Honeywell

Steven Bowles
Senior Remediation Manager

Phone 602-231-2008 x2008
steven.bowles@honeywell.com
www.honeywell.com

HEALTH, SAFETY, ENVIRONMENTAL, PRODUCT STEWARDSHIP AND SUSTAINABILITY
111 South 34th Street, M/S 158
Phoenix, Arizona 85034

March 27, 2024

Via Electronic Delivery

Mr. Martin Castaneda
Phoenix Active Management Area
Arizona Department of Water Resources
1110 West Washington Street, Suite 310
Phoenix, Arizona 85007

Re: 2023 Annual Groundwater Monitoring Report, Honeywell Peoria Avenue Site, Phoenix, Arizona, Arizona Department of Environmental Quality Voluntary Remediation Program Site Code 070273-00 for the Poor Quality Groundwater Withdrawal Permit No. 59-570144.0002; and the 2023 Periodic Site Review Report, Former Honeywell Peoria Avenue Site, Phoenix, Arizona, Arizona Department of Environmental Quality Voluntary Remediation Program Site Code 070273-00

Dear Mr. Castaneda,

In accordance with requirements of the Poor Quality Groundwater Withdrawal Permit Number (No.) 59-570144.0002, issued June 11, 2009, for extraction wells EW-1 (55-570189), EW-2 (55-570190), and MW-10 (55-556637), Honeywell International Inc. (Honeywell) is pleased to submit the attached 2023 Annual Groundwater Monitoring Report and 2023 Periodic Site Review Report to the Arizona Department of Water Resources for the Former Honeywell Peoria Avenue Site in Phoenix, Arizona. The 2023 Periodic Site Review Report, required by Arizona Department of Environmental Quality, is included as Appendix A to the 2023 Annual Groundwater Monitoring Report.

Groundwater monitoring results indicate that concentrations of chlorinated volatile organic compounds were generally less than those observed in 2022, although plume extents were overall similar to 2022 extents, with small up and down concentration fluctuations observed at individual locations, as has been observed over time. Overall, the results indicate the contaminant plume is stable and contained.

If you have any questions or require discussion, please contact me at 602-231-2008 or Derek Foehr at 480-234-8347. For your convenience, my email address is Steven.Bowles@Honeywell.com, and Derek's email address is derek.foehr@jacobs.com.

Sincerely,

Steven L. Bowles
Senior Remediation Manager

cc: Jennifer Widlowski, Arizona Department of Environmental Quality
Derek Foehr, Jacobs

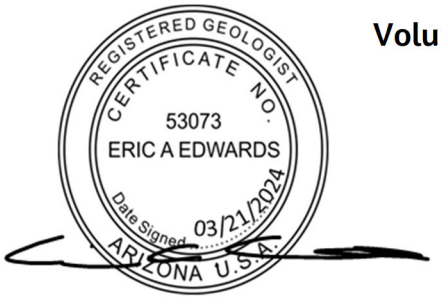
Honeywell Peoria Avenue Facility, West Peoria Avenue and North 23rd Avenue, Phoenix, Arizona

Annual Groundwater Monitoring Report for 2023

March 2024

Arizona Department of Environmental Quality
Voluntary Remediation Program Site Code 070273-00

Honeywell International Inc.



EXPIRES: 12/31/2026

Executive Summary

This *Annual Groundwater Monitoring Report for 2023* has been prepared by Jacobs on behalf of Honeywell International Inc. (Honeywell) to evaluate the effectiveness and adequacy of the approved remedy in achieving remedial objectives with respect to volatile organic compounds (VOCs) in groundwater at the Peoria Avenue site (site).

The approved remedy consists of groundwater monitoring and groundwater containment to prevent migration of groundwater impacted by VOCs at the site. Key contaminants of concern at the site include trichloroethene (TCE) and 1,1-dichloroethene (1,1-DCE). Extracted groundwater is discharged directly to the City of Phoenix sanitary sewer, where it is treated offsite at the 91st Avenue Multi-cities Wastewater Treatment Plant and eventually discharged to the Salt River.

The evaluation in this Annual Groundwater Monitoring Report found the following:

- Depth-to-groundwater measurements indicate an average increase in groundwater elevation at the site (not including active extraction wells) of 1.75 foot since the previous annual monitoring event, in 2022. The groundwater flow direction at the site continued to be to the north–northwest, with an average calculated gradient of 0.006 foot per foot, which is consistent with historical values.
- Results for the 2023 water quality samples showed that 6 out of the 12 groundwater monitoring wells sampled and inactive extraction well EW-2 had concentrations of 1,1-DCE or TCE that exceeded Arizona Aquifer Water Quality Standards (AAWQSs). Effluent water quality samples from extraction well EW-1 exceeded the AAWQS for 1,1-DCE and TCE but was below the AAWQS for other constituents. Effluent water quality samples from extraction well MW-10 were not collected as the extraction pump is currently inoperable.
- Concentrations of 1,1-DCE in water quality samples collected from monitoring wells MW-7, MW-13, and MW-14 continued to be below AAWQS.
- Concentrations of TCE in water quality samples collected from monitoring wells MW-7, MW-12, MW-13, and MW-14 continued to be below AAWQS.
- Concentrations of 1,1-DCE exceeding the AAWQS were observed at wells MW-4 and MW-12.
- When using the data available over the previous 5 years for trend analysis evaluation, two wells presented an upward trend for TCE concentrations (MW-3 and MW-12). Wells MW-3, MW-4, and MW-12 presented an upward trend for 1,1-DCE concentrations. An upward trend was also observed for chloroform concentrations at wells MW-7 and MW-13. Table ES-1 analyzes the trends, including data ranges, using data available over the previous 5 years. The trend evaluation for the previous 5 years is described in Section 3.2.3.

Table ES-1. Summary of Mann-Kendall Trend Statistical Analysis—5 Years

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	TCE (µg/L)
MW-1a	No trend	No trend	No trend	No trend	Stable	No trend	No trend
	120–1800	7–81	1.3–12	2.1–20	0.7–**10**	3.2–**11**	**35–180**
MW-2	Stable	No trend	No trend	Stable	No trend	Stable	No trend

Table ES-1. Summary of Mann-Kendall Trend Statistical Analysis—5 Years

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	TCE (µg/L)
	86–270	7.8–77	0.6–1.4	0.2–5	0.5–**9**	0.8–4.3	**6.8–49**
MW-3	Increasing	Stable	Stable	Stable	Stable	Stable	Increasing
	2.4–**54**	0.5–0.5	0.5–0.5	0.5–2	0.5–0.5	0.5–0.5	1.4–**61**
MW-4	Increasing	Stable	Stable	Stable	Stable	Stable	No trend
	4.8–**18**	0.5–0.5	0.5–0.5	0.5–2	0.5–0.5	0.5–0.5	2.9–4.5
MW-5	Stable	No trend	Stable	Stable	Stable	Stable	Stable
	6.2–**16**	0.3–0.5	0.5–0.5	0.5–2	0.5–0.5	0.5–0.5	2–**15**
MW-6	Stable	Stable	Stable	Stable	Stable	Stable	Stable
	0.5–0.5	0.5–0.5	0.5–0.5	0.5–2	0.5–0.5	0.5–0.5	0.5–0.5
MW-7	Decreasing	No trend	No trend	Increasing	No trend	No trend	Decreasing
	1–**5**	0.5–1	0.5–1	0.4–1	0.5–1	0.5–1	0.56–**4.5**
MW-8	No trend	Stable	Stable	No trend	Stable	Stable	No trend
	0.2–0.5	0.5–0.5	0.5–0.5	0.4–0.5	0.5–0.5	0.5–0.5	0.2–0.5
MW-9	Stable	Stable	Stable	Stable	Stable	Stable	Stable
	0.81–2.2	0.5–0.5	0.5–0.5	0.5–0.5	0.5–0.5	0.5–0.5	0.5–1
MW-10	Stable	Stable	No trend	Stable	No trend	No trend	Stable
	11–26	0.51–1.1	0.2–1	0.5–1	0.5–1	0.5–1	3.5–**6.4**
MW-12	Increasing	No trend	No trend	Stable	No trend	No trend	Increasing
	0.6–10	0.5–1	0.5–1	4–5.4	0.5–1	0.5–1	0.2–4.3
MW-13	No trend	No trend	No trend	Increasing	No trend	No trend	No trend
	0.5–1	0.5–1	0.5–1	0.5–1.6	0.5–1	0.5–1	0.5–1
MW-14	No trend	No trend	No trend	No trend	No trend	No trend	No trend
	0.5–3.2	0.2–1	0.5–1	0.5–1	0.5–1	0.5–1	0.4–1
EW-1	No trend	Stable	No trend	Stable	No trend	No trend	Stable
	41–63	3.2–5.4	0.5–1	0.95–1.3	0.5–1	0.5–1	**12–18**
EW-2	Stable	No trend	Stable	No trend	Stable	Stable	Stable
	0.5–25	0.3–0.5	0.5–0.5	0.3–0.5	0.5–0.5	0.5–0.5	**17–33**

Table ES-1. Summary of Mann-Kendall Trend Statistical Analysis—5 Years

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	TCE (µg/L)

Nondetect concentrations were used at their detection level for purposes of the evaluation.

The first row for each well describes the concentration trend and the second row for each well lists the range of concentrations in the data set.

Bold concentrations exceed the Arizona Aquifer Water Quality Standard.

µg/L = micrograms per liter

DCE = dichoroethene

DCA = dichloroethane

TCA = trichloroethane

PCE = tetrachloroethene

TCE = trichloroethene

- When using all data collected over the previous 15 years for trend analysis evaluation, only three wells presented an upward trend for TCE concentrations (MW-4, MW-12, and EW-2). Two wells presented an upward trend for 1,1-DCE concentrations (MW-4 and MW-12). Table ES-2 analyzes the trends, including data ranges, using data available over the previous 15 years. The trend evaluation for the previous 15 years is described in Section 3.2.3.

Table ES-2. Summary of Mann-Kendall Trend Statistical Analysis—15 Years

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	TCE (µg/L)
MW-1a	Decreasing	Decreasing	Deceasing	Decreasing	Decreasing	Decreasing	Decreasing
	120–2700	6.9–180	0.9–25	1.8–49	0.7–26	1.2–25	**35–310**
MW-2	Decreasing	Decreasing	Probably decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	86–1600	7.8–290	0.6–19	0.2–39	0.5–35	0.8–22	**6.8–320**
MW-3	Probably increasing	Stable	Stable	Stable	Stable	Stable	No trend
	0.5–**54**	0.5–0.64	0.5–0.5	0.1–2	0.5–0.5	0.5–0.5	1.2–**61**
MW-4	Increasing	Stable	Stable	No trend	Stable	Stable	Increasing
	0.5–**18**	0.5–0.5	0.5–0.5	0.5–2	0.5–0.5	0.5–0.5	0.5–4.5
MW-5	Decreasing	Decreasing	Stable	No trend	Stable	Stable	No trend
	6.2–**28**	0.3–1.2	0.1–0.5	0.2–2	0.5–0.5	0.5–0.5	2–**15**
MW-6	Stable	Stable	Stable	No trend	Stable	Stable	Stable
	0.5–0.5	0.5–0.5	0.5–0.5	0.5–2	0.5–0.5	0.5–0.5	0.5–0.5

Table ES-2. Summary of Mann-Kendall Trend Statistical Analysis—15 Years

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	TCE (µg/L)
MW-7	Stable	Stable	Stable	No trend	Stable	Stable	Stable
	1–**18**	0.1–0.71	0.5–0.5	0.3–0.8	0.5–0.5	0.5–0.5	0.56–**17**
MW-8	Stable	Stable	Stable	Stable	Stable	Stable	Probably decreasing
	0.2–0.5	0.5–0.5	0.5–0.5	0.2–0.5	0.5–0.5	0.5–0.5	0.1–0.78
MW-9	Stable	Stable	Stable	Stable	Stable	Stable	Stable
	0.59–3.9	0.5–0.5	0.5–0.5	0.2–0.5	0.5–0.5	0.5–0.5	0.5–4.6
MW-10	Probably decreasing	Decreasing	Stable	Probably decreasing	Stable	Stable	Decreasing
	11–34	0.51–1.7	0.2–0.5	0.5–0.7	0.5–0.5	0.1–0.5	3.5–**8.9**
MW-12	Increasing	No trend	Stable	Probably increasing	Stable	Stable	Increasing
	0.3–10	0.5–0.97	0.5–0.5	1.8–5.4	0.5–0.5	0.5–0.5	0.2–4.3
MW-13	Stable	Stable	Stable	Probably increasing	Stable	Stable	Stable
	0.5–0.5	0.5–0.5	0.5–0.5	0.5–1.6	0.5–0.5	0.5–0.5	0.5–0.5
MW-14	No trend	No trend	Stable	Stable	Stable	Stable	No trend
	0.5–2.9	0.2–0.5	0.5–0.5	0.5–0.5	0.5–0.5	0.5–0.5	0.4–0.58
EW-1	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	41–170	3.2–14	0.5–1.3	0.95–3.4	0.5–2.1	0.5–1.1	**12–33**
EW-2	No trend	Probably decreasing	Stable	Stable	Stable	Stable	Increasing
	0.5–25	0.3–0.75	0.5–0.5	0.2–0.5	0.5–0.5	0.5–0.5	4.3–**33**

Table ES-2. Summary of Mann-Kendall Trend Statistical Analysis—15 Years

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	TCE (µg/L)

Nondetect concentrations were used at their detection level for purposes of the evaluation.

The first row for each well describes the concentration trend and the second row for each well lists the range of concentrations in the data set.

Bold concentrations exceed the Arizona Aquifer Water Quality Standard.

µg/L = micrograms per liter

DCE = dichoroethene

DCA = dichloroethane

TCA = trichloroethane

PCE = tetrachloroethene

TCE = trichloroethene

Table ES-3 includes the approved site metrics and associated contingency actions and indicates whether the metrics were met. Performance against site metrics is described in Section 4.

Table ES-3. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
Extraction remains at or above established flow rates. Flow rates for specific extraction wells are as follows: • EW-1: 55 gpm • MW-10: 30 gpm	No	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days if the flow rate is reduced by more than 10% over 30 days. - Metric not met. The extraction pump in MW-10 was found to be operating below the discharge rate of 30 gpm and that the pump would need to be replaced. • Notify ADEQ within 7 days of identifying a shutdown of pump operations greater than 72 hours. - Metric not met. On August 28, 2023, ADEQ was notified of further investigation of the extraction pump in well MW-10. • Take steps to resume extraction flow rates. - Metric not met. Extraction pump in MW-10 is scheduled to be replaced during the first quarter of 2024. • Evaluate capture at achieved flow rates if target flow rates are not resumed. - Metric not met. Well cleaning and pump replacement to resume target flow rate in MW-10 are being scheduled. • Evaluate potential mitigation actions to resume the target flow rate, including pump replacement, well rehabilitation, or other appropriate actions. - Metric not met. Extraction pump in MW-10 is scheduled to be replaced in the first quarter after cleaning of the well casing.
Mass removal trends at extraction well MW-10 will be stable during the 3-year period of 2021 to 2023.	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days. - Metric was met while MW-10 was in operation. On August 2023, the extraction pump in MW-10 was found to be operating below the discharge rate of 30 gpm and that the pump would need to be replaced. Mass removal rates are expected to remain stable once the extraction in MW-10 is started. • Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - Metric met. No action required. • Evaluate actions to be taken to change mass removal rates, as needed. - Metric met. No action required. • Evaluate mass removal metric and update to reflect current conditions, as needed. - Metric met. No action required.

Table ES-3. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
Mass removal trends at extraction well EW-1 will be stable during the 3-year period of 2021 to 2023.	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days. - Metric met. No action required. • Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - Metric met. No action required. • Evaluate actions to be taken to change mass removal rates, as needed. - Metric met. No action required. • Evaluate mass removal metric and update to reflect current conditions, as needed. - Metric met. No action required.
TCE and 1,1-DCE concentration trends at sentinel well MW-13 do not show an increasing trend, including detectable concentrations above 50% of the AAWQS.	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric met. No action required. • Confirm trend by one or more subsequent sampling events. - Metric met. No action required. • Evaluate increased sampling frequency. - Metric met. No action required. • Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at EW-1, in situ remediation, or other appropriate options. - Metric met. No action required.
TCE and 1,1-DCE concentration trends at sentinel well MW-14 do not show an increasing trend, including detectable concentrations above 50% of the AAWQS.	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric met. No action required. • Confirm trend by one or more subsequent sampling events. - Metric met. No action required. • Evaluate increased sampling frequency. - Metric met. No action required. • Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at MW-10, in situ remediation, or other appropriate options. - Metric met. No action required.

Table ES-3. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
TCE and 1,1-DCE concentration trends at trigger well MW-12 do not show an increasing trend, including concentrations above 50% of the AAWQS.	No	If the metric is not met, the associated contingency actions include: • Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric not met. ADEQ notified of the exceedance of 1,1-DCE in MW-12. • Confirm trend by one or more subsequent sampling events. - Metric not met. MW-12 scheduled for sampling during the semiannual groundwater sampling event in May 2024. • Evaluate increased sampling frequency. - Metric not met. MW-12 is currently sampled on a semiannual basis. • Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at EW-1, in situ remediation, or other appropriate options. - Capture zone evaluation indicated that groundwater at MW-12 is contained by extraction well MW-10.
TCE and 1,1-DCE concentrations at sentinel and trigger monitoring wells do not exceed the AAWQS. Sentinel and trigger monitoring wells include the following: MW-6, MW-8, MW-13, and MW-14	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 15 days of receiving laboratory data. After notifying ADEQ, collect samples within 30 days to confirm concentrations. - Metric met. No action required. • Evaluate increased sampling frequency. - Metric met. No action required. • Evaluate factors contributing to concentrations that exceed AAWQS and downgradient impacts of concentrations that exceed AAWQS and explain overall impacts to site remediation. - Metric met. No action required. • Re-evaluate the groundwater remedial action and present appropriate mitigation actions or modifications. - Metric met. No action required.

Table ES-3. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
TCE and 1,1-DCE concentrations at trigger monitoring wells do not exceed the AAWQS. Sentinel and trigger monitoring wells include the following: MW-4, MW-7, MW-9, and MW-12	No	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 15 days of receiving laboratory data. After notifying ADEQ, collect samples within 30 days to confirm concentrations. - Metric was not met at monitoring well MW-4 during the annual sampling event. ADEQ was notified within 15 days of receiving laboratory data. Confirmation sample collection was unnecessary because a duplicate sample was collected at MW-4 during the annual sampling event. • Evaluate increased sampling frequency. - Increase sampling frequency at monitoring well MW-4 from annual to semiannual. • Evaluate factors contributing to concentrations that exceed AAWQS and downgradient impacts of concentrations that exceed AAWQS and explain overall impacts to site remediation. - Model simulations of 1,1-DCE at monitoring well MW-4 were run for 10 years starting in 2016 to include non-routine periods of downtime at extraction well EW-1 starting in 2018. Concentrations of 1,1-DCE at monitoring well MW-4 did not reach the AAWQS for 1,1-DCE (7 µg/L) in any simulation. The maximum simulated concentration of 1,1-DCE at monitoring well MW-4 was 2.69 µg/L. Simulations indicated that downtime of extraction well EW-1 did not result in increasing concentrations of 1,1-DCE at monitoring well MW-4, suggesting that increased TCE concentrations at monitoring well MW-4 are unrelated to TCE concentrations in the source area. - Additionally, groundwater flow direction at the site has been north–northwest since 2006. Well MW-4 is located cross gradient and approximately 1,080 feet northeast of source area well MW-1a. The direction of groundwater flow during periods of EW-1 downtime also suggests that increased TCE concentrations at well MW-4 are unrelated to TCE concentrations in the source area. • Re-evaluate the groundwater remedial action and present appropriate mitigation actions or modifications. - Additional actions or modifications to the remedial action are not recommended.

ADEQ = Arizona Department of Environmental Quality

gpm = gallon(s) per minute

The following recommendations are based on the 2023 annual groundwater monitoring results:

- Continue to operate extraction wells EW-1 and MW-10 to maintain hydraulic control of the VOC plume.
- Continue semiannual sampling frequency at MW-4 and MW-12.
- Decrease sampling frequency at MW-7, MW-13, and MW-14 from semiannual to annual. Concentrations of 1,1-DCE and TCE at MW-7 have been below their AAWQS since 2018. Concentrations of 1,1-DCE and TCE have been below their AAWQS at MW-13, and MW-14 since the wells were installed in 2019 and 2018, respectively.
- Include only the contaminants of concern (COCs) described in Section 1.1 in future trend analysis.
- Conduct semiannual and annual groundwater monitoring events at the site during the second quarter and the fourth quarter of 2024, respectively, in accordance with the field sampling instructions (CH2M 2012) and *Quality Assurance Project Plan* (CH2M 2007) for the site.
- Evaluate 2024 site conditions against approved metrics for the site and apply the appropriate contingency actions, if needed.
- Submit the 2024 Annual Groundwater Monitoring Report by March 31, 2025.
- Submit the 2024-2026 Periodic Site Review Report by March 31, 2027.

Contents

Figures

Acronyms and Abbreviations

µg/L	microgram(s) per liter
1,1-DCE	1,1-dichloroethene
1,1,2-TCA	1,1,2-trichloroethane
AAWQS	Arizona Aquifer Water Quality Standard
ADEQ	Arizona Department of Environmental Quality
amsl	above mean sea level
CoC	chain-of-custody
COC	contaminant of concern
EPA	U.S. Environmental Protection Agency
gpm	gallon(s) per minute
Honeywell	Honeywell International Inc.
$KMnO_4$	potassium permanganate
No.	number
PCE	tetrachloroethene
PDB	passive diffusion bag
QC	quality control
RAP	Remedial Action Plan
site	Peoria Avenue site
TCE	trichloroethene
VOC	volatile organic compound

1. Introduction

This report summarizes groundwater monitoring activities conducted during 2023 for the Honeywell International Inc. (Honeywell) Peoria Avenue site (site), located in the vicinity of North 23rd and West Peoria Avenues, Phoenix, Arizona (Figure 1-1). Monitoring activities included depth-to-groundwater measurements and collection of groundwater quality samples from monitoring and extraction wells. Laboratory results from groundwater quality samples in the vicinity of the site are used to assess the overall effectiveness of the operating groundwater containment system. The site is assigned Arizona Department of Environmental Quality (ADEQ) Voluntary Remediation Program Site Code 070273-00.

1.1 Site Background

Various soil and groundwater investigations were conducted at the site between 1985 and 1997 to determine whether historical site operations had resulted in hazardous chemical impacts to soil and groundwater. As a result of those investigations, the following COCs were identified in the groundwater:

- 1,1-Dichloroethene (1,1-DCE)
- Trichloroethene (TCE)
- Tetrachloroethene (PCE)
- 1,1,2-Trichloroethane (1,1,2-TCA)

These COCs have historically been detected at concentrations exceeding Arizona Aquifer Water Quality Standards (AAWQS) in groundwater samples collected from monitoring wells located near former site dry wells and in downgradient monitoring wells.

A groundwater monitoring program was established at the site in 1989 for onsite monitoring wells MW-1a, MW-2, MW-3, and MW-4. Groundwater monitoring well MW-2 collapsed above the water table in 2019. Monitoring well MW-2 was a shallow well co-located with the deeper monitoring well MW-1a upgradient of extraction well EW-1. Beginning in 2020, monitoring activities in this area were completed using monitoring well MW-1a for groundwater sample collection, which has generally had higher COC concentrations than monitoring well MW-2.

Monitoring and extraction wells were added to the groundwater monitoring program as follows:

- MW-5 through MW-8 in 1990
- MW-9 in 1992
- MW-10 in 1997
- EW-1 and EW-2 in 1999
- MW-12 in 2017
- MW-14 in 2018
- MW-13 in 2019

Based on the results of soil and groundwater investigations completed at the site, a feasibility study (RUST 1994) and Remedial Action Plan (RAP) (RUST 1996) were developed for the site. In February 1996, the RAP was submitted to ADEQ for approval; ADEQ approved the RAP on April 1, 1997 (Olm, pers. comm. 1997). The approved RAP stipulated a groundwater containment remedy to prevent migration of groundwater impacted by COCs from the site. Three extraction wells, EW-1, EW-2, and MW-10 were installed approximately 500, 1,800, and 3,000 feet, respectively, downgradient from the source area (located south of wells MW-1a and MW-2) to provide hydraulic control of the site's volatile organic compound (VOC) plume.

An in situ chemical oxidation pilot study using potassium permanganate ($KMnO_4$) was conducted at the site between June 2002 and May 2003. In June 2002, a 3–4% $KMnO_4$ solution was injected into two source area monitoring wells, MW-1a and MW-2, which were screened in the Middle Alluvium Unit and Upper Alluvium Unit, respectively. Totals of 6,500 and 25,700 gallons of the $KMnO_4$ solution were injected into MW-1a and MW-2, respectively. Groundwater monitoring was subsequently conducted to evaluate the performance of $KMnO_4$ treatment in reducing VOC concentrations. The results of this pilot study were described in the *Semiannual Groundwater Monitoring Report—May 2003* (ERM 2003).

At ADEQ's request, Honeywell completed installation of two sentinel monitoring wells to monitor groundwater downgradient of monitoring wells MW-7 and MW-10; these sentinel monitoring wells were designated MW-13 and MW-14, respectively. Figure 1-2 shows the locations of monitoring and extraction wells at the site.

Honeywell continues to operate under former Water Quality Assurance Revolving Fund Rules, provided the remedy is still effective and Honeywell performs periodic reviews at intervals not to exceed 5 years, as authorized by ADEQ in a letter titled *Review of Monitoring Wells MW-13 and MW-14 Installation and Sampling Summary and the Development and Application of the Peoria Avenue Groundwater Flow Model* (Patricki, pers. comm. 2019). ADEQ requested in a letter titled *Approval of Annual Groundwater Monitoring Report for 2019*, dated June 12, 2020 (Patricki, pers. comm. 2020) that site reviews be conducted and reported every 3 years. The initial site review was submitted to ADEQ in the *2020 Periodic Site Review Report, Honeywell Peoria Avenue Site, Phoenix, Arizona, ADEQ VRP Site Code 070273-00* on December 23, 2020 (Jacobs 2020). The *2023 Periodic Site Review Report, Honeywell Peoria Avenue Site, Phoenix, Arizona, ADEQ VRP Site Code 070273-00* is presented as Appendix A in this report.

Groundwater was extracted from wells EW-1 and MW-10 during 2022 to create a hydraulic capture zone and prevent downgradient migration of VOC-impacted groundwater. Well EW-2 is no longer used as an extraction well. Groundwater extracted from these wells is discharged to the City of Phoenix sanitary sewer system in accordance with Class "A" Wastewater Discharge Permits (Numbers [No.] 1806-5436 and 2302-5436 for EW-1 and No. 2208-5383 for MW-10). The extracted groundwater is treated at the 91st Avenue Multi-Cities Wastewater Treatment Plant and eventually discharged to the Salt River. City of Phoenix Monthly Discharge Reports for January through December 2023 are included in Appendix B.

1.2 Extraction Well Operation and Maintenance

Extraction well MW-10 pump operations were observed to be reduced during a site visit on August 21, 2023. On August 22, 2023, the flowmeter was replaced with a certified flowmeter and flow was confirmed to be reduced. Upon further investigation, it was determined that the pump in MW-10 needed to be replaced. The pump was removed, however, during replacement activities, the new pump could not be deployed due to rust scale building on the inside casing of the well. Rust scale removal and pump redeployment are scheduled for the first quarter of 2024.

Extraction well EW-1 operated without interruption during 2023.

2. Summary of Groundwater Monitoring Activities

The semiannual groundwater monitoring event for the site was performed in May 2023. Monitoring activities included depth-to-groundwater measurement and deployment and sampling of passive diffusion bags (PDBs) at monitoring wells MW-7, MW-12, MW-13, and MW-14.

The annual groundwater monitoring event for the site was performed in November 2023. Monitoring activities included depth-to-groundwater measurement, deployment and sampling of PDBs at all site monitoring wells and inactive extraction well EW-2, and collection of samples from active extraction well EW-1 using a dedicated submersible pump. A groundwater sample was not collected from extraction well MW-10 as the submersible pump was not functional and is in the process of being replaced. These activities are further discussed in the following subsections.

Groundwater levels were measured in four monitoring wells at the site on May 17, 2023, through May 18, 2023, and in all site wells on November 14, 2023. Monitoring and extraction well locations are shown on Figure 1-2.

Table 2-1 summarizes monitoring and extraction well specifications, including:

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

Table 2-2 presents the results of the November 2023 groundwater level measurements. Water level measurements collected in May 2023 and October 2023 are included in Appendix C.

2.1 Groundwater Sample Collection Using Dedicated Pumps

A groundwater sample was collected from operating extraction well EW-1 on November 14, 2023. A groundwater sample was not collected from extraction well MW-10 as the pump is currently not functioning. During pump installation activities in December of 2023, it was determined that the steel casing of well MW-10 will need to reamed out due to rust buildup in order to reinstall the extraction pump. The extraction pump in well MW-10 is currently scheduled to be replaced in the first quarter of 2024. Because well EW-1 was in continual operation, purging was not required, and field parameters were not measured for verification of purge stabilization.

The extraction well groundwater samples, a trip blank sample, and a temperature blank, were placed in an ice-filled sample cooler under chain-of-custody (CoC) for delivery to Eurofins TestAmerica in Phoenix, Arizona. Eurofins TestAmerica is an Arizona Department of Health Services certified laboratory (No. AZ0728) and is licensed in Arizona to perform the requested analyses. Samples were analyzed for VOCs by U.S. Environmental Protection Agency (EPA) Method 624.1.

2.2 Passive Diffusion Bag Deployment and Sampling

PDBs were used during the 2023 semiannual and annual groundwater monitoring events to collect samples from site monitoring wells and former extraction well EW-2. PDBs have been in use at the site since 2004, and the depths at which the PDBs were installed in wells are based on the 2004 pilot test and the continued evaluation of previous PDB sampling results.

In accordance with the *Work Plan for Vertical Profile Groundwater Sample Collection, Honeywell Peoria Avenue Facility, Phoenix, Arizona, VRP Site Code 070273-00* (CH2M 2016), PDBs were left in the monitoring wells for at least 14 days to come to equilibrium with groundwater, after which time they were retrieved and sampled using disposable sampling equipment. Groundwater samples, trip blank samples, and temperature blanks were placed in ice-filled sample coolers under CoC for laboratory analysis for VOCs using EPA Method 624.1. Samples collected during the semiannual and annual groundwater monitoring events were analyzed by Eurofins TestAmerica, Phoenix, Arizona.

3. Summary of Groundwater Monitoring Results

The following subsections present the results of the 2023 semiannual and annual groundwater monitoring events with emphasis on the annual event.

3.1 Hydrologic Conditions

Groundwater elevations in monitoring wells ranged from 973.10 feet above mean sea level (amsl) (MW-14) to 991.69 feet amsl (MW-8) in November 2023. Depth-to-groundwater measurements, calculated groundwater elevations, and changes in groundwater levels since the October 2022 annual groundwater monitoring event are provided in Table 2-2.

Groundwater elevations within the monitoring wells at the site during the annual groundwater monitoring event in November were similar to those collected during the previous annual groundwater monitoring event in October 2022 (increased by an average of 1.81 foot). Current and historical groundwater elevations for the site are presented in Appendix C.

A groundwater elevation contour map was developed from the depth-to-water data collected at the site in November 2023, as shown on Figure 3-1. The groundwater elevations measured at active extraction wells EW-1 and MW-10 were not used in development of the groundwater elevation contours. The groundwater flow direction at the site continued to be to the north–northwest, with an average calculated gradient of 0.006 foot per foot, which is consistent with historical values.

3.2 Analytical Results

Laboratory analytical results are presented in the following subsections. A map showing 1,1-DCE and TCE concentrations in site wells sampled during the 2023 annual groundwater monitoring event is presented on Figure 3-2. These two COCs define the full areal extent of all COCs at the site.

3.2.1 Monitoring Well Results

Table 3-1 summarizes laboratory analytical results and PDB installation depths for the 2023 semiannual and annual sampling events. Appendix C presents a table of current and historical groundwater monitoring well analytical data. Appendix D presents the analytical laboratory reports for these samples, including CoC documentation and quality control (QC) conformance summaries.

Water quality samples collected from wells EW-1, EW-2, MW-1a, MW-3, MW-4, MW-5, MW-10, and MW-12 in 2023 exhibited concentrations of COCs exceeding the AAWQS, while no AAWQS were exceeded in the samples collected from monitoring wells MW-6, MW-7, MW-8, MW-9, MW-13, and MW-14. In general, COCs have historically been either less than laboratory reporting limits or detected at concentrations less than 1 microgram per liter (µg/L) in monitoring wells MW-6, MW-8, MW-9, and MW-13.

Detectable concentrations of 1,1-DCE ranged from 1 µg/L (MW-7) to 1,800 µg/L (MW-1a), and detectable concentrations of TCE ranged from 0.56 µg/L (MW-7) to 190 µg/L (MW-1a), as shown on Figure 3-2.

A review of groundwater quality data for monitoring well MW-1a indicates that concentrations of both 1,1-DCE and TCE increased slightly from 2022 to 2023, as shown on Figure 3-3.

COC concentrations in monitoring well MW-3 have been generally decreasing since 2006 but have been increasing since 2020 and 1,1-DCE and TCE concentrations were above the AAWQSs in 2023, as shown on Figure 3-4.

1,1-DCE concentrations in well EW-2 decreased from 2022 to 2023. TCE concentrations in well EW-2 decreased slightly from 2022 to 2023. Data from monitoring well MW-5, located downgradient of well EW-2, indicate that concentrations of 1,1-DCE and TCE decreased from 2022 to 2023, as shown on Figure 3-5. The 1,1-DCE concentration at MW-5 is above the AAWQSs.

TCE (1.0 to 0.56 µg/L) and 1,1-DCE (1.7 to 1 µg/L) concentrations at MW-7 decreased from 2022 to 2023. The concentrations had increased slowly between 2011 and 2016, remained stable from 2017 to 2018, and have been decreasing since 2018.

TCE and 1,1-DCE were not detected at downgradient monitoring well MW-13. TCE was not detected at downgradient monitoring well MW-14. 1,1-DCE was detected at downgradient monitoring well MW-14 at a concentration below the AAWQS.

COC concentrations at monitoring well MW-4 have traditionally been below AAWQS. However, 1,1-DCE (19 µg/L) concentrations at MW-4 were observed above the AAWQS for the third consecutive year in the sample collected in November 2023. TCE (3.3 µg/L) was detected below the AAWQS in MW-4. ADEQ was notified of the exceedance within 15 days of receiving laboratory data.

1,1-DCE (10 µg/L) was detected above the AAWQS in MW-12. ADEQ was notified of the exceedance within 15 days of receiving laboratory data.

3.2.2 Extraction Well Results

Active extraction well EW-1 was sampled on November 14, 2023. Concentrations of 1,1-DCE (47 µg/L) and TCE (15 µg/L) at EW-1 were above the AAWQSs.

Groundwater sampling results for extraction well EW-1are summarized in Table 3-1. Analytical laboratory reports, including CoC documentation and QC conformance summaries, are presented in Appendix D. The volumes of groundwater extracted from active wells EW-1 and MW-10 during 2023 are provided in Table 3-2. A table of current and historical groundwater extraction system operational data is provided in Appendix E.

3.2.3 Mann-Kendall Analysis

Trend analyses were performed for seven COCs that are regularly analyzed for at this site. Trend analyses were performed on all available data collected over the previous 15 years to represent long-term trends and on data collected over the last 5 years to represent recent trends. The Mann-Kendall trend analysis produces one of six different results for each well based on the data analyzed. The results indicate the data trend is increasing, probably increasing, stable, probably decreasing, or decreasing, or no trend is apparent. All nondetect concentrations were used at their detection level for the evaluation. Due to the use of nondetect concentrations at their detection level, some wells and COCs may present trends that are the result of the changes of detection limits over time, not actual trends due to changing concentrations in groundwater. These trends are presented along with the rest of the analysis but are not discussed in this section. The results of the Mann-Kendall trend analyses for the following parameters are presented in Appendix F and Appendix G and are described below:

- 1,1-DCE

- 1,1-DCA
- trans-1,2-DCE
- Chloroform
- 1,1,2-TCA
- PCE
- TCE

3.2.3.1 Mann-Kendall Analysis—5 Years

Mann-Kendall trend analyses for the last 5 years of monitoring were performed on 12 groundwater wells with enough data to generate a trend. The results of the Mann-Kendall trend analyses are presented in Table F-1 of Appendix F.

When using the data available during this period, two wells presented an upward trend for TCE (MW-3 and MW-12). Wells MW-3, MW-4, and MW-12 presented an upward trend for 1,1-DCE. The concentrations of 1,1-DCE at well MW-4 exceeded the AAWQS for the third consecutive year. An upward trend was also observed for chloroform at wells MW-7 and MW-13, although this may be due to varying reporting limits over time.

Well MW-7 presented decreasing trends for 1,1-DCE and TCE, indicating that hydraulic containment by extraction well EW-1 in the direction of well MW-7 has been restored.

3.2.3.2 Mann-Kendall Analysis—15 Years

Mann-Kendall trend analyses were performed on 15 groundwater wells for which data are available. The results of the Mann-Kendall trend analyses are presented in Table G-1 of Appendix G.

When using all data collected over the previous 15 years for trend analysis evaluation, three wells presented an upward trend for TCE (MW-4, MW-12, and EW-2). Two wells presented an upward trend for 1,1-DCE (MW-4 and MW-12). No other upward trends were observed.

3.3 Data Evaluation

Laboratory data were evaluated by the project chemist. Evaluation included a review of the following:

- CoC documentation
- Holding-time compliance
- Required field and laboratory QC samples
- Flagging for method and field blanks
- Laboratory control sample and laboratory control sample duplicates
- Surrogate spike recoveries
- Matrix spike and matrix spike duplicate samples

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of trip blanks and field duplicates.

The findings of the data evaluation are summarized as follows:

1) No data were rejected, and completeness was 100 percent.
2) No data were qualified because of low-level blank contamination.

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

4. Metrics and Contingency Actions

This section discusses performance against site metrics and associated contingency actions taken. Table 4-1 describes site metrics and associated contingency actions, indicates whether the metrics were met, and describes contingency actions taken for metrics that were not met.

4.1 Extraction Well Flow Rate

Metric: *Extraction remains at or above established flow rates. Flow rates for specific extraction wells are as follows: EW-1, 55 gpm; MW-10, 30 gpm.*

The site metric was met for well EW-1; however, the flow rate at well MW-10 decreased below 30 gpm in August 2023. Honeywell is scheduling cleaning of the well casing to allow pump replacement. No contingency actions were identified.

4.2 Extraction Well Mass Removal

Metric: *Mass removal trends at extraction well MW-10 will be stable during the 3-year period of 2021 to 2023.*

The metric applies during the 3-year period of 2021 to 2023. During this period mass removal trends remained stable at well MW-10. Removal rates averaged 0.27 lbs/month, with a maximum removal rate of 0.34 lbs/month and a minimum rate of 0.13 lbs/month. Mass removal for MW-10 is presented in Figure 4-1. In August 2023, the pump at well MW-10 was found to be operating below the discharge rate of 30 gpm. The pump was removed and will be replaced.

Metric: *Mass removal trends at extraction well EW-1 will be stable during the 3-year period of 2021 to 2023.*

The metric applies during the 3-year period of 2021 to 2023. During this period mass removal trends remained stable at well EW-1. Removal rates averaged 1.7 lbs/month, with a maximum removal rate of 2.54 lbs/month and a minimum rate of 0.54 lbs/month. Mass removal for EW-1 is presented in Figure 4-1.

4.3 Trends at Sentinel Well MW-13

Metric: *TCE and 1,1-DCE concentration trends at sentinel well MW-13 do not show an increasing trend, including detectable concentrations above 50% of the AAWQS*.

The site metric was met. No action is required.

4.4 Trends at Sentinel Well MW-14

Metric: *TCE and 1,1-DCE concentration trends at sentinel well MW-14 do not show an increasing trend, including detectable concentrations above 50% of the AAWQS*.

The site metric was met. No action is required.

4.5 Trends at Trigger Well MW-12

Metric: *TCE and 1,1-DCE concentration trends at trigger well MW-12 do not show an increasing trend, including concentrations above 50% of the AAWQS*.

ADEQ was notified of an exceedance of the AAWQS for 1,1-DCE in MW-12. MW-12 is scheduled for sampling during the semiannual groundwater sampling event in May 2024. MW-12 is currently sampled on a semiannual basis.

4.6 Sentinel Monitoring Wells

Metric: *TCE and 1,1-DCE concentrations at sentinel and trigger monitoring wells do not exceed the AAWQS. Sentinel and trigger monitoring wells include the following: MW-6, MW-8, MW-13, and MW-14.*

The site metric was met. No action is required.

4.7 Trigger Monitoring Wells

Metric: *TCE and 1,1-DCE concentrations at trigger monitoring wells do not exceed the AAWQS. Sentinel and trigger monitoring wells include the following: MW-4, MW-7, MW-9, and MW-12.*

Concentrations of 1,1-DCE (19 µg/L) at trigger monitoring well MW-4 exceeded the AAWQS during November 2023; this represents the fifth exceedance of 1,1-DCE at well MW-4. The first exceedance at MW-4 occurred during October 2021 (9.5 µg/L). The 1,1-DCE concentration has been relatively stable between October 2022 and November 2023.

Contingency actions associated with this metric are:

- Notify ADEQ within 15 days of receiving laboratory data. After notifying ADEQ, collect samples within 30 days to confirm concentrations.
- Evaluate increased sampling frequency.
- Evaluate factors contributing to concentrations that exceed AAWQS and downgradient impacts of concentrations that exceed AAWQS and explain overall impacts to site remediation.
- Re-evaluate the groundwater remedial action and present appropriate mitigation actions or modifications.

Per the site metrics and contingency actions, ADEQ was notified within 15 days of receiving laboratory data. Collection of a confirmation sample was unnecessary because a duplicate sample was collected at MW-4 during the annual sampling event and because the exceedance was already confirmed in 2021. Sampling at MW-4 was increased from annual to semiannual to provide additional data for concentration tracking.

The groundwater model was updated to evaluate the impacts of downtime at extraction well EW-1 on 1,1-DCE concentrations at monitoring well MW-4. VOC transport parameters from the groundwater model for the nearby Deer Valley Computer Park site were used to develop a transport model for this site. A sensitivity analysis was conducted to evaluate the effects of parameter value selection on the model output. Table 4-2 summarizes the transport parameters.

Simulations of 1,1-DCE concentrations at monitoring well MW-4 were run for 10 years starting in 2016 to include non-routine periods of downtime at extraction well EW-1 starting in 2018, as shown on Figure 4-2.

The six simulations represent various transport parameter values and combinations and constitute the sensitivity analysis. Concentrations of 1,1-DCE at monitoring well monitoring well MW-4 did not reach the AAWQS for 1,1-DCE (7 µg/L) in any simulation. The maximum simulated concentration of 1,1-DCE at monitoring well MW-4 is 2.69 µg/L. These simulations indicate that downtime of extraction well EW-1 did not result in increasing concentrations of 1,1-DCE at monitoring well MW-4, suggesting that increased TCE concentrations at monitoring well MW-4 are unrelated to TCE concentrations in the source area. Additionally, groundwater flow direction at the site has been north–northwest since 2006. Well MW-4 is located cross gradient and approximately 1,080 feet northeast of source area well MW-1a. The direction of groundwater flow during periods of EW-1 downtime also suggests that increased TCE concentrations at well MW-4 are unrelated to TCE concentrations in the source area. Therefore, additional actions or modifications to the remedial action are not recommended.

5. Recommendations

The following recommendations are based on the 2023 annual groundwater monitoring results:

- Continue to operate extraction wells EW-1 and MW-10 to maintain hydraulic control of the VOC plume.
- Continue sampling at MW-4 and MW-12 semiannually to provide additional data for concentration tracking.
- Decrease sampling frequency at MW-7, MW-13, and MW-14 from semiannual to annual. Concentrations of 1,1-DCE and TCE at MW-7 have been below their AAWQS since 2018. Concentrations of 1,1-DCE and TCE have been below their AAWQS at MW-13 and MW-14 since the wells were installed in 2019 and 2018, respectively.
- Include only the contaminants of concern (COCs) described in Section 1.1 in future trend analysis.
- Conduct semiannual and annual groundwater monitoring events at the site during the second quarter and the fourth quarter of 2024, respectively, in accordance with the field sampling instructions (CH2M 2012) and *Quality Assurance Project Plan* (CH2M 2007) for the site.
- Evaluate 2024 site conditions against approved metrics for the site and apply the appropriate contingency actions, if needed.
- Submit the 2024 Annual Groundwater Monitoring Report by March 31, 2025.
- Submit the 2024-2026 Periodic Site Review Report by March 31, 2027.

6. References

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Tables

Table 2-1. Summary of Well Specifications

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Arizona ID	Easting	Northing	TOC Elevation (feet)	ADWR Reg. No.	Casing Depth (feet)	Screen Interval (feet)
MW-1a	(A-3-2)24dcc1	641748.01	939875.97	1253.84	55-511917	500	430-465/475-500
MW-2	(A-3-2)24dcc2	641743.83	939838.60	1252.53	55-523950	379	199-369
MW-3	(A-3-2)24dcb	641797.71	940636.22	1254.96	55-523951	400	223-389
MW-4	(A-3-2)24dca	642372.83	940655.01	1254.73	55-523957	384	207-373
MW-5	(A-3-2)24acc	641788.48	942245.86	1265.78	55-527607	456	216-446
MW-6	(A-3-2)24acd	642987.26	942094.36	1265.60	55-527605	475	234-465
MW-7	(A-3-2)24cac	640656.50	940915.26	1255.04	55-527606	448	207-438
MW-8	(A-3-2)25baa	641671.63	938964.84	1245.73	55-527608	441	221-431
MW-9	(A-3-2)24cdd	641224.15	939771.47	1250.71	55-534737	400	194-390
MW-10	(A-3-2)24bca	641859.70	942752.39	1263.60	55-556637	430	200-425
MW-12	(A-3-2)24caa	641146.04	941304.84	1260.45	55-921044	503	260-500
MW-13	(A-3-2)23dca	638868.42	942843.46	1265.26	55-922500	500	258-500
MW-14	(A-3-2)24baa	641351.52	944355.48	1273.81	55-922027	502	260-502
EW-1	(A-3-2)24adc	641613.58	940199.37	1250.22	55-570189	425	265-415
EW-2	(A-3-2)24bbd	641873.10	941498.71	1257.33	55-570190	425	255-415

Notes:

Easting and Northing are in NAD83 coordinates

Elevations are based on NAVD88

ADWR = Arizona Department of Water Resources

Arizona ID = Arizona state well number (legal description of well location)

ID = identification

Reg. No. = registration number

TOC = top of casing

Originator: **HTS**	*HTS*
	(Signature)
Checked by: **Derek Foehr**	*Derek Foehr*
	(Signature)

Table 2-2. Summary of Monitoring Well Groundwater Elevation Data

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well Number	Date Measured	Top of Casing Elevation (feet amsl)	May/November 2023 Depth-to-Water (feet)	May/October 2022 Groundwater Elevation (feet amsl)	May/November 2023 Groundwater Elevation (feet amsl)	Water Level Change 2022 to 2023 (feet)
EW-1	11/14/2023	1250.22	301.47	950.40	948.75	-1.65
EW-2	11/14/2023	1257.33	274.23	980.88	983.10	2.22
MW-1a	11/14/2023	1253.84	265.77	988.26	988.07	-0.19
MW-2	11/14/2023	1252.53	NA	NA	NA	NC
MW-3	11/14/2023	1254.96	268.09	984.63	986.87	2.24
MW-4	5/17/2023	1254.73	268.88	986.02	985.85	-0.17
MW-4	11/14/2023	1254.73	266.36	986.02	988.37	2.35
MW-5	11/14/2023	1265.78	285.21	977.76	980.57	2.81
MW-6	11/14/2023	1265.60	282.35	979.68	983.25	3.57
MW-7	5/17/2023	1255.04	271.32	982.00	983.72	1.72
MW-7	11/14/2023	1255.04	270.71	982.00	984.33	2.33
MW-8	11/14/2023	1245.73	254.04	990.72	991.69	0.97
MW-9	11/14/2023	1250.71	262.59	987.25	988.12	0.87
MW-10	11/14/2023	1263.60	NA	962.11	NA	NC
MW-12	5/17/2023	1260.45	278.13	980.05	982.32	2.27
MW-12	11/14/2023	1260.45	277.85	980.05	982.60	2.55
MW-13	5/17/2023	1265.26	288.69	974.24	976.57	2.33
MW-13	11/14/2023	1265.26	288.21	974.24	977.05	2.81
MW-14	5/18/2023	1273.81	301.28	970.04	972.53	2.49
MW-14	11/14/2023	1273.81	300.71	970.04	973.10	3.06

Notes:

amsl = above mean sea level

NA = not available

NC = not calculated

Originator: **HTS**	*HTS* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Table 3-1. Summary of Laboratory Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Sample Depth (feet bgs)	Sample Date	1,1,2-TCA	1,1-DCE	PCE	TCE
EW-1	NA	11/14/2023	<0.50	**47**	<0.50	**15**
EW-2	360	11/14/2023	<0.50	<0.50	<0.50	**17**
MW-1A	435	11/14/2023	**7.7/8.0**	**1800/1800**	**10/11**	**170/190**
MW-3	355	11/14/2023	<0.50	**54**	<0.50	**61**
MW-4	355	5/17/2023	<0.50/<0.50	**18/19**	<0.50/0.50	**4.5/4.5**
MW-4	355	11/14/2023	<0.50/<0.50	**18/19**	<0.50/0.59	**3.2/3.3**
MW-5	310	11/14/2023	<0.50	**7.4**	<0.50	2.6
MW-6	355	11/14/2023	<0.50	<0.50	<0.50	<0.50
MW-7	285	5/17/2023	<0.50	1.2	<0.50	0.82
MW-7	285	11/14/2023	<0.50	1	<0.50	0.56
MW-8	355	11/14/2023	<0.50	<0.50	<0.50	<0.50
MW-9	355	11/14/2023	<0.50	0.87	<0.50	<0.50
MW-12	410	5/17/2023	<0.50	4.6	<0.50	2.2
MW-12	410	11/14/2023	<0.50	**10**	<0.50	4.3
MW-13	355	5/17/2023	<0.50	<0.50	<0.50	<0.50
MW-13	355	11/14/2023	<0.50	<0.50	<0.50	<0.50
MW-14	350	5/17/2023	<0.50	<0.50	<0.50	<0.50
MW-14	350	11/14/2023	<0.50	2.9	<0.50	<0.50
Aquifer Water Quality Standards			**5**	**7**	**5**	**5**

Notes:

All concentrations are reported in micrograms per liter

Bold values denote concentrations that exceed the Arizona Aquifer Water Quality Standard

Samples were analyzed using EPA Method 624.1

Where applicable, original and duplicate sample results are presented before and after a "/", respectively

< = less than

1,1,2-TCA = 1,1,2-trichloroethane

1,1-DCE = 1,1-dichloroethene

bgs = below ground surface

EPA = U.S. Environmental Protection Agency

ID = identification

NA = not applicable

PCE = tetrachloroethene

TCE = trichloroethene

Originator: **HTS**	*HTS* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Table 3-2. Summary of Annual Groundwater Withdrawal

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well Number	Totalizer Reading								Volume Extracted	
	Start of Year		Before Replacement		After Replacement		End of Year			
	Read Date	Value (gallons)	Read Date	Value (gallons)	Read Date	Value (gallons)	Read Date	Value (gallons)	(gallons)	(acre-feet)
EW-1	12/20/2022	46,877,607	12/6/2023	75,470,985	12/6/2023	33,678,075	12/20/2023	34,820,505	29,735,808	91.3
MW-10	12/20/2022	22,051,805	8/23/2023	33,676,741	8/23/2023	51,220,652	12/20/2023	51,271,132	11,675,416	35.8

Notes:

A complete summary of monthly flow volumes is provided in Appendix D. The values in Appendix D are estimated on a monthly basis and may differ slightly from the numbers provided in this table.

Originator: **Kaleb Tsang**	*Kaleb Tsang* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Table 4-1. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
Extraction remains at or above established flow rates. Flow rates for specific extraction wells are as follows: • EW-1: 55 gpm • MW-10: 30 gpm	No	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days if the flow rate is reduced by more than 10% over 30 days. - Metric not met. The extraction pump in MW-10 was found to be operating below the discharge rate of 30 gpm and the pump needs to be replaced. • Notify ADEQ within 7 days of identifying a shutdown of pump operations greater than 72 hours. - Metric not met. On August 28, 2023, ADEQ was notified of further investigation of the extraction pump in well MW-10. • Take steps to resume extraction flow rates. - Metric not met. Extraction pump in MW-10 is scheduled to be replaced in the first quarter in 2024. • Evaluate capture at achieved flow rates if target flow rates are not resumed. - Well cleaning and pump replacement to resume target flow rate in MW-10 are being scheduled. • Evaluate potential mitigation actions to resume the target flow rate, including pump replacement, well rehabilitation, or other appropriate actions. - Extraction pump in MW-10 is scheduled to be replaced in the first quarter in 2024 after cleaning of the well casing.
Mass removal trends at extraction well MW-10 will be stable during the 3-year period of 2021 to 2023.	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days. - Metric was met while well MW-10 was in operation. On August 2023, the extraction pump in MW-10 was found to be operating below the discharge rate of 30 gpm and that the pump would need to be replaced. Mass removal rates are expected to remain stable once the extraction in MW-10 is started. • Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - Metric met. No action required. • Evaluate actions to be taken to change mass removal rates, as needed. - Metric met. No action required. • Evaluate mass removal metric and update to reflect current conditions, as needed. - Metric met. No action required.

Table 4-1. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
Mass removal trends at extraction well EW-1 will be stable during the 3-year period of 2021 to 2023.	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days. - Metric met. No action required. • Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - Metric met. No action required. • Evaluate actions to be taken to change mass removal rates, as needed. - Metric met. No action required. • Evaluate mass removal metric and update to reflect current conditions, as needed. - Metric met. No action required.
TCE and 1,1-DCE concentration trends at sentinel well MW-13 do not show an increasing trend, including detectable concentrations above 50% of the AAWQS.	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric met. No action required. • Confirm trend by one or more subsequent sampling events. - Metric met. No action required. • Evaluate increased sampling frequency. - Metric met. No action required. • Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at EW-1, in situ remediation, or other appropriate options. - Metric met. No action required.
TCE and 1,1-DCE concentration trends at sentinel well MW-14 do not show an increasing trend, including detectable concentrations above 50% of the AAWQS.	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric met. No action required. • Confirm trend by one or more subsequent sampling events. - Metric met. No action required. • Evaluate increased sampling frequency. - Metric met. No action required. • Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at MW-10, in situ remediation, or other appropriate options. - Metric met. No action required.

Table 4-1. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
TCE and 1,1-DCE concentration trends at trigger well MW-12 do not show an increasing trend, including concentrations above 50% of the AAWQS.	No	If the metric is not met, the associated contingency actions include: • Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric not met. ADEQ notified of the exceedance of 1,1-DCE in MW-12. • Confirm trend by one or more subsequent sampling events. - Metric not met. MW-12 scheduled for sampling during the semiannual groundwater sampling event in May 2024. • Evaluate increased sampling frequency. - Metric not met. MW-12 is currently sampled on a semiannual basis which allows for identification of trends. • Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at EW-1, in situ remediation, or other appropriate options. - Capture zone evaluation indicated that groundwater at MW-12 is contained by extraction well MW-10.
TCE and 1,1-DCE concentrations at sentinel and trigger monitoring wells do not exceed the AAWQS. Sentinel and trigger monitoring wells include the following: MW-6, MW-8, MW-13, and MW-14	Yes	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 15 days of receiving laboratory data. After notifying ADEQ, collect samples within 30 days to confirm concentrations. - Metric met. No action required. • Evaluate increased sampling frequency. - Metric met. No action required. • Evaluate factors contributing to concentrations that exceed AAWQS and downgradient impacts of concentrations that exceed AAWQS and explain overall impacts to site remediation. - Metric met. No action required. • Re-evaluate the groundwater remedial action and present appropriate mitigation actions or modifications. - Metric met. No action required.

Table 4-1. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
TCE and 1,1-DCE concentrations at trigger monitoring wells do not exceed the AAWQS. Sentinel and trigger monitoring wells include the following: MW-4, MW-7, MW-9, and MW-12	No	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 15 days of receiving laboratory data. After notifying ADEQ, collect samples within 30 days to confirm concentrations. - Metric not met at monitoring well MW-4 during annual sampling event. ADEQ notified within 15 days of receiving laboratory data. Confirmation sample collection was unnecessary because a duplicate sample was collected at MW-4 during the annual sampling event. • Evaluate increased sampling frequency. - Increase sampling frequency at monitoring well MW-4 from annual to semiannual. • Evaluate factors contributing to concentrations that exceed AAWQS and downgradient impacts of concentrations that exceed AAWQS and explain overall impacts to site remediation. - Model simulations of 1,1-DCE at monitoring well MW-4 were run for 10 years starting in 2016 to include non-routine periods of downtime at extraction well EW-1 starting in 2018. Concentrations of 1,1-DCE at monitoring well MW-4 did not reach the AAWQS for 1,1-DCE (7 µg/L) in any simulation. The maximum simulated concentration of 1,1-DCE at monitoring well MW-4 was 2.69 µg/L. Simulations indicated that downtime of extraction well EW-1 did not result in increasing concentrations of 1,1-DCE at monitoring well MW-4, suggesting that increased TCE concentrations at monitoring well MW-4 are unrelated to TCE concentrations in the source area. - Additionally, groundwater flow direction at the site has been north–northwest since 2006. Well MW-4 is located cross gradient and approximately 1,080 feet northeast of source area well MW-1a. The direction of groundwater flow during periods of EW-1 downtime also suggests that increased TCE concentrations at well MW-4 are unrelated to TCE concentrations in the source area. • Re-evaluate the groundwater remedial action and present appropriate mitigation actions or modifications. - Additional actions or modifications to the remedial action are not recommended.

ADEQ = Arizona Department of Environmental Quality

gpm = gallon(s) per minute

Table 4-2. Transport Model Parameters

Honeywell Peoria Avenue Site, Phoenix, Arizona

Parameter	Low Value	High Value
Total porosity	0.377	0.377
Mobile porosity	0.05	0.15
Immobile porosity	0.227	0.327
Longitudinal dispersivity (feet)	10	100
Transverse dispersivity (feet)	1	10
Vertical dispersivity (feet)	0.1	1
Distribution coefficient Kd (µg/L), calculated as foc * Koc	0	0.065
Fraction of organic carbon (foc)	0	0.001
Water partitioning coefficient (Koc) (65 L/µg)	65	65
Mass transfer rate (1/day), calculated as the reciprocal of the mean residence time (assuming 45 years)	6.09×10^{-6}	6.09×10^{-5}

Figures

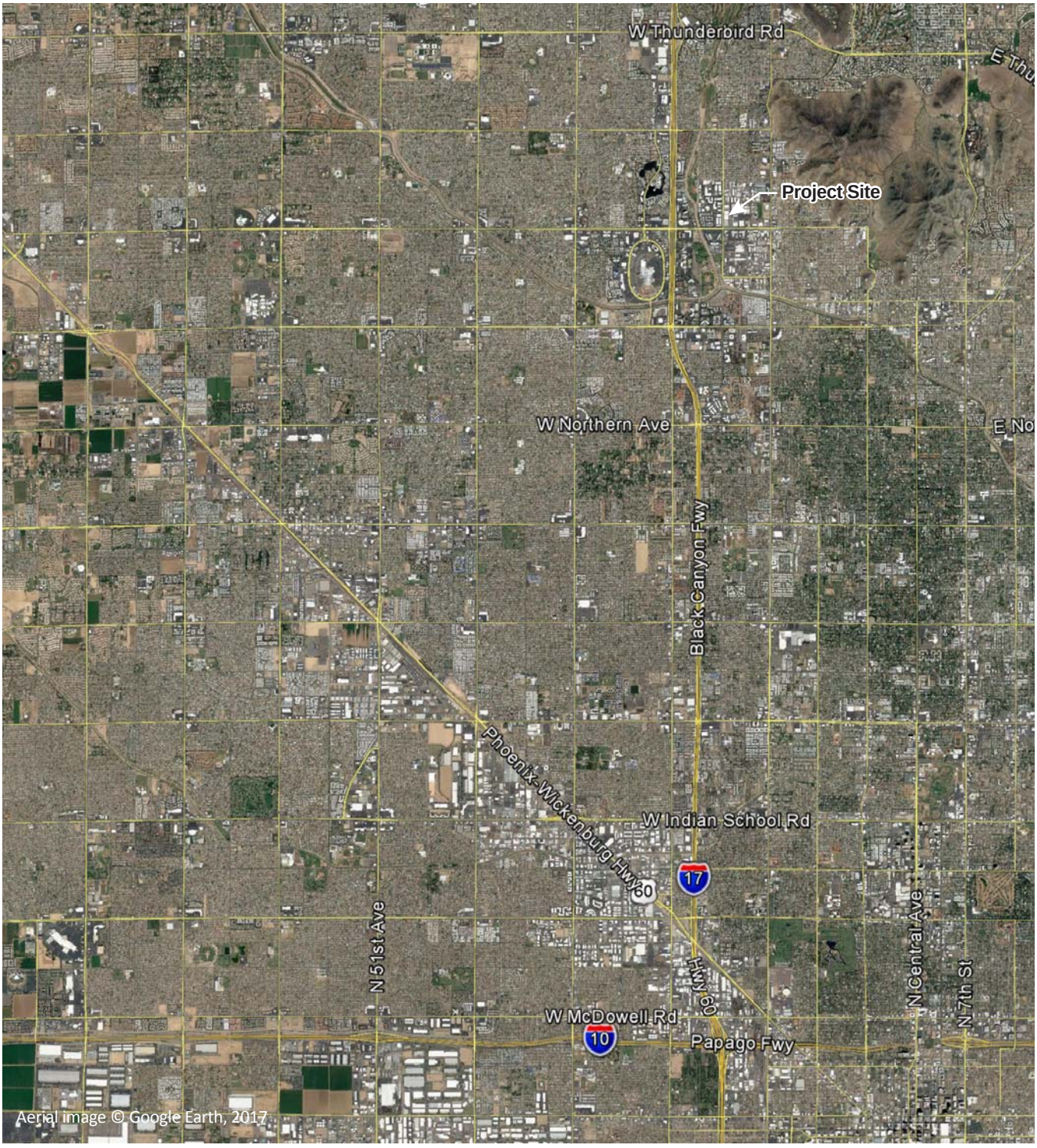


Figure 1-1
Site Location Map
Honeywell Peoria Avenue Site
Phoenix, Arizona

North

0 1.5 2.5

Approximate scale in miles

JACOBS

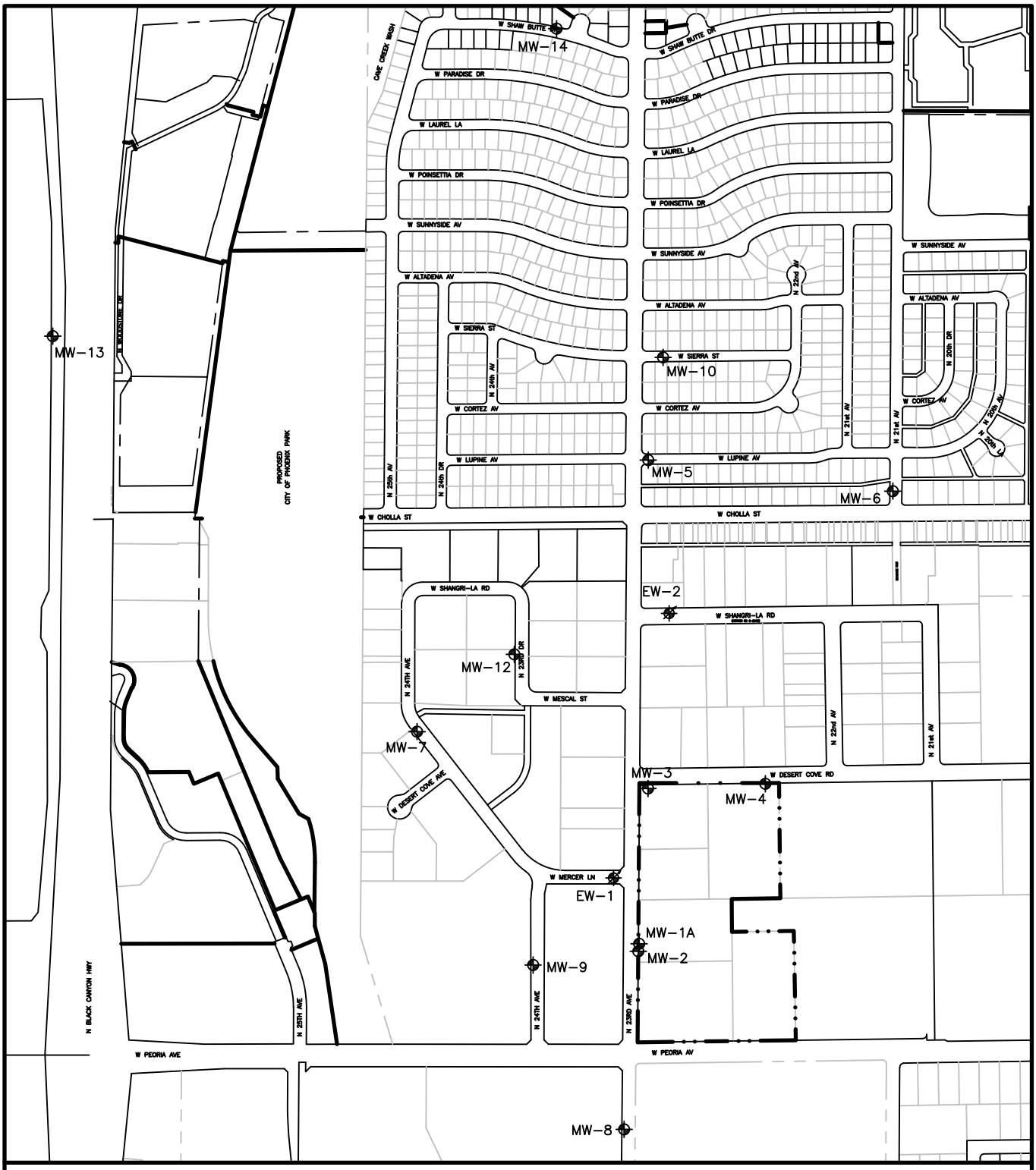
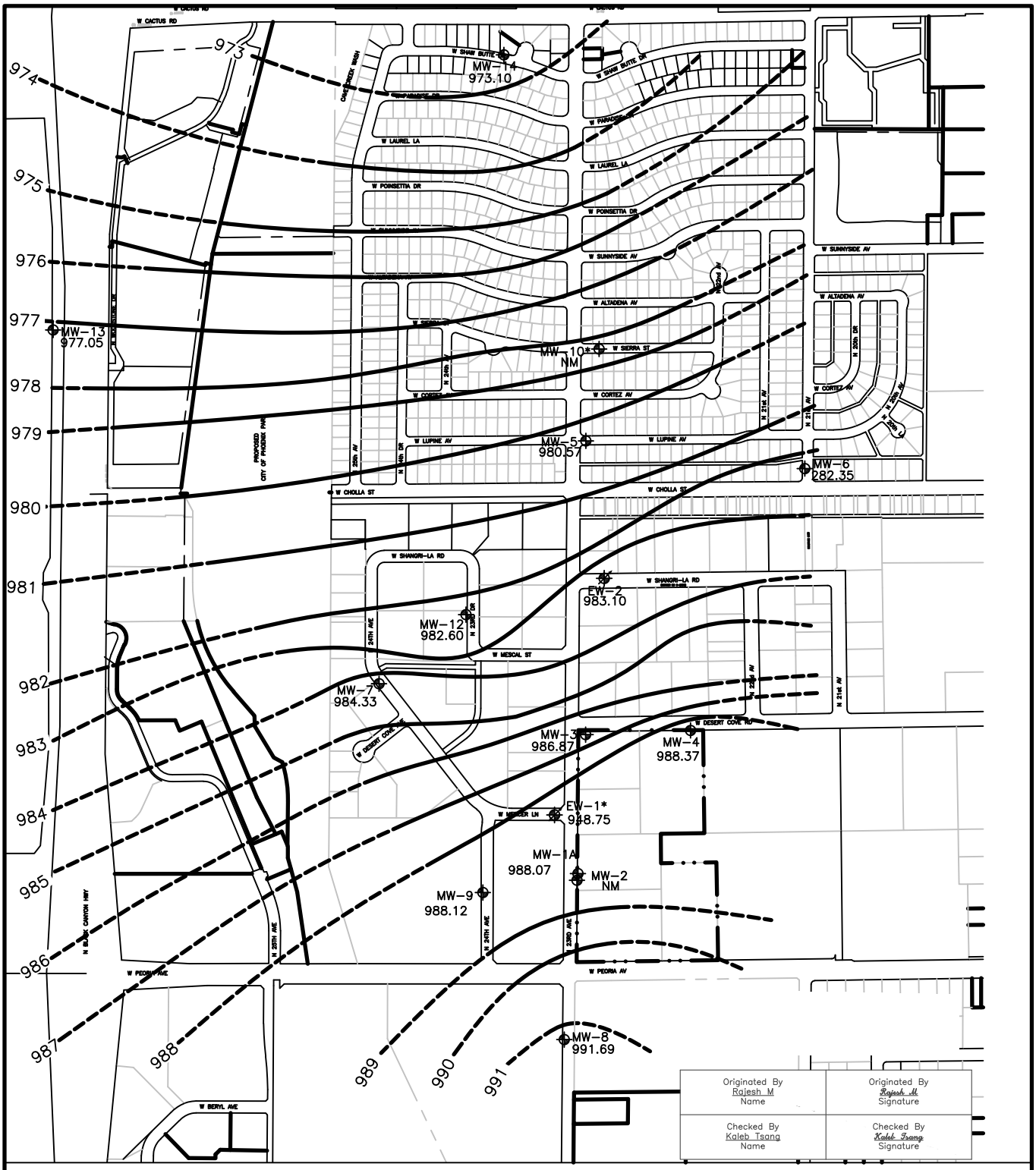


Figure 1-2
Well Location Map
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS



LEGEND

- Extraction Well
- Monitoring Well
- Peoria Avenue Site Boundary
- * Groundwater Elevation may not be Representative of the Upper Alluvium Unit
- 991.69 Groundwater Elevation Contour (dashed where inferred)
- NA Not Available

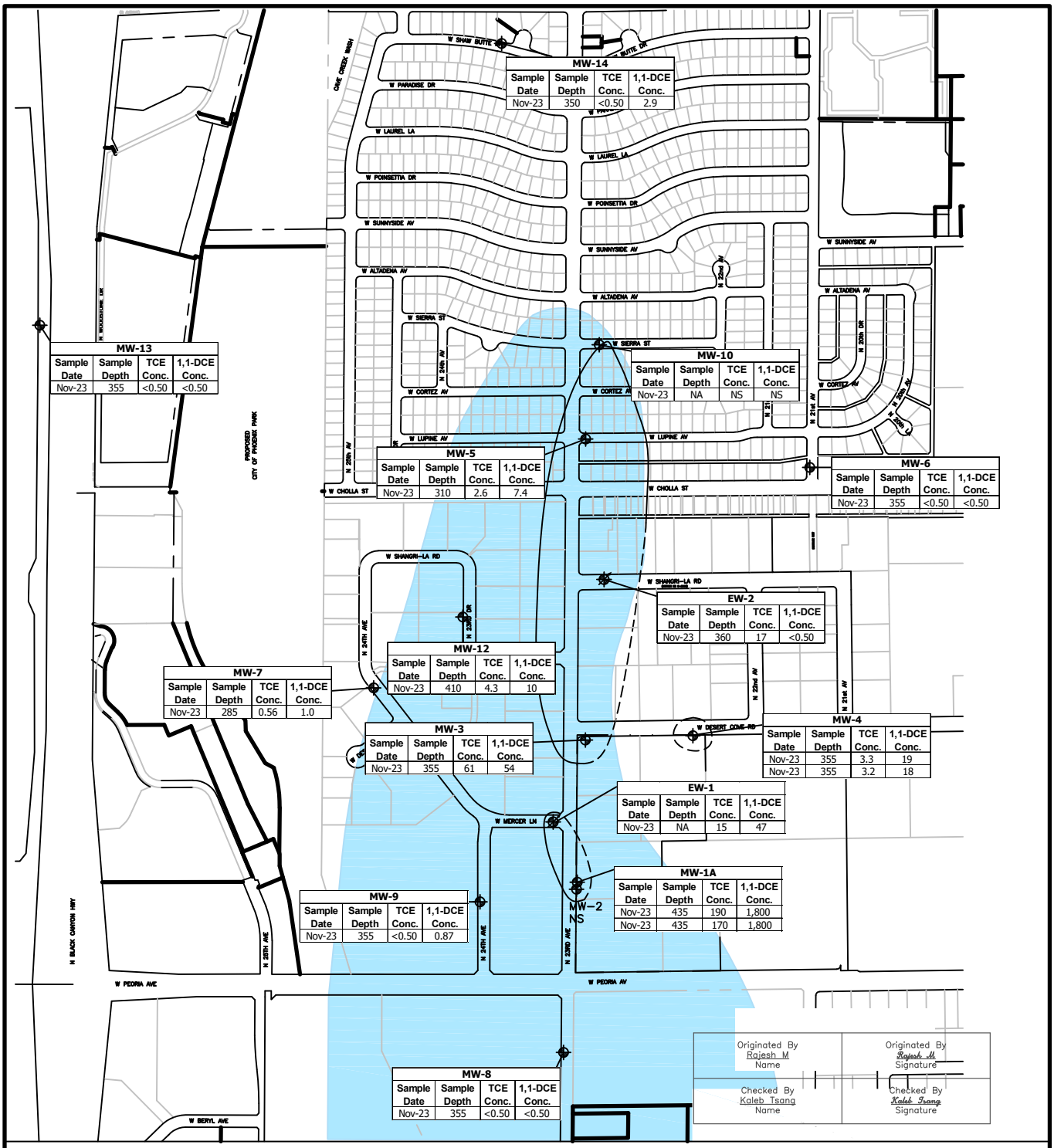
N

0 500

FEET

Figure 3-1
2023 Groundwater Elevations
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS



LEGEND

Extraction Well

Monitoring Well

Peoria Avenue Site Boundary

TCE Trichloroethene

11–DCE 1,1–Dichloroethene

Approximate area exceeding Aquifer Water Quality Standards (dashed line where inferred)

Estimated Capture Zone boundary

NS = Not Sampled
Conc. = concentration
J = estimated concentration
Sample depth (feet below ground surface)
All concentrations in ug/L

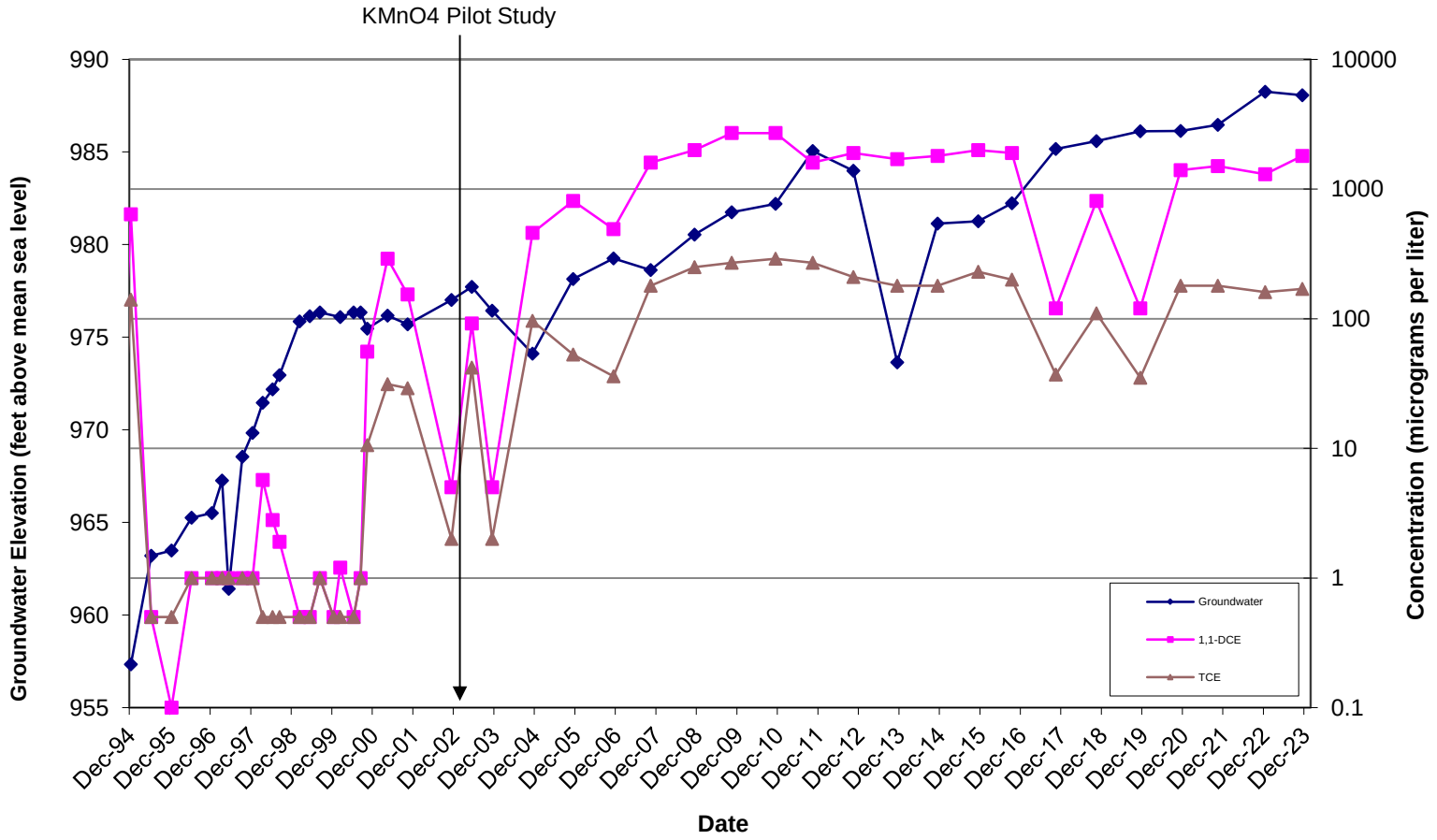
N

0 500

FEET

Figure 3-2
Fall 2023 TCE and 1,1-DCE Concentrations
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS



Notes: Non-detect chemical concentrations are plotted at the detection limit.
Sampling method was changed from submersible pump to passive diffusion bag in November 2005.

Originator: **Bhagya S**	*Bhagya S* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Figure 3-3
MW-1a Hydrograph and Concentration Data
Peoria Avenue Site, Phoenix, Arizona

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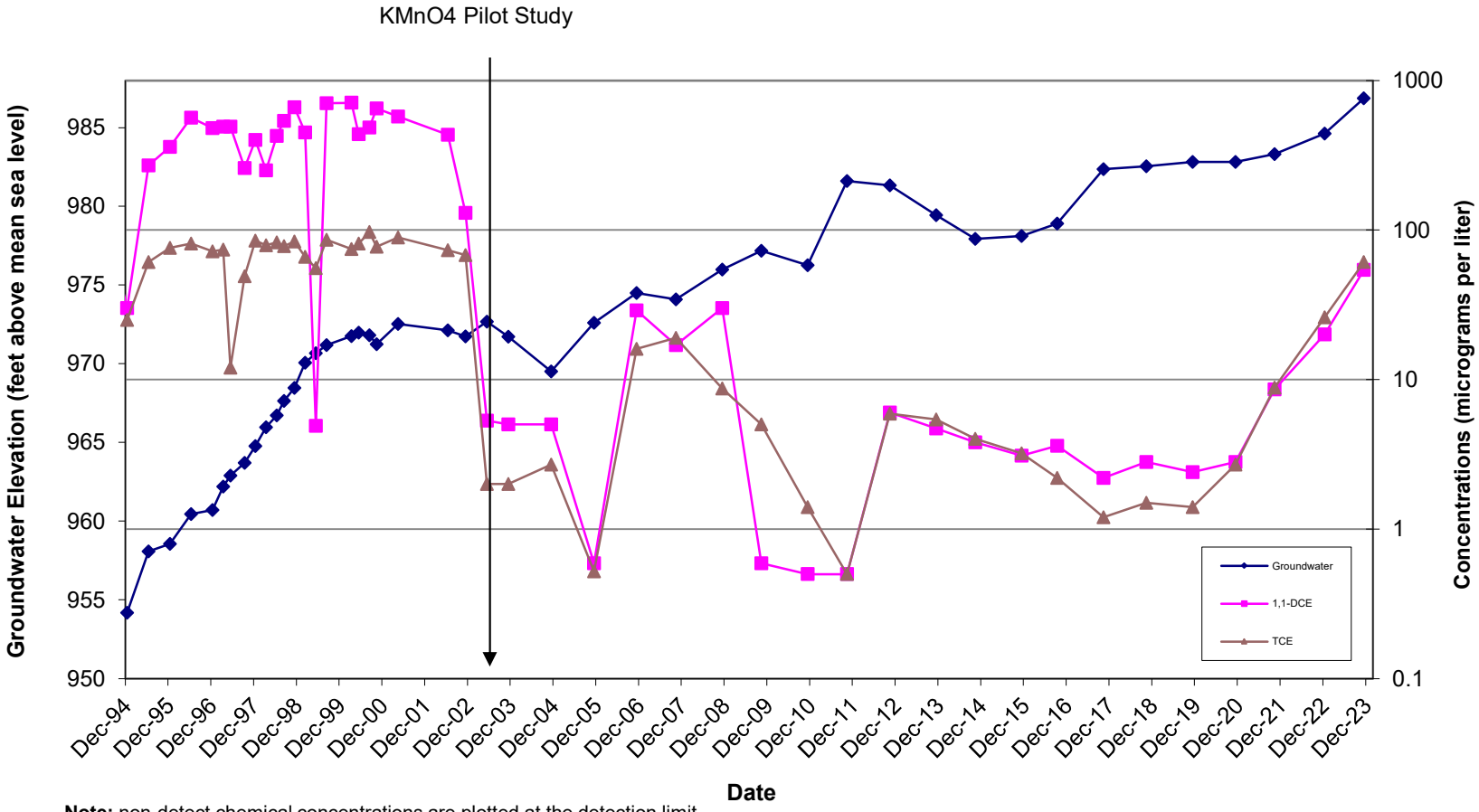

Note: non-detect chemical concentrations are plotted at the detection limit.

Originator: **Bhagya S**	*Bhagya S* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Figure 3-4
MW-3 Hydrograph and Concentration Data
Peoria Avenue Site, Phoenix, Arizona

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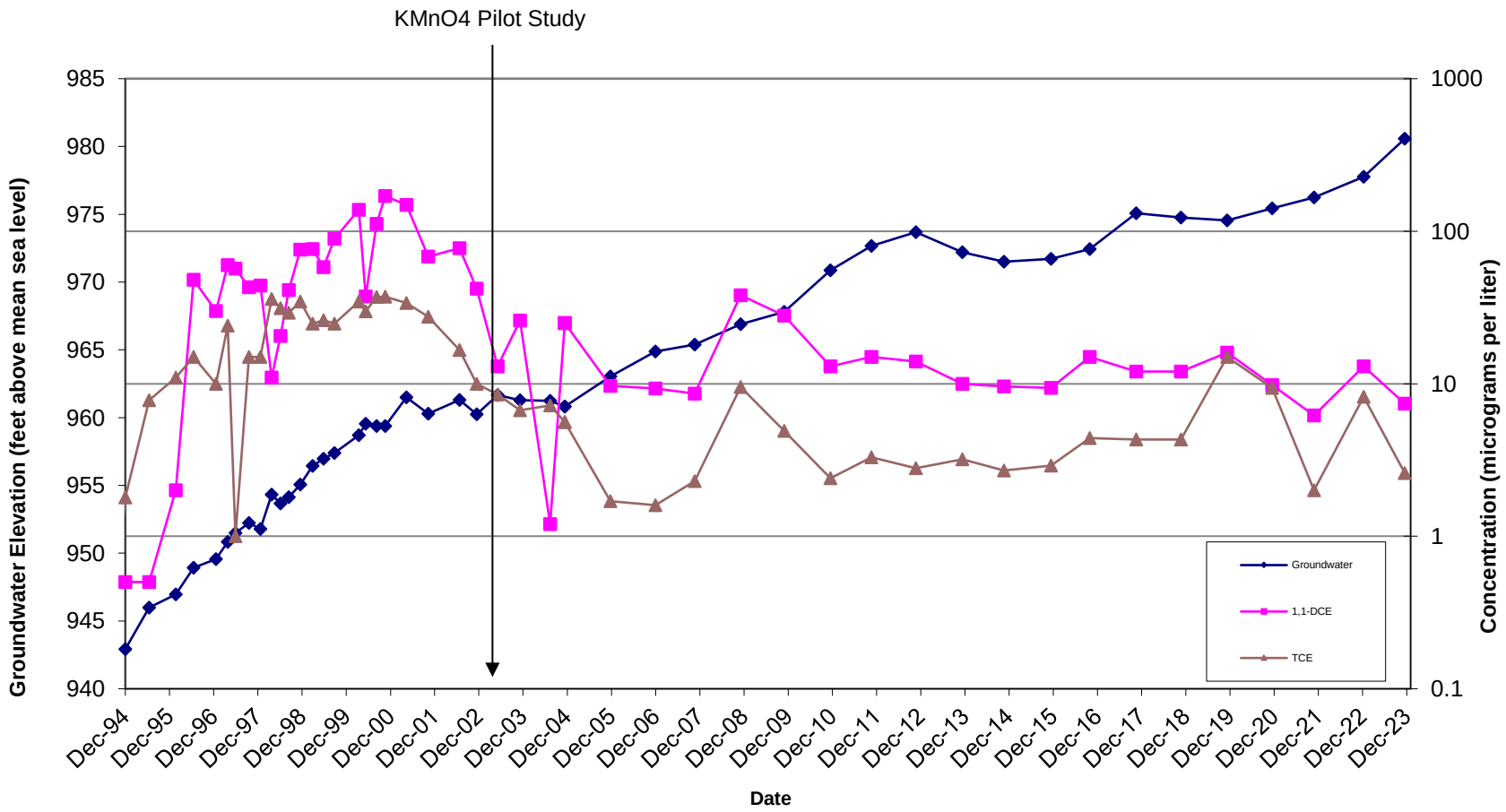
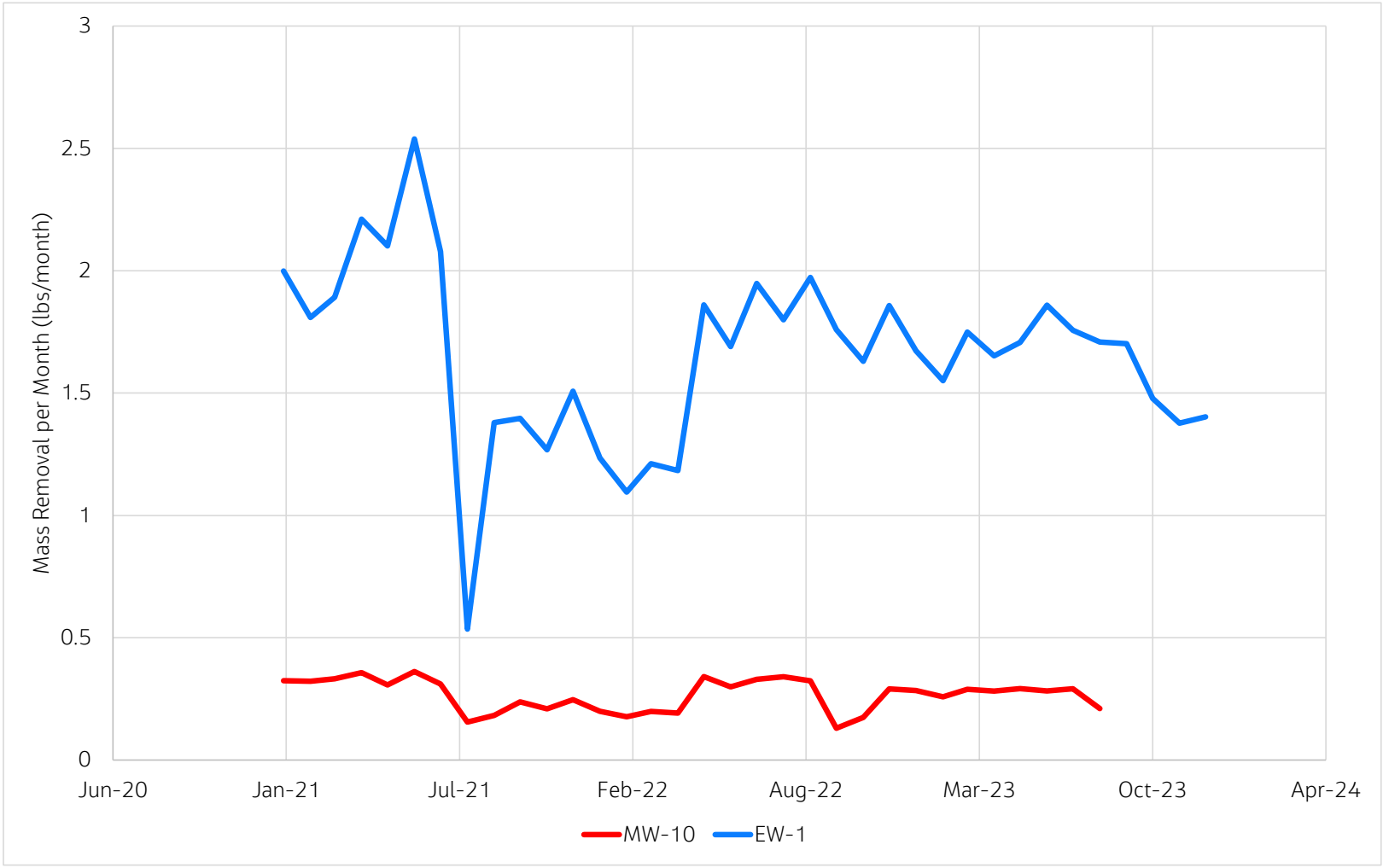


Notes: Non-detect chemical concentrations are plotted at the detection limit.
Sampling method was changed from submersible pump to passive diffusion bag in November 2005.

Originator: **Bhagya S**	*Bhagya S* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Figure 3-5
MW-5 Hydrograph and Concentration Data
Peoria Avenue Site, Phoenix, Arizona

JACOBS

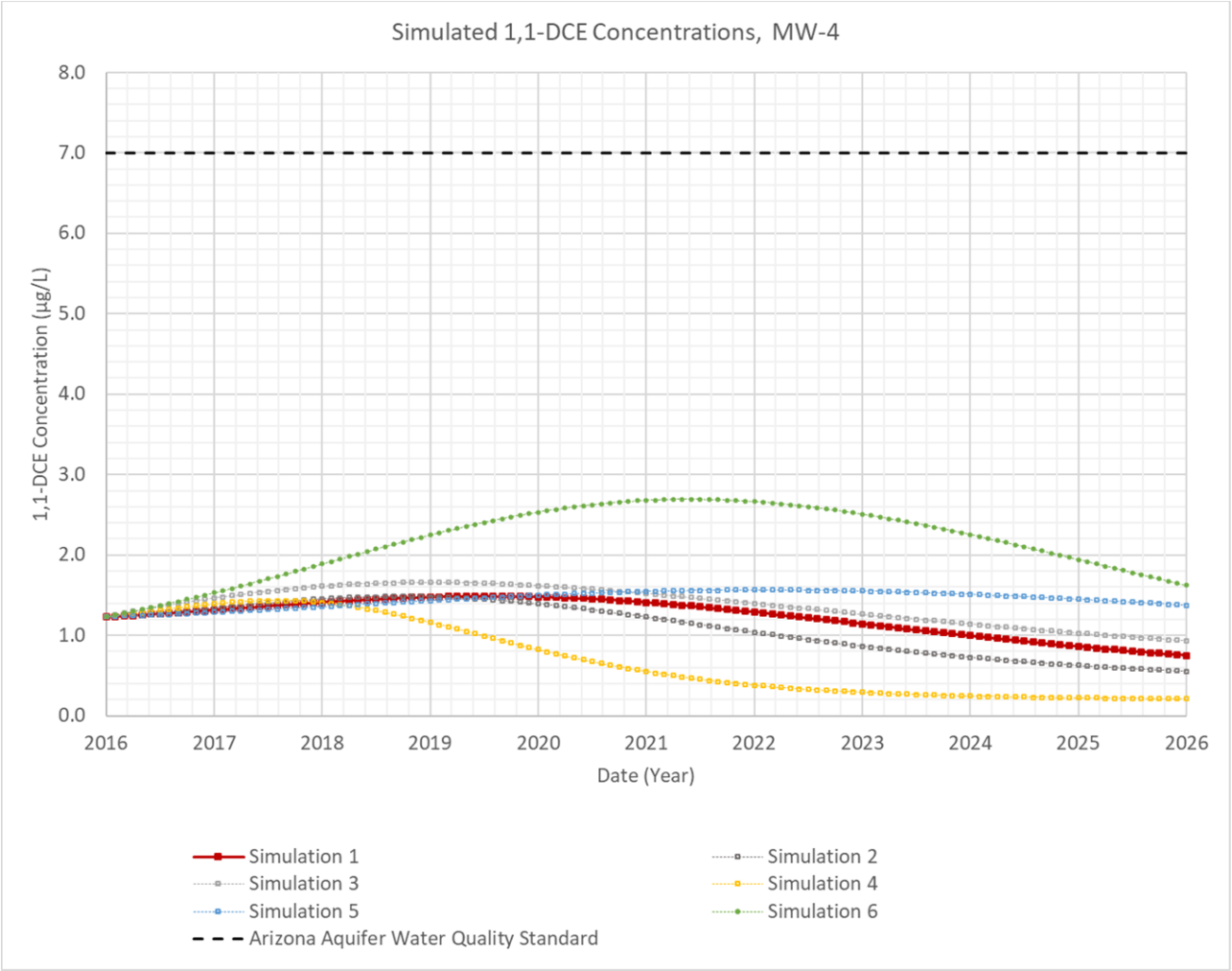


Notes:
Rates that appeared to be impacted by the permanganate pilot test (2002-2007) are not included

Figure 4-1. **Mass Removal at M**W-10 **an**d EW-1

Honeywell Peoria Avenue Site, Phoenix, Arizona

JACOBS



Notes:

1,1-DCE = 1,1-dichloroethene

µg/L = micrograms per liter

Figure 4-2

Simulated 1,1-DCE Concentrations at MW-4

Honeywell Peoria Avenue Site

Phoenix, Arizona

Jacobs

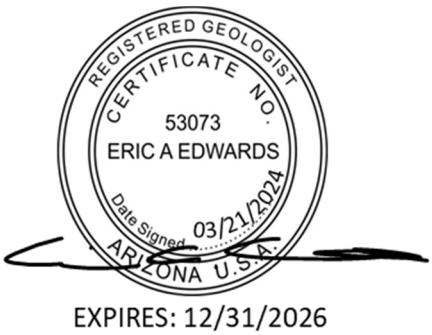
Appendix A
2023 Periodic Status Review Report

Jacobs

Honeywell Peoria Avenue Site
Phoenix, Arizona

ADEQ VRP Site Code: 070273-00

2023 Periodic Site Review Report



EXPIRES: 12/31/2026

Draft

March 2024

Honeywell International Inc.

Executive Summary

The Periodic Site Review (PSR) Report has been developed to confirm the effectiveness and adequacy of the approved remedy in achieving remedial objectives with respect to volatile organic compounds (VOCs) in groundwater at the Peoria Avenue Site (Site). Jacobs Project Management Co. (Jacobs), on behalf of Honeywell International Inc. (Honeywell), prepared the Periodic PSR Report in accordance with the Arizona Department of Environmental Quality's (ADEQ's) request included in the *Approval of Annual Groundwater Monitoring Report for 2019* letter (ADEQ 2020).

The approved remedy consists of groundwater containment to prevent migration of groundwater impacted by VOCs at the Site and groundwater monitoring. Key contaminants of concern (COCs) at the Site include trichloroethene (TCE) and 1,1-dichloroethene (DCE). Extracted groundwater is discharged directly to the City of Phoenix sanitary sewer, where it is treated offsite at the 91st Avenue Multi-cities Wastewater Treatment Plant and eventually discharged to the Salt River.

The assessment of this PSR found the following:

- The approved remedy has provided hydraulic containment of the VOC plume in groundwater, removed over 500 pounds of VOC mass from the subsurface, and contributed to lesser VOC concentrations and a smaller VOC plume in groundwater.
- The approved remedy meets the remedial objectives of containing the VOC-impacted groundwater.
- When using all concentration data available for trend analysis evaluation, only 3 of the 12 wells evaluated presented an upward trend for TCE. Two of these wells also presented an upward trend for 1,1-DCE.
- When using the concentration data available in a 5-year rolling window, only 2 of the 12 wells evaluated presented an upward trend for TCE and 3 wells presented an upward trend for 1,1-DCE. While the evaluation showed an upward trend at some wells, COC concentrations remain relatively low and mostly less than the corresponding Aquifer Water Quality Standard (AWQS).
- The current groundwater monitoring program is effective for ongoing monitoring of impacted groundwater and evaluation of the remedy against remedial objectives. No changes to the groundwater monitoring program are recommended.
- The current groundwater remedy is effective for maintaining hydraulic control of VOC-impacted groundwater.

Contents

Appendix

Tables

Figures

Acronyms and Abbreviations

µg/L	microgram(s) per liter
1,1,2-TCA	1,1,2-trichloroethane
1,1-DCE	1,1-dichloroethene
ACDC	Arizona Canal Diversion Channel
ADEQ	Arizona Department of Environmental Quality
amsl	above mean sea level
AWQS	Aquifer Water Quality Standards
COC	contaminant of concern
EPA	U.S. Environmental Protection Agency
gpm	gallon(s) per minute
HBGL	health-based guidance level
Honeywell	Honeywell International Inc.
ISCO	in situ chemical oxidation
Jacobs	Jacobs Project Management Co.
LAU	Lower Alluvium unit
MAU	Middle Alluvium unit
mg/kg	milligram(s) per kilogram
PCE	perchloroethylene
PSR Report	Periodic Site Review Report
RAP	remedial action plan
Site	Peoria Avenue Site
TCE	trichloroethylene
TCLP	toxicity characteristic leaching procedure
UAU	Upper Alluvium unit
VOC	volatile organic compound
VRP	Voluntary Remediation Program

1. Introduction

Jacobs Project Management Co. (Jacobs), on behalf of Honeywell International Inc. (Honeywell), prepared this 2023 Periodic Site Review Report (PSR Report) for the Peoria Avenue Site (Site) located in the vicinity of North 23rd and West Peoria Avenues, Phoenix, Arizona (Figure 1-1). The Arizona Department of Environmental Quality (ADEQ) Voluntary Remediation Program (VRP) Site Code is 070273-00.

The PSR Report was prepared in response to ADEQ recommendations in the ADEQ Approval of Annual Groundwater Monitoring Report for 2019 letter (ADEQ 2020).

The report is organized into the following sections:

- Section 2 – Site chronology
- Section 3 – Background
- Section 4 – Remedial actions
- Section 5 – Progress since remedy implementation
- Section 6 – Periodic site review process and findings
- Section 7 – Technical assessment
- Section 8 – Issues
- Section 9 – Recommendations and follow-up actions
- Section 10 – Next periodic review
- Section 11 – References

2. Site Chronology

This section summarizes the site chronology for COCs and includes notable events and documents to-date (Table 2-1).

Table 2-1. Site Chronology

Event	Date
GE began operating the circuit board manufacturing facility.	1957
Honeywell purchased the site from GE and continued operations.	1974 until 1993
Various soil and groundwater investigations were conducted. As a result of investigations, COCs were identified including chlorinated solvents (primarily TCE and 1,1-DCE).	1985 through 1997
Groundwater monitoring well MW-1a was installed.	1985
A groundwater monitoring program was established at the Site. Monitoring wells MW-2, MW-3, and MW-4 were installed.	1989
Monitoring wells MW-5, MW-6, MW-7, and MW-8 were added to the groundwater monitoring program.	1990
Monitoring well MW-9 was added to the groundwater monitoring program.	1992
Dry wells DW-2 through DW-5 were removed.	1992
A feasibility study was developed by RUST.	1994
A RAP was submitted to ADEQ.	1996
The RAP was approved by ADEQ.	1997

Table 2-1. Site Chronology

Event	Date
Groundwater containment activities began in the form of groundwater extraction.	1997
Monitoring well MW-10 was added to the groundwater monitoring program in early 1997 and was converted to an extraction well by late 1997.	1997
A Beneficial End Use Plan/Feasibility Study was submitted that documented remedial actions listed in the RAP that could not be implemented and recommended a final approach.	2000
In situ chemical oxidation pilot study performed using potassium permanganate in MW-1a and MW-2.	2002
Extraction well EW-2 stopped operating because it was not necessary to maintain hydraulic capture.	2003
The remedial approach recommended in Beneficial End Use Plan/Feasibility Study was approved by ADEQ.	2009
Monitoring well MW-12 was added to the groundwater monitoring program.	2017
Monitoring well MW-14 was added to the groundwater monitoring program.	2018
Monitoring well MW-13 was added to the groundwater monitoring program.	2019
Monitoring well MW-2 collapsed, preventing the collection of groundwater monitoring samples.	2019
The Site was removed from ADEQ's list of Known, Ongoing, Unauthorized Impact sites.	2020
ADEQ requested the submission of Periodic Status Review (PSR) Reports every 3 years.	2020

Notes:

1,1-DCE = 1,1-dichloroethene

COC = contaminant of concern

GE = General Electric

RAP = remedial action plan

RUST = RUST Environment and Infrastructure

TCE = trichloroethylene

Details related to the site chronology were provided in the following reports:

- Groundwater Monitoring Report for Phase I Hydrogeological Investigation, Phase II Remedial Action Plan (Errol L. Montgomery & Associates, Inc. 1990)
- Hydrogeologic Investigation for Phase II Remedial Action Plan (Errol L. Montgomery & Associates, Inc. 1991)
- Vadose Zone Investigations and Corrective Actions for Dry Wells Phase III Remedial Action Plan (Errol L. Montgomery & Associates, Inc. 1993)
- Feasibility Study for Groundwater Remediation (RUST 1994)
- Final Remediation Action Plan for Groundwater Remediation (RUST 1996)

- Peoria Avenue Facility Water Quality Assurance Revolving Fund Site, Letter of Determination (ADEQ 1997)
- Beneficial End Use Plan/Feasibility Study (ERM 2000)
- Review of Beneficial End Use Plan/Feasibility Study and March 31, 2004, ERM Letter (ADEQ 2009)
- Semiannual Groundwater Monitoring Report – May 2003 (ERM 2003)
- Monitoring Well MW-12 Installation and Sampling Summary (Jacobs 2018)
- Monitoring Wells MW-13 and MW-14 Installation and Sampling Summary and the Development and Application of the Peoria Avenue Groundwater Flow Model (Jacobs 2019)
- Honeywell Peoria Ave Site – KOUI Delisting (ADEQ 2020)
- Approval of Annual Groundwater Monitoring Report for 2019 (ADEQ 2020)

3. Background

This section presents a physical description of the site, land and resource use, the history of contamination, and the basis for taking action.

3.1 Physical Description

The Site is in the southwestern quarter of the southwestern quarter of the southeastern quarter of Section 24, Township 3 North, Range 2 East, Maricopa County, Arizona. The Site is in the vicinity of North 23rd and West Peoria Avenues, Phoenix, Arizona. It is bound by West Desert Cove Road to the north, industrial properties to the east, North 23rd Avenue to the west, and West Peoria Avenue to the south.

The facility elevation is approximately 1,252 feet above mean sea level (amsl) and the manufacturing facility occupied approximately 20 acres.

The facility began operations in 1957 as a circuit board manufacturing facility. GE owned and operated the facility from 1957 until 1974, when the facility was purchased by Honeywell, and Honeywell continued operations until 1993.

3.1.1 Geology and Hydrogeology

The Site lies in the southeastern part of Deer Valley, in the Basin and Range Province of central Arizona. Deer Valley comprises a north extension of the basin floor of the west Salt River Valley. Deer Valley is bound to the north by the Hedgpeth Hills, to the south by the Arizona Canal, to the east by the Union Hills and Phoenix Mountains, and to the west by New River.

Land surface in the basin slopes gently to the southwest in the area, from an elevation of about 1,400 feet amsl in the northeast to 1,150 feet amsl in the southwest. The elevation of land surface at the Site ranges from about 1,258 feet amsl in the northeastern corner of the property to 1,250 feet amsl in the southwestern corner.

The principal surface water drainages in the area include:

- Cave Creek, which is located about ¼ mile west from the Site and drains south to the Arizona Canal Diversion Channel (ACDC)
- Skunk Creek, which is located about five miles northeast from the Site and drains southwest

The Arizona Canal is located about three-quarters of a mile south of the Site and conveys Salt River Project water west across the area. The ACDC was constructed adjacent to, and north of, the Arizona Canal and directs stormwater runoff to Skunk Creek.

The basin-fill deposits comprise the principal groundwater reservoir in Deer Valley and in the Salt River Valley. The thickness of the basin-fill deposits ranges from a featheredge near the Phoenix Mountains to more than 1,000 feet in the west part of the area (Brown and Pool 1989). The bedrock complex crops out in the Phoenix Mountains and generally functions as a basal and lateral boundary to groundwater movement.

The site hydrogeology consists of a multilayer aquifer system with three water-bearing zones (the Upper Alluvium unit [UAU], the Middle Alluvium unit [MAU], and the Lower Alluvium unit [LAU]). The MAU is generally considered an aquitard. The UAU and the LAU are considered to be the primary aquifers at the site. Approximate depths of the water-bearing zones are:

- UAU – 0 to 400 feet bgs
- MAU – 400 to 850 feet bgs
- LAU – below 850 feet bgs

Over much of the Phoenix Basin, the UAU is relatively coarse-grained, consisting primarily of gravel, sand, and silt. However, the UAU near the Peoria Avenue Site is typically more fine-grained, composed largely of silty and clayey sands and sandy silt. The MAU is much finer-grained than the UAU and acts as an aquitard. This unit consists primarily of clay and silt, with some interbedded sand and gravel. The LAU is a coarse-grained unit and consists mainly of sand and gravel. However, most wells at the Site are completed in the UAU and shallow MAU. Thus, little Site-specific information regarding the depth and lithology of the deep MAU and LAU are available. Igneous and metamorphic bedrock underlie the LAU. Bedrock, which outcrops as the Phoenix Mountains east of the study area, dips