	1,500 J	1,600	2,500	3,600	1,200	1,300	1,100	NS	NS	NS	NS	NS	NS	0.48 J	0.70	0.50 U	0.40 J	0.36 J	0.32 J	0.26 J
1,2,4-Trichlorobenzene	30 U		1,500 U	310 U	250 U	500 U	250 U*	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	500 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	50 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	300 UR	15 J	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	200 UR	100 U	120 U	310 U	250 U	500 U	250 U	170 U	NS	NS	NS	NS	NS	NS	0.19 J	0.50 U	0.50 U	0.50 U	0.50 U	0.26 J	1.0 UJ
Xylenes (total)	550 J	1,600 J	1,100	1,400	1,500	840	1,100	750	NS	NS	NS	NS	NS	NS	36	23	4.7	78	110	34	32
1,4-Dioxane	5,800 UR	10,000 U	10,000 UJ						NS	NS	NS	NS	NS	NS	87	33	118	230	320	290 J	320

Notes:

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TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-6D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	6.0 U*	7.0 U*	6.0 J	5.0 U*	6.0 U*	5.0 U	NS	NS	NS	10 U	4.8 J	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	6.5	10 U
Benzene	6.0	1.0 U	1.0 U	6.0	5.0	2.0	1.0 U	1.0 U	NS	NS	NS	1.0 U	0.16 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	0.19 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	5.0 U	NS	NS	NS	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	0.22 J	1.0 U	1.0 U	0.22 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	15	1.0	3.0	4.0 J	0.90 J	0.10 J	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	0.10 J	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UJ	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	0.22 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	1.0 U	0.50 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	3.8	17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	0.31 J	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	8.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U*	1.0 U*	2.0 U*	2.0 U*	2.0 UJ	2.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NS	NS	NS	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.7	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	50 U	5.0 U		1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	9.3	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	0.80 J	3.1	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	0.70 J	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	NS	NS	20 U	26	3.0 U	32	2.7	76	120	150	140	110

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-11S																		
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	R	R	6.0 J	R	5.0 U*	R	R	3.1 U*	5.0 U	10 U	10 U	10 U	10 U	5.0 U	47	23	20	9.2
Benzene	2.0 U	0.80 J	1.0	0.60 J	1.0 U	0.30 J	0.40 J	0.40 J	0.054 J	0.26 J	0.22 J	0.14 J	0.27 J	0.47 J	0.48 J	0.72	3.0	2.9	2.7	0.68
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.12 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Butanone	20 UR	R	R	R	R	R	R	R	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	14	5.0 U	6.1	6.3
Carbon disulfide	1.0 J	0.60 J	0.90 J	1.0 U	2.0	0.30 J	0.60 J	0.2 J	0.50 U	0.53 U*	0.50 U	1.0 U	0.22 J	1.0 U	0.47 J	5.0	5.6	1.0 J	1.3 J	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.034 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	1.0 U	0.40 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UJ	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	R	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.15 U*	0.50 U	0.50 U	1.0 U	0.12 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.080 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.12 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.51	0.50 U	0.5 U	0.50 U
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U	2.0 U*	4.0 U*	2.0 U*	2.0 UJ	2.0 U	0.30 U*	0.33 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	7.1 U*	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.052 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	15.6	3.8	1.7	0.50 U
1,2,4-Trichlorobenzene	10 U	25 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.45 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J
1,4-Dioxane	5,800 U	10,000 UJ	10000 UJ							20,000 U	NS	20 U	20 U	3.0 U	3.0 U	1.5 J	2.7	0.76 J	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	A-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	9.0 J	8.0 J	R	5.0 U*	5.0 U*	5.0 U	3.4 U*	R	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Benzene	2.0 U	2.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.033 J	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromochloromethane		2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromoform	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.05 U*	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	0.21 U*	NS	NS	NS	NS	NS	NS
Bromomethane	10 U	2.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
2-Butanone	20 UR	R	R	R	R	R	5.0 U	5.0 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Carbon disulfide	5.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.1 J	1.0 U	0.13 U*	1.3 U	0.50 U	1.0 U	0.12 J	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chlorobenzene	5.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.035 J	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloroethane	5.0 U	2.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	22	35	11 J	3.4	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloroform	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloromethane	10 U	2.0 U	2.00 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	0.78	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	4.0 UR	R	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Dibromochloromethane	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	10 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	5.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	5.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	0.60 U	2.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	1.0 U	2.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.19 J	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	5.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	5.0 U	2.0 U	2.0 U	1.0 UJ	1.0 U	0.20 J	0.20 J	1.0 U	0.12 J	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	1.0 UJ	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.074 U*	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	1.0 UJ	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Ethyl benzene	5.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Methylene chloride	5.0 U*	0.2 U*	2.0 U	4.0 U*	2.0 U*	2.0 U*	2.0 U	2.0 U	0.79 U*	0.30 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	5.0 UJ	10 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 UJ	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Styrene	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	0.5 U	2.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Tetrachloroethene	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.069 J	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Toluene	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.0	1.0 U	1.0 U	0.082 U*	0.47 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	10 U	50.0 U	25.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	5.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	0.50 U	2.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Trichloroethene	3.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Vinyl chloride	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.00 U	0.40 J	0.50 U	1.3 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Xylenes (total)	5.0 U	2.0 U	12 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.17 J	1.3 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS	NS	NS	NS	NS
1,4-Dioxane	5,800 UJ	10,000 UJ	10,000 UJ							20,000 U		20 U	4.7 J	4.4	7.4	NS	NS	NS	NS	NS	16

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	B-10																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	R	6.0 J	R	5.0 U*	5.0 U*	5.0 U	R	R	5.0 U	10 U	10 U	3.4 U*	10 U	5.0 U	5.0 U	5.0 U	5.0 U	7.2	3.1 J
Benzene	2.0 U	10 U	10 J	1.0 UJ	1.0 U	0.10 J	1.0 U	1.0 U	0.072 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.096 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	5.0 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	0.10 J	1.0 U	0.32 J	0.50 U	0.50 U	1.0 U	0.13 J	1.0 U	0.24 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	10 U	25 U	1.0 UJ	1.0 U	1.0 U	1.0 J	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	10 U	3.0 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	10 U	25 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	0.50 U	0.50 UJ	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UJ	R	R	1.0 U	1.0 U	1.0 U	R	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	10 U	25 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	0.9 J	7.0 J	42	1.0 U	1.0 U	1.0 U	0.3 J	1.0 U	0.049 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	10 U	25 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	10 U	25 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	6.0 J	320	1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	10 U	25 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.086 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	20 U	25 U	3.0 U*	2.0 U*	2.0 U*	2.0 UJ	2.0 U	0.37 U*	0.34 U*	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	7.4 U*	5.0 U	5.0 U	5.0 U	2.3 J
4-Methyl-2-pentanone	5.0 UJ	50 U	R	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	10 U	25 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	10 U	25 U*	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.15 U*	0.16 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5 U	5 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	10 U	25 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	10 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	160	100	1.0 U	1.0 U	1.0 U	1.0 U	0.80 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	10 U	120 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 UJ	10,000 UJ							20,000 U		20 U	4.9 J	3.0 U	3.0 U	2.0 U	2.0 U	2.0 U	0.31 J	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	B-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	1.0 J	R	R	11 J	R	5.0 U*	5.0 U*	18 U	2.2 U*	R	5.0 U	10 U	5.9 J	10 U	10 U	5.5	5.0 U	5.0 U	5 U	11 U	3.2 J
Benzene	2.0 U	10 U	10 U	4.0 U	3.0 U	0.10 J	1.0 U	4.0 U	0.14 J	0.50 U	0.50 U	1.0 U	0.13 J	0.15 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 UJ	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.16 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	10 U	10 UJ	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	18 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	0.08 J	4.0 U	0.19 J	0.50 U	0.50 U	1.0 U	0.32 J	1.0 U	0.18 U*	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 UJ	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	3.0 J	190	180	40	32	27	50	44	4.9	4.6	0.79	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	0.80 J	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	0.64 J
Chloromethane	10 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U*	4.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UJ	R	R	4.0 UJ	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 UJ	5.0 U
Dibromochloromethane	2.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0** U	1.0 U
1,2-Dichloroethane	0.6 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.089 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	10 U	10 U	4.0 U	3.0 U	0.20 J	0.30 J	4.0 U	0.14 J	0.15 J	0.11 J	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.083 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	16 U	5.0 U	5.0 UJ	18 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	1.0 U*	10 U*	9.0 U	6.0 U	2.0 U*	6.0 J	0.70 J	0.37 U*	0.28 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	6.5 U*	5.0 U	5.0 U	5.0 U	2.2 J
4-Methyl-2-pentanone	5.0 UJ	50 U	R	22 U	16 U	5.0 U	5.0 UJ	18 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	10 U	10 UJ	4.0 U	3.0 U	1.0 U	1.0 UJ	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	10 U	10 U	4.0 U	3.0 U	1.0 U*	0.1 J	4.0 U	0.061 U*	0.13 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	50 U	25 UJ		3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	10 U	10 UJ	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	10 U	10 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 J	4.0 J	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	0.50 U	1.0 U	0.13 J	1.0 U	1.0 U	0.5 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	10 U	50 U	4.0 U	3.0 U	1.0 U	1.0 U	4.0 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 UJ	10,000 UJ							20,000 U		20 U	24	13	22	8.2	19	20	17	25 J	22

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	C-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	9.0 J	R	3.0 J	R	5.0 U*	5.0 U*	5.0 U	NS	NS	NS	10 U	10 U	10 U	3.5 J	5.0 U	5.0 U	5.0 U	5.0 U	4.6 J	10 U
Benzene	1.0 J	1.0	1.0	1.0 J	1.0 U	0.10 J	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	3.0 J	R	R	R	R	5.0 U	5.0 U	NS	NS	NS	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U*	0.20 J	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 J	2.0	0.8 J	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	0.9 J	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UJ	R	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	0.40 J	4.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	0.12 J	0.14 J	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	0.6 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	12	0.10 J	0.40 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	R	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS	NS	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	2.0 U	1.0 U	1.0 U*	2.0 U*	2.0 U*	2.0 U	2.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS	NS	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	50 U	20 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	3.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	10	0.50 J	1.0 J	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	NS	NS	20 U	20 U	4.3	9.1	2.3	2.3	3.2	2.4	3.4	4.0

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	D-10																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	8,300 UR	R	R	R	18 J	100 U*	R	89 J	NS	NS	NS	NS	NS	10 U	3.3 J	5.0 U	5.0 U	5.0 U	5.0 U	6.5	2.9 J
Benzene	3,300 J	200	250	140	59	470	630	380	NS	NS	NS	NS	NS	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.26 J	0.41 J
Bromochloromethane		100 U	12 U	10 U	5.0 U	20 U	100 UJ	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	83 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	170 U	100 U	12 U	10 U	5.0 U	20 U	100 UJ	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	830 U	100 U	12 UJ	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	1,700 UR	R	R	R	R	R	R	130 U	NS	NS	NS	NS	NS	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	420 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	83 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	420 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	130 J	18 J	11 J	10 UJ	5.0 U	20 U	100 UJ	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Chloroform	83 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	830 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	330 UJ	R	12 U	10 U	5.0 U	20 U	R	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	170 U	100 U	12 U	10 U	5.0 U	20 U	100 UJ	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	83 U	100 U	12 U	10 U	5.0 U	20 U	100 UJ	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	830 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	420 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	420 U	100 U	12 U	10 U	5.0 U	20 U	31 J	3 U*	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	170 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	50 U	100 U	12 U	10 U	5.0 U	20 U	24 J	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	83 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	420 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	71 J	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	170 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	83 UJ	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	83 UJ	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	300 J	37 J	8.0 J	10 U	5.0 U	5.0 J	100 U	4.0 J	NS	NS	NS	NS	NS	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	4,200 UR	R	R	R	25 U	100 U	500 UJ	130 U	NS	NS	NS	NS	NS	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	420 U	200 U	12 U	20 U	10 U*	40 U*	200 UJ	4.0 J	NS	NS	NS	NS	NS	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.4 J
4-Methyl-2-pentanone	420 UJ	500 U	62 UJ	50 U	25 U	100 U	500 UJ	130 U	NS	NS	NS	NS	NS	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	83 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J
1,1,2,2-Tetrachloroethane	42 U	100 U	12 UJ	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	170 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	170 U*	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.35 J
1,2,4-Trichlorobenzene	10 U	50 U	15 UJ	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	420 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	42 U	100 U	12 U	10 U	5.0 U	20 U	36 J	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	250 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	170 U	100 U	12 U	10 U	5.0 U	20 U	100 U	25 U	NS	NS	NS	NS	NS	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.00 U	1.00 U
Xylenes (total)	890	3,300	250	28	96	18 J	100 U	25 U	NS	NS	NS	NS	NS	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.30 J
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ						NS	NS	NS	NS	NS	3.0 U	3.0 U	2.0 U	0.52 J	2.0 U	0.78 J	0.94 J	1.0 J

Notes:

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U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

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[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

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[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	H-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [4]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	11 J	46 J	48 U*	R	17 J	5.0 U*	9.0 U*	5.0 U	5.1 U*	3.3 J	4.1 J	10 U	3.3 J	10 U	3.8 J	NS	NS	NS	NS	NS	NS
Benzene	2.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.14 J	1.0 U	NS	NS	NS	NS	NS	NS
Bromochloromethane		5.0 U	2.0 U	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromoform	2.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromomethane	10 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
2-Butanone	4.0 J	R	R	R	R	R	5.0 U	5.0 U	5.0 U	5.00 U	5.00 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Carbon disulfide	5.0 U	5.0 U	2.0 U	5.0 U	1.0 UJ	1.0 U	0.1 J	1.0 U	0.14 U*	0.70 J	0.50 U	1.0 U	1.0 U	1.0 U	0.11 J	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	1.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chlorobenzene	5.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.13 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloroethane	5.0 U	5.0 U	2.0 UJ	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloroform	1.0 U	5.0 U	2.0 U	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.03 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloromethane	10 U	5.0 U	0.90 J	0.90 J	1.0 UJ	1.0 UJ	1.0 U*	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	4.0 UR	R	2.0 U	5.0 U	R	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Dibromochloromethane	2.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	1.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	10 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.23 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	5.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.22 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	5.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.32 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	2.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	0.60 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	1.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.16 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	5.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	5.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.18 J	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	2.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	1.0 UJ	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.08 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	1.0 UJ	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Ethyl benzene	5.0 U	5.0 U	2.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.03 U*	0.11 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
2-Hexanone	50 UR	R	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Methylene chloride	5.0 U*	10.0 U	2.0 U	5.0 U	2.00 U*	2.0 U*	2.0 U*	2.0 U	0.79 U*	0.50 UJ	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	5.0 UJ	25 U	12.0 U	R	R	5.0 U	5.0 U	5.0 U	0.40 J	5.0 U	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Styrene	1.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	0.50 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Tetrachloroethene	2.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.36 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Toluene	2.0 U*	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U*	1.0 U*	1.0 U	0.35 U*	0.14 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	10 U	50 U	25.0 UJ		1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	5.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	0.5 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Trichloroethene	3.0 U	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.15 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Vinyl chloride	2.0 U	5.00 U	2.00 U	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.11 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Xylenes (total)	5.0 U	5.0 U	12.0 U	25.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.12 U*	0.27 J	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS	NS	NS	NS	NS
1,4-Dioxane	5,800 UR	10,000 UJ	10,000 UJ							20,000 UJ		140	75	130	180	NS	NS	NS	100	130	100

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	M-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [4]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	R	R	7.0 J	5.0 U*	R	5.0 U	3.6 U*	2.4 U*	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Benzene	2.0 U	2.0 U	1.0 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromochloromethane		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Bromoform	2.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.07 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.2 J	NS	NS	NS	NS	NS	NS
Bromomethane	10 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
2-Butanone	20 UR	R	R	R	R	R	5.0 U	5.0 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Carbon disulfide	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.65	0.50 U	0.50 U	1.0 U	0.71 J	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.04 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloroethane	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloroform	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Chloromethane	10 U	2.0 U	0.10 J	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Dibromochloromethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	0.60 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	2.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.08 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Ethyl benzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Methylene chloride	5.0 U*	4.0 U	1.0 U	2.0 U*	3.0 U*	2.0 U*	2.0 U*	2.0 U	0.21 U*	0.20 U*	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	5.0 UR	10 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
Styrene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	0.50 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Tetrachloroethene	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Toluene	2.0 U*	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U*	1.0 U	0.14 U*	0.13 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	10 U	5.0 U	5.0 UJ	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Trichloroethene	3.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Vinyl chloride	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS	NS	NS	NS	NS
Xylenes (total)	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS	NS	NS	NS	NS
1,4-Dioxane	5,800 U	10,000 UJ	10,000 UJ							20,000 U		20 U	2.4 J	3.0 U	3.0 U	NS	NS	NS	2.1	3.6	16

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	O-10																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [4]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	12 J	10 J	4.0 J	R	R	5.0 U*	5.0 U*	5.0 U	2.4 U*	2.2 U*	5.0 U	10 U	3.9 J	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Benzene	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.033 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	NS
Bromochloromethane		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Bromodichloromethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Bromoform	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.084 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Bromomethane	10 U	2.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	NS	NS
2-Butanone	20 UR	R	R	R	R	R	R	5.0 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Carbon disulfide	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.11 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 J	2.0 U	2.0 U	2.0 U	NS	NS
Carbon tetrachloride	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Chlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.049 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Chloroethane	5.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Chloroform	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	NS	NS
Chloromethane	10 U	0.2 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Dibromochloromethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	NS	NS
1,2-Dibromoethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,2-Dichlorobenzene	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,3-Dichlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,4-Dichlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1-Dichloroethane	2.0 U	0.4 J	0.3 J	1.0 U	1.0 U	0.30 J	0.30 J	0.20 J	0.077 J	0.24 J	0.50 U	1.0 U	0.12 J	1.0 U	0.13 J	1.0	1.0 U	1.0 U	1.0 U	NS	NS
1,2-Dichloroethane	0.6 U	2.0 U	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1-Dichloroethene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.061 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
cis-1,2-Dichloroethene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 J	1.0 U	0.18 J	0.50 U	0.50 U	1.0 U	0.14 J	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	NS	NS
trans-1,2-Dichloroethene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	NS	NS
1,2-Dichloropropane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	NS	NS
cis-1,3-Dichloropropene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.069 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
trans-1,3-Dichloropropene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Ethyl benzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.049 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	NS
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Methylene chloride	5.0 UJ	4.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	0.60 J	2.0 U	0.36 U*	0.32 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 cn	5.0 U	5.0 U	5.0 U	NS	NS
4-Methyl-2-pentanone	5.0 U	10 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Styrene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1,2,2-Tetrachloroethane	0.5 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Tetrachloroethene	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Toluene	1.0 J	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.44 U*	0.11 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.37 J	0.50 U	NS	NS
1,2,4-Trichlorobenzene	10 U	50 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1,1-Trichloroethane	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1,2-Trichloroethane	0.5 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Trichloroethene	3.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50	0.50 U	0.50 U	0.50 U	NS	NS
Vinyl chloride	2.0 U	0.20 J	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	NS
Xylenes (total)	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32 J	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,4-Dioxane	5,800 UJ	10,000 U	10,000 UJ							20,000 U		20 U	20 U	3.7	4.8	1.5 J	1.2 J	0.68 J	2.90	NS	NS

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	O-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [4]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	R	R	R	5.0 U*	5.0 U*	5.0 U	2.4 U*	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.8	NS	NS
Benzene	2.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	0.90 J	2.0	3.0	0.18 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	NS
Bromochloromethane		5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Bromodichloromethane	1.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Bromoform	2.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.080 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Bromomethane	10 UJ	5.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	NS	NS
2-Butanone	20 UR	R	R	R	R	R	R	5 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Carbon disulfide	5.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.15 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	NS	NS
Carbon tetrachloride	1.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Chlorobenzene	5.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.046 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Chloroethane	5.0 UJ	5.0 U	5.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Chloroform	1.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	NS	NS
Chloromethane	10 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.14 U*	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,2-Dibromo-3-chloropropane	4.0 UR	R	5.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Dibromochloromethane	2.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	NS	NS
1,2-Dibromoethane	1.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,2-Dichlorobenzene	10 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,3-Dichlorobenzene	5.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,4-Dichlorobenzene	5.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1-Dichloroethane	2.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**NS**	NS
1,2-Dichloroethane	0.60 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1-Dichloroethene	1.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.085 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
cis-1,2-Dichloroethene	5.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
trans-1,2-Dichloroethene	5.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,2-Dichloropropane	2.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
cis-1,3-Dichloropropene	1.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.087 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
trans-1,3-Dichloropropene	1.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Ethyl benzene	5.0 UJ	5.0 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	NS
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Methylene chloride	5.0 U*	10 U	5.0 U	2.0 U*	2.0 U*	2.0 U*	1.0 J	2.0 U	0.85 U*	0.28 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
4-Methyl-2-pentanone	36 J	25 U	25 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Styrene	1.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1,2,2-Tetrachloroethane	0.50 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Tetrachloroethene	2.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Toluene	0.60 J	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 U*	0.13 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	NS
1,2,4-Trichlorobenzene	50 U	250 U	15 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1,1-Trichloroethane	5.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,1,2-Trichloroethane	0.50 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
Trichloroethene	3.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	NS
Vinyl chloride	2.0 UJ	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.32 U*	1.1	1.3	1.7	1.0 U	0.83 J	0.50 U	0.50 U	0.50 U	0.50 U	NS	NS
Xylenes (total)	5.0 UJ	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.070 U*	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	NS
1,4-Dioxane	2,500 J	10,000 U	10,000 UJ							20,000 U		20 U	37	69	69	10	12	11	83	NS	NS

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	P-10																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	2,500 UR	R	20 U*	R	R	16 J	6.0 U*	25 U	2.3 U*	4.1 U*	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.2	10 U
Benzene	200	42	42	75	250 U	31	40	35	8.0	3.7	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		2.0 U	4.0 U	62 U	250 U		1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	25 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	250 U	2.0 UJ	4.0 UJ	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	400 J	R	R	R	R	10 UJ	5.0 U	25 U	5.0 UJ	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	120 U	2.0 U	4.0 U	62 U	250 U	10 U	0.10 J	5.0 U	0.051 J	0.17 U*	0.50 U	0.13 J	0.81 J	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	25 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	120 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	65 J	14	8.0	62 UJ	250 U	26	23	19	2.8	0.50 U	0.28 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	25 U	2.0 U	4.0 U	62 UJ	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	250 UJ	0.40 J	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	100 UJ	R	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	50 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	25 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	250 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	120 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	120 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	34 J	2.0 U	4.0 U	62 U	250 U	2.0 J	1.0	1.0 J	0.19 J	0.15 J	0.11 J	1.0 U	1.0 U	1.0 U	0.14 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	15 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	25 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	110 J	2.0 U	4.0 U	62 U	250 U	3.0 J	1.0	1.0 J	0.21 U*	0.13 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	120 U	2.0 U	4.0 U	62 U	250 U	10 U	0.30 J	5.0 U	0.081 J	0.50 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	50 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	25 UJ	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.093 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	25 UJ	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	120 U	2.0 U	4.0 U	62 U	250 U	3.0 J	3.0	2.0 J	0.032 U*	0.30 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1,200 UR	R	R	R	1,200 U	10 U	5.0 U	25 U	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	150 U*	4.0 U*	4.0 U	120 U	250 U	10 U	2.0 U*	0.60 J	0.51 U*	0.26 U*	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	350 J	10 U	20 U	310 UJ	1,200 U	10 U	1.0 J	25 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	25 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	12 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	50 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000 J	0.40 J	4.0 U	790	2,200	190	110	110	0.093 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	25 U	5.0 UJ	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	120 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	12 U	2.0 U	4.0 U	62 U	250 U	10 U	1.0 U	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	75 U	2.0 U	4.0 U	62 U	250 U	10 U	0.70 J	5.0 U	0.091 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	29 J	2.0 U	4.0 U	62 U	250 U	1.0 J	0.50 J	5.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	120 U	2.0 U	20 U	62 U	250 U	11	11	7.0	0.50 U	0.77	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ							20,000 U		20 U	9.8 J	8.5	9.3	3.2	5.9	19	21	28	24

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	P-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	7.0 U*	R	R	5.0 U*	5.0 U*	5.0 U	3.1 U*	R	5.0 U	10 U	10 U	10 U	5.6 J	5.0 U	5.0 U	5.0 U	8.4	5.1	10 U
Benzene	6.0 J	0.6 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.072 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10.0 UR	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20.0 UR	R	R	R	R	R	5.0 U	5.0 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	1.0 U	0.048 J	0.50 U	0.50 U	1.0 U	0.90 J	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 UR	0.3 J	1.0 U	1.0 U	1.0 U	0.30 J	0.60 J	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10.0 UR	0.1 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	R	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 UR	1.0 U	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	0.5 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.043 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	0.20 J	1.0 U	0.22 J	0.25 J	0.25 J	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.069 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.34 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50.0 UR	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U*	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 U*	2.0 U	0.37 U*	0.50 UJ	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 UR	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	12.0 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.11 U*	0.18 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10.0 U	50 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.21 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 UR	9.0	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.97	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5800 UR	10,000 U	10,000 UJ							20,000 U		20	4.2 J	19	14	23	12	14	11	17	18

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	Q-10																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	5.0 U*	R	5.0 J	R	11 U*	6.0	R	2.9 U*	5.0 U	3.5 J	4.3 J	10 U	3.8 J	5.0 U	5.0 U	5.0 U	5.0 U	6.4	10 U
Benzene	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.054 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U
Bromochloromethane		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	5.0 U	4.7 U*	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.24 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.46 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	2.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.077 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	5.0 U	R	5.0 UJ	5.0 U	0.36 U*	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 UJ	5.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 UJ	2.0 U	0.32 U*	0.20 U*	0.5 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	12 U	5.0 U	1.0 J	5.0 U	R	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	0.5 J	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.30 U*	0.10 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.058 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.079 U*	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 UJ	10,000 UJ	10,000 UJ							20,000 U		20 U	20 U	3.0 U	1.6 J	2.0 U	2.0 U	0.70 J	0.40 J	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	Q-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	R	R	5 J	R	5 U*	5 U	3.1 U*	R	5.0 U	10 U	3.7 J	10 U	10 U	32	5.0 U	5.0 U	6.0	18	10 U
Benzene	2.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.052 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.16 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	4.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	5.0 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.036 J	0.50 U	0.50 U	1.0 U	1.9	1.0 U	0.19 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	0.10 J	0.60 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	R	R	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	4.0	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.081 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 UJ	2.0 U	4.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 UJ	2.0 U	0.26 U*	0.15 U*	0.5 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	20 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 J	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.11 U*	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	50 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	1.0 J	1.0 U	20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 UJ	10,000 UJ	10,000 UJ							20,000 U		20 U	20 U	3.0 U	1.4 J	2.0 U	2.0 U	2.0 U	0.46 J	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	R-10																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	16 U*	R	R	R	5.0 U*	5.0 U	3.8 U*	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	6.5	10 U
Benzene	36 J	8.0	8.0	1.0 U	0.90 J	0.50 J	1.0 U	0.30 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.074 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	5.0 U	5.0 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.10 J	1.0 U	0.038 J	0.50 U	0.50 U	1.0 U	1.5	1.0 U	0.16 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.033 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 UJ	0.60 J	3.0	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.045 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	1.0 UJ	0.20 J	1.0 U	1.0 UJ	1.0 UJ	1.0 U*	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 U	R	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 UJ	0.30 J	0.90 J	1.0	1.0 U	1.0 U	1.0 U	1.0 U	0.16 J	0.59	0.20 J	1.0 U	1.0 U	0.11 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.053 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.50 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.079 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U	3.0 U*	2.0 U*	2.0 U*	2.0 U*	2.0 U	0.42 U*	1.3 U*	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 UJ	5.0 U	R	5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U*	1.0 U	0.13 U*	0.16 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U	5.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.18 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 UJ	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U	10,000 UJ							20,000 U		20 U	20 U	3.0 U	3.0 U	2.0 U	2.0 U	0.30 J	0.65 J	1.0 J	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	R-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	5.0 J	R	R	R	R	5.0 U	2.4 U*	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	3.9 J	10 UJ
Benzene	2.0 U	1.0 U	1.0 U	1.0 UJ	1.0 J	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	10 J	R	R	R	5.0 U	5.0 U	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	0.86 J	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	0.50 J	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dibromo-3-chloropropane	4.0 UR	R	1.0 U	1.0 U	R	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 UJ
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.24 J	0.15 J	0.24 J	1.0 U	1.0 U	0.15 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	0.20 J	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.091 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.63	1.2	0.63 J	0.51 J	0.56 J	1.0 U	2.6	4.8	4.3	2.9	3.1
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.082 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Methylene chloride	5.0 U*	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 U*	2.0 U	0.39 U*	0.27 U*	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 UJ	5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.064 U*	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10.0 U	10 U	5.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.13 J	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 UJ
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 UJ	10,000 U	10,000 UJ							20,000 U		20 U	20 U	3.0 U	3.0 U	2.0 U	2.0 U	2.0 U	0.4 J	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	S-10						S-30					
Collection Date	2014	2015	2016	2017	2018[3]	2019	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	8.0	4.5 J	5.0 U	5.0 U	5.0 U	5.0 U	6.5	3.9 J
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.2 J	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 J
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	0.50 U	0.50 U	0.50 U	0.5 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	2.0 U	2.0 U	2.0 U	0.36 J	2.0 U	2.0 U	1.0	3.0	3.2	3.0	0.97 J	1.1 J

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-6

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	EW-4													
Collection Date	2002	2004	2005	2008	2009	2010 (Sept.)[5]	2010 (Oct.)[5]	2011	2012	2014	2015	2017	2018 [3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	25 U	5.3 U*	4.6 J	5.5 UJ	10 U	10 U	10 U	10 U	6.1 J	5.0 U	5.0 U	5.0 U	4.2 J	10 U
Benzene	11	31	16	6.8	8.5	9.2	0.14 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 UJ	2.0 U	3.0 U
2-Butanone	25 U	2.4 J	R	5.0 UJ	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	0.43 U*	0.14 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	0.062 U*	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	57	9.2	0.63 U	1.6 J	0.69 J	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	5.0 U	0.50 U	0.63 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	6.0	6.9	6.7	4.1	2.2	1.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.41 J	1.0 U
1,2-Dichloroethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5.0 U	0.18 U*	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	6.0	57	12	4.2	0.75 J	0.61 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	0.77	0.54 J	0.33 J	0.30 J	0.30 J	0.24 J	0.28 J	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J
1,2-Dichloropropane	5.0 U	0.50 U	0.63 U	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	5.0 U	0.066 U*	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	0.56	0.63 U	0.50 U	0.21 J	0.54 J	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.5 U	0.50 U	0.50 U
2-Hexanone	25 U	5.0 U	0.63 U	5.0 UJ	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	10 U	0.39 U*	0.40 U*	0.50 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	25 U	3.9 J	0.63 U	5.0 UJ	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 J	4.0	2.5 J	0.61	5.5	33	1.0 U	0.30 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	0.051 J	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5.0 U	0.50 U	0.63 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5.0 U	0.075 J	0.79	0.13 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	10	11	7.7	2.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	3.6	0.63 U	1.5 U	0.44 J	1.4 J	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane			20,000 U		20 U	20 U	31	23	44	16	22	28	8.3	15

Notes:

Analytical results only presented for those monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered non-detect due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

Blank space = The compound was not analyzed for in this sample.

NS = This monitoring location was not sampled.

[1] Value shown is the highest detected between the investigative sample and its unpreserved, duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The O-Cluster was not sampled in 2019 sampling event due to standing water.

[4] Prior to the shutdown of the Midco I Site's GWETS, a sample was collected from each extraction well in September 2010. After the shutdown of the Midco I GWETS, an additional groundwater sample was collected from extraction well EW-4 in October 2010. The September and October 2010 results for extraction well EW-4 are presented separately.

TABLE 5-7

1993 - 2019 Semivolatile Organic Compound - Pentachlorophenol in Monitoring Location Samples[1,2,3]
Midco I Site
Gary, Indiana

Monitoring Location	MW-4S													
Collection Date	1993	1996	1997	2005	2009	2010	2011	2012	2014	2015	2016	2017	2018	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Pentachlorophenol	18 UJ	4.0 J	20 U	19	9.2 J	1,900	810 J	1,300	12 J	29 J	9.2 J	17 U	39	16 U

Notes:

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated quantitation limit.

UJ = The associated quantitation limit estimated based on a bias identified during the quality assurance review.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] Only ground water collected from monitoring well MW-4S was analyzed for pentachlorophenol.

Table 5-8

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-2S																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 UJ	1.0 U	1.0 U	0.30 UJ	1.7	0.20 U	0.30 U	0.40 U	NS	NS	NS	NS	NS	18.9	5.7	19	1.6	0.86	0.79	0.45 J	1.0
Copper	12.8 U*	1.5	1.0 U	1.3	2.2 U*	2.0 U*	3.7 U*	1.0 U	NS	NS	NS	NS	NS	142	184	100	39.0	49.0	47.0	39.0	46.0
Cyanide	12.9	10.0 U	10.0 U	10.0 U	8.9	4.4 U*	5.2	12.3	NS	NS	NS	NS	NS	2.5 U	3.2 J	10.0 U	2.8 J	11.0	10.0	10.0 U	10.0 U
Nickel	33.8	7.3	11.6	5.9	4.8	5.8	7.0 J	4.9 U*	NS	NS	NS	NS	NS	16,400	2,730	2,600	1,120	1,100	540	420	350
Zinc	26.7 U*	7.4 U*	20.0 U*	0.50 UJ	0.40 UJ	0.80 UJ	1.0 UJ	2.9 J	NS	NS	NS	NS	NS	2,760	978	1,100	435	180	55.0	28.0	32.0

Monitoring Location	MW-2D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 U	1.0 U	1.0 U	0.30 UJ	0.97 U*	0.2 U	0.30 U	0.40 U	NS	NS	NS	2.0 U	2.0 U	1.8 U	1.8 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Copper	4.0 U	2.0	190	0.70 U	1.2 U*	0.60 U	0.90 U	2.4 J	NS	NS	NS	4.1 J	4.5 J	2.5 J	0.91 U	1.2 J	3.7	1.8 J	3.8	5.7	1.0 J
Cyanide	5.0 U	10.0 U	10.0 U	10.0 U	4.7 U	3.1 U*	3.0	3.6 J	NS	NS	NS	3.1 J	10.0 U	2.5 U	7.0 J	10.0 U	54.0	100	23.0	14.0	12.0
Nickel	13.0 U	4.9	4.4	3.6	2.9	4.6	3.5 U*	6.7 J	NS	NS	NS	40.0 U	40.0 U	3.4 U	3.4 U	1.5 J	1.5 J	2.3 J	3.9	2.6	1.4 J
Zinc	5.0 U	16.8	10.6 U*	0.50 UJ	0.40 UJ	0.80 UJ	1.0 UJ	3.2 J	NS	NS	NS	7.3 J	20.0 U	10.2 U	10.2 U	20.0 U	6.6 J	20.0 U	20.0 U	11.0 J	20.0 U

Notes:

Results only presented for those analytes and monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed but not detected. The associated value is the sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

UJ = The compound was analyzed but not detected. The associated value is an estimated sample quantitation limit based on a bias identified during the quality assurance review.

NS = Monitoring location was not sampled.

Blank = Analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The 2018 sampling event occurred January 2019.

Table 5-8

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-3S																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 U	1.0 U	1.0 U	0.30 UJ	1.1 U*	0.2 U	1.0 U*	0.42 J	NS	NS	NS	NS	NS	NS	1.8 U	0.50 U	0.50 U	0.50 U	0.50 U	0.19 J	0.50 U
Copper	4.0 U	9.6	5.3 U*	1.4	5.2 U*	1.3 U*	7.4 U*	2.8 J	NS	NS	NS	NS	NS	NS	11.4	15.0	6.8	2.6	1.2 J	1.5 J	1.5 J
Cyanide	9.2 J	12.2	72.4 J	10.0 U	4.7 U	2.6 U*	6.5 U*	7.1 J	NS	NS	NS	NS	NS	NS	**	10.0 U	3.3 J	10.0 U	7.9 J	18.0	10.0 U
Nickel	13.7	5.2	26.4	19.0	7.3	19.3	8.5	10.5 J	NS	NS	NS	NS	NS	NS	5.7 J	11.0	5.9	8.1	10.0	9.0	9.3
Zinc	5.0 U	11.1 U*	10 U*	0.50 UJ	0.40 UJ	0.80 UJ	4.8 J	5.1 J	NS	NS	NS	NS	NS	NS	10.2 U	20.0 U	20.0 U	11.0 J	12.0 J	12.0 J	37.0

Monitoring Location	MW-3D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 U	1.0 U	1.2	0.30 UJ	0.20 U	0.20 U	0.30 U	0.40 U	NS	NS	NS	2.0 U	2.0 U	1.8 U	1.8 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Copper	4.0 U	1.0 U	2.1 U*	0.70 U	0.50 U*	2.7 U*	1.4 U*	1.0 U	NS	NS	NS	2.5 J	5.0 U	0.91 U	0.91 U	2.1	1.1 J	2.0 U	2.0 U	0.69 J	2.0 U
Cyanide	5.0 UJ	12.1	10.0 U	10.0 U	4.7 U	3.1 U*	3.6 U*	2.3 J	NS	NS	NS	4.6 J	5.5 J	4.7 J	5.9 J	10.0 U	8.5 J	5.0 J	3.8 J	6.8 J	10.0 U
Nickel	13.0 U	1.6	4.0	2.9	2.1	2.7	2.8 U*	2.2 U*	NS	NS	NS	40.0 U	40.0 U	4.4 J	4.0 J	5.6	9.2	6.7	5.7	5.2	8.7
Zinc	5.0 U	5.8 U*	9.3 U*	0.50 UJ	0.40 UJ	0.80 UJ	1.0 UJ	1.6 U	NS	NS	NS	20.0 U	20.0 U	10.2 U	10.2 U	20 U	9.6 J	8.2 J	7.9 J	20.0 U	55.0

Notes:

Results only presented for those analytes and monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed but not detected. The associated value is the sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

UJ = The compound was analyzed but not detected. The associated value is an estimated sample quantitation limit based on a bias identified during the quality assurance review.

NS = Monitoring location was not sampled.

Blank = Analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The 2018 sampling event occurred January 2019.

Table 5-8

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-4D																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 U	1.0 U	1.0 U	0.30 UJ	1.4	0.20 U	0.51 U*	0.48 J	NS	NS	NS	2.0 U	2.0 U	1.8 U	1.8 U	0.50 U	0.50 U	0.20 J	0.50 U	0.50 U	0.50 U
Copper	4.0 U	25.0	3.3 U*	0.70 U	0.45 U*	2.4 U*	2.9 U*	3.5 J	NS	NS	NS	2.4 J	2.0 J	0.91 U	0.91 U	0.90 J	2.0 U	1.0 J	1.0 J	1.7 J	2.0 U
Cyanide	5.0 U	10.0 U	10.0 U	10.0 U	4.7 U	17.5	26.2 J	25.4	NS	NS	NS	16.0	9.9 J	8.1 J	**	4.2 J	10.0 U	4.2 J	8.4 J	6.2 J	10.0 U
Nickel	13.0 U	3.2	2.3	2.3	8.3	9.4	20.6	17.3 J	NS	NS	NS	40.0 U	40.0 U	3.4 U	3.4 U	2.7	2.0 J	3.6	2.1	1.4 J	1.4 J
Zinc	5.0 U	17.9	8.4 U*	0.50 UJ	0.40 UJ	0.80 UJ	1.0 UJ	5.5 J	NS	NS	NS	20.0 U	8.1 J	10.2 U	10.2 U	20.0 U	4.9 J	20.0 U	20.0 U	20.0 U	20.0 U

Notes:

Results only presented for those analytes and monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed but not detected. The associated value is the sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

UJ = The compound was analyzed but not detected. The associated value is an estimated sample quantitation limit based on a bias identified during the quality assurance review.

NS = Monitoring location was not sampled.

Blank = Analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The 2018 sampling event occurred January 2019.

Table 5-8

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-5S																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 UJ	1.2	1.0 U	0.30 UJ	0.99 U*	1.0	2.5	1.3 J	NS	NS	NS	NS	NS	55.8	19.6	11	1.1	1.1	0.79	0.52	0.95
Copper	496	197	273	79.9 J	29.1	267	814	369	NS	NS	NS	NS	NS	3,460	2,910	6,300	336	330	250	150	290
Cyanide	38.9	17.0	10.0 UJ	10.0 U	7.5	11.6	10.4	13.7	NS	NS	NS	NS	NS		**	10.0 U	12.0	10.0	15.0	3.6 J	10.0 U
Nickel	545	286	218	171	163	1,160	2,040	585	NS	NS	NS	NS	NS	22,300	11,000	12,000	1,610	990	640	680	640
Zinc	135	82.8	65.8	13.5 J	6.8 J	171	210	106	NS	NS	NS	NS	NS	4,430	1,960	1,100	314	140	62.0	42.0	82.0

Monitoring Location	MW-5D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 U	1.0 U	1.3	0.30 UJ	0.58 U*	0.20 U	0.30 U	0.40 U	NS	NS	NS	2.0 U	2.0 U	1.8 U	1.8 U	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
Copper	22.0	4.5	42.3	1.3 U*	2.3 U*	0.60 U	10.6	4.2 J	NS	NS	NS	5.0 U	5.0	0.91 U	0.91 U	4.3	3.7	2.9	2.1	1.6 J	0.96 J
Cyanide	5.0 U	20.0 U	10.0 U	10.0 U	4.7 U	4.7 U*	3.4	3.8 J	NS	NS	NS	9.3 J	9.7 J	13.9	**	3.4 J	10.0 U	10.0 U	6.8 J	10.0 U	10.0 U
Nickel	13.0 U	2.0	11.8	2.6	2.4	3.7	2.8	2.2 U*	NS	NS	NS	40.0 U	10.0 J	48.3	53.1	49.0	45.0 J	38.0	29.0	28.0	25.0
Zinc	8.9	9.3 U*	19.6 U*	0.50 UJ	0.40 UJ	3.5 J	1.0 UJ	3.9 J	NS	NS	NS	20.0 U	20.0 U	15.4 J	10.2 U	20.0 U	20.0 U	20.0 U	7.2 J	20.0 U	11.0 J

Notes:

Results only presented for those analytes and monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed but not detected. The associated value is the sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

UJ = The compound was analyzed but not detected. The associated value is an estimated sample quantitation limit based on a bias identified during the quality assurance review.

NS = Monitoring location was not sampled.

Blank = Analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The 2018 sampling event occurred January 2019.

Table 5-8

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	MW-6S																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 UJ	1.3	2.2	0.30 U	1.5	2.5	2.1	0.40 U	NS	NS	NS	NS	NS	NS	2.1 J	1.5	0.28 J	0.50 U	0.20 J	0.25 J	2.5 U
Copper	102	50.4	61.4	58.5	52.8	84.1	60.7	18.3 J	NS	NS	NS	NS	NS	NS	34.4	260	110	110	39.0	98.0	5.1 J
Cyanide	61.0	1,370 J	15.5 J	15.1	8.9	22.2	43.3	52.7	NS	NS	NS	NS	NS	NS	**	7.7 J	3.3 J	7.1 J	13.0	10.0 U	8.1 J
Nickel	4,880	5,610	1,390	1,780	2,250	4,660	2,090	811	NS	NS	NS	NS	NS	NS	1,090	49.0	364	180	260	280	290
Zinc	111	67.1	46.8	58.5 J	19.7 J	68.4	22.0 J	9.6 J	NS	NS	NS	NS	NS	NS	69.4	20.0 U	24.0	14.0 J	15.0 J	19.0 J	100 U

Monitoring Location	MW-6D																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 UJ	1.0 U	1.0 U	0.30 UJ	1.2	0.20 U	0.30 U	0.45 J	NS	NS	NS	2.0 U	2.0 U	1.8 U	1.8 U	0.50 U	0.50 U	0.50 U	0.50 U	0.40 J	0.50 U
Copper	4.0 U	1.0 U	1.8 U*	0.70 U	1.1 U*	0.6 U	2.3 U*	1.0 U	NS	NS	NS	1.8 J	5.0 U	4.2 J	0.91 U	1.0 J	1.9 J	2.5	3.2	7.5	1.5 J
Cyanide	40.1	30.1	21.6	20.8	4.7 U	18.8	1.0 U	18.0	NS	NS	NS	31.0	47.0	2.5 U	10.7	10.0 U	3.6 J	8.2 J	8.2 J	10.0 U	4.5 J
Nickel	19.7	2.2	4.3	29.9	32.1	30.4	44.0	33.1 J	NS	NS	NS	25.0 J	42.0	19.0	148	8.8	120	160	180	170	120
Zinc	6.0 U*	5.5 U*	6.8 U*	0.50 UJ	0.40 UJ	0.80 UJ	12.0 J	4.4 J	NS	NS	NS	20.0 U	20.0 U	15.3 J	10.2 U	7.1 J	12.0 J	9.1 J	11.0 J	26.0	7.7 J

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U = The compound was analyzed but not detected. The associated value is the sample quantitation limit.

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UJ = The compound was analyzed but not detected. The associated value is an estimated sample quantitation limit based on a bias identified during the quality assurance review.

NA = Not analyzed

Blank = Analyte was not analyzed for in this sample.

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[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

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[3] The 2018 sampling event occurred January 2019.

Table 5-8

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	C-30																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 UJ	1.0 U	1.0	0.30 UJ	1.7	0.49 J	0.30 U	0.50 J	NS	NS	NS	0.71 J	2.0 U	1.8 U	1.8 U	0.50 U	0.50 U	0.50 U	0.17 J	0.50 U	0.50 U
Copper	32.0	11.1	75.1	2.6	3.7 U*	1.3 U*	2.3 U*	3.8 J	NS	NS	NS	4.0 J	2.7 J	3.7 J	0.91 U	1.1 U*	1.1 J	1.9 J	3.2	3.9	2.0
Cyanide	52.0	24.1	16.8 J	16.7	8.5	12.6	21.3 J	24.2	NS	NS	NS	19.0	28.0	30.4	**	15	5.2 J	9.0 J	12.0	10.0	10.0 U
Nickel	25.5	23.5	76.9	21.4	22.5	19.0	31.5 J	55.7	NS	NS	NS	18.0 J	12.0 J	27.6	5.5 J	8.1	4.6	11.0	9.1	5.2	8.9
Zinc	24.5 U*	11.4 U*	40.2	0.50 UJ	0.40 UJ	0.80 UJ	1.0 UJ	6.1 J	NS	NS	NS	20.0 U	20.0 U	10.2 U	10.2 U	8.5 U*	20.0 U	6.3 J	20.0 U	20.0 U	20.0 U

Notes:

Results only presented for those analytes and monitoring locations sampled during 2019 event.
ug/L = Micrograms per liter
J = The concentration is approximate due to limitations identified during the quality assurance review.
U = The compound was analyzed but not detected. The associated value is the sample quantitation limit.
U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).
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NS = Monitoring location was not sampled.
Blank = Analyte was not analyzed for in this sample.
** = Anomalous data as compared to historical trends.
[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.
[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.
[3] The 2018 sampling event occurred January 2019.

Table 5-8

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco I Site
Gary, Indiana

Monitoring Location	D-10																			
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[3]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Cadmium	5.0 U	1.0 U	1.0 U	0.30 UJ	0.33 U*	0.23	0.34 U*	0.58 J	NS	NS	NS	NS	NS	1.8 U	1.8 U	0.42 J	0.60	0.60	0.60	0.60	0.81
Copper	14.5	8.2	1.0 U	7.6	8.5	12.6	16.6	12.0 J	NS	NS	NS	NS	NS	431	491	1,100	961	1,100	820	900	1,100
Cyanide	23.5	37.8	26.7 J	23.8	36.1	18.9	35.1	45.6	NS	NS	NS	NS	NS	7.7 J	15.1	230	149	150	36.0	71.0	79.0
Nickel	90.0	42.6	22.9	22.9	20.0	166	74.3 J	59.5	NS	NS	NS	NS	NS	55.9	96.6	370	373	390	350 J	570	580
Zinc	6.0	4.4 U*	8.6 U*	0.50 UJ	0.40 UJ	18.8 J	1.0 UJ	4.3 J	NS	NS	NS	NS	NS	23.2 J	28.5 J	66.0	107	110	99.0	99.0	100

Notes:

Results only presented for those analytes and monitoring locations sampled during 2019 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed but not detected. The associated value is the sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

UJ = The compound was analyzed but not detected. The associated value is an estimated sample quantitation limit based on a bias identified during the quality assurance review.

NS = Monitoring location was not sampled.

Blank = Analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The ground water extraction and treatment system (GWETS) was shut down on September 24, 2010 and has not been re-started.

[3] The 2018 sampling event occurred January 2019.

TABLE 5-9

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco I Site
Gary, Indiana

Monitoring Location	MW-2S						MW-3S					
Collection Date	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Alkalinity (mg/L)	350	388	600	580	360	360	360	431	400	370	350	340
Iron, total (ug/L)	620	20,200	50,000	52,000	52,000 J	60,000	960	92 J	4,700	33,000	19,000	23,000
Iron, dissolved (ug/L)	500	5,990	240	120	2,900 J	82 J	460	100 U	490	13,000	6,600	100 U
Manganese, dissolved (ug/L)	740	1,280	1,700	910	860 J	900	55	6.6	220	250	230	190
Nitrate as nitrogen (mg/L)	0.23	0.10 U	0.10 U	0.064 J	0.10 U	0.10 U	0.10 U	0.51	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	310	268	230	160	130 J	120	19	83	120	120	190	180

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.
mg/L = Milligrams per liter
ug/L = Micrograms per liter
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Analyte was analyzed for but was not detected at or above the associated numerical value.
U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).
NS = Not sampled
[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.
[2] Monitoring wells O-10 and O-30 were not sampled in October 2016 as an unstable tree was observed to be leaning over the well cluster. The tree was removed in January 2017 and the well cluster was sampled in February 2017.
[3] Monitoring wells O-10 and O-30 were not sampled in during the 2018 and 2019 sampling events due to high standing water.

TABLE 5-9

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco I Site
Gary, Indiana

Monitoring Location	MW-4S						MW-5S					
Collection Date	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Alkalinity (mg/L)	260	299	320	240	110	820	530	785	860	850	910	1,400
Iron, total (ug/L)	1,500	318	1,800	1,600	490	120	76,000	69,900	46,000	28,000	26,000	23,000
Iron, dissolved (ug/L)	1,400	186	1,300	250	170	100 U	15,000	10,600	170	220	120	220
Manganese, dissolved (ug/L)	92	15	120 J	78	16	15	4,300	967	310	170	150	120
Nitrate as nitrogen (mg/L)	0.12	0.10 U	0.10 U	0.060 J	2.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12	0.10 U
Sulfate (mg/L)	22	41	73	94	28	21	1,500	508	140	14	71	19

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

NS = Not sampled

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells O-10 and O-30 were not sampled in October 2016 as an unstable tree was observed to be leaning over the well cluster. The tree was removed in January 2017 and the well cluster was sampled in February 2017.

[3] Monitoring wells O-10 and O-30 were not sampled in during the 2018 and 2019 sampling events due to high standing water.

TABLE 5-9

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco I Site
Gary, Indiana

Monitoring Location	MW-6S						B-10					
Collection Date	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Alkalinity (mg/L)	630	1,170	1,800	2,200	2,100	2,300 J	380	314	410	270	290	330
Iron, total (ug/L)	16,000	9,450	8,700	7,600	7,500	4,000	7,900	2,400	1,800	1,800	2,000	1,400
Iron, dissolved (ug/L)	3,500	7,820	630	1,100	4,900	3,700	2,900	73 J	100 U	900	100 U	100 U
Manganese, dissolved (ug/L)	300	390	360	310	380	420 J	1,200	506	850	260	430	390
Nitrate as nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.055 J	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	45	236	84	77	86	190	61	40	42	34	13	13

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

NS = Not sampled

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells O-10 and O-30 were not sampled in October 2016 as an unstable tree was observed to be leaning over the well cluster. The tree was removed in January 2017 and the well cluster was sampled in February 2017.

[3] Monitoring wells O-10 and O-30 were not sampled in during the 2018 and 2019 sampling events due to high standing water.

TABLE 5-9

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco I Site
Gary, Indiana

Monitoring Location	B-30						D-10					
Collection Date	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Alkalinity (mg/L)	400	460	460	460	450	950	210	288	300	290	280	880
Iron, total (ug/L)	5,500	6,040	5,400	6,100	5,000 J	7,600	42 J	230	84 J	98 J	83 J	100 U
Iron, dissolved (ug/L)	2,200	72 J	54 J	86 J	55 J	51 J	14 J	100 U	100 U	100 U	100 U	100 U
Manganese, dissolved (ug/L)	430	276	300	230	170 J	250	2,200	2,350	2,100	1,800	2,900	2,400
Nitrate as nitrogen (mg/L)	0.070 J	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.31	0.10 U	0.14	0.84	0.39
Sulfate (mg/L)	160	123	130	120	120	120	210	363	350	330	320	370

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

NS = Not sampled

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells O-10 and O-30 were not sampled in October 2016 as an unstable tree was observed to be leaning over the well cluster. The tree was removed in January 2017 and the well cluster was sampled in February 2017.

[3] Monitoring wells O-10 and O-30 were not sampled in during the 2018 and 2019 sampling events due to high standing water.

TABLE 5-9

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco I Site
Gary, Indiana

Monitoring Location	O-10						O-30					
Collection Date	2014	2015	2016[2]	2017	2018[3]	2019[3]	2014	2015	2016[2]	2017	2018[3]	2019[3]
Alkalinity (mg/L)	570	605	370	740	NS	NS	340	517	700	700	NS	NS
Iron, total (ug/L)	27,000	27,400	24,000	69,000	NS	NS	8,400	7,290	8,400	7,400	NS	NS
Iron, dissolved (ug/L)	5,900	253	530	4,000	NS	NS	2,400	100	33	66 J	NS	NS
Manganese, dissolved (ug/L)	2,400	2,130	1,300	1,500	NS	NS	290	223	280	200	NS	NS
Nitrate as nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	NS	NS	0.088 J	0.0544 J	0.081	0.10 U	NS	NS
Sulfate (mg/L)	66	232	29	1.1	NS	NS	360	280	180	120	NS	NS

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.
mg/L = Milligrams per liter
ug/L = Micrograms per liter
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Analyte was analyzed for but was not detected at or above the associated numerical value.
U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).
NS = Not sampled
[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.
[2] Monitoring wells O-10 and O-30 were not sampled in October 2016 as an unstable tree was observed to be leaning over the well cluster. The tree was removed in January 2017 and the well cluster was sampled in February 2017.
[3] Monitoring wells O-10 and O-30 were not sampled in during the 2018 and 2019 sampling events due to high standing water.

TABLE 5-9

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco I Site
Gary, Indiana

Monitoring Location	Q-10						Q-30					
Collection Date	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Alkalinity (mg/L)	390	393	430	320	340	840	830	469	490	500	510	1,000
Iron, total (ug/L)	1,400	2,590	1,200	1,200	1,400	1,000	110,000	10,600	9,300	8,000	9,200	9,000
Iron, dissolved (ug/L)	800	174	640	1,100	220	100	72,000	2,070	65 J	650	74 J	110
Manganese, dissolved (ug/L)	870	405	160	210	300	240	9,600	834	720	680	670	960 J
Nitrate as nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.33	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	470	234	130	150	220	240	470	341	390	320	240	260

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

NS = Not sampled

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells O-10 and O-30 were not sampled in October 2016 as an unstable tree was observed to be leaning over the well cluster. The tree was removed in January 2017 and the well cluster was sampled in February 2017.

[3] Monitoring wells O-10 and O-30 were not sampled in during the 2018 and 2019 sampling events due to high standing water.

TABLE 5-9

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco I Site
Gary, Indiana

Monitoring Location	S-10						S-30					
Collection Date	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Alkalinity (mg/L)	590	649	610	470	570	980	440	443	480	440	410	830
Iron, total (ug/L)	7,200	4,660	15,000	11,000	9,700	8,900	4,500	4,340	3,300	1,700	1,000	1,200
Iron, dissolved (ug/L)	4,800	531	430	810	100 U	49 J	2,800	279 U*	100	200	350	470
Manganese, dissolved (ug/L)	2,000	1,050	1,400	1,100	1,100	1,400	350	162	160	140	160	200
Nitrate as nitrogen (mg/L)	5.8	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.0481 J	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	340	119	200	310	130	110	180	107	130	73	46	65

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.
mg/L = Milligrams per liter
ug/L = Micrograms per liter
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Analyte was analyzed for but was not detected at or above the associated numerical value.
U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).
NS = Not sampled
[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.
[2] Monitoring wells O-10 and O-30 were not sampled in October 2016 as an unstable tree was observed to be leaning over the well cluster. The tree was removed in January 2017 and the well cluster was sampled in February 2017.
[3] Monitoring wells O-10 and O-30 were not sampled in during the 2018 and 2019 sampling events due to high standing water.

TABLE 5-9

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco I Site
Gary, Indiana

Monitoring Location	EW-4					
Collection Date	2014	2015	2016	2017	2018	2019
Alkalinity (mg/L)	410	472	500	480	450	940
Iron, total (ug/L)	6,500	6,240	22,000	16,000	2,900	2,900
Iron, dissolved (ug/L)	2,300	100	110	100 U	85 J	84 J
Manganese, dissolved (ug/L)	230	134	220	200	510	410
Nitrate as nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	82	114	71	74	52	63

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review (data validation).

NS = Not sampled

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells O-10 and O-30 were not sampled in October 2016 as an unstable tree was observed to be leaning over the well cluster. The tree was removed in January 2017 and the well cluster was sampled in February 2017.

[3] Monitoring wells O-10 and O-30 were not sampled in during the 2018 and 2019 sampling events due to high standing water.

TABLE 6-1

Volatile Organic Compounds[1]
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	MW-1R	MW-50R		MW-2I	MW-2D	MW-3S	MW-3D		MW-4D	B-10	B-30
Sample ID		2WMW122	2WMW5022	2WMW5022D	2WMW2I22	2WMW2D22	2WMW3S22	2WMW3D22	2WMW3D22D	2WMW4D22	2WB1022M	2WB3022
Sample Date		11/13/2019	11/13/2019	11/13/2019	11/18/2019	11/18/2019	11/13/2019	11/19/2019	11/19/2019	11/19/2019	11/15/2019	11/15/2019
Sample Type				FD					FD		MS/MSD	
Acetone	22,060	10 U	10 U	10 U	5.7 J	4.4 J	10 U	10 U	10 U	10	10 U	10 U
Benzene	2.3	0.50 U	0.50 U	0.50 U	0.25 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.31 J	0.50 U
2-Butanone	8,356	5.0 U	5.0 U	5.0 U	5 UJ	5.0 U	5 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 J
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.57 J	1.0 U
Chloroform	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	14	7.7	1.0 U	1.0 U	9.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1	1.0 U	1.0 U	1.0 U	**2.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.7	1.0 U	1.0 U	13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.43 J	1.0 U
1,2-Dichloropropane	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.22 J	0.50 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	2.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)	2,000	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 J
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54	0.46 J
Trichloroethene	5	0.29 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.2	1.0 U	1.0 U	1.0 U	**3.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U
Xylenes, Total	281	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.45 J	0.48 J
1,4-Dioxane	--	1.8 J	260	260	40	72	4.0 U	120	120	560	NA	NA

Notes:
CAL = Clean-up Action Level
-- = No CAL established
BOLD = Analyte present at a concentration greater than its CAL.
NA = Not analyzed
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.
[1] Only those analytes that are detected in one or more samples are presented.
All results reported in micrograms per liter (ug/L).

TABLE 6-1

Volatile Organic Compounds[1]
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	C-10	D-10	D-30	E-10		F-30		G-10	G-30	H-10	H-30
Sample ID		2WC1022	2WD1022	2WD3022	2WE1022	2WE1022D	2WF3022	2WF3022D	2WG1022	2WG3022	2WH1022	2WH3022
Sample Date		11/14/2019	11/19/2019	11/18/2019	11/18/2019	11/18/2019	11/19/2019	11/19/2019	11/15/2019	11/18/2019	11/15/2019	11/15/2019
Sample Type						FD		FD				
Acetone	22,060	10 U	10 U	2.5 J	7.4 J	6.0 J	3.6 J	3.7 J	10 U	4.0 J	10 U	10 U
Benzene	2.3	0.50 U	**49**	**2.8**	1.2	1.2	0.50 U	0.50 U	2.0	0.50 U	0.50 U	0.50 U
2-Butanone	8,356	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 UJ	1.0 U	4.0	1.0 U	1.0	1.0 U
1,2-Dichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	0.57 J	0.45 J	0.5 J	1.0 U	1.0 U	4.8	1.0 U	1.4	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Ethylbenzene	8.4	0.50 U	5.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	2.1 J	2.1 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)	2,000	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1	1.0 U	1.0 U	0.95 J	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J	0.40 J	1.0 U	1.0 U
Toluene	1,000	0.50 U	1.1	0.50 U	0.50 U	0.50 U	0.50 U	0.16 J	0.38 J	0.16 J	0.27 J	0.29 J
Trichloroethene	5	0.5 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.6	0.50 U	**6.0**	0.50 U
Vinyl chloride	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	281	1.0 U	1.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.44 J	1.0 U	0.27 J	1.0 U
1,4-Dioxane	--	1.3 J	1.0 J	4.6	3.4	4.1	12	14	35	10	2.0 U	5.4

Notes:
CAL = Clean-up Action Level
-- = No CAL established
BOLD = Analyte present at a concentration greater than its CAL.
NA = Not analyzed
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.
[1] Only those analytes that are detected in one or more samples are presented.
All results reported in micrograms per liter (ug/L).

TABLE 6-1

Volatile Organic Compounds[1]
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	N-10	N-30	N-50	Q-10	Q-50	R-10	R-50	S-10	S-50	T-10	T-50
Sample ID		2WN1022	2WN3022	2WN5022	2WQ1022	2WQ5022	2WR1022	2WR5022M	2WS1022	2WS5022	2WT1022	2WT5022
Sample Date		11/14/2019	11/14/2019	11/19/2019	11/18/2019	11/18/2019	11/13/2019	11/18/2019	11/15/2019	11/15/2019	11/14/2019	11/18/2019
Sample Type								MS/MSD				
Acetone	22,060	10 U	10 U	10 U	3.6 J	10 U	4.0 J	10 U	9.1 J	5.6 J	10 U	10 U
Benzene	2.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Butanone	8,356	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	11	5.0 U	5 UJ	5.0 U
Carbon disulfide	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1	2.0 U	2.0 U	0.57 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.57 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	2.2 J	2.1 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
4-Methyl-2-pentanone (MIBK)	2,000	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Toluene	1,000	0.34 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.44 J	0.50 U	0.50 U	0.50 U
Trichloroethene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 UJ	1.0 U
Xylenes, Total	281	1.0 U	0.43 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J	1.0 U	1.0 U	1.0 U
1,4-Dioxane	--	2.0 U	3.9	60	2.0 U	2,000	1.2 J	5.0	NA	NA	1.2 J	59

Notes:
CAL = Clean-up Action Level
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BOLD = Analyte present at a concentration greater than its CAL.
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FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.
[1] Only those analytes that are detected in one or more samples are presented.
All results reported in micrograms per liter (ug/L).

TABLE 6-1

Volatile Organic Compounds[1]
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	**Midco II Parameter-Specific CAL**	**U-10**	**U-50**	**V-10**	**V-50**	**W-10**	**W-30**		**W-50**	**Z-10**
Sample ID		2WU1022	2WU5022	2WV1022M	2WV5022	2WW1022	2WW3022	2WW3022D	2WW5022	2WZ1022
Sample Date		11/14/2019	11/14/2019	11/13/2019	11/14/2019	11/15/2019	11/15/2019	11/15/2019	11/18/2019	11/19/2019
Sample Type				**MS/MSD**				**FD**		
Acetone	22,060	10 U	10 U	6.7 J	10 U	5.3 J	10 U	10 U	10 U	3.7 J
Benzene	2.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**22**
2-Butanone	8,356	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.6
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.38 J
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 UJ	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	2.5	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	0.37 J	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Ethylbenzene	8.4	0.28 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	**13**
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 J	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)	2,000	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	0.50 U	0.29 J	0.50 U	0.30 J	0.19 J	0.50 U	0.24 J	0.50 U	0.63
Trichloroethene	5	0.50 U	0.50 U	0.50 U	0.50 U	**9.6**	0.5 UJ	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	281	0.29 J	0.30 J	1.0 U	0.32 J	1.0 U	0.27 U	0.25 J	1.0 U	9.4
1,4-Dioxane	--	2.0 U	39	1.3 J	38	2.2	150	140	500	1.5 J

Notes:
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-- = No CAL established
BOLD = Analyte present at a concentration greater than its CAL.
NA = Not analyzed
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.
[1] Only those analytes that are detected in one or more samples are presented.
All results reported in micrograms per liter (ug/L).

TABLE 6-1

Volatile Organic Compounds[1]
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	AA-10	AC-30	AD-10	GA-50	P-3
Sample ID		2WAA1022	2WAC3022	2WAD1022	2WGA5022	2WP322
Sample Date		11/14/2019	11/14/2019	11/15/2019	11/18/2019	11/14/2019
Sample Type						
Acetone	22,060	10 U	10 U	10 U	5.4 J	10 U
Benzene	2.3	0.50 U	0.62	**43**	0.50 U	0.50 U
2-Butanone	8,356	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Carbon disulfide	--	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 J	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	0.47 J	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.2	1.0 U	1.0 J	1.0 U	1.0 U	1.0 U
Ethylbenzene	8.4	0.50 U	0.50 U	**13**	0.50 U	0.50 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	2.2 J	5.0 U
4-Methyl-2-pentanone (MIBK)	2,000	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	0.50 U	0.21 J	0.58	0.50 U	0.50 U
Trichloroethene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	281	1.0 U	1.0 U	6.1	1.0 U	1.0 U
1,4-Dioxane	--	2.0 U	1.2 J	NA	2.0 U	4.5

Notes:
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BOLD = Analyte present at a concentration greater than its CAL.
NA = Not analyzed
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.
UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.
[1] Only those analytes that are detected in one or more samples are presented.
All results reported in micrograms per liter (ug/L).

TABLE 6-2

1,4-Dioxane Results from Selected Non-Annual Monitoring Wells[1]
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	P-30	P-50	V-30	P-1	P-2	P-4R
Sample ID		2WP3022	2WP5022	2WV3022	2WP122	2WP222	2WP422
Sample Date		11/15/2019	11/15/2019	11/14/2019	11/18/2019	11/18/2019	11/14/2019
Sample Type							
1,4-Dioxane	--	2.0 U	10	2.0 U	4.0	2.0 U	43

Notes:

CAL = Clean-up Action Level

-- = No CAL established

U = Compound was analyzed for but was not detected at or above the associated numerical value.

[1] All results reported in units of micrograms per liter (ug/L).

TABLE 6-3

Inorganic Analytes
2019 Annual Ground Water Monitoring Event[1]
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	MW-1R	MW-50R		MW-2I	MW-2D	MW-3S	MW-3D	
Sample ID		2WMW122	2WMW5022	2WMW5022D	2WMW2I22	2WMW2D22	2WMW3S22	2WMW3D22	2WMW3D22D
Sample Date		11/13/2019	11/13/2019	11/13/2019	11/18/2019	11/18/2019	11/13/2019	11/19/2019	11/19/2019
Sample Type				FD					FD
Copper	120	0.93 J	1.3 J	1.4 J	2.0 U	0.73 J	3.5	1.0 J	1.1 J
Nickel	647	7.8	28	42	5.0	4.6	5.2	27	26
Cyanide, Total	158	10 U	10 U	10 U	3.6 J	38 J	37	10 U	10 U

Notes:

CAL = Clean-up Action Level

-- = No CAL established

BOLD = Analyte present at a concentration greater than its CAL.

FD = Field Duplicate

MS/MSD = Matrix Spike/Matrix Spike Duplicate

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Compound was analyzed for but was not detected at or above the associated numerical value.

[1] All results reported in micrograms per liter (ug/L).

TABLE 6-3

Inorganic Analytes
2019 Annual Ground Water Monitoring Event[1]
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	MW-4D	C-10	D-10	D-30	E-10		F-30	
Sample ID		2WMW4D22	2WC1022	2WD1022	2WD3022	2WE1022	2WE1022D	2WF3022	2WF3022D
Sample Date		11/19/2019	11/14/2019	11/19/2019	11/18/2019	11/18/2019	11/18/2019	11/19/2019	11/19/2019
Sample Type							FD		FD
Copper	120	1.8 J	2.0 U	2.7	3.8	7.7	7.8	4.3 J	4.2
Nickel	647	720	6.3	0.94 J	1.0 J	8.4	8.6	37 J	38
Cyanide, Total	158	10 U	10 U	10 U	10 U	31	32	10 U	10 U

Notes:

CAL = Clean-up Action Level

-- = No CAL established

BOLD = Analyte present at a concentration greater than its CAL.

FD = Field Duplicate

MS/MSD = Matrix Spike/Matrix Spike Duplicate

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Compound was analyzed for but was not detected at or above the associated numerical value.

[1] All results reported in micrograms per liter (ug/L).

TABLE 6-3

Inorganic Analytes
2019 Annual Ground Water Monitoring Event[1]
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	G-10	G-30	H-10	H-30	N-10	N-30	N-50	Q-10	Q-50
Sample ID		2WG1022	2WG3022	2WH1022	2WH3022	2WN1022	2WN3022	2WN5022	2WQ1022	2WQ5022
Sample Date		11/15/2019	11/18/2019	11/15/2019	11/15/2019	11/14/2019	11/14/2019	11/19/2019	11/18/2019	11/18/2019
Sample Type										
Copper	120	**1,100**	9.3	12	100	2.0 U	2.0 U	7.3	2.0 U	3.0
Nickel	647	160	23	11	9.5	1.5 J	2.9	21	2.4	25
Cyanide, Total	158	58	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.3 J

Notes:

CAL = Clean-up Action Level

-- = No CAL established

BOLD = Analyte present at a concentration greater than its CAL.

FD = Field Duplicate

MS/MSD = Matrix Spike/Matrix Spike Duplicate

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Compound was analyzed for but was not detected at or above the associated numerical value.

[1] All results reported in micrograms per liter (ug/L).

TABLE 6-3

Inorganic Analytes
2019 Annual Ground Water Monitoring Event[1]
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	R-10	R-50	T-10	T-50	U-10	U-50	V-10	V-50
Sample ID		2WR1022	2WR5022M	2WT1022	2WT5022	2WU1022	2WU5022	2WV1022M	2WV5022
Sample Date		11/13/2019	1/18/2019	11/14/2019	11/18/2019	11/14/2019	11/14/2019	11/13/2019	11/14/2019
Sample Type			MS/MSD					MS/MSD	
Copper	120	4.3	14 J	0.70 J	0.60 J	2.0	17	2.0 U	16
Nickel	647	130	310 J	1.3 J	9.9	4.8	7.4	6.9	84
Cyanide, Total	158	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:

CAL = Clean-up Action Level

-- = No CAL established

BOLD = Analyte present at a concentration greater than its CAL.

FD = Field Duplicate

MS/MSD = Matrix Spike/Matrix Spike Duplicate

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Compound was analyzed for but was not detected at or above the associated numerical value.

[1] All results reported in micrograms per liter (ug/L).

TABLE 6-3

Inorganic Analytes
2019 Annual Ground Water Monitoring Event[1]
Midco II Site
Gary, Indiana

Location	Midco II Parameter-Specific CAL	W-10	W-30		W-50	Z-10	AA-10	AC-30	GA-50	P-3
Sample ID		2WW1022	2WW3022	2WW3022D	2WW5022	2WZ1022	2WAA1022	2WAC3022	2WGA5022	2WP322
Sample Date		11/15/2019	11/15/2019	11/15/2019	11/18/2019	11/19/2019	11/14/2019	11/15/2019	11/18/2019	11/14/2019
Sample Type				FD						
Copper	120	2.3	2.6	2.8	2.0	7.5	2.0 U	5.3	0.99 J	9.8
Nickel	647	10	22	22	21	2.0	2.8	2.0	2.0 U	18
Cyanide, Total	158	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	80

Notes:

CAL = Clean-up Action Level

-- = No CAL established

BOLD = Analyte present at a concentration greater than its CAL.

FD = Field Duplicate

MS/MSD = Matrix Spike/Matrix Spike Duplicate

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Compound was analyzed for but was not detected at or above the associated numerical value.

[1] All results reported in micrograms per liter (ug/L).

TABLE 6-4

Monitored Natural Attenuation Parameters
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	**MW-2I**	**MW-2D**	**MW-3S**	**MW-3D**		**C-10**	**D-10**
Sample ID	2WMW2I22	2WMW2D22	2WMW3S22	2WMW3D22	2WMW3D22D	2WC1022	2WD1022
Sample Date	11/18/2019	11/18/2019	11/13/2019	11/19/2019	11/19/2019	11/14/2019	11/19/2019
Sample Type					**FD**		
Alkalinity (mg/L)	970	930	860	970	980	850	4,400 J
Iron, total (ug/L)	40,000	17,000	3,700	38,000	38,000	1,700	100 U
Iron, Dissolved (ug/L)	100 U	100 U	100	54 J	79 J	100 U	100 U
Manganese, Dissolved (ug/L)	550 J	73 J	520	76 J	95 J	1,000	440 J
Nitrate as Nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	910	760	520 J	780	780	320	210
Methane (ug/L)	31	3,700	60	3,000	2,500	3,300	23,000
Total Organic Carbon (mg/L)	13	4.7	48	5.9	5.9	19	26

Notes:
ug/L = micrograms per liter
mg/L = milligrams per liter
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.

TABLE 6-4

Monitored Natural Attenuation Parameters
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	**F-30**		**G-10**	**G-30**	**N-10**	**N-30**
Sample ID	2WF3022	2WF3022D	2WG1022	2WG3022	2WN1022	2WN3022
Sample Date	11/19/2019	11/19/2019	11/15/2019	11/18/2019	11/14/2019	11/14/2019
Sample Type		**FD**				
Alkalinity (mg/L)	1,700	1,300	2,100	1,200	480	1,000
Iron, total (ug/L)	2,100 J	2,100	1,600	5,000	12,000	23,000
Iron, Dissolved (ug/L)	140 J	480	100 U	65 J	100 U	100 U
Manganese, Dissolved (ug/L)	230 J	220 J	320	24 J	230	270
Nitrate as Nitrogen (mg/L)	1.0	1.0	0.045 J	0.18	0.10 U	0.10 U
Sulfate (mg/L)	1,100	570	500	250	110 J	650
Methane (ug/L)	1,500	1,100	2,700	6,700	150	39
Total Organic Carbon (mg/L)	4.1	4.2	35	5.9	9.6	31

Notes:

ug/L = micrograms per liter
mg/L = milligrams per liter
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.

TABLE 6-4

Monitored Natural Attenuation Parameters
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	**P-10**	**P-50**	**Q-10**	**Q-50**	**R-10**	**R-50**	**T-10**
Sample ID	2WP1022	2WP5022	2WQ1022	2WQ5022	2WR1022	2WR5022M	2WT1022
Sample Date	11/15/2019	11/15/2019	11/15/2019	11/18/2019	11/13/2019	11/18/2019	11/14/2019
Sample Type						**MS/MSD**	
Alkalinity (mg/L)	680	320	230	910	930	500	930
Iron, total (ug/L)	2,300	34,000	2,400	17,000	33,000	180 J	8,500
Iron, Dissolved (ug/L)	100 U	62 J	100 U	100 U	75 J	100 U	48 J
Manganese, Dissolved (ug/L)	420	87	310 J	72 J	900 J	2,900 J	490 J
Nitrate as Nitrogen (mg/L)	0.10 U	0.84	0.055 J	1.5	0.10 U	320	0.078 J
Sulfate (mg/L)	120	550	210	420	36	1,400 J	98
Methane (ug/L)	1,700	450	180	8,800	3,500	70	5,600
Total Organic Carbon (mg/L)	6.4	7.2	3.5	6.1	60	1.7 J	24

Notes:
ug/L = micrograms per liter
mg/L = milligrams per liter
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.

TABLE 6-4

Monitored Natural Attenuation Parameters
2019 Annual Ground Water Monitoring Event
Midco II Site
Gary, Indiana

Location	**W-10**	**W-30**		**W-50**	**Z-10**	**AA-10**	**GA-50**
Sample ID	2WW1022	2WW3022	2WW3022D	2WW5022	2WZ1022	2WAA1022	2WGA5022
Sample Date	11/15/2019	11/15/2019	11/15/2019	11/18/2019	11/19/2019	11/14/2019	11/18/2019
Sample Type			**FD**				
Alkalinity (mg/L)	500	1,500	1,100	840	2,100 J	720	750
Iron, total (ug/L)	100 U	100 U	100 U	24,000	48 J	770	13,000
Iron, Dissolved (ug/L)	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Manganese, Dissolved (ug/L)	790	2,300	2,100	1,900 J	500 J	270 J	66 J
Nitrate as Nitrogen (mg/L)	0.12	0.10 U	0.10 U	0.12	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	160	690 J	690	890	860	100	200
Methane (ug/L)	91	4.1	4.4	2,200	16,000	13	160
Total Organic Carbon (mg/L)	15	11	11	4.7	34	4.8	7.3

Notes:
ug/L = micrograms per liter
mg/L = milligrams per liter
FD = Field Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate
J = The concentration is approximate due to the limitations identified during the quality assurance review.
U = Compound was analyzed for but was not detected at or above the associated numerical value.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-1																	MW-1R				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015[3]	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	10 J	R	R	R	R	25 U*	R	5.0 U*	4.1 U*	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	6.7	10.0 U
Benzene	2.0 U	0.4 J	25 U	17 U	12 U	2.0	5.0 U	1.0 U	0.24 J	0.17 J	0.13 U*	0.50 U	1.0 U	1.0 U	0.18 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 UJ	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 UJ	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 UJ	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	8.0 J	R	R	R	120 U*	R	R	1.7 U*	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	0.10 J	6.0 J	17 U	12 U	1.0 U*	0.9 J	0.40 J	0.60	0.53	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	R	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 UJ	2.5 U	6.4	0.50 U	1.0 U	2.0	1.2	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U*	1.0 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	2.0 UJ	25 U	17 U	R	1.0 U	R	R	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 UJ	18 J	110	120	180	94	27 J	61	45	0.44 J	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 UJ	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 UJ	25 U	17 U	12 U	2.0	5.0 U	0.40 J	1.1	0.89	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	28 J	20 J	19 J	12 U	7.0	20	5.0	6.4	9.2	4.0	0.65	0.54 J	4.8	2.8	6.1	1.8	13.0	18	4	6	8 U
1,2-Dichloroethane	0.60 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	0.20 J	0.27 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	0.50 J	25 U	17 U	12 U	1.0	5.0 U	0.60 J	0.21 J	0.85 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	12	15	140	170	100	13	9.0	87	9.6	7.0	2.8	3.8	0.31 J	1.0 U	19	7.9	5.4	3.9	5.8	1.0 J	1.0 U	1.7
trans-1,2-Dichloroethene	5.0 U	1.0	4.0 J	17 U	12 U	2.0	5.0 U	4.0	1.1 J	0.90 J	0.82	0.22 J	1.0 U	1.0 U	1.0	0.74 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 UJ	25 U	17 U	12 U	0.20 J	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	25 U	17 U	12 U	1.0	5.0 U	1.0 U	0.70 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	R	R	5.0 U	25 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 UJ	120 U	84 U	62 U	42 U	25 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	25 U	33 U	25 U	2.0 U*	10 UJ	2.0 U	0.48 U*	1.0 U*	0.11 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	25 U	17 U	12 U	1.0 UJ	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	1.0 UJ	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	0.20 J	25 U	17 U	12 U	0.3 J	0.8 J	4.0	0.99	0.63	0.12 J	1.9	0.58 J	1.0 U	0.33 J	0.79 J	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 U	25 U	17 U	12 U	1.0 U*	5.0 U	1.0 U	0.13 U*	0.26 U*	0.30 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 UJ	25 U	17 U	12 U	1.0 U	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	20	19 J	370	380	210	24	65	230	22	12	2.4	19	0.88 J	0.27 J	18	29	36	0.35 J	0.50 U	0.44 J	0.50 U	0.29 J
Vinyl chloride	2.0	2.0	4.0 J	9.0 J	12 U	7.0	4.0 J	1.0	0.63 J	1.0	0.91	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.00 U	1.00 U
Xylenes (total)	5.0 U	1.0 U	120 U	17 U	12 U	1.0	5.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				29	140	8.3	5.8	2.4	2.0 U	2.0 U	0.4 J	2.0 U	1.8 J

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-50																	MW-50R				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015[3]	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	4.0 J	R	5.0 U*	R	4.0 J	5.0 U*	9.0 U*	5.9 J	3.1 U*	3.6 U*	5.0 U	10 U	10 U	10 U	4.2 J	5.0 U	5.0 U	5.0 U	5.6	5.5	10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.11 J	0.50 U	1.0 U	1.0 U	0.14 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.14 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	3.0 J	R	R	R	R	R	5.0 U	R	R	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 J	1.0 U	1.0 U	0.49 J	0.12 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	R	R	1.0 U	R	1.0 U	R	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 J	1.0 U	0.50 U	0.16 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	0.90 J	1.0 U	0.20 J	1.0 U	1.0 U	0.10 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	R	R	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U	2.0 U*	2.0 U	2.0 U*	2.0 UJ	0.10 U*	0.70 U*	0.10 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.20 J	0.29 U*	0.50 U	0.39 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	0.20 J	0.20 J	1.0 U	1.0 U	0.10 J	0.20 J	0.20 J	0.11 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	0.9 J	1.0 U	0.2 J	0.26 U*	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	1,000 J	10,000 U							20,000 U				760	86	770	580	300	240 J	190	170	250	260

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-2I							
Collection Date	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	10 U	10 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.7 J
Benzene	1.0 U	0.36 J	0.29 J	0.5 U	0.3 J	0.5 J	0.50 U	0.25 J
Bromochloromethane	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	5.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 UJ	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	0.91 J	0.77 J	0.81 J	3.5	4.0	2.8	6.3	9.3
1,2-Dichloroethane	1.9	1.7	3.5	4.2	3.1	2.8 J	1.0 U	2.7
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	2.9	0.45 J	8.8	16.7	14.0	24.0	16	13
trans-1,2-Dichloroethene	0.38 J	0.59 J	1.0	4.7	6.4	8.3	10	13
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Ethyl benzene	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U
2-Hexanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 J
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U
Vinyl chloride	2.8	8.0	4.8	5.6	5.0	5.9	3.4	3.6
Xylenes (total)	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6.9	1.4 J	1.7 J	5.4	17.0	28.0	44	40

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

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[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

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[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-2D																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[2]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	6.0 J	R	R	5.0 J	4.0 J	6.0 U*	R	12 U*	2.9 U*	4.9 U*	5.0 U	10 U	10 U	10 U	3.8 J	5.0 U	5.0 U	5.0 U	5.3	6.5	4.4 J
Benzene	2.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	5.0 UJ	5.0 U	2.0 U*	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	R	R	1.0 U	1.0 U	1.0 U	R	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.7 J	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.7 J	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.14 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.25 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	10 U	R	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 UJ	2.0 U	2.0 U	2.0 U*	2.0 U	2.0 U*	2.0 UJ	2.0 U	1.0 U*	0.85 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 J
Styrene	1.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U*	0.10 J	1.0 U	0.11 U*	0.18 U*	1.5 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	15 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.48 J	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 UJ	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.64 U*	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	100	62	70	55	70	67	67	71	72

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-3S																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[2]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	8.0 U*	5.0 U*	5.0 U*	R	5.0 U*	9.0 J	R	7.4 U*	6.1 U*	16 U*	5.0 U	NS	5.9 J	5.4 J	10 U	5.0 U	6.8	5.0 U	5.0 U	9.6	10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.033 U*	0.50 U	1.7 J	0.50 U	NS	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Bromomethane	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	5.0 U	R	R	R	5.0 U*	1.0 J	R	10	R	25 U	5.0 U	NS	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.091 J	0.12 J	2.5 U	0.14 J	NS	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	2.5 UJ	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	1.0 UJ	R	1.0 U	R	1.0 U	1.0 UJ	R	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 UJ	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	6.0	3.0	1.0 U	1.0 U	1.0 U	0.4 J	1.0 U	1.0 U	0.29 J	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.53 J	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	0.60 J	0.90 J	1.0 U	1.0 U	0.60 J	0.40 J	0.30 J	0.20 J	0.51	0.81	2.5 U	0.13 J	NS	0.68 J	0.31 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 J	1.0 U	1.0 U	0.067 U*	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.2 J	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	5.0 U	5.0 U	R	R	R	R	5.0 U	5.0 U	25 U	5.0 U	NS	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	0.32 J	5.0 U	25 U	5.0 U	NS	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 U	2.0 U	1.1 U*	2.8 U*	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J
1,1,2,2-Tetrachloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.044 J	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.26 U*	0.10 U*	1.3 J	0.50 U	NS	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	0.10 J	1.0 U	1.0 U	1.0 U	0.10 J	1.0 U	1.0 U	0.089 J	0.50 UJ	2.5 U	0.50 U	NS	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.076 J	0.50 U	2.5 U	1.5 U	NS	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U							20,000 U				NS	24	3 U	3 U	2.0 U	4.0 U	2.0 U	4.0 U	2.0 U	4.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-3D																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[2]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	18.0 U*	R	7.0 U*	R	5.0 U*	10 J	5.0 U	3.6 U*	2.5 U*	13 U*	5.0 U	10 U	10 U	4.9 J	4.4 J	5.0 U	5.0 U	5.0 U	5.0 U	6.9	10 U
Benzene	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.051 J	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	32	R	R	R	R	R	5.0 U	7.2	R	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	0.60 J	0.089 J	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloroform	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.097 U*	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	1.0 U	R	1.0 U	R	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.095 U*	0.11 J	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	5.0 U	R	R	R	5.0 U	5.0 U	5.0 U	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 UJ	5.0 U	R	5.0 U	5.0 U	5.0 U	0.9 J	5.0 U	5.0 U	5.0 U	25 U	5.0 U	10 U	10 U	10 U	0.45 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	2.0 U	2.0 UJ	2.0 U*	2.0 U*	2.0 U*	2.0 U	2.0 U	1.3 U*	2.7 U*	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.84 U*	0.12 U*	0.79 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	2.0	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U				20,000 U							20 U	41	43	64	39	46	43	45	88	120

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-4D																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[2]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	10 U*	12 U*	R	R	680	140 U*	2,800	25,000 U*	36,000 J	50,000 J	3,500 J	580	56 J	8.6 J	15	5.0 U	5.0 U	5.0 U	5.0 U	10	10
Benzene	2.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	1.0 J	500 U	0.50 U	3.3 U*	0.76 J	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	2.0 U	12 U	25 U			0.70 J	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U		500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 UJ	2.0 UJ	12 U	25 U	10 U	140 U	2.0 J	500 UJ	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	5.0 U	R	R	R	460	140 U*	1,900	12,000 J	21,000 J	34,000 J	2,800 J	260	100 U	10 U	3.3 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.31 J	13 U	0.54 J	1.0 U	10 U	1.0 U	0.15 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	0.60 J	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 UJ	1.0 U	2.0 UJ	12 U	25 U	10 U	140 U	10 U	500 UJ	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 UJ	0.70	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	1.0 U	R	12 U	R	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	0.3 J	12 U	25 U	10 U	140 U	10 U	500 U	0.11 J	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.11 J	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	0.4 J	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	0.60 J	500 U	0.14 J	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	0.50 J	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	0.80 J	500 UJ	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	R	1 J	140 U	10 U	5,000 U	5.0 U	130 U	25 U	10 U	100 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	19	210 J	1,100 J	2,100 J	1,600	2,100 J	730	5,000 UJ	920 J	1,000	1,100 J	450	760	180	120	18	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	2.0 U	25 U	50 U	10 U	140 U	22 J	830	2.3 U*	13 U	32 J	1.0 U	10 U	1.0 U	1.0 U	5.0 U	5.0 U	6.0	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.11 J	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	0.4 J	140 J	0.14 J	13 U	2.5 U	1.0 U	3.2 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	3.0 U*	1.0 U	2.0 U*	12 U	25 U	10 U	140 U	17 J	500 U	0.17 U*	3.0 U*	2.5 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		12 U	25 U	10 U	140 U	10 U	140 U*	0.15 U*	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	2.0 UJ	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.50 U	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	2.0 U	12 U	25 U	10 U	140 U	0.50 J	500 U	0.50 U	13 U	2.5 U	1.0 U	5.7 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	4.0	12 U	25 U	10 U	140 U	10 U	500 UJ	0.50 UJ	13 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	10.0 U	12 U	25 U	10 U	140 U	10 U	500 U	0.23 J	13 U	7.5 U	5.0 U	50 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U							20,000 U				35	880	300 J	360	360	500	410	300	420	560

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	B-10																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	7,100 U*	250 U	250 U*	R	R	5.0 U*	5.0 U*	5.0 U	3.1 U*	2.8 U*	3.1 U*	5.0 U	10	10 U	10 U	10 U	5.0 U	6.9	5.0 U	7.1	6.0	10 U
Benzene	140 U	45 J	48 J	22 J	2.0 U	0.60 J	1.0	0.40 J	0.66	0.28 J	0.19 J	0.12 J	0.17 J	1.0 U	1.0 U	0.13 J	1.1	0.50 U	0.50 U	0.50 U	0.50 U	0.31 J
Bromochloromethane		50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	71 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	140 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	710 U	50 U	50 U	53 U	2.0 U	1.0 UJ	1.0 U*	1.0 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	1,300 J	250 U	R	R	R	R	R	5.0 U	1.1 U*	R	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	360 U	50 U	50 U	53 UJ	2.0 U	1.0 U*	1.0 U*	0.20 J	0.10 J	0.13 J	0.50 U	0.50 U	0.11 J	1.0 U	1.0 U	0.17 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	71 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	360 U	14 J	14 J	53 U	2.0 J	1.0	0.90 J	0.60 J	0.35 J	0.18 J	0.13 J	0.12 J	1.0 U	1.0 U	0.2 J	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	0.39 J	0.57 J
Chloroethane	360 U	50 U	50 U	53 U	2.0 U	3.0	3.0	1.0 U	0.11 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	71 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	710 U	50 U	50 U	53 UJ	2.0 U	1.0 U	1.0 U*	1.0 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	290 U	50 U	R	53 U	R	R	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	140 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	71 U	50 U	50 UJ	53 U	2.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	710 U	50 U	50 U	53 U	2.0 J	1.0 U*	0.20 J	1.0 U	0.13 J	0.50 U	0.11 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	360 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	360 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	910	370	310	48 J	2.0 U	0.2 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.11 J	1.00 U	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	43 U	50 U	50 U	53 U	2.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	71 U	50 U	50 U	53 U	2.0 U	1.0 U	0.20 J	1.0 U	0.12 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	200 J	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	0.20 J	0.38 J	0.18 J	0.13 J	0.12 J	1.0 U	1.0 U	0.3 J	0.37 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	120 J	370	220	44 J	2.0 U	0.2 J	0.2 J	1.0 U	0.17 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.3 J	0.31 J	0.61 J	1.1	1.0 U	1.0 U	1.0 U	0.43 J
1,2-Dichloropropane	120 J	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	71 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	71 U	50 U	50 UJ	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	990 U	990	720	510	26	4.0	3.0	0.80 J	0.50	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.22 J
2-Hexanone	3,600 UR	R	R	R	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5,600	250 U	R	R	10 U	R	5.0 U	5.0 U	5.0 UJ	5.0 U	1.2 J	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	360 U	100 U	50 U	100 U	4.0 U	2.0 U*	2.0 U	2.0 U	1.0 U*	0.44 U*	0.10 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	71 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	36 U	50 U	50 UJ	53 U	2.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	130 J	50 U	50 U	53 U	2.0 U	1.0 U	0.20 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	140 U*	12 J	50 U*	53 U	2.0 U	1.0 U*	0.20 J	0.20 J	0.17 U*	0.16 U*	2.1	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.17 J	0.54
1,2,4-Trichlorobenzene	10 U	50 U		53 U	2.0 U	1.0 U	1.0 U*	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	360 U	50 U	50 U	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	300	50 U	50 UJ	53 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	370	50 U	50 U	53 U	2.0 U	0.1 J	1.0 U	1.0 U	0.11 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	170	50 U	50 U	53 U	2.0 U	1.0 U	0.09 J	1.0 U	0.10 J	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.17 J	0.27 J	0.50 U	0.50 U	0.50 U	1.0 U	0.22 J
Xylenes (total)	2,300	820	510	73	4.0	1.0	2.0	0.40 J	0.30 J	0.24 J	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.45 J
1,4-Dioxane	5,800 U	10,000 UJ							20,000 U				26	20 U	49	89						

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	B-30																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	780 J	510	640 J	3,000 J	150 J	540 J	62 J	410	920 J	190 U*	25 U*	6.9 U	7.6 J	8.9 J	10 U	10 U	5.0 U	7.5	5.0 U	6.9	9.2	10 U
Benzene	2.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	5.0 UJ	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10.0 U	5.0 UJ	10 U	1.0 U	4.0 U	20 UJ	1.0 U*	1.0 U	8.3 UJ	2.1 U	2.5 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	150 J	86	R	44 J	R	130 J	15 J	73	120 J	27 J	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	10 U	1.0 UJ	4.0 U	20 UJ	1.0 U	0.20 J	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.28 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	10 U	1.0 U	4.0 U	11 J	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	5.0 U	10 U	1.0 J	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	5.0 U	10 U	1.0 UJ	4.0 U	20 U	1.0 U*	1.0 U	8.3 U	2.1 U	2.5 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	5.0 UJ	R	1.0 U	R	R	1.0 UJ	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	5.0 U	10 UJ	1.0 U	4.0 U	20 UJ	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	5.0 UJ	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	5.0 UJ	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	5.0 UJ	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	5.0 U	10 U	1.0 U	4.0 U	20 UJ	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	5.0 U	10 UJ	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	R	R	R	5.0 U	83 U	21 U	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	18	21 J	9.0 J	R	18 U	R	1.0 J	5.0 J	83 U	5.1 J	5.9 J	4.2 J	4.1 J	4.6 J	3.6 J	3.1 J	5.0 U	5.0 U	5.0 U	5.0 U	2.9 J	3.0 J
Methylene chloride	5.0 U*	10 U	10 U	2.0 U	7.0 U	40 U*	2.0 U	2.0 U	12 U*	0.84 U*	0.54 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	5.0 U	10 UJ	1.0 U	4.0 UJ	20 UJ	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	1.8 U*	2.1 U	9.6	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.46 J
1,2,4-Trichlorobenzene	20 U	25 U		1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	5.0 U	10 UJ	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	5.0 U	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	0.9 J	10 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	5.0 U	50 U	1.0 U	4.0 U	20 U	1.0 U	1.0 U	8.3 U	2.1 U	2.5 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J
1,4-Dioxane	5,800 U	10,000 UJ							20,000 U				20 U	20 U	3 U	6						

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	C-10																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	12 U*	50 U*	R	R	22 U*	19 J	25 U*	5.7 U*	R	20 U	4.2 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	6.8	10 U
Benzene	2.0	24	32	75	42	16	8.0	11	8.6	14	0.67 U*	1.3 U	1.0 U	1.0 U	0.13 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	5.0 UJ	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	0.19 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	5.0 UJ	2.0 UJ	10 U	10 U	3.0 U	4.0 U*	1.0 U	0.50 UJ	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	R	5.9 J	1.9 J	R	3.3 J	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.98 J	0.68	2.5 U	0.97 J	1.0 U	1.0 U	1.0 U	0.33 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	5.0 U	2.0 U	10 U	10 U	3.0 UJ	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	5.0 U	2.0 U	10 U	10 U	0.20 J	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	0.80 J	2.0 U	10 U	10 UJ	3.0 U	4.0 U	1.0 U	0.50 UJ	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	5.0 UJ	2.0 U	10 U	10 U	3.0 UJ	4.0 U*	1.0 U	0.50 UJ	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	R	R	10 U	R	3.0 U	4.0 UJ	R	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	5.0 UJ	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	5.0 UJ	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	5.0 UJ	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	0.6 J	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 UJ	0.11 J	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	0.80 J	1.0 J	10 U	10 U	0.80 J	4.0 U	0.40 UJ	0.31 J	0.36 J	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 UJ	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	0.90 J	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.11 J	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	17	2.0 U	40	19	14	4.0	7.0	23	6.0	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	25 U	R	R	R	14 U	R	5.0 U	5.0 U	5.0 U	25 U	13 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	25 U	R	50 U	51 J	14 U	20 U	5.0 U	5.0 UJ	5.0 U	25 U	13 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	10 U	2.0 U	20 U	20 U	2.0 U*	8.0 U	0.60 U*	0.82 U*	3.3 U*	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	5.0 U	2.0 U	5.0 J	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	5.0 U	2.0 UJ	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	5.0 UJ	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.34 J	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	7.0	2.0 U	16	7.0 J	2.0 U*	1.0 J	0.7 UJ	0.98 U*	0.67 U*	2.5 U	0.25 J	1.0 U	0.20 J	0.24 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.30 J
1,2,4-Trichlorobenzene	10.0 U	100 U		10 U	10 UJ	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	5.0 U	2.0 UJ	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.50 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	5.0 U	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 U	0.21 J	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	3.0 J	2.0 U	10 U	10 U	3.0 U	4.0 U	1.0 U	0.50 UJ	0.50 UJ	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	1.0 J	220	14	240	140	84	35	52	160	17	2.5 U	3.8 U	0.27 J	0.19 J	5.00 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				18 J	20 U	3.0 U	3.0 U	2.0 U	1.0 J	0.85 J	1.50 J	1.2 J	1.3 J

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	D-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[2]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	720 J	650	120 U*	R	R	150 J	42 U*	10 U*	9.7 U*	90 U*	27 J	130	6.4 J	10 U	10 U	4.2 J	5.0 U	5.0 U	5.0 U	8.7	6.9	10 U
Benzene	82	32	46	34	21	75	38	36	58	55	45	56	50	50	58	70	32	47.3	52	64	55	49
Bromochloromethane		10 U	10 U	8.0 U	3.0 U	0.8 J	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	8.0 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	17 U	10 U	10 U	8.0 U	3.0 U	10 U*	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	0.19 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	83 U	10 UJ	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	1,100 J	730	120 U*	R	R	R	34 J	5.0 U	11 J	84 U	R	130 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	42 U	10 U	10 U	8.0 UJ	3.0 U	10 U*	1.0 J	0.50 J	9.3	12	2.4 J	13 U	1.9	1.0 U	0.34 J	2.4	3.2 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	8.0 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	42 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.063 J	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	42 U	10 U	R	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 UJ	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	8 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	0.3 J	0.62 J	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	83 U	10 U	10 UJ	8.0 UJ	3.0 U	10 U	5.0 U*	1.0 U	0.50 U	15	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	33 UR	10 U	10 U	8.0 U	R	10 U	R	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	17 U	10 U	10 U	8.0 U	3.0 U	0.8 J	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	8 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	83 U	10 U	10 U	8.0 U	3.0 U	10 U*	5.0 U	1.0 U	0.072 J	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	42 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	42 U	10 U	10 U	8.0 U	3.0 U	10 U*	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	17 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5.0 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	2.0	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	8.0 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.76 J	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	42 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.041 J	2.2 J	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	42 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	18	10 J	25	15	8.0	10 UJ	11	12	9.0	8.4 U	2.5 U	13 U	2.7	1.0 U	2.4	1.0 U	1.0	1.0 U	1.3	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	8.0 U	10 U	10 U	8.0 U	3.0 U	0.5 J	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	8.0 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	160	81	200	170	64	57	94	130	120	150	110	120	120	98	72	100	52	30.3	29	32	7.7	5.3
2-Hexanone	420 UR	R	R	R	R	R	25 UJ	5.0 U	0.93 J	84 UJ	25 U	130 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	1,500 J	970	230	280 J	100	280 J	32 J	4.0 J	5.0 U	84 U	25 U	130 U	1.4 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	42 U*	20 U	10 U	17 U*	6.0 U	20 U*	10 UJ	0.8 U*	0.54 U*	8.2 U*	0.62 J	8.7 J	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	5.0 J	2.0 J	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	4.0 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	17 U	10 U	10 U	8.0 U	3.0 U	0.10 J	5.0 U	1.0 U	0.050 J	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	18	4.0 J	12 U*	8.0 J	5.0	10 U*	6.0	5.0	7.1	9.3 U*	9.7	12 J	15	13	10	22	5.8	5.0	5.8	6.8	1.5	1.1
1,2,4-Trichlorobenzene	10	50 U		8.0 U	3.0 U	10 U*	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	42 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	4.0 U	10 U	10 U	8.0 U	3.0 U	10 U*	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	0.85 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	25 U	10 U	10 U	8.0 U	3.0 U	10 U	5.0 U	1.0 U	0.60 J	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	17 U	10 U	10 U	8.0 U	3.0 U	10 UJ	5.0 U	1.0 U	0.50 U	8.4 U	2.5 U	13 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	340	120	170	140	72	93	87	100	96	120	86	80	95	53	33	58	16	11.3	13	13	2.1	1.7
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	20 U	3.0 U	1.4 J	1.3 J	1.8 J	20 U	1.6 J	1.8 J	1.0 J

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

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NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	D-30																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[2]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	2.0 J	25 U	50 U*	R	R	5.0 U*	5.0 U*	R	7.6 U*	3.1 U*	23 U*	25 U	4.1 J	10 U	10 U	10 UJ	5.0 U	5.0 U	5.0 U	8.6	6.4	2.5 J
Benzene	3.0	7.0	7.0 J	4.0	2.0	0.90 J	0.60 J	3.0	2.9	1.1	17	9.8	1.9	1.7	4.2	3.0	10	0.68	2.5	4.6	2.9	2.8
Bromochloromethane		5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	0.14 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	5.0 U	10 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 UJ	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	25.0 U	76 U*	R	R	R	5.0 UJ	5.0 U	R	R	R	25 U	10 U	10 U	10 U	10 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	10 U	1.0 UJ	1.0 U	1.0 U	0.20 J	1.0 U	0.21 J	0.50 U	1.5 J	1.6 J	0.15 J	1.0 U	0.1 J	0.43 J	1.7 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	5.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U*	1.0 U	0.50 U	0.50 U	1.6 UJ	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	5.0 U	R	1.0 U	R	R	R	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	5.0 U	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	3.0 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.059 U*	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	0.2 J	0.2 J	0.31 J	0.31 J	1.6 U	2.5 U	1.0 U	1.0 U	0.4 J	0.42 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.57 J
trans-1,2-Dichloroethene	5.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 U*	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	5.0 U	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.080 J	0.15 U*	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	2.0 J	4.0 J	2.0 J	3.0	1.0 U	1.0 U	1.0 U	1.0 U	0.11 J	0.50 U	51	42	5.3	0.88 J	0.48 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	2.0 J	R	R	5.0 U	R	5.0 UJ	5.0 U	5.0 U	5.0 U	16 U	25 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	70	420.0	620 J	R	1.0 U*	R	5.0 UJ	5.0 U	0.67 J	5.0 U	16 U	25 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	10.0 U	10 U*	2.0 U*	2.0 U	2.0 U*	2.0 UJ	2.0 U	1.0 U*	0.50 UJ	1.6 U	1.4 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	5.0 U	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.95 J
Toluene	2.0 U	5.0 U	10 U*	0.5 J	1.0 U	1.0 U	1.0 U	0.2 J	0.25 U*	0.50 U	1.5 U*	0.73 J	0.19 J	0.18 J	1.00 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	5.0 U	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	5.0 U	10 U	1.0 U	1.0 U	1.0 U	0.20 J	0.20 J	0.50 U	0.32 J	1.6 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	2.0 J	5.0 U	2.0 J	2.0	0.6 J	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	6.8	7.5 U	0.31 J	5.0 U	5.0 U	0.23 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 UJ							20,000 U				20 U	20 U	3.0 U	3.0 U	2.0 U	0.80 J	0.33 J	1.40 J	1.5 J	4.6

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	E-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	83,000 UR	R	R	R	R	400 U*	120 J	330 U	710 U*	160 U*	24 J	14 U	10 U	5.6 J	10 U	10 U	5.0 U	5.0 U	5.0 U	5.7	6.4	7.4 J
Benzene	1,700 U	120 J	32 J	500 UJ	1,700 U	51 J	110	86 J	92 J	44	85	0.28 J	1.0 U	1.0 U	1.0 U	0.22 J	0.50 U	0.50 U	0.68	0.75	0.75	1.2
Bromochloromethane		1,000 U	250 U	500 UJ	1,700 U			330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	830 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U		63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1,700 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.19 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	8,300 U	1,000 UJ	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 UJ	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	17,000 UR	R	R	R	R	400 U	40 J	330 U	R	840 U	R	3.0 J	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	4,200 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	27 J	25 U	2.5 U	0.44 J	0.18 J	1.0 U	1.0 U	0.13 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	830 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	4,200 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	13 J	25 U	0.91 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	4,200 U	1,000 U	250 U	500 UJ	1,700 U	400 UJ	33 J	52 J	63 UJ	25 U	27	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	830 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	8,300 U	1,000 U	250 U	500 UJ	1,700 U	400 U	12 J	330 U	63 UJ	23 J	2.5 UJ	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	3,300 UR	R	R	500 UJ	R	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	1,700 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	830 U	1,000 U	250 UJ	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	8,300 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	16 J	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	4,200 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	26 J	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	4,200 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	30 J	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	580 J	320 J	100 J	500 UJ	1,700 U	59 J	45 J	39 J	63 U	25 U	2.5 U	0.11 J	1.0 U	1.0 U	1.0 U	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	500 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	830 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	24 J	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	4,200 U	1,000 U	410	480 J	1,700 U	520 U	480	300 J	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.52 J	1.0 U	1.0 U	0.55 J	1.00 U	1.0 U	0.45 J
trans-1,2-Dichloroethene	4,200 U	2,400	250 U	500 UJ	1,700 U	400 U	100 U	330 U	22 J	25 U	1.0 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	730 J	440 J	110 J	500 UJ	1,700 U	400 U	30 J	34 J	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	830 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	830 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	18,000	7,900	1,700	8,000 J	8,700	3,000	1,900	2,600	5,500	3,800	3,500	2.2	0.27 J	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	42,000 UR	5,000 U	R	R	R	400 U	100 U	330 U	630 U	250 U	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	4,200 U	3,000 J	R	2,100 J	9,200 J	1,200	690	370	630 UJ	250 U	10 J	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	4,200 U*	2,000 U*	250 U	1,000 UJ	3,300 U	400 U	100 U	330 U	43 U*	25 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.1 J
Styrene	830 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	420 U	1,000 U	250 UJ	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1,700 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	36 J	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	68,000	25,000	3,700	8,900 J	21,000	5,400	3,000	4,600	200	8.0 U*	420	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	150 U	100 U		500 UJ	1,700 U	400 U	100 U	330 U	46 U*	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	4,200 U	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	420 U	1,000 U	250 UJ	500 UJ	1,700 U	400 U	100 U	330 U	63 U	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1,800 J	1,000 U	250 U	500 UJ	1,700 U	400 U	100 U	330 U	20 J	25 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.11 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	1,700 U	1,000 U	45 J	500 UJ	1,700 U	400 U	50 J	330 U	63 UJ	33 J	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.49 J	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	46,000	32,000	6,400	31,000 J	36,000	13,000	11,000	11,000	10,000	3,400	5,500	7.0	1.6 J	5.0 U	5.0 U	0.33 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	20.0 U	3.0 U	1.9 J	2.0 U	0.68 J	1.40 J	0.89 J	4.9	3.4

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	F-30																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007[4]	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	2,500 UR	R	125 U*	R	R	250 U*	100 U*	250 U	100 U*	140 U*	R	690	100 U	100 U	10 U	5.8 J	5.0 U	5.0 U	5.0 U	6.3	5.6	3.6 J
Benzene	50 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	1 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		20 U	25 U	100 U	28 U			250 U	13 U	31 U	63 U	25 U	10 U	10 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	25 U	20 U	25 U	100 U	28 U	250 U	100 U		13 U	31 U	63 U	25 U	10 U	10 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50 U	20 UJ	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	1 U	0.23 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	250 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 UJ	31 U	63 UJ	25 U	10 U	10 U	40 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	500 UR	R	125 U*	R	R	250 U	100 U	250 U	69 U*	R	R	250 U	100 U	100 U	400 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	120 U	20 U	25 U	100 UJ	28 U	250 U	100 U	250 U	13 UJ	31 U	63 U	25 U	10 U	10 U	1 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	25 U	20 U	25 U	100 UJ	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	120 UJ	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	120 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 UJ	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U
Chloroform	25 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	250 U	20 U	25 U	100 UJ	28 U	250 U	100 U	250 U	13 UJ	31 U	63 UJ	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	100 U	R	R	R	R	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	50 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	25 U	20 U	25 UJ	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	250 UJ	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	120 UJ	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	120 UJ	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	15 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	25 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	3.9 U*	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	150 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	120 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 UJ	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	50 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	25 U	20 U	U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	25 U	20 U	25 UJ	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	120 UJ	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	20 J	16 J	25 U	10 U	10 U	40 U	0.23 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1,200 U*	100 U	R	R	R	250 U	100 U	250 U	130 U	310 U	630 U	250 U	100 U	100 U	1.9 J	1.4 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	1,700	1,700 J	1,800 J	2,000 J	1,900 J	2,500	3,200 J	4,300	3,700 J	4,900	7,900	3,900	1,200	1,900	780 J	400 J	22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	120 U*	29 J	26 U*	200 U*	69 U*	78 J	100 U*	90 J	100	88 U*	54 U*	50	21	1.9 J	40 U	1.0 U	5.0 U	5.0 U	4.9 J	5.0 U	5.0 U	5.0 U
Styrene	25 UJ	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	12 U	20 U	25 UJ	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	50 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	50 UJ	20 U	25 U	100 U	28 U	250 U	100 U	26 J	3.1 U*	27 U*	190 U*	25 U	10 U	10 U	40 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	25 U		100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	120 U	20 U	25 U	100 UJ	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	12 U	20 U	25 UJ	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	10 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	75 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 U	31 U	63 U	25 U	10 U	1.6 J	40 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	50 U	20 U	25 U	100 U	28 U	250 U	100 U	250 U	13 UJ	31 UJ	63 U	25 U	10 U	10 U	40 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	120 UJ	20 U	120 U	100 U	28 U	250 U	100 U	24 J	13 U	54	63 U	75 U	50 U	50 U	200 U	0.51 J	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U							20,000 U				200 U	200 U	27	33	21	24	19	15	13	12

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

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R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	G-10																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	2.0 J	8.0 U*	9.0 U*	830 U*	R	10 U*	R	5.0 U	100 U*	4.2 U*	4.1 U*	5.0 U	10 U	10 U	10 U	4.3 J	5.0 U	5.0 U	5.0 U	5.0 U	4.5 J	10 U
Benzene	2.0 U	1.0 U	1.0 U	170 U	71 U	9.0 J	3.0	0.4 J	13 U	0.50 U	0.50 U	0.50 U	0.18 J	1.0 U	1.0 U	1.0 U	0.50 U	0.5 U	1.9	2.2	6.7	2.0
Bromochloromethane		1.0 U	1.0 U	170 U	71 U		1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 UJ	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 UJ	170 U	71 U	10 U	1.0 U	1.0 U	13 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	5.0 U	R	R	R	10 U	5.0 UJ	5.0 U	28 J	5.0 U	4.6 J	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	0.10 J	170 U	71 U	10 U	1.0 U	1.0 U	2.7 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 UJ	170 UJ	71 U	5.0 J	1.0 U	1.0	34 J	0.50 UJ	0.50 U	1.2	19	0.77 J	1 U	1.0 U	1.0 U	1.0 U	1.2	2.4	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 UJ	1.0 U	13 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	1.0 U	R	170 U	R	10 U	R	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 J	2.0	1.0	170 U	71 U	33	11	7.0	330	4.4	0.50 U	1.2	16	15	0.68 J	1.0 U	1.0 U	1.9	2.9	3.7	9.0	4.0
1,2-Dichloroethane	0.60 U	1.0 U	0.40 J	170 U	71 U	10 U	3.0	0.70 J	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.12 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	6.0	3.0	2.0	170 U	71 U	14	3.0	2.0	12 J	1.4	0.50 U	0.20 J	2.8	3.3	0.31 J	1.0 U	1.0 U	1.0	2.8	5.2	4.0	4.8
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	170 U	71 U	10 U	0.50 J	2.0	13 UJ	1.5	0.50 U	0.20 J	6.7	2.9	1.0 U	1.0 U	1.0 U	0.74 J	3.1	2.9	2.7	2.1
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	170 U	71 U	10 U	0.40 J	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	0.10 J	810	650	390	21	0.40 J	13 U	0.50 U	0.50 U	0.12 J	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	R	R	10 U	5.0 UJ	5.0 U	130 U	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	830 U	R	10 U	5.0 UJ	5.0 U	130 UJ	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	1.1 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U*	330 U	140 U*	10 U	2.0 UJ	0.20 J	16 U*	0.92 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	100 J	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	13	3.0	6.0	170 U	71 U	10 U	1.0	2.0	13 U	2.8	0.22 J	0.25 J	0.18 J	0.22 J	0.39 J	1.0 U	1.0 U	0.39 J	1.0 U	0.6 J	1.0 U	0.48 J
Toluene	2.0 U	1.0 U	1.0 U*	170 U	71 U	10 U	1.0 U	1.0 U	13 U	0.22 U*	0.50 U	0.46 J	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.38 J
1,2,4-Trichlorobenzene	10 U	5.0 U		170 U	71 U	10 U	0.10 J	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	3.0 J	0.50 J	3.0 J	170 U	71 U	10 U	0.40 J	1.0	13 U	0.13 J	0.50 U	0.40 J	1.0 U	1.3	1.0	1.0 U	1.0 U	1.0 U	0.51 J	1.00 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.70	0.20 J	0.8 J	170 U	71 U	10 U	0.20 J	1.0 U	13 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	6.0	4.00	7.0	170 U	71 U	2.0 J	5.0	7.0	7.6 J	7.2	0.25 J	0.58	1.0 U	1.3	2.1	1.0 U	0.46 J	3.5	6.9	6.3	2.2	1.6
Vinyl chloride	2.0 U	0.50 J	1.0 U	170 U	71 U	4.0 J	0.30 J	0.60 J	13 UJ	0.61	0.50 U	0.50 U	0.93 J	1.5	1.0 U	1.0 U	0.50 U	0.25 J	0.50 U	0.50 U	0.99 J	1.0 U
Xylenes (total)	0.60 J	0.30 J	0.40 J	3,800	1,200	10	0.70 J	0.10 J	13 U	0.23 J	0.50 U	0.46 J	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.44 J
1,4-Dioxane	6,000 U	10,000 UJ							20,000 U				20 U	57	3.0 U	21	2.0 U	0.61 J	2.2	5.7	21	35

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	G-30																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 U*	16 U*	R	10 U*	R	8.0 J	17 U*	R	7.4 U*	10 U*	13 U*	6.4 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	6.8	6.6	4.0 J
Benzene	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	0.69 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	2.0 UJ	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	2.0 UJ	2.0 UJ	2.0 U	3.0 U	1.0 U	2.0 U*	1.0 U	0.50 UJ	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	10 U	72 U*	R	R	1.0 J	R	5.0 U	1.9 U*	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	0.50 J	1.0 U	2.5 J	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U*	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	2.0 U	2.0 UJ	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 UJ	0.50 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U
Chloromethane	10 U	0.90 J	2.0 U	2.0 UJ	3.0 U	1.0 U	2.0 U*	1.0 U	0.50 UJ	0.50 U	2.5 U	0.50 U	0.83 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	2.0 UJ	R	2.0 U	R	1.0 UJ	2.0 UJ	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	2.0 UJ	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	2.0 UJ	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	2.0 UJ	2.0 U	2.0 U	3.0 U	1.0 U*	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	2.0 U	0.4 J	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 UJ	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	6.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 UJ	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	2.3 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	84 J	R	R	R	R	5.0 U	R	5.0 U	1.2 J	5.0 UJ	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	170 J	130 J	200 J	130 J	140 J	140 J	110	110	62 J	74	29	28	13	1.4 J	1.2 J	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	25	38.0	5.0 U*	6.0 U*	2.0 U*	2.0 J	13.0	81	12 U*	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.8 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	3.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.38 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.40 J
Toluene	3.0 U	0.3 J	2.0 U*	0.5 J	3.0 U	1.0 U*	0.40 J	0.30 J	0.33 U*	0.41 U*	0.61 U*	0.47 J	0.17 J	0.17 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.16 J
1,2,4-Trichlorobenzene	10 U	10 U		2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	2.0 U	2.0 UJ	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	8.1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	2.0 U	2.0 U	2.0 UJ	3.0 U	1.0 U	2.0 U	1.0 U	0.50 UJ	0.21 J	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	2.0 U	12.0 U	2.0 U	3.0 U	1.0 U*	2.0 U	1.0 U	0.33 J	0.23 J	2.5 U	0.35 J	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U							20,000 U				20 U	31	12	3.0 U	9.3	16	13	11	11	10

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	H-10																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	3.0 J	R	R	R	2.0 J	5.0 U*	5.0 U	3.5 J	4.7 U*	R	5.0 U	3.7 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U		10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Bromoform	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Bromomethane	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	NS	3.0 U
2-Butanone	20 UR	R	R	R	R	R	0.90 J	5.0 U	R	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.08 J	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	NS	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	NS	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U*	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	R	R	1.0 U	R	1.0 U	R	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	NS	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,2-Dichlorobenzene	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,1-Dichloroethane	2.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.2	0.90 J	0.66 J	1.3	4.7	1.6	NS	1.0
1,2-Dichloroethane	0.6 U	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
cis-1,2-Dichloroethene	6.0 U	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.2	3.1	0.50 J	1.3	6.9	2.5	NS	1.4
trans-1,2-Dichloroethene	5.0 U	0.80 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.7 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,2-Dichloropropane	2.0 U	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.3 J	0.35 J	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.3 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	0.50 U
2-Hexanone	50 UR	5.0 U	R	R	R	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	0.60 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U
Methylene chloride	5.0 UJ	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 UJ	2.0 U	1.1 U*	1.0 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Toluene	2.0 U*	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.24 U*	0.22 U*	0.43 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	0.27 J
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.83 J	0.52 J	0.97	0.85	1.0	2.1	NS	6.0
Vinyl chloride	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	NS	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	0.27 J
1,4-Dioxane	5,800 U	10,000 U							20,000 U				20 U	20 U	3 U	3.0 U	2.0 U	2.0 U	2.0 U	0.29 J	NS	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	H-30																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	4.0 J	25 U*	R	R	4.0 J	5.0 U*	5.0 U	16 J	3.1 U*	5.4 U*	5.0 U	6.2 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	7.2	10 U
Benzene	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.12 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.16 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	2.0 J	5.0 U	4.0 J	R	R	5.0 U	10 U	10 U	10 U	4.7 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	0.10 J	0.10 J	0.20 J	0.83 J	0.50 U	0.50 U	0.50 U	0.13 J	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	1.0 U	5.0 U	1.0 U	1.0 U	0.20 J	1.0 J	1.0 U	0.50 UJ	0.50 U	0.50 U	0.23 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	R	R	U	R	1.0 U	R	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	0.30 J	1.0 U	1.0 U	0.11 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	5.0 U	R	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	R	5.0 U	0.70 J	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	5.0 U	2.0 U*	2.0 U	2.0 U*	2.0 UJ	2.0 U	0.76 U*	0.15 U*	0.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.30 U*	0.50 U	0.32 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.29 J
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	5.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	16	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.17 J	0.50 U	0.12 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	0.21 U*	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 UJ	20 U	3.0 U	2.2 J	2.5	2.6	3.0	3.7	4.6	5.4

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	N-10																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	5.0 U*	R	5.0 U*	R	5.0 U*	14.0 J	R	3.9 U*	3.9 U*	R	7.7 U	10 U	10 U	3.6 J	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.2	10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	0.060 U*	0.50 U	0.24 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.17 J	0.50 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	5.0 U	R	R	R	R	R	5.0 U	8.7	R	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	0.7 J	0.038 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.50 U	0.50 U	0.50 UJ	0.15 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	1.0 U	R	1.0 U	R	R	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	0.30 J	0.60 J	0.60 J	1.0 U	2.0	1.0	2.0	1.0	2.8	0.36 J	3.9	2.2	1.9	0.83 J	0.68 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.060 J	0.50 U	0.50 U	0.11 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.085 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.22 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	5.0 U	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	5.0 U	R	2.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 U	2.0 U	0.38 U*	0.21 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 J	1.0 U	1.4 U*	0.50 U	0.18 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.34 J
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	0.15 J	0.50 U	0.50 U	1.0 U	0.16 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	1.0 J	0.50 J	1.0	1.0 U	0.90 J	0.90 J	0.90 J	3.0	0.99	0.72 J	0.50 U	0.50 U	3.6	3.0	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.66 U*	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	20 U	3.0 U	3.0 U	2.0 U	2.0 U	2.0 U	0.26 J	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

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[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	N-30							
Collection Date	2011	2012	2014	2015	2016	2017	2018[2]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	6.1	10 U
Benzene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	0.19 J	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	0.16 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.43 J
1,4-Dioxane	3.0 U	3.0 U	1.1 J	0.94 J	0.43 J	1.3 J	2.0 U	3.9

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

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[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	N-50																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	5.0 U	5.0 U*	5.0 U*	R	5.0 U*	8.0 J	5.0 U	5.3 U*	7.5 J	21 U*	6.0 U	10 U	4.6 J	3.4 J	4.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.7	10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.36 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	5.0 U	R	R	R	5.0 U*	R	5.0 U	1.2 U*	R	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	0.60 J	0.50 U	0.50 U	0.12 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	0.57 J B
Chloromethane	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.13 J	0.50 U	0.24 J	0.50 U	0.55 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	1.0 U	R	1.0 U	R	R	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U*	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.59	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	5.0 U	R	5.0 U*	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	5.0 UJ	5.0 U*	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	0.69 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U*	2.0 U*	2.0 U*	2.0 U*	2.0 U	0.10 J	0.54 U*	0.12 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.4 J	0.16 U*	0.10 U*	0.15 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	0.5 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 J	0.50 U	1.5 U*	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	20 U	24	36	41	52	58	53	59	60

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	Q-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	3.0 J	R	R	R	23 U*	5.0 U*	R	9.0 U*	4.1 U*	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	6.9	3.6 J
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.039 J	0.50 U	0.12 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	7.0 U*	5.0 UJ	5.0 U	1.6 U*	R	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	0.1 J	1.0 U	1.0 U	1.0 U*	0.10 J	0.30 J	5.9	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 J	1.0 U	2.0	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	0.15 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	R	R	1.0 U	R	R	R	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.21 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.38 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	5.0 U	R	R	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	5.0 UJ	R	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 UJ	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 UJ	2.0 U	1.1 U*	0.16 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.2 J
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10.0 U	5.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U*	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 UJ							20,000 U				20 U	20 U	3.0 U	3.0 U	0.99 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	Q-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	R	R	R	R	5.0 U*	120 U*	5.0 J	4.7 U*	9.8 U*	R	5.7 U	10 U	5.5 J	10 U	4.1 J	5.2	7.8	5.0 U	5.0 U	5.0 U	10 U
Benzene	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	0.60 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	63 UJ	R	5.0 U	R	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	0.2 J	2.0 U	1.0 U	1.0 U	1.0 U*	2.0 J	0.8 UJ	1.2	0.17 J	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.19 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	1.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	R	R	1.0 U	R	R	R	R	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.18 U*	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.55 U*	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	5.0 U	R	R	63 UJ	5.0 U	5.0 U	5.0 U	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	5.0 U	R	63 UJ	5.0 U	5.0 U	6.4	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	2.0 U	2.0 U*	2.0 U*	2.0 U*	25 UJ	2.0 U	0.70 U*	0.12 U*	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.1 J
Styrene	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U*	13 U	1.0 U	0.14 U*	0.69 U*	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	50 U		1.0 U	1.0 UJ	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	2.0 U	1.0 UJ	1.0 U	1.0 U	13 U	1.0 U	0.50 U	0.50 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	10.0 U	1.0 U	1.0 U	1.0 U	13 U	1.0 U	0.50 U	1.5 U*	2.5 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	2,000 J	10,000 U							20,000 U				1,600	630	1,200	1,000	700	830	800	760	1,700	2,000

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	R-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100,000 UR	R	R	R	R	5,000 U	10,000 U*	1,600 J	2,200 J	2,500 UJ	6,400 J	1,700 U	240 J	9.4 J	6.8 J	10 U	5.0 U	5.0 U	5.0 U	7.1	8.3	4.0 J
Benzene	930 J	4,000 UJ	650 J	5,000 U	1,000 U	5,000 U	10,000 U	110 J	110 J	95 J	15	170 U	50 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.47 J	0.50 U	0.50 U
Bromochloromethane		4,000 U	5,000 U	5,000 U	1,000 U			2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1,000 U	4,000 UJ	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U		310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2,000 U	4,000 UJ	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10,000 U	4,000 U	5,000 UJ	5,000 U	1,000 U	5,000 U	10,000 U	170 U*	310 UJ	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20,000 UR	R	R	R	R	5,000 U	10,000 U	2,500 U	R	R	R	1,700 U	500 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	0.84 J	170 U	50 U	0.26 J	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	5.3	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5,000 U	4,000 U	5,000 UJ	5,000 U	1,000 UJ	5,000 UJ	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10,000 U	4,000 U	5,000 UJ	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4,000 UR	R	R	5,000 UJ	R	2,000 J	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	0.84 J	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	510 J	400 J	600 J	5,000 U	1,000 U	5,000 U	10,000 U	200 J	310 J	230 J	95	170 U	50 U	1.0 U	1.0 U	1.0 U	0.74 J	2.2	3.0	1.0	1.3	0.57 J
1,2-Dichloroethane	600 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	65 U*	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	790 J	660 J	1,200 J	5,000 U	1,000 U	2,100 J	1,900 J	1,100 J	2,800	1,600	750 J	200	50 U	1.0 J	2.1	1.0 U	1.0 U	1.0 U	1.0 U	1.8	2.0	1.0 U
trans-1,2-Dichloroethene	5,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	0.65 J	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1,900 J	4,000 UJ	1,600 J	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	360	150 J	170 U	50 U	1.0 U	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	23,000	11,000	20,000	17,000	2,800	12,000	17,000	12,000	13,000	9,500	3,800	1,600	1,400	6.1	5.9	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50,000 UR	20,000 U	R	R	R	5,000 U	10,000 U	2,500 U	3,100 U	2,500 U	25 U	1,700 U	500 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	38,000	20,000 UJ	12,000 J	25,000 U	R	5,000 U*	10,000 J	2,500 U	770 J	1,100 J	25	1,700 U	500 U	0.77 J	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	17,000 J	8,000 U*	5,000 U*	10,000 UJ	2,000 U	5,000 U	10,000 U	2,500 U	590 U*	390 J	2.5 U	49 J	50 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	500 U	4,000 UJ	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	110 J	190 J	140 J	43	170 U	8.3 J	1.0 U	1.0 U	1.0 U	0.56 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	120,000 J	56,000	96,000	100,000	22,000	51,000	77,000	50,000	43,000	33,000	17,000	5,300	50 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	150 U	200 U		5,000 UJ	1,000 UJ	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	5.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	2,700 J	820 J	1,900 J	5,000 U	1,000 U	5,000 U	1,600 J	680 J	700	490	300 J	80 J	50 U	1.0 U	1.0 U	1.0 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	500 U	4,000 UJ	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 U	2.5 U	170 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1,400 J	730 J	1,000 J	5,000 U	370 J	5000 U	10,000 U	2,500 U	310 U	250 U	3.7	170 U	50 U	1.0 U	1.0 U	1.0 U	0.40 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2,000 U	4,000 U	5,000 U	5,000 U	1,000 U	5,000 U	10,000 U	2,500 U	310 U	250 UJ	3.5	170 U	50 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	57,000	37,000	56,000	49,000	7,000	31,000	49,000	36,000	39,000	28,000	12,000	4,700	7,900	2.2 J	57	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				1,000 U	20 U	3 U	3.0 U	2.0 U	1.0 U	2.0 U	0.34 J	2.0	1.2 J

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	R-50																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	2,500 UR	R	R	R	R	480 U*	600 U*	140 UJ	410 J	180 U*	R	5.0 U	6.8 J	10 U	5.5 J	10 U	5.0 U	5.0 U	5.0 U	5.0 U	4.0 UJ	10 U
Benzene	50 U	25 UJ	50 U	42 UJ	7.0 U	25 U	100 U	250 U	4.4 J	41 J	2.2 J	4.4	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		25 U	50 U	42 UJ	7.0 U	25 U		250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	25 U	25 UJ	50 U	42 UJ	7.0 U	25 U	100 U		13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50 U	25 UJ	50 U	42 UJ	7.0 U	25 U	100 U	250 U	2.7 J	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.20 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	250 U	25 U	50 UJ	42 UJ	7.0 U	25 U	100 U	64 U*	13 UJ	42 U	2.5 U	0.50 U	1.0 U	12	1.0 U	0.29 J	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U*
2-Butanone	500 UR	R	R	R	R	180 U*	660	250 U	R	R	R	5.0 U	14	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	120 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	26 J	42 U	2.5 U	0.16 J	1.7	1.0 U	0.38 J	0.26 U*	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	25 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	120 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	120 U	25 U	50 UJ	42 UJ	7.0 UJ	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Chloroform	25 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	250 UJ	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 UJ	42 U	2.5 U	0.50 U	1.0 U	13	2.0	0.52 J	1.0 U	1.0 U	1.1	1 U	1.0 UJ	1.0 U*
1,2-Dibromo-3-chloropropane	100 UR	R	R	42 UJ	R	25 U	100 U	250 U	13 U	42 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 UJ	5.0 U
Dibromochloromethane	50 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	25 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	250 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	120 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	120 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.8 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	15 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 UJ	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	25 U	25 U	50 U	42 UJ	7.0 U	25 UJ	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	120 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	120 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	50 U	25 UJ	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	2.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	25 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	25 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	22 J	10 J	12 J	42 UJ	7.0 U	25 U	100 U	9 UJ	3 J	44	0.87 U*	0.93 J	1.0 U	1.0 U	1.0 U	0.19 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1,200 UR	120 U	R	R	R	R	100 U	250 U	130 UJ	420 U	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	2,600	1,400 J	5,300 J	2,600 J	330 J	2,100	950 J	1,300	990 J	4,800	450	130 J	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	440 J	190	480	110 U*	13 U	50 U*	100 U	15 UJ	16 U*	16 U*	0.53 U*	0.50 U	1.0 U	0.24 J	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	25 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	12 U	25 UJ	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	50 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	160	34	50 U*	42 UJ	7.0 U	25 U*	100 U	30 J	4.9 U*	59	1.8 J	0.68 J	1.0 U	0.69 J	1.0 U	0.72 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	50 U	25 U		42 UJ	7.0 UJ	25 U	100 U	250 U	13 U	42 U	2.5 U	1.3 U	1.0 U	5.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	120 U	25 U	50 UJ	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	12 U	25 UJ	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	75 U	25 UJ	50 U	42 UJ	7.0 U	25 U	100 U	13 J	13 U	42 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	50 U	25 U	50 U	42 UJ	7.0 U	25 U	100 U	250 U	13 U	42 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	47 J	26	28 J	42 UJ	7.0 U	5 J	100 U	30 J	7.2 U*	130	1.6 J	2.7 J	5.0 U	5.0 U	5.0 U	0.72 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	20 U	3.0 U	3.4	3.8	4.7	4.4	4.3	4.9 J	5.0

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	S-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	28 J	19 U*	8.0 U*	12 U*	R	10 UJ	5.0 J	5.0 U	4.7 U*	4.2 U*	5.0 U	5.0 U	4.9 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	6.6	9.1 J
Benzene	30	0.80 J	0.30 J	1.0 U	1.0 U	10 U	0.70 J	0.40 J	0.48 J	0.50 U	0.16 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 UJ	1.0 U		1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.052 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	5.0 U	R	R	R	10 U	R	5.0 U	4.3 J	R	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	11
Carbon disulfide	5.0 U	0.10 J	1.0 U	1.0 U	1.0 UJ	10 U	1.0 U*	1.0 U	0.050 J	0.50 U	0.28 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	R	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	0.15 U*	0.50 U	0.50 U	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	1.0 U	1.0 U	1.0 U	R	10 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.0 J	0.20 J	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.039 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.093 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	10 J	0.4 J	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	5.0 U	R	10 U	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	2.0 U	1.0 U	2.0 U*	2.0 U*	10 U	2.0 U	2.0 U	0.98 U*	1.9 U*	0.50 U	0.50 U	1.0 U	1.0 U	10.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	250	31.0	8.0	18.0	33.0	10 U*	5.0 J	11	2.8 J	5.0 U	3.8 J	5.0 U	2.0 J	0.4 J	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	15	0.20 J	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.31 U*	0.12 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.44 J
1,2,4-Trichlorobenzene	10 U	50.0 U		1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	0.20 J	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	34	0.50 J	5.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.50 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	20 U	3.0 U	3.0 U						

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	S-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	31,000	36,000 J	9.0 U*	41,000 J	25 U*	37 J	9.0 U*	5.4 U*	5.8 U*	2.9 U*	5.1 U	10 U	6.0 J	10.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	4.9 J	5.6 J
Benzene	2.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.27 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	6,000	6,300 J	R	9,500 J	59 J	3.0 J	5.0 U	4.2 J	R	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	250 U	620 U	1.0 U	330 UJ	1.0 U	0.50 J	1.0 U	0.086 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	250 U	R	1.0 UJ	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U
Chloroform	1.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloromethane	10 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U*	1.0 U	0.50 U	0.50 U	0.50 U	0.27 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 UR	250 U	620 U	1.0 U	R	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U
Dibromochloromethane	2.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	250 U	620 U	1.0 U	330 U	1.0 UJ	1.0 U	1.0 U	0.091 J	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.088 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	1,200 U	R	5.0 U	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	500 U	620 U	2.0 U*	670 U*	2.0 U*	2.0 U	2.0 U	1.2 U*	1.9 U*	0.50 U	0.50 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	1,200 U	3,100 U	5.0 U	1,700	5.0 U*	9.0 J	3.0 J	1.0 J	5.0 U	5.0 U	5.0 U	10 U	10 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	250 U	620 U	1.0 U	330 U	1.0 U*	1.0 U	1.0 U	0.70 U*	0.14 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	150 U		1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	250 U	620 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	250 U	3,100 U	1.0 U	330 U	1.0 U	1.0 U	1.0 U	0.072 U*	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 UJ							20,000 U				520	20 U	3.0 U	3.0 U						

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	T-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	200 UR	6.0 U*	5.0 U*	R	R	8.0 U*	5.0 U*	5.0 U	6.2 U*	8.0 U*	32 U*	5.9 U	7.9 J	10 U	4.0 J	10 U	5.0 U	5.0 U	5.0 U	5.0 U	7.3	10 U
Benzene	52 J	3.0	12	11	4.0	11	11	4.0	0.67 U*	0.61	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.75 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	4.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.063 U*	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	20 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	40 UR	5.0 U	R	R	R	R	2.0 J	5.0 U	2.6 J	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	10 U	0.10 J	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U*	0.10 J	0.081 U*	0.56	2.5 U	0.50 U	0.26 J	1.0 U	1.0 U	1.1	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	10 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.078 U*	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	10 U	1.0 U	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U
Chloroform	2.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloromethane	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.075 U*	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8.0 U	1.0 U	1.0 U	1.0 U	R	R	R	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U
Dibromochloromethane	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	4.0 U	0.1 J	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	2.0 J	0.70 J	1.0 J	1.0	0.60 J	0.70 J	0.70 J	0.30 J	0.55	0.89	2.5 U	0.24 J	0.15 J	1.0	0.41 J	0.72 J	1.0 U	1.0 U	0.58 J	0.63 J	0.42 J	1.0 U
trans-1,2-Dichloroethene	10 U	0.1 J	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U*	0.10 J	0.081 U*	0.56	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.088 U*	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	2.0 J	1.0 U	1.0 U	1.0 U	1.0 U	0.7 J	0.9 J	2.0	0.028 J	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.49 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	100 UR	5.0 U	R	5.0 U	R	R	5.0 UJ	5.0 U	5.0 U	5.0 UJ	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	10 U	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 UJ	0.30 U*	0.41 U*	0.87 U*	2.5 U	0.50 U	1.0 U	1.0 U	10 U	10 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 J	5.0 U	5.0 U	5.0 U	5.0 U	R	5.0 UJ	5.0 U	5.0 U	1.2 J	25 U	5.0 U	10 U	0.50 J	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	3.0	0.8 J	2.0	0.43 U*	0.21 U*	0.50 U*	0.50 U	1.0 U	1.0 U	0.18 J	0.19 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	6.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	0.057 J	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	3.0 J	0.40 J	1.0	1.0 U	1.0 U	0.80 J	0.70 J	0.20 J	0.13 J	0.50 U	2.5 U	0.50 U	1.0 U	0.49 J	1.0 U	0.19 J	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	4.0 J	1.0 U	5.0 U	1.0 U	1.0 U	3.0	0.90 J	18	0.50 U	0.50 U	2.5 U	1.50 U	5.0 U	5.0 U	5.0 U	0.43 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	5,800 U	10,000 U							20,000 U				20 U	20 U	3.0 U	3.0 U	0.86 J	0.81 J	2.00 U	1.1 J	1.2 J	1.2 J

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	T-50																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	5.0 U	5.0 U*	11 U*	82 J	16,000 J	19,000 J	9,100	2,700 J	11 U*	5.5 U*	5.0 U	7.4 J	7.2 J	4.0 J	10 U	5.0 U	5.0 U	5.0 U	8.1	7.1	10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ		0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.053 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1,000 UJ	1,000 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	3.0 J	5.0 U	R	R	73 J	5,300 J	6,000 J	3,100	440	5.0 U	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.084 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.1	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	1.0 UJ	R	1.0 U	R	R	1,000 UJ	250 U*	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	4.2 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.084 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.073 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	660 J	1,000 U	0.039 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	R	R	5.0 U	R	R	5,000 UJ	1,000 U	5.0 U	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 UJ	2.0 U*	2.0 U*	2.0 U*	1,000 U*	1,000 U	0.64 U*	0.85 U*	0.50 U	0.50 U	1.0 U	1.0 U	10 U	0.45 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	R	5.0 U	5.0 U	5.0 U*	1,000 UJ	1,000 U	87	95	48	27	10	10 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.50 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	3.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1,000 UJ	1,000 U	0.46 U*	0.20 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 U	1.0 U	1,000 U*	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000 UJ	1,000 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	1.0 J	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	2,700 J	1,000 U	0.24 U*	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	20 U	15	13	10	14	16	15	32	59

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	U-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	6.0 U*	R	5.0 U*	R	5.0 U*	29 U*	R	8.2 U*	3.5 U*	6.9 U*	7.5 U	7.5 J	4.5 J	4.6 J	10 U	5.0 U	5.0 U	5.0 U	5.0 U	7.8	10 U
Benzene	2.0	0.9 J	0.50 J	1.0 U	1.0 U	3.0	2.0 J	12.0	2.6	1.2	0.19 J	0.50 U	1.0 U	1.0 U	1.0 U	0.13 J	0.35 J	0.50 U	1.0	0.6	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.16 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	5.0 U	R	12 J	R	R	R	5.0 U	4.0 J	R	R	1.6 J	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 J	1.0 U	0.18 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.46 J	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	R	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.092 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	1.0 U	1.0 U	1.0 U	R	R	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	0.20 J	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.1 J	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	6.0 U	0.70 J	0.20 J	1.0 U	1.0 U	0.30 J	1.0 UJ	0.40 J	0.37 J	0.45 J	0.50 U	0.13 J	1.0 U	1.0 U	0.21 J	0.55 J	1.0 U	1.0 U	1.0 U	1.0 U	0.45 J	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 J	1.0 U	0.18 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.074 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	0.70 J	1.0 U	1.0 U	1.0 U	1.0 U	0.60 J	20 J	13	4.7	5.5	0.40 U*	3.0	1.2	2.4	0.75 J	0.75 J	0.61	2.7	3.8	2.2	1.7	0.28 J
2-Hexanone	50 UR	5.0 U	R	5.0 U	R	R	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 UJ	2.0 U	1.2 U*	1.7 U*	0.50 U	0.50 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.77 J	10 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	20	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.11 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	6.0	7.0 J	5.0	1.3 U*	4.6	0.38 U*	14	1.2	1.7	0.29 J	0.19 J	0.75	0.5 U	1.1	0.26 J	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 UJ	1.0 U	0.60 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.052 J	0.27 J	0.50 U	0.50 U	1.0 U	0.2 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	0.4 J	0.2 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	2.0 J	1.0 U	5.0 U	1.0 U	1.0 U	2.0	28 J	13	3.2	21	1.6	25	9.0	21	3.8 J	2.3 J	1.3	3.0	4.6	2.3	1.4	0.29 J
1,4-Dioxane	5,800 U	10,000 U							20,000 U				20 U	20 U	3.0 U	3.0 U	2.0 U	2.0 U	2.0 U	0.58 J	2.0 U	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	U-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	4.0 J	5.0 U*	5.0 U*	R	5.0 U*	R	5.0 U	8.0 U*	4.3 U*	6.8 U*	5.0 U	3.5 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	9.7	10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.036 J	0.50 U	0.21 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 UJ	1.0 U	0.1 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.063 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.15 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	2.0 J	R	R	R	R	5.0 U	8.2	R	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U*	0.15 J	0.93	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloromethane	10 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	R	1.0 U	1.0 U	R	1.0 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.2 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.60 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	6.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U*	0.15 J	0.93	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.085 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.2 J	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	R	5.0 U	R	5.0 U*	R	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 U	2.0 U	1.5 U*	1.9 U*	0.50 U	0.50 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	0.42 J	5.0 U	5.0 U	5.0 U	0.61 J	10 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.2	0.13 U*	0.14 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.29 J
1,2,4-Trichlorobenzene	10 U	5.0 U		1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.30 J
1,4-Dioxane	5,800 U	10,000 U							20,000 U				20 U	24 U	67	55	19	16	17	14	20	39

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

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Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	V-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	170 UR	7.0 J	25 U*	5.0 U*	R	5.0 U*	130 U*	R	6.9 U*	7.1 U*	R	5.0 U	7.5 J	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.7 J
Benzene	3.0 U	0.9 J	2.0 J	1.0 U	2.0 U	0.30 J	13 UJ	1.0 U*	0.061 U*	0.36 J	0.26 U*	0.50 U	1.0 U	1.0 U	0.62 J	0.20 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	5.0 U	1.0 U	2.0 U	1.0 UJ	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	2.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	3.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.085 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.29 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	17 U	1.0 UJ	5.0 U	1.0 U	2.0 U	1.0 U	13 U*	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	33 UR	3.0 J	R	R	R	5.0 U*	R	5.0 U	8.1	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	8.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 UJ	1.0 J	0.30 J	0.32 U*	0.50 U	0.39 J	0.50 U	0.16 J	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	2.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	8.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	8.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	2.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 UJ	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	17 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 U*	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	7.0 U	R	R	1.0 U	R	1.0 UJ	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	3.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	2.0 U	1.0 U	5.0 UJ	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	17.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 UJ	2.0 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 UJ	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 UJ	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	3.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	2.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	8.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	8.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 UJ	1.0 J	0.3 J	0.32 U*	0.50 U	0.39 J	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	3.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	2.0 U	1.0 U	5.0 U	1.0 U	2.0 U	0.20 J	13 UJ	1.0 U	0.071 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	2.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	12 J	1.0	42.0	1.0 U	10	0.70 J	13 UJ	4.0	0.10 J	0.14 J	0.50 U	0.50 U	1.0 U	1.0 U	0.30 J	0.17 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	84 UR	5.0 U	R	R	R	R	R	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	8.0 U	5.0 U	R	5.0 U	10 U	5.0 U*	63 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	8.0 U*	2.0 U	5.0 UJ	2.0 U*	4.0 U*	2.0 U*	25 UJ	2.0 U	0.38 U*	0.99 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	2.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.8 U	1.0 U	5.0 UJ	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	2.6	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	3.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	3.0 U	0.60 J	5.0 U*	1.0 U	2.0 U	1.0 U*	13 UJ	0.50 J	1.2 U*	0.36 U*	0.15 U*	0.50 U	1.0 U	1.0 U	0.20 J	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	10 U	10 U		1.0 U	2.0 U	1.0 UJ	13 U*	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	8.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.8 U	1.0 U	5.0 UJ	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.13 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	3.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	13 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	12	1.2 J	48	1.0 U	4.0	0.50 J	13 UJ	2.0	0.17 U*	0.59	0.50 U	1.5 U	5.0 U	5.0 U	0.48 J	0.32 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 UJ	20 U	3.0 U	100	4.3	3.4	2.3	2.1	2.2	1.3 J

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	V-50																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	100 UR	6.0 J	5.0 U*	R	R	6.0 U*	5.0 U*	5.0 U	4.4 U*	3.5 U*	15 U*	5.0 U	3.3 J	10 U	10 U	4.1 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U
Benzene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 J	1.0 U	1.0 U	0.036 U*	0.50 UJ	0.86 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U *	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	20 UR	R	R	R	R	R	R	5.0 U	7.2	R	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 J	0.3 J	0.10 J	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	10 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 UJ	4.0 J	1.0 U	0.053 J	0.50 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	4.0 U	R	R	1.0 U	R	1.0 UJ	5.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	0.5 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.7 J	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.8 J	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	0.10 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 J	0.30 J	0.10 J	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.083 U*	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.14 J	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	50 UR	5.0 U	5.0 U	5.0 U	R	R	5.0 UJ	5.0 U	0.26 U*	5.0 U	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	R	34.0 J	5.0 U	5.0 U	5.0 U	25 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U*	2.0 U	1.0 U	2.0 U*	2.0 U*	2.0 U*	2.0 UJ	2.0 U	0.28 U*	0.26 U*	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	0.59 U*	0.11 U*	0.61 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.30 J
1,2,4-Trichlorobenzene	30 U	10 U		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.50 UJ	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	2.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 UJ	0.09 J	1.0 U	0.50 U	0.11 U*	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.50 U	0.42 J	2.5 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	0.32 J
1,4-Dioxane	6,000 U	10,000 U							20,000 U				20 U	20 U	110	100 J	45	44 U	33	30	38	38

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	W-10								W-30							
Collection Date	2011	2012	2014	2015	2016	2017	2018[5]	2019	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	10 U	10 U	5 U	5.0 U	5.0 U	5.0 U	7.4	5.3 J	10 U	200 UJ	5 U	5.0 U	5.0 U	5.0 U	5.5	10 U
Benzene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	20 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	20 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	10 U	10 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	200 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	1.0 U	1.0 U	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	20 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	2 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	1.0 U	1.0 U	1 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	0.46 J	1.0 U	1.0 U	1.9	13	4	2.1	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	32	7.7	0.60 J	2.9	3.6	2.7	2.2	2.5	1.0 U	33 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	8.7	0.94 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37 J	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	20 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	200 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	200 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	0.70 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.19 J	1.0 U	20 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	39	8.2	2.2	1.6	0.50 U	1.30	11	9.6	0.37 J	20 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	20 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	5.0 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.27 J
1,4-Dioxane	3.4	540	4.5	1.1 J	0.77 J	0.46 J	2.0 U	2.2	4.5	720	800	180	37	64	200	150

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

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[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	W-50								Z-10					
Collection Date	2011	2012	2014	2015	2016	2017	2018[5]	2019	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	10 U	10 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	10.0 U	5.0 U	7.0	5.0 U	3.7 J
Benzene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	10	14.5	17	16	14	22
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	1.0 U	4.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.9 J	4.0 U	2.0 U	2.0	2.0 U	2.6
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	0.38 J
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	2.0 U	2.0 U	1.0 U	1.0 UJ	5.0 U	5.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	10.0 U	5.0 U	5.0 UJ	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Ethyl benzene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	28	56	27	17	21	13
2-Hexanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.69	1.6	0.73	0.36 J	0.99	0.63
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.5 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.50 U	1.0 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	54	36	11	1 J	28	9.4
1,4-Dioxane	340	130	2,200	580	1,400	470	480 UJ	500	0.89 J	15 U	3.2	1.0 J	2.3	1.5 J

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	AA-10						AC-30				AD-10			GA-50					
Collection Date	2014	2015	2016	2017	2018[5]	2019	2016[5]	2017	2018[5]	2019	2017	2018[5]	2019	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	6.2	10 U	5.0 U	5.0 U	4.6 J	10 U	5.0 U	27	10 U	5.0 U	5.0 U	5.0 U	5.0 U	10 J	5.4 J
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.3	1.1	1.4	0.62	99	46	43	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Bromomethane	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	2.0 U	2.0 U	2.0 U	3.0 U	2.0 U	2.0 U	3.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2-Dibromo-3-chloropropane	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 UJ	5.0 U
Dibromochloromethane	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.81 J	1.10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 J	1.0 U	0.47 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	0.29 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	120	30	13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.2 J
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.21 J	42	0.50	0.58	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.43 J	0.50 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	0.37 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	260	10	6.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.66 J	0.80 J	2.0 U	1.2 J	15 U	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	1.2 J	2.0 U

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

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NS = This well was not sampled.

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[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-5

1993 - 2019 Volatile Organic Compounds in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	P-3																
Collection Date	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[5]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	1,100 U*	R	360	5.7 U*	4.8 U*	7.6 U*	5.3 U	4.2 J	3.6 J	10 U	10 UJ	5.0 U	5.0 U	5.0 U	5.0 U	10	10 U
Benzene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50 U	1.0 U	1.0 U	0.072 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50 U	1.0 UJ	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
2-Butanone	250 U*	58 J	37	5.0 U	R	R	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	50 U	0.070 J	0.40 J	0.094 U*	0.12 J	0.50 U	0.50 U	0.10 J	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	50 U	1.0 U	1.0 U	0.50 UJ	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	50 U	1.0 UJ	1.0 U	0.095 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	50 U	R	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Dibromochloromethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dibromoethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	50 UJ	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	50 U	1.0 U	1.0 U	0.046 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	50 U	0.070 J	0.40 J	0.094 U*	0.12 J	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50 U	1.0 U	1.0 U	0.081 U*	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethyl benzene	50 U	1.0 U	1.0 U	0.032 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	R	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	250 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.51 J	0.46 J	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	100 U*	2.0 UJ	2.0 U	1.2 U*	1.6 U*	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	50 U	1.0 U*	0.2 J	0.47 U*	0.13 U*	0.47 U*	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride	50 U	1.0 U	1.0 U	0.50 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Xylenes (total)	50 U	1.0 U	1.0 U	0.089 U*	0.50 U	0.50 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane				20,000 U				20 U	20 U	3.0 U	2.2 J	1.0 J	19 J	3.3	3.4	5.1	4.5

Notes:

Analytical results only presented for those monitoring locations sampled during 2018 event.

ug/L = Micrograms per liter

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank cell indicates that the compound was not analyzed for in this sample.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. The data in this table have been reported accordingly.

[4] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[5] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-1																	MW-1R				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015[2]	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	1.0 U	4.0 U	3.4 U*	3.9 U*	1.2 U*	1.8 U*	3.6 U*	1.3 J	0.90 U	8.7 J	7.6 J	9.6	6.4	12.4	8.6	13	6.5	2.0 U	2.2	1.4 J	0.93 J
Cyanide	447	336	1,930 J	1,160	3,630	103 J	563	9,500	537	355	1,390	211	3,600	920	1,390	1,290	160	7.9 J	8.2 J	10.0	10	10 U
Nickel	27.2 J	7.8	24.5	34.2	7.1 J	5.5	17.2	22.7 J	88.7	228	39.4 J	19.6 J	18.0 J	41.0	52.5	52.1	140	7.2	4.3	5.6	7.1	7.8

Monitoring Location	MW-50																	MW-50R				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015[2]	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	6.4 J	11.4	2.9 U*	8.6 U*	2.6 U*	13.0 U*	2.1 U*	1.3 U	1.1 J	0.60 U	0.86 U	4.7 J	5.0 U	0.91 U	0.91 U	2.0	1.4 U	1.9 J	2.0	2.2	1.3 J
Cyanide	5.0 U	10.0 U	10.0 UJ	10.0 U	6.7	4.1 J	7.9 J	7.3 U*	5.9 J	2.8 UJ	1.2 U	2.2 J	8.4 J	10.0 U	4.2 J	**	10.0 U	130	51.0	60.0	51	10 U
Nickel	22.2 J	92.5	84.9 J	28.2	39.3 J	41.9	32.7 J	0.84 J	0.83 J	10.6 J	4.5 J	8.1 J	40.0 U	40.0 U	5.8 J	5.7 J	9.0	8.6	2.9	3.2	170	28

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

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NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-2I					
Collection Date	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	1.0 J	2.0 U	1.2 J	2.0 U	2.0 U	2.0 U
Cyanide	36.0	19.0	36.0	28.0 J	7 J	3.6 J
Nickel	2.3	1.8 J	2.8	1.9 J	2.7	5.0

Monitoring Location	MW-2D																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	7.2 U*	4.0	4.0 U	2.9 U*	12.0	0.60 U	8.0 J	1.0 U	0.70 U	0.90 U	0.81 J	0.62 U	2.6 J	130 U	0.91 U	0.91 U	1.5 J	2.0	1.4 J	1.6 J	0.76 J	0.73 J
Cyanide	5.0 U	10.0 U	10.0 UJ	10.0 U	4.7 U	2.0 J	16.2	77.9	19.8	12.6	33.6	20.8	29.0	39.0	20.2	**	60.0	74.0	44.0	58.0	34	38
Nickel	17.4 J	52.5	14.7 J	35.5	32 J	22.4	14.1 J	10.6 J	3.8 J	6.6 J	20.7 J	1.5 U	40.0 U	1,000 U	3.4 U	3.4 U	5.6	7.2	6.3	4.8	5.2	4.6

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

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U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

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R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-3S																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	6.2 U*	19.4	12.7	4.6 J	4.4 J	6.0 J	6.6 J	7.0 J	0.70 U	0.90 U	3.5 J	0.62 U	NS	5.0 U	2.2 J	2.7 J	4.7	2.6	1.3 J	1.5 J	3.7	3.5
Cyanide	71.3	99.5 J	48.8 J	29.3	72.9	55.6 J	91.3	87.5	25.5	35.3	53.5	22.8	NS	13.0	126	34.7	51.0	24.0	46.0	31.0	48 J	37
Nickel	33.5 J	15.9	23.8 J	16.4	31.2	23.9	21.9 J	29.3 J	8.7 J	7.4 J	14.9 J	13.0 J	NS	40.0 U	5.3 J	3.4 U	4.3	9.7	1.3 J	2.2	3.5	5.2

Monitoring Location	MW-3D																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	13.2 U*	4.4 J	4.0 U	0.71 J	0.57 J	0.60 U	5.6 J	1.0 U	7.4 J	0.90 U	0.72 J	0.62 U	2.1 J	5.0 U	0.91 U	0.91 U	1.3 J	1.8 J	1.7 J	1.9 J	0.68 J	1.0 J
Cyanide	6.9	10.0 UJ	10.0 UJ	10.0 U	4.7 U	1.3 J	0.90 UJ	2.5 J	14.6	24.7	18.4	29.1	51.0	41.0	38.5	29.7	110	29.0	76.0 F1	87.0	52	10 U
Nickel	18.2 J	51.3	7.0 UJ	7.5	9.0 J	15.7	20.0 J	16.8 J	35.2 J	16.0 J	7.5 J	15.9 J	15.0 J	34.0 J	32.8	30.7	30.0	21.0	17.0	16.0	21	27

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

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[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	MW-4D																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	11.9 U*	1.6	1.0 U	0.70 U	3.6 U*	0.60 U	4.4 J	17.0 J	0.70 U	2.4 U*	1.6 J	1.5 U	5.0 J	250 U	0.91 U	0.91 U	2.0	1.3 J	2.0 U	4.0	1.5 J	1.8 J
Cyanide	5.0 U	10.0 UJ	10.0 UJ	10.0 U	9.9	14.0	19.2	13.7	51.4	62.9	56.5 J	16.5	14.0 J	14.0	8.5 J	128	210	47.0	42.0	43.0	34	10 U
Nickel	14.8	30.9	17.9	44.5	71.7 J	159	219	275	778	1,010	1,060	350	190	2,000 U	306	254	240	500	280	250	380	720

Notes:

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[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	C-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	2.9	11.1	4.6 U*	8.8	0.61 U*	4.2 J	0.70 U	0.79 J	0.90 U	0.60 U	1.3 U	5.0 U	5.0 U	8.5	0.91 U	0.90 J	2.0 U	2.0 U	2.0 U	0.68 J	2.0 U
Cyanide	46.9	39.5 J	11.2 J	22.7	14.2	10.1 U*	12.3 J	14.9	17.2	7.4 J	4.1 J	17.4	6.8 J	10.0 U	7.7 J	5.2 J	7.7 J	4.4 J	4.5 J	10.0 U	9.1 J	10 U
Nickel	34.2	40.3	18.9	21.1	10.0	4.4	4.8 J	4.8 J	3.2 J	1.8 J	2.0 J	2.8 U	40.0 U	40.0 U	3.4 U	3.6 J	3.6	3.7	2.9	1.5 J	1.6 J	6.3

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

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[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	D-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	16.1 U*	21.7	31.3	7.8	27.1	44.4	41.1 J	20.6 J	16.3 J	3.7 U*	12.2 J	6.1 U	9.8	15.0	29.3	23.7	11.0	8.0	5.9	5.5	20	2.7
Cyanide	10.0 U	13.2 J	10.0 UJ	19.1	5.9	25.8	14.6	14.6	2.7 J	4.6 J	58.1	8.0 J	10.0 U	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	8.2 J	3.5 J	10 U	10 U
Nickel	13.0 U	19.7	7.0 UJ	6.0	19.7 J	31.9	21.1 J	10.0 J	13.9 J	3.7 J	2.6 J	2.4 U	40.0 U	40.0 U	3.4 U	3.4 U	2.4	0.84 J	1.20 J	1.60 J	1.7 J	0.94 J

Monitoring Location	D-30																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	1.8	4.0 U	2.8	9.6 U*	0.60 U	10.5 J	7.0 J	4.0 J	1.0 U*	3.2 J	15.1 J	6.5	11.0	14.4	37.2	3.5	23.0	19.0	11.0	8.7	3.8
Cyanide	10.0 U	10.0 UJ	10.0 UJ	10.0 U	4.7 U	2.9	3.2	1.7 U*	3.7 J	5.2 J	1.2 U	1.9 U	10.0 U	10.0 U	2.5 U	6.4 J	10.0 U	10.0 U	10.0 U	10.0 U	10	10 U
Nickel	24.3	11.8	12.6 J	7.6	5.2 J	6.3	12.9 J	42.6 J	12.7 J	5.4 J	2.7 J	12.5 J	40.0 U	40.0 U	3.4 U	3.8 J	2.0	2.2	1.4 J	1.7 J	1.3 J	1.0 J

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

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U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

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R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	E-10																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	97.0	31.6	52.2	3.2	13.7	7.3	35.3	158	2.8 U*	5.2 J	20.0 J	3.9 U	87.0	74.0	36.6	14.1	22.0	10.0	7.0	10.0	7.6	7.7
Cyanide	1,320	109 J	827 J	756	46.5	30.2	24.9	119	43.7	47.7	49.2	14.8	53.0	140	81.6	**	130	62.0	44.0	64.0	37	31
Nickel	498	27.8	14.7	3.6	25.2 J	36.7	34.3	37.3 J	12.2 J	31.6 J	24.2 J	118	45.0	52.0	4.5 J	25.6	8.8	16.0	15.0	16.0	13	8.4

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	F-30																					
Collection Date	1996	1996	1996	1997	1998	1999	2000	2001	2002	2004	2005	20073	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	1.0 U	1.0 U	1.0 U	22.1	0.70 UJ	1.2 U*	1.4 U*	57.3	0.70 U	0.70 U	0.90 U	5.7 J	6.6 J	21.0	250 U	4.2 J	4.5 J	6.7	10.0 U	3.0	4.3	100	4.3
Cyanide	11.6 J	11.6 J	11.0 J	10.0 UJ	10.0 U	8.8	10.8 U*	10.0 J	7.6 U*	11.0	22.1	20.6	21.6	130	22.0	31.7	8.5 J	350	10.0 U	46.0	72.0 J	91	10 U
Nickel	33.9	30.8	33.9	53.9 J	26.6	35.3 J	56.7	73.5	19.6 J	24.7 J	53.1	28.1 J	17.3 J	57.0	2,000 U	30.6	25.0	19.0	19.0	20.0	24.0	46	37

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	G-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	727	847	607	245	486	286	231	191	478	297	223	231	430	420	311	543	760	640	810	1,100	1,300	1,100
Cyanide	19.4	10.0 UJ	14.0	18.7	7.5	16.1 J	3.4	3.3 U*	2.1 J	0.80 U	6.8 J	3.8 J	3.2 J	4.7 J	7.5 J	9.8 J	20.0	41.0	60.0	83.0	57	58
Nickel	199	190	312 J	296	660 J	499	392	284	225	198	26.8 J	38.7 J	93.0	120	67.2	142	83.0	78.0	92.0	86.0	120	160

Monitoring Location	G-30																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	12.8 U*	14.7	18.8	3.6 U*	2.6 U*	0.60 U	1.5	5.7 J	0.70 U	8.2 J	2.8 J	0.62 U	5.8	4.7 J	4.9 J	0.91 U	4.8	6.7	9.9	7.0	6.3	9.3
Cyanide	7.0	10.0 UJ	10.0 UJ	10.0 U	6.0	4.4 J	3.1 J	5.5 U*	7.2 J	8.2 J	13.8 J	6.5 J	8.0 J	13.0	8.0 J	11.8	6.5 J	11.0	18.0	14.0	19	10 U
Nickel	34.2	49.0	74.9 J	131	100 J	48.2	53.2	85.0	6.6 J	200	32.9 J	20.9 J	40.0 U	16.0 J	22.9	16.5	8.5	22.0	8.5	7.7	16	23

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

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[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	H-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.4 U*	2.6	4.0 U	5.9 U*	4.9	3.3 U*	10.6	8.8 J	7.1 J	2.6 J	19.5 J	3.3 U	5.0	3.8 J	13.3	8.8	25.0	12.0	16.0	11.0	12	12
Cyanide	5.0 U	10.0 U	10.0 U	10.0 U	4.7 U	1.8 J	2.1	4.7 J	1.1 J	2.3 J	1.7 J	1.9 U	10.0 U	10.0 U	2.8 J	2.5 U	3.1 J	3.4 J	10.0 U	3.5 J	7.4 J	10 U
Nickel	13.0 U	4.3	7.0 UJ	4.5	8.4	8.7	19.3	58.1	10.4 J	3.5 J	13.1 J	9.2 U	40.0 U	40.0 U	4.9 J	74.5	33	22	34	28	9.7	11

Monitoring Location	H-30																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	5.4 U*	8.3	9.5	0.70 U	5.2 U*	3.6 U*	2.0 U*	8.0 J	16.5 J	4.6 J	0.69 J	2.6 U	7.8	2.5 J	1.1 J	4.3 J	4.4	5.3	6.0	4.3	4.2	100
Cyanide	5.0 U	10.0 U	10.0 UJ	10.0 U	4.7 U	1.1 J	1.2	2.3 J	1.6 J	2.8 UJ	1.2 U	4.7 J	10.0 U	2.8 J	2.5 U	2.5 U	3.7 J	12.0	11.0	6.8 J	8.3 J	10 U
Nickel	48.4 J	110	82.7 J	42.2	78.4 J	85.5	68.4	125	163 J	24.8 J	10.1 J	14.8 J	40.0 U	13.0 J	5.7 J	5.6 J	8.1	8.5	6.8	5.7	8.5	9.5

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

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[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	N-10																				
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	10.6	4.0 U	3.0	2.6	0.69	2.8	1.0 U	3.1 J	0.90 U	0.60 U	0.62 U	5.0 U	5.0 U	0.91 U	0.91 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Cyanide	6.5	10.0 UJ	10.0 U	10.0 U	8.1	1.1	0.90 UJ	4.0 J	2.5 J	2.5 J	1.2 U	1.9 U	10.0 U	10.0 U	2.5 U	12.3	4.7 J	6.3 J	10.0 U	10.0 U	10 U	10 U
Nickel	13.0 U	2.5	7.0 U	2.3 U*	2.8	3.4	2.0	2.6 J	3.1 J	0.85 J	0.80 U	1.2 U	40.0 U	40.0 U	3.4 U	3.4 U	1.9 J	2.7	0.57 J	2.000 U	2.0 U	1.5 J

Monitoring Location	N-30					
Collection Date	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	0.98 J	2.3	1.0 J	2.0 U	2.0 U	2.0 U
Cyanide	11.0	7.1 J	11.0	10.0	6.1 J	10 U
Nickel	1.6 J	0.69 J	2.0 U	0.6 J	2.0 U	2.9

Monitoring Location	N-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	5.9 U*	7.6 J	4.0 U	0.70 U	1.2 J	0.60 U	6.8 J	1.0 U	1.7 J	0.90 U	1.6 J	2.5 U	4.2 J	5.0 U	1.9 J	3.8 J	1.4 J	3.5	2.8	3.9	6.1	7.3
Cyanide	5.0 U	10.0 UJ	10.0 UJ	10.0 U	6.3	1.7	0.90 UJ	5.6 J	19.7	44.2	50.2	46.4	36.0	34.0	27.0	39.2	13.0	33.0	15.0	20.0	10	10 U
Nickel	26.6 J	58.0	32.1 J	31.3	13.1	17.4	59.8 J	14.3 J	18.9 J	66.7	16.2 J	17.9 J	11.0 J	2,000 U	13.0	19.8	7.3	15.0	11.0	8.3	16	21

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

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U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

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NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	Q-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004[4]	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	1.0 U	4.0 U	5.2	2.3	0.60 U	6.4 U*	2.4 U*	4.6 J	0.90 U	0.60 U	0.62 U	5.0 U	5.0 U	0.91 U	0.91 U	2.0 U	2.0 UJ	2.0 UJ	0.79 J	0.63 J	2.0 U
Cyanide	5.9	10.0 U	10.0 U	10.0 U	5.4	2.8	3.9	3.8 U*	4.5 J	3.5 J	1.3 J	1.9 U	2.9 J	3.0 J	2.5 U	2.5 U	10.0 U	3.5 J	10.0 J	10.0 U	4.5 J	10 U
Nickel	16.8 J	14.4	13.0	21.1	18.8	13.0	12.1	11.4 J	9.0 J	2.5 J	0.80 U	1.3 U	40.0 U	40.0 U	3.4 U	3.4 U	0.78 J	1.3 J	0.55 J	1.2 J	2.0 U	2.4

Monitoring Location	Q-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	9.8 U*	7.5 J	4.0 U	0.70 U	1.1 J	0.74 J	12.8 J	4.7 J	1.0 J	0.90 U	1.7 J	2.6 U	3.4 J	3.6 J	0.91 U	2.2 J	1.5 J	2.5	3.5	3.8	5.8	3.0
Cyanide	5.5	28.5 J	10.0 UJ	16.6	17.6	8.0	10.3	12.0	8.4 J	6.4 J	6.2 J	13.3	38.0	61.0	43.7	57.9	15.0	34.0	24.0	13.0	7.8 J	5.3 J
Nickel	20.0	73.2	29.1 J	63.6	55.7	57.5	116	78.3	83.2	47.6 J	42.6 J	33.5 J	32.0 J	49.0	39.4	38.6	32.0	28.0	29.0	20.0	18	25

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

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[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	R-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	5.5 U*	8.0 J	1.0 U	1.6	7.5 J	3.7	11.7 J	4.5 J	2.8 J	2.0 U*	4.8 J	25.9 J	3.0 J	50.0 U	14.9	0.91 U	10.0	4.8	1.5	1.8 J	2.1	4.3
Cyanide	1,580	848 J	1,940 J	377	331	16.4	57.6	29.8	21.0 J	8.8 J	19.5 J	90.2 J	26.0	21.0	18.9	23.5	10.0 U	10.0 U	12.0 U	8.7 J	12	10 U
Nickel	725	546	1,060	1,030	1,770	707	516	57.5	18.6 J	15.2 J	4.5 J	55.4	47.0	400 U	86.5	96.4	71.0	120	100	110	94	130

Monitoring Location	R-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	10.5 U*	17.5	50.8	7.4	7.8	1.0 U*	2.1	12.0 J	2.8 J	18.1 J	12.8 J	13.5 J	11.0	250 U	17.1	41.1	15.0	8.5	10.0	9.2	8.7 J	14
Cyanide	22.4	21.4 J	14.4 J	10.0 U	10.5	10.3 J	10.3 J	14.8	24.3 J	62.6	59.6 J	7.8 J	16.0	77.0	82.1	127 J	8.1 J	3.6	4.4	5.5 J	12 UJ	10 U
Nickel	25.2	31.2	76.4	54.1	36.9	19.6	32.5	69.1	7.2 J	17.3 J	13.6 J	22.7 J	170	2,000 U	61.2	**	210	240	160	120	220 J	310

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	T-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	19.9 U*	1.5	4.0 U	6.2	3.4 J	1.7	1.6	2.0 U*	0.70 U	1.5 J	0.83 J	1.1 U	5.0 U	5.0 U	2.4 J	0.91 U	0.81 J	1.4 J	2.0 U	2.0 U	1.3 J	0.70 J
Cyanide	46.4	31.1 J	22.6 J	10.0 U	27.2	1.0	11.7 J	15.7	0.88 J	19.8	12.6 J	4.9 J	5.5 J	7.3 J	6.2 J	5.1 J	13.0	3.1 J	6.7 J	3.9 J	4.2 J	10 U
Nickel	51.1	19.2	10.8 J	29.8	6.8 J	13.8	5.9	5.7 J	4.3 J	3.1 J	3.0 J	2.1 U	40.0 U	2,000 U	8.0 J	3.4 U	2.9	1.2 J	1.1 J	1.3 J	1.3 J	1.3 J

Monitoring Location	T-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.4 U*	1.0 UJ	4.0 U	0.70 U	0.46	0.60 U	2.0 J	2.3 U*	0.70 U	5.9 J	0.60 U	0.62 U	6.3	5.0 U	2.1 J	0.91 U	0.99 J	1.0 J	2.0 U	1.3 J	2.0 U	0.60 J
Cyanide	19.6	10.0 UJ	10.0 UJ	10.0 U	4.7 U	17.5	24.7	38.4	61.2	52.0	61.4 J	32.2 J	9.9 J	6.3 J	2.5 U	2.5 U	43.0	76.0	65.0	60.0	10.0	10 U
Nickel	13.0 U	27.7	8.5 J	25.8	80.0	144	216	164	138	133	20.2 J	4.3 J	40.0 U	2,000 U	3.4 U	3.4 U	2.7	2.5	2.1	2.1	2.9	9.9

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	U-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	1.6 J	4.0 U	1.7 J	1.7 J	1.6 J	18.3 J	1.5 J	0.88 J	1.5 J	3.9 J	1.4 U	1.8 J	5.0 U	0.91 U	0.91 U	1.0 J	2.0 J	1.9 J	2.0 U	1.7 J	2.0
Cyanide	62.7	24.0 J	10.0 UJ	10.0 U	8.3	9.9	5.0 J	7.9 J	29.4	37.0	6.3 J	10.1	10.0 U	17.0	2.5 U	8.5 J	10.00 U	7.4 U	7.5 J	12.0	5.2 J	10 U
Nickel	13.8 J	25.3	27.4 J	17.7	129	80.8	185	50.5	15.1 J	26.4 J	5.0 J	3.6 U	10.0 J	1,000 U	3.4 U	3.4 U	3.1	5.6	9.9	1.8 J	3.2	4.8

Monitoring Location	U-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.4 U*	1.0 UJ	4 U	0.94 J	0.58 J	0.60 U	2.6 J	1.0 U	1.0 J	0.90 U	0.60 U	0.62 U	2.7 J	5.0 U	0.91 U	0.91 U	1.1 J	1.0 J	1.3 J	1.4 J	1.1 J	17
Cyanide	57.4	43.1 J	20.7 J	26.6	32.2	21.7	18.0	23.3	29.0	32.5	25.1	51.1	32.0	49.0	50.4	**	21.0	70.0	39.0	68.0	22	10 U
Nickel	13.0 U	11.7	9.6 J	9.8	5.2 J	4.3 J	10.2 J	5.2 J	4.1 J	3.1 J	0.87 J	2.3 U	40.0 U	2,000 U	32.2	36.0	23.0	16.0	13.0	8.0	20	7.4

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	V-10																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	1.0 UJ	4.0 U	7.0 J	2.4	0.69	3.2 U*	1.3 J	2.6 J	0.90 U	0.60 U	2.1 U	1.8 J	5.0 U	0.91 U	0.91 U	1.5 J	1.3 J	1.0 J	1.4 J	0.60 J	2.0 U
Cyanide	7.2	10.0 U	10.0 U	10.0 U	4.7 U	1.8	1.7	1.4 J	2.4 J	0.80 U	1.40 J	1.9 U	10.0 U	10.0 U	2.5 U	2.5 U	10.00 U	3.2 J	10.0 J	10.0 U	10 U	10 U
Nickel	18.6 J	5.8	10.0 J	9.3	7.9	10.4 J	4.5 U*	6.9 J	7.8 J	1.0 J	0.82 J	3.8 U	40.0 U	40.0 U	6.0 J	3.4 U	28.0	25.0	11.0	11.0	13	6.9

Monitoring Location	V-50																					
Collection Date	1993	1996	1997	1998	1999	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	4.0 U	1.0 UJ	4.0 U	0.70 U	0.78 J	0.60 U	1.2 U*	1.0 U	0.70 U	1.1 J	0.69 J	0.72 J	3.7 J	5.0 U	0.91 U	0.91 U	1.4 J	1.4 J	1.5 J	3.2	0.66 J	16
Cyanide	5.0 U	28.6 J	33.9 J	15.7	34.2	29.6	66.0	51.3	6.4 J	2.8 J	1.2 U	2.1 J	10.0 U	2.9 J	2.5 U	2.5 U	10.0 U	14.0 U	12.0 U	10.0	13	10 U
Nickel	13.0 U	62.6	7.0 UJ	5.8 U*	3.1 J	3.6 J	5.0 J	3.5 J	9.3 J	27.5 J	1.2 J	4.8 J	40.0 U	40.0 U	3.4 U	3.4 U	5.0	6.2	0.8	2.2	1.6 J	84

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	W-10						W-30						W-50					
Collection Date	2014	2015	2016	2017	2018[6]	2019	2014	2015	2016	2017	2018[6]	2019	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	5.5	4.6	3.3	2.9	3.0	2.3	3.1	2.5	2.6	1.9 J	1.4 J	2.6	2.8	2.3	1.8 J	2.3	3.4	2.0
Cyanide	50.0	39	14	8 J	10 U	10 U	10.0 U	10 U	10 U	10 U	10 U	10 U	10.0 U	10 U	10 U	4.6 J	10 UJ	10 U
Nickel	7.2	6.1	7.3	5.6	6.4	10	16.0	16	14	14	17	22	18.0	16	11	12	19	21

Monitoring Location	Z-10						AA-10						AC-30				GA-50					
Collection Date	2014	2015	2016	2017	2018[6]	2019	2014	2015	2016	2017	2018[6]	2019	2016[5]	2017	2018[6]	2019	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	23.0	21.6	8.0	8.1 J	11	7.5	2.0 U	2.0 UJ	2.0 U	1.1 J	0.88 J	2.0 U	25	15	2.9	5.3	3.4	2.6	2.1	3.8	1.7 U	0.99 J
Cyanide	10.0 U	10.0 U	10.0 U	10.0 R	10 U	10 U	10.0 U	10.0 U	10.0 U	10.0 U	3.9 J	10 U	10 U	4.1 J	6.6 J	10 U	10.0 U	3.2 J	10.0 J	10.0 U	5.1 J	10 U
Nickel	2.8	1.83 J	1.1 J	1.4 J	3.2	2.0	2.4	5.2	1.8 J	2.8	3.0	2.8	5.1	3.0	0.98 J	2.0	4.5	4.2	2.1	2.1	2.0 U	2.0 U

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

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[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-6

1993 - 2019 Inorganic Analytes in Monitoring Location Samples[1,2]
Midco II Site
Gary, Indiana

Monitoring Location	P-3																
Collection Date	2000	2001	2002	2004	2005	2007	2008	2009	2010	2011	2012	2014	2015	2016	2017	2018[6]	2019
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Copper	0.60 U	1.0 U*	2.8 U*	0.70 U	0.90 U	0.60 U	0.95 U	2.0 J	5.0 U	0.91 U	0.91 U	2.0 U	3.5 J	1.2 J	1.2 J	1.4 J	9.8
Cyanide	33.2 J	47.1	42.8	41.0	30.0	11.1	9.0 J	18.0	14.0	7.8 J	5.8 J	8.1 J	60.0	40.0	19.0	18	80
Nickel	18.0	38.4 J	78.1	69.0	0.91 J	7.9 J	0.76 U	40.0 U	40.0 U	3.4 U	3.4 U	2.0	21.0 J	2.5	2.5	3.9	18

Notes:

Results only presented for those analytes and monitoring locations sampled in 2018.

ug/L = Micrograms per liter

J = The concentration is approximate due to limitations identified during the quality assurance review.

U = The compound was analyzed for but not detected at or above the associated sample quantitation limit.

U* = The compound should be considered "not detected" due to limitations identified during the quality assurance review.

UJ = The compound was analyzed for but not detected at or above the associated sample quantitation limit. The quantitation limit is estimated based on a bias identified during the quality assurance review.

R = The results were considered unusable during the quality assurance review.

NS = This well was not sampled.

Blank = The analyte was not analyzed for in this sample.

** = Anomalous data as compared to historical trends.

[1] Values shown may be the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] Monitoring wells MW-1 and MW-50 were reinstalled in May 2015 following source area treatment for cyanide.

[3] Based on historical concentrations, Ramboll Environ believes that the sample labels for F-10 and F-30 were switched in the field during the 2007 event. Data in this table have been reported accordingly.

[4] Based on historical concentrations, Ramboll Environ believes that the sample labels for Q-10 and Q-50 were switched in the field during the 2004 event. Data in this table have been reported accordingly.

[5] Monitoring well AC-30 was installed in January 2017 and the groundwater sample was collected on February 11, 2017.

[6] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	MW-2I						MW-2D					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	550	700	800	750	660	970	440	490	560	550	510	930
Iron, total (ug/L)	14,000	24,000	30,000	27,000	29,000	40,000	20,000	17,000	17,000	15,000	15,000	17,000
Iron, dissolved (ug/L)	7,200	6,100	64 J	570	22,000	100 U	13,000	7,500	140	160	12,000	100 U
Manganese, dissolved (ug/L)	450	650	420	640	640	550 J	95	80	94	82	75	73 J
Nitrate as nitrogen (mg/L)	0.071 J	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	400	430	400	390	680	910	1,300	1,100	1,100	1,100	890	760

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	MW-3S						MW-3D					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	540	690	660	700	440	860	360	427	530	490	510	970
Iron, total (ug/L)	35,000	11,000	14,000	27,000	1,700	3,700	39,000	39,000	38,000	38,000	42,000	38,000
Iron, dissolved (ug/L)	8,900	3,200	84 J	52 J	120	100	30,000	28,000	10,000	4,500	28,000	54 J
Manganese, dissolved (ug/L)	950	2,600	1,100	1,200	410	520	130	130	130	90	110	76 J
Nitrate as nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.34	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	440	1,100	480	560	560	520 J	630	770	770	820	830	780

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	C-10						D-10					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	750	560	490	470	520	850	2,200	2,380	2,700	2,700	2,300	4,400 J
Iron, total (ug/L)	2,000	3,600	1,500	1,600	1,800	1,700	62 J	63 J	100 U	59 J	270	100 U
Iron, dissolved (ug/L)	1,200	1,800	610	100 U	100 U	100 U	63 J	100 U	100 U	100 U	100 U	100 U
Manganese, dissolved (ug/L)	700	1,300	1,000	1,100	1,100	1,000	1,000	740	590	710	650	440 J
Nitrate as nitrogen (mg/L)	0.092 J	0.10 U	0.10 U	0.084 J	0.10 U	0.10 U	0.10 U	0.10 U	0.11	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	190	420	270	310	290	320	660	320	360	270	270	210

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	F-30						G-10					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	1,000	1,130	1,200	1,200	970	1,700	480	660	1,000	1,300	1,500	2,100
Iron, total (ug/L)	650	1,300	990	1,200	2,000	2,100	100 U	43 J	63 J	100 U	29,000	1,600
Iron, dissolved (ug/L)	500	500 U	50 J	73 J	1,000 U	480	100 U	100 U	34 J	100 U	69 J	100 U
Manganese, dissolved (ug/L)	57	100	96	150	290	230 J	880	440	490	380	350	320
Nitrate as nitrogen (mg/L)	0.10 U	0.47	0.56	0.52	0.65	1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.045 J
Sulfate (mg/L)	310	290	380	620	960	1,100	55	180	220	150	310	500

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	G-30						N-10					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	560	660	860	970	960	1,200	590	570	690	520	500	480
Iron, total (ug/L)	2,900	2,900	3,400	2,900	2,500	5,000	14,000	14,000	17,000	15,000	13,000	12,000
Iron, dissolved (ug/L)	530	33 J	33 J	63 J	1,000 U	65 J	420	7,800	100 U	100 U	100 U	100 U
Manganese, dissolved (ug/L)	50	47	30	30	70	24 J	320	350	380	380	420	230
Nitrate as nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.18	0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.10 U
Sulfate (mg/L)	240	310	310	270	220	250	140	260	98	140	130	110 J

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	N-30						P-10					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	500	510	550	560	570	1,000	320	220	390	400	370	680
Iron, total (ug/L)	16,000	21,000	22,000	23,000	23,000	23,000	5,800	1,800	3,700	3,900	2,600	2,300
Iron, dissolved (ug/L)	3,500	5,300	4,100	2,300	100 U	100 U	4,200	100 U	200	63 J	170	100 U
Manganese, dissolved (ug/L)	170	280	380	230	370	270	910	500	420	770	520	420
Nitrate as nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	530	710	770	800	710	650	210	18	150	270	74	120

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	P-50						Q-10					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	340	360	380	370	330	320	320	360	360	300	280	230
Iron, total (ug/L)	24,000	26,000	30,000	24,000	37,000	34,000	6,500	3,700	1,500	1,500	5,800	2,400
Iron, dissolved (ug/L)	4,700	2,400	4,000	3,500	1,100	62 J	2,300	690	51 J	75 J	650	100 U
Manganese, dissolved (ug/L)	94	110	92	100	160	87	710	470	210	200	520	310
Nitrate as nitrogen (mg/L)	0.046 J	0.10 U	0.10 U	0.10 U	0.10 U	0.84	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.055 J
Sulfate (mg/L)	510	530	540	580	520	550	49	13	31	26	270	210

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	Q-50						R-10					
Collection Date	2014	2015	2016	2017	2018[1]	2019	2014	2015	2016	2017	2018[1]	2019
Alkalinity (mg/L)	630	668	600	520	520	910	500	684	790	830	800	930
Iron, total (ug/L)	7,700	8,500	10,000	11,000	15,000	17,000	51	9,200	18,000	24,000	43,000	33,000
Iron, dissolved (ug/L)	2,300	140	110	140	120	100 U	52 J	65 J	100	54 J	130	75 J
Manganese, dissolved (ug/L)	34	26	43	49	58	72 J	460	1,200	840	1,600	650	900 J
Nitrate as nitrogen (mg/L)	1.1	0.053 J	0.86	0.19	0.14	1.5	0.35	0.22	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	53	54	43	120	350	420	44	220	200	250	210	36

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	R-50						T-10					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	120	130	130	130	220	500	460	560	650	640	740	930
Iron, total (ug/L)	130	76 J	73 J	100 U	67 J	180 J	16,000	6,400	7,500	9,500	8,300	8,500
Iron, dissolved (ug/L)	68 J	38 J	100 U	100 U	500 U	100 U	5,500	48 J	100 U	100 U	48 J	48 J
Manganese, dissolved (ug/L)	2,800	2,500	2,300	2,500	3,800	2,900 J	1,200	700	470	670	600	490 J
Nitrate as nitrogen (mg/L)	420	310	310	350	240	320	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.078 J
Sulfate (mg/L)	1,800	1,800 J	1,800	1,900	1,600 J	1,400 J	160	130	75	91	59	98

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	W-10						W-30					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	350	370	500	430	390	500	180	350	430	530	620	1,500
Iron, total (ug/L)	29 J	49 J	46 J	100 U	100 U	100 U	17 J	46 J	100 U	100 U	100 U	100 U
Iron, dissolved (ug/L)	56 J	34 J	100 U	48 J	100 U	100 U	21 J	28 J	100 U	100 U	100 U	100 U
Manganese, dissolved (ug/L)	49	520	640	840	420	790	230	920	1,200	1,800	2,800	2,300
Nitrate as nitrogen (mg/L)	28	0.53	0.093 J	0.10 U	0.14	0.12	78	67	20	0.061 J	0.10 U	0.10 U
Sulfate (mg/L)	690	200	180	140	140	160	800	1,200 J	1,400	1,200	850	690

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	W-50						Z-10					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	400	519	590	470	580	840	1,000	1,680	2,200	1,900	2,300	2,100 J
Iron, total (ug/L)	23,000	3,900	27,000	30,000	18,000	24,000	560	157	50 J	100 U	89 J	48 J
Iron, dissolved (ug/L)	10,000	32 J	2,500	17,000	13,000	100 U	230	70.7 J	100 U	100 U	64 J	100 U
Manganese, dissolved (ug/L)	3,300	1,900	1,200	2,100	3,000	1,900 J	1,100	914	480	830	590	500 J
Nitrate as nitrogen (mg/L)	78	45	0.99	0.86	0.053 J	0.12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L)	560	920	740	1,100	1,200	890	3,500	1,880	730	2,100	990	860

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

TABLE 6-7

2014 - 2019 Monitored Natural Attenuation Parameters in Monitoring Location Samples[1]
Midco II Site
Gary, Indiana

Monitoring Location	AA-10						GA-50					
Collection Date	2014	2015	2016	2017	2018[2]	2019	2014	2015	2016	2017	2018[2]	2019
Alkalinity (mg/L)	320	430	410	370	440	720	350	310	350	340	330	750
Iron, total (ug/L)	1,400	1,800	2,800	1,800	980	770	9,900	18,000	14,000	17,000	12,000	13,000
Iron, dissolved (ug/L)	1,100	100 U	250	190	100 U	100 U	17 J	5,500	100 U	720	460	100 U
Manganese, dissolved (ug/L)	290	390	330	270	250	270 J	180	130	95	86	83	66 J
Nitrate as nitrogen (mg/L)	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.044 J	0.10 UJ	0.10 U
Sulfate (mg/L)	91	130	200	120	170	100	55	300	240	320	230	200

Notes:

Results only presented for those analytes and monitoring locations sampled in 2019.

mg/L = Milligrams per liter

ug/L = Micrograms per liter

J = The concentration is approximate due to the limitations identified during the quality assurance review.

U = Analyte was analyzed for but was not detected at or above the associated numerical value.

[1] Values shown are the highest detected between the investigative sample and its duplicate, reanalysis, or dilution sample. The results shown are either the highest positive result or the lowest detection limit. Higher estimated positive results were disregarded if accurate positive results were detected.

[2] The 2018 annual event was conducted in January 2019.

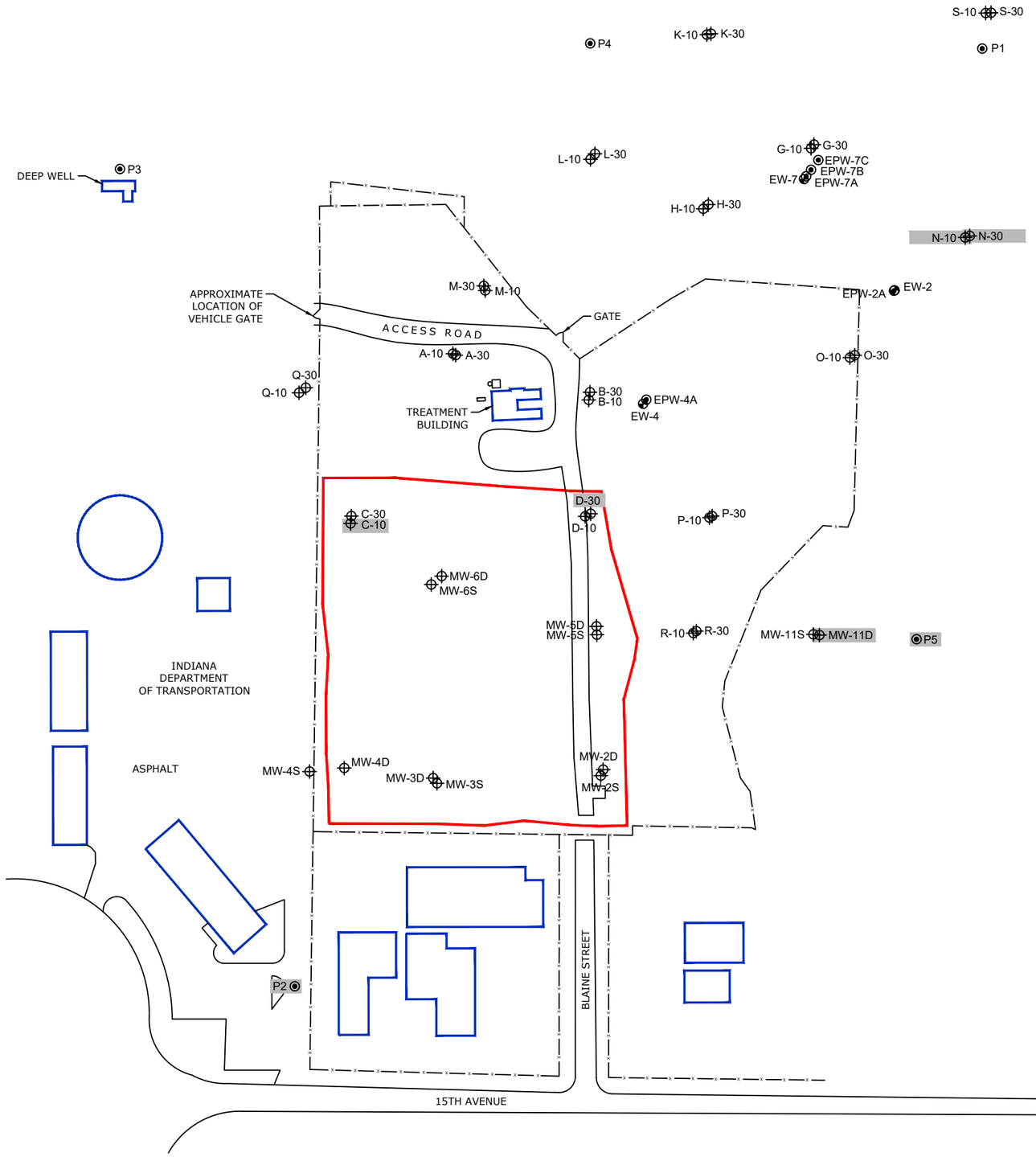
Table 6-8

Cyanide in Cyanide Area Monitoring Locations
2019 Monitoring Event
Midco II Site
Gary, Indiana

Monitoring Location	**Midco II**	**AB-10**	**PT-5**	**PT-10**	**PT-11**	**PT-12**
Sample ID	**Parameter-**	AB10-111319	PT5-111319	PT10-111419	PT11-111419	PT12-111419
Collection Date	**Specific**	11/13/2019	11/13/2019	11/14/2019	11/14/2019	11/14/2019
Units	**CAL**	ug/L	ug/L	ug/L	ug/L	ug/L
Cyanide	158	15	3.9 J	**370**	16	13

Notes:
ug/L = Micrograms per liter
CAL = Clean-up Action Level
BOLD = Analyte present at a concentration greater than its CAL.

FIGURES



LEGEND

- FENCE
- SLURRY WALL
- MONITORING WELL LOCATION
- EXTRACTION WELL LOCATION
- PIEZOMETER LOCATION
- MONITORING WELL / PIEZOMETER DESTROYED OR ABANDONED

0 150

SCALE IN FEET

WELL AND PIEZOMETER LOCATIONS

MIDCO I
GARY, INDIANA

RAMBOLL

FIGURE
1-1

DRAFTED BY: CKL | DATE: 2/28/20 | 1690008997

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-03\1-1_Well & PZ Locs (MI).dwg

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-03\1-2_Well & PZ Locs (MII).dwg

P4
AA-10
℄ PITTSBURG, FT. WAYNE & CHICAGO RAILROAD
B-10
B-30
C-30
C-10
S-50
S-10
R-50
R-10
AD-10
Z-10
F-30
F-10
MW-4D
MW-4S
T-10
T-50
P3
E-50
E-10
D-30
D-10
P5
G-30
G-10
MW-3S
MW-3D
U-10
U-50
MW-2I
MW-2S
MW-2D
AC-30
N-30
N-10
N-50
ACCESS ROAD
GW TREATMENT
BLDGS.
MW-1R
MW-50R
P2
P-30
P-50
P-10
H-10
H-30
W-30
W-50
W-10
V-30
V-10
V-50
INDUSTRIAL HIGHWAY
Q-10
Q-50
P1
TRUE NORTH
SITE NORTH
LEGEND
FENCE
MONITORING WELL LOCATION
PIEZOMETER LOCATION
PIEZOMETER DESTROYED
AIRPORT
GA-50
0
180
SCALE IN FEET

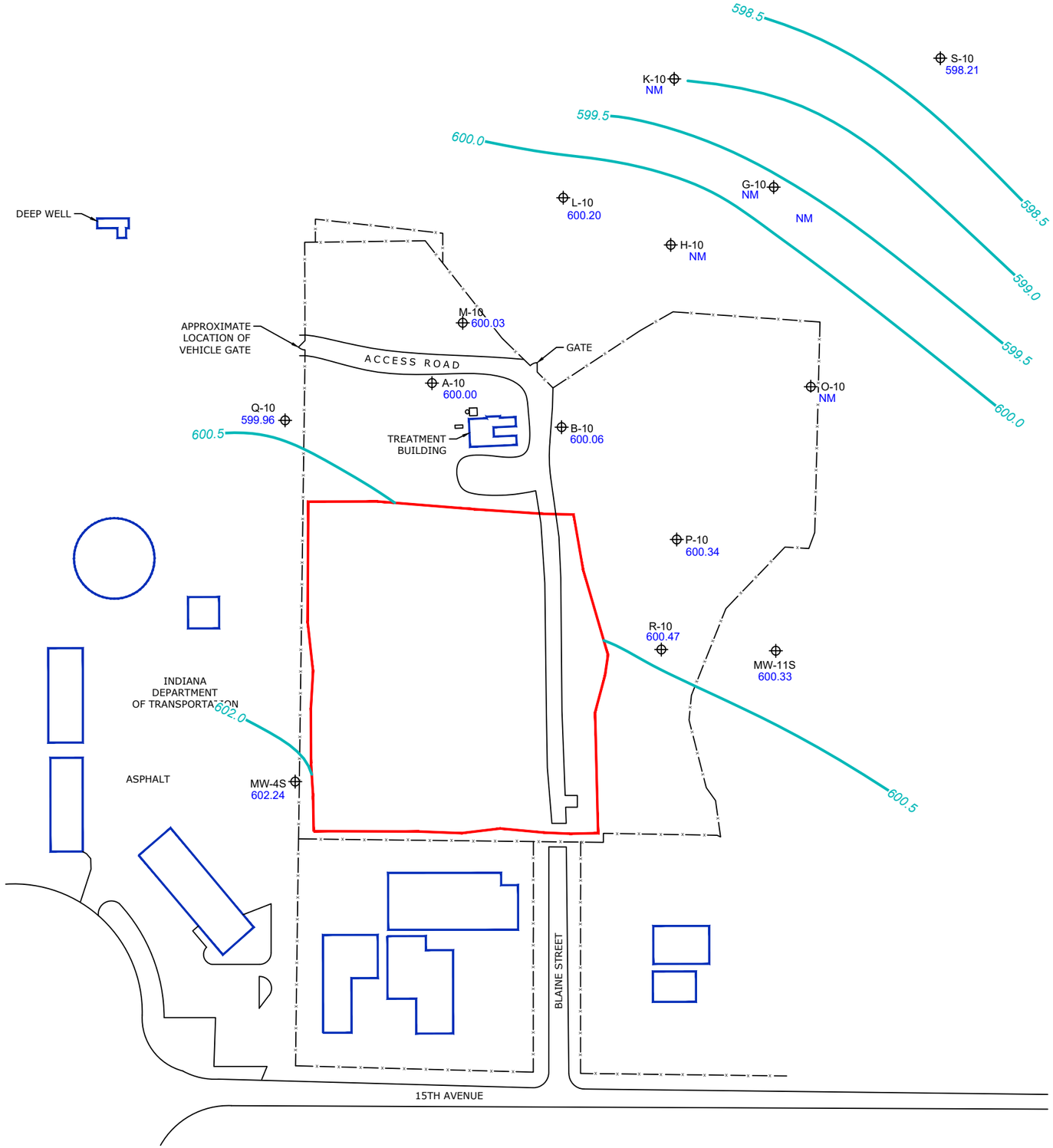
RAMBOLL

DRAFTED BY: CKL
DATE: 2/28/20

WELL AND PIEZOMETER LOCATIONS
MIDCO II
GARY, INDIANA

FIGURE
1-2

1690008997



N

LEGEND

- FENCE
- SLURRY WALL
- MONITORING WELL LOCATION
- PIEZOMETER
- 599.5 GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL = 0.5 ft)
- 601.47 GROUNDWATER ELEVATION (ft msl)
- NM NOT MEASURED

Notes:

Midco I groundwater extraction and treatment system has been shutdown. Pumping of the extraction wells was last conducted in October 2013.

Monitoring locations G-10, K-10, and O-10 were not measured due to accessibility issues.

0 150
SCALE IN FEET

GROUND WATER CONTOUR MAP
NOVEMBER 12, 2019
SHALLOW MONITORING NETWORK

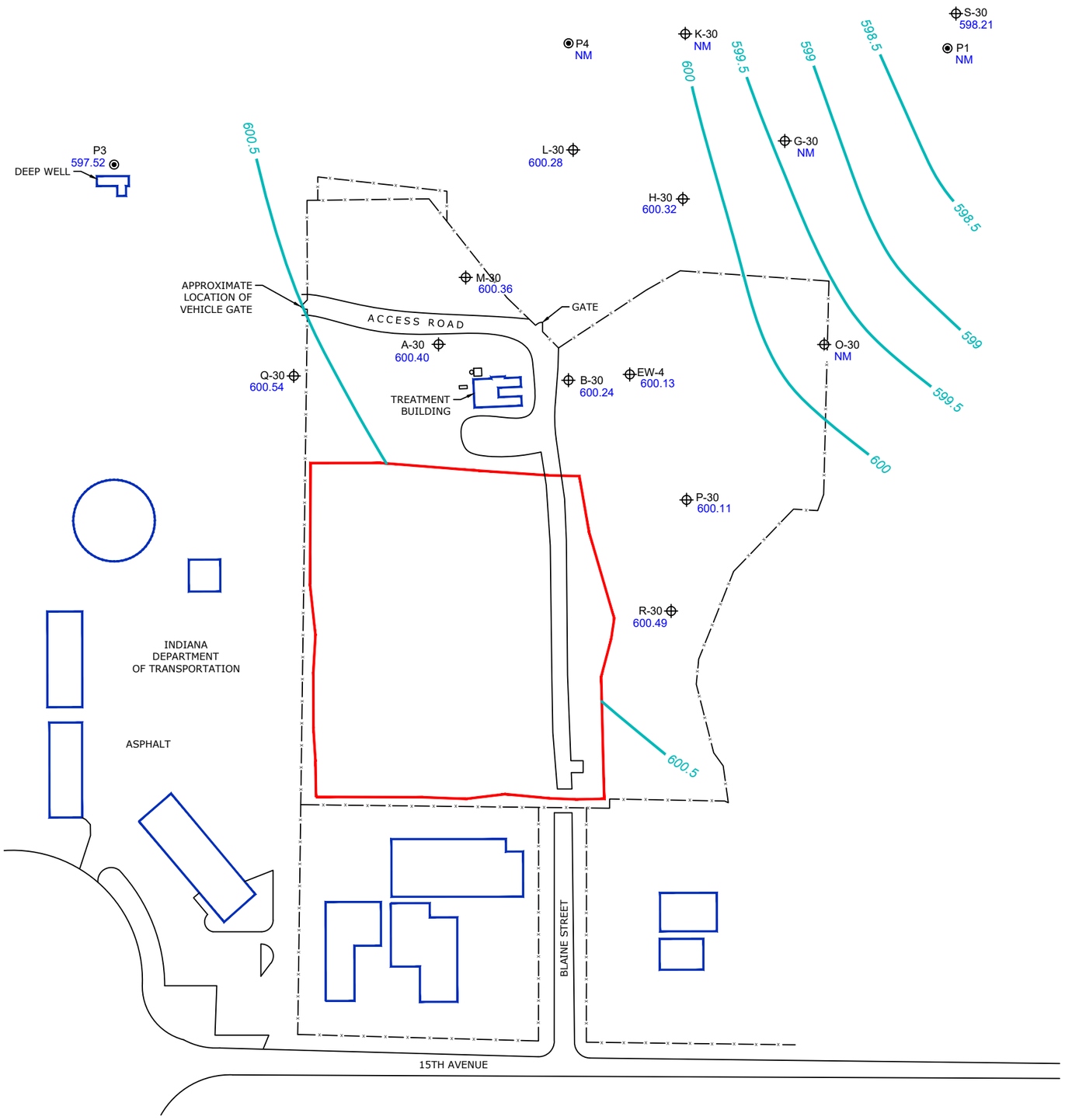
MIDCO I
GARY, INDIANA

RAMBOLL

FIGURE
3-1

DRAFTED BY: CKL | DATE: 2/28/20 | 1690008997

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHI_2020-03\3-1_Shallow GW Contour Map - 2019-11 (MI).dwg



LEGEND

- FENCE
- SLURRY WALL
- MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- 599 GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL = 0.5 ft)
- 598.17 GROUNDWATER ELEVATION (ft msl)
- NM NOT MEASURED

Notes:

Midco I groundwater extraction and treatment system has been shutdown. Pumping of the extraction wells was last conducted in October 2013.

Could not measure monitoring locations G-30, K-30, P1, and P4 due to accessibly issues.

P3 was not used to develop potentiometric contours due to anomalous reading.

0 150
SCALE IN FEET

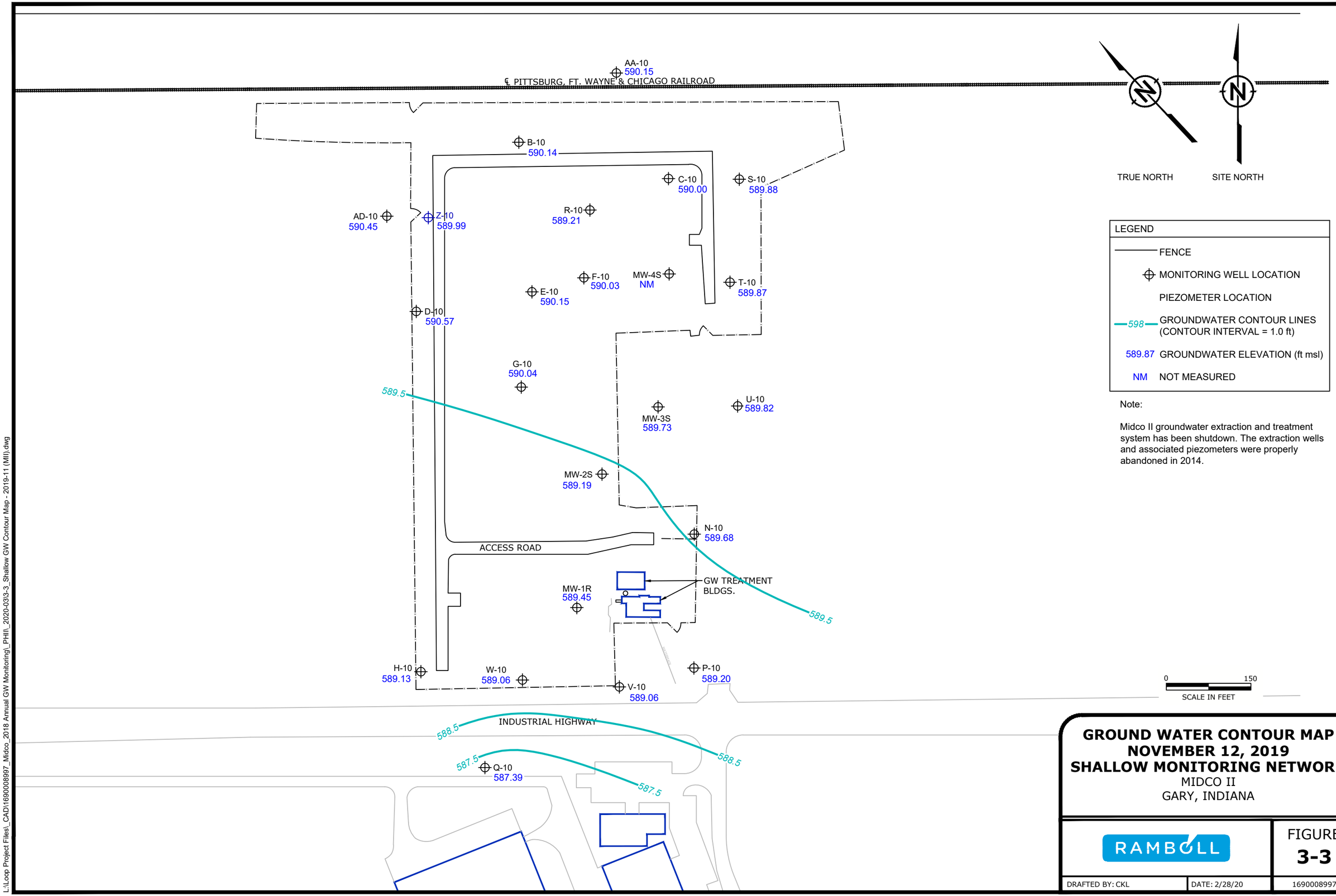
GROUND WATER CONTOUR MAP
NOVEMBER 12, 2019
DEEP MONITORING NETWORK
MIDCO I
GARY, INDIANA

RAMBOLL

FIGURE
3-2

DRAFTED BY: CKL | DATE: 2/28/20 | 1690008997

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-03\3-2_Deep GW Contour Map - 2019-11 (MI).dwg



GROUND WATER CONTOUR MAP NOVEMBER 12, 2019 SHALLOW MONITORING NETWORK

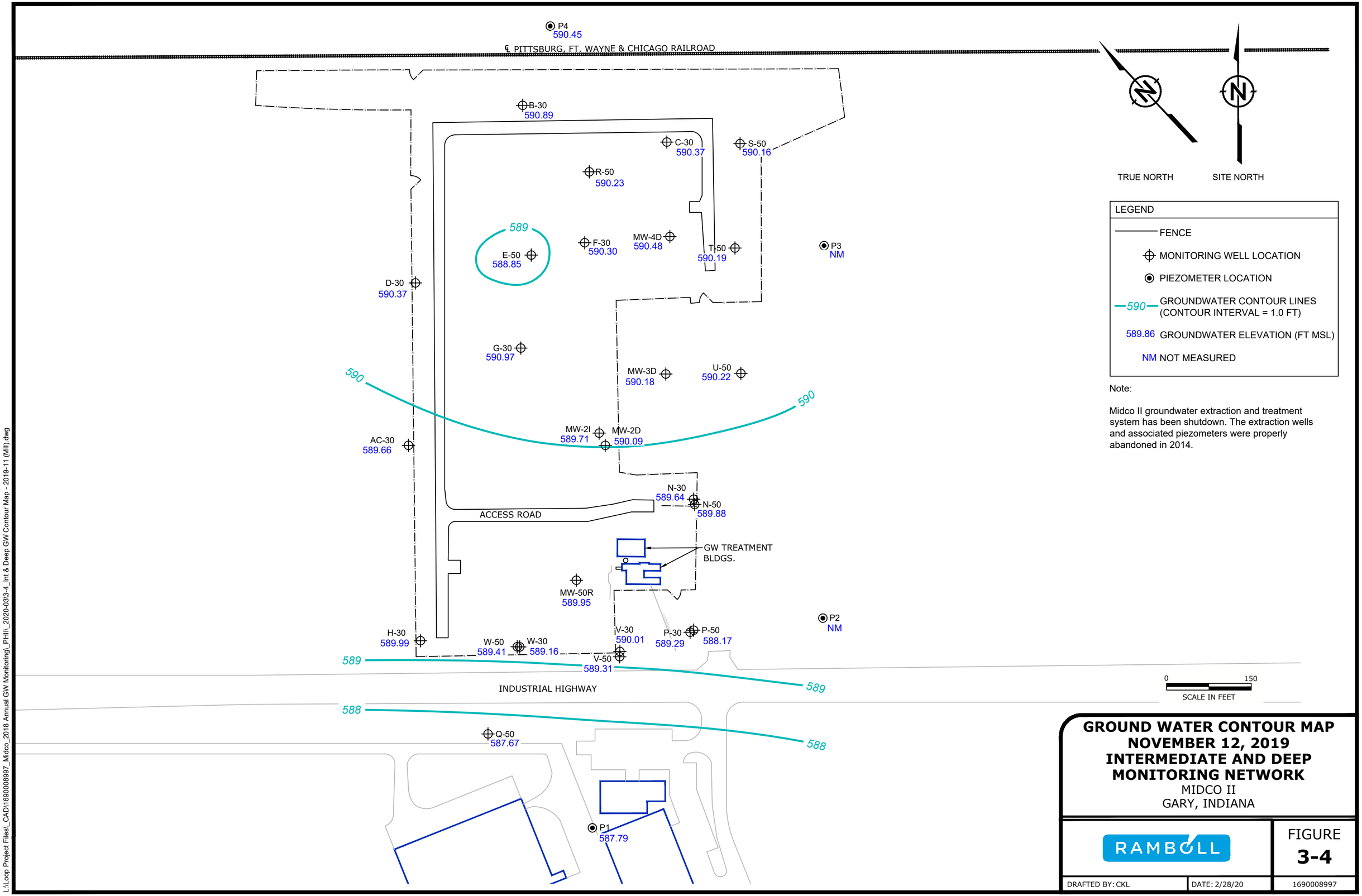
MIDCO II
GARY, INDIANA

RAMBOLL

FIGURE
3-3

DRAFTED BY: CKL	DATE: 2/28/20	1690008997

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-0313-3_Shallow GW Contour Map - 2019-11 (MII).dwg



Note:

Midco II groundwater extraction and treatment system has been shutdown. The extraction wells and associated piezometers were properly abandoned in 2014.

GROUND WATER CONTOUR MAP NOVEMBER 12, 2019 INTERMEDIATE AND DEEP MONITORING NETWORK

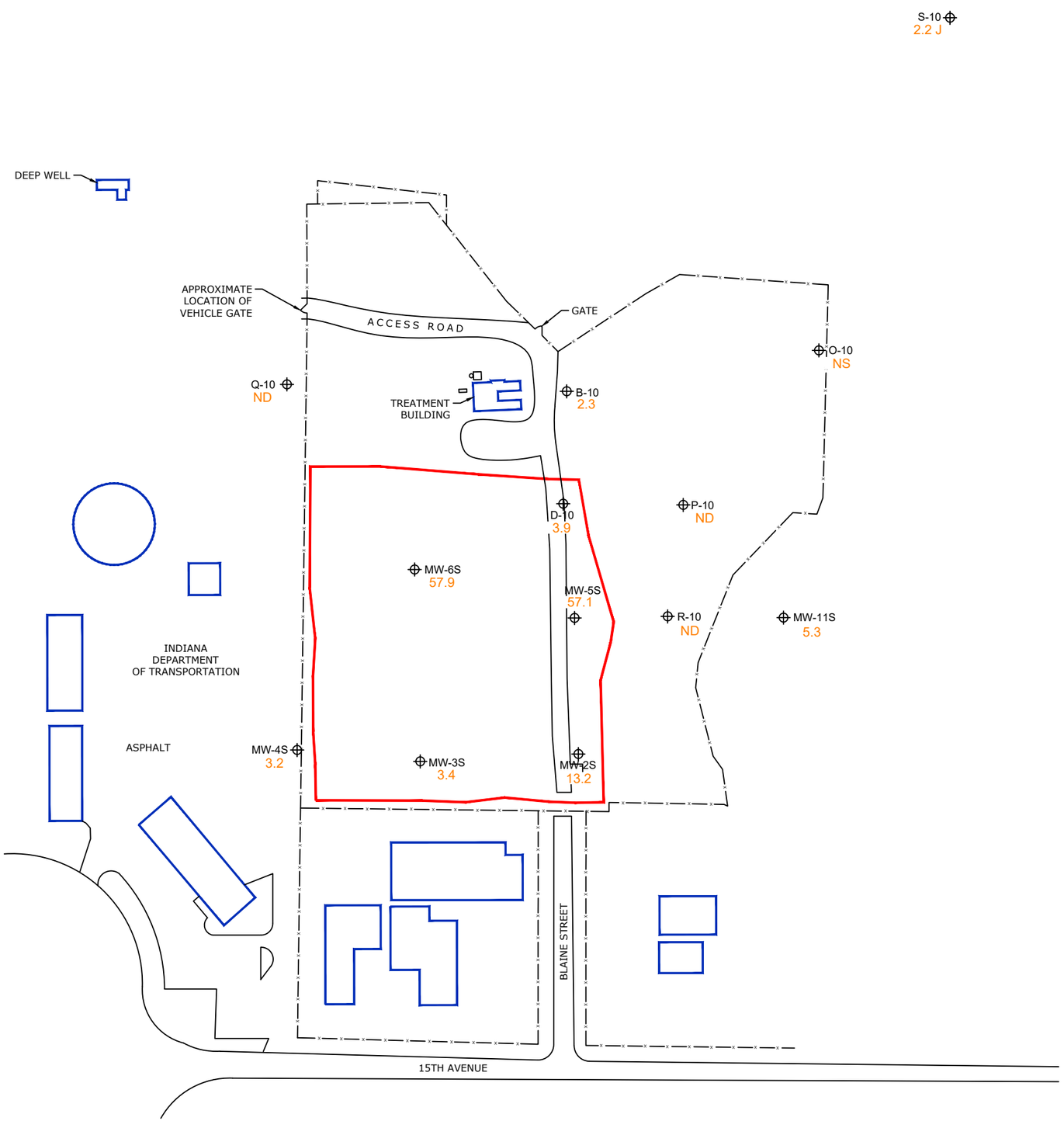
MIDCO II
GARY, INDIANA

RAMBOLL

FIGURE
3-4

DRAFTED BY: CKL	DATE: 2/28/20	1690008997

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-0303-4_Int & Deep GW Contour Map - 2019-11 (MII).dwg



LEGEND

- FENCE
- SLURRY WALL
- MONITORING WELL LOCATION
- 31.2 CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- NS NOT SAMPLED
- J ESTIMATED VALUE
- ND NOT DETECTED

Notes:

1. Total Volatile Organic Compound (VOC) concentrations do not include the concentration values for 1,4-dioxane or acetone (known lab contaminant).
2. Only those monitoring locations included in the annual monitoring program for VOCs are presented.
3. The highest concentration for duplicates is shown.
4. Samples collected in November 2019.

0 150
SCALE IN FEET

TOTAL VOC CONCENTRATIONS SHALLOW MONITORING NETWORK

MIDCO I
GARY, INDIANA

RAMBOLL

FIGURE **5-1**

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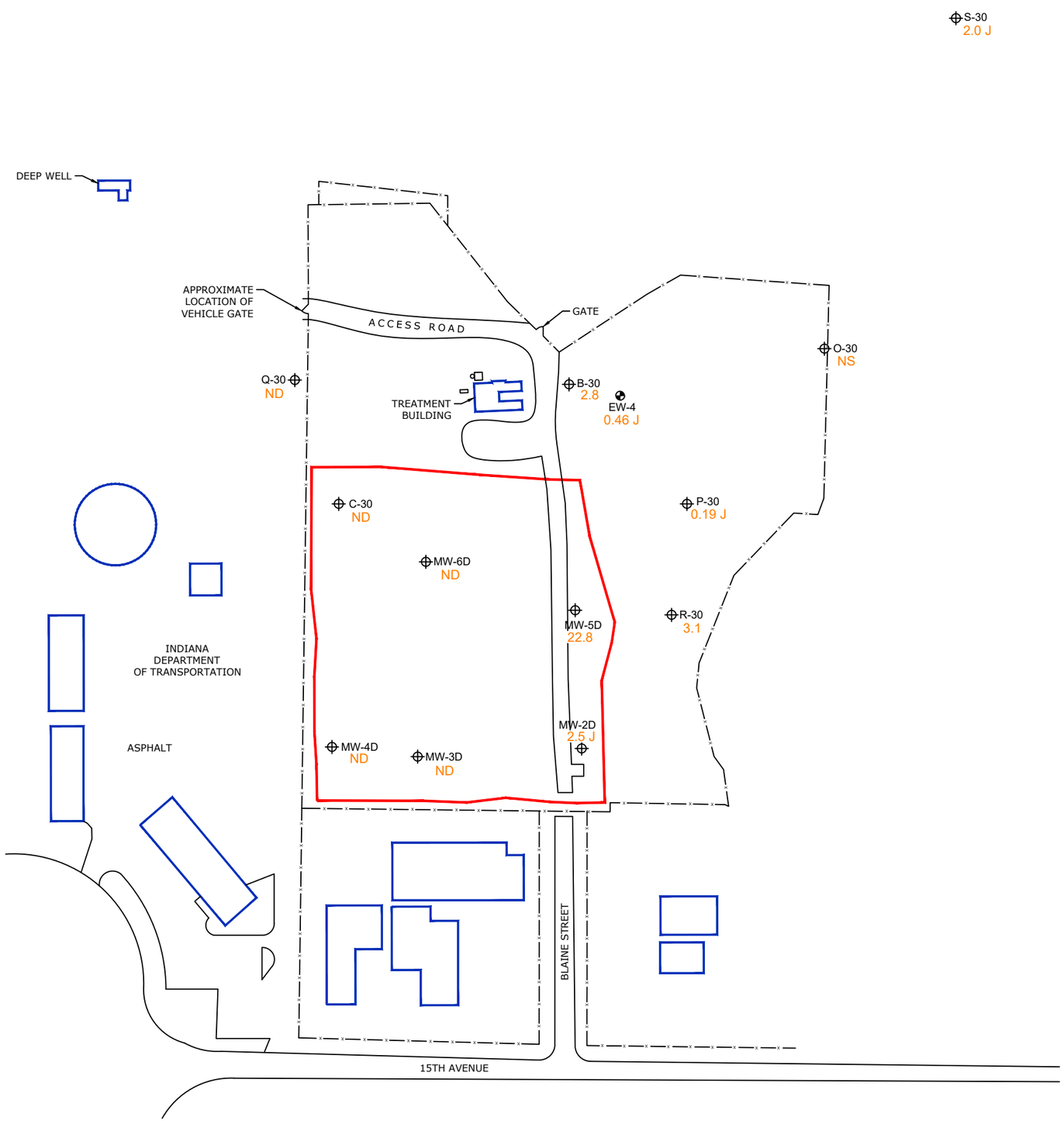
L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-0315-1_Total VOC Concentrations - Shallow (MI).dwg



N

LEGEND

- FENCE
- SLURRY WALL
- MONITORING WELL LOCATION
- EXTRACTION WELL LOCATION
- 3.1 CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- NS NOT SAMPLED
- J ESTIMATED VALUE
- ND NOT DETECTED

Notes:

1. Total Volatile Organic Compound (VOC) concentrations do not include the concentration values for 1,4-dioxane, or acetone (known lab contaminant).
2. Only those monitoring locations included in the annual monitoring program for VOCs are presented.
3. The highest concentration for duplicates is shown.
4. Samples collected in November 2019.

0 150
SCALE IN FEET

TOTAL VOC CONCENTRATIONS DEEP MONITORING NETWORK

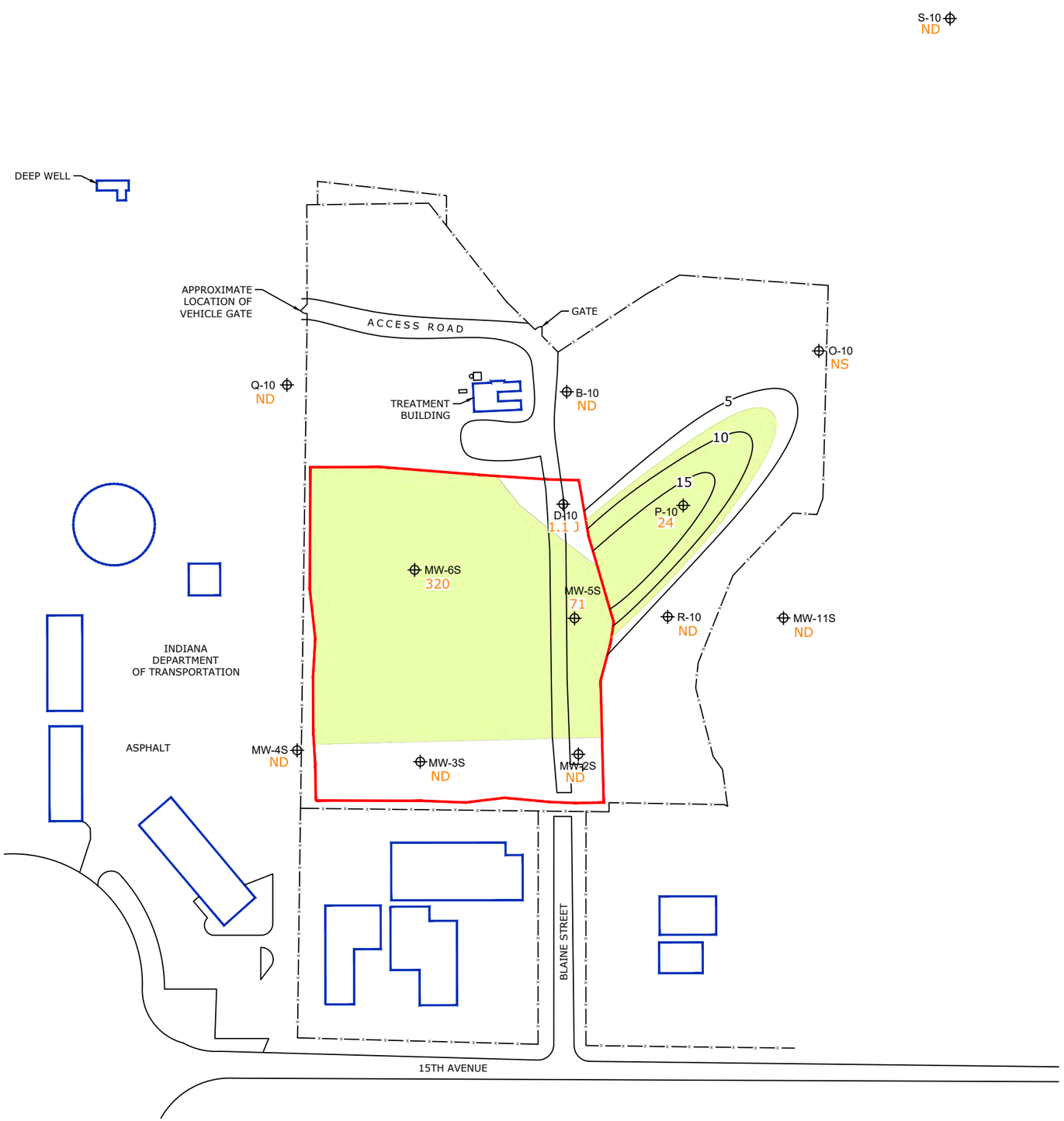
MIDCO I
GARY, INDIANA

RAMBOLL

FIGURE **5-2**

DRAFTED BY: CKL/ELS | DATE: 2/28/20 | 1690008997

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHI_2020-03\5-2_Total VOC Concentrations - Deep (MI).dwg



LEGEND

- FENCE
- SLURRY WALL
- 1,4-DIOXANE ISOCONCENTRATION (µg/L)
- ESTIMATED AREA WITH 1,4-DIOXANE CONCENTRATION GREATER THAN 7.8µg/L.
- MONITORING WELL LOCATION
- 24 CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- ND NOT DETECTED
- NS NOT SAMPLED
- J ESTIMATED VALUE

Notes:

1. Only those monitoring locations included in the monitoring program for 1,4-Dioxane are presented.
2. The highest concentration for duplicates is shown.
3. Monitoring location O-10 not sampled due to standing water.
4. Samples collected in November 2019.

0 150
SCALE IN FEET

1,4-DIOXANE CONCENTRATIONS SHALLOW MONITORING NETWORK

MIDCO I
GARY, INDIANA

RAMBOLL

FIGURE 5-3

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L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHI_2020-03\5-3_1,4-Dioxane Concentrations - Shallow (MI).dwg

LEGEND

- FENCE
- SLURRY WALL
- 1,4-DIOXANE ISOCONCENTRATION (µg/L)
- ESTIMATED AREA WITH 1,4-DIOXANE CONCENTRATION GREATER THAN 7.8µg/L.
- MONITORING WELL LOCATION
- 22 CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- ND NOT DETECTED
- NS NOT SAMPLED
- J ESTIMATED VALUE

Notes:

1. Only those monitoring locations included in the monitoring program for 1,4-Dioxane are presented.
2. The highest concentration for duplicates is shown.
3. Monitoring locations G-30, K-30, and O-30 not sampled due to standing water.
4. Samples collected in November 2019.

0 150
SCALE IN FEET

1,4-DIOXANE CONCENTRATIONS DEEP MONITORING NETWORK

MIDCO I
GARY, INDIANA

RAMBOLL

FIGURE
5-4

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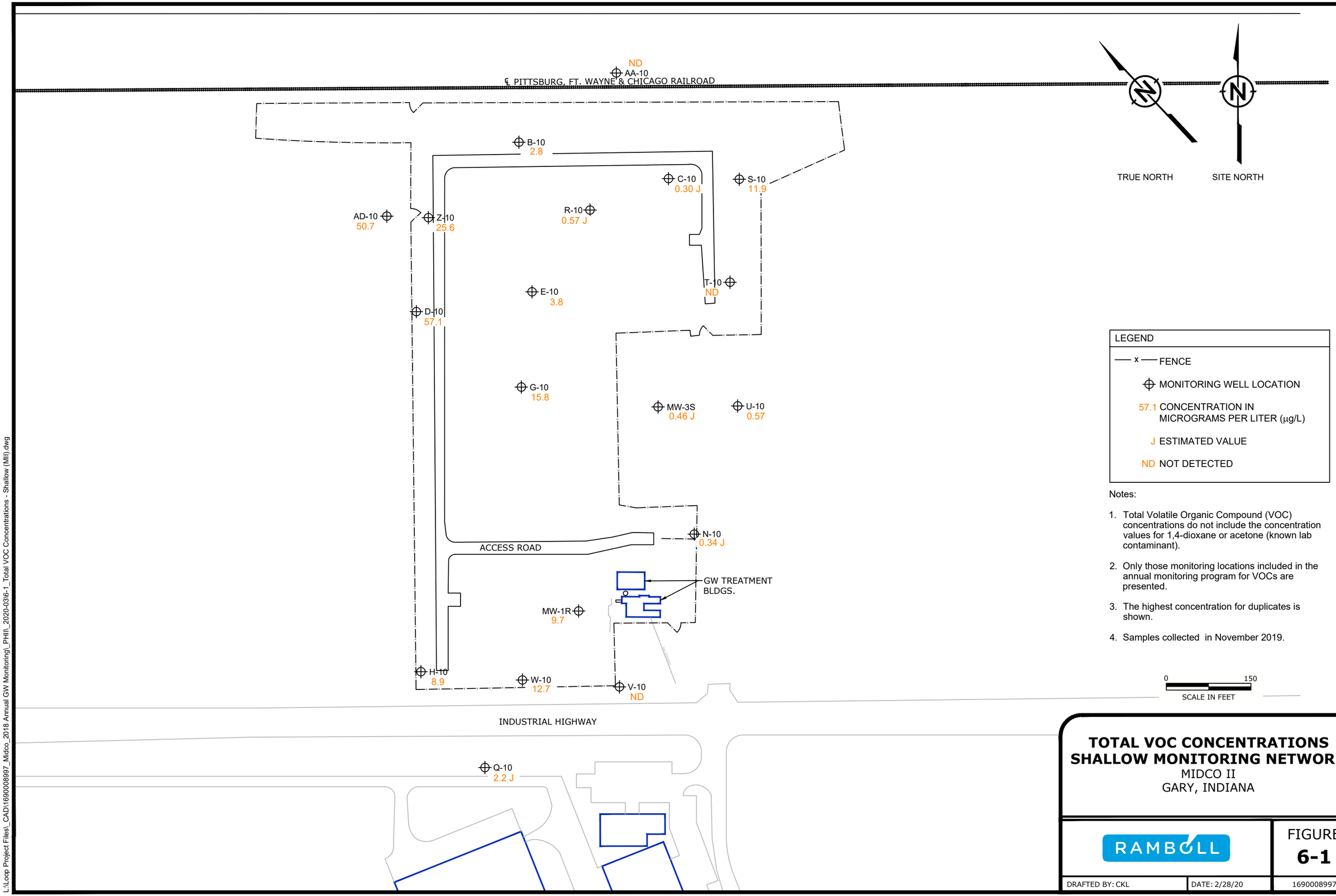
L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PH_2020-0315-4_1,4-Dioxane Concentrations - Deep (MI).dwg



L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-0316-1_Total VOC Concentrations - Shallow (MII).dwg

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-03\6-2_Total VOC Concentrations - Int & Deep (MII).dwg

℄ PITTSBURG, FT. WAYNE & CHICAGO RAILROAD

B-30 5.9

S-50 ND

R-50 ND

F-30 0.16 J

MW-4D ND

T-50 ND

P3 ND

D-30 4.3

G-30 0.56

MW-3D ND

U-50 0.59

MW-2I 43.9

MW-2D 2.0 J

AC-30 3.3

N-50 0.57 J

N-30 0.43 J

ACCESS ROAD

GW TREATMENT BLDGS.

MW-50R ND

H-30 0.29 J

W-50 ND

W-30 5.3

V-50 0.62

INDUSTRIAL HIGHWAY

Q-50 2.1 J

AIRPORT

GA-50 2.2 J

TRUE NORTH

SITE NORTH

LEGEND

- FENCE
- MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- 19.2 CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- J ESTIMATED VALUE
- ND NOT DETECTED

Notes:

1. Total Volatile Organic Compound (VOC) concentrations do not include the concentration values for 1,4-dioxane or acetone (known lab contaminant).
2. Only those monitoring locations included in the annual monitoring program for VOCs are presented.
3. The highest concentration for duplicates is shown.
4. Samples collected in November 2019.

0 180
SCALE IN FEET

RAMBOLL

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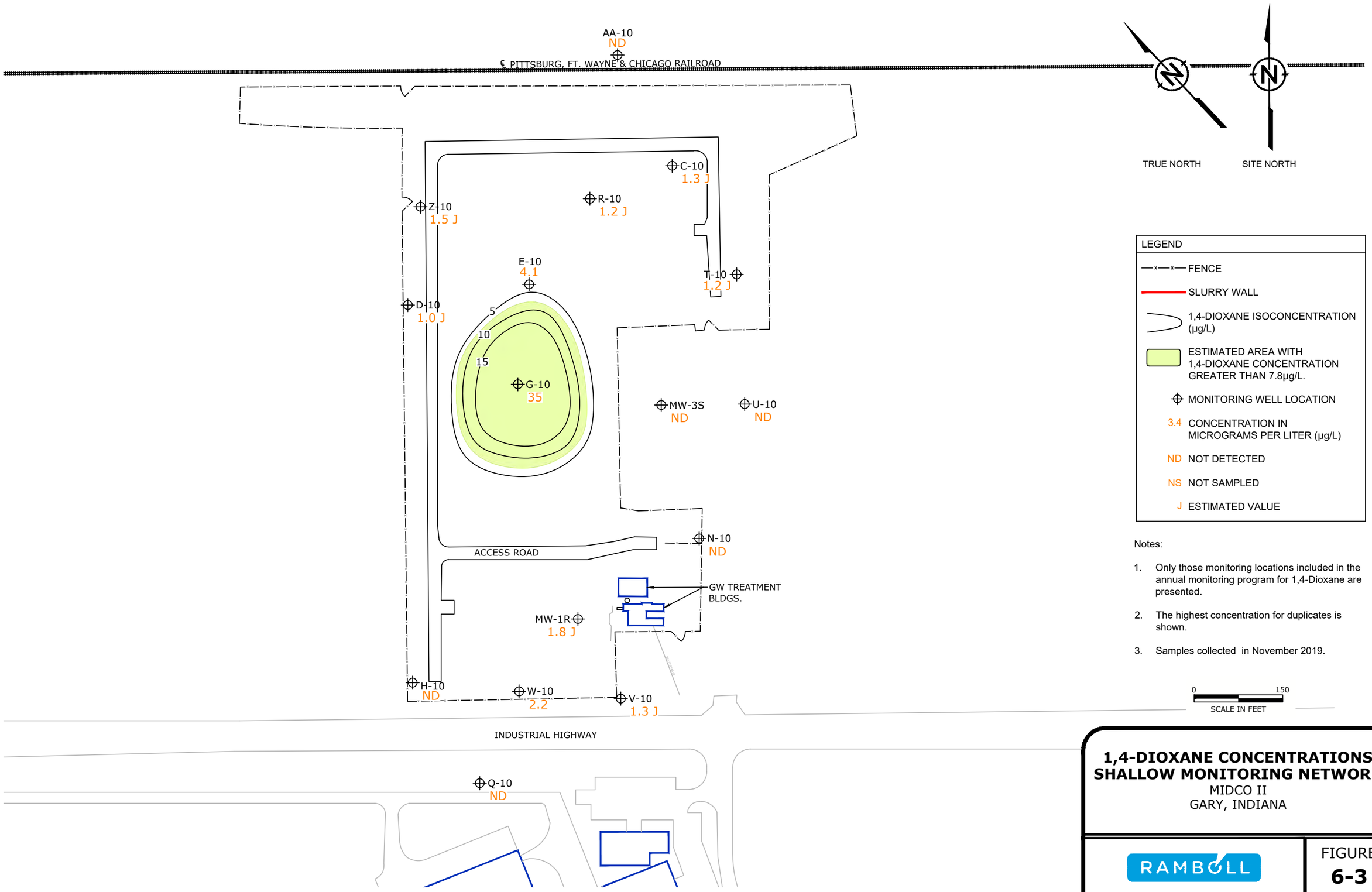
TOTAL VOC CONCENTRATIONS
INTERMEDIATE AND DEEP MONITORING NETWORK
MIDCO II
GARY, INDIANA

FIGURE
6-2

1690008997



Notes:

1. Only those monitoring locations included in the annual monitoring program for 1,4-Dioxane are presented.
2. The highest concentration for duplicates is shown.
3. Samples collected in November 2019.

1,4-DIOXANE CONCENTRATIONS SHALLOW MONITORING NETWORK

MIDCO II
GARY, INDIANA

RAMBOLL

FIGURE
6-3

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L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-03\6-3_1,4-Dioxane Concentrations - Shallow (MII).dwg

L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-03\6-4_1,4-Dioxane Concentrations - Int & Deep (MII).dwg

P4R
43

℄ PITTSBURG, FT. WAYNE & CHICAGO RAILROAD

R-50
5.0

F-30
14

MW-4D
560

T-50
59

P3
4.5

D-30
4.6

G-30
10

MW-3D
120

U-50
39

MW-2I
40

MW-2D
72

AC-30
1.2 J

N-50
60

N-30
3.9

ACCESS ROAD

GW TREATMENT BLDGS.

MW-50R
260

P2
ND

P-30
ND

P-50
10

H-30
5.4

W-30
150

W-50
500

V-30
ND

V-50
38

INDUSTRIAL HIGHWAY

Q-50
2,000

P1
4.0

15

10

5

AIRPORT

GA-50
ND

TRUE NORTH

SITE NORTH

LEGEND

- FENCE
- SLURRY WALL
- 1,4-DIOXANE ISOCONCENTRATION (µg/L)
- ESTIMATED AREA WITH 1,4-DIOXANE CONCENTRATION GREATER THAN 7.8µg/L.
- MONITORING WELL LOCATION
- 4.5 CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- ND NOT DETECTED
- NS NOT SAMPLED
- J ESTIMATED VALUE

Notes:

1. Only those monitoring locations included in the annual monitoring program for 1,4-Dioxane are presented.
2. The highest concentration for duplicates is shown.
3. Samples collected in November 2019.

0 180
SCALE IN FEET

RAMBOLL

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1,4-DIOXANE CONCENTRATIONS
INTERMEDIATE AND DEEP MONITORING NETWORK

MIDCO II
GARY, INDIANA

FIGURE
6-4

1690008997

MW-1	
5-2013	240
7-2014	160
12-2014	440
2-2015	200

MW-1R	
4-30-15	4.7J
12-15-15	7.9J
10-11-16	8.2J
8-11-17	10
1-9-19	10
11-13-19	10 U

PT-2R	
12-2014	4.2J

PT-2	
5-2013	70

PT-1	
5-2013	190

PT-1R	
12-2014	6.5J

SP-2	
6-11-15	30

MW-50	
7-2014	5.5J
7-2014	ND
12-2014	ND

MW-50R	
5-20-15	12
12-15-15	130
10-11-16	51.0
8-11-17	3.2
1-11-19	51
11-13-19	10 U

PT-4	
5-2013	1,400

SP-3	
6-11-15	240

PT-10	
5-20-15	2,200
5-29-15	2,100
10-14-16	390
8-10-17	370
1-11-19	300
11-14-19	370

PT-9	
4-14-15	6,200
4-14-15	6,800

PT-12	
10-14-16	390
8-10-17	670
1-11-19	94
11-14-19	13

AB-10	
6-11-15	150
10-14-16	30
8-10-17	79
1-11-19	67
11-13-19	15

PT-2R
PT-2
MW-1R
PT-6
MW-1
PT-3
PT-1R
PT-1
PT-3r
SP-2
MW-50
MW-50R
PT-7
SP-1
PT-8
23.5-Ft
PT-4
PT-4R
PT-11
SP-4
SP-3
PT-10
PT-9
7.0-Ft
PT-12
PT-5
SP-5
AB-10

PT-6	
4-14-15	34

PT-3	
5-2013	100

PT-3r	
12-2014	6.6J

SP-1	
6-11-15	850

PT-7	
4-14-15	270

PT-8	
4-14-15	1,200

PT-4R	
12-2014	1,200
2-2015	5,600

SP-4	
6-11-15	120

PT-11	
5-20-15	230
5-29-15	210
10-14-16	210
8-10-17	140
1-11-19	28
11-14-19	16

PT-5	
5-2013	240
12-2014	99
2-2015	110
5-20-15	2,000
5-29-15	1,500
5-29-15	2,300
10-14-16	150
8-10-17	110
1-11-19	57
11-13-19	3.9 J

SP-5	
6-11-15	180

LEGEND

- MONITORING WELL
- PIEZOMETERS
- ABANDONED
- TEMPORARY MONITORING WELL
- TREATMENT AREA

NOTES:
1. ALL RESULTS IN MICROGRAMS PER LITER (µg/L).
2. CYANIDE CLEANUP ACTION LEVEL (CAL) IS 158 µg/L.
3. ND = NOT DETECTED
4. J = ESTIMATED VALUE

0 10
SCALE IN FEET

HISTORICAL CYANIDE CONCENTRATIONS

CYANIDE AREA MONITORING LOCATIONS
MIDCO II
GARY, INDIANA

RAMBOLL

FIGURE 6-5

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L:\Loop Project Files_CAD\1690008997_Midco_2018 Annual GW Monitoring_PHII_2020-03\6-5_Historical Cyanide Concentrations (MII).dwg