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HEALTH, SAFETY, ENVIRONMENTAL, PRODUCT STEWARDSHIP AND SUSTAINABILITY
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December 16, 2024

Via Electronic Delivery

Ms. Nichole Osuch, PMP
Project Manager
Voluntary Remediation Program Unit
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, AZ 85007

Re: 2024 Groundwater Monitoring Report, Former Honeywell Area 10
Arizona Department of Environmental Quality Voluntary Remediation Program Site Code 070110-00

Dear Ms. Osuch,

Honeywell International Inc. (Honeywell), is pleased to submit the 2024 Groundwater Monitoring Report for the former Honeywell Area 10 Site in Phoenix, Arizona.

Groundwater monitoring results indicate that concentrations of chlorinated volatile organic compounds (VOCs) that exceed Aquifer Water Quality Standards (AWQSs) in well MW-11 continue to decrease. Overall progress towards the interim milestones is on track.

If you have any questions or require discussion, please contact me at 602-231-2008 or Rick Edwards at 480-570-7162. For your convenience, my e-mail address is steven.bowles@honeywell.com and Rick's email address is rick.edwards@jacobs.com.

Sincerely,

Steven L. Bowles
Senior Remediation Manager

Copies w/attachment:
Mr. Rick Edwards, Jacobs
Mr. Ed Eisele, Capistrano's Bakery

Former Honeywell Area 10 Facility
2635 South 24th Street, Phoenix, Arizona

2024 Groundwater Monitoring Report

December 2024

Honeywell International Inc.

Arizona Department of Environmental Quality
Voluntary Remediation Program
Site Code 070110-00

Former Honeywell Area 10 Facility
2635 South 24th Street, Phoenix, Arizona

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Contents

Acronyms and Abbreviations

µg/L	micrograms per liter
ADEQ	Arizona Department of Environmental Quality
amsl	above mean sea level
AWQS	Aquifer Water Quality Standard
CH2M	CH2M HILL Engineers, Inc.
DCA	dichloroethane
DCE	dichloroethene
GGASD	Garrett General Aviation Service Division
Honeywell	Honeywell International Inc.
PCE	tetrachloroethene
PDB	passive diffusion bag
TCA	trichloroethane
TCE	trichloroethene
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

1. Introduction

This report summarizes groundwater monitoring activities conducted in 2024 by Jacobs Engineering Group, Inc. (Jacobs) at the Honeywell International Inc. (Honeywell) former Garrett General Aviation Service Division (GGASD)–Area 10 (the Site), located at 2635 South 24th Street, Phoenix, Arizona. Figure 1-1 presents a site location map. Monitoring activities included measuring depths to groundwater and collecting groundwater quality samples from monitoring wells. Laboratory results from groundwater quality samples collected at the Site were used to characterize dissolved-phase contaminant concentrations and other geochemical parameters in the area. Field activities were performed in accordance with the Arizona Department of Environmental Quality (ADEQ)-approved *Groundwater Sampling Work Plan and Field Sampling Plan* (CH2M HILL Engineers, Inc. [CH2M], 2016).

The Site is assigned ADEQ Voluntary Remediation Program Site Code 070110-00.

1.1 Operational History

The property was vacant and undeveloped prior to 1967. From 1967 to 1985, the Site was used by Garrett Corporation for the repair, overhaul, and storage of turbine engines and aviation-related mechanical products. GGASD and Allied Signal Aerospace Company, a unit of Allied Signal Inc., took over operations between 1985 and 1991. Prior to 1985, a 500-gallon underground storage tank (UST) was used at the Site to contain waste oil and solvents (mineral oil). In October 1987, the 500-gallon UST was removed. Chemicals historically used at the Site included petroleum hydrocarbon products, degreasing solvents in vapor degreasers, and aqueous caustic cleaning solutions (GGASD, 1991).

1.2 Historical Investigations

Various soil and groundwater investigations were conducted at the Site between 1987 and 2005 to determine if historical operations had impacted soil, groundwater, or both (CH2M, 2016). A groundwater monitoring program was established at the Site in 1988 for onsite monitoring wells MW-1 through MW-4. Monitoring wells MW-5 through MW-8 were added in 1990, and monitoring wells MW-9 and MW-10 were added between 1993 and 1995 (CH2M, 2016). In addition, two vapor extraction wells (VE-1 and VE-2) were installed at the Site in 1990 as part of a planned soil vapor extraction remedy, which ultimately was never operated. Figure 1-2 shows the locations of the current groundwater monitoring wells at the Site.

Additional Site characterization activities were completed in February and March 2015 to refine the Conceptual Site Model. A shallow soil gas survey was completed by installing and sampling temporary soil gas probes at depths of 5 and 15 feet at each of six locations. In addition, vertical soil and soil gas profile sampling was conducted at three locations from a depth of 10 feet to 80 or 90 feet, depending on the location. The soil samples were analyzed for semivolatile organic compounds (SVOCs) and the soil gas samples were analyzed for volatile organic compounds (VOCs). SVOCs were detected in only 2 of the 48 soil samples collected, and both detections were at concentrations less than residential soil remediation levels. No VOCs were present in soil gas samples at concentrations exceeding cleanup standards (CH2M, 2015).

Five additional groundwater monitoring wells, MW-11 through MW-15, were installed in 2015 to supplement the monitoring network (Figure 1-2). Groundwater monitoring wells MW-3 through MW-6, MW-8, and MW-10 have not been sampled since 2012 because these wells have gone dry, and monitoring wells MW-1, MW-2, MW-7, and MW-9, along with vapor extraction wells VE-1 and VE-2, were abandoned in 2016.

The monitoring program has historically identified the following compounds in groundwater:

- 1,1-dichloroethane (DCA)
- 1,2-DCA
- 1,1-dichloroethene (DCE)
- cis-1,2-DCE

- 1,1,1-trichloroethane (TCA)
- Chloroform
- Ethylbenzene
- Trichloroethene (TCE)
- Tetrachloroethene (PCE)
- Xylenes

Of the compounds listed above, 1,2-DCA, 1,1-DCE, cis-1,2-DCE, 1,1,1-TCA, TCE, and PCE have historically been detected at concentrations above Arizona Aquifer Water Quality Standards (AWQSs) in groundwater samples collected from Site monitoring wells. More recently, however, only concentrations of TCE and 1,1-DCE have exceeded their respective AWQS.

2. Summary of 2024 Groundwater Monitoring Activities

Jacobs conducted groundwater monitoring at the Site in September 2024. Monitoring activities included measuring groundwater elevations, deploying passive diffusion bags (PDBs) in monitoring wells MW-11 through MW-15, and collecting groundwater samples from each PDB. Groundwater samples were also collected from these monitoring wells in September 2024 using low-flow purging methods and analyzed for VOCs and natural attenuation parameters.

September 2024 groundwater monitoring activities are discussed in the following subsections.

2.1 Groundwater-level Measurements

On September 27, 2024, Jacobs measured groundwater levels in monitoring wells MW-11 through MW-15. Monitoring well locations are shown on Figure 1-2.

Table 2-1 summarizes monitoring well specifications, including:

- Legal descriptions
- Universal Transverse Mercator coordinates (northing and easting)
- Arizona Department of Water Resources registration numbers
- Casing depths and screen intervals
- PDB installation depths

2.2 Groundwater Sampling

PDBs were deployed in monitoring wells MW-11 through MW-15 on September 29, 2023. The PDB installation depths are presented in Table 2-1. On September 27, 2024, the PDBs were retrieved and groundwater samples were collected from each using a disposable discharge straw. Once the samples had been collected, new PDBs were installed in each active monitoring well (MW-11 through MW-15).

The collected groundwater samples and quality assurance/quality control samples (field duplicate, matrix spike/matrix spike duplicate, and trip and temperature blanks) were placed in an ice-filled sample cooler under chain-of-custody for submittal to Eurofins TestAmerica (Arizona Department of Health Services Certification No. AZ0728) in Phoenix, Arizona. All samples were analyzed for VOCs using United States Environmental Protection Agency Method 8260B.

Groundwater samples were also collected from wells using low-flow purging methods and analyzed for the following:

- Dissolved metals (iron II and magnesium II) by Method 6010C,
- Chloride by Method E300.0,
- Sulfide by Method SM4500S2-D,
- Total dissolved carbon by Method 9060A, and
- Carbon dioxide by Method RSK-175.

Appendix A contains the well purging and sampling forms.

3. Summary of 2024 Groundwater Monitoring Results

The following subsections present the results of the September 2024 groundwater monitoring event.

3.1 Hydrologic Conditions

Groundwater elevations measured in monitoring wells on September 27, 2024, ranged from a minimum of 1011.14 feet above mean sea level (amsl) in monitoring well MW-14 to a maximum of 1012.04 feet amsl in monitoring well MW-12. These groundwater elevations decreased an average of 2.86 foot relative to groundwater elevation measurements collected on September 29, 2023. Groundwater elevations from September 27, 2024, as well as those from September 29, 2023, are provided in Table 3-1, and Appendix B presents historical groundwater elevations for the Site.

Figure 3-1 presents contours depicting the September 27, 2024, groundwater elevations and the general groundwater flow directions across the Site. Based on the contours, the overall groundwater flow direction was generally to the west, with an average horizontal hydraulic gradient of 0.0014 foot per foot.

3.2 Analytical Results

Figures 3-2, 3-3, and 3-4, respectively, show concentrations of TCE, 1,1 DCE, and 1,1 DCA (the primary compounds of interest) detected at Site monitoring wells in September 2024. Table 3-2 summarizes analytical results for groundwater samples collected in September 2024, and Appendix C presents laboratory analytical reports for these samples, including chain of custody documentation and quality control conformance summaries. Appendix B presents historical analytical results. Table 3-3 summarizes the results of the natural attenuation parameter analyses, which are evaluated in Section 3.3.

Five VOCs (TCE; 1,1-DCE; 1,1-DCA; cis-1,2 DCE; and chloroform) were detected in groundwater samples collected in September 2024 from monitoring wells MW-11 through MW-15. 1,1-DCE was detected at a concentration that exceeded its Arizona AWQS.

Key results of VOC detections in groundwater at the Site in September 2024 are as follows:

- 1,1-DCE was detected at a concentration exceeding its Arizona AWQS (7 µg/L) at monitoring well MW-11 (8.4 µg/L).
- No other compounds were detected at concentrations exceeding an Arizona AWQS.
- The VOC concentrations observed in September 2024 from monitoring wells MW-12 through MW-15 decreased in concentrations compared to concentrations in 2023.

3.2.1 Regression Analysis and Interim Milestone Evaluation

Honeywell (2020) used a regression analysis of TCE and 1,1-DCE concentration data to estimate the remediation time under a monitored natural attenuation remedy and to set interim milestones for remediation. These compounds were selected because their concentrations consistently exceeded the AWQS at monitoring well MW-11. The analysis used concentration data from co-located monitoring well pair MW-1, which went dry in 2012, and MW-11, which replaced monitoring well MW-1 in 2015. Data prior to 2009, when the use of PDBs was implemented, were omitted from the analysis due to a high degree of variability in the results from these purged (versus PDB) samples. The regression analysis calculated first order attenuation rate constants of 0.10 per year for TCE and 0.11 per year for 1,1-DCE.

Interim milestones for TCE and 1,1-DCE concentrations at the Site were established in March 2020 (Honeywell, 2020) and consist of concentrations that are halfway between the concentrations of these compounds at monitoring well MW-11 in September 2019 and the AWQS. The interim milestone for TCE is 10.5 µg/L and was projected to be met by 2024, and the interim milestone for 1,1-DCE is 22.5 µg/L and was projected to be met by 2023.

The interim milestone for TCE has been met since September 2021 and the interim milestone for 1,1-DCE has been met since September 2023.

The final milestones are for the concentrations of TCE and 1,1-DCE to reach their respective Arizona AWQSs. These projected dates were 2031 for TCE and 2037 for 1,1-DCE (Honeywell 2020). The final milestone for TCE was met in September 2024.

3.2.2 Mann-Kendall Trend Analysis

The Mann-Kendall analysis is a non-parametric statistical procedure that is used for analyzing trends in data over time. GSI Environmental, Inc. (GSI) (2012) developed a spreadsheet system with which to conduct the Mann-Kendall analysis. The analysis is based on three statistical metrics (GSI, 2012):

- The 'S' Statistic indicates whether the concentration trend is generally decreasing or increasing.
- The Confidence Factor (CF) modifies the S Statistic to indicate the degree to confidence in the trend result.
- The Coefficient of Variation (COV) is used to distinguish between a "No Trend" result and a "Stable" result in the S Statistic.

Jacobs entered TCE and 1,1-DCE concentration data collected from monitoring wells MW-11 through MW-15 since their 2015 installation into the spreadsheet tool. The data set for monitoring well MW-11 also included historical data collected from co-located monitoring well MW-1 after routine PDB implementation in 2009. Monitoring well MW-1 went dry in 2012 and was replaced by well MW-11 in 2015. For consistency, a value of 0.2 µg/L was used in the spreadsheet when a compound was not detected rather than using one-half of the reporting limit, which can change between sampling events. Appendix D contains the spreadsheet analysis forms and Table 3-4 and Table 3-5 summarize the calculation results for TCE and 1,1-DCE.

The analysis identified decreasing long-term trends for both TCE and 1,1-DCE at monitoring well MW-11 and at downgradient monitoring well MW-14. This indicates effective attenuation of these compounds in Site groundwater. The long-term trend for TCE and 1,1-DCE was classified as increasing at upgradient wells MW-12 and MW-15. Short-term data indicated generally stable trends or showed no trend; the 1,1-DCE trend at monitoring well MW-11 was decreasing, indicating recent reductions in concentration.

No contingency actions as described in Honeywell (2020) were required because the interim milestones were met and the site is on track to meet the final milestones.

3.3 Natural Attenuation Evaluation

Natural attenuation includes a variety of physical, chemical, or biological processes that act to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil and ground water (EPA, 1997). Historical site data (Appendix B) have consistently shown that concentrations of VOCs decrease in and downgradient of well MW-11, indicating that some type of attenuation is occurring.

The primary biological attenuation mechanism for chlorinated solvents is reductive dechlorination, which degrades contaminants such as TCE by sequentially removing chlorine atoms. Reductive dechlorination typically requires anaerobic aquifer conditions and often results in changes in groundwater chemistry. These changes can be measured by analysis of groundwater samples for parameters such as iron, manganese, chloride, sulfide, and others.

Under aerobic conditions, chlorinated ethenes, apart from tetrachloroethene, are susceptible to cometabolic degradation (EPA, 1998). Aerobic cometabolism of ethenes may be characterized by a loss of contaminant mass; the presence of intermediate degradation products such as chlorinated oxides, aldehydes, ethanols, and epoxides; and the presence of other products such as chloride, carbon dioxide, carbon monoxide, and a variety of organic acids. The loss of contaminant mass in Site groundwater is

well documented and results of the geochemical parameter sampling conducted since September 2020 indicate spatial changes in chloride, carbon dioxide, and total organic carbon concentrations that are indicative of reductive dechlorination. Studies have identified first-order attenuation rate constants attributable to the cometabolism of TCE in aerobic groundwater ranging from 0.05 per year to 0.21 per year (Wilson et al., 2019), which is approximately the same range as the attenuation rate constants calculated for TCE (0.10 per year) and 1,1-DCE (0.11 per year) in Site groundwater.

The abiotic degradation of 1,1,1-TCA to acetic acid through hydrolysis and to 1,1-DCE through dehydrochlorination is also well documented (for example, McCarty, 1997). Several minerals, including pyrite, mackinawite, green rusts, and magnetite, have shown the capacity to catalyze abiotic transformation of chlorinated VOCs (U.S. EPA, 2009).

Multiple lines of evidence were evaluated to assess the potential for natural attenuation of VOCs in Site groundwater. Data collected during groundwater monitoring activities indicate that natural attenuation is occurring at the Site due to both biological and abiotic mechanisms. Key lines of evidence supporting this evaluation include:

- Geochemical parameter results;
- The presence of 1,1-DCE and cis-1,2-DCE indicates that reductive dechlorination and abiotic transformation are occurring in Site groundwater;
- Magnetic susceptibility analyses conducted in the aquifer near the Site indicated that reactive minerals such as magnetite are present in the aquifer, providing evidence of abiotic transformation of the chlorinated VOCs in similar sediments to those found at the Site.

The following subsections describe evaluations of these lines of evidence.

3.3.1 Geochemical Parameters

Geochemical analysis of groundwater (Table 3-3) provides evidence of biodegradation. This evidence includes:

- Chloride concentrations were about 10 percent higher at downgradient monitoring wells MW-13 and MW-14 compared to upgradient wells MW-12 and MW-15. Chloride is a daughter product of biological reduction of TCE, and the higher concentrations downgradient of elevated TCE concentrations suggests that reductive dechlorination is occurring.
    - Carbon dioxide was highest in central monitoring well MW-11 and may be a byproduct of reductive dechlorination.
    - Dissolved manganese concentrations were highest in central monitoring well MW-11 and may indicate manganese reduction in this area.

Dissolved iron total organic carbon concentrations were variable across the Site and did not provide evidence of biological activity. Sulfide was not detected in any of the groundwater samples.

3.3.2 Daughter Product Ratios

The presence of daughter products can be used to show that parent compounds such as TCE and 1,1,1-TCA are degrading through natural processes. In particular, the presence of cis-1,2-DCE provides evidence of reductive dechlorination of TCE and the presence of 1,1-DCE provides likely evidence of abiotic transformation of 1,1,1-TCA[1]. Other degradation mechanisms such as cometabolism are often active in groundwater although these mechanisms are not evaluated in this report. The discussion in this

[1] The presence of 1,1-DCE could also be due to the anaerobic degradation of TCE, but this is a minor transformation pathway and unlikely to result in the 1,1-DCE concentrations observed at the Site.

section will focus on monitoring well MW-11 because other wells did not contain sufficient concentrations of the various compounds to provide a meaningful calculation.

Appendix E includes calculations of the concentrations of organic chlorine and ethane or ethene (depending on the compound), the molar ratio of chlorine to ethane or ethene, and the fraction of chlorine atoms removed from TCE and 1,1,1-TCA. For the purposes of this analysis, two separate, nonoverlapping attenuation pathways were assumed: Abiotic transformation of 1,1,1-TCA to 1,1-DCE, with subsequent degradation of 1,1-DCE to vinyl chloride, chloroethane, ethane, and ethene; and reductive dechlorination of TCE to cis-1,2-DCE, with subsequent degradation of cis-1,2-DCE to vinyl chloride and ethene. The analysis likely underestimates the percentage of chlorine removed because vinyl chloride was not detected in any of the samples. The absence of vinyl chloride in groundwater containing parent products is not uncommon and may be due to aerobic degradation of vinyl chloride to ethene and ethane or mineralization to carbon dioxide, water, and chloride.

The fractions of chlorine removed from parent compounds TCE and 1,1,1-TCA were calculated by first converting the concentrations of parent compounds and their degradation products from µg/L to moles per liter of chlorine and moles per liter of chloroethylene. For TCE, there are three moles of chlorine for each mole of chloroethylene (three chlorine atoms per molecule); for cis-1,2-DCE, trans-1,2-DCE, and 1,1-DCE, there are two moles of chlorine for each mole of chloroethylene (two chlorine atoms per molecule); and for vinyl chloride there is one mole of chlorine per mole of chloroethylene (one chlorine atom per molecule). For 1,1,1-TCA, there are three moles of chlorine for each mole of chloroethane; for 1,1-DCA and 1,2-DCA, there are two moles of chlorine for each mole of chloroethane, and for each mole of chloroethane there is one mole of chlorine.

The overall ratio for each monitoring well is the total moles of chlorine divided by the total moles of ethane or ethylene based on concentrations of parent and degradation products. The percentage of chlorine removed is one minus the overall ratio divided by the ratio for the parent compound (which is three for both TCE and 1,1,1-TCA), and that difference multiplied by 100. For example:

$$\%\ Chlorine\ Removed = \left(1 - \left[\frac{\left(\frac{Cl_{TCE} + Cl_{cDCE} + Cl_{tDCE} + Cl_{1,1DCE} + Cl_{VC}}{ETH_{TCE} + ETH_{cDCE} + ETH + ETH_{1,1DCE} + ETH_{VC}}\right)}{3}\right]\right) \times 100$$

where:

Cl_{TCE} is the total moles of chlorine in TCE in the sample

Cl_{cDCE} is the total moles of chlorine in cis-1,2-DCE in the sample

Cl_{tDCE} is the total moles of chlorine in trans-1,2-DCE in the sample

Cl_{VC} is the total moles of chlorine in vinyl chloride in the sample

ETH_{TCE} is the total moles of ethene in TCE in the sample

ETH_{cDCE} is the total moles of ethene in cis-1,2-DCE in the sample

ETH_{tDCE} is the total moles of ethene in trans-1,2-DCE in the sample

ETH_{VC} is the total moles of ethene in vinyl chloride in the sample.

A similar process is performed for the 1,1,1-TCA pathway.

Appendix E summarizes the molar ratio calculations. The data indicate that about 19 percent of chlorine atoms have been removed from TCE and about 35 percent of chlorine atoms have been removed from

1,1,1-TCA in groundwater near well MW-11. These calculations provide evidence that reductive dechlorination of TCE and abiotic transformation of 1,1,1-TCA are occurring in Site groundwater.

3.3.3 Abiotic Transformation

Evaluations of natural attenuation of chlorinated solvents have historically focused on biological degradation (for example, USEPA, 1998). However, the importance of abiotic degradation recently has been recognized (USEPA, 2009; Wiedemeier et al., 2017). Magnetite, the most abundant mineral in natural sediments that exhibits magnetic behavior (Microbial Insights, 2015), has been shown to degrade a variety of chlorinated alkenes including TCE (EPA, 2009).

Although no magnetic susceptibility measurements (to confirm the presence of magnetite) have been made on aquifer materials at the Site, values were obtained from both sediment generated during drilling and from a down-hole probe at another nearby site located in the same hydrogeologic setting (CH2M, 2018). Results of that study indicated the presence of magnetite and that the magnetite provides a plausible explanation for the attenuation observed at the Site. Additional information regarding this evaluation was provided in Jacobs (2020).

Also, 1,1,1-TCA can be abiotically degraded to acetic acid through hydrolysis and to 1,1-DCE through dehydrochlorination (McCarty, 1997). These processes are independent of the presence of reactive minerals.

3.4 Data Quality Evaluation

The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision-making process. The following summary highlights the precision, accuracy, representativeness, completeness, and comparability findings for the above-defined events:

1. No data were rejected and completeness was 100 percent for all method/analyte combinations.

2. No data were qualified due to laboratory blank contamination.

3. A LCS/LCSD RPD exceedance was observed for Method SW8260B; one result was qualified as estimated.

4. A MS/MSD RPD exceedance was observed for Method SW8260B; one result was qualified as estimated.

5. The precision and accuracy of the data, as measured by laboratory QC indicators, suggest that the DQOs were met.

4. Recommendations

The following recommendations are based on the 2024 groundwater monitoring results:

- Sample all site monitoring wells for VOCs annually in September. Continue to use PDBs to collect groundwater samples for VOC analysis. Sample monitoring wells MW-11, MW-12, and MW-14 for MNA parameters carbon dioxide, chloride, dissolved iron, dissolved manganese, sulfide, and total organic carbon in odd-numbered years.
- Submit annual reports within 60 days of receipt of validated laboratory data.
- When the final milestones are met, consider site closure.

5. References

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Tables

Table 2-1. Summary of Well Specifications and Passive Diffusion Bag Installation Depths

Former Honeywell Area 10 Facility, Phoenix, Arizona

Well ID	Arizona ID	Easting	Northing	TOC Elevation (feet amsl)	ADWR Reg. #	Casing Depth (feet)	Screen Interval (feet from TOC)	Passive Diffusion Bag Installation Depth (feet from TOC)
MW-11	A-1-0-3-0-14CCC	665678.12	881448.35	1099.81	55-917668	130	90-130	100
MW-12	A-1-0-3-0-14CCC	665935.52	881390.85	1099.74	55-917669	130	90-130	100
MW-13	A-1-0-3-0-14CCC	665283.89	881571.94	1097.46	55-917670	130	90-130	100
MW-14	A-1-0-3-0-14CCC	665291.89	881395.13	1097.27	55-917671	130	90-130	100
MW-15	A-1-0-3-0-14CCC	665778.36	881454.06	1100.10	55-917672	130	90-130	100

Notes:

Reg. # is the ADWR registration number.

Easting and Northing are Universal Transverse Mercator coordinates.
Only wells that were sampled during the reporting period are included in this table.

ADWR = Arizona Department of Water Resources
amsl = above mean sea level
ID = identification
TOC = top of casing

Originator: **P. Parthiban**	*P. Parthiban* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Table 3-1. Summary of Monitoring Well Groundwater Elevation Data

Former Honeywell Area 10 Facility, Phoenix, Arizona

Well Number	Top of Casing Elevation (feet amsl)	September 27, 2024 Depth to Groundwater (feet from north side top of casing)	September 29, 2023 Groundwater Elevation (feet amsl)	September 27, 2024 Groundwater Elevation (feet amsl)	Water Level Elevation Change September 29, 2023 to September 27, 2024 (feet)[a]
MW-11	1099.81	88.11	1014.56	1011.70	-2.86
MW-12	1099.74	87.70	1014.98	1012.04	-2.94
MW-13	1097.46	86.19	1014.06	1011.27	-2.79
MW-14	1097.27	86.13	1013.93	1011.14	-2.79
MW-15	1100.10	88.30	1014.70	1011.80	-2.90

Notes:

amsl = above mean sea level

[a]Negative value indicates a decrease in water levels

Originator: **P. Parthiban**	*P. Parthiban* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Table 3-2. Summary of Groundwater Analytical Results - September 2024

Former Honeywell Area 10, Phoenix, Arizona

	Location	MW-11	MW-12	MW-12	MW-13	MW-14	MW-15
	Sample Depth (feet):	100	100	100	100	100	100
	Date:	9/27/2024	9/27/2024	9/27/2024	9/27/2024	9/27/2024	9/27/2024
	Sample Purpose:	REG	REG	FD	REG	REG	REG
Parameter	**AWQS**						
1,1,1,2-Tetrachloroethane	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	200	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	--	**6.5**	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	7	**8.4**	**1.5**	**1.5**	**0.83**	**0.74**	**3.1**
1,1-Dichloropropene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,3-Trichlorobenzene	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
1,2,3-Trichloropropane	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trichlorobenzene	70	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trimethylbenzene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dibromo-3-Chloropropane	0.2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane	0.05	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	600	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,3,5-Trimethylbenzene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichloropropane	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	75	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,2-Dichloropropane	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone	--	<10	<10	<10	<10	<10	<10
2-Chlorotoluene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-Hexanone	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chlorotoluene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
4-Methyl-2-Pentanone	--	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Acetone	--	<10	<10	<10	<10	<10	<10
Benzene	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromobenzene	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Tetrachloride	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroethane	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	--	**1.5**	**1.6**	**1.5**	**0.68**	**0.68**	**1.3**
Chloromethane	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	**1.9 J**	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,3-Dichloropropene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dibromochloromethane	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dibromomethane	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	700	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Freon 12	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Iodomethane	--	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Isopropylbenzene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m,p-Xylenes	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MTBE	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Naphthalene	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
para-Isopropyl Toluene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Propylbenzene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
sec-Butylbenzene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	1000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethene	100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,3-Dichloropropene	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 3-2. Summary of Groundwater Analytical Results - September 2024

Former Honeywell Area 10, Phoenix, Arizona

	Location	MW-11	MW-12	MW-12	MW-13	MW-14	MW-15
	Sample Depth (feet):	**100**	**100**	**100**	**100**	**100**	**100**
	Date:	**9/29/2023**	**9/29/2023**	**9/29/2023**	**9/29/2023**	**9/29/2023**	**9/29/2023**
	Sample Purpose:	**REG**	**REG**	**FD**	**REG**	**REG**	**REG**
Parameter	**AWQS**						
Trichloroethene	5	**3.6**	**1.1**	**1.1**	**0.55**	**0.50**	**1.5**
Trichlorofluoromethane	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Acetate	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Xylene (total)	10000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes:

All samples analyzed using EPA Method SW8260B

All values are in micrograms per liter

Bold and underlined results = laboratory analytical results detected exceeding AWQS

Bold results = laboratory analytical results detected exceeding reporting limit

-- = not established

< = laboratory analytical results not detected exceeding reporting limit

AWQS = Aquifer Water Quality Standards (Arizona Administrative Code Title 18, Chapter 11 R-18-11-406, March 31, 2003)

EPA = U.S. Environmental Protection Agency

FD = field duplicate

J = estimated value

REG = regular sample

Table 3-3. Summary of Groundwater MNA Analytical Results—September 2024

Former Honeywell Area 10, Phoenix, Arizona

	Location:	**MW-11**	**MW-12**	**MW-13**	**MW-14**	**MW-15**
	Sample Depth (feet):	**100**	**100**	**100**	**100**	**100**
	Date:	**9/27/2024**	**9/27/2024**	**9/27/2024**	**9/27/2024**	**9/27/2024**
	Region:	**Central**	**Upgradient**	**Downgradient**	**Downgradient**	**Upgradient**
Parameter	**Units**					
Carbon Dioxide	µg/l	**20,000**	**14,000**	**17,000**	**14,000**	**13,000**
Chloride	mg/L	**230**	**230**	**250**	**250**	**230**
Iron, dissolved	mg/L	**2.1**	**2.4**	**3.6**	**1.5**	**1.1**
Manganese, dissolved	mg/L	**0.49**	**0.13**	**0.10**	**0.072**	**0.28**
Sulfide, dissolved	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Total Organic Carbon	mg/L	**1.1**	**1.1**	**1.6**	**5.0**	**3.9**

Notes:

< = laboratory analytical results not detected exceeding reporting limit

µg/L = micrograms per liter

Bold results = laboratory analytical results detected exceeding reporting limit

mg/L = milligrams per liter

MNA = monitored natural attenuation

Table 3-4. Mann-Kendall Statistical Summary for TCE Concentrations in Monitoring Wells

Former Honeywell Area 10, Arizona

	Historical Data Set						3-Year Data Set						
Well ID	Coefficient of Variation	Mann-Kendall Statitic (S)	Confidence Factor (%)	Concentration Trend	Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Coefficient of Variation	Mann-Kendall Statitic (S)	Confidence Factor (%)	Concentration Trend	Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Are Contingency Actions Required?
MW-1/MW-11	0.60	-166.00	>99.9%	Decreasing	3.60	57	0.37	-4	83%	Stable	3.6	10	No
MW-12	2.44	67.00	99.8%	Increasing	0.20	14	1.44	1	50%	No Trend	1.1	14	No
MW-13	0.45	-25.00	79.7%	Stable	0.20	1.6	0.49	0	41%	Stable	0.2	1.0	No
MW-14	0.87	-129.00	>99.9%	Decreasing	0.20	7.4	0.47	-4	76%	Stable	0.2	0.85	No
MW-15	1.68	44.00	96.2%	Increasing	0.20	10	1.38	4	83%	No Trend	0.2	10	No

µg/L = microgams per liter

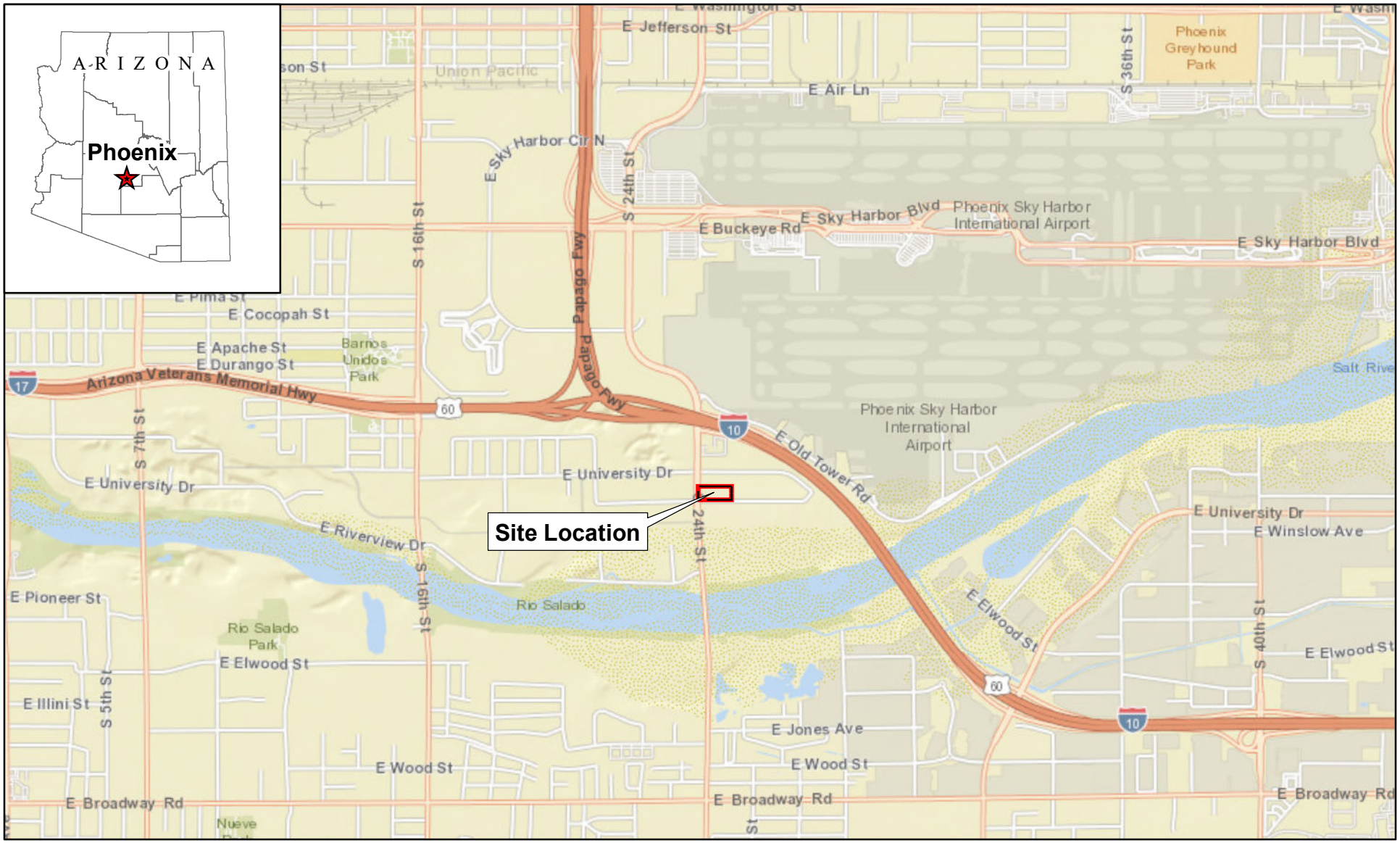
Table 3-5. Mann-Kendall Statistical Summary for 1,1-DCE Concentrations in Monitoring Wells

Former Honeywell Area 10, Arizona

	Historical Data Set						3-Year Data Set						
Well ID	Coefficient of Variation	Mann-Kendall Statitic (S)	Confidence Factor (%)	Concentration Trend	Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Coefficient of Variation	Mann-Kendall Statitic (S)	Confidence Factor (%)	Concentration Trend	Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Are Contingency Actions Required?
MW-1/MW-11	0.70	-150	>99.9%	Decreasing	8.40	160	0.55	-6	95.8%	Decreasing	8.4	34	No
MW-12	1.81	57	99.0%	Increasing	0.20	14	1.35	2	62.5%	No Trend	1.1	14	No
MW-13	0.53	-80	99.8%	Decreasing	0.79	4.7	0.28	-4	75.8%	Stable	0.8	1.5	No
MW-14	0.64	-116	>99.9%	Decreasing	0.74	6.0	0.35	-5	82.1%	Stable	0.7	1.6	No
MW-15	1.82	50	97.9%	Increasing	0.20	16	1.39	4	83.3%	No Trend	0.2	16	No

µg/L = microgams per liter

Figures



LEGEND

Approximate Area 10 Boundary

N

0 0.25 0.5

Approximate scale in miles

Figure 1-1. Site Vicinity Map
Former Honeywell Area 10 Facility
Phoenix, Arizona

Image Source: ESRI Street Map
\\dc1vs01\GISProj\H\Honeywell\Area_10\MapFiles\Sept2020\Fig1-1_Site_Vicinity_Map_Rev1.mxd 11/11/2020 11:31:48 AM

Jacobs

LEGEND

- Groundwater Monitoring Well
- Groundwater Monitoring Well (Abandoned)
- Vapor Extraction Well (Abandoned)
- Approximate Area 10 Boundary

N

0 50 100

Approximate scale in feet

Figure 1-2. Site Map
Former Honeywell Area 10 Facility
Phoenix, Arizona

Image Source: © Google, 2019.
\\dc1vs01\GISProj\H\Honeywell\Area_10\MapFiles\Sept2020\Fig1-2_Site_Map_Rev1.mxd 11/11/2020 11:05:52 AM

Jacobs

Legend

- Groundwater Monitoring Well
- Approximate Area 10 Boundary
- Groundwater Flow Direction
- Groundwater Elevation Contour

Notes:
1. Groundwater elevations are shown in feet above mean sea level.
2. All measurements recorded on September 27, 2024.
3. Imagery Aerial image © Google, 2013.
4. NM = Not measured

N

0 50 100

Feet

Originator: Rajesh M	Rajesh M (signature)
Checked by: Derek Foehr	Derek Foehr (signature)

FIGURE 3-1
Groundwater Elevation Contours
September 2024
Honeywell Area 10 Facility
Phoenix, Arizona

Jacobs

C:\PROJECT_DELIVERABLES\GIS_SITES\HW_AREA10\MAPFILES\2022\SA2-GW\FIG3-1_GWELEV_SEPTEMBER2022_HTSREV0.MXD GANESH 10/28/2022 17:02:24

Legend

- Groundwater Monitoring Well
- Approximate Area 10 Boundary

Notes:

1. All results are in µg/L.
2. AWQS = ADEQ Aquifer Water Quality Standards (AAC Title 18, Ch. 11 R-18-11-406, March 31, 2003)
3. AWQS value for Trichloroethene is 5 µg/L.
4. NS = Not Sampled.
5. Samples collected on September 27, 2024.
6. Imagery Aerial image © Google, 2013.
7. Field duplicates value shown in parentheses.

N

0 50 100

Feet

Originator: Rajesh M	Rajesh M (signature)
Checked by: Derek Foehr	Derek Foehr (signature)

FIGURE 3-2
Trichloroethene
September 2024 Groundwater Results
Honeywell Area 10 Facility
Phoenix, Arizona

Jacobs

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\AREA_10\MAPFILES\2010_SEPT\FIG3-2_TCE_SEPT2010.MXD GANESH 11/19/2010 17:59:01

Legend

- Groundwater Monitoring Well
- Approximate Area 10 Boundary

Notes:

1. All results are in µg/L.
2. AWQS = ADEQ Aquifer Water Quality Standards (AAC Title 18, Ch. 11 R-18-11-406, March 31, 2003)
3. AWQS value for 1,1-Dichloroethene is 7 µg/L.
4. Detected concentrations that exceed the AWQS are in **red**
5. NS = Not Sampled.
6. Samples collected on September 27, 2024.
7. Imagery Aerial image © Google, 2013.
8. Field duplicates value shown in parentheses.

N

0 50 100

Feet

Originator: Rajesh M	Rajesh M (signature)
Checked by: Derek Foehr	Derek Foehr (signature)

FIGURE 3-3
1,1-Dichloroethene
September 2024 Groundwater Results
Honeywell Area 10 Facility
Phoenix, Arizona

Jacobs

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\AREA_10\MAPFILES\2010_SEPT\FIG3-3_DCE_SEPT2010.MXD GANESH 11/19/2010 17:58:51

Legend

- Groundwater Monitoring Well
- Approximate Area 10 Boundary

Notes:

1. All results are in µg/L.
2. NS = Not Sampled.
3. Samples collected on September 27, 2024.
4. Imagery Aerial image © Google, 2013.
5. There is currently no Arizona Aquifer Water Quality Standard for 1,1-Dichloroethane.
6. Field duplicates value shown in parentheses.

N

0 50 100

Feet

Originator: Rajesh M	Rajesh M (signature)
Checked by: Derek Foehr	Derek Foehr (signature)

FIGURE 3-4
1,1-Dichloroethane
September 2024 Groundwater Results
Honeywell Area 10 Facility
Phoenix, Arizona

Jacobs

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\AREA_10\MAPFILES\2010_SEPT\FIG3-4_DCA_SEPT2010.MXD GANESH 11/19/2010 17:58:32

Appendix A
Groundwater Sampling Field Forms

Honeywell Area 10 Groundwater Sampling Field Sheet

Event: 2024 Annual GW Sampling Field Staff: D. Foehr

	Water Level Measurement			PID	PDB Sample Collection		PDB Replacement		FSP Summary	
Well	Date	Time	DTW	ppm	Depth (Circle)	QC Type	Depth (Circle)	QC Type	Depth	QC Type
MW-11	092724	0881	88.11	Ø	(100) 110 120		(100) 110 120		100	MS/MSD
MW-12	092724	0652	87.70	Ø	(100) 110 120		(100) 110 120		100	FD
MW-13	092724	0214	86.19	Ø	(100) 110 120		(100) 110 120		100	REG
MW-14	092724	0358	86.13	Ø	(100) 110 120		(100) 110 120		100	REG
MW-15	092724	0525	88.30	Ø	(100) 110 120		(100) 110 120		100	REG

Trip Blank Collected	☑
Field Blank Collected	☑

FIELD DUPLICATE

REG Sample ID	FD Sample ID
MW-12-24A1-092724	DUP-24A1-092724

Notes:

JACOBS — GROUNDWATER SAMPLING DATA SHEET

WELL ID: MW-11

Project Name:	Honeywell Area 10	Casing Materials:	PVC	Well Depth:	130 ft btoc
Project Number:	HNA10301			Start Water Level:	88.11 ft btoc
Start Date:	9/27/2024	PID Reading:	0 ppm	Water Column:	41.89 ft
Sampling Team:	Derek Foehr	Weather:	Sunny, 100 degrees	Well Diameter:	2 in
				Volume per foot:	0.163 gal/ft
Purge Method:	Low Flow			Well Volume:	6.83 gal
Equipment:	Geo Tech Geo Control Pro			Start Time:	0815
				End Time:	0835
Tubing Materials:	1/4" and 3/8" LDPE			Screened Interval:	90-130 ft btoc
				Pump/Tubing Intake:	100 ft btoc

Diam. (in)	Vol. (gal/ft)
1	0.041
1.25	0.064
2	0.163
4	0.653

WELL STABILIZATION DATA

Time	Volume Removed	pH	SPCOND. (mS/cm)	Temp. (°C)	ORP (mV)	Water level (ft)	D.O. (mg/L)	Turbidity (NTU)	Pumping rate (Lpm)	Appearance
Requirements[1]	(gallons)	+/- 0.1	+/- 3%	+/- 0.2	+/- 10 mV	< 0.3 ft	+/- 10%	<10 or +/- 10%	<0.5LPM	
0820	0.6	7.58	1340	28.17	1120	88.11	1.83	4.8	0.5	clear
0825	1.3	7.57	1340	28.16	1119	88.11	1.81	4.6	0.5	clear
0830	2.0	7.56	1340	28.16	1122	88.11	1.79	3.9	0.5	clear
0835	2.6	7.56	1339	28.15	1125	88.11	1.78	4.0	0.5	clear

SAMPLE INFORMATION

Sample ID:	MW-11-24A1-092724	Primary Laboratory:	Eurofins PHX
Analyses:	See COC	QA/QC Laboratory:	Eurofins PHX
Collection Date:	9/27/2024	Shipment Method:	Drop off at lab
Collection Time:	0835	Well Condition/Comments:	well in good condition
Field Filter? (Y/N):			

[1] Sampling standards adapted from USEPA Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, 2002

JACOBS

GROUNDWATER SAMPLING DATA SHEET

WELL ID: MW-12

Project Name:	Honeywell Area 10	Casing Materials:	PVC	Well Depth:	130 ft btoc
Project Number:	HNA10301			Start Water Level:	87.70 ft btoc
Start Date:	9/27/2024	PID Reading:	0 ppm	Water Column:	42.3 ft
Sampling Team:	Derek Foehr	Weather:	Sunny, 100 degrees	Well Diameter:	2 in
				Volume per foot:	0.163 gal/ft
Purge Method:	Low Flow			Well Volume:	6.89 gal
Equipment:	Geo Tech Geo Control Pro			Start Time:	0640
				End Time:	0700
Tubing Materials:	1/4" and 3/8" LDPE			Screened Interval:	90-130 ft btoc
				Pump/Tubing Intake:	100 ft btoc

Diam. (in)	Vol. (gal/ft)
1	0.041
1.25	0.064
2	0.163
4	0.653

WELL STABILIZATION DATA

Time	Volume Removed	pH	SPCOND. (mS/cm)	Temp. (°C)	ORP (mV)	Water level (ft)	D.O. (mg/L)	Turbidity (NTU)	Pumping rate (Lpm)	Appearance
Requirements[1]	(gallons)	+/- 0.1	+/- 3%	+/- 0.2	+/- 10 mV	< 0.3 ft	+/- 10%	<10 or +/- 10%	<0.5LPM	
0645	0.6	7.22	1190	28.17	213.7	87.70	2.0	2.1	0.5	clear
0650	1.3	7.20	1194	28.16	214.2	87.70	2.1	3.7	0.5	clear
0655	2.0	7.20	1187	28.16	214.9	87.70	2.0	3.2	0.5	clear
0700	2.6	7.20	1191	28.16	214.5	87.70	2.0	3.0	0.5	clear

SAMPLE INFORMATION

Sample ID:	MW-12-24A1-092724	Primary Laboratory:	Eurofins PHX
Analyses:	See COC	QA/QC Laboratory:	Eurofins PHX
Collection Date:	9/27/2024	Shipment Method:	Drop off at lab
Collection Time:	0700	Well Condition/Comments:	well in good condition
Field Filter? (Y/N):			

[1] Sampling standards adapted from USEPA Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, 2002

JACOBS — GROUNDWATER SAMPLING DATA SHEET

WELL ID: MW-13

Project Name:	Honeywell Area 10	Casing Materials:	PVC	Well Depth:	130 ft btoc
Project Number:	HNA10301			Start Water Level:	86.19 ft btoc
Start Date:	9/27/2024	PID Reading:	0 ppm	Water Column:	43.8 ft
Sampling Team:	Derek Foehr	Weather:	Sunny, 100 degrees	Well Diameter:	2 in
				Volume per foot:	0.163 gal/ft
Purge Method:	Low Flow			Well Volume:	7.14 gal
Equipment:	Geo Tech Geo Control Pro			Start Time:	0210
				End Time:	0230
Tubing Materials:	1/4" and 3/8" LDPE			Screened Interval:	90-130 ft btoc
				Pump/Tubing Intake:	100 ft btoc

Diam. (in)	Vol. (gal/ft)
1	0.041
1.25	0.064
2	0.163
4	0.653

WELL STABILIZATION DATA

Time	Volume Removed	pH	SPCOND. (mS/cm)	Temp. (°C)	ORP (mV)	Water level (ft)	D.O. (mg/L)	Turbidity (NTU)	Pumping rate (Lpm)	Appearance
Requirements[1]	(gallons)	+/- 0.1	+/- 3%	+/- 0.2	+/- 10 mV	< 0.3 ft	+/- 10%	<10 or +/- 10%	<0.5LPM	
0215	0.6	7.30	1180	28.17	202.7	86.19	3.15	4.6	0.5	clear
0220	1.3	7.30	1171	28.16	203.4	86.19	3.17	5.1	0.5	clear
0225	2.0	7.29	1170	28.16	203.5	86.19	3.18	4.7	0.5	clear
0230	2.6	7.29	1168	28.15	203.8	86.19	3.18	4.8	0.5	clear

SAMPLE INFORMATION

Sample ID:	MW-13-24A1-092724	Primary Laboratory:	Eurofins PHX
Analyses:	See COC	QA/QC Laboratory:	Eurofins PHX
Collection Date:	9/27/2024	Shipment Method:	Drop off at lab
Collection Time:	0230	Well Condition/Comments:	well in good condition
Field Filter? (Y/N):			

[1] Sampling standards adapted from USEPA Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, 2002

JACOBS — GROUNDWATER SAMPLING DATA SHEET

WELL ID: MW-14

Project Name:	Honeywell Area 10	Casing Materials:	PVC	Well Depth:	130 ft btoc
Project Number:	HNA10301			Start Water Level:	86.13 ft btoc
Start Date:	9/27/2024	PID Reading:	0 ppm	Water Column:	43.9 ft
Sampling Team:	Derek Foehr	Weather:	Sunny, 100 degrees	Well Diameter:	2 in
				Volume per foot:	0.163 gal/ft
Purge Method:	Low Flow			Well Volume:	7.15 gal
Equipment:	Geo Tech Geo Control Pro			Start Time:	0341
				End Time:	0401
Tubing Materials:	1/4" and 3/8" LDPE			Screened Interval:	90-130 ft btoc
				Pump/Tubing Intake:	100 ft btoc

Diam. (in)	Vol. (gal/ft)
1	0.041
1.25	0.064
2	0.163
4	0.653

WELL STABILIZATION DATA

Time	Volume Removed	pH	SPCOND. (mS/cm)	Temp. (°C)	ORP (mV)	Water level (ft)	D.O. (mg/L)	Turbidity (NTU)	Pumping rate (Lpm)	Appearance
Requirements[1]	(gallons)	+/- 0.1	+/- 3%	+/- 0.2	+/- 10 mV	< 0.3 ft	+/- 10%	<10 or +/- 10%	<0.5LPM	
0346	0.6	7.24	2002	28.18	200.1	86.13	3.11	2.6	0.5	clear
0351	1.3	7.23	2000	28.16	198.9	86.13	3.08	1.9	0.5	clear
0356	2.0	7.22	2000	28.16	198.8	86.13	3.09	2.6	0.5	clear
0401	2.6	7.22	1998	28.16	199.4	86.13	3.09	2.4	0.5	clear

SAMPLE INFORMATION

Sample ID:	MW-14-24Al_092724	Primary Laboratory:	Eurofins PHX
Analyses:	See COC	QA/QC Laboratory:	Eurofins PHX
Collection Date:	9/27/2024	Shipment Method:	Drop off at lab
Collection Time:	0401	Well Condition/Comments:	well in good condition
Field Filter? (Y/N):			

[1] Sampling standards adapted from USEPA Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, 2002

JACOBS

GROUNDWATER SAMPLING DATA SHEET

WELL ID: MW-15

Project Name:	Honeywell Area 10	Casing Materials:	PVC	Well Depth:	130 ft btoc
Project Number:	HNA10301			Start Water Level:	88.30 ft btoc
Start Date:	9/27/2024	PID Reading:	0 ppm	Water Column:	41.7 ft
Sampling Team:	Derek Foehr	Weather:	Sunny, 100 degrees	Well Diameter:	2 in
				Volume per foot:	0.163 gal/ft
Purge Method:	Low Flow			Well Volume:	6.8 gal
Equipment:	Geo Tech Geo Control Pro			Start Time:	0512
				End Time:	0532
Tubing Materials:	1/4" and 3/8" LDPE			Screened Interval:	90-130 ft btoc
				Pump/Tubing Intake:	100 ft btoc

Diam. (in)	Vol. (gal/ft)
1	0.041
1.25	0.064
2	0.163
4	0.653

WELL STABILIZATION DATA

Time	Volume Removed	pH	SPCOND. (mS/cm)	Temp. (°C)	ORP (mV)	Water level (ft)	D.O. (mg/L)	Turbidity (NTU)	Pumping rate (Lpm)	Appearance
Requirements[1]	(gallons)	+/- 0.1	+/- 3%	+/- 0.2	+/- 10 mV	< 0.3 ft	+/- 10%	<10 or +/- 10%	<0.5LPM	
0517	0.6	7.02	1150	28.17	291	88.30	3.0	2.1	0.5	clear
0522	1.3	7.02	1141	28.15	283	88.30	2.9	2.0	0.5	clear
0527	2.0	7.01	1140	28.15	282	88.30	2.8	2.4	0.5	clear
0532	2.6	7.01	1140	28.15	281	88.30	2.8	2.1	0.5	clear

SAMPLE INFORMATION

Sample ID:	MW-15-2441-092724	Primary Laboratory:	Eurofins PHX
Analyses:	See COC	QA/QC Laboratory:	Eurofins PHX
Collection Date:	9/27/2024	Shipment Method:	Drop off at lab
Collection Time:	0532	Well Condition/Comments:	well in good condition
Field Filter? (Y/N):			

[1] Sampling standards adapted from USEPA Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, 2002

Appendix B
Historical Groundwater Elevations and Analytical Results

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-1	1/1/1989	--	--	440	47	102	--	--	65	--
MW-1	7/1/1989	--	--	8,700	300	1,300	--	--	280	--
MW-1	10/1/1989	--	--	9,060	--	1,545	--	--	--	--
MW-1	1/1/1990	--	--	4,310	120	638	--	--	225	--
MW-1	8/1/1990	--	--	1,300	27	400	--	--	210	--
MW-1	11/1/1990	--	--	1,100	72	650	--	--	400	--
MW-1	1/2/1991	1030.49	67.19	--	--	--	--	--	--	--
MW-1	2/1/1991	--	--	510	29	250	--	--	131	--
MW-1	2/6/1991	1030.33	67.35	--	--	--	--	--	--	--
MW-1	3/8/1991	1030.56	67.12	--	--	--	--	--	--	--
MW-1	5/1/1991	--	--	2,100	32	780	--	--	140	--
MW-1	12/1/1993	--	--	73	120	220	--	--	4	--
MW-1	4/1/1994	--	--	--	--	--	--	--	2	--
MW-1	6/1/1994	1042.67	55.01	--	--	--	--	--	6	--
MW-1	10/1/1994	1040.70	56.98	--	--	--	--	--	2	--
MW-1	1/1/1995	1044.99	52.69	--	--	--	--	--	--	--
MW-1	4/1/1995	1052.78	44.90	--	--	--	--	--	1	--
MW-1	7/1/1995	1047.13	50.55	--	--	--	--	--	--	--
MW-1	10/1/1995	1046.47	51.21	--	--	--	--	--	3	--
MW-1	1/1/1996	--	--	17	33	36	3	8	1	--
MW-1	4/1/1996	1043.40	54.28	630	150	260	13	30	25U	--
MW-1	7/1/1996	1041.55	56.13	850	270	570	30	100	30	--
MW-1	10/1/1996	1040.97	56.71	1,400	460	1,200	33	200	20	--
MW-1	1/1/1997	1037.39	60.29	990	540	1,300	47	190	45	1.6
MW-1	4/1/1997	1036.11	61.57	160	180	260	18	67	22	--
MW-1	4/1/1998	1036.23	61.45	230	110	650	12	80	310	--
MW-1	7/1/1998	1035.92	61.76	130	130	350	25U	63	170	--
MW-1	10/1/1998	1035.27	62.41	470	230	600	18	96	180	--
MW-1	4/1/1999	1032.60	65.08	130	150	530	13	58	54	10U
MW-1	7/1/1999	1031.77	65.91	64	140	410	9	54	26	2.5U
MW-1	10/1/1999	1031.01	66.67	46	110	310	7	45	15	2.5U
MW-1	1/1/2000	1028.35	69.33	38	18	100	1	7	8	0.5U
MW-1	4/1/2000	1028.30	69.38	49	32	110	3	12	9	0.5U
MW-1	10/1/2000	1026.35	71.33	35	11	38	1	4	5	0.5U
MW-1	1/1/2001	1026.69	70.99	27	12	40	1	4	14	0.5U
MW-1	4/1/2001	1029.45	68.23	39	20	89	2	7	23	0.5U
MW-1	7/1/2001	1026.78	70.90	47	12	40	1	4	6	0.5U
MW-1	10/1/2001	1024.97	72.71	6	3	11	0.5U	1	3	0.5U
MW-1	4/1/2005	--	--	120	100	240	11	38	56	0.5U
MW-1	4/5/2005	--	--	120	100	240	11	38	56	--
MW-1	4/7/2005	1023.57	74.11	--	--	--	--	--	--	--
MW-1	4/15/2005	1023.48	74.20	--	--	--	--	--	--	--
MW-1	4/20/2005	--	--	120	100	240	11	38	56	0.50U
MW-1	12/11/2008	1021.47	76.21	--	--	--	--	--	--	--
MW-1	3/23/2009	1023.32	74.36	--	--	--	--	--	--	--
MW-1	4/14/2009	1024.50	73.18	20	34	86J	5	14	36	0.8U
MW-1	8/6/2009	1022.93	74.75	--	--	--	--	--	--	--
MW-1	9/4/2009	1022.32	75.36	--	--	--	--	--	--	--
MW-1	9/25/2009	1022.04	75.64	97J	110	160	11	44J	57	0.5U
MW-1	4/6/2010	--	--	14	22	65	2	8	29	0.5U
MW-1	9/7/2010	1031.63	66.05	--	--	--	--	--	--	--
MW-1	9/28/2010	1032.11	65.57	71	81	110	4	40	38	1.0U

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
		Aquifer Water Quality Standard:		*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-1	3/21/2011	1023.61	74.07	64	74	79	0.5U	28	41	0.5U
MW-1	9/28/2011	1022.39	75.29	24J	64J	65J	5	19J	30	0.7U
MW-1	3/29/2012	--	Dry	--	--	--	--	--	--	--
MW-1	9/19/2012	--	Dry	--	--	--	--	--	--	--
MW-1	3/28/2013	--	Dry	--	--	--	--	--	--	--
MW-1	9/30/2013	--	Dry	--	--	--	--	--	--	--
MW-1	3/31/2014	--	Dry	--	--	--	--	--	--	--
MW-1	9/30/2014	--	Dry	--	--	--	--	--	--	--
MW-1	5/5/2015	--	Dry	--	--	--	--	--	--	--
MW-1	9/11/2015	--	Dry	--	--	--	--	--	--	--
MW-1	5/25/2016	--	Dry	--	--	--	--	--	--	--
MW-1	10/27/2016	Well has been abandoned								

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

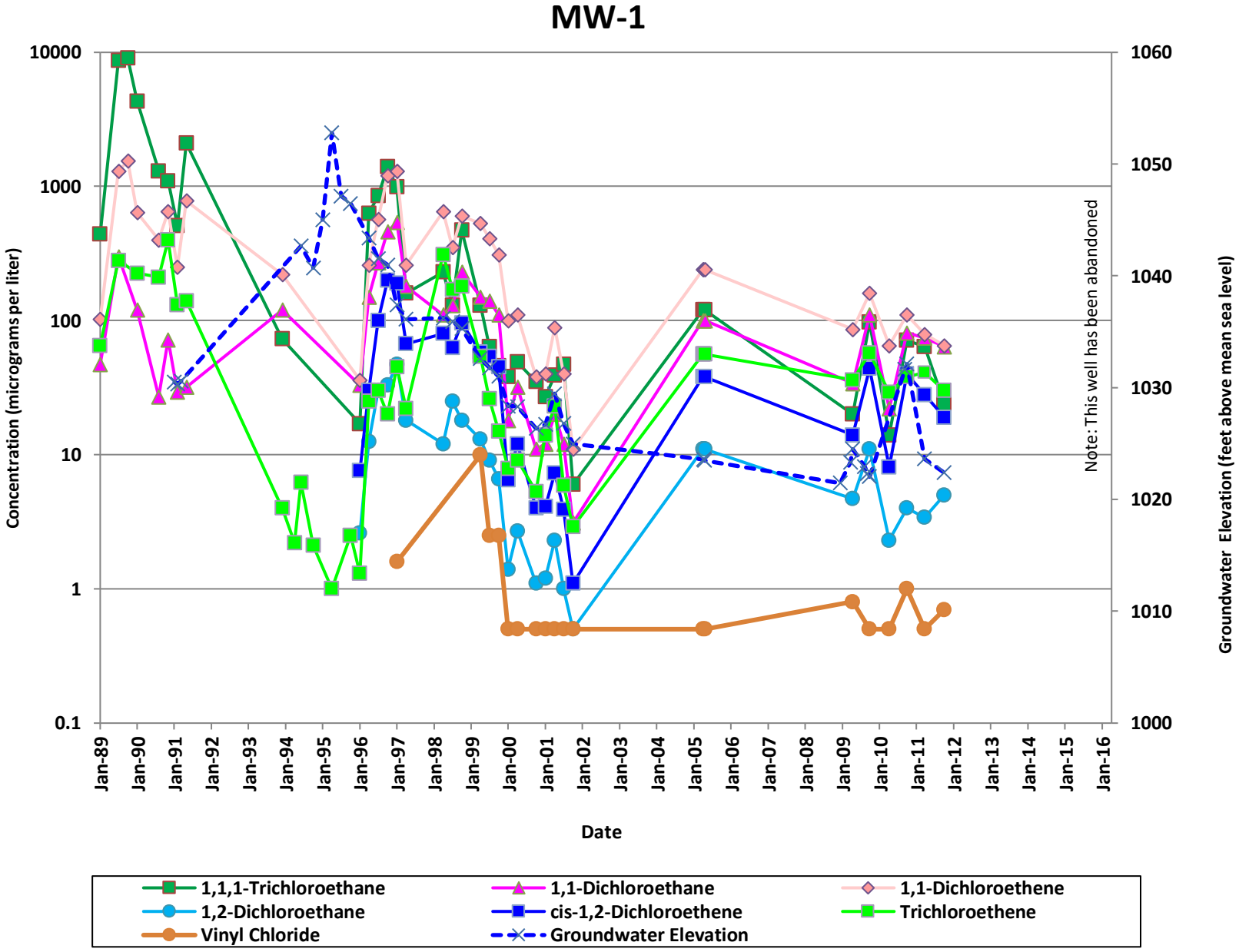
J = estimated value

NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter


MW-1
Concentration (micrograms per liter)
10000
1000
100
10
1
0.1
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date
Note: This well has been abandoned
Groundwater Elevation (feet above mean sea level)
1060
1050
1040
1030
1020
1010
1000
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-2	1/1/1989	--	--	560	40	380	--	--	370	--
MW-2	7/1/1989	--	--	800	26	1200	--	--	1000	--
MW-2	10/1/1989	--	--	583	--	530	--	--	718	--
MW-2	1/1/1990	--	--	136	6.6	160	--	--	39	--
MW-2	8/1/1990	--	--	9	--	51	--	--	16	--
MW-2	11/1/1990	--	--	36	11	46	--	--	14	--
MW-2	1/2/1991	1030.57	67.35	--	--	--	--	--	--	--
MW-2	2/1/1991	--	--	22.5	7.3	43.6	--	--	42.7	--
MW-2	2/6/1991	1030.39	67.53	--	--	--	--	--	--	--
MW-2	3/8/1991	1030.68	67.24	--	--	--	--	--	--	--
MW-2	5/1/1991	--	--	115	5	280	--	--	108	--
MW-2	12/1/1993	--	--	20	15	360	--	--	260	--
MW-2	4/1/1994	--	--	--	--	--	--	--	5.8	--
MW-2	6/1/1994	1042.82	55.10	--	--	--	--	--	45	--
MW-2	10/1/1994	1040.77	57.15	--	--	--	--	--	170	--
MW-2	1/1/1995	1045.16	52.76	--	--	--	--	--	--	--
MW-2	4/1/1995	1052.92	45.00	--	--	--	--	--	5.9	--
MW-2	7/1/1995	1047.29	50.63	--	--	--	--	--	--	--
MW-2	10/1/1995	1046.48	51.44	--	--	--	--	--	12	--
MW-2	1/1/1996	--	--	4.5	33	120	2.2	2	130	--
MW-2	4/1/1996	1043.53	54.39	69	15	270	5.2	3	200	--
MW-2	7/1/1996	1041.71	56.21	80	20	250	5U	5U	230	--
MW-2	10/1/1996	1041.10	56.82	79	21	340	0.5U	4	190	--
MW-2	1/1/1997	1037.49	60.43	22	15	190	4.8	5.2	170	0.5U
MW-2	4/1/1997	1036.17	61.75	9.9	7.7	120	2.3	4.9	110	--
MW-2	4/1/1998	1036.24	61.68	2	0.6	14	0.5U	0.5U	8	--
MW-2	7/1/1998	1035.89	62.03	17	5.9	110	3	4.4	74	--
MW-2	10/1/1998	1035.51	62.41	14	5.4	85	1.3	2.4	57	--
MW-2	4/1/1999	1032.64	65.28	5.2	1.9	34	0.5U	0.6	20	0.5U
MW-2	7/1/1999	1031.65	66.27	1.2	0.5U	6.3	0.5U	0.5U	3.1	0.5U
MW-2	10/1/1999	1031.02	66.90	3.9	0.8	12	0.5U	0.5U	5.3	0.5U
MW-2	1/1/2000	1028.28	69.64	4.2	0.5U	4.7	0.5U	0.5U	1.9	0.5U
MW-2	4/1/2000	1028.25	69.67	8.5	1.4	15	0.5U	0.5U	4.9	0.5U
MW-2	10/1/2000	1026.46	71.46	1.5	0.5	4.7	0.5U	0.5U	2.8	0.5U
MW-2	1/1/2001	1026.80	71.12	1.3	0.5U	3.4	0.5U	0.5U	2.6	0.5U
MW-2	4/1/2001	1029.51	68.41	1.8	0.6	5.9	0.5U	0.5U	2.5	0.5U
MW-2	7/1/2001	1026.85	71.07	0.5U	0.5U	1.5	0.5U	0.5U	1	0.5U
MW-2	10/1/2001	1025.07	72.85	0.5U	0.5U	1.6	0.5U	0.5U	1.1	0.5U
MW-2	1/1/2002	--	--	2.3	0.5	8.7	0.5U	0.5U	5.6	0.5U
MW-2	4/1/2005	--	--	16	23	160	1.9	5.6	91	0.5U
MW-2	4/5/2005	--	--	16	23	160	1.9	5.6	91	--
MW-2	4/20/2005	--	--	16	23	160	1.9	5.6	91	0.50U
MW-2	3/23/2009	1023.53	74.39	--	--	--	--	--	--	--
MW-2	4/14/2009	1024.77	73.15	2.9	23	160	2.4	7.1	140	1.3U
MW-2	8/6/2009	1023.07	74.85	--	--	--	--	--	--	--
MW-2	9/4/2009	1022.44	75.48	--	--	--	--	--	--	--
MW-2	9/25/2009	1022.18	75.74	17	94	390	6.4	27	190	2.5U
MW-2	4/6/2010	--	--	2.7J	21J	130J	1.9	6.5J	110	1.0U
MW-2	9/7/2010	1031.76	66.16	--	--	--	--	--	--	--
MW-2	4/14/2009	1024.77	65.66	2.9	23	160	2.4	7.1	140	1.3U
MW-2	9/28/2010	1032.26	73.15	0.6	11	75	0.9	4.4	56	0.5U
MW-2	3/21/2011	1023.75	74.17	0.6	15	93	1	5.9	62	0.5UJ

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-2	9/28/2011	1022.56	75.36	5.5	60J	230	3.9	20J	110	0.5U
MW-2	3/29/2012	1020.09	77.83	--	--	--	--	--	--	--
MW-2	9/19/2012	--	--	--	--	--	--	--	--	--
MW-2	3/28/2013	--	--	--	--	--	--	--	--	--
MW-2	9/30/2013	--	--	--	--	--	--	--	--	--
MW-2	3/31/2014	--	--	--	--	--	--	--	--	--
MW-2	9/30/2014	--	--	--	--	--	--	--	--	--
MW-2	5/5/2015	--	--	--	--	--	--	--	--	--
MW-2	9/11/2015	--	--	--	--	--	--	--	--	--
MW-2	5/25/2016	--	--	--	--	--	--	--	--	--
MW-2	10/27/2016	Well has been abandoned								

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

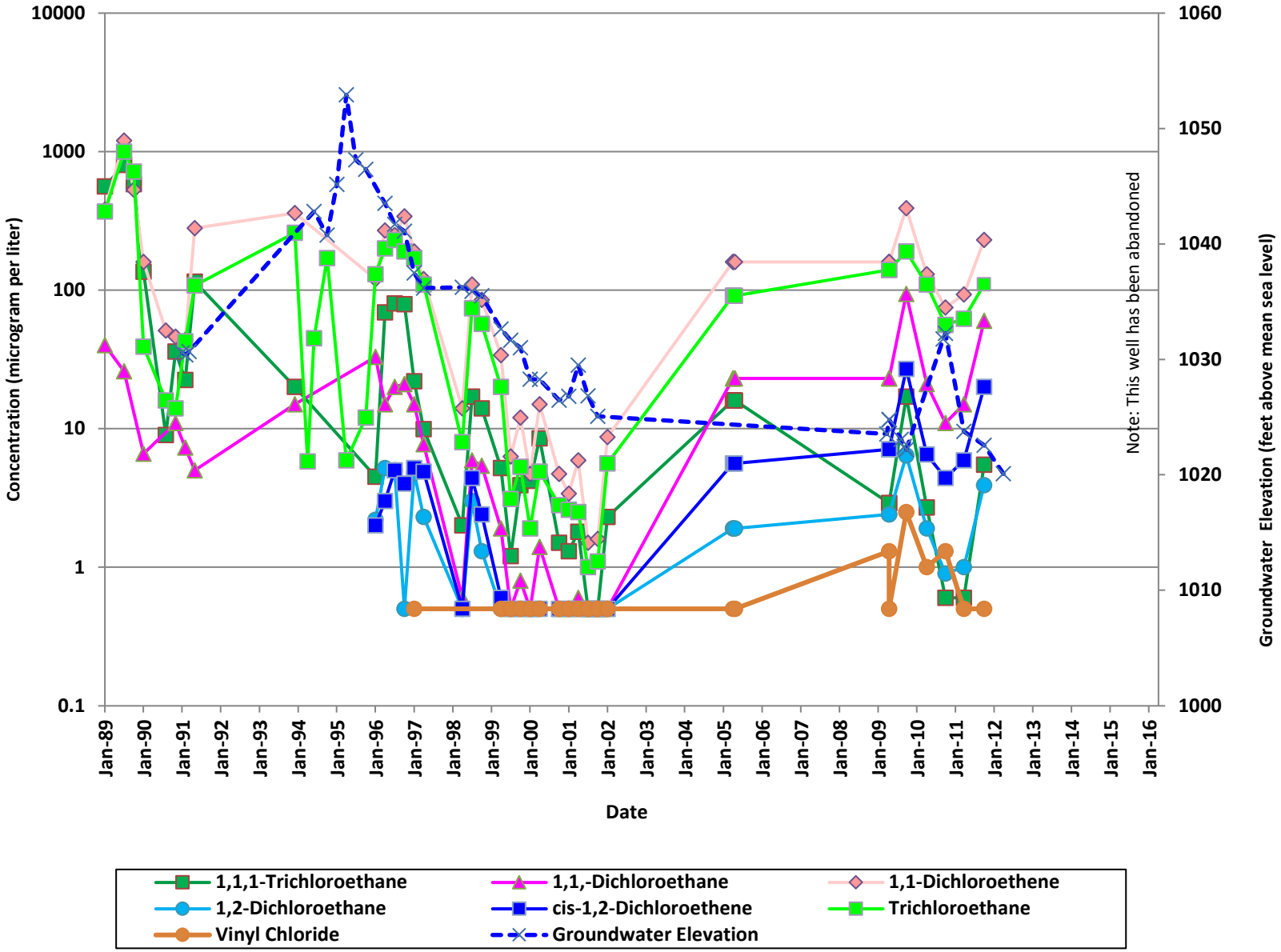
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-2


10000
1000
100
10
1
0.1
Concentration (microgram per liter)
1060
1050
1040
1030
1020
1010
1000
Groundwater Elevation (feet above mean sea level)
Note: This well has been abandoned
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date
1,1,1-Trichloroethane
1,1,-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethane
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-3	1/1/1989	--	--	130	--	160	--	--	33	--
MW-3	7/1/1989	--	--	110	2	240	--	--	43	--
MW-3	10/1/1989	--	--	72	--	60	--	--	16.7	--
MW-3	1/1/1990	--	--	76.4	1U	129	--	--	15.1	--
MW-3	8/1/1990	--	--	76	2.7	220	--	--	40	--
MW-3	11/1/1990	--	--	18	1.1	88	--	--	33	--
MW-3	1/2/1991	1030.56	66.36	--	--	--	--	--	--	--
MW-3	2/1/1991	--	--	22.3	1.3	117	--	--	62.3	--
MW-3	2/6/1991	1030.34	66.58	--	--	--	--	--	--	--
MW-3	3/8/1991	1030.70	66.22	--	--	--	--	--	--	--
MW-3	5/1/1991	--	--	48.5	--	140	--	--	20.1	--
MW-3	12/1/1993	--	--	17	4.2	30	--	--	140	--
MW-3	4/1/1994	--	--	--	--	--	--	--	1	--
MW-3	6/1/1994	1042.37	54.55	--	--	--	--	--	2.7	--
MW-3	10/1/1994	1040.62	56.30	--	--	--	--	--	3.1	--
MW-3	1/1/1995	1045.04	51.88	--	--	--	--	--	--	--
MW-3	4/1/1995	1052.95	43.97	--	--	--	--	--	57	--
MW-3	7/1/1995	1047.17	49.75	--	--	--	--	--	--	--
MW-3	10/1/1995	1046.37	50.55	--	--	--	--	--	0.5	--
MW-3	1/1/1996	--	--	0.5	0.5U	2.4	0.5U	0.5U	0.6	--
MW-3	4/1/1996	1043.29	53.63	25	2.2	9.9	0.5U	0.5U	2.5	--
MW-3	7/1/1996	1041.51	55.41	24	1.8	4.8	0.5U	0.5U	1	--
MW-3	10/1/1996	1040.99	55.93	19	1.7	4.8	0.5	0.5	1.2	--
MW-3	1/1/1997	1037.24	59.68	11	1.6	6.2	0.5U	1.2	22	0.5U
MW-3	4/1/1997	1035.94	60.98	3.4	1U	5.6	0.5U	3	57	--
MW-3	7/1/1997	1033.75	63.17	2	1U	3	0.5U	1.8	40	--
MW-3	10/24/1997	1033.72	63.20	--	--	--	--	--	--	--
MW-3	4/1/1998	1036.19	60.73	1	1U	2.4	1U	2.2	50	--
MW-3	7/1/1998	1035.77	61.15	2.9	0.7	4.6	0.5U	2	44	--
MW-3	10/1/1998	1035.21	61.71	20	2.7	3.6	0.5U	0.5U	1.7	--
MW-3	1/1/1999	--	--	2.8	0.8	2.1	0.5U	0.6	24	--
MW-3	4/1/1999	1032.61	64.31	1.9	0.6	2.2	0.5U	0.6	25	0.5U
MW-3	7/1/1999	1031.60	65.32	0.9	0.5U	1	0.5U	0.6U	13	0.5U
MW-3	10/1/1999	1030.85	66.07	1.1	0.5U	2.2	0.5U	0.5U	16	0.5U
MW-3	1/1/2000	1028.15	68.77	1.1	0.5U	2.8	0.5U	0.5	21	0.5U
MW-3	4/1/2000	1028.09	68.83	0.6	0.5U	1.7	0.5U	0.5	11	0.5U
MW-3	7/1/2000	--	--	0.5U	0.5U	1.1	0.5U	0.5U	6	0.5U
MW-3	10/1/2000	1025.41	71.51	0.5U	0.5U	1	0.5U	0.5U	5.5	0.5U
MW-3	1/1/2001	1026.67	70.25	0.5U	0.5U	1.4	0.5U	0.5U	7	0.5U
MW-3	4/1/2001	1029.44	67.48	0.5U	0.5U	1.5	0.5U	0.5U	5.3	0.5U
MW-3	7/1/2001	1026.73	70.19	0.5U	0.5U	0.8	0.5U	0.5U	2.7	0.5U
MW-3	10/1/2001	1024.92	72.00	0.5U	0.5U	0.6	0.5U	0.5U	1.4	0.5U
MW-3	1/1/2002	--	--	0.9	0.5U	1	0.5U	0.5U	5.1	0.5U
MW-3	3/31/2005	1023.29	73.63	--	--	--	--	--	--	--
MW-3	4/1/2005	--	--	1	0.98	3.2	0.5U	2.5	46	0.5U
MW-3	4/5/2005	--	--	1	0.98	3.2	0.5U	2.5	46	--
MW-3	4/7/2005	1023.78	73.14	--	--	--	--	--	--	--
MW-3	4/15/2005	1023.54	73.38	--	--	--	--	--	--	--
MW-3	4/20/2005	--	--	1	0.98	3.2	0.5U	2.5	46	0.50U
MW-3	12/11/2008	1021.08	75.84	--	--	--	--	--	--	--
MW-3	3/23/2009	1023.07	73.85	--	--	--	--	--	--	--
MW-3	4/14/2009	1024.45	72.47	3.6	7.9	34	1.3U	23	200	1.3U

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
		Aquifer Water Quality Standard:		*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-3	8/6/2009	1022.52	74.40	--	--	--	--	--	--	--
MW-3	9/4/2009	1021.91	75.01	--	--	--	--	--	--	--
MW-3	9/25/2009	1021.72	75.20	2.3	2.3J	11	1U	3.9	43	1U
MW-3	4/6/2010	--	--	0.5U	0.5U	6.1	0.5U	1.1	14	0.5U
MW-3	9/7/2010	1031.55	65.37	--	--	--	--	--	--	--
MW-3	9/28/2010	1032.01	64.91	0.5	1.9	11	0.5U	3.6	26	0.5U
MW-3	3/21/2011	1023.37	73.55	0.7	1.8	13	0.50U	5.1	35	0.5U
MW-3	9/28/2011	1022.20	74.72	0.7	2.2	11	0.5U	5.7	34	0.5U
MW-3	3/29/2012	1019.13	77.79	--	--	--	--	--	--	--
MW-3	9/19/2012	--	--	--	--	--	--	--	--	--
MW-3	3/28/2013	--	--	--	--	--	--	--	--	--
MW-3	9/30/2013	--	--	--	--	--	--	--	--	--
MW-3	3/31/2014	--	--	--	--	--	--	--	--	--
MW-3	9/30/2014	--	--	--	--	--	--	--	--	--
MW-3	5/5/2015	--	--	--	--	--	--	--	--	--
MW-3	9/11/2015	--	--	--	--	--	--	--	--	--
MW-3	5/25/2016	--	--	--	--	--	--	--	--	--
MW-3	10/27/2016			This well is no longer in the monitoring program						

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

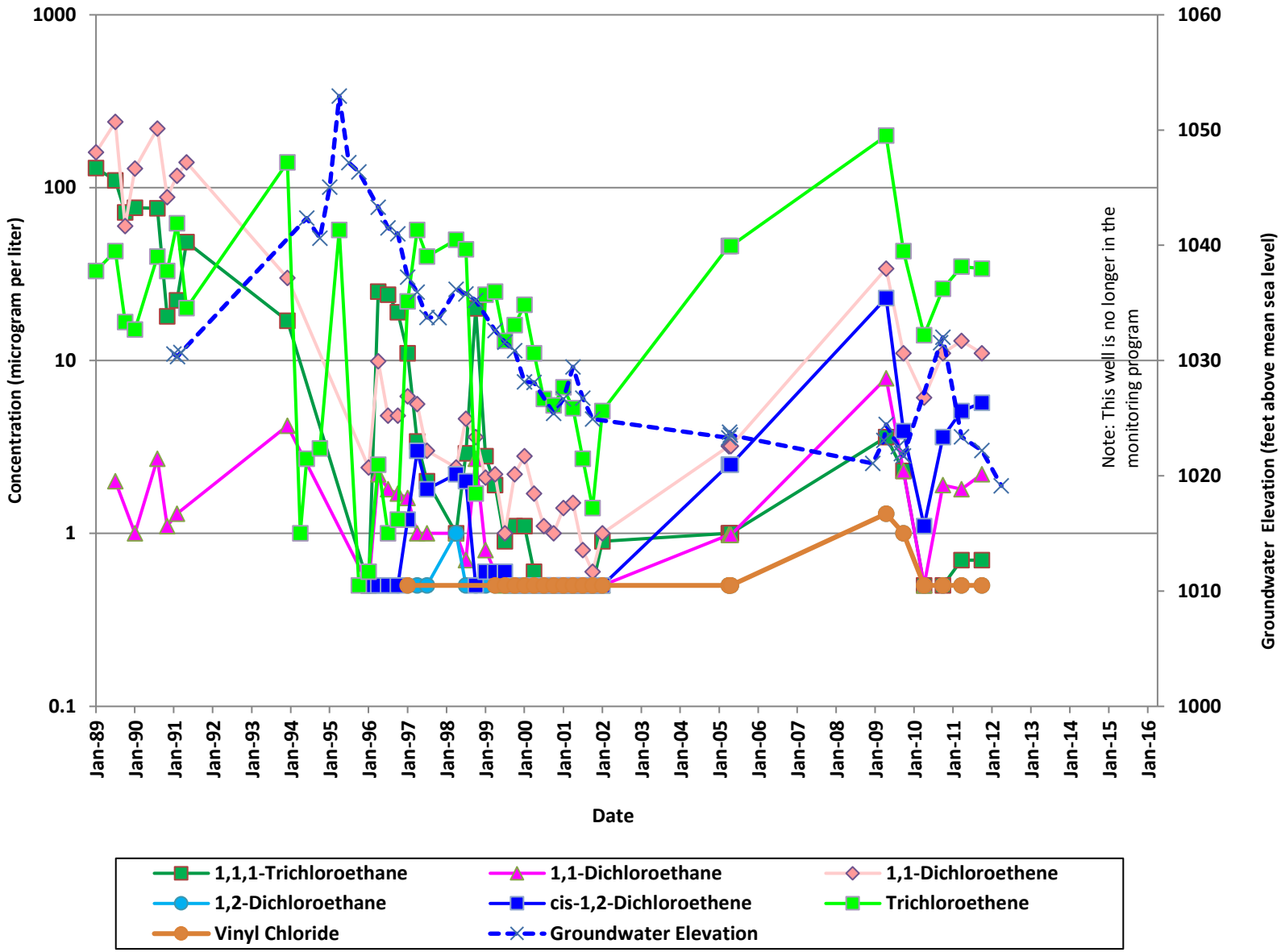
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-3


1000
100
10
1
0.1
Concentration (microgram per liter)
1060
1050
1040
1030
1020
1010
1000
Groundwater Elevation (feet above mean sea level)
Note: This well is no longer in the monitoring program
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-4	1/1/1989	--	--	290	--	170	--	--	83	--
MW-4	7/1/1989	--	--	670	2	980	--	--	180	--
MW-4	10/1/1989	--	--	274	--	289	--	--	95.7	--
MW-4	1/1/1990	--	--	108	1U	200	--	--	70.2	--
MW-4	8/1/1990	--	--	23	2.7	110	--	--	60	--
MW-4	11/1/1990	--	--	39	1.1	110	--	--	55	--
MW-4	1/2/1991	1029.98	67.19	--	--	--	--	--	--	--
MW-4	2/1/1991	--	--	89.2	1.3	274	--	--	66.6	--
MW-4	2/6/1991	1029.83	67.34	--	--	--	--	--	--	--
MW-4	3/8/1991	1030.02	67.15	--	--	--	--	--	--	--
MW-4	5/1/1991	--	--	140	--	570	--	--	108	--
MW-4	12/1/1993	--	--	90	4.2	310	--	--	75	--
MW-4	4/1/1994	--	--	--	--	--	--	--	21	--
MW-4	6/1/1994	1042.27	54.90	--	--	--	--	--	7.2	--
MW-4	10/1/1994	1040.25	56.92	--	--	--	--	--	13	--
MW-4	1/1/1995	1044.47	52.70	--	--	--	--	--	--	--
MW-4	4/1/1995	1052.22	44.95	--	--	--	--	--	37	--
MW-4	7/1/1995	1046.72	50.45	--	--	--	--	--	--	--
MW-4	10/1/1995	1045.87	51.30	--	--	--	--	--	21	--
MW-4	1/1/1996	--	--	33	13	110	2.9	5.8	16	--
MW-4	4/1/1996	1042.88	54.29	17	5.1	35	0.5U	3.4	33	--
MW-4	7/1/1996	1041.00	56.17	13	7.4	41	0.6	5.2	45	--
MW-4	10/1/1996	1040.42	56.75	13	12	62	1U	6.8	50	--
MW-4	1/1/1997	1036.91	60.26	41	27	90	0.5U	14	53	0.5U
MW-4	4/1/1997	1035.88	61.29	25	18	100	2.1	9.9	28	--
MW-4	4/1/1998	1035.96	61.21	57	16	210	2.5	17	140	--
MW-4	7/1/1998	1035.31	61.86	45	28	220	3.7	16	100	--
MW-4	10/1/1998	1034.92	62.25	60	31	310	3	19	150	--
MW-4	4/1/1999	1032.37	64.80	16	13	62	1.2	5.8	26	0.5U
MW-4	7/1/1999	1031.25	65.92	7.7	6.4	20	0.6	2.5	16	0.5U
MW-4	10/1/1999	1030.47	66.70	4.7	7.8	30	0.7	3.6	13	0.5U
MW-4	1/1/2000	1027.69	69.48	2.5	2.7	24	0.5U	1.1	8.3	0.5U
MW-4	4/1/2000	1027.58	69.59	3.9	3.5	41	0.5U	1.5	14	0.5U
MW-4	10/1/2000	1025.66	71.51	--	--	--	--	--	--	--
MW-4	1/1/2001	1026.03	71.14	5.1	5.7	8.9	0.5U	0.5U	18	0.5U
MW-4	4/1/2001	1029.27	67.90	3.3	4.2	32	0.5U	1.5	14	0.5U
MW-4	7/1/2001	1026.37	70.80	3.4	4.9	1.4	0.5U	1.3	13	0.5U
MW-4	10/1/2001	1024.56	72.61	4.5	4.9	34	0.5U	1.2	7.5	0.5U
MW-4	1/1/2002	1022.47	74.70	--	--	--	--	--	--	--
MW-4	4/1/2005	--	--	21	49	83	2.7	8.6	42	0.5U
MW-4	4/7/2005	1023.26	73.91	--	--	--	--	--	--	--
MW-4	4/15/2005	1022.93	74.24	--	--	--	--	--	--	--
MW-4	4/20/2005	--	--	21	49	83	2.7	8.6	42	0.50U
MW-4	12/11/2008	1021.87	75.30	--	--	--	--	--	--	--
MW-4	3/23/2009	1022.85	74.32	--	--	--	--	--	--	--
MW-4	4/14/2009	1024.07	73.10	--	--	--	--	--	--	--
MW-4	8/6/2009	1022.31	74.86	--	--	--	--	--	--	--
MW-4	9/4/2009	1021.68	75.49	--	--	--	--	--	--	--
MW-4	9/25/2009	1021.47	75.70	6.6	42	140J	3	11	41	0.5U
MW-4	4/6/2010	--	--	3.4	30	130	1.7	7.4	26	1.0U
MW-4	9/7/2010	1031.26	65.91	--	--	--	--	--	--	--
MW-4	9/28/2010	1031.74	65.43	1.6	18	69	1.3	6.1	13	0.5U

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-4	3/21/2011	1023.09	74.08	1.8	26	72	1.7	7.8	17	0.5UJ
MW-4	9/28/2011	1021.87	75.3	1.4	19	71	1.5	5.6	16	0.5U
MW-4	3/29/2012	1021.21	75.96	1.7	14	98	0.7	3.2	19	--
MW-4	9/19/2012	--	--	--	--	--	--	--	--	--
MW-4	3/28/2013	--	--	--	--	--	--	--	--	--
MW-4	9/30/2013	--	--	--	--	--	--	--	--	--
MW-4	3/31/2014	--	--	--	--	--	--	--	--	--
MW-4	9/30/2014	--	--	--	--	--	--	--	--	--
MW-4	5/5/2015	--	--	--	--	--	--	--	--	--
MW-4	9/11/2015	--	--	--	--	--	--	--	--	--
MW-4	5/25/2016	--	--	--	--	--	--	--	--	--
MW-4	10/27/2016	This well is no longer in the monitoring program								

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

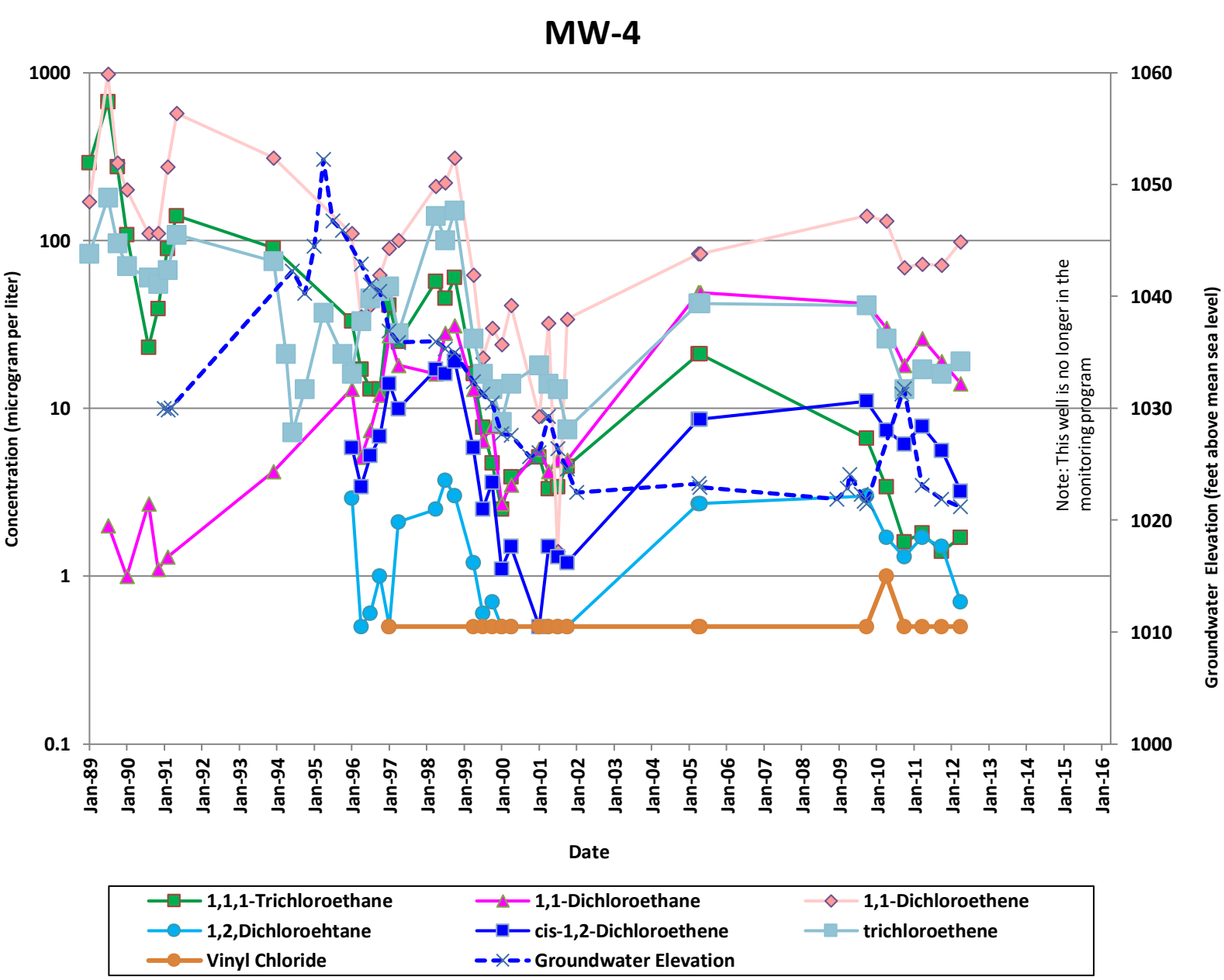
J = estimated value

NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter


MW-4
1000
100
10
1
0.1
Concentration (microgram per liter)
1060
1050
1040
1030
1020
1010
1000
Groundwater Elevation (feet above mean sea level)
Note: This well is no longer in the monitoring program
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2,Dichloroehtane
cis-1,2-Dichloroethene
trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-5	8/1/1990	--	--	21	--	180	--	--	96	--
MW-5	11/1/1990	--	--	84	11	450	--	--	130	--
MW-5	1/2/1991	1031.19	67.52	--	--	--	--	--	--	--
MW-5	2/1/1991	--	--	28.4	2.4	156	--	--	63	--
MW-5	2/6/1991	1031.01	67.70	--	--	--	--	--	--	--
MW-5	3/8/1991	1031.16	67.55	--	--	--	--	--	--	--
MW-5	5/1/1991	--	--	103	7.9	510	--	--	130	--
MW-5	12/1/1993	--	--	0.5	0.7	5.4	--	--	12	--
MW-5	4/1/1994	--	--	--	--	--	--	--	11	--
MW-5	6/1/1994	1043.54	55.17	--	--	--	--	--	21	--
MW-5	10/1/1994	1041.53	57.18	--	--	--	--	--	15	--
MW-5	1/1/1995	1045.79	52.92	--	--	--	--	--	--	--
MW-5	4/1/1995	1053.73	44.98	--	--	--	--	--	4.2	--
MW-5	7/1/1995	1048.08	50.63	--	--	--	--	--	--	--
MW-5	10/1/1995	1047.33	51.38	--	--	--	--	--	5.4	--
MW-5	1/1/1996	--	--	1.4	1.2	2.5	0.5U	1.4	5.2	--
MW-5	4/1/1996	1044.36	54.35	1.2	1.9	2.8	0.5U	2	8.2	--
MW-5	7/1/1996	1042.57	56.14	0.9	1.6	7.3	0.5U	2	9.7	--
MW-5	10/1/1996	1041.84	56.87	1.6	3.1	10	1U	3.3	8.2	--
MW-5	1/1/1997	1038.06	60.65	1.4	3.4	6.9	0.5U	3.4	7.7	0.5U
MW-5	4/1/1997	1036.83	61.88	0.5	2.6	8	0.5U	2.7	8.2	--
MW-5	4/1/1998	1036.85	61.86	0.5U	0.9	12	0.5U	0.7	4.8	--
MW-5	7/1/1998	1036.50	62.21	0.8	1.5	7.1	0.5U	1.6	12	--
MW-5	10/1/1998	1035.94	62.77	0.5U	1.4	12	0.5U	1.3	9.9	--
MW-5	4/1/1999	1033.63	65.08	0.5	1.3	6.7	0.5U	1.4	5.3	0.5U
MW-5	7/1/1999	1032.49	66.22	0.7	1.2	3.9	0.5U	1.4	3.6	0.5U
MW-5	10/1/1999	1033.18	65.53	0.7	1.8	5.4	0.5U	2	3.5	0.5U
MW-5	1/1/2000	1029.21	69.50	0.5U	1.1	7.4	0.5U	1.1	3.6	0.5U
MW-5	4/1/2000	1029.16	69.55	0.5U	0.6	7.3	0.5U	0.5	3.4	0.5U
MW-5	7/1/2000	--	--	0.5U	0.5U	7.1	0.5U	0.5U	3.7	0.5U
MW-5	10/1/2000	1027.40	71.31	0.5U	0.5	10	0.5U	0.5U	4.3	0.5U
MW-5	1/1/2001	1027.82	70.89	0.5U	0.6	12	0.5U	0.5U	5.2	0.5U
MW-5	4/1/2001	1030.52	68.19	0.5U	15	32	0.5U	0.5U	17	0.5U
MW-5	7/1/2001	1027.90	70.81	0.5U	0.7	6.4	0.5U	0.5	3.7	0.5U
MW-5	10/1/2001	1026.14	72.57	0.5U	0.5	4.4	0.5U	0.5U	2.7	0.5U
MW-5	1/1/2002	1023.71	75.00	--	--	--	--	--	--	--
MW-5	4/1/2005	--	--	0.5U	0.5U	7	0.5U	0.5U	4.4	0.5U
MW-5	4/5/2005	--	--	0.5U	0.5U	7	0.5U	0.5U	4.4	--
MW-5	4/7/2005	1024.58	74.13	--	--	--	--	--	--	--
MW-5	4/15/2005	1024.35	74.36	--	--	--	--	--	--	--
MW-5	4/20/2005	--	--	0.5U	0.5U	7	0.5U	0.5U	4.4	0.50U
MW-5	12/11/2008	1022.24	76.47	--	--	--	--	--	--	--
MW-5	3/23/2009	1024.26	74.45	--	--	--	--	--	--	--
MW-5	4/14/2009	1025.48	73.23	0.5U	0.5U	5.3	0.5U	0.5U	3.7	0.5U
MW-5	8/6/2009	1023.59	75.12	--	--	--	--	--	--	--
MW-5	9/4/2009	1022.88	75.83	--	--	--	--	--	--	--
MW-5	9/25/2009	1022.63	76.08	1.4	2.3	37	0.5U	0.6	25	0.5U
MW-5	4/6/2010	--	--	0.5U	0.6	8.3	0.5U	0.5U	5.7	0.5U
MW-5	9/7/2010	1032.92	65.79	--	--	--	--	--	--	--
MW-5	9/28/2010	1033.43	65.28	0.5U	2.1	3.8	0.5U	1.5	5.7	0.5U
MW-5	3/21/2011	1024.36	74.35	0.50U	0.7	6.9	0.50U	0.50U	5.3	0.5U
MW-5	9/28/2011	1022.99	75.72	0.5U	1J	11J	0.5U	0.5U	7.8	0.5U

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-5	3/29/2012	1019.92	78.79	0.5U	1.1	9.9	0.5U	0.5U	9.6	--
MW-5	9/19/2012	--	--	--	--	--	--	--	--	--
MW-5	3/28/2013	--	--	--	--	--	--	--	--	--
MW-5	9/30/2013	--	--	--	--	--	--	--	--	--
MW-5	3/31/2014	--	--	--	--	--	--	--	--	--
MW-5	9/30/2014	--	--	--	--	--	--	--	--	--
MW-5	5/5/2015	--	--	--	--	--	--	--	--	--
MW-5	9/11/2015	--	--	--	--	--	--	--	--	--
MW-5	5/25/2016	--	--	--	--	--	--	--	--	--
MW-5	10/27/2016	This well is no longer in the monitoring program								

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

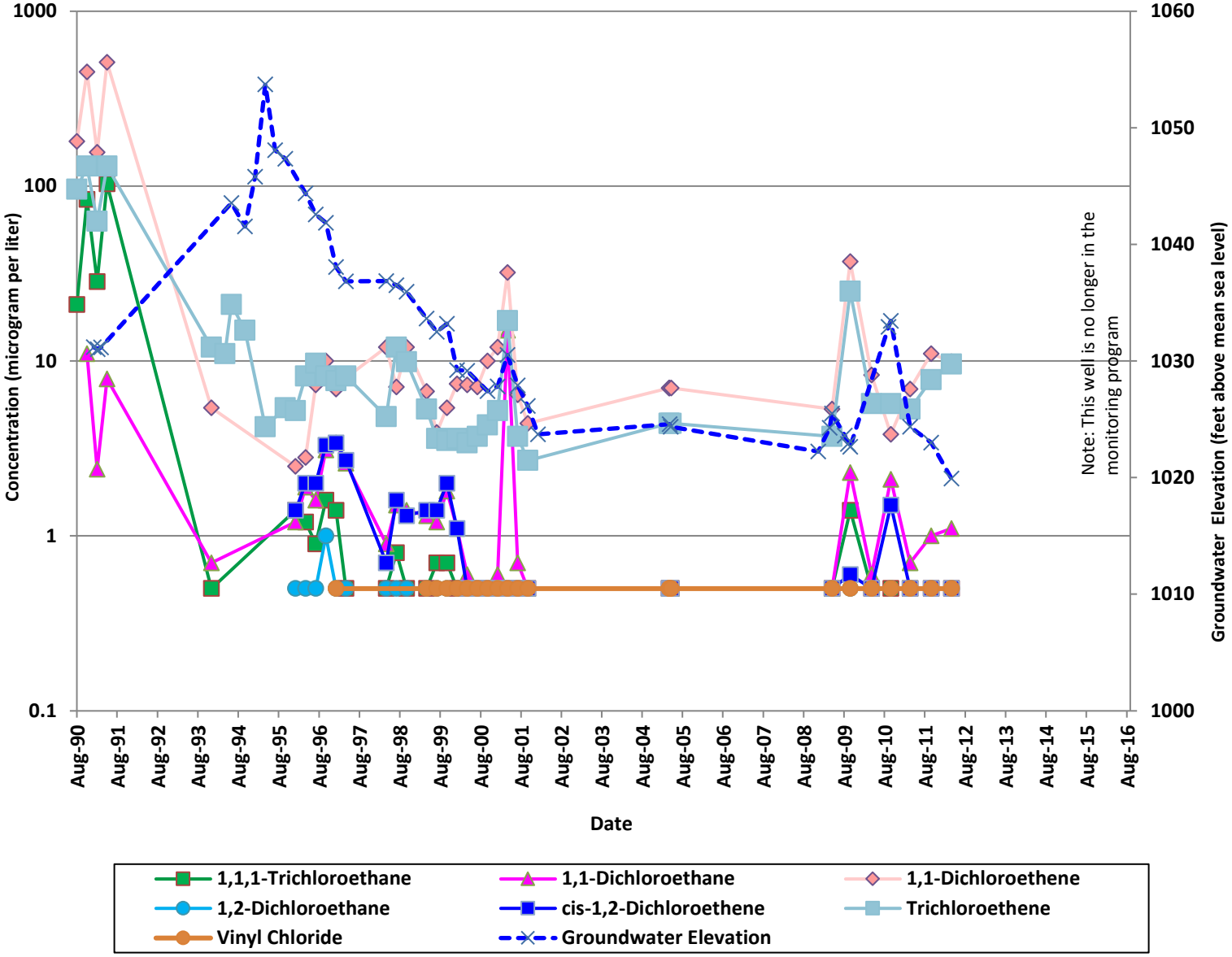
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-5


1000
100
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1
0.1
1060
1050
1040
1030
1020
1010
1000
Concentration (microgram per liter)
Groundwater Elevation (feet above mean sea level)
Note: This well is no longer in the monitoring program
Aug-90
Aug-91
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Aug-07
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Aug-11
Aug-12
Aug-13
Aug-14
Aug-15
Aug-16
Date
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-6	8/1/1990	--	--	62	--	420	--	--	73	--
MW-6	11/1/1990	--	--	30	1.9	140	--	--	36	--
MW-6	1/2/1991	1030.95	66.70	--	--	--	--	--	--	--
MW-6	2/1/1991	--	--	4.5	--	42.1	--	--	8.1	--
MW-6	2/6/1991	1030.80	66.85	--	--	--	--	--	--	--
MW-6	3/8/1991	1031.10	66.55	--	--	--	--	--	--	--
MW-6	5/1/1991	--	--	20.2	--	210	--	--	20.2	--
MW-6	12/1/1993	--	--	0.6	--	3.5	--	--	1.7	--
MW-6	4/1/1994	--	--	--	--	--	--	--	0.6	--
MW-6	6/1/1994	1042.95	54.70	--	--	--	--	--	2.1	--
MW-6	10/1/1994	1041.02	56.63	--	--	--	--	--	3.3	--
MW-6	1/1/1995	1045.25	52.40	--	--	--	--	--	--	--
MW-6	4/1/1995	1053.44	44.21	--	--	--	--	--	0.5	--
MW-6	7/1/1995	1047.79	49.86	--	--	--	--	--	--	--
MW-6	10/1/1995	1046.94	50.71	--	--	--	--	--	0.5	--
MW-6	1/1/1996	--	--	0.5U	1U	1.8	0.5U	0.5U	0.6	--
MW-6	4/1/1996	1043.72	53.93	28	5	19	2.5U	5.9	150	--
MW-6	7/1/1996	1042.10	55.55	26	4.6	12	0.5U	4.4	68	--
MW-6	10/1/1996	1041.46	56.19	40	7	14	1U	7.8	170	--
MW-6	1/1/1997	1037.55	60.10	4.9	1.1	4.7	0.5U	1U	19	0.5U
MW-6	4/1/1997	1036.28	61.37	3.3	1U	6.6	0.5U	1U	21	--
MW-6	7/1/1997	--	--	0.5U	1U	3	0.5U	1U	6.7	--
MW-6	4/1/1998	1036.50	61.15	2	0.7	7.2	0.5U	0.5U	16	--
MW-6	7/1/1998	1036.14	61.51	3.6	1.2	10	0.5U	0.9	21	--
MW-6	10/1/1998	1035.56	62.09	8.7	3	14	0.5U	1.4	45	--
MW-6	1/1/1999	--	--	2.3	0.9	4.5	0.5U	0.5U	17	--
MW-6	4/1/1999	1032.16	65.49	1.4	0.6	3.3	0.5U	0.5U	11	0.5U
MW-6	7/1/1999	1032.21	65.44	0.5U	0.5U	0.6	0.5U	0.5U	0.9	0.5U
MW-6	10/1/1999	1031.52	66.13	0.5U	0.5U	1.2	0.5U	0.5U	2.8	0.5U
MW-6	1/1/2000	1028.78	68.87	0.5U	0.5U	0.9	0.5U	0.5U	0.7	0.5U
MW-6	4/1/2000	1028.77	68.88	0.5U	0.5U	0.6	0.5U	0.5U	1	0.5U
MW-6	7/1/2000	--	--	0.5U	0.5U	1	0.5U	0.5U	1.5	0.5U
MW-6	10/1/2000	1027.12	70.53	0.5U	0.5U	1.4	0.5U	0.5U	1.5	0.5U
MW-6	1/1/2001	1027.37	70.28	0.5U	0.5U	1.6	0.5U	0.5U	1.6	0.5U
MW-6	4/1/2001	1030.08	67.57	0.5U	0.5U	1.1	0.5U	0.5U	0.8	0.5U
MW-6	7/1/2001	1027.44	70.21	0.5U	0.5U	1.2	0.5U	0.5U	0.9	0.5U
MW-6	10/1/2001	1025.77	71.88	0.5U	0.5U	1	0.5U	0.5U	0.7	0.5U
MW-6	1/1/2002	1023.72	73.93	0.5U	0.5U	1.6	0.5U	0.5U	1.4	0.5U
MW-6	3/14/2005	1022.29	75.36	--	--	--	--	--	--	--
MW-6	3/31/2005	1024.45	73.2	--	--	--	--	--	--	--
MW-6	4/1/2005	--	--	0.5U	0.5U	0.84	0.5U	0.5U	1.6	0.5U
MW-6	4/5/2005	--	--	0.5U	0.5U	0.84	0.5U	0.5U	1.6	--
MW-6	4/7/2005	1024.97	72.68	--	--	--	--	--	--	--
MW-6	4/15/2005	1024.73	72.92	--	--	--	--	--	--	--
MW-6	4/20/2005	--	--	0.5U	0.5U	0.84	0.5U	0.5U	1.6	0.5U
MW-6	12/11/2008	1022.46	75.19	--	--	--	--	--	--	--
MW-6	3/23/2009	1024.37	73.28	--	--	--	--	--	--	--
MW-6	4/14/2009	1025.55	72.10	0.5U	0.5U	3.1	0.5U	0.5U	1.8	0.5U
MW-6	8/6/2009	1023.89	73.76	--	--	--	--	--	--	--
MW-6	9/4/2009	1023.11	74.54	--	--	--	--	--	--	--
MW-6	9/25/2009	1022.90	74.75	0.5U	0.5U	6.4	0.5U	0.5U	2.8	0.5U
MW-6	4/6/2010	--	--	0.5U	0.5U	7.6	0.5U	0.5U	3.5	0.5U

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-6	9/7/2010	1032.49	65.16	--	--	--	--	--	--	--
MW-6	9/28/2010	1032.95	64.70	0.5U	0.5U	14	0.5U	0.5U	7.3	0.5U
MW-6	3/21/2011	1024.43	73.22	0.50U	0.50U	1.3	0.50U	0.50U	0.5	0.5U
MW-6	9/28/2011	1023.24	74.41	0.5U	0.5U	1.1J	0.5U	0.5U	0.5	0.5U
MW-6	3/29/2012	1020.36	77.29	0.5U	0.5U	11	0.5U	0.5U	6.1	--
MW-6	9/19/2012	--	--	--	--	--	--	--	--	--
MW-6	3/28/2013	--	--	--	--	--	--	--	--	--
MW-6	9/30/2013	--	--	--	--	--	--	--	--	--
MW-6	3/31/2014	--	--	--	--	--	--	--	--	--
MW-6	9/30/2014	--	--	--	--	--	--	--	--	--
MW-6	5/5/2015	--	--	--	--	--	--	--	--	--
MW-6	9/11/2015	--	--	--	--	--	--	--	--	--
MW-6	5/25/2016	--	--	--	--	--	--	--	--	--
MW-6	10/27/2016	This well is no longer in the monitoring program								

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

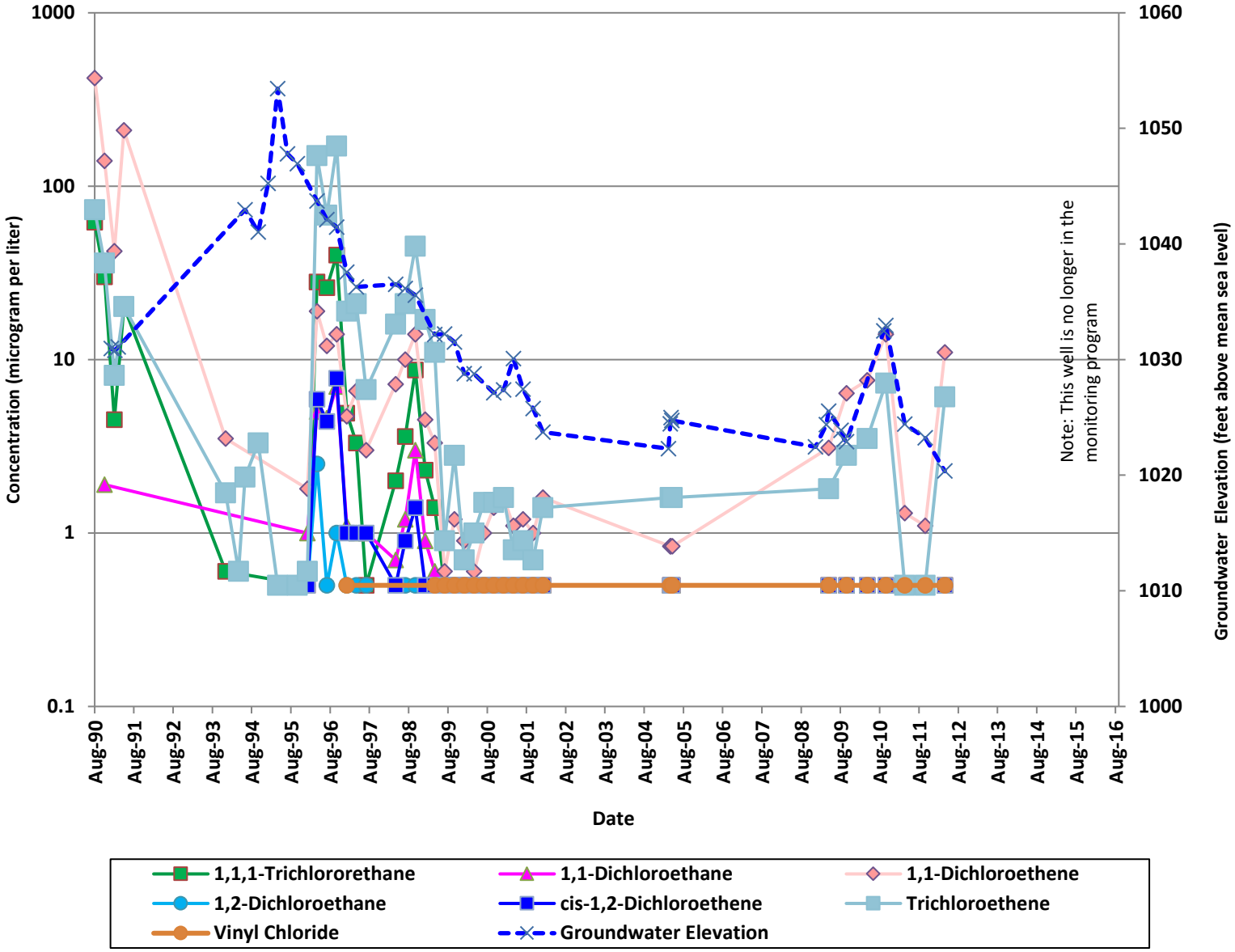
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-6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Concentration (microgram per liter)
Groundwater Elevation (feet above mean sea level)
Note: This well is no longer in the monitoring program
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Aug-16
Date
1,1,1-Trichlororethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-7	8/1/1990	--	--	9.5	0.5U	190	--	--	63	--
MW-7	1/2/1991	1030.68	68.12	--	--	--	--	--	--	--
MW-7	2/1/1991	--	--	8.9	1.6	72.1	--	--	36.1	--
MW-7	2/6/1991	1030.55	68.25	--	--	--	--	--	--	--
MW-7	3/8/1991	1030.64	68.16	--	--	--	--	--	--	--
MW-7	5/1/1991	--	--	17.8	2.4	160	--	--	63.9	--
MW-7	4/1/1994	--	--	--	--	--	--	--	1	--
MW-7	6/1/1994	1043.84	54.96	--	--	--	--	--	3.3	--
MW-7	10/1/1994	1041.50	57.30	--	--	--	--	--	0.2	--
MW-7	1/1/1995	1044.86	53.94	--	--	--	--	--	--	--
MW-7	4/1/1995	1053.21	45.59	--	--	--	--	--	36	--
MW-7	7/1/1995	1047.27	51.53	--	--	--	--	--	--	--
MW-7	10/1/1995	1046.63	52.17	--	--	--	--	--	37	--
MW-7	1/1/1996	--	--	4.9	11	109	0.8	9.7	35	--
MW-7	4/1/1996	1043.69	55.11	8.6	14	120	2.5U	12	43	--
MW-7	7/1/1996	1041.67	57.13	4.4	11	89	0.5U	12	28	--
MW-7	10/1/1996	1041.19	57.61	3.2	11	120	1U	10	37	--
MW-7	1/1/1997	1037.61	61.19	2.9	11	43	0.5U	10	24	0.5U
MW-7	4/1/1997	1036.39	62.41	3.1	12	35	0.5U	11	21	--
MW-7	7/1/1997	1033.80	65.00	1.8	10	26	0.5U	11	20	--
MW-7	10/1/1997	--	--	1U	6.3	28	1U	1U	14	--
MW-7	10/24/1997	1032.68	66.12	--	--	--	--	--	--	--
MW-7	1/1/1998	1031.35	67.45	1U	2.7	9.9	1U	1U	7.8	--
MW-7	4/1/1998	1036.20	62.60	0.7	4.8	32	0.5U	5.1	14	--
MW-7	7/1/1998	1036.08	62.72	0.9	4.6	43	0.5U	5.1	17	--
MW-7	10/1/1998	1035.42	63.38	0.7	4.5	30	0.5U	5.3	14	--
MW-7	1/1/1999	1033.48	65.32	0.5U	2.1	8.5	0.5U	2.1	6.1	--
MW-7	4/1/1999	1032.93	65.87	0.5U	3.3	18	0.5U	3.3	11	0.5U
MW-7	7/1/1999	1032.93	65.87	0.6	2.4	9.9	0.5U	2.6	8.4	0.5U
MW-7	10/1/1999	1031.35	67.45	0.6	3.4	11	0.5U	3.7	8	0.5U
MW-7	1/1/2000	1028.60	70.20	0.5U	2.1	6.9	0.5U	2.3	4.6	0.5U
MW-7	4/1/2000	1028.53	70.27	0.5U	2.6	7.5	0.5U	2.9	5.3	0.5U
MW-7	7/1/2000	1027.20	71.60	--	--	--	--	--	--	--
MW-7	10/1/2000	1026.80	72.00	--	--	--	--	--	--	--
MW-7	1/1/2001	1027.37	71.43	0.5U	1.8	0.5U	0.5U	1.7	6.1	0.5U
MW-7	4/1/2001	1029.89	68.91	0.5U	1.9	76	0.5U	1.9	5	0.5U
MW-7	7/1/2001	1027.26	71.54	0.5U	1.9	3.9	0.5U	1.9	3.5	0.5U
MW-7	10/1/2001	1025.43	73.37	0.5U	1.6	2.8	0.5U	1.6	2.3	0.5U
MW-7	1/1/2002	--	--	0.5U	1.6	2.3	0.5U	1.9	2.8	0.5U
MW-7	4/1/2005	--	--	0.5U	3.4	32	0.5U	1.3	19	0.5U
MW-7	4/5/2005	--	--	0.5U	3.4	32	0.5U	1.3	19	--
MW-7	4/15/2005	1023.66	75.14	--	--	--	--	--	--	--
MW-7	4/20/2005	--	--	0.5U	3.4	32	0.5U	1.3	19	0.50U
MW-7	12/11/2008	1021.88	76.92	--	--	--	--	--	--	--
MW-7	3/23/2009	1023.59	75.21	--	--	--	--	--	--	--
MW-7	4/14/2009	1024.76	74.04	0.5U	2.6	28	0.5U	1	13	0.5U
MW-7	9/4/2009	1022.52	76.28	--	--	--	--	--	--	--
MW-7	9/25/2009	1022.20	76.6	0.5U	1.5	11	0.5U	0.7	6	0.5U
MW-7	4/6/2010	--	--	0.5U	1.1	13	0.5U	0.5	5.6	0.5U
MW-7	3/21/2011	1023.78	75.02	0.5U	1	2.8	0.5U	0.9	2.1	0.5U
MW-7	9/28/2011	1022.59	76.21	0.5U	0.8	3	0.5U	0.6	1.7	0.5U
MW-7	3/29/2012	--	--	--	--	--	--	--	--	--

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-7	9/19/2012	--	--	--	--	--	--	--	--	--
MW-7	3/28/2013	--	--	--	--	--	--	--	--	--
MW-7	9/30/2013	--	--	--	--	--	--	--	--	--
MW-7	3/31/2014	--	--	--	--	--	--	--	--	--
MW-7	9/30/2014	--	--	--	--	--	--	--	--	--
MW-7	5/5/2015	--	--	--	--	--	--	--	--	--
MW-7	9/11/2015	--	--	--	--	--	--	--	--	--
MW-7	5/25/2016	--	--	--	--	--	--	--	--	--
MW-7	10/27/2016	Well has been abandoned								

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

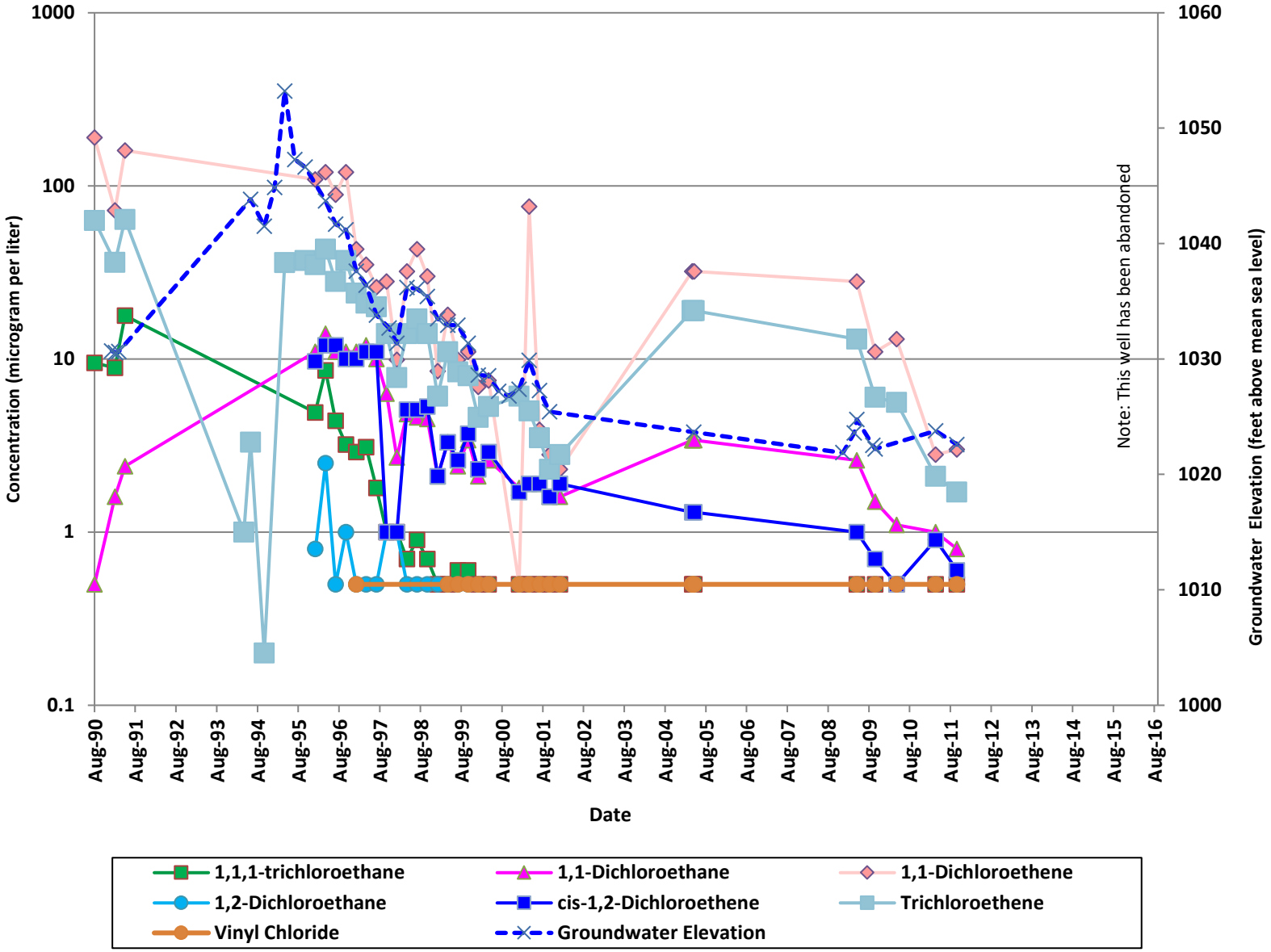
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-7


1000
100
10
1
0.1
Concentration (microgram per liter)
1060
1050
1040
1030
1020
1010
1000
Groundwater Elevation (feet above mean sea level)
Note: This well has been abandoned
Aug-90
Aug-91
Aug-92
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Aug-10
Aug-11
Aug-12
Aug-13
Aug-14
Aug-15
Aug-16
Date
1,1,1-trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-8	8/1/1990	--	--	93	--	290	--	--	172	--
MW-8	11/1/1990	--	--	250	6.4	400	--	--	180	--
MW-8	1/2/1991	1029.98	67.30	--	--	--	--	--	--	--
MW-8	2/1/1991	--	--	137	4.8	305	--	--	89.9	--
MW-8	2/6/1991	1029.80	67.48	--	--	--	--	--	--	--
MW-8	3/8/1991	1030.05	67.23	--	--	--	--	--	--	--
MW-8	5/1/1991	--	--	130	2.7	280	--	--	130	--
MW-8	12/1/1993	--	--	20	6.1	87	--	--	76	--
MW-8	4/1/1994	--	--	--	--	--	--	--	97	--
MW-8	6/1/1994	1042.88	54.40	--	--	--	--	--	100	--
MW-8	10/1/1994	1040.16	57.12	--	--	--	--	--	260	--
MW-8	1/1/1995	1044.80	52.48	--	--	--	--	--	--	--
MW-8	4/1/1995	1052.67	44.61	--	--	--	--	--	200	--
MW-8	7/1/1995	1047.12	50.16	--	--	--	--	--	--	--
MW-8	10/1/1995	1046.34	50.94	--	--	--	--	--	116	--
MW-8	1/1/1996	--	--	22	6.4	89	1.5	6.4	88	--
MW-8	4/1/1996	1043.36	53.92	110	20	260	2.5U	24	260	--
MW-8	7/1/1996	1041.07	56.21	95	10	89	5U	15	270	--
MW-8	10/1/1996	1040.50	56.78	110	9.8	94	1U	10	160	--
MW-8	1/1/1997	1036.89	60.39	150	21	170	2.4	20	240	0.5U
MW-8	4/1/1997	1035.55	61.73	120	25	170	4.3	21	200	--
MW-8	4/1/1998	1035.68	61.60	120	31	300	5U	36	370	--
MW-8	7/1/1998	1035.25	62.03	65	9.9	98	2.6	11	130	--
MW-8	10/1/1998	1034.55	62.73	86	17	130	2.5U	15	140	--
MW-8	4/1/1999	1031.87	65.41	82	18	120	2.5U	12	130	2.5U
MW-8	7/1/1999	1031.00	66.28	35	12	56	0.9	6.5	53	0.5U
MW-8	10/1/1999	1030.26	67.02	23	14	64	1.1	7.7	49	0.5U
MW-8	1/1/2000	1027.59	69.69	18	16	110	1.1	8.8	43	0.5U
MW-8	4/1/2000	1027.56	69.72	14	14	67	1	7.3	36	0.5U
MW-8	10/1/2000	1025.67	71.61	--	--	--	--	--	--	--
MW-8	1/1/2001	--	--	5.9	7.1	24	0.7	2.8	16	0.5U
MW-8	4/1/2001	1028.83	68.45	5.5	7.5	75	0.7	3.2	29	0.5U
MW-8	7/1/2001	1026.05	71.23	5	6.8	35	0.6	2.8	23	0.5U
MW-8	10/1/2001	1024.27	73.01	3.3	4.6	30	0.5U	2.1	15	0.5U
MW-8	4/1/2005	--	--	8.4	0.5U	3.9	0.5U	0.5U	2.9	0.5U
MW-8	4/5/2005	--	--	8.4	0.5U	3.9	0.5U	0.5U	2.9	--
MW-8	4/7/2005	1022.98	74.30	--	--	--	--	--	--	--
MW-8	4/20/2005	--	--	8.4	0.5U	3.9	0.5U	0.5U	2.9	0.5U
MW-8	12/11/2008	1020.65	76.63	--	--	--	--	--	--	--
MW-8	3/23/2009	1022.66	74.62	--	--	--	--	--	--	--
MW-8	4/14/2009	1023.83	73.45	0.6	2.6	44	0.5U	0.7	8.1	0.5U
MW-8	8/6/2009	1022.07	75.21	--	--	--	--	--	--	--
MW-8	9/4/2009	1021.49	75.79	--	--	--	--	--	--	--
MW-8	9/25/2009	1021.29	75.99	0.6	0.5	13J	0.5U	0.5U	4.5	0.5U
MW-8	4/6/2010	--	--	0.5U	3	21	0.5U	1	6.9	0.5U
MW-8	9/7/2010	1030.68	66.6	--	--	--	--	--	--	--
MW-8	9/28/2010	1031.17	66.11	3.5	18	98	1.8	6.9	38	1.0U
MW-8	3/21/2011	1022.97	74.31	0.7	5.1	48	0.50U	2.2	13	0.5U
MW-8	9/28/2011	1021.81	75.47	0.5U	1.9	16	0.5U	0.8	5.7	0.5U
MW-8	3/29/2012	--	--	--	--	--	--	--	--	--
MW-8	9/19/2012	--	--	--	--	--	--	--	--	--
MW-8	3/28/2013	--	--	--	--	--	--	--	--	--

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-8	9/30/2013	--	--	--	--	--	--	--	--	--
MW-8	3/31/2014	--	--	--	--	--	--	--	--	--
MW-8	9/30/2014	--	--	--	--	--	--	--	--	--
MW-8	5/5/2015	--	--	--	--	--	--	--	--	--
MW-8	9/11/2015	--	--	--	--	--	--	--	--	--
MW-8	5/25/2016	--	--	--	--	--	--	--	--	--
MW-8	10/27/2016	This well is no longer in the monitoring program								

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

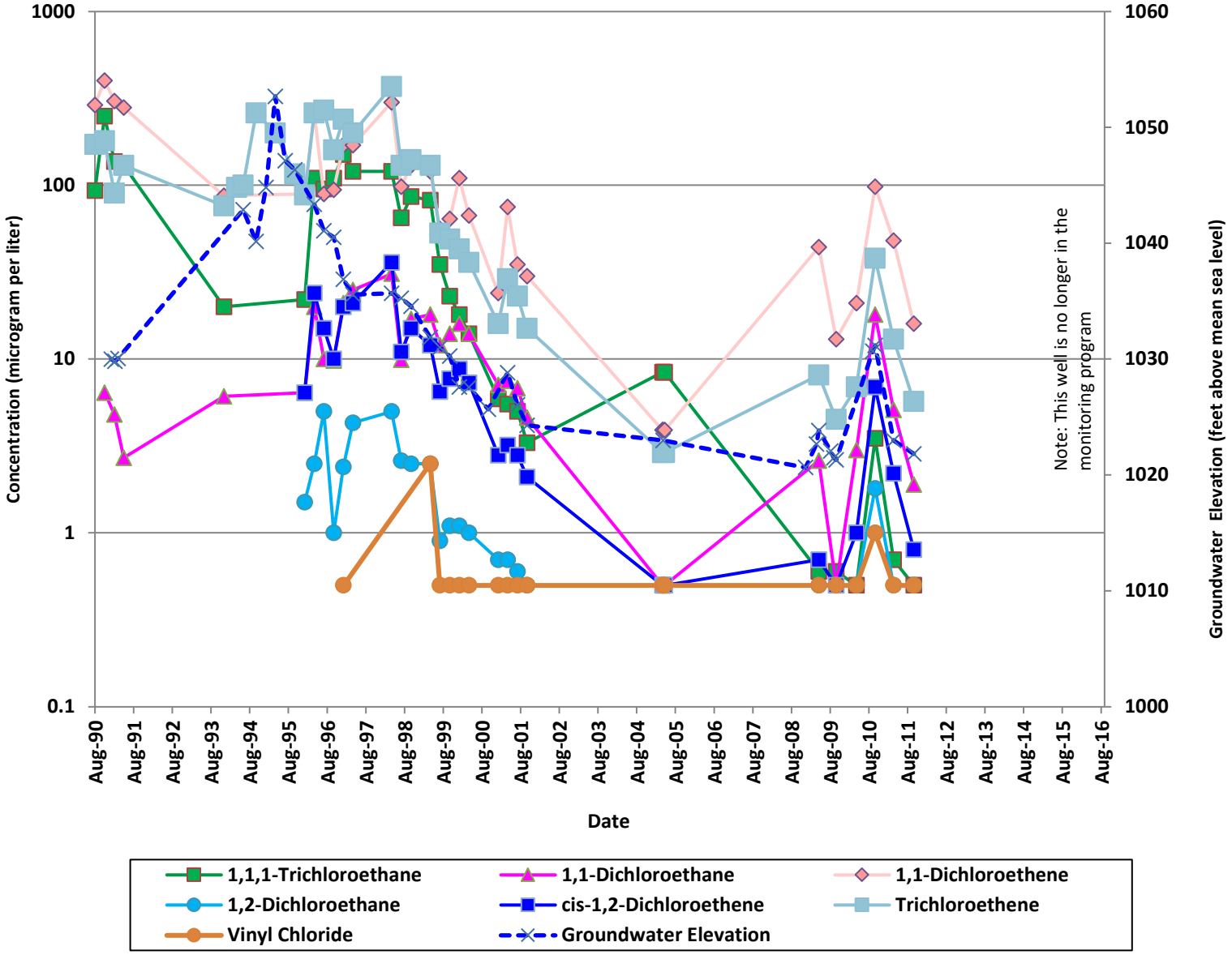
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-8


1000
100
10
1
0.1
1060
1050
1040
1030
1020
1010
1000
Concentration (microgram per liter)
Groundwater Elevation (feet above mean sea level)
Note: This well is no longer in the monitoring program
Aug-90
Aug-91
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Aug-07
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Aug-10
Aug-11
Aug-12
Aug-13
Aug-14
Aug-15
Aug-16
Date
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-9	10/1/1995	--	--	--	--	--	--	--	0.6	--
MW-9	1/1/1996	--	--	0.5U	0.5U	1.2	0.5U	0.5U	0.5U	--
MW-9	4/1/1996	--	--	0.5U	0.5U	0.9	0.5U	0.5U	0.5U	--
MW-9	7/1/1996	--	--	0.5U	0.5U	1.1	0.5U	0.5U	0.6	--
MW-9	10/1/1996	--	--	1U	1U	1.6	1U	1U	1U	--
MW-9	1/1/1997	--	--	1U	0.5U	1.5	0.5U	1U	1U	0.5U
MW-9	4/1/1997	--	--	1U	1U	1.4	0.5U	1U	1U	--
MW-9	7/1/1997	--	--	0.5U	1U	1.9	0.5U	1U	1U	--
MW-9	10/1/1997	--	--	1U	1U	1U	1U	1U	1U	--
MW-9	1/1/1998	--	--	1U	1U	1U	1U	1U	1U	--
MW-9	4/1/1998	--	--	0.5U	0.5U	1.6	0.5U	0.5U	0.7	--
MW-9	7/1/1998	--	--	0.5U	0.5U	1.4	0.5U	0.5U	0.7	--
MW-9	10/1/1998	--	--	0.5U	0.5U	1	0.5U	0.5U	0.6	--
MW-9	1/1/1999	--	--	0.5U	0.5U	1.1	0.5U	0.5U	0.5U	--
MW-9	4/1/1999	--	--	0.5U	0.5U	1.3	0.5U	0.5U	0.6	0.5U
MW-9	7/1/1999	--	--	0.5U	0.5U	1.1	0.5U	0.5U	0.6	0.5U
MW-9	10/1/1999	--	--	0.5U	0.5U	1.2	0.5U	0.5U	0.5U	0.5U
MW-9	1/1/2000	--	--	0.5U	0.5U	1.3	0.5U	0.5U	0.5U	0.5U
MW-9	4/1/2000	--	--	0.5U	0.5U	1.2	0.5U	0.5U	0.6	0.5U
MW-9	10/1/2000	--	--	0.5U	0.5U	1.3	0.5U	0.5U	0.7	0.5U
MW-9	1/1/2001	--	--	0.5U	0.5U	0.9	0.5U	0.5U	0.5U	0.5U
MW-9	4/1/2001	--	--	0.5U	0.5U	1.1	0.5U	0.5U	0.5	0.5U
MW-9	7/1/2001	--	--	0.5U	0.5U	1	0.5U	0.5U	0.7	0.5U
MW-9	10/1/2001	--	--	0.5U	0.5U	0.9	0.5U	0.5U	0.6	0.5U
MW-9	1/1/2002	--	--	0.5U	0.5U	0.8	0.5U	0.5U	0.7	0.5U
MW-9	7/1/2002	--	--	0.5U	0.5U	0.96	--	--	0.52	--
MW-9	10/1/2002	--	--	0.5U	0.5U	0.96	0.5U	0.5U	0.52	0.5U
MW-9	1/3/2003	--	--	0.5U	0.5U	1	--	--	0.53	--
MW-9	6/1/2003	--	--	0.5U	0.5U	1	0.5U	0.5U	0.53	0.5U
MW-9	1/13/2010	--	--	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9-001	1/13/2010	--	--	0.5U	1.4	1.1	0.5U	0.5U	0.5U	0.5U
MW-9-002	1/13/2010	--	--	0.5U	1.2	1	0.5U	0.5U	0.5U	0.5U
MW-9-003	1/13/2010	--	--	0.5U	0.6	0.8	0.5U	0.5U	0.5U	0.5U
MW-9	4/6/2010	--	--	0.5U	1.2J	0.8J	0.5U	0.5U	0.5U	0.5U
MW-9	9/28/2010	--	--	0.5U	1.1	1.1	0.5U	0.5U	0.5U	0.5U
MW-9	3/21/2011	--	--	0.5U	0.7	0.7	0.5U	0.5U	0.5U	0.5U
MW-9	9/28/2011	--	--	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9	3/29/2012	--	--	0.5U	0.5U	0.6	0.5U	0.5U	0.5U	--
MW-9	9/19/2012	1015.89	81.35	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9	3/28/2013	1011.09	86.15	0.5U	0.6	0.5	0.5U	0.5U	0.5U	0.5U
MW-9	9/30/2013	1008.35	88.89	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9	3/31/2014	1005.27	91.97	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9	9/30/2014	1004.44	92.80	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9	5/5/2015	1005.88	94.03	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9	9/11/2015	1005.62	94.29	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9	2/2/2016	1003.08	96.83	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-9	10/27/2016				Well has been abandoned					

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

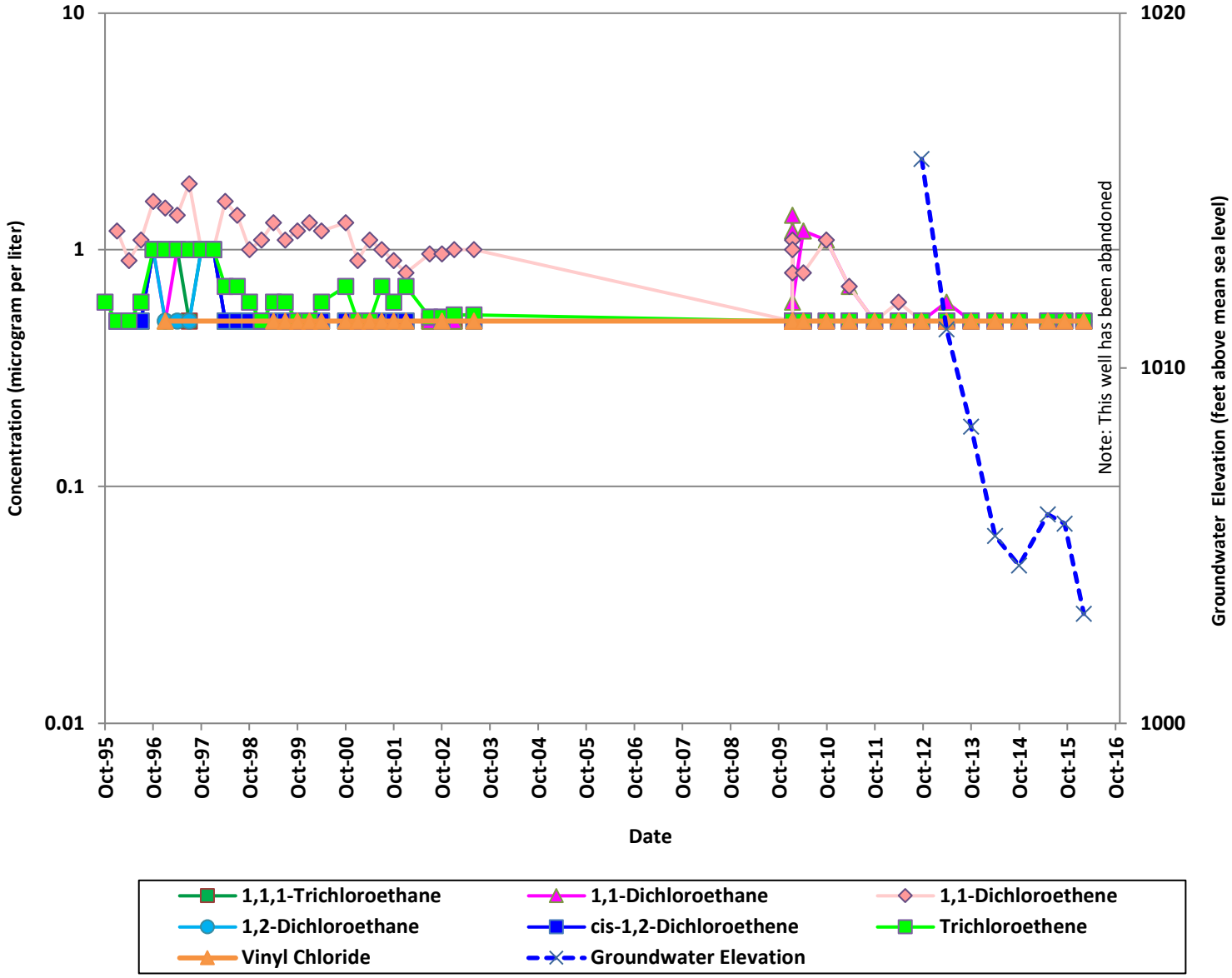
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-9


10
1
0.1
0.01
1020
1010
1000
Concentration (microgram per liter)
Groundwater Elevation (feet above mean sea level)
Note: This well has been abandoned
Oct-95
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Oct-13
Oct-14
Oct-15
Oct-16
Date
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-10	10/1/1995	1047.25	51.35	--	--	--	--	--	3.9	--
MW-10	1/1/1996	--	--	1.1	0.8	3.1	0.5U	0.8	4.1	--
MW-10	4/1/1996	1044.10	54.50	0.7	0.8	3.6	0.5U	1	5.6	--
MW-10	7/1/1996	1042.38	56.22	0.5U	0.7	4.2	0.5U	0.9	5.9	--
MW-10	10/1/1996	1041.69	56.91	10U	1.1	6.7	1U	1.1	5.1	--
MW-10	1/1/1997	1037.88	60.72	1U	1.8	10	0.5U	1.8	7	0.5U
MW-10	4/1/1997	1036.69	61.91	1U	1.2	8.7	0.5U	1.5	6.8	--
MW-10	7/1/1997	1034.13	64.47	0.5U	1.8	2.7	0.5U	2	12	--
MW-10	1/1/1998	1031.71	66.89	1U	1.4	34	1U	1U	13	--
MW-10	4/1/1998	1037.02	61.58	1U	0.8	7.2	1U	1U	3.6	--
MW-10	7/1/1998	1036.55	62.05	0.6	1	15	0.5U	1.1	9.9	--
MW-10	10/1/1998	1035.95	62.65	0.6	0.9	12	0.5U	0.8	6.5	--
MW-10	1/1/1999	1034.00	64.60	--	--	--	--	--	--	--
MW-10	4/1/1999	1033.59	65.01	--	--	--	--	--	--	--
MW-10	7/1/1999	1032.34	66.26	--	--	--	--	--	--	--
MW-10	10/1/1999	1031.94	66.66	0.5U	1.8	27	0.5U	1.6	15	0.5U
MW-10	1/1/2000	1029.05	69.55	0.5U	0.9	9.2	0.5U	0.7	6.7	0.5U
MW-10	4/1/2000	1028.88	69.72	0.5U	0.6	8.2	0.5U	0.5U	5.6	0.5U
MW-10	7/1/2000	1027.20	71.40	0.5U	0.6	5.1	0.5U	0.5U	4.4	0.5U
MW-10	10/1/2000	1026.85	71.75	0.5U	0.5	6.5	0.5U	0.5U	3.9	0.5U
MW-10	1/1/2001	1027.18	71.42	0.5U	0.5	9.1	0.5U	0.5U	7.5	0.5U
MW-10	4/1/2001	1030.21	68.39	0.5U	0.9	13	0.5U	0.5U	11	0.5U
MW-10	7/1/2001	1027.25	71.35	0.5U	0.7	3.3	0.5U	0.5U	6.1	0.5U
MW-10	10/1/2001	1025.55	73.05	0.5U	0.5U	0.6	0.5U	0.5U	3.6	0.5U
MW-10	1/1/2002	1023.30	75.30	0.5U	0.5U	1.6	0.5U	0.5U	2.7	0.5U
MW-10	7/1/2002	1019.11	79.49	0.5U	0.5U	4.6	--	--	2	--
MW-10	10/1/2002	--	--	0.5U	0.5U	4.6	0.5U	0.5U	2	0.5U
MW-10	1/1/2003	1014.56	84.04	--	--	--	--	--	--	--
MW-10	3/14/2005	1022.05	76.55	--	--	--	--	--	--	--
MW-10	3/31/2005	1023.82	74.78	--	--	--	--	--	--	--
MW-10	4/1/2005	--	--	0.81	2.9	20	0.5U	0.5U	32	0.5U
MW-10	4/5/2005	--	--	0.81	2.9	20	0.5U	0.5U	32	--
MW-10	4/7/2005	1024.36	74.24	--	--	--	--	--	--	--
MW-10	4/15/2005	1024.10	74.50	--	--	--	--	--	--	--
MW-10	4/20/2005	--	--	0.81	2.9	20	0.5U	0.5U	32	0.5U
MW-10	12/11/2008	1021.94	76.66	--	--	--	--	--	--	--
MW-10	3/23/2009	1023.87	74.73	--	--	--	--	--	--	--
MW-10	4/14/2009	1025.01	73.59	0.5U	3	59	0.5U	0.5	33	0.5U
MW-10	8/6/2009	1023.31	75.29	--	--	--	--	--	--	--
MW-10	9/4/2009	1022.69	75.91	--	--	--	--	--	--	--
MW-10	9/25/2009	1022.38	76.22	0.5U	3.6	65	0.7	0.6	37	0.5U
MW-10	4/6/2010	--	--	0.5U	1.9	22	0.7	0.5U	15	0.5U
MW-10	9/7/2010	1032.90	65.70	--	--	--	--	--	--	--
MW-10	9/28/2010	1033.40	65.20	0.5U	2.2	7.7	0.5U	1.4	7.7	0.5U
MW-10	3/21/2011	1024.06	74.54	0.50U	3.1	32	0.5	0.8	22	0.5U
MW-10	9/28/2011	1022.84	75.76	0.5U	0.9J	14J	0.5U	0.5U	8.7	0.5U
MW-10	3/29/2012	1019.78	78.82	0.5U	1.2	23	0.5U	0.5U	12	--
MW-10	9/19/2012	1017.05	84.49	0.5U	2.2	36	0.5U	0.9	19	0.5U
MW-10	3/28/2013	--	--	--	--	--	--	--	--	--
MW-10	9/30/2013	--	--	--	--	--	--	--	--	--
MW-10	3/31/2014	--	--	--	--	--	--	--	--	--
MW-10	9/30/2014	--	--	--	--	--	--	--	--	--

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-10	5/5/2015	--	--	--	--	--	--	--	--	--
MW-10	9/11/2015	--	--	--	--	--	--	--	--	--
MW-10	5/25/2016	--	--	--	--	--	--	--	--	--
MW-10	10/27/2016	This well is no longer in the monitoring program								

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

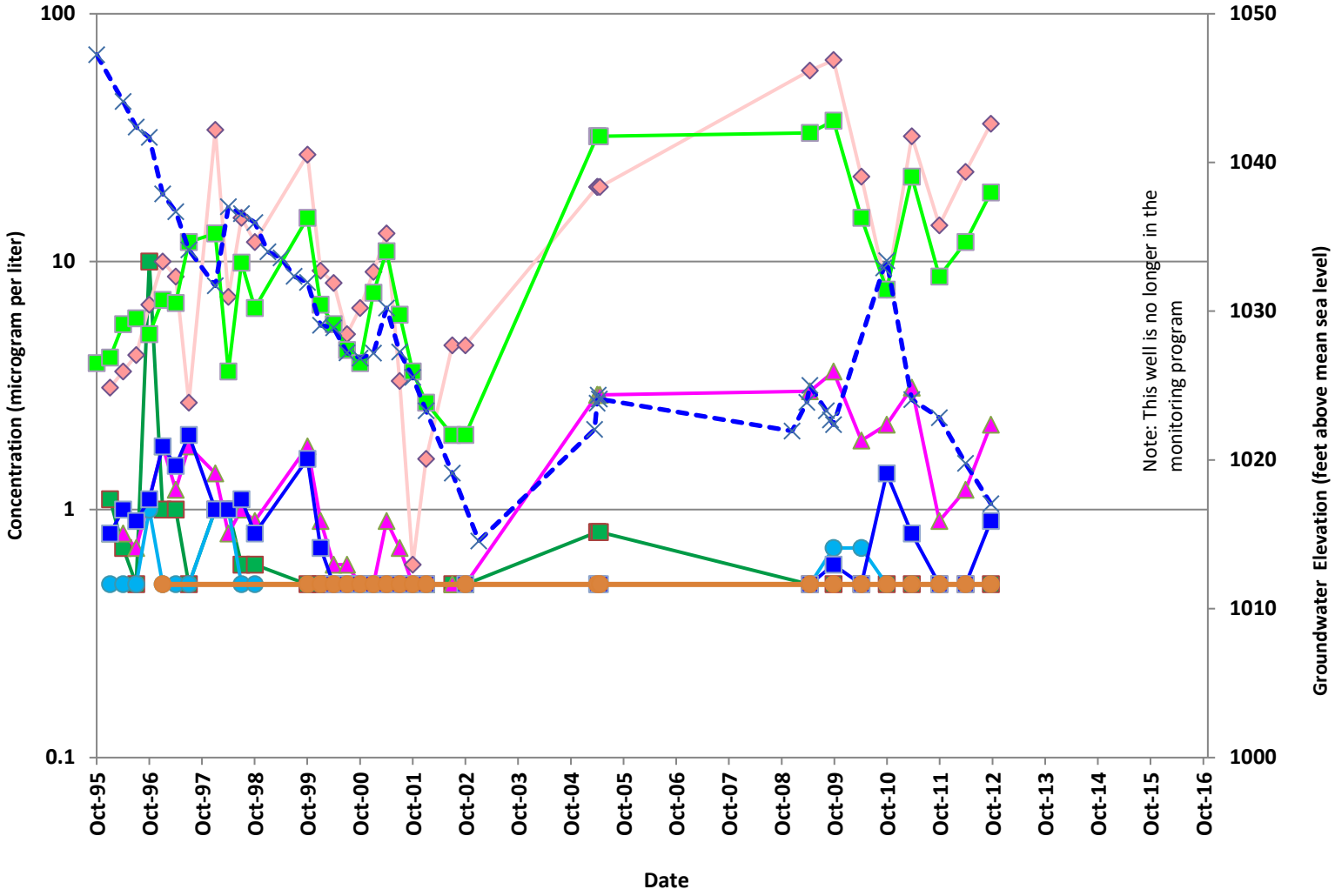
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-10


100
10
1
0.1
Concentration (microgram per liter)
1050
1040
1030
1020
1010
1000
Groundwater Elevation (feet above mean sea level)
Note: This well is no longer in the monitoring program
Oct-95
Oct-96
Oct-97
Oct-98
Oct-99
Oct-00
Oct-01
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Oct-15
Oct-16
Date
1,1,1,Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-11	5/5/2015	1005.51	94.30	3.4	10	25	0.5U	5.7	13	0.5U
MW-11	9/11/2015	1005.29	94.52	8.6	22	41	0.5	11	21	0.5U
MW-11	2/2/2016	1002.31	97.50	1.8	6.7	19	0.5U	3.1	9.8	0.5U
MW-11-100	5/25/2016	1002.24	97.57	3.4	15	41	0.5U	7.7	18	0.5U
MW-11-110	5/25/2016	1002.24	97.57	0.5U	0.5U	0.6	0.5U	0.5U	0.5U	0.5U
MW-11-120	5/25/2016	1002.24	97.57	0.5U	0.5U	1.2	0.5U	0.5U	0.5U	0.5U
MW-11	9/27/2016	1002.30	97.51	4.2	20	51	0.9	14	25	0.5U
MW-11	3/8/2017	1003.38	96.43	3.8	20	33	0.8	10	18	0.5U
MW-11	9/28/2017	1004.70	95.11	13	31	57	0.8	16	27	0.5U
MW-11	3/27/2018	1001.67	98.14	4.4	21	39	0.9	12	19	0.5U
MW-11	9/26/2018	1000.89	98.92	5.9	30	58	1.2	14	19	0.5U
MW-11	3/28/2019	1004.42	95.39	6.1J	22J	51J	0.9	10J	16J	0.5U
MW-11	9/27/2019	1003.52	96.29	6.4	18	38	0.5U	8.3	16	0.5U
MW-11	3/30/2020	1005.91	93.90	0.7	6.5	14	0.5U	3.9	8.6	0.5U
MW-11	9/23/2020	1006.44	93.37	2.4	20	27	0.71	9	16J	0.5U
MW-11	3/22/2021	1004.04	95.77	--	--	--	--	--	--	--
MW-11	9/24/2021	1006.09	93.72	5.4	23	34	0.67	8	10	0.5 U
MW-11	3/30/2022	1004.86	94.95	--	--	--	--	--	--	--
MW-11	9/28/2022	1005.76	94.05	3.3	23	23	0.85	8.2	8.1	0.5 U
MW-11	9/29/2023	1014.56	85.25	0.65	9.6	15	0.77	4.7	9.4	0.50 U
MW-11	3/22/2024	1012.23	87.58	--	--	--	--	--	--	--
MW-11	9/27/2024	1011.70	88.11	0.50 U	6.5	8.4	0.50 U	1.9 J	3.6	0.50 U

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

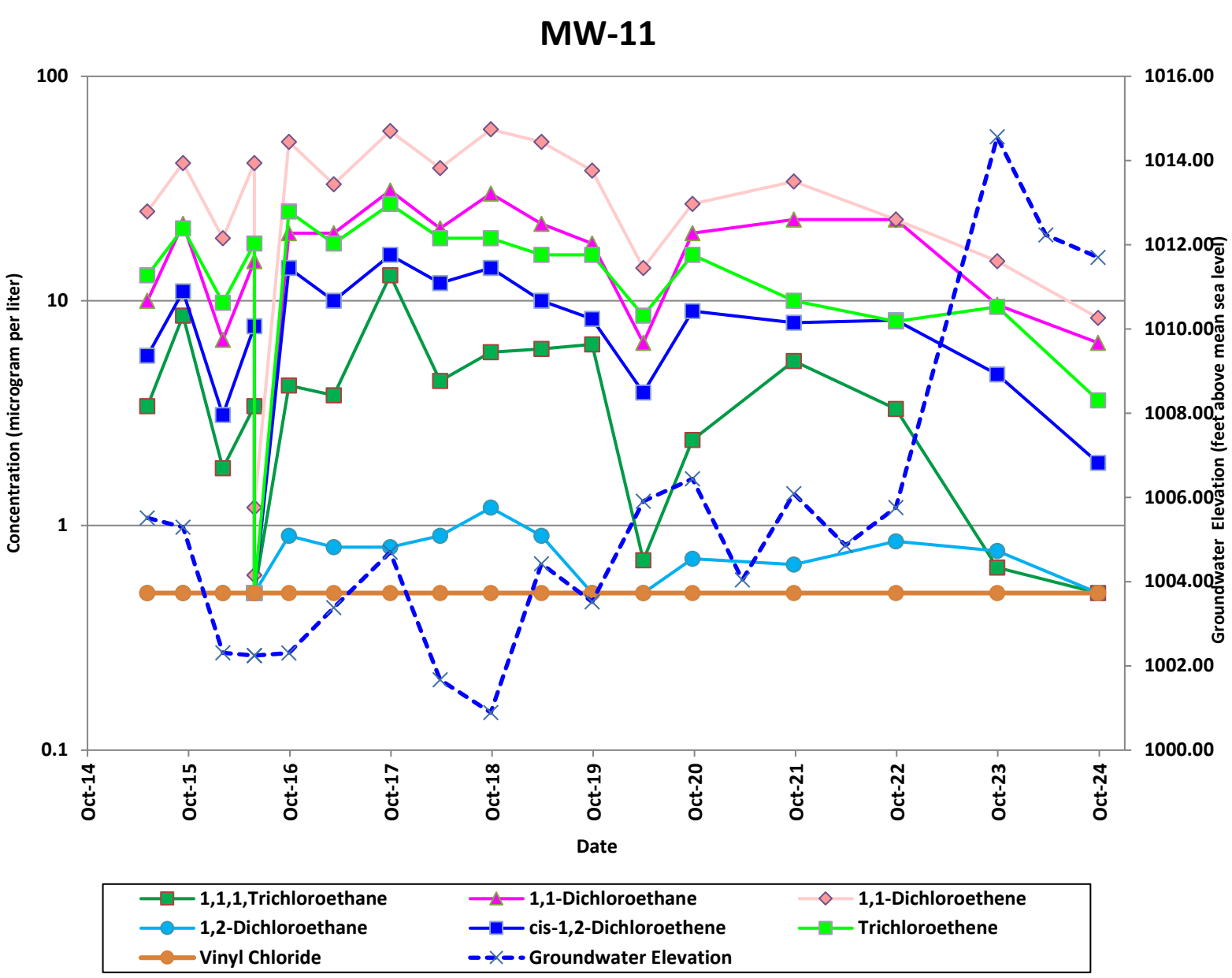
J = estimated value

NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter


MW-11
100
10
1
0.1
Concentration (microgram per liter)
1016.00
1014.00
1012.00
1010.00
1008.00
1006.00
1004.00
1002.00
1000.00
Groundwater Elevation (feet above mean sea level)
Oct-14
Oct-15
Oct-16
Oct-17
Oct-18
Oct-19
Oct-20
Oct-21
Oct-22
Oct-23
Oct-24
Date
1,1,1,Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-12	5/5/2015	1005.87	93.87	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-12	9/11/2015	1005.68	94.06	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-12	2/2/2016	1003.10	96.64	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-12	5/25/2016	1002.57	97.17	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-12	9/27/2016	1002.63	97.11	0.5U	0.5U	1.6	0.5U	0.5U	0.5U	0.5U
MW-12	3/8/2017	1003.79	95.95	0.5U	0.5U	2.1	0.5U	0.5U	0.9	0.5U
MW-12	9/28/2017	1005.06	94.68	0.5U	0.5U	0.8	0.5U	0.5U	0.5UJ	0.5U
MW-12	3/27/2018	1001.95	97.79	0.5U	0.5U	0.6	0.5U	0.5U	0.5U	0.5U
MW-12	9/26/2018	1001.20	98.54	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-12	3/28/2019	1004.93	94.81	0.5U	0.5U	3.3	0.5U	0.5U	1.6	0.5U
MW-12	9/27/2019	1003.90	95.84	0.5U	0.5U	1.4 J	0.5U	0.5U	0.7	0.5U
MW-12	3/30/2020	1006.31	93.43	0.5U	0.5U	0.8	0.5U	0.5U	0.5U	0.5U
MW-12	9/23/2020	1006.82	92.92	0.5U	0.5U	0.37J	0.5U	0.5U	0.29J	0.5U
MW-12	3/22/2021	1004.40	95.34	--	--	--	--	--	--	--
MW-12	9/24/2021	1006.54	93.20	0.5U	0.5U	1.1	0.5U	0.5U	1.1	0.5U
MW-12	3/30/2022	1005.24	94.50	--	--	--	--	--	--	--
MW-12	9/28/2022	1006.09	93.65	0.5 U	0.5 U	1.9	0.5 U	0.5 U	1.5	0.5 U
MW-12	9/29/2023	1014.98	84.76	0.50 U	2.5	19	0.50 U	1.4	17	0.50 U
MW-12	3/22/2024	1012.59	87.15	--	--	--	--	--	--	--
MW-12	9/27/2024	1012.04	87.70	0.50 U	0.50 U	1.5	0.50 U	0.50 U	1.1	0.50 U

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

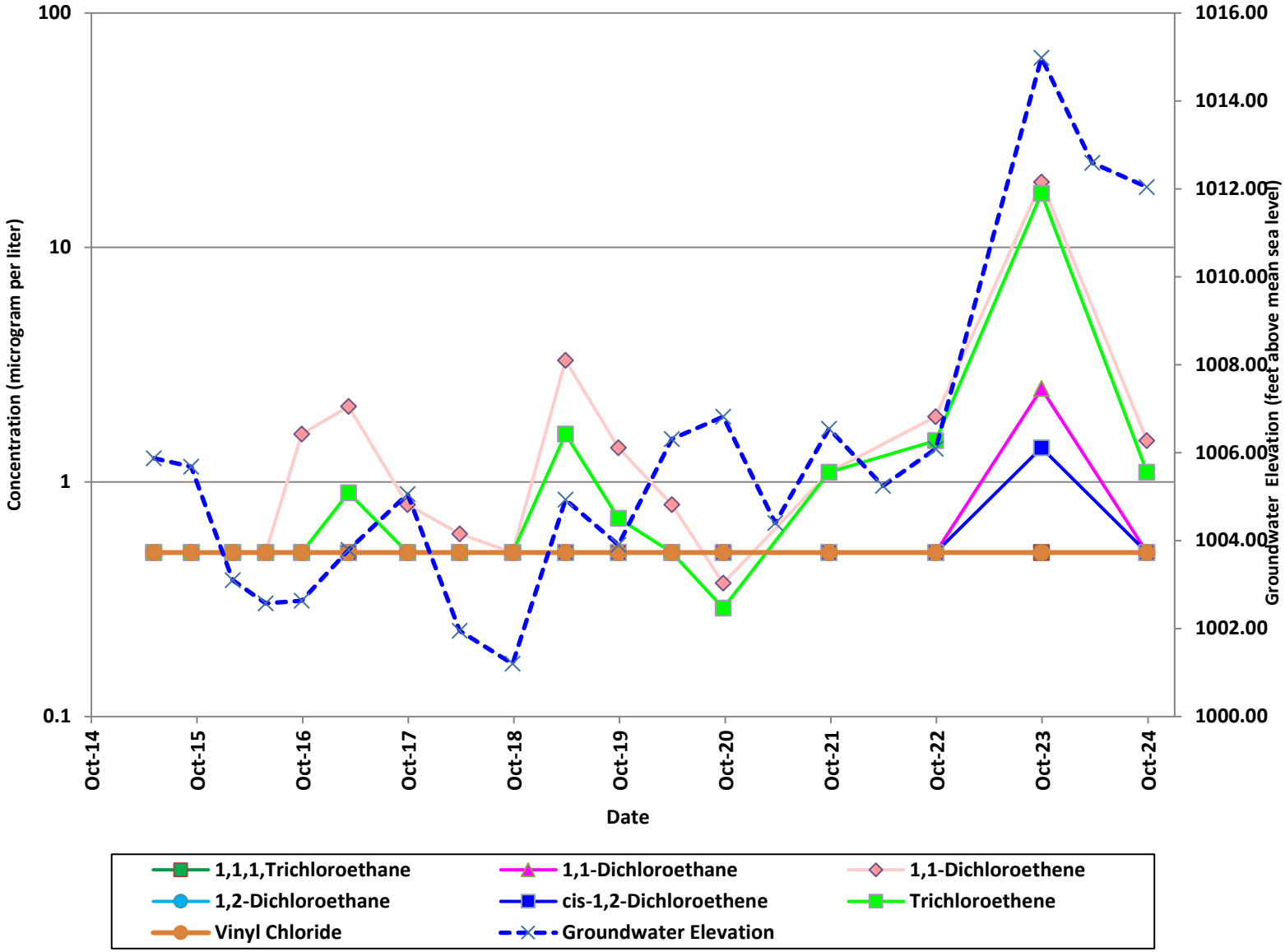
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-12


100
10
1
0.1
Concentration (microgram per liter)
1016.00
1014.00
1012.00
1010.00
1008.00
1006.00
1004.00
1002.00
1000.00
Groundwater Elevation (feet above mean sea level)
Oct-14
Oct-15
Oct-16
Oct-17
Oct-18
Oct-19
Oct-20
Oct-21
Oct-22
Oct-23
Oct-24
Date
1,1,1,Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-13	5/5/2015	1005.08	92.38	0.5U	0.5U	1.5	0.5U	0.5U	0.5U	0.5U
MW-13	9/11/2015	1004.83	92.63	0.5U	0.5U	1.4	0.5U	0.5U	0.5U	0.5U
MW-13	2/2/2016	1002.25	95.21	0.5U	0.5U	3	0.5U	0.5U	0.9	0.5U
MW-13	5/25/2016	1001.75	95.71	0.5U	0.5	3.5	0.5U	0.5U	1.1	0.5U
MW-13-100	9/27/2016	999.73	97.73	0.5U	0.6	4.7	0.5U	0.5U	1.2	0.5U
MW-13-110	9/27/2016	999.73	97.73	0.5U	0.5U	2.1	0.5U	0.5U	0.5U	0.5U
MW-13-120	9/27/2016	999.73	97.73	0.5U	0.5U	1.8	0.5U	0.5U	0.5U	0.5U
MW-13	3/8/2017	1002.77	94.69	0.5U	0.5	3.4	0.5U	0.5U	1.0	0.5U
MW-13	9/28/2017	1004.13	93.33	0.5U	0.5	2.9	0.5U	0.5U	0.9	0.5U
MW-13	3/27/2018	1001.13	96.33	0.5U	0.6	2.8	0.5U	0.5U	0.8	0.5U
MW-13	9/26/2018	1000.21	97.25	0.5U	0.5U	2.0	0.5U	0.5U	0.7	0.5U
MW-13	3/28/2019	1003.81	93.65	0.5U	0.7	4.5	0.5U	0.5U	1.6	0.5U
MW-13	9/27/2019	1003.05	94.41	0.5U	0.7	3.5	0.5U	0.5U	1.1	0.5U
MW-13	3/30/2020	1005.41	92.05	0.5U	0.5	1.7	0.5U	0.5U	0.7	0.5U
MW-13	9/23/2020	1005.91	91.55	0.5U	0.61	1.4	0.5U	0.35J	0.9	0.5U
MW-13	3/22/2021	1003.53	93.93	0.5U	0.61	1.8	0.5U	0.5U	0.74	0.5U
MW-13	9/24/2021	1005.64	91.82	0.5U	0.82	1.5	0.5U	0.5U	0.8	0.5U
MW-13	3/30/2022	1004.40	93.06	0.50 U	0.50 U	0.97	0.50 U	0.50 U	0.54	0.50 U
MW-13	9/28/2022	1005.27	92.19	0.5 U	0.5 U	0.79	0.5 U	0.5 U	0.5 U	0.5 U
MW-13	9/29/2023	1014.06	83.40	0.50 U	0.62	1.2	0.50 U	0.50 U	1.0	0.50 U
MW-13	3/22/2024	1011.75	85.71	--	--	--	--	--	--	--
MW-13	9/27/2024	1011.27	86.19	0.50 U	0.50 U	0.83	0.50 U	0.50 U	0.55	0.50 U

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

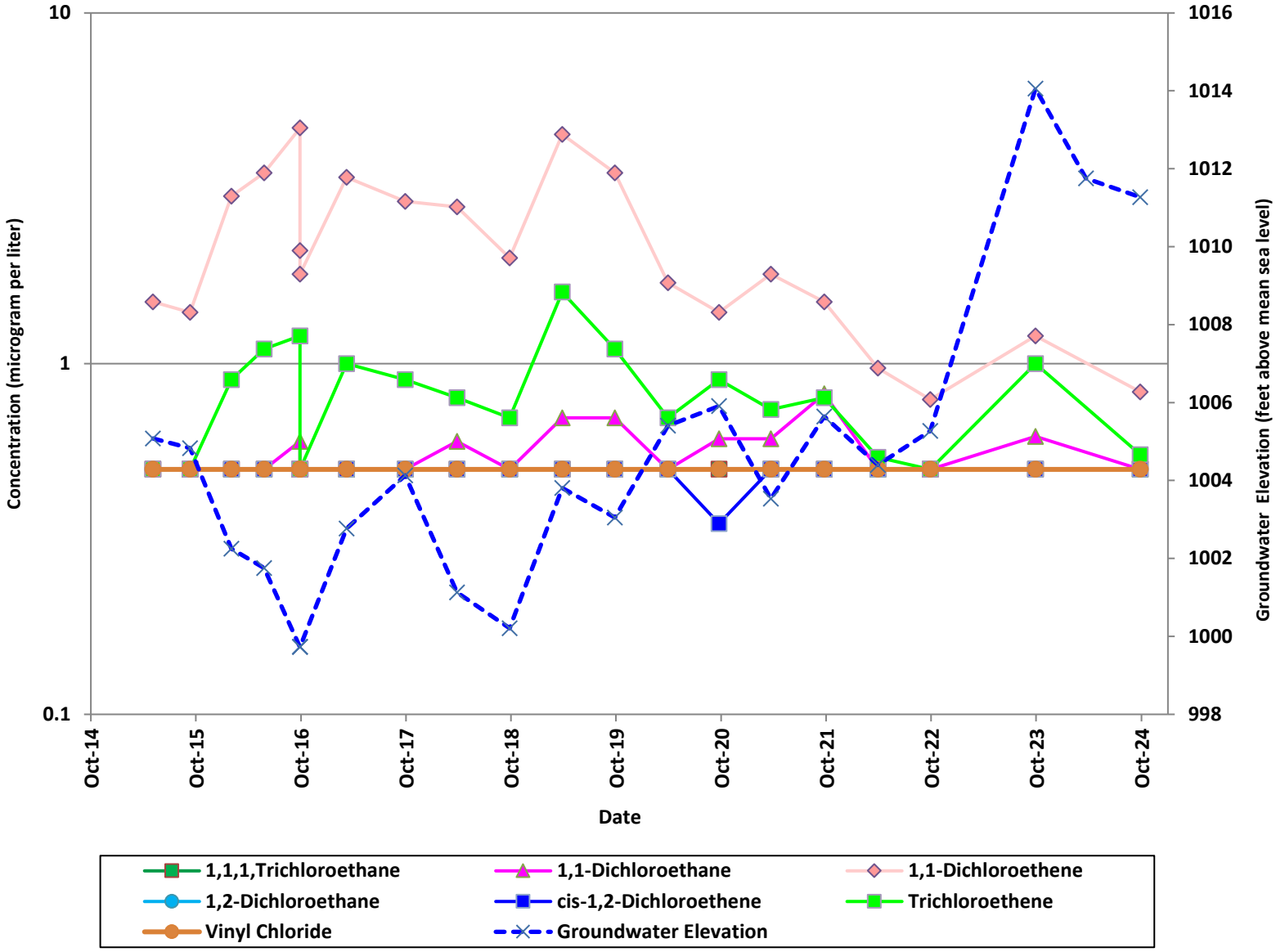
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-13


10
1
0.1
Concentration (microgram per liter)
1016
1014
1012
1010
1008
1006
1004
1002
1000
998
Groundwater Elevation (feet above mean sea level)
Oct-14
Oct-15
Oct-16
Oct-17
Oct-18
Oct-19
Oct-20
Oct-21
Oct-22
Oct-23
Oct-24
Date
1,1,1,Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-14	5/5/2015	1004.96	92.31	0.8	2.3	5.8	0.5U	2	6	0.5U
MW-14	9/11/2015	1004.73	92.54	0.8	2.6	6	0.5U	1.7	7.4	0.5U
MW-14	2/2/2016	1002.11	95.16	0.5U	1.2	3	0.5U	1.1	3.4	0.5U
MW-14	5/25/2016	1001.63	95.64	0.5U	0.6	1.9	0.5U	0.6	2	0.5U
MW-14-100	9/27/2016	1001.61	95.66	0.5U	0.8	3	0.5U	1	3.2	0.5U
MW-14-110	9/27/2016	1001.61	95.66	0.5U	0.5	2	0.5U	0.8	2.1	0.5U
MW-14-120	9/27/2016	1001.61	95.66	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-14	3/8/2017	1002.67	94.60	0.5	1.3	4.1	0.5U	1.2	3.9	0.5U
MW-14	9/28/2017	1003.97	93.30	0.8	1.8	4.8	0.5U	1.7	4.5	0.5U
MW-14	3/27/2018	1001.02	96.25	0.5	1.3	3.7	0.5U	0.9	2.4	0.5U
MW-14	9/26/2018	1000.10	97.17	0.5U	0.7	1.8	0.5U	0.5U	1.0	0.5U
MW-14	3/28/2019	1003.70	93.57	0.5U	0.7	2.6	0.5U	0.7	1.7	0.5U
MW-14	9/27/2019	1002.94	94.33	0.7	1.2	3.5	0.5U	0.8	2.3	0.5U
MW-14	3/30/2020	1005.29	91.98	0.5U	0.5U	1.2	0.5U	0.5U	0.9	0.5U
MW-14	9/23/2020	1005.77	91.50	0.5U	0.55	1.4	0.5U	0.45J	1.2	0.5U
MW-14	3/22/2021	1003.36	93.91	0.5U	0.57	1.4	0.5U	0.5U	0.8	0.5U
MW-14	9/24/2021	1005.47	91.80	0.5U	0.96	1.6	0.5U	0.62	0.85	0.5U
MW-14	3/30/2022	1004.23	93.04	0.50 U	0.50 U	0.92	0.50 U	0.50 U	0.51	0.50 U
MW-14	9/28/2022	1005.13	92.14	0.5 U	0.5 U	0.74	0.5 U	0.5 U	0.5 U	0.5 U
MW-14	9/29/2023	1013.93	83.34	0.50 U	0.62	1.1	0.50 U	0.50 U	0.84	0.50 U
MW-14	3/22/2024	1011.62	85.65	--	--	--	--	--	--	--
MW-14	9/27/2024	1011.14	86.13	0.50 U	0.50 U	0.74	0.50 U	0.50 U	0.50	0.50 U

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

J = estimated value

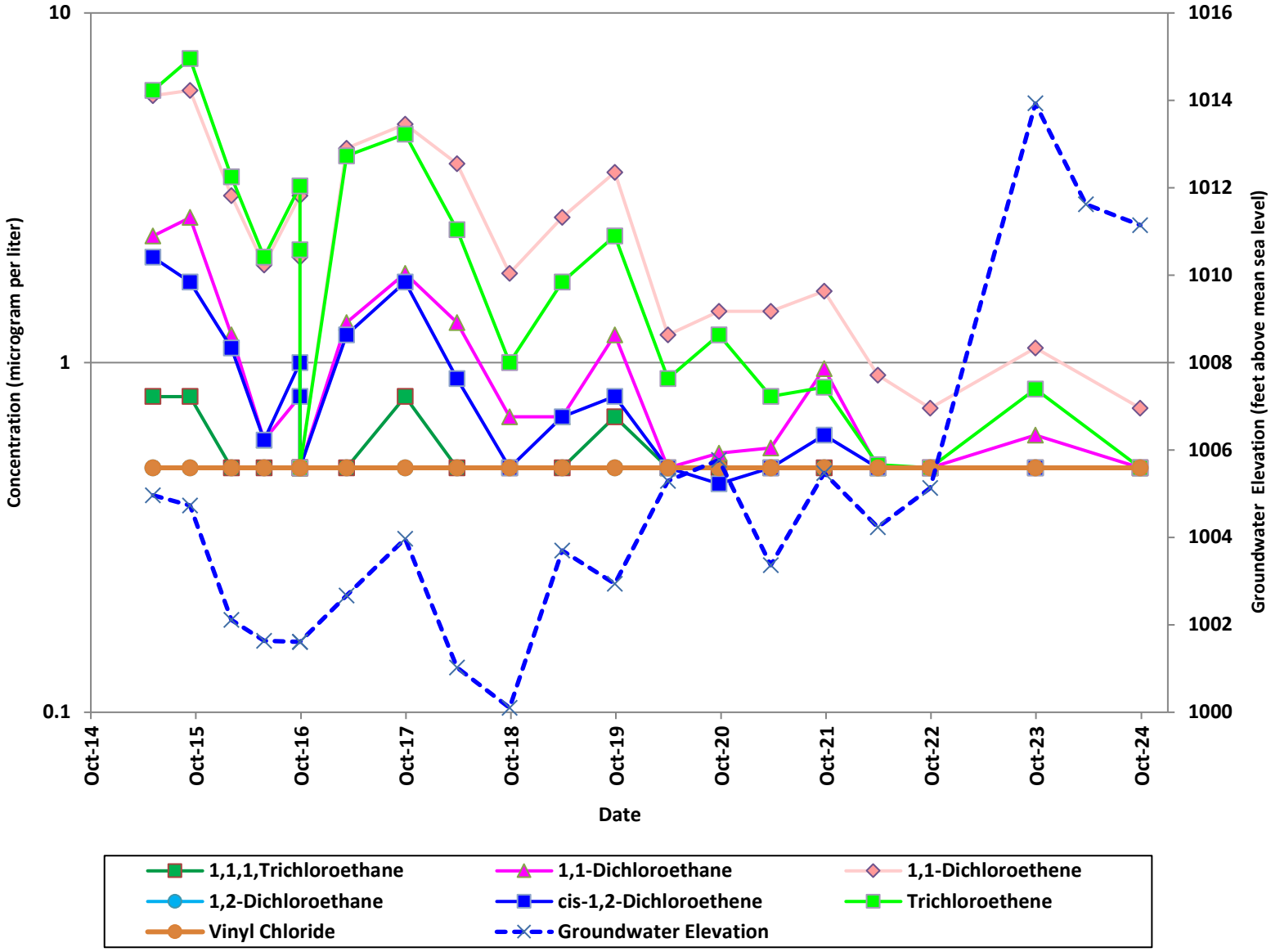
NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter

MW-14


10
1
0.1
Concentration (microgram per liter)
1016
1014
1012
1010
1008
1006
1004
1002
1000
Groundwater Elevation (feet above mean sea level)
Oct-14
Oct-15
Oct-16
Oct-17
Oct-18
Oct-19
Oct-20
Oct-21
Oct-22
Oct-23
Oct-24
Date
1,1,1,Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix B. Historical Groundwater Elevations and Analytical Results

Former Honeywell Area 10 Facility, Phoenix, Arizona

Sample Location	Sample Date	GW Elevation	Depth to Water	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	TCE	VC
	Aquifer Water Quality Standard:			*200*	*NE*	*7*	*5*	*70*	*5*	*2*
MW-15	5/5/2015	1005.62	94.48	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-15	9/11/2015	1005.42	94.68	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-15	2/2/2016	1002.88	97.22	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-15	5/25/2016	1002.37	97.73	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-15	9/27/2016	1002.43	97.67	0.5U	0.5U	0.6J	0.5U	0.5U	0.5U	0.5U
MW-15	3/8/2017	1003.50	96.60	0.5U	0.5U	1.9	0.5U	0.5U	2.0	0.5U
MW-15	9/28/2017	1004.78	95.32	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-15	3/27/2018	1001.81	98.29	0.5U	1.8	6.6	0.5U	0.6	2.5	0.5U
MW-15	9/26/2018	1000.98	99.12	0.8	31	100	0.5	10	52	0.5U
MW-15	10/23/2018	--	--	0.5U	0.5U	2.7	0.5U	0.5U	4.1	0.5U
MW-15	3/28/2019	1004.60	95.50	0.5U	0.5U	1.4	0.5U	0.5U	1.1	0.5U
MW-15	9/27/2019	1003.68	96.42	0.5U	0.5U	0.6	0.5U	0.5U	0.5U	0.5U
MW-15	3/30/2020	1006.06	94.04	0.5U	0.5U	0.6	0.5U	0.5U	0.5U	0.5U
MW-15	9/23/2020	1006.50	93.60	0.5U	0.5U	0.44J	0.5U	0.5U	0.42J	0.5U
MW-15	3/22/2021	1004.18	95.92	--	--	--	--	--	--	--
MW-15	9/24/2021	1006.22	93.88	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
MW-15	3/30/2022	1004.99	95.11	--	--	--	--	--	--	--
MW-15	9/28/2022	1005.88	94.22	0.5 U	0.57	1.6	0.5 U	0.5 U	1.4	0.5 U
MW-15	9/29/2023	1014.70	85.40	0.50 U	6.1	16	0.50 U	2.7	10	0.50 U
MW-15	3/22/2024	1012.33	87.77	--	--	--	--	--	--	--
MW-15	9/27/2024	1011.80	88.30	0.50 U	0.50 U	3.1	0.50 U	0.50 U	1.5	0.50 U

Notes:

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,2-DCA=1,2 -Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

TCE=Trichloroethene

VC=Vinyl Chloride

-- = not sampled, not measured, or not calculated

Bold results = compound was detected above the reporting limit

GW = groundwater

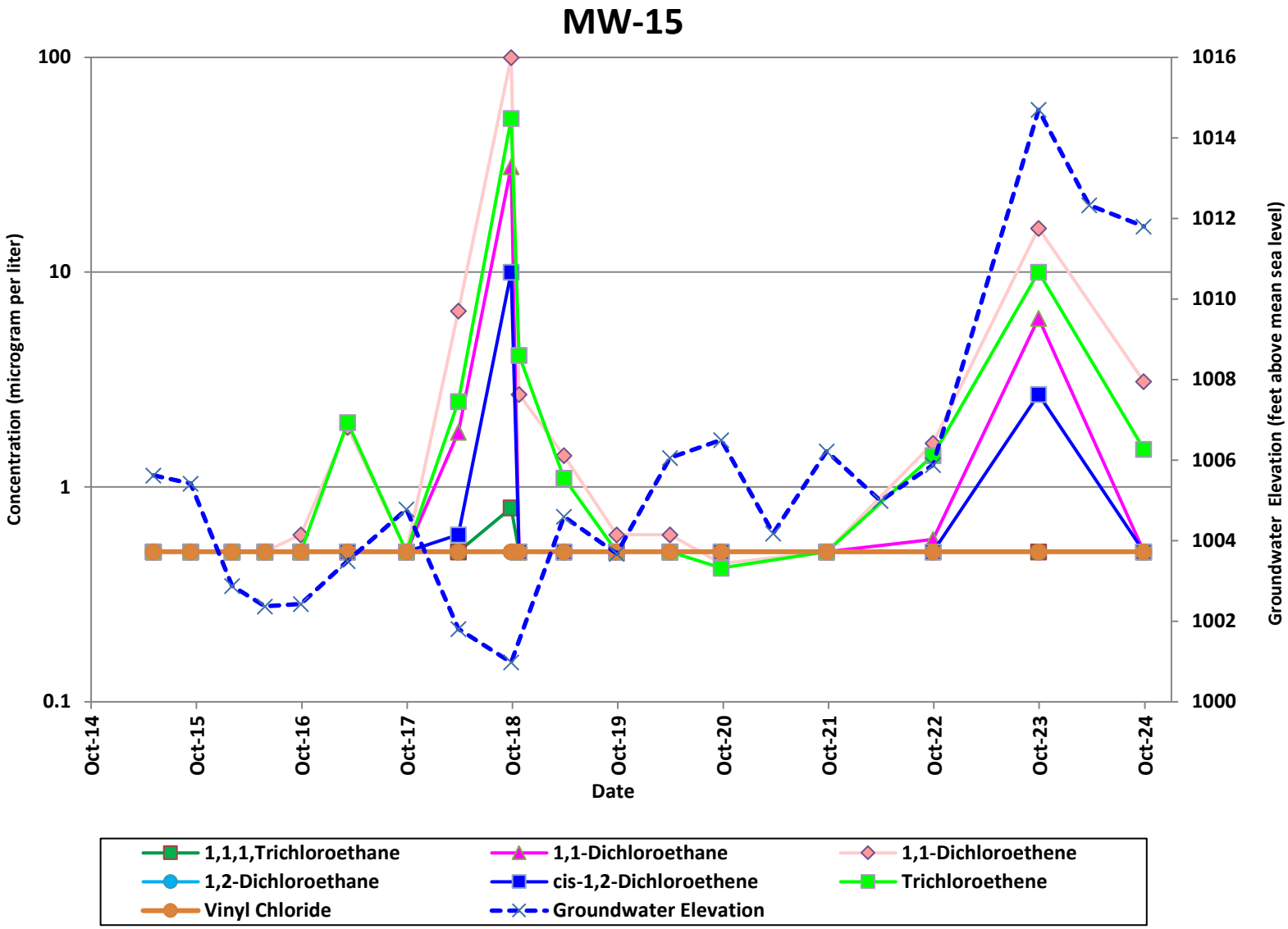
J = estimated value

NE = not established

U = compound analyzed for but not detected

µg/L = micrograms per liter

Concentrations reported in micrograms per liter


MW-15
100
10
1
0.1
Concentration (microgram per liter)
1016
1014
1012
1010
1008
1006
1004
1002
1000
Groundwater Elevation (feet above mean sea level)
Oct-14
Oct-15
Oct-16
Oct-17
Oct-18
Oct-19
Oct-20
Oct-21
Oct-22
Oct-23
Oct-24
Date
1,1,1,Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
Groundwater Elevation

Appendix C
Laboratory Analytical Results for Monitoring Wells—September 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Derek Foehr
Jacobs Engineering Group, Inc.
1501 W Fountainhead Parkway
Suite 401
Tempe, Arizona 85282

Generated 10/25/2024 8:39:15 AM

JOB DESCRIPTION

Area 10
SA2 GW Sampling

JOB NUMBER

550-224036-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southwest, LLC Project Manager.

Authorization

Generated
10/25/2024 8:39:15 AM

Authorized for release by
Emily Petrunia, Project Manager I
Emily.Petrunia@et.eurofinsus.com
(602)659-7629

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
R4	MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
R6	LFB/LFBD RPD exceeded method control limit. Recovery met acceptance criteria.

HPLC/IC

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.

Metals

Qualifier	Qualifier Description
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.

General Chemistry

Qualifier	Qualifier Description
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
R4	MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-224036-1 Eurofins Phoenix

Job Narrative
550-224036-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/28/2024 9:53 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6°C and 3.3°C.

GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 9060A: The continuing calibration verification (CCV) associated with batch 280-670213 recovered above above the upper control limit for only TOC result 1 but the average of the 4 results passed.Therefore, re-analysis of associated samples were not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-224036-1	DUP-24A1_092724	Water	09/27/24 07:01	09/28/24 09:53
550-224036-2	FB-01-24A1_092724	Water	09/27/24 08:56	09/28/24 09:53
550-224036-3	MW-11-24A1_092724	Water	09/27/24 08:35	09/28/24 09:53
550-224036-4	MW-12-24A1_092724	Water	09/27/24 07:00	09/28/24 09:53
550-224036-5	MW-13-24A1_092724	Water	09/27/24 02:30	09/28/24 09:53
550-224036-6	MW-14-24A1_092724	Water	09/27/24 04:01	09/28/24 09:53
550-224036-7	MW-15-24A1_092724	Water	09/27/24 05:32	09/28/24 09:53
550-224036-8	TB-01-24A1_092724	Water	09/27/24 00:00	09/28/24 09:53

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: DUP-24A1_092724 — Lab Sample ID: 550-224036-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.5		0.50		ug/L	1		8260B	Total/NA
Chloroform	1.5		0.50		ug/L	1		8260B	Total/NA
Trichloroethene	1.1		0.50		ug/L	1		8260B	Total/NA

Client Sample ID: FB-01-24A1_092724 — Lab Sample ID: 550-224036-2

No Detections.

Client Sample ID: MW-11-24A1_092724 — Lab Sample ID: 550-224036-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	6.5		0.50		ug/L	1		8260B	Total/NA
1,1-Dichloroethene	8.4		0.50		ug/L	1		8260B	Total/NA
Chloroform	1.5		0.50		ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.9	R4 R6	0.50		ug/L	1		8260B	Total/NA
Trichloroethene	3.6		0.50		ug/L	1		8260B	Total/NA
Carbon dioxide	20000		10000		ug/L	1		RSK-175	Total/NA
Chloride	230	D2	20		mg/L	10		300.0	Total/NA
Nitrate as N	4.7		0.050		mg/L	1		300.0	Total/NA
Sulfate	81		2.0		mg/L	1		300.0	Total/NA
Iron	2.1	M2	0.40		mg/L	1		6010C	Total/NA
Manganese	0.49		0.020		mg/L	1		6010C	Total/NA
Total Organic Carbon - Duplicates	1.1		1.0		mg/L	1		9060A	Total/NA

Client Sample ID: MW-12-24A1_092724 — Lab Sample ID: 550-224036-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.5		0.50		ug/L	1		8260B	Total/NA
Chloroform	1.6		0.50		ug/L	1		8260B	Total/NA
Trichloroethene	1.1		0.50		ug/L	1		8260B	Total/NA
Carbon dioxide	14000		10000		ug/L	1		RSK-175	Total/NA
Chloride	230	D2	20		mg/L	10		300.0	Total/NA
Nitrate as N	3.2		0.050		mg/L	1		300.0	Total/NA
Sulfate	74		2.0		mg/L	1		300.0	Total/NA
Iron	2.4		0.40		mg/L	1		6010C	Total/NA
Manganese	0.13		0.020		mg/L	1		6010C	Total/NA
Total Organic Carbon - Duplicates	1.1		1.0		mg/L	1		9060A	Total/NA
Total Sulfide	0.080		0.050		mg/L	1		SM4500 S2 C & D	Total/NA

Client Sample ID: MW-13-24A1_092724 — Lab Sample ID: 550-224036-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.83		0.50		ug/L	1		8260B	Total/NA
Chloroform	0.68		0.50		ug/L	1		8260B	Total/NA
Trichloroethene	0.55		0.50		ug/L	1		8260B	Total/NA
Carbon dioxide	17000		10000		ug/L	1		RSK-175	Total/NA
Chloride	250	D2	20		mg/L	10		300.0	Total/NA
Nitrate as N	3.6		0.050		mg/L	1		300.0	Total/NA
Sulfate	85		2.0		mg/L	1		300.0	Total/NA
Iron	3.6		0.40		mg/L	1		6010C	Total/NA
Manganese	0.10		0.020		mg/L	1		6010C	Total/NA
Total Organic Carbon - Duplicates	1.6		1.0		mg/L	1		9060A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-13-24A1_092724 (Continued) — Lab Sample ID: 550-224036-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Sulfide	0.071		0.050		mg/L	1		SM4500 S2 C & D	Total/NA

Client Sample ID: MW-14-24A1_092724 — Lab Sample ID: 550-224036-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.74		0.50		ug/L	1		8260B	Total/NA
Chloroform	0.68		0.50		ug/L	1		8260B	Total/NA
Trichloroethene	0.50		0.50		ug/L	1		8260B	Total/NA
Carbon dioxide	14000		10000		ug/L	1		RSK-175	Total/NA
Chloride	250	D2	20		mg/L	10		300.0	Total/NA
Nitrate as N	3.7		0.050		mg/L	1		300.0	Total/NA
Sulfate	85		2.0		mg/L	1		300.0	Total/NA
Iron	1.5		0.40		mg/L	1		6010C	Total/NA
Manganese	0.072		0.020		mg/L	1		6010C	Total/NA
Total Organic Carbon - Duplicates	5.0		1.0		mg/L	1		9060A	Total/NA

Client Sample ID: MW-15-24A1_092724 — Lab Sample ID: 550-224036-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.1		0.50		ug/L	1		8260B	Total/NA
Chloroform	1.3		0.50		ug/L	1		8260B	Total/NA
Trichloroethene	1.5		0.50		ug/L	1		8260B	Total/NA
Carbon dioxide	13000		10000		ug/L	1		RSK-175	Total/NA
Chloride	230	D2	20		mg/L	10		300.0	Total/NA
Nitrate as N	3.3		0.050		mg/L	1		300.0	Total/NA
Sulfate	76		2.0		mg/L	1		300.0	Total/NA
Iron	1.1		0.40		mg/L	1		6010C	Total/NA
Manganese	0.28		0.020		mg/L	1		6010C	Total/NA
Total Organic Carbon - Duplicates	3.9		1.0		mg/L	1		9060A	Total/NA

Client Sample ID: TB-01-24A1_092724 — Lab Sample ID: 550-224036-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: DUP-24A1_092724
Date Collected: 09/27/24 07:01
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-1
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 05:54	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/01/24 05:54	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 05:54	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/01/24 05:54	1
1,1-Dichloroethane	ND		0.50		ug/L			10/01/24 05:54	1
1,1-Dichloroethene	**1.5**		0.50		ug/L			10/01/24 05:54	1
1,1-Dichloropropene	ND		0.50		ug/L			10/01/24 05:54	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			10/01/24 05:54	1
1,2,3-Trichloropropane	ND		2.0		ug/L			10/01/24 05:54	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/01/24 05:54	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/01/24 05:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/01/24 05:54	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/01/24 05:54	1
1,2-Dichloroethane	ND		0.50		ug/L			10/01/24 05:54	1
1,2-Dichloropropane	ND		0.50		ug/L			10/01/24 05:54	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/01/24 05:54	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/01/24 05:54	1
1,3-Dichloropropane	ND		0.50		ug/L			10/01/24 05:54	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/01/24 05:54	1
2,2-Dichloropropane	ND	R6	1.0		ug/L			10/01/24 05:54	1
2-Butanone (MEK)	ND		10		ug/L			10/01/24 05:54	1
2-Chlorotoluene	ND		0.50		ug/L			10/01/24 05:54	1
2-Hexanone	ND		5.0		ug/L			10/01/24 05:54	1
4-Chlorotoluene	ND		0.50		ug/L			10/01/24 05:54	1
4-Isopropyltoluene	ND		0.50		ug/L			10/01/24 05:54	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			10/01/24 05:54	1
Acetone	ND		10		ug/L			10/01/24 05:54	1
Benzene	ND		0.50		ug/L			10/01/24 05:54	1
Bromobenzene	ND		1.0		ug/L			10/01/24 05:54	1
Bromoform	ND		1.0		ug/L			10/01/24 05:54	1
Bromomethane	ND		5.0		ug/L			10/01/24 05:54	1
Carbon disulfide	ND		5.0		ug/L			10/01/24 05:54	1
Carbon tetrachloride	ND		0.50		ug/L			10/01/24 05:54	1
Chlorobenzene	ND		0.50		ug/L			10/01/24 05:54	1
Chlorobromomethane	ND		0.50		ug/L			10/01/24 05:54	1
Chlorodibromomethane	ND		0.50		ug/L			10/01/24 05:54	1
Chloroethane	ND		1.0		ug/L			10/01/24 05:54	1
Chloroform	**1.5**		0.50		ug/L			10/01/24 05:54	1
Chloromethane	ND		1.0		ug/L			10/01/24 05:54	1
cis-1,2-Dichloroethene	ND	R6	0.50		ug/L			10/01/24 05:54	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 05:54	1
Dibromomethane	ND		0.50		ug/L			10/01/24 05:54	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 05:54	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 05:54	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 05:54	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 05:54	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 05:54	1
Iodomethane	ND		2.5		ug/L			10/01/24 05:54	1
Isopropylbenzene	ND		0.50		ug/L			10/01/24 05:54	1

Client Sample ID: DUP-24A1_092724

Lab Sample ID: 550-224036-1

Date Collected: 09/27/24 07:01
Matrix: Water
Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 05:54	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 05:54	1
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 05:54	1
Naphthalene	ND		5.0		ug/L			10/01/24 05:54	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 05:54	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 05:54	1
o-Xylene	ND		0.50		ug/L			10/01/24 05:54	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 05:54	1
Styrene	ND		1.0		ug/L			10/01/24 05:54	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 05:54	1
Tetrachloroethene	ND		0.50		ug/L			10/01/24 05:54	1
Toluene	ND		0.50		ug/L			10/01/24 05:54	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 05:54	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 05:54	1
Trichloroethene	**1.1**		0.50		ug/L			10/01/24 05:54	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 05:54	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 05:54	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 05:54	1
Xylenes, Total	ND		0.50		ug/L			10/01/24 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/01/24 05:54*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/01/24 05:54*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*10/01/24 05:54*	*1*

Client Sample ID: FB-01-24A1_092724

Lab Sample ID: 550-224036-2

Date Collected: 09/27/24 08:56
Matrix: Water
Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 06:21	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/01/24 06:21	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 06:21	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/01/24 06:21	1
1,1-Dichloroethane	ND		0.50		ug/L			10/01/24 06:21	1
1,1-Dichloroethene	ND		0.50		ug/L			10/01/24 06:21	1
1,1-Dichloropropene	ND		0.50		ug/L			10/01/24 06:21	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			10/01/24 06:21	1
1,2,3-Trichloropropane	ND		2.0		ug/L			10/01/24 06:21	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/01/24 06:21	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/01/24 06:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/01/24 06:21	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/01/24 06:21	1
1,2-Dichloroethane	ND		0.50		ug/L			10/01/24 06:21	1
1,2-Dichloropropane	ND		0.50		ug/L			10/01/24 06:21	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/01/24 06:21	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/01/24 06:21	1
1,3-Dichloropropane	ND		0.50		ug/L			10/01/24 06:21	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/01/24 06:21	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: FB-01-24A1_092724
Date Collected: 09/27/24 08:56
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-2
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND	R6	1.0		ug/L			10/01/24 06:21	1
2-Butanone (MEK)	ND		10		ug/L			10/01/24 06:21	1
2-Chlorotoluene	ND		0.50		ug/L			10/01/24 06:21	1
2-Hexanone	ND		5.0		ug/L			10/01/24 06:21	1
4-Chlorotoluene	ND		0.50		ug/L			10/01/24 06:21	1
4-Isopropyltoluene	ND		0.50		ug/L			10/01/24 06:21	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			10/01/24 06:21	1
Acetone	ND		10		ug/L			10/01/24 06:21	1
Benzene	ND		0.50		ug/L			10/01/24 06:21	1
Bromobenzene	ND		1.0		ug/L			10/01/24 06:21	1
Bromoform	ND		1.0		ug/L			10/01/24 06:21	1
Bromomethane	ND		5.0		ug/L			10/01/24 06:21	1
Carbon disulfide	ND		5.0		ug/L			10/01/24 06:21	1
Carbon tetrachloride	ND		0.50		ug/L			10/01/24 06:21	1
Chlorobenzene	ND		0.50		ug/L			10/01/24 06:21	1
Chlorobromomethane	ND		0.50		ug/L			10/01/24 06:21	1
Chlorodibromomethane	ND		0.50		ug/L			10/01/24 06:21	1
Chloroethane	ND		1.0		ug/L			10/01/24 06:21	1
Chloroform	ND		0.50		ug/L			10/01/24 06:21	1
Chloromethane	ND		1.0		ug/L			10/01/24 06:21	1
cis-1,2-Dichloroethene	ND	R6	0.50		ug/L			10/01/24 06:21	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 06:21	1
Dibromomethane	ND		0.50		ug/L			10/01/24 06:21	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 06:21	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 06:21	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 06:21	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 06:21	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 06:21	1
Iodomethane	ND		2.5		ug/L			10/01/24 06:21	1
Isopropylbenzene	ND		0.50		ug/L			10/01/24 06:21	1
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 06:21	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 06:21	1
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 06:21	1
Naphthalene	ND		5.0		ug/L			10/01/24 06:21	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 06:21	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 06:21	1
o-Xylene	ND		0.50		ug/L			10/01/24 06:21	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 06:21	1
Styrene	ND		1.0		ug/L			10/01/24 06:21	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 06:21	1
Tetrachloroethene	ND		0.50		ug/L			10/01/24 06:21	1
Toluene	ND		0.50		ug/L			10/01/24 06:21	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 06:21	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 06:21	1
Trichloroethene	ND		0.50		ug/L			10/01/24 06:21	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 06:21	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 06:21	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 06:21	1
Xylenes, Total	ND		0.50		ug/L			10/01/24 06:21	1

Client Sample ID: FB-01-24A1_092724

Lab Sample ID: 550-224036-2

Date Collected: 09/27/24 08:56
Matrix: Water
Date Received: 09/28/24 09:53

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/01/24 06:21*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/01/24 06:21*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*10/01/24 06:21*	*1*

Client Sample ID: MW-11-24A1_092724

Lab Sample ID: 550-224036-3

Date Collected: 09/27/24 08:35
Matrix: Water
Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			10/01/24 09:06	1
1,1,1-Trichloroethane	ND		0.50	ug/L			10/01/24 09:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/01/24 09:06	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/01/24 09:06	1
1,1-Dichloroethane	**6.5**		0.50	ug/L			10/01/24 09:06	1
1,1-Dichloroethene	**8.4**		0.50	ug/L			10/01/24 09:06	1
1,1-Dichloropropene	ND		0.50	ug/L			10/01/24 09:06	1
1,2,3-Trichlorobenzene	ND		3.0	ug/L			10/01/24 09:06	1
1,2,3-Trichloropropane	ND		2.0	ug/L			10/01/24 09:06	1
1,2,4-Trichlorobenzene	ND		2.0	ug/L			10/01/24 09:06	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			10/01/24 09:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			10/01/24 09:06	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/01/24 09:06	1
1,2-Dichloroethane	ND		0.50	ug/L			10/01/24 09:06	1
1,2-Dichloropropane	ND		0.50	ug/L			10/01/24 09:06	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			10/01/24 09:06	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/01/24 09:06	1
1,3-Dichloropropane	ND		0.50	ug/L			10/01/24 09:06	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/01/24 09:06	1
2,2-Dichloropropane	ND	R6	1.0	ug/L			10/01/24 09:06	1
2-Butanone (MEK)	ND		10	ug/L			10/01/24 09:06	1
2-Chlorotoluene	ND		0.50	ug/L			10/01/24 09:06	1
2-Hexanone	ND		5.0	ug/L			10/01/24 09:06	1
4-Chlorotoluene	ND		0.50	ug/L			10/01/24 09:06	1
4-Isopropyltoluene	ND		0.50	ug/L			10/01/24 09:06	1
4-Methyl-2-pentanone (MIBK)	ND		2.5	ug/L			10/01/24 09:06	1
Acetone	ND		10	ug/L			10/01/24 09:06	1
Benzene	ND		0.50	ug/L			10/01/24 09:06	1
Bromobenzene	ND		1.0	ug/L			10/01/24 09:06	1
Bromoform	ND		1.0	ug/L			10/01/24 09:06	1
Bromomethane	ND		5.0	ug/L			10/01/24 09:06	1
Carbon disulfide	ND		5.0	ug/L			10/01/24 09:06	1
Carbon tetrachloride	ND		0.50	ug/L			10/01/24 09:06	1
Chlorobenzene	ND		0.50	ug/L			10/01/24 09:06	1
Chlorobromomethane	ND		0.50	ug/L			10/01/24 09:06	1
Chlorodibromomethane	ND		0.50	ug/L			10/01/24 09:06	1
Chloroethane	ND		1.0	ug/L			10/01/24 09:06	1
Chloroform	**1.5**		0.50	ug/L			10/01/24 09:06	1
Chloromethane	ND		1.0	ug/L			10/01/24 09:06	1
cis-1,2-Dichloroethene	**1.9**	**R4 R6**	0.50	ug/L			10/01/24 09:06	1

Client Sample ID: MW-11-24A1_092724

Date Collected: 09/27/24 08:35
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-3

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 09:06	1
Dibromomethane	ND		0.50		ug/L			10/01/24 09:06	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 09:06	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 09:06	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 09:06	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 09:06	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 09:06	1
Iodomethane	ND		2.5		ug/L			10/01/24 09:06	1
Isopropylbenzene	ND		0.50		ug/L			10/01/24 09:06	1
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 09:06	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 09:06	1
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 09:06	1
Naphthalene	ND		5.0		ug/L			10/01/24 09:06	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 09:06	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 09:06	1
o-Xylene	ND		0.50		ug/L			10/01/24 09:06	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 09:06	1
Styrene	ND		1.0		ug/L			10/01/24 09:06	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 09:06	1
Tetrachloroethene	ND		0.50		ug/L			10/01/24 09:06	1
Toluene	ND		0.50		ug/L			10/01/24 09:06	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 09:06	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 09:06	1
Trichloroethene	**3.6**		0.50		ug/L			10/01/24 09:06	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 09:06	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 09:06	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 09:06	1
Xylenes, Total	ND		0.50		ug/L			10/01/24 09:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/01/24 09:06*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*10/01/24 09:06*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*10/01/24 09:06*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**20000**		10000		ug/L			10/04/24 14:43	1
Methane	ND		2.0		ug/L			10/02/24 15:33	1
Ethane	ND		4.0		ug/L			10/02/24 15:33	1
Ethylene	ND		3.0		ug/L			10/02/24 15:33	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**230**	**D2**	20		mg/L			09/28/24 14:18	10
Nitrate as N	**4.7**		0.050		mg/L			09/28/24 14:00	1
Nitrite as N	ND		0.050		mg/L			09/28/24 14:00	1
Sulfate	**81**		2.0		mg/L			09/28/24 14:00	1

Client Sample ID: MW-11-24A1_092724

Lab Sample ID: 550-224036-3

Date Collected: 09/27/24 08:35
Matrix: Water
Date Received: 09/28/24 09:53

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.1**	**M2**	0.40		mg/L		10/01/24 10:12	10/02/24 20:19	1
Manganese	**0.49**		0.020		mg/L		10/01/24 10:12	10/02/24 20:19	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates (SW846 9060A)	**1.1**		1.0		mg/L			10/08/24 13:07	1
Total Sulfide (SM4500 S2 C & D)	ND		0.050		mg/L			10/01/24 16:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved (SM4500 S2 C & D)	ND	H6 R4	0.050		mg/L		10/01/24 14:45	10/01/24 16:57	1

Client Sample ID: MW-12-24A1_092724

Lab Sample ID: 550-224036-4

Date Collected: 09/27/24 07:00
Matrix: Water
Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 06:48	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/01/24 06:48	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 06:48	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/01/24 06:48	1
1,1-Dichloroethane	ND		0.50		ug/L			10/01/24 06:48	1
1,1-Dichloroethene	**1.5**		0.50		ug/L			10/01/24 06:48	1
1,1-Dichloropropene	ND		0.50		ug/L			10/01/24 06:48	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			10/01/24 06:48	1
1,2,3-Trichloropropane	ND		2.0		ug/L			10/01/24 06:48	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/01/24 06:48	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/01/24 06:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/01/24 06:48	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/01/24 06:48	1
1,2-Dichloroethane	ND		0.50		ug/L			10/01/24 06:48	1
1,2-Dichloropropane	ND		0.50		ug/L			10/01/24 06:48	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/01/24 06:48	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/01/24 06:48	1
1,3-Dichloropropane	ND		0.50		ug/L			10/01/24 06:48	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/01/24 06:48	1
2,2-Dichloropropane	ND	R6	1.0		ug/L			10/01/24 06:48	1
2-Butanone (MEK)	ND		10		ug/L			10/01/24 06:48	1
2-Chlorotoluene	ND		0.50		ug/L			10/01/24 06:48	1
2-Hexanone	ND		5.0		ug/L			10/01/24 06:48	1
4-Chlorotoluene	ND		0.50		ug/L			10/01/24 06:48	1
4-Isopropyltoluene	ND		0.50		ug/L			10/01/24 06:48	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			10/01/24 06:48	1
Acetone	ND		10		ug/L			10/01/24 06:48	1
Benzene	ND		0.50		ug/L			10/01/24 06:48	1
Bromobenzene	ND		1.0		ug/L			10/01/24 06:48	1
Bromoform	ND		1.0		ug/L			10/01/24 06:48	1
Bromomethane	ND		5.0		ug/L			10/01/24 06:48	1
Carbon disulfide	ND		5.0		ug/L			10/01/24 06:48	1

Client Sample ID: MW-12-24A1_092724
Date Collected: 09/27/24 07:00
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-4
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		0.50		ug/L			10/01/24 06:48	1
Chlorobenzene	ND		0.50		ug/L			10/01/24 06:48	1
Chlorobromomethane	ND		0.50		ug/L			10/01/24 06:48	1
Chlorodibromomethane	ND		0.50		ug/L			10/01/24 06:48	1
Chloroethane	ND		1.0		ug/L			10/01/24 06:48	1
Chloroform	**1.6**		0.50		ug/L			10/01/24 06:48	1
Chloromethane	ND		1.0		ug/L			10/01/24 06:48	1
cis-1,2-Dichloroethene	ND	R6	0.50		ug/L			10/01/24 06:48	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 06:48	1
Dibromomethane	ND		0.50		ug/L			10/01/24 06:48	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 06:48	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 06:48	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 06:48	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 06:48	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 06:48	1
Iodomethane	ND		2.5		ug/L			10/01/24 06:48	1
Isopropylbenzene	ND		0.50		ug/L			10/01/24 06:48	1
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 06:48	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 06:48	1
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 06:48	1
Naphthalene	ND		5.0		ug/L			10/01/24 06:48	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 06:48	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 06:48	1
o-Xylene	ND		0.50		ug/L			10/01/24 06:48	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 06:48	1
Styrene	ND		1.0		ug/L			10/01/24 06:48	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 06:48	1
Tetrachloroethene	ND		0.50		ug/L			10/01/24 06:48	1
Toluene	ND		0.50		ug/L			10/01/24 06:48	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 06:48	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 06:48	1
Trichloroethene	**1.1**		0.50		ug/L			10/01/24 06:48	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 06:48	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 06:48	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 06:48	1
Xylenes, Total	ND		0.50		ug/L			10/01/24 06:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*10/01/24 06:48*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*10/01/24 06:48*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*10/01/24 06:48*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**14000**		10000		ug/L			10/04/24 15:14	1
Methane	ND		2.0		ug/L			10/02/24 16:03	1
Ethane	ND		4.0		ug/L			10/02/24 16:03	1
Ethylene	ND		3.0		ug/L			10/02/24 16:03	1

Client Sample ID: MW-12-24A1_092724

Lab Sample ID: 550-224036-4

Date Collected: 09/27/24 07:00

Matrix: Water

Date Received: 09/28/24 09:53

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**230**	**D2**	20		mg/L			09/28/24 15:32	10
Nitrate as N	**3.2**		0.050		mg/L			09/28/24 15:13	1
Nitrite as N	ND		0.050		mg/L			09/28/24 15:13	1
Sulfate	**74**		2.0		mg/L			09/28/24 15:13	1

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.4**		0.40		mg/L		10/01/24 10:12	10/02/24 20:23	1
Manganese	**0.13**		0.020		mg/L		10/01/24 10:12	10/02/24 20:23	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates (SW846 9060A)	**1.1**		1.0		mg/L			10/08/24 14:26	1
Total Sulfide (SM4500 S2 C & D)	**0.080**		0.050		mg/L			10/01/24 16:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved (SM4500 S2 C & D)	ND	H6	0.050		mg/L		10/01/24 14:45	10/01/24 16:57	1

Client Sample ID: MW-13-24A1_092724

Lab Sample ID: 550-224036-5

Date Collected: 09/27/24 02:30

Matrix: Water

Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 07:16	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/01/24 07:16	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 07:16	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/01/24 07:16	1
1,1-Dichloroethane	ND		0.50		ug/L			10/01/24 07:16	1
1,1-Dichloroethene	**0.83**		0.50		ug/L			10/01/24 07:16	1
1,1-Dichloropropene	ND		0.50		ug/L			10/01/24 07:16	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			10/01/24 07:16	1
1,2,3-Trichloropropane	ND		2.0		ug/L			10/01/24 07:16	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/01/24 07:16	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/01/24 07:16	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/01/24 07:16	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/01/24 07:16	1
1,2-Dichloroethane	ND		0.50		ug/L			10/01/24 07:16	1
1,2-Dichloropropane	ND		0.50		ug/L			10/01/24 07:16	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/01/24 07:16	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/01/24 07:16	1
1,3-Dichloropropane	ND		0.50		ug/L			10/01/24 07:16	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/01/24 07:16	1
2,2-Dichloropropane	ND	R6	1.0		ug/L			10/01/24 07:16	1
2-Butanone (MEK)	ND		10		ug/L			10/01/24 07:16	1
2-Chlorotoluene	ND		0.50		ug/L			10/01/24 07:16	1
2-Hexanone	ND		5.0		ug/L			10/01/24 07:16	1
4-Chlorotoluene	ND		0.50		ug/L			10/01/24 07:16	1
4-Isopropyltoluene	ND		0.50		ug/L			10/01/24 07:16	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: MW-13-24A1_092724
Date Collected: 09/27/24 02:30
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-5
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			10/01/24 07:16	1
Acetone	ND		10		ug/L			10/01/24 07:16	1
Benzene	ND		0.50		ug/L			10/01/24 07:16	1
Bromobenzene	ND		1.0		ug/L			10/01/24 07:16	1
Bromoform	ND		1.0		ug/L			10/01/24 07:16	1
Bromomethane	ND		5.0		ug/L			10/01/24 07:16	1
Carbon disulfide	ND		5.0		ug/L			10/01/24 07:16	1
Carbon tetrachloride	ND		0.50		ug/L			10/01/24 07:16	1
Chlorobenzene	ND		0.50		ug/L			10/01/24 07:16	1
Chlorobromomethane	ND		0.50		ug/L			10/01/24 07:16	1
Chlorodibromomethane	ND		0.50		ug/L			10/01/24 07:16	1
Chloroethane	ND		1.0		ug/L			10/01/24 07:16	1
Chloroform	**0.68**		0.50		ug/L			10/01/24 07:16	1
Chloromethane	ND		1.0		ug/L			10/01/24 07:16	1
cis-1,2-Dichloroethene	ND	R6	0.50		ug/L			10/01/24 07:16	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 07:16	1
Dibromomethane	ND		0.50		ug/L			10/01/24 07:16	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 07:16	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 07:16	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 07:16	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 07:16	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 07:16	1
Iodomethane	ND		2.5		ug/L			10/01/24 07:16	1
Isopropylbenzene	ND		0.50		ug/L			10/01/24 07:16	1
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 07:16	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 07:16	1
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 07:16	1
Naphthalene	ND		5.0		ug/L			10/01/24 07:16	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 07:16	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 07:16	1
o-Xylene	ND		0.50		ug/L			10/01/24 07:16	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 07:16	1
Styrene	ND		1.0		ug/L			10/01/24 07:16	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 07:16	1
Tetrachloroethene	ND		0.50		ug/L			10/01/24 07:16	1
Toluene	ND		0.50		ug/L			10/01/24 07:16	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 07:16	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 07:16	1
Trichloroethene	**0.55**		0.50		ug/L			10/01/24 07:16	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 07:16	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 07:16	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 07:16	1
Xylenes, Total	ND		0.50		ug/L			10/01/24 07:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/01/24 07:16*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*10/01/24 07:16*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*10/01/24 07:16*	*1*

Client Sample ID: MW-13-24A1_092724

Lab Sample ID: 550-224036-5

Date Collected: 09/27/24 02:30
Matrix: Water
Date Received: 09/28/24 09:53

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**17000**		10000		ug/L			10/04/24 15:24	1
Methane	ND		2.0		ug/L			10/02/24 16:13	1
Ethane	ND		4.0		ug/L			10/02/24 16:13	1
Ethylene	ND		3.0		ug/L			10/02/24 16:13	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**250**	**D2**	20		mg/L			09/28/24 16:08	10
Nitrate as N	**3.6**		0.050		mg/L			09/28/24 15:50	1
Nitrite as N	ND		0.050		mg/L			09/28/24 15:50	1
Sulfate	**85**		2.0		mg/L			09/28/24 15:50	1

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.6**		0.40		mg/L		10/01/24 10:12	10/02/24 20:26	1
Manganese	**0.10**		0.020		mg/L		10/01/24 10:12	10/02/24 20:26	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates (SW846 9060A)	**1.6**		1.0		mg/L			10/08/24 14:42	1
Total Sulfide (SM4500 S2 C & D)	**0.071**		0.050		mg/L			10/01/24 16:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved (SM4500 S2 C & D)	ND	H6	0.050		mg/L		10/01/24 14:45	10/01/24 16:57	1

Client Sample ID: MW-14-24A1_092724

Lab Sample ID: 550-224036-6

Date Collected: 09/27/24 04:01
Matrix: Water
Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 07:43	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/01/24 07:43	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 07:43	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/01/24 07:43	1
1,1-Dichloroethane	ND		0.50		ug/L			10/01/24 07:43	1
1,1-Dichloroethene	**0.74**		0.50		ug/L			10/01/24 07:43	1
1,1-Dichloropropene	ND		0.50		ug/L			10/01/24 07:43	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			10/01/24 07:43	1
1,2,3-Trichloropropane	ND		2.0		ug/L			10/01/24 07:43	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/01/24 07:43	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/01/24 07:43	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/01/24 07:43	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/01/24 07:43	1
1,2-Dichloroethane	ND		0.50		ug/L			10/01/24 07:43	1
1,2-Dichloropropane	ND		0.50		ug/L			10/01/24 07:43	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/01/24 07:43	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/01/24 07:43	1
1,3-Dichloropropane	ND		0.50		ug/L			10/01/24 07:43	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: MW-14-24A1_092724
Date Collected: 09/27/24 04:01
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-6
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.50		ug/L			10/01/24 07:43	1
2,2-Dichloropropane	ND	R6	1.0		ug/L			10/01/24 07:43	1
2-Butanone (MEK)	ND		10		ug/L			10/01/24 07:43	1
2-Chlorotoluene	ND		0.50		ug/L			10/01/24 07:43	1
2-Hexanone	ND		5.0		ug/L			10/01/24 07:43	1
4-Chlorotoluene	ND		0.50		ug/L			10/01/24 07:43	1
4-Isopropyltoluene	ND		0.50		ug/L			10/01/24 07:43	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			10/01/24 07:43	1
Acetone	ND		10		ug/L			10/01/24 07:43	1
Benzene	ND		0.50		ug/L			10/01/24 07:43	1
Bromobenzene	ND		1.0		ug/L			10/01/24 07:43	1
Bromoform	ND		1.0		ug/L			10/01/24 07:43	1
Bromomethane	ND		5.0		ug/L			10/01/24 07:43	1
Carbon disulfide	ND		5.0		ug/L			10/01/24 07:43	1
Carbon tetrachloride	ND		0.50		ug/L			10/01/24 07:43	1
Chlorobenzene	ND		0.50		ug/L			10/01/24 07:43	1
Chlorobromomethane	ND		0.50		ug/L			10/01/24 07:43	1
Chlorodibromomethane	ND		0.50		ug/L			10/01/24 07:43	1
Chloroethane	ND		1.0		ug/L			10/01/24 07:43	1
Chloroform	**0.68**		0.50		ug/L			10/01/24 07:43	1
Chloromethane	ND		1.0		ug/L			10/01/24 07:43	1
cis-1,2-Dichloroethene	ND	R6	0.50		ug/L			10/01/24 07:43	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 07:43	1
Dibromomethane	ND		0.50		ug/L			10/01/24 07:43	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 07:43	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 07:43	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 07:43	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 07:43	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 07:43	1
Iodomethane	ND		2.5		ug/L			10/01/24 07:43	1
Isopropylbenzene	ND		0.50		ug/L			10/01/24 07:43	1
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 07:43	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 07:43	1
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 07:43	1
Naphthalene	ND		5.0		ug/L			10/01/24 07:43	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 07:43	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 07:43	1
o-Xylene	ND		0.50		ug/L			10/01/24 07:43	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 07:43	1
Styrene	ND		1.0		ug/L			10/01/24 07:43	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 07:43	1
Tetrachloroethene	ND		0.50		ug/L			10/01/24 07:43	1
Toluene	ND		0.50		ug/L			10/01/24 07:43	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 07:43	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 07:43	1
Trichloroethene	**0.50**		0.50		ug/L			10/01/24 07:43	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 07:43	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 07:43	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 07:43	1

Client Sample ID: MW-14-24A1_092724

Lab Sample ID: 550-224036-6

Date Collected: 09/27/24 04:01
Matrix: Water
Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.50		ug/L			10/01/24 07:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/01/24 07:43*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*10/01/24 07:43*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*10/01/24 07:43*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**14000**		10000		ug/L			10/04/24 15:34	1
Methane	ND		2.0		ug/L			10/02/24 16:23	1
Ethane	ND		4.0		ug/L			10/02/24 16:23	1
Ethylene	ND		3.0		ug/L			10/02/24 16:23	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**250**	**D2**	20		mg/L			09/28/24 16:45	10
Nitrate as N	**3.7**		0.050		mg/L			09/28/24 16:27	1
Nitrite as N	ND		0.050		mg/L			09/28/24 16:27	1
Sulfate	**85**		2.0		mg/L			09/28/24 16:27	1

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.5**		0.40		mg/L		10/01/24 10:12	10/02/24 20:30	1
Manganese	**0.072**		0.020		mg/L		10/01/24 10:12	10/02/24 20:30	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates (SW846 9060A)	**5.0**		1.0		mg/L			10/07/24 23:35	1
Total Sulfide (SM4500 S2 C & D)	ND		0.050		mg/L			10/01/24 16:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved (SM4500 S2 C & D)	ND	H6	0.050		mg/L		10/01/24 14:45	10/01/24 16:57	1

Client Sample ID: MW-15-24A1_092724

Lab Sample ID: 550-224036-7

Date Collected: 09/27/24 05:32
Matrix: Water
Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 08:11	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/01/24 08:11	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 08:11	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/01/24 08:11	1
1,1-Dichloroethane	ND		0.50		ug/L			10/01/24 08:11	1
1,1-Dichloroethene	**3.1**		0.50		ug/L			10/01/24 08:11	1
1,1-Dichloropropene	ND		0.50		ug/L			10/01/24 08:11	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			10/01/24 08:11	1
1,2,3-Trichloropropane	ND		2.0		ug/L			10/01/24 08:11	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/01/24 08:11	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: MW-15-24A1_092724
Date Collected: 09/27/24 05:32
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-7
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/01/24 08:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/01/24 08:11	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/01/24 08:11	1
1,2-Dichloroethane	ND		0.50		ug/L			10/01/24 08:11	1
1,2-Dichloropropane	ND		0.50		ug/L			10/01/24 08:11	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/01/24 08:11	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/01/24 08:11	1
1,3-Dichloropropane	ND		0.50		ug/L			10/01/24 08:11	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/01/24 08:11	1
2,2-Dichloropropane	ND	R6	1.0		ug/L			10/01/24 08:11	1
2-Butanone (MEK)	ND		10		ug/L			10/01/24 08:11	1
2-Chlorotoluene	ND		0.50		ug/L			10/01/24 08:11	1
2-Hexanone	ND		5.0		ug/L			10/01/24 08:11	1
4-Chlorotoluene	ND		0.50		ug/L			10/01/24 08:11	1
4-Isopropyltoluene	ND		0.50		ug/L			10/01/24 08:11	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			10/01/24 08:11	1
Acetone	ND		10		ug/L			10/01/24 08:11	1
Benzene	ND		0.50		ug/L			10/01/24 08:11	1
Bromobenzene	ND		1.0		ug/L			10/01/24 08:11	1
Bromoform	ND		1.0		ug/L			10/01/24 08:11	1
Bromomethane	ND		5.0		ug/L			10/01/24 08:11	1
Carbon disulfide	ND		5.0		ug/L			10/01/24 08:11	1
Carbon tetrachloride	ND		0.50		ug/L			10/01/24 08:11	1
Chlorobenzene	ND		0.50		ug/L			10/01/24 08:11	1
Chlorobromomethane	ND		0.50		ug/L			10/01/24 08:11	1
Chlorodibromomethane	ND		0.50		ug/L			10/01/24 08:11	1
Chloroethane	ND		1.0		ug/L			10/01/24 08:11	1
Chloroform	**1.3**		0.50		ug/L			10/01/24 08:11	1
Chloromethane	ND		1.0		ug/L			10/01/24 08:11	1
cis-1,2-Dichloroethene	ND	R6	0.50		ug/L			10/01/24 08:11	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 08:11	1
Dibromomethane	ND		0.50		ug/L			10/01/24 08:11	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 08:11	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 08:11	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 08:11	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 08:11	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 08:11	1
Iodomethane	ND		2.5		ug/L			10/01/24 08:11	1
Isopropylbenzene	ND		0.50		ug/L			10/01/24 08:11	1
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 08:11	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 08:11	1
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 08:11	1
Naphthalene	ND		5.0		ug/L			10/01/24 08:11	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 08:11	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 08:11	1
o-Xylene	ND		0.50		ug/L			10/01/24 08:11	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 08:11	1
Styrene	ND		1.0		ug/L			10/01/24 08:11	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 08:11	1

Client Sample ID: MW-15-24A1_092724

Lab Sample ID: 550-224036-7

Date Collected: 09/27/24 05:32

Matrix: Water

Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.50		ug/L			10/01/24 08:11	1
Toluene	ND		0.50		ug/L			10/01/24 08:11	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 08:11	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 08:11	1
Trichloroethene	**1.5**		0.50		ug/L			10/01/24 08:11	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 08:11	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 08:11	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 08:11	1
Xylenes, Total	ND		0.50		ug/L			10/01/24 08:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/01/24 08:11*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/01/24 08:11*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*10/01/24 08:11*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**13000**		10000		ug/L			10/04/24 15:44	1
Methane	ND		2.0		ug/L			10/02/24 16:34	1
Ethane	ND		4.0		ug/L			10/02/24 16:34	1
Ethylene	ND		3.0		ug/L			10/02/24 16:34	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**230**	**D2**	20		mg/L			09/28/24 17:59	10
Nitrate as N	**3.3**		0.050		mg/L			09/28/24 17:40	1
Nitrite as N	ND		0.050		mg/L			09/28/24 17:40	1
Sulfate	**76**		2.0		mg/L			09/28/24 17:40	1

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.1**		0.40		mg/L		10/01/24 10:12	10/02/24 20:33	1
Manganese	**0.28**		0.020		mg/L		10/01/24 10:12	10/02/24 20:33	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates (SW846 9060A)	**3.9**		1.0		mg/L			10/07/24 23:51	1
Total Sulfide (SM4500 S2 C & D)	ND		0.050		mg/L			10/01/24 16:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved (SM4500 S2 C & D)	ND	H6	0.050		mg/L		10/01/24 14:45	10/01/24 16:57	1

Client Sample ID: TB-01-24A1_092724

Lab Sample ID: 550-224036-8

Date Collected: 09/27/24 00:00

Matrix: Water

Date Received: 09/28/24 09:53

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 08:38	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/01/24 08:38	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: TB-01-24A1_092724
Date Collected: 09/27/24 00:00
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-8
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 08:38	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/01/24 08:38	1
1,1-Dichloroethane	ND		0.50		ug/L			10/01/24 08:38	1
1,1-Dichloroethene	ND		0.50		ug/L			10/01/24 08:38	1
1,1-Dichloropropene	ND		0.50		ug/L			10/01/24 08:38	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			10/01/24 08:38	1
1,2,3-Trichloropropane	ND		2.0		ug/L			10/01/24 08:38	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/01/24 08:38	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/01/24 08:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/01/24 08:38	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/01/24 08:38	1
1,2-Dichloroethane	ND		0.50		ug/L			10/01/24 08:38	1
1,2-Dichloropropane	ND		0.50		ug/L			10/01/24 08:38	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/01/24 08:38	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/01/24 08:38	1
1,3-Dichloropropane	ND		0.50		ug/L			10/01/24 08:38	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/01/24 08:38	1
2,2-Dichloropropane	ND	R6	1.0		ug/L			10/01/24 08:38	1
2-Butanone (MEK)	ND		10		ug/L			10/01/24 08:38	1
2-Chlorotoluene	ND		0.50		ug/L			10/01/24 08:38	1
2-Hexanone	ND		5.0		ug/L			10/01/24 08:38	1
4-Chlorotoluene	ND		0.50		ug/L			10/01/24 08:38	1
4-Isopropyltoluene	ND		0.50		ug/L			10/01/24 08:38	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			10/01/24 08:38	1
Acetone	ND		10		ug/L			10/01/24 08:38	1
Benzene	ND		0.50		ug/L			10/01/24 08:38	1
Bromobenzene	ND		1.0		ug/L			10/01/24 08:38	1
Bromoform	ND		1.0		ug/L			10/01/24 08:38	1
Bromomethane	ND		5.0		ug/L			10/01/24 08:38	1
Carbon disulfide	ND		5.0		ug/L			10/01/24 08:38	1
Carbon tetrachloride	ND		0.50		ug/L			10/01/24 08:38	1
Chlorobenzene	ND		0.50		ug/L			10/01/24 08:38	1
Chlorobromomethane	ND		0.50		ug/L			10/01/24 08:38	1
Chlorodibromomethane	ND		0.50		ug/L			10/01/24 08:38	1
Chloroethane	ND		1.0		ug/L			10/01/24 08:38	1
Chloroform	ND		0.50		ug/L			10/01/24 08:38	1
Chloromethane	ND		1.0		ug/L			10/01/24 08:38	1
cis-1,2-Dichloroethene	ND	R6	0.50		ug/L			10/01/24 08:38	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 08:38	1
Dibromomethane	ND		0.50		ug/L			10/01/24 08:38	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 08:38	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 08:38	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 08:38	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 08:38	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 08:38	1
Iodomethane	ND		2.5		ug/L			10/01/24 08:38	1
Isopropylbenzene	ND		0.50		ug/L			10/01/24 08:38	1
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 08:38	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 08:38	1

Client Sample ID: TB-01-24A1_092724

Date Collected: 09/27/24 00:00
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-8

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 08:38	1
Naphthalene	ND		5.0		ug/L			10/01/24 08:38	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 08:38	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 08:38	1
o-Xylene	ND		0.50		ug/L			10/01/24 08:38	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 08:38	1
Styrene	ND		1.0		ug/L			10/01/24 08:38	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 08:38	1
Tetrachloroethene	ND		0.50		ug/L			10/01/24 08:38	1
Toluene	ND		0.50		ug/L			10/01/24 08:38	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 08:38	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 08:38	1
Trichloroethene	ND		0.50		ug/L			10/01/24 08:38	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 08:38	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 08:38	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 08:38	1
Xylenes, Total	ND		0.50		ug/L			10/01/24 08:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/01/24 08:38*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*10/01/24 08:38*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*10/01/24 08:38*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
550-224036-1	DUP-24A1_092724	98	96	100
550-224036-2	FB-01-24A1_092724	98	96	102
550-224036-3	MW-11-24A1_092724	98	94	103
550-224036-3 MS	MW-11-24A1_092724	89	89	97
550-224036-3 MSD	MW-11-24A1_092724	87	91	93
550-224036-4	MW-12-24A1_092724	94	99	100
550-224036-5	MW-13-24A1_092724	98	100	98
550-224036-6	MW-14-24A1_092724	96	99	99
550-224036-7	MW-15-24A1_092724	97	96	100
550-224036-8	TB-01-24A1_092724	97	93	102
LCS 550-326437/1002	Lab Control Sample	84	85	94
LCSD 550-326437/4	Lab Control Sample Dup	84	86	93
MB 550-326437/6	Method Blank	95	95	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-326437/6
Matrix: Water
Analysis Batch: 326437

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 01:47	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/01/24 01:47	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/01/24 01:47	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/01/24 01:47	1
1,1-Dichloroethane	ND		0.50		ug/L			10/01/24 01:47	1
1,1-Dichloroethene	ND		0.50		ug/L			10/01/24 01:47	1
1,1-Dichloropropene	ND		0.50		ug/L			10/01/24 01:47	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			10/01/24 01:47	1
1,2,3-Trichloropropane	ND		2.0		ug/L			10/01/24 01:47	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/01/24 01:47	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/01/24 01:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/01/24 01:47	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/01/24 01:47	1
1,2-Dichloroethane	ND		0.50		ug/L			10/01/24 01:47	1
1,2-Dichloropropane	ND		0.50		ug/L			10/01/24 01:47	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/01/24 01:47	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/01/24 01:47	1
1,3-Dichloropropane	ND		0.50		ug/L			10/01/24 01:47	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/01/24 01:47	1
2,2-Dichloropropane	ND		1.0		ug/L			10/01/24 01:47	1
2-Butanone (MEK)	ND		10		ug/L			10/01/24 01:47	1
2-Chlorotoluene	ND		0.50		ug/L			10/01/24 01:47	1
2-Hexanone	ND		5.0		ug/L			10/01/24 01:47	1
4-Chlorotoluene	ND		0.50		ug/L			10/01/24 01:47	1
4-Isopropyltoluene	ND		0.50		ug/L			10/01/24 01:47	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			10/01/24 01:47	1
Acetone	ND		10		ug/L			10/01/24 01:47	1
Benzene	ND		0.50		ug/L			10/01/24 01:47	1
Bromobenzene	ND		1.0		ug/L			10/01/24 01:47	1
Bromoform	ND		1.0		ug/L			10/01/24 01:47	1
Bromomethane	ND		5.0		ug/L			10/01/24 01:47	1
Carbon disulfide	ND		5.0		ug/L			10/01/24 01:47	1
Carbon tetrachloride	ND		0.50		ug/L			10/01/24 01:47	1
Chlorobenzene	ND		0.50		ug/L			10/01/24 01:47	1
Chlorobromomethane	ND		0.50		ug/L			10/01/24 01:47	1
Chlorodibromomethane	ND		0.50		ug/L			10/01/24 01:47	1
Chloroethane	ND		1.0		ug/L			10/01/24 01:47	1
Chloroform	ND		0.50		ug/L			10/01/24 01:47	1
Chloromethane	ND		1.0		ug/L			10/01/24 01:47	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 01:47	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/01/24 01:47	1
Dibromomethane	ND		0.50		ug/L			10/01/24 01:47	1
Dichlorobromomethane	ND		0.50		ug/L			10/01/24 01:47	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/01/24 01:47	1
Ethylbenzene	ND		0.50		ug/L			10/01/24 01:47	1
Ethylene Dibromide	ND		0.50		ug/L			10/01/24 01:47	1
Hexachlorobutadiene	ND		5.0		ug/L			10/01/24 01:47	1
Iodomethane	ND		2.5		ug/L			10/01/24 01:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 550-326437/6
Matrix: Water
Analysis Batch: 326437

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.50		ug/L			10/01/24 01:47	1
Methyl tert-butyl ether	ND		0.50		ug/L			10/01/24 01:47	1
Methylene Chloride	ND		5.0		ug/L			10/01/24 01:47	1
m-Xylene & p-Xylene	ND		1.0		ug/L			10/01/24 01:47	1
Naphthalene	ND		5.0		ug/L			10/01/24 01:47	1
n-Butylbenzene	ND		1.0		ug/L			10/01/24 01:47	1
N-Propylbenzene	ND		0.50		ug/L			10/01/24 01:47	1
o-Xylene	ND		0.50		ug/L			10/01/24 01:47	1
sec-Butylbenzene	ND		0.50		ug/L			10/01/24 01:47	1
Styrene	ND		1.0		ug/L			10/01/24 01:47	1
tert-Butylbenzene	ND		0.50		ug/L			10/01/24 01:47	1
Tetrachloroethene	ND		0.50		ug/L			10/01/24 01:47	1
Toluene	ND		0.50		ug/L			10/01/24 01:47	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/01/24 01:47	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/01/24 01:47	1
Trichloroethene	ND		0.50		ug/L			10/01/24 01:47	1
Trichlorofluoromethane	ND		1.0		ug/L			10/01/24 01:47	1
Vinyl acetate	ND		5.0		ug/L			10/01/24 01:47	1
Vinyl chloride	ND		0.50		ug/L			10/01/24 01:47	1
Xylenes, Total	ND		0.50		ug/L			10/01/24 01:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*10/01/24 01:47*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*10/01/24 01:47*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*10/01/24 01:47*	*1*

Lab Sample ID: LCS 550-326437/1002
Matrix: Water
Analysis Batch: 326437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane			50.0	43.9		ug/L		88	70 - 130		
1,1,1-Trichloroethane			50.0	43.0		ug/L		86	70 - 130		
1,1,2,2-Tetrachloroethane			50.0	48.9		ug/L		98	70 - 130		
1,1,2-Trichloroethane			50.0	47.3		ug/L		95	70 - 130		
1,1-Dichloroethane			50.0	45.7		ug/L		91	70 - 130		
1,1-Dichloroethene			50.0	42.3		ug/L		85	70 - 130		
1,1-Dichloropropene			50.0	44.3		ug/L		89	70 - 130		
1,2,3-Trichlorobenzene			50.0	42.6		ug/L		85	70 - 130		
1,2,3-Trichloropropane			50.0	48.3		ug/L		97	70 - 130		
1,2,4-Trichlorobenzene			50.0	42.0		ug/L		84	70 - 130		
1,2,4-Trimethylbenzene			50.0	49.0		ug/L		98	70 - 130		
1,2-Dibromo-3-Chloropropane			50.0	48.9		ug/L		98	61 - 130		
1,2-Dichlorobenzene			50.0	45.6		ug/L		91	70 - 130		
1,2-Dichloroethane			50.0	47.0		ug/L		94	70 - 130		
1,2-Dichloropropane			50.0	46.5		ug/L		93	70 - 130		
1,3,5-Trimethylbenzene			50.0	49.8		ug/L		100	70 - 130		
1,3-Dichlorobenzene			50.0	45.7		ug/L		91	70 - 130		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-326437/1002
Matrix: Water
Analysis Batch: 326437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichloropropane	50.0	47.1		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	44.6		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	40.7		ug/L		81	70 - 130
2-Butanone (MEK)	50.0	45.8		ug/L		92	50 - 150
2-Chlorotoluene	50.0	48.8		ug/L		98	70 - 130
2-Hexanone	50.0	48.7		ug/L		97	52 - 138
4-Chlorotoluene	50.0	48.2		ug/L		96	70 - 130
4-Isopropyltoluene	50.0	50.1		ug/L		100	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	44.0		ug/L		88	64 - 131
Acetone	50.0	57.4		ug/L		115	18 - 150
Benzene	50.0	45.9		ug/L		92	70 - 130
Bromobenzene	50.0	44.5		ug/L		89	70 - 130
Bromoform	50.0	42.0		ug/L		84	70 - 130
Bromomethane	50.0	50.5		ug/L		101	62 - 136
Carbon disulfide	50.0	51.8		ug/L		104	70 - 130
Carbon tetrachloride	50.0	43.3		ug/L		87	70 - 130
Chlorobenzene	50.0	45.5		ug/L		91	70 - 130
Chlorobromomethane	50.0	41.3		ug/L		83	70 - 130
Chlorodibromomethane	50.0	45.2		ug/L		90	70 - 130
Chloroethane	50.0	50.7		ug/L		101	70 - 130
Chloroform	50.0	43.5		ug/L		87	80 - 120
Chloromethane	50.0	47.2		ug/L		94	64 - 134
cis-1,2-Dichloroethene	50.0	43.9		ug/L		88	70 - 130
cis-1,3-Dichloropropene	50.0	48.9		ug/L		98	70 - 130
Dibromomethane	50.0	46.5		ug/L		93	70 - 130
Dichlorobromomethane	50.0	49.3		ug/L		99	70 - 130
Dichlorodifluoromethane	50.0	53.6		ug/L		107	29 - 150
Ethylbenzene	50.0	47.2		ug/L		94	80 - 120
Ethylene Dibromide	50.0	48.2		ug/L		96	70 - 130
Hexachlorobutadiene	50.0	43.3		ug/L		87	70 - 130
Iodomethane	50.0	55.7		ug/L		111	70 - 136
Isopropylbenzene	50.0	48.6		ug/L		97	70 - 130
Methyl tert-butyl ether	50.0	46.7		ug/L		93	70 - 132
Methylene Chloride	50.0	53.0		ug/L		106	70 - 130
m-Xylene & p-Xylene	50.0	45.3		ug/L		91	70 - 130
Naphthalene	50.0	44.5		ug/L		89	70 - 130
n-Butylbenzene	50.0	47.7		ug/L		95	70 - 130
N-Propylbenzene	50.0	49.1		ug/L		98	70 - 130
o-Xylene	50.0	48.1		ug/L		96	70 - 130
sec-Butylbenzene	50.0	50.6		ug/L		101	70 - 130
Styrene	50.0	48.7		ug/L		97	70 - 130
tert-Butylbenzene	50.0	49.5		ug/L		99	70 - 130
Tetrachloroethene	50.0	42.8		ug/L		86	70 - 130
Toluene	50.0	47.6		ug/L		95	80 - 120
trans-1,2-Dichloroethene	50.0	42.9		ug/L		86	70 - 130
trans-1,3-Dichloropropene	50.0	48.8		ug/L		98	70 - 130
Trichloroethene	50.0	46.0		ug/L		92	70 - 130
Trichlorofluoromethane	50.0	45.7		ug/L		91	70 - 130
Vinyl acetate	50.0	40.4		ug/L		81	63 - 147

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-326437/1002
Matrix: Water
Analysis Batch: 326437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	50.0	49.3		ug/L		99	70 - 130
Xylenes, Total	100	93.4		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
Dibromofluoromethane (Surr)	*85*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 550-326437/4
Matrix: Water
Analysis Batch: 326437

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	44.6		ug/L		89	70 - 130	1	20
1,1,1-Trichloroethane	50.0	42.0		ug/L		84	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	47.0		ug/L		94	70 - 130	4	20
1,1,2-Trichloroethane	50.0	48.4		ug/L		97	70 - 130	2	20
1,1-Dichloroethane	50.0	48.3		ug/L		97	70 - 130	5	20
1,1-Dichloroethene	50.0	37.8		ug/L		76	70 - 130	11	20
1,1-Dichloropropene	50.0	42.9		ug/L		86	70 - 130	3	20
1,2,3-Trichlorobenzene	50.0	41.4		ug/L		83	70 - 130	3	20
1,2,3-Trichloropropane	50.0	46.3		ug/L		93	70 - 130	4	20
1,2,4-Trichlorobenzene	50.0	41.1		ug/L		82	70 - 130	2	20
1,2,4-Trimethylbenzene	50.0	46.5		ug/L		93	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/L		101	61 - 130	4	21
1,2-Dichlorobenzene	50.0	44.9		ug/L		90	70 - 130	2	20
1,2-Dichloroethane	50.0	49.8		ug/L		100	70 - 130	6	20
1,2-Dichloropropane	50.0	46.4		ug/L		93	70 - 130	0	20
1,3,5-Trimethylbenzene	50.0	47.5		ug/L		95	70 - 130	5	20
1,3-Dichlorobenzene	50.0	44.1		ug/L		88	70 - 130	4	20
1,3-Dichloropropane	50.0	48.0		ug/L		96	70 - 130	2	20
1,4-Dichlorobenzene	50.0	43.3		ug/L		87	70 - 130	3	20
2,2-Dichloropropane	50.0	57.0	R6	ug/L		114	70 - 130	33	20
2-Butanone (MEK)	50.0	58.4		ug/L		117	50 - 150	24	34
2-Chlorotoluene	50.0	46.5		ug/L		93	70 - 130	5	20
2-Hexanone	50.0	48.6		ug/L		97	52 - 138	0	29
4-Chlorotoluene	50.0	45.2		ug/L		90	70 - 130	6	20
4-Isopropyltoluene	50.0	47.6		ug/L		95	70 - 130	5	20
4-Methyl-2-pentanone (MIBK)	50.0	46.1		ug/L		92	64 - 131	5	23
Acetone	50.0	48.9		ug/L		98	18 - 150	16	35
Benzene	50.0	44.8		ug/L		90	70 - 130	2	20
Bromobenzene	50.0	43.0		ug/L		86	70 - 130	3	20
Bromoform	50.0	42.1		ug/L		84	70 - 130	0	20
Bromomethane	50.0	51.2		ug/L		102	62 - 136	1	20
Carbon disulfide	50.0	49.0		ug/L		98	70 - 130	6	20
Carbon tetrachloride	50.0	42.4		ug/L		85	70 - 130	2	20
Chlorobenzene	50.0	45.7		ug/L		91	70 - 130	0	20
Chlorobromomethane	50.0	42.1		ug/L		84	70 - 130	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 550-326437/4
Matrix: Water
Analysis Batch: 326437

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorodibromomethane			50.0	44.5		ug/L		89	70 - 130	2	20
Chloroethane			50.0	50.8		ug/L		102	70 - 130	0	20
Chloroform			50.0	44.0		ug/L		88	80 - 120	1	20
Chloromethane			50.0	47.6		ug/L		95	64 - 134	1	20
cis-1,2-Dichloroethene			50.0	59.6	R6	ug/L		119	70 - 130	30	20
cis-1,3-Dichloropropene			50.0	48.3		ug/L		97	70 - 130	1	20
Dibromomethane			50.0	46.0		ug/L		92	70 - 130	1	20
Dichlorobromomethane			50.0	49.5		ug/L		99	70 - 130	0	20
Dichlorodifluoromethane			50.0	52.1		ug/L		104	29 - 150	3	21
Ethylbenzene			50.0	46.4		ug/L		93	80 - 120	2	20
Ethylene Dibromide			50.0	48.9		ug/L		98	70 - 130	2	20
Hexachlorobutadiene			50.0	41.4		ug/L		83	70 - 130	4	20
Iodomethane			50.0	50.1		ug/L		100	70 - 136	11	20
Isopropylbenzene			50.0	45.8		ug/L		92	70 - 130	6	20
Methyl tert-butyl ether			50.0	53.0		ug/L		106	70 - 132	13	20
Methylene Chloride			50.0	53.8		ug/L		108	70 - 130	1	20
m-Xylene & p-Xylene			50.0	42.1		ug/L		84	70 - 130	7	20
Naphthalene			50.0	44.5		ug/L		89	70 - 130	0	20
n-Butylbenzene			50.0	45.6		ug/L		91	70 - 130	4	20
N-Propylbenzene			50.0	45.8		ug/L		92	70 - 130	7	20
o-Xylene			50.0	46.0		ug/L		92	70 - 130	5	20
sec-Butylbenzene			50.0	47.2		ug/L		94	70 - 130	7	20
Styrene			50.0	46.0		ug/L		92	70 - 130	6	20
tert-Butylbenzene			50.0	47.8		ug/L		96	70 - 130	4	20
Tetrachloroethene			50.0	42.4		ug/L		85	70 - 130	1	20
Toluene			50.0	46.7		ug/L		93	80 - 120	2	20
trans-1,2-Dichloroethene			50.0	46.4		ug/L		93	70 - 130	8	20
trans-1,3-Dichloropropene			50.0	49.2		ug/L		98	70 - 130	1	20
Trichloroethene			50.0	46.1		ug/L		92	70 - 130	0	20
Trichlorofluoromethane			50.0	45.6		ug/L		91	70 - 130	0	20
Vinyl acetate			50.0	49.5		ug/L		99	63 - 147	20	20
Vinyl chloride			50.0	49.0		ug/L		98	70 - 130	1	20
Xylenes, Total			100	88.1		ug/L		88	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
Dibromofluoromethane (Surr)	*86*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 326437

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		50.0	46.7		ug/L		93	67 - 137
1,1,1-Trichloroethane	ND		50.0	45.1		ug/L		90	64 - 143
1,1,2,2-Tetrachloroethane	ND		50.0	56.0		ug/L		112	63 - 136
1,1,2-Trichloroethane	ND		50.0	50.8		ug/L		102	66 - 137

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 326437

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	6.5		50.0	73.6		ug/L		134	70 - 137
1,1-Dichloroethene	8.4		50.0	53.4		ug/L		90	53 - 150
1,1-Dichloropropene	ND		50.0	44.2		ug/L		88	58 - 141
1,2,3-Trichlorobenzene	ND		50.0	43.7		ug/L		87	57 - 144
1,2,3-Trichloropropane	ND		50.0	53.1		ug/L		106	60 - 138
1,2,4-Trichlorobenzene	ND		50.0	42.1		ug/L		84	58 - 140
1,2,4-Trimethylbenzene	ND		50.0	51.6		ug/L		103	50 - 147
1,2-Dibromo-3-Chloropropane	ND		50.0	58.1		ug/L		116	51 - 143
1,2-Dichlorobenzene	ND		50.0	48.9		ug/L		98	67 - 131
1,2-Dichloroethane	ND		50.0	53.2		ug/L		106	58 - 146
1,2-Dichloropropane	ND		50.0	49.7		ug/L		99	66 - 135
1,3,5-Trimethylbenzene	ND		50.0	53.4		ug/L		107	50 - 147
1,3-Dichlorobenzene	ND		50.0	47.9		ug/L		96	68 - 130
1,3-Dichloropropane	ND		50.0	50.5		ug/L		101	67 - 134
1,4-Dichlorobenzene	ND		50.0	46.9		ug/L		94	68 - 128
2,2-Dichloropropane	ND	R6	50.0	54.6		ug/L		109	54 - 150
2-Butanone (MEK)	ND		50.0	60.4		ug/L		121	10 - 150
2-Chlorotoluene	ND		50.0	51.2		ug/L		102	63 - 132
2-Hexanone	ND		50.0	53.7		ug/L		107	37 - 150
4-Chlorotoluene	ND		50.0	50.9		ug/L		102	66 - 131
4-Isopropyltoluene	ND		50.0	51.6		ug/L		103	53 - 147
4-Methyl-2-pentanone (MIBK)	ND		50.0	50.7		ug/L		101	41 - 150
Acetone	ND		50.0	58.7		ug/L		117	10 - 150
Benzene	ND		50.0	46.9		ug/L		94	54 - 142
Bromobenzene	ND		50.0	47.0		ug/L		94	69 - 132
Bromoform	ND		50.0	48.2		ug/L		96	57 - 142
Bromomethane	ND		50.0	52.3		ug/L		105	56 - 149
Carbon disulfide	ND		50.0	50.5		ug/L		101	48 - 150
Carbon tetrachloride	ND		50.0	46.5		ug/L		93	60 - 143
Chlorobenzene	ND		50.0	47.2		ug/L		94	69 - 129
Chlorobromomethane	ND		50.0	53.4		ug/L		107	67 - 145
Chlorodibromomethane	ND		50.0	48.5		ug/L		97	61 - 143
Chloroethane	ND		50.0	54.8		ug/L		110	60 - 146
Chloroform	1.5		50.0	46.6		ug/L		90	69 - 138
Chloromethane	ND		50.0	50.0		ug/L		100	50 - 150
cis-1,2-Dichloroethene	1.9	R6 R4	50.0	68.3		ug/L		133	65 - 139
cis-1,3-Dichloropropene	ND		50.0	48.3		ug/L		97	57 - 145
Dibromomethane	ND		50.0	48.9		ug/L		98	64 - 138
Dichlorobromomethane	ND		50.0	52.9		ug/L		106	61 - 143
Dichlorodifluoromethane	ND		50.0	53.6		ug/L		107	21 - 150
Ethylbenzene	ND		50.0	48.4		ug/L		97	46 - 149
Ethylene Dibromide	ND		50.0	51.6		ug/L		103	67 - 136
Hexachlorobutadiene	ND		50.0	44.5		ug/L		89	49 - 146
Iodomethane	ND		50.0	49.6		ug/L		99	43 - 150
Isopropylbenzene	ND		50.0	51.7		ug/L		103	56 - 143
Methyl tert-butyl ether	ND		50.0	69.5		ug/L		139	56 - 148
Methylene Chloride	ND		50.0	48.5		ug/L		97	66 - 134
m-Xylene & p-Xylene	ND		50.0	47.2		ug/L		94	52 - 144
Naphthalene	ND		50.0	48.2		ug/L		96	47 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 326437

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
n-Butylbenzene	ND		50.0	49.1		ug/L		98	54 - 145
N-Propylbenzene	ND		50.0	51.4		ug/L		103	54 - 144
o-Xylene	ND		50.0	50.7		ug/L		101	55 - 143
sec-Butylbenzene	ND		50.0	53.0		ug/L		106	55 - 145
Styrene	ND		50.0	50.6		ug/L		101	21 - 150
tert-Butylbenzene	ND		50.0	52.9		ug/L		106	57 - 143
Tetrachloroethene	ND		50.0	43.8		ug/L		88	37 - 150
Toluene	ND		50.0	49.1		ug/L		98	56 - 141
trans-1,2-Dichloroethene	ND		50.0	63.0		ug/L		126	69 - 136
trans-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	57 - 147
Trichloroethene	3.6		50.0	50.9		ug/L		95	62 - 134
Trichlorofluoromethane	ND		50.0	48.6		ug/L		97	60 - 150
Vinyl acetate	ND		50.0	57.2		ug/L		114	14 - 150
Vinyl chloride	ND		50.0	50.9		ug/L		102	48 - 150
Xylenes, Total	ND		100	97.9		ug/L		98	53 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 326437

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	44.1		ug/L		88	67 - 137	6	35
1,1,1-Trichloroethane	ND		50.0	44.1		ug/L		88	64 - 143	2	35
1,1,2,2-Tetrachloroethane	ND		50.0	54.0		ug/L		108	63 - 136	4	35
1,1,2-Trichloroethane	ND		50.0	49.6		ug/L		99	66 - 137	2	35
1,1-Dichloroethane	6.5		50.0	60.6		ug/L		108	70 - 137	19	35
1,1-Dichloroethene	8.4		50.0	50.8		ug/L		85	53 - 150	5	35
1,1-Dichloropropene	ND		50.0	42.9		ug/L		86	58 - 141	3	35
1,2,3-Trichlorobenzene	ND		50.0	43.3		ug/L		87	57 - 144	1	35
1,2,3-Trichloropropane	ND		50.0	52.8		ug/L		106	60 - 138	1	35
1,2,4-Trichlorobenzene	ND		50.0	40.7		ug/L		81	58 - 140	3	35
1,2,4-Trimethylbenzene	ND		50.0	47.8		ug/L		96	50 - 147	8	35
1,2-Dibromo-3-Chloropropane	ND		50.0	57.8		ug/L		116	51 - 143	1	35
1,2-Dichlorobenzene	ND		50.0	47.5		ug/L		95	67 - 131	3	35
1,2-Dichloroethane	ND		50.0	50.1		ug/L		100	58 - 146	6	35
1,2-Dichloropropane	ND		50.0	48.3		ug/L		97	66 - 135	3	35
1,3,5-Trimethylbenzene	ND		50.0	51.1		ug/L		102	50 - 147	4	35
1,3-Dichlorobenzene	ND		50.0	46.0		ug/L		92	68 - 130	4	35
1,3-Dichloropropane	ND		50.0	48.9		ug/L		98	67 - 134	3	35
1,4-Dichlorobenzene	ND		50.0	45.5		ug/L		91	68 - 128	3	35
2,2-Dichloropropane	ND	R6	50.0	39.5		ug/L		79	54 - 150	32	35
2-Butanone (MEK)	ND		50.0	49.4		ug/L		99	10 - 150	20	35
2-Chlorotoluene	ND		50.0	48.0		ug/L		96	63 - 132	7	35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 326437

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Hexanone	ND		50.0	55.4		ug/L		111	37 - 150	3	35
4-Chlorotoluene	ND		50.0	47.8		ug/L		96	66 - 131	6	35
4-Isopropyltoluene	ND		50.0	49.1		ug/L		98	53 - 147	5	35
4-Methyl-2-pentanone (MIBK)	ND		50.0	49.6		ug/L		99	41 - 150	2	35
Acetone	ND		50.0	55.7		ug/L		111	10 - 150	5	35
Benzene	ND		50.0	44.7		ug/L		89	54 - 142	5	35
Bromobenzene	ND		50.0	44.8		ug/L		90	69 - 132	5	35
Bromoform	ND		50.0	48.0		ug/L		96	57 - 142	0	35
Bromomethane	ND		50.0	53.8		ug/L		108	56 - 149	3	35
Carbon disulfide	ND		50.0	57.1		ug/L		114	48 - 150	12	35
Carbon tetrachloride	ND		50.0	43.6		ug/L		87	60 - 143	6	35
Chlorobenzene	ND		50.0	44.7		ug/L		89	69 - 129	5	35
Chlorobromomethane	ND		50.0	42.3		ug/L		85	67 - 145	23	35
Chlorodibromomethane	ND		50.0	47.1		ug/L		94	61 - 143	3	35
Chloroethane	ND		50.0	55.3		ug/L		111	60 - 146	1	35
Chloroform	1.5		50.0	46.8		ug/L		91	69 - 138	0	35
Chloromethane	ND		50.0	49.8		ug/L		100	50 - 150	0	35
cis-1,2-Dichloroethene	1.9	R6 R4	50.0	46.5	R4	ug/L		89	65 - 139	38	35
cis-1,3-Dichloropropene	ND		50.0	47.1		ug/L		94	57 - 145	3	35
Dibromomethane	ND		50.0	48.6		ug/L		97	64 - 138	1	35
Dichlorobromomethane	ND		50.0	51.2		ug/L		102	61 - 143	3	35
Dichlorodifluoromethane	ND		50.0	51.7		ug/L		103	21 - 150	4	35
Ethylbenzene	ND		50.0	46.1		ug/L		92	46 - 149	5	35
Ethylene Dibromide	ND		50.0	49.9		ug/L		100	67 - 136	3	35
Hexachlorobutadiene	ND		50.0	42.7		ug/L		85	49 - 146	4	35
Iodomethane	ND		50.0	57.8		ug/L		116	43 - 150	15	35
Isopropylbenzene	ND		50.0	48.1		ug/L		96	56 - 143	7	35
Methyl tert-butyl ether	ND		50.0	58.1		ug/L		116	56 - 148	18	35
Methylene Chloride	ND		50.0	48.5		ug/L		97	66 - 134	0	35
m-Xylene & p-Xylene	ND		50.0	44.5		ug/L		89	52 - 144	6	35
Naphthalene	ND		50.0	48.1		ug/L		96	47 - 150	0	35
n-Butylbenzene	ND		50.0	47.1		ug/L		94	54 - 145	4	35
N-Propylbenzene	ND		50.0	48.0		ug/L		96	54 - 144	7	35
o-Xylene	ND		50.0	47.3		ug/L		95	55 - 143	7	35
sec-Butylbenzene	ND		50.0	50.1		ug/L		100	55 - 145	6	35
Styrene	ND		50.0	48.2		ug/L		96	21 - 150	5	35
tert-Butylbenzene	ND		50.0	48.4		ug/L		97	57 - 143	9	35
Tetrachloroethene	ND		50.0	42.7		ug/L		85	37 - 150	3	35
Toluene	ND		50.0	46.2		ug/L		92	56 - 141	6	35
trans-1,2-Dichloroethene	ND		50.0	50.5		ug/L		101	69 - 136	22	35
trans-1,3-Dichloropropene	ND		50.0	49.2		ug/L		98	57 - 147	3	35
Trichloroethene	3.6		50.0	49.2		ug/L		91	62 - 134	3	35
Trichlorofluoromethane	ND		50.0	50.4		ug/L		101	60 - 150	4	35
Vinyl acetate	ND		50.0	51.6		ug/L		103	14 - 150	10	35
Vinyl chloride	ND		50.0	52.1		ug/L		104	48 - 150	2	35
Xylenes, Total	ND		100	91.8		ug/L		92	53 - 145	6	35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 326437

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 200-209179/5
Matrix: Water
Analysis Batch: 209179

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		2.0		ug/L			10/02/24 12:32	1
Ethane	ND		4.0		ug/L			10/02/24 12:32	1
Ethylene	ND		3.0		ug/L			10/02/24 12:32	1

Lab Sample ID: LCS 200-209179/3
Matrix: Water
Analysis Batch: 209179

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methane			72.8	75.2		ug/L		103	70 - 130		
Ethane			137	134		ug/L		98	70 - 130		
Ethylene			127	129		ug/L		101	70 - 130		

Lab Sample ID: LCSD 200-209179/4
Matrix: Water
Analysis Batch: 209179

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methane			72.8	76.0		ug/L		104	70 - 130	1	30
Ethane			137	134		ug/L		98	70 - 130	0	30
Ethylene			127	128		ug/L		101	70 - 130	1	30

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 209179

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Methane	ND		72.8	77.7		ug/L		107	70 - 130		
Ethane	ND		137	139		ug/L		102	70 - 130		
Ethylene	ND		127	133		ug/L		104	70 - 130		

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 209179

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methane	ND		72.8	75.9		ug/L		104	70 - 130	2	30
Ethane	ND		137	136		ug/L		100	70 - 130	2	30
Ethylene	ND		127	132		ug/L		103	70 - 130	1	30

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 200-209286/5
Matrix: Water
Analysis Batch: 209286

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		10000		ug/L			10/04/24 12:56	1

Lab Sample ID: LCS 200-209286/3
Matrix: Water
Analysis Batch: 209286

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide			40000	40300		ug/L		101	70 - 130		

Lab Sample ID: LCSD 200-209286/4
Matrix: Water
Analysis Batch: 209286

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide			40000	46400		ug/L		116	70 - 130	14	30

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 209286

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide	20000		40000	60300		ug/L		100	70 - 130		

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 209286

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	20000		40000	62500		ug/L		106	70 - 130	4	30

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 550-326403/2
Matrix: Water
Analysis Batch: 326403

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			09/28/24 12:28	1
Nitrate as N	ND		0.050		mg/L			09/28/24 12:28	1
Nitrite as N	ND		0.050		mg/L			09/28/24 12:28	1
Sulfate	ND		2.0		mg/L			09/28/24 12:28	1

Lab Sample ID: LCS 550-326403/5
Matrix: Water
Analysis Batch: 326403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	20.4		mg/L		102	90 - 110		
Nitrate as N			4.00	4.15		mg/L		104	90 - 110		
Nitrite as N			4.00	3.93		mg/L		98	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 550-326403/5
Matrix: Water
Analysis Batch: 326403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate			20.0	20.1		mg/L		101	90 - 110		

Lab Sample ID: LCSD 550-326403/6
Matrix: Water
Analysis Batch: 326403

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			20.0	20.4		mg/L		102	90 - 110	0	20
Nitrate as N			4.00	4.14		mg/L		104	90 - 110	0	20
Nitrite as N			4.00	3.94		mg/L		98	90 - 110	0	20
Sulfate			20.0	20.1		mg/L		101	90 - 110	0	20

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 326403

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	230	D2	200	438	D2	mg/L		102	80 - 120		
Nitrate as N	4.5		40.0	45.2	D2	mg/L		102	80 - 120		
Nitrite as N	ND		40.0	39.5	D2	mg/L		99	80 - 120		
Sulfate	80		200	279	D2	mg/L		99	80 - 120		

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 326403

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	230	D2	200	441	D2	mg/L		103	80 - 120	1	20
Nitrate as N	4.5		40.0	45.8	D2	mg/L		103	80 - 120	1	20
Nitrite as N	ND		40.0	39.8	D2	mg/L		99	80 - 120	1	20
Sulfate	80		200	281	D2	mg/L		100	80 - 120	1	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 550-326463/1-A
Matrix: Water
Analysis Batch: 326549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 326463

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.40		mg/L		10/01/24 10:12	10/02/24 19:59	1
Manganese	ND		0.020		mg/L		10/01/24 10:12	10/02/24 19:59	1

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-670213/4
Matrix: Water
Analysis Batch: 670213

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/07/24 16:06	1

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 280-670213/68
Matrix: Water
Analysis Batch: 670213

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/08/24 09:00	1

Lab Sample ID: LCS 280-670213/3
Matrix: Water
Analysis Batch: 670213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Duplicates			25.0	26.6		mg/L		106	88 - 112		

Lab Sample ID: LCS 280-670213/67
Matrix: Water
Analysis Batch: 670213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Duplicates			25.0	27.3		mg/L		109	88 - 112		

Lab Sample ID: 280-196950-C-3 MS
Matrix: Water
Analysis Batch: 670213

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Duplicates	6.9		25.0	33.0		mg/L		104	88 - 112		

Lab Sample ID: 280-196950-C-3 MSD
Matrix: Water
Analysis Batch: 670213

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	6.9		25.0	33.5		mg/L		106	88 - 112	2	15

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 670213

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Duplicates	1.1		25.0	28.3		mg/L		109	88 - 112		

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 670213

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	1.1		25.0	28.3		mg/L		109	88 - 112	0	15

Method: SM4500 S2 C & D - Sulfide, Total with Pretreatment

Lab Sample ID: MB 550-326479/8
Matrix: Water
Analysis Batch: 326479

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Sulfide	ND		0.050		mg/L			10/01/24 16:57	1

Lab Sample ID: LCS 550-326479/9
Matrix: Water
Analysis Batch: 326479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Sulfide			0.501	0.541		mg/L		108	80 - 120		

Lab Sample ID: LCSD 550-326479/10
Matrix: Water
Analysis Batch: 326479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Sulfide			0.501	0.545		mg/L		109	80 - 120	1	20

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 326479

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Sulfide	ND		0.501	0.465		mg/L		93	80 - 120		

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 326479

Client Sample ID: MW-11-24A1_092724
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Sulfide	ND		0.501	0.484		mg/L		97	80 - 120	4	20

Lab Sample ID: MB 550-326477/1-A
Matrix: Water
Analysis Batch: 326479

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 326477

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved	ND		0.050		mg/L		10/01/24 14:45	10/01/24 16:57	1

Lab Sample ID: 550-224036-3 MS
Matrix: Water
Analysis Batch: 326479

Client Sample ID: MW-11-24A1_092724
Prep Type: Dissolved
Prep Batch: 326477

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide, Dissolved	ND	H6 R4	0.501	0.514	H6	mg/L		103	80 - 120		

Lab Sample ID: 550-224036-3 MSD
Matrix: Water
Analysis Batch: 326479

Client Sample ID: MW-11-24A1_092724
Prep Type: Dissolved
Prep Batch: 326477

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide, Dissolved	ND	H6 R4	0.501	0.403	H6 R4	mg/L		81	80 - 120	24	20

GC/MS VOA

Analysis Batch: 326437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-1	DUP-24A1_092724	Total/NA	Water	8260B	
550-224036-2	FB-01-24A1_092724	Total/NA	Water	8260B	
550-224036-3	MW-11-24A1_092724	Total/NA	Water	8260B	
550-224036-4	MW-12-24A1_092724	Total/NA	Water	8260B	
550-224036-5	MW-13-24A1_092724	Total/NA	Water	8260B	
550-224036-6	MW-14-24A1_092724	Total/NA	Water	8260B	
550-224036-7	MW-15-24A1_092724	Total/NA	Water	8260B	
550-224036-8	TB-01-24A1_092724	Total/NA	Water	8260B	
MB 550-326437/6	Method Blank	Total/NA	Water	8260B	
LCS 550-326437/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 550-326437/4	Lab Control Sample Dup	Total/NA	Water	8260B	
550-224036-3 MS	MW-11-24A1_092724	Total/NA	Water	8260B	
550-224036-3 MSD	MW-11-24A1_092724	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 209179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-3	MW-11-24A1_092724	Total/NA	Water	RSK-175	
550-224036-4	MW-12-24A1_092724	Total/NA	Water	RSK-175	
550-224036-5	MW-13-24A1_092724	Total/NA	Water	RSK-175	
550-224036-6	MW-14-24A1_092724	Total/NA	Water	RSK-175	
550-224036-7	MW-15-24A1_092724	Total/NA	Water	RSK-175	
MB 200-209179/5	Method Blank	Total/NA	Water	RSK-175	
LCS 200-209179/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-209179/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
550-224036-3 MS	MW-11-24A1_092724	Total/NA	Water	RSK-175	
550-224036-3 MSD	MW-11-24A1_092724	Total/NA	Water	RSK-175	

Analysis Batch: 209286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-3	MW-11-24A1_092724	Total/NA	Water	RSK-175	
550-224036-4	MW-12-24A1_092724	Total/NA	Water	RSK-175	
550-224036-5	MW-13-24A1_092724	Total/NA	Water	RSK-175	
550-224036-6	MW-14-24A1_092724	Total/NA	Water	RSK-175	
550-224036-7	MW-15-24A1_092724	Total/NA	Water	RSK-175	
MB 200-209286/5	Method Blank	Total/NA	Water	RSK-175	
LCS 200-209286/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-209286/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
550-224036-3 MS	MW-11-24A1_092724	Total/NA	Water	RSK-175	
550-224036-3 MSD	MW-11-24A1_092724	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 326403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-3	MW-11-24A1_092724	Total/NA	Water	300.0	
550-224036-3	MW-11-24A1_092724	Total/NA	Water	300.0	
550-224036-4	MW-12-24A1_092724	Total/NA	Water	300.0	
550-224036-4	MW-12-24A1_092724	Total/NA	Water	300.0	
550-224036-5	MW-13-24A1_092724	Total/NA	Water	300.0	
550-224036-5	MW-13-24A1_092724	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 326403 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-6	MW-14-24A1_092724	Total/NA	Water	300.0	
550-224036-6	MW-14-24A1_092724	Total/NA	Water	300.0	
550-224036-7	MW-15-24A1_092724	Total/NA	Water	300.0	
550-224036-7	MW-15-24A1_092724	Total/NA	Water	300.0	
MB 550-326403/2	Method Blank	Total/NA	Water	300.0	
LCS 550-326403/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 550-326403/6	Lab Control Sample Dup	Total/NA	Water	300.0	
550-224036-3 MS	MW-11-24A1_092724	Total/NA	Water	300.0	
550-224036-3 MSD	MW-11-24A1_092724	Total/NA	Water	300.0	

Metals

Prep Batch: 326463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-3	MW-11-24A1_092724	Total/NA	Water	3005A	
550-224036-4	MW-12-24A1_092724	Total/NA	Water	3005A	
550-224036-5	MW-13-24A1_092724	Total/NA	Water	3005A	
550-224036-6	MW-14-24A1_092724	Total/NA	Water	3005A	
550-224036-7	MW-15-24A1_092724	Total/NA	Water	3005A	
MB 550-326463/1-A	Method Blank	Total/NA	Water	3005A	
LCS 550-326463/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 550-326463/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	
550-224036-3 MS	MW-11-24A1_092724	Total/NA	Water	3005A	
550-224036-3 MSD	MW-11-24A1_092724	Total/NA	Water	3005A	

Analysis Batch: 326549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-3	MW-11-24A1_092724	Total/NA	Water	6010C	326463
550-224036-4	MW-12-24A1_092724	Total/NA	Water	6010C	326463
550-224036-5	MW-13-24A1_092724	Total/NA	Water	6010C	326463
550-224036-6	MW-14-24A1_092724	Total/NA	Water	6010C	326463
550-224036-7	MW-15-24A1_092724	Total/NA	Water	6010C	326463
MB 550-326463/1-A	Method Blank	Total/NA	Water	6010C	326463
LCS 550-326463/2-A	Lab Control Sample	Total/NA	Water	6010C	326463
LCSD 550-326463/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	326463
550-224036-3 MS	MW-11-24A1_092724	Total/NA	Water	6010C	326463
550-224036-3 MSD	MW-11-24A1_092724	Total/NA	Water	6010C	326463

General Chemistry

Prep Batch: 326477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-3	MW-11-24A1_092724	Dissolved	Water	SM 4500 S2 B	
550-224036-4	MW-12-24A1_092724	Dissolved	Water	SM 4500 S2 B	
550-224036-5	MW-13-24A1_092724	Dissolved	Water	SM 4500 S2 B	
550-224036-6	MW-14-24A1_092724	Dissolved	Water	SM 4500 S2 B	
550-224036-7	MW-15-24A1_092724	Dissolved	Water	SM 4500 S2 B	
MB 550-326477/1-A	Method Blank	Dissolved	Water	SM 4500 S2 B	
550-224036-3 MS	MW-11-24A1_092724	Dissolved	Water	SM 4500 S2 B	
550-224036-3 MSD	MW-11-24A1_092724	Dissolved	Water	SM 4500 S2 B	

General Chemistry

Analysis Batch: 326479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-3	MW-11-24A1_092724	Dissolved	Water	SM4500 S2 C & D	326477
550-224036-3	MW-11-24A1_092724	Total/NA	Water	SM4500 S2 C & D	
550-224036-4	MW-12-24A1_092724	Dissolved	Water	SM4500 S2 C & D	326477
550-224036-4	MW-12-24A1_092724	Total/NA	Water	SM4500 S2 C & D	
550-224036-5	MW-13-24A1_092724	Dissolved	Water	SM4500 S2 C & D	326477
550-224036-5	MW-13-24A1_092724	Total/NA	Water	SM4500 S2 C & D	
550-224036-6	MW-14-24A1_092724	Dissolved	Water	SM4500 S2 C & D	326477
550-224036-6	MW-14-24A1_092724	Total/NA	Water	SM4500 S2 C & D	
550-224036-7	MW-15-24A1_092724	Dissolved	Water	SM4500 S2 C & D	326477
550-224036-7	MW-15-24A1_092724	Total/NA	Water	SM4500 S2 C & D	
MB 550-326477/1-A	Method Blank	Dissolved	Water	SM4500 S2 C & D	326477
MB 550-326479/8	Method Blank	Total/NA	Water	SM4500 S2 C & D	
LCS 550-326479/9	Lab Control Sample	Total/NA	Water	SM4500 S2 C & D	
LCSD 550-326479/10	Lab Control Sample Dup	Total/NA	Water	SM4500 S2 C & D	
550-224036-3 MS	MW-11-24A1_092724	Dissolved	Water	SM4500 S2 C & D	326477
550-224036-3 MS	MW-11-24A1_092724	Total/NA	Water	SM4500 S2 C & D	
550-224036-3 MSD	MW-11-24A1_092724	Dissolved	Water	SM4500 S2 C & D	326477
550-224036-3 MSD	MW-11-24A1_092724	Total/NA	Water	SM4500 S2 C & D	

Analysis Batch: 670213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-224036-3	MW-11-24A1_092724	Total/NA	Water	9060A	
550-224036-4	MW-12-24A1_092724	Total/NA	Water	9060A	
550-224036-5	MW-13-24A1_092724	Total/NA	Water	9060A	
550-224036-6	MW-14-24A1_092724	Total/NA	Water	9060A	
550-224036-7	MW-15-24A1_092724	Total/NA	Water	9060A	
MB 280-670213/4	Method Blank	Total/NA	Water	9060A	
MB 280-670213/68	Method Blank	Total/NA	Water	9060A	
LCS 280-670213/3	Lab Control Sample	Total/NA	Water	9060A	
LCS 280-670213/67	Lab Control Sample	Total/NA	Water	9060A	
280-196950-C-3 MS	Matrix Spike	Total/NA	Water	9060A	
280-196950-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	9060A	
550-224036-3 MS	MW-11-24A1_092724	Total/NA	Water	9060A	
550-224036-3 MSD	MW-11-24A1_092724	Total/NA	Water	9060A	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: DUP-24A1_092724

Lab Sample ID: 550-224036-1

Date Collected: 09/27/24 07:01
Matrix: Water
Date Received: 09/28/24 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	326437	R1K	EET PHX	10/01/24 05:54

Client Sample ID: FB-01-24A1_092724

Lab Sample ID: 550-224036-2

Date Collected: 09/27/24 08:56
Matrix: Water
Date Received: 09/28/24 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	326437	R1K	EET PHX	10/01/24 06:21

Client Sample ID: MW-11-24A1_092724

Lab Sample ID: 550-224036-3

Date Collected: 09/27/24 08:35
Matrix: Water
Date Received: 09/28/24 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	326437	R1K	EET PHX	10/01/24 09:06
Total/NA	Analysis	RSK-175		1	209179	RMG	EET BUR	10/02/24 15:33
Total/NA	Analysis	RSK-175		1	209286	RMG	EET BUR	10/04/24 14:43
Total/NA	Analysis	300.0		1	326403	RDC	EET PHX	09/28/24 14:00
Total/NA	Analysis	300.0		10	326403	RDC	EET PHX	09/28/24 14:18
Total/NA	Prep	3005A			326463	HHL	EET PHX	10/01/24 10:12
Total/NA	Analysis	6010C		1	326549	JAC	EET PHX	10/02/24 20:19
Total/NA	Analysis	9060A		1	670213	GMW	EET DEN	10/08/24 13:07
Dissolved	Prep	SM 4500 S2 B			326477	GLW	EET PHX	10/01/24 14:45
Dissolved	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57
Total/NA	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57

Client Sample ID: MW-12-24A1_092724

Lab Sample ID: 550-224036-4

Date Collected: 09/27/24 07:00
Matrix: Water
Date Received: 09/28/24 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	326437	R1K	EET PHX	10/01/24 06:48
Total/NA	Analysis	RSK-175		1	209179	RMG	EET BUR	10/02/24 16:03
Total/NA	Analysis	RSK-175		1	209286	RMG	EET BUR	10/04/24 15:14
Total/NA	Analysis	300.0		1	326403	RDC	EET PHX	09/28/24 15:13
Total/NA	Analysis	300.0		10	326403	RDC	EET PHX	09/28/24 15:32
Total/NA	Prep	3005A			326463	HHL	EET PHX	10/01/24 10:12
Total/NA	Analysis	6010C		1	326549	JAC	EET PHX	10/02/24 20:23
Total/NA	Analysis	9060A		1	670213	GMW	EET DEN	10/08/24 14:26
Dissolved	Prep	SM 4500 S2 B			326477	GLW	EET PHX	10/01/24 14:45
Dissolved	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57
Total/NA	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57

Client Sample ID: MW-13-24A1_092724

Lab Sample ID: 550-224036-5

Date Collected: 09/27/24 02:30
Matrix: Water
Date Received: 09/28/24 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	326437	R1K	EET PHX	10/01/24 07:16
Total/NA	Analysis	RSK-175		1	209179	RMG	EET BUR	10/02/24 16:13
Total/NA	Analysis	RSK-175		1	209286	RMG	EET BUR	10/04/24 15:24
Total/NA	Analysis	300.0		1	326403	RDC	EET PHX	09/28/24 15:50
Total/NA	Analysis	300.0		10	326403	RDC	EET PHX	09/28/24 16:08
Total/NA	Prep	3005A			326463	HHL	EET PHX	10/01/24 10:12
Total/NA	Analysis	6010C		1	326549	JAC	EET PHX	10/02/24 20:26
Total/NA	Analysis	9060A		1	670213	GMW	EET DEN	10/08/24 14:42
Dissolved	Prep	SM 4500 S2 B			326477	GLW	EET PHX	10/01/24 14:45
Dissolved	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57
Total/NA	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57

Client Sample ID: MW-14-24A1_092724

Lab Sample ID: 550-224036-6

Date Collected: 09/27/24 04:01
Matrix: Water
Date Received: 09/28/24 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	326437	R1K	EET PHX	10/01/24 07:43
Total/NA	Analysis	RSK-175		1	209179	RMG	EET BUR	10/02/24 16:23
Total/NA	Analysis	RSK-175		1	209286	RMG	EET BUR	10/04/24 15:34
Total/NA	Analysis	300.0		1	326403	RDC	EET PHX	09/28/24 16:27
Total/NA	Analysis	300.0		10	326403	RDC	EET PHX	09/28/24 16:45
Total/NA	Prep	3005A			326463	HHL	EET PHX	10/01/24 10:12
Total/NA	Analysis	6010C		1	326549	JAC	EET PHX	10/02/24 20:30
Total/NA	Analysis	9060A		1	670213	GMW	EET DEN	10/07/24 23:35
Dissolved	Prep	SM 4500 S2 B			326477	GLW	EET PHX	10/01/24 14:45
Dissolved	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57
Total/NA	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57

Client Sample ID: MW-15-24A1_092724

Lab Sample ID: 550-224036-7

Date Collected: 09/27/24 05:32
Matrix: Water
Date Received: 09/28/24 09:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	326437	R1K	EET PHX	10/01/24 08:11
Total/NA	Analysis	RSK-175		1	209179	RMG	EET BUR	10/02/24 16:34
Total/NA	Analysis	RSK-175		1	209286	RMG	EET BUR	10/04/24 15:44
Total/NA	Analysis	300.0		1	326403	RDC	EET PHX	09/28/24 17:40
Total/NA	Analysis	300.0		10	326403	RDC	EET PHX	09/28/24 17:59
Total/NA	Prep	3005A			326463	HHL	EET PHX	10/01/24 10:12
Total/NA	Analysis	6010C		1	326549	JAC	EET PHX	10/02/24 20:33
Total/NA	Analysis	9060A		1	670213	GMW	EET DEN	10/07/24 23:51

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Client Sample ID: MW-15-24A1_092724

Date Collected: 09/27/24 05:32
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	SM 4500 S2 B			326477	GLW	EET PHX	10/01/24 14:45
Dissolved	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57
Total/NA	Analysis	SM4500 S2 C & D		1	326479	GLW	EET PHX	10/01/24 16:57

Client Sample ID: TB-01-24A1_092724

Date Collected: 09/27/24 00:00
Date Received: 09/28/24 09:53

Lab Sample ID: 550-224036-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	326437	R1K	EET PHX	10/01/24 08:38

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Laboratory: Eurofins Phoenix

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-25

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-19-25
Florida	NELAP	E87467	10-09-24
Minnesota	NELAP	050-999-436	12-31-24
New Hampshire	NELAP	2006	12-18-24
New Jersey	NELAP	VT972	06-30-25
New York	NELAP	10391	03-31-25
Pennsylvania	NELAP	68-00489	04-30-25
Rhode Island	State	LAO00298	12-31-24
US Fish & Wildlife	US Federal Programs	058448	08-01-25
USDA	US Federal Programs	P330-17-00272	12-19-26
Vermont	State	VT4000	02-10-25
Virginia	NELAP	460209	12-14-24
Wisconsin	State	399140830	03-31-25

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0713	12-20-24

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Area 10

Job ID: 550-224036-1
SDG: SA2 GW Sampling

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET PHX
RSK-175	Dissolved Gases (GC)	RSK	EET BUR
300.0	Anions, Ion Chromatography	EPA	EET PHX
6010C	Metals (ICP)	SW846	EET PHX
9060A	Organic Carbon, Total (TOC)	SW846	EET DEN
SM4500 S2 C & D	Sulfide, Total with Pretreatment	SM	EET PHX
3005A	Preparation, Total Metals	SW846	EET PHX
5030C	Purge and Trap	SW846	EET PHX
SM 4500 S2 B	Sulfide, Separation of Soluble and Insoluble	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

9/28/24 ~~224038~~ 224036

Test America Phoenix	
4625 E. Cotton Center Blvd Phoenix,AZ,85040 602 437-3340	

Honeywell

Chain Of Custody / Analysis Request

Lab Proj # (SDG):							
COC #	R37081_092724						
Privileged & Confidential		Facility Code		Site Name:	Area 10	Phase	
Sampling Co:	JACOBS	EDD To:	EQuIS, HTS-RES-LAB@Honeywell.com, Bernice.kidd@jacobs.com	Location of Site:		Sampling Program	SA2 GW SAMPLING
		Lab ID	TAL-PHX	Site ID	R37081	Lab Job #	Authorized User:

Reporting Information	Name	Jacobs 2635 South 24th Street Phoenix,AZ,85034-6808	Sampler(s)	Derek Foehr
			PO #	A001817810
			Analysis Turnaround Time (TAT):	10
	Contact email	Derek.Foehr@jacobs.com Bernice.kidd@jacobs.com	Consultant	
Billing Information	Co. Name	Honeywell	Laboratory Contact	
	Address	855 S Mint St	Report Tier Level	2
	City, State, Zip	Charlotte,NC,28202	Full Report TAT	10
	Attn:	HTS-RES-LAB@Honeywell.com Derek.Foehr@jacobs.com	Honeywell RM	Steven.Bowles@honeywell.com

550-224036 Chain of Custody

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sampling Method	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite /G	Field Filtered	E300.0	RSK175	SM4500S2-D	SW6010	SW8260	SW9060		MS/MSD
Preservative														one	one	NaOH, Zn Acetate	HNO3 (pH<2)	HCl	H2SO4 (pH<2)		
Units																					
1	MW-12	–	–	DUP-24A1_092724	–	092724	0701	FD	GW	Water	3	G	N					x			
2	QC	–	–	FB-01-24A1_092724	–	092724	0856	FB	WQ	Water	3	G	N					x			
3	MW-11	–	–	MW-11-24A1_092724	–	092724	0835	REG	GW	Water	39	G	N	x	x	x	x	x	x		x
4	MW-12	–	–	MW-12-24A1_092724	–	092724	0700	REG	GW	Water	13	G	N	x	x	x	x	x	x		
5	MW-13	–	–	MW-13-24A1_092724	–	092724	0230	REG	GW	Water	13	G	N	x	x	x	x	x	x		
6	MW-14	–	–	MW-14-24A1_092724	–	092724	0401	REG	GW	Water	13	G	N	x	x	x	x	x	x		
7	MW-15	–	–	MW-15-24A1_092724	–	092724	0532	REG	GW	Water	13	G	N	x	x	x	x	x	x		
8	QC	–	–	TB-01-24A1_092724	–	092724	–	TB	WQ	Water	3	G	N					x			

Relinquished By	Company	JACOBS	Received By		Company		Condition	Custody Seals Intact
[signature]	Date/Time	092824/9:53			Date/Time		Cooler Temp.	
Relinquished By	Company		Received By		Company		Condition	Custody Seals Intact
	Date/Time		[signature]	EETA PHX	Date/Time	9/28/24 @ 0953	Cooler Temp.	1.4°/3.3°C Lab Quote #
Analytical Method Comments:							COO/ICE	FedEx Tracking #

Page 1 of 1

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

550-224036 Chain of Custody

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Petrunia, Emily A		COC No: 550-40594.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Emily.Petrunia@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona		Job #: 550-224036-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/14/2024	Analysis Requested		Preservation Codes: -
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: Area 10	Project #: 55018689			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175/ Methane, Ethane, Ethene	RSK_175_CO2/ Carbon Dioxide	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-11-24A1_092724 (550-224036-3)	9/27/24	08:35 Arizona	G	Water			X	X	6	
MW-11-24A1_092724 (550-224036-3MS)	9/27/24	08:35 Arizona	G	Water			X	X	6	
MW-11-24A1_092724 (550-224036-3MSD)	9/27/24	08:35 Arizona	G	Water			X	X	6	
MW-12-24A1_092724 (550-224036-4)	9/27/24	07:00 Arizona	G	Water			X	X	6	
MW-13-24A1_092724 (550-224036-5)	9/27/24	02:30 Arizona	G	Water			X	X	6	
MW-14-24A1_092724 (550-224036-6)	9/27/24	04:01 Arizona	G	Water			X	X	6	
MW-15-24A1_092724 (550-224036-7)	9/27/24	05:32 Arizona	G	Water			X	X	6	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _______ Months*
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 09-30-24 15:45	Company: EETA-PHX	Received by: [signature]	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature]	Date/Time: 10/01/24 1030	Company: ETA-Burl
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

ORIGIN ID:INWA (602) 437-3340
EUROFINS PHOENIX
EUROFINS PHOENIX
4625 E COTTON CENTER BLVD
SUITE 189
PHOENIX, AZ 85040
UNITED STATES US

SHIP DATE: 30SEP24
ACTWGT: 39.03 LB
CAD: 0875926/CAFE3854
DIMS: 19x10x13 IN

BILL SENDER

TO **SHIPPING/RECEIVING**
TESTAMERICA LABORATORIES, INC.
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF: S550-92732
PO: YES DEPT: SAMPLE RECEIVING

589C2/8264/FE2D

FedEx Express

J243024070401uv

TRK# 0201 **4156 7883 5346**

TUE - 01 OCT 10:30A
PRIORITY OVERNIGHT

NX BTVA

05403
VT-US **BTV**

Eurofins Phoenix
4625 East Cotton Center Boulevard Suite #189
Phoenix, AZ 85040
Phone: 602-437-3340

Chain of Custody Record

eurofins | Environment Testing

10/25/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Petrunia, Emily A	Carrier Tracking No(s):	COC No: 550-40591.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Emily.Petrunia@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona		Job #: 550-224036-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 10/14/2024			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Area 10	Project #: 55018689			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9060A/ Waters - TOC Duplicates	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-11-24A1_092724 (550-224036-3)	9/27/24	08:35 Arizona	G	Water			X	3	AZ QAS 4
MW-11-24A1_092724 (550-224036-3MS)	9/27/24	08:35 Arizona	G	Water			X	3	AZ QAS 4
MW-11-24A1_092724 (550-224036-3MSD)	9/27/24	08:35 Arizona	G	Water			X	3	AZ QAS 4
MW-12-24A1_092724 (550-224036-4)	9/27/24	07:00 Arizona	G	Water			X	1	AZ QAS 4
MW-13-24A1_092724 (550-224036-5)	9/27/24	02:30 Arizona	G	Water			X	1	AZ QAS 4
MW-14-24A1_092724 (550-224036-6)	9/27/24	04:01 Arizona	G	Water			X	1	AZ QAS 4
MW-15-24A1_092724 (550-224036-7)	9/27/24	05:32 Arizona	G	Water			X	1	AZ QAS 4

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southwest, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	09-30-24 14:30		Fedex		
2				[signature]	10/1/24 0915	EETDEN
3						

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.1°C fail IR Tol

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-224036-1
SDG Number: SA2 GW Sampling

Login Number: 224036
List Number: 1
Creator: Vela, Jorge

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-224036-1
SDG Number: SA2 GW Sampling

Login Number: 224036
List Number: 3
Creator: Devarney, Hilary

List Source: Eurofins Burlington
List Creation: 10/01/24 05:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	2241968
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-224036-1
SDG Number: SA2 GW Sampling

Login Number: 224036
List Number: 2
Creator: Little, Matthew L

List Source: Eurofins Denver
List Creation: 10/01/24 01:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Emily Petrunia

From: Foehr, Derek <Derek.Foehr@jacobs.com>
Sent: Monday, September 30, 2024 4:38 PM
To: Emily Petrunia; Kidd, Bernice; HTS-RES-LAB HTS-RES-LAB
Subject: RE: [EXTERNAL] REPLY NEEDED: Eurofins Environment Testing Southwest, LLC sample confirmation files from 550-224036-1 Area 10

Emily,

Metals and anions are listed below.

Metals:
Iron II
Manganese II

Anions:
Chloride
Nitrate as N
Nitrite as N
Sulfate

Thanks.

Derek

From: Emily Petrunia <TALS@reports.et.eurofinsus.com>
Sent: Monday, September 30, 2024 2:21 PM
To: Kidd, Bernice <Bernice.Kidd@jacobs.com>; Foehr, Derek <Derek.Foehr@jacobs.com>; HTS-RES-LAB HTS-RES-LAB <HTS-RES-LAB@honeywell.com>
Subject: [EXTERNAL] REPLY NEEDED: Eurofins Environment Testing Southwest, LLC sample confirmation files from 550-224036-1 Area 10

Hello,

--Can you please verify which metals (6010) and which anions (300) you need?

Attached please find the sample confirmation files for job 550-224036-1; Area 10

The samples were received on 9/28/2024 09:53 AM.

Please review the attachments for accuracy and notify your Project Manager of any discrepancies as quickly as possible.

Any discrepancies not communicated in a timely fashion could result in missed holding times, TAT delays and may potentially incur additional charges.

Please feel free to contact me if you have any questions.

Thank you.

Emily A Petrunia
Project Manager

Eurofins Phoenix
Phone: 602-659-7629

E-mail: Emily.Petrunia@et.eurofinsus.com
www.eurofinsus.com/env

Reference: [550-576856]
Attachments: 2

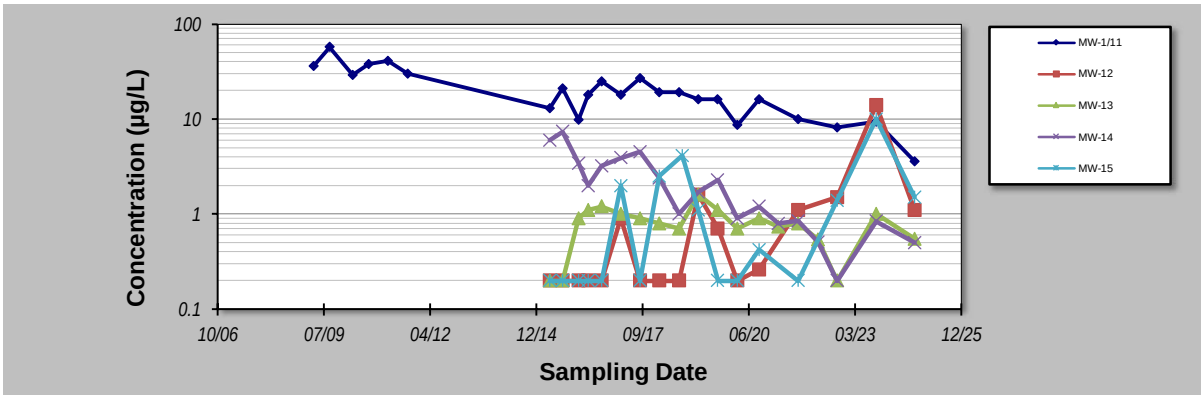
Appendix D
Mann-Kendall Trend Evaluation

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **7-Nov-24**
Facility Name: **HON Area 10**
Conducted By: **Derek Foehr**

Job ID: **HNA10301**
Constituent: **TCE**
Concentration Units: **µg/L**

Sampling Point ID:	MW-1/11	MW-12	MW-13	MW-14	MW-15		
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	Apr-09	36						
2	Sep-09	57						
3	Apr-10	29						
4	Sep-10	38						
5	Mar-11	41						
6	Sep-11	30						
7	May-15	13	0.2	0.2	6	0.2		
8	Sep-15	21	0.2	0.2	7.4	0.2		
9	Feb-16	9.8	0.2	0.9	3.4	0.2		
10	May-16	18	0.2	1.1	2	0.2		
11	Sep-16	25	0.2	1.2	3.2	0.2		
12	Mar-17	18	0.9	1	3.9	2		
13	Sep-17	27	0.2	0.9	4.5	0.2		
14	Mar-18	19	0.2	0.8	2.4	2.5		
15	Sep-18	19	0.2	0.7	1			
16	Oct-18					4.1		
17	Mar-19	16	1.6	1.6	1.7	1.1		
18	Sep-19	16	0.7	1.1	2.3	0.2		
19	Mar-20	8.6	0.2	0.7	0.9	0.2		
20	Sep-20	16	0.26	0.9	1.2	0.42		
21	Mar-21			0.74	0.8			
22	Sep-21	10	1.1	0.8	0.85	0.2		
23	Mar-22			0.54	0.51			
24	Sep-22	8.1	1.5	0.2	0.2	1.4		
25	Sep-23	9.4	14	1	0.84	10		
26	Sep-24	3.6	1.1	0.55	0.5	1.5		
27								
28								
29								
30								
Coefficient of Variation:		0.60	2.44	0.45	0.87	1.68		
Mann-Kendall Statistic (S):		-166	67	-25	-129	44		
Confidence Factor:		>99.9%	99.8%	79.7%	>99.9%	96.2%		
Concentration Trend:		Decreasing	Increasing	Stable	Decreasing	Increasing		



Notes:

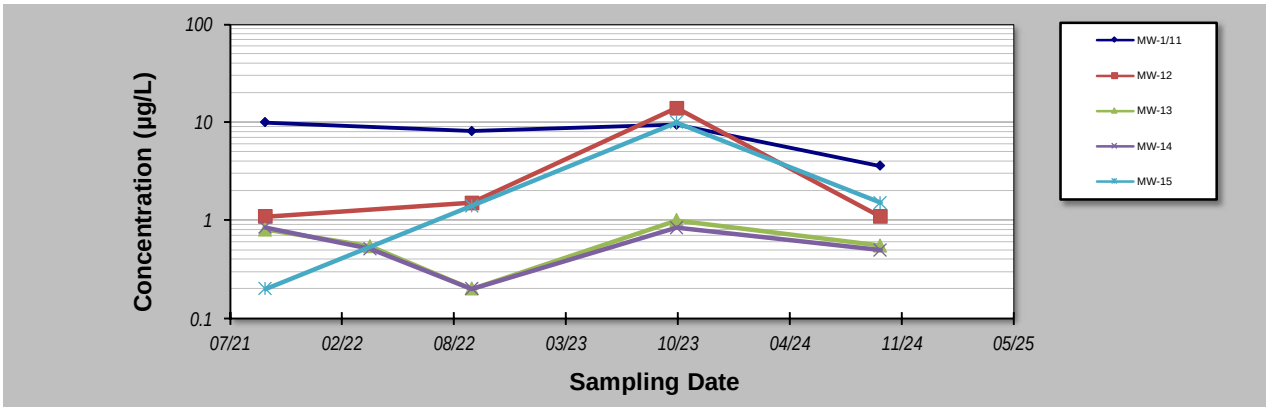
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **7-Nov-24**
Facility Name: **HON Area 10**
Conducted By: **Rick Edwards**

Job ID: **HNA10301**
Constituent: **TCE**
Concentration Units: **µg/L**

Sampling Point ID:	MW-1/11	MW-12	MW-13	MW-14	MW-15		
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	Sep-21	10	1.1	0.8	0.85	0.2		
2	Mar-22			0.54	0.51			
3	Sep-22	8.1	1.5	0.2	0.2	1.4		
4	Sep-23	9.4	14	1	0.84	10		
5	Sep-24	3.6	1.1	0.55	0.5	1.5		
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.37	1.44	0.49	0.47	1.38		
Mann-Kendall Statistic (S):		-4	1	0	-4	4		
Confidence Factor:		83.3%	50.0%	40.8%	75.8%	83.3%		
Concentration Trend:		Stable	No Trend	Stable	Stable	No Trend		



Notes:

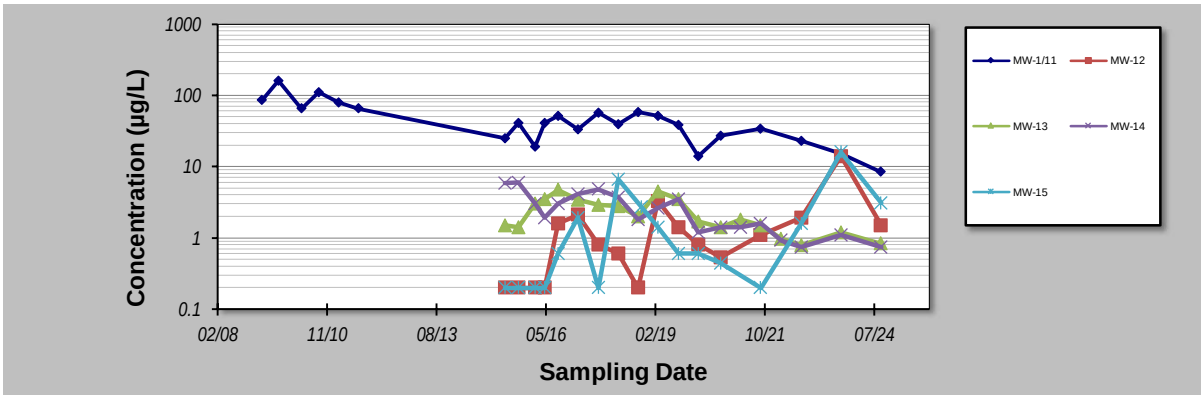
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **7-Nov-24**
Facility Name: **HON Area 10**
Conducted By: **Derek Foehr**

Job ID: **HNA10301**
Constituent: **1,1-DCE**
Concentration Units: **µg/L**

Sampling Point ID:	MW-1/11	MW-12	MW-13	MW-14	MW-15		
Sampling Event	Sampling Date	1,1-DCE CONCENTRATION (µg/L)						
1	Apr-09	86						
2	Sep-09	160						
3	Apr-10	65						
4	Sep-10	110						
5	Mar-11	79						
6	Sep-11	65						
7	May-15	25	0.2	1.5	5.8	0.2		
8	Sep-15	41	0.2	1.4	6	0.2		
9	Feb-16	19	0.2	3	3	0.2		
10	May-16	41	0.2	3.5	1.9	0.2		
11	Sep-16	51	1.6	4.7	3	0.6		
12	Mar-17	33	2.1	3.4	4.1	1.9		
13	Sep-17	57	0.8	2.9	4.8	0.2		
14	Mar-18	39	0.6	2.8	3.7	6.6		
15	Sep-18	58	0.2	2	1.8			
16	Oct-18					2.7		
17	Mar-19	51	3.3	4.5	2.6	1.4		
18	Sep-19	38	1.4	3.5	3.5	0.6		
19	Mar-20	14	0.8	1.7	1.2	0.6		
20	Sep-20	27	0.53	1.4	1.4	0.44		
21	Mar-21			1.8	1.4			
22	Sep-21	34	1.1	1.5	1.6	0.2		
23	Mar-22			0.97	0.92			
24	Sep-22	23	1.9	0.79	0.74	1.6		
25	Sep-23	15	14	1.2	1.1	16		
26	Sep-24	8.4	1.5	0.83	0.74	3.1		
27								
28								
29								
30								
Coefficient of Variation:		0.70	1.81	0.53	0.64	1.82		
Mann-Kendall Statistic (S):		-150	57	-80	-116	50		
Confidence Factor:		>99.9%	99.0%	99.8%	>99.9%	97.9%		
Concentration Trend:		Decreasing	Increasing	Decreasing	Decreasing	Increasing		



Notes:

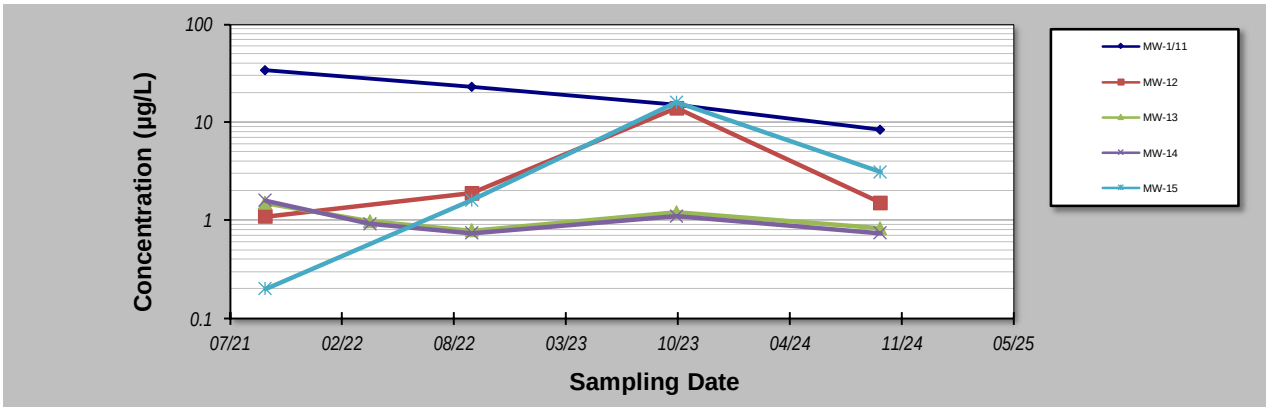
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **7-Nov-24**
Facility Name: **HON Area 10**
Conducted By: **Rick Edwards**

Job ID: **HNA10301**
Constituent: **1,1-DCE**
Concentration Units: **µg/L**

Sampling Point ID:	MW-1/11	MW-12	MW-13	MW-14	MW-15		
Sampling Event	Sampling Date	1,1-DCE CONCENTRATION (µg/L)						
1	Sep-21	34	1.1	1.5	1.6	0.2		
2	Mar-22			0.97	0.92			
3	Sep-22	23	1.9	0.79	0.74	1.6		
4	Sep-23	15	14	1.2	1.1	16		
5	Sep-24	8.4	1.5	0.83	0.74	3.1		
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.55	1.35	0.28	0.35	1.39		
Mann-Kendall Statistic (S):		-6	2	-4	-5	4		
Confidence Factor:		95.8%	62.5%	75.8%	82.1%	83.3%		
Concentration Trend:		Decreasing	No Trend	Stable	Stable	No Trend		



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

Appendix E
Molar Ratio Calculations

Appendix E. Molar Ratio Calculations

Well: **MW-11** **Sample Date:** **9/27/2024**

Trichloroethene

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
TCE	3.6	131.4	0.082191781	0.02739726
cis-DCE	1.9	96.95	0.039195462	0.019597731
trans-DCE	0.25	96.95	0.005157298	0.002578649
Vinyl chloride	0.25	62.5	0.004	0.004
Ethylene	0	28.05	0	0
			Total	**Total**
			0.13054454	**0.05357364**

Molar Ratio	2.436730831

Fraction Chloride Ions Removed:	0.18775639

1,1,1-Trichloroethane

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
1,1,1-TCA	0.25	133.4	0.005622189	0.001874063
1,1-DCA	6.5	98.96	0.131366209	0.065683104
1,2-DCA	0.25	98.96	0.005052546	0.002526273
1,1-DCE	8.4	96.95	0.173285199	0.086642599
Vinyl chloride	0.25	62.5	0.004	0.004
Chloroethane	0.5	64.51	0.007750736	0.007750736
Ethane	0	30.07	0	0
Ethylene	0	28.05	0	0
			Total	**Total**
			0.327076879	**0.168476776**

Molar Ratio	1.941376648

Fraction Chloride Ions Removed:	0.352874451

Notes:

µg/L = micrograms per liter

One-half of the reporting limit was used for compounds that were not detected.

Zero was used for the compounds that were not analyzed for

Analysis assumes that all 1,1-DCE resulted from abiotic transformation of 1,1,1-TCA; 1,1-DCE is omitted from the TCE analysis.

DCE = dichloroethene

L = liter

Mol. Wt. = molecular weight

TCA = trichloroethane

TCE = trichloroethene

Appendix E. Molar Ratio Calculations

Well: **MW-12** **Sample Date:** **9/27/2024**

Trichloroethene

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
TCE	1.1	131.4	0.025114155	0.008371385
cis-DCE	0.25	96.95	0.005157298	0.002578649
trans-DCE	0.25	96.95	0.005157298	0.002578649
Vinyl chloride	0.25	62.5	0.004	0.004
Ethylene	0	28.05	0	0
			Total	**Total**
			0.03942875	**0.017528683**

Molar Ratio	2.24938469

Fraction Chloride Ions Removed:	0.250205103

1,1,1-Trichloroethane

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
1,1,1-TCA	0.25	133.4	0.005622189	0.001874063
1,1-DCA	0.25	98.96	0.005052546	0.002526273
1,2-DCA	0.25	98.96	0.005052546	0.002526273
1,1-DCE	1.5	96.95	0.030943785	0.015471893
Vinyl chloride	0.25	62.5	0.004	0.004
Chloroethane	0.5	64.51	0.007750736	0.007750736
Ethane	0	30.07	0	0
Ethylene	0	28.05	0	0
			Total	**Total**
			0.058421804	**0.034149239**

Molar Ratio	1.710779104

Fraction Chloride Ions Removed:	0.429740299

Notes:

µg/L = micrograms per liter

One-half of the reporting limit was used for compounds that were not detected

Zero was used for the compounds that were not analyzed for

Analysis assumes that all 1,1-DCE resulted from abiotic transformation of 1,1,1-TCA; 1,1-DCE is omitted from the TCE analysis

DCE = dichloroethene

L = liter

Mol. Wt. = molecular weight

TCA = trichloroethane

TCE = trichloroethene

Appendix E. Molar Ratio Calculations

Well: **MW-13** **Sample Date:** **9/27/2024**

Trichloroethene

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
TCE	0.55	131.4	0.012557078	0.004185693
cis-DCE	0.25	96.95	0.005157298	0.002578649
trans-DCE	0.25	96.95	0.005157298	0.002578649
Vinyl chloride	0.25	62.5	0.004	0.004
Ethylene	0	28.05	0	0
			Total	**Total**
			0.026871673	**0.01334299**

Molar Ratio	2.013916861

Fraction Chloride Ions Removed:	0.32869438

1,1,1-Trichloroethane

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
1,1,1-TCA	0.25	133.4	0.005622189	0.001874063
1,1-DCA	0.25	98.96	0.005052546	0.002526273
1,2-DCA	0.25	98.96	0.005052546	0.002526273
1,1-DCE	0.83	96.95	0.017122228	0.008561114
Vinyl chloride	0.25	62.5	0.004	0.004
Chloroethane	0.5	64.51	0.007750736	0.007750736
Ethane	0	30.07	0	0
Ethylene	0	28.05	0	0
			Total	**Total**
			0.044600246	**0.02723846**

Molar Ratio	1.637399712

Fraction Chloride Ions Removed:	0.454200096

Notes:

µg/L = micrograms per liter

One-half of the reporting limit was used for compounds that were not detected

Zero was used for the compounds that were not analyzed for

Analysis assumes that all 1,1-DCE resulted from abiotic transformation of 1,1,1-TCA; 1,1-DCE is omitted from the TCE analysis

DCE = dichloroethene

L = liter

Mol. Wt. = molecular weight

TCA = trichloroethane

TCE = trichloroethene

Appendix E. Molar Ratio Calculations

Well: **MW-14** **Sample Date:** **9/27/2024**

Trichloroethene

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
TCE	0.5	131.4	0.011415525	0.003805175
cis-DCE	0.25	96.95	0.005157298	0.002578649
trans-DCE	0.25	96.95	0.005157298	0.002578649
Vinyl chloride	0.25	62.5	0.004	0.004
Ethylene	0	28.05	0	0
			Total	**Total**
			0.02573012	**0.012962473**

Molar Ratio	1.984970077

Fraction Chloride Ions Removed:	0.338343308

1,1,1-Trichloroethane

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
1,1,1-TCA	0.25	133.4	0.005622189	0.001874063
1,1-DCA	0.25	98.96	0.005052546	0.002526273
1,2-DCA	0.25	98.96	0.005052546	0.002526273
1,1-DCE	0.74	96.95	0.015265601	0.0076328
Vinyl chloride	0.25	62.5	0.004	0.004
Chloroethane	0.5	64.51	0.007750736	0.007750736
Ethane	0	30.07	0	0
Ethylene	0	28.05	0	0
			Total	**Total**
			0.042743619	**0.026310146**

Molar Ratio	1.624605911

Fraction Chloride Ions Removed:	0.458464696

Notes:

µg/L = micrograms per liter

One-half of the reporting limit was used for compounds that were not detected

Zero was used for the compounds that were not analyzed for

Analysis assumes that all 1,1-DCE resulted from abiotic transformation of 1,1,1-TCA; 1,1-DCE is omitted from the TCE analysis

DCE = dichloroethene

L = liter

Mol. Wt. = molecular weight

TCA = trichloroethane

TCE = trichloroethene

Appendix E. Molar Ratio Calculations

Well: **MW-15** **Sample Date:** **9/27/2024**

Trichloroethene

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
TCE	1.5	131.4	0.034246575	0.011415525
cis-DCE	0.25	96.95	0.005157298	0.002578649
trans-DCE	0.25	96.95	0.005157298	0.002578649
Vinyl chloride	0.25	62.5	0.004	0.004
Ethylene	0	28.05	0	0
			Total	**Total**
			0.04856117	**0.020572823**

Molar Ratio	2.360452488

Fraction Chloride Ions Removed:	0.213182504

1,1,1-Trichloroethane

Compound	Concentration µg/L	Mol. Wt.	Organic Chlorine moles/L	Ethane or Ethene moles/L
1,1,1-TCA	0.25	133.4	0.005622189	0.001874063
1,1-DCA	0.25	98.96	0.005052546	0.002526273
1,2-DCA	0.25	98.96	0.005052546	0.002526273
1,1-DCE	3.1	96.95	0.06395049	0.031975245
Vinyl chloride	0.25	62.5	0.004	0.004
Chloroethane	0.5	64.51	0.007750736	0.007750736
Ethane	0	30.07	0	0
Ethylene	0	28.05	0	0
			Total	**Total**
			0.091428508	**0.050652591**

Molar Ratio	1.805011487

Fraction Chloride Ions Removed:	0.398329504

Notes:

µg/L = micrograms per liter

One-half of the reporting limit was used for compounds that were not detected

Zero was used for the compounds that were not analyzed for

Analysis assumes that all 1,1-DCE resulted from abiotic transformation of 1,1,1-TCA; 1,1-DCE is omitted from the TCE analysis

DCE = dichloroethene

L = liter

Mol. Wt. = molecular weight

TCA = trichloroethane

TCE = trichloroethene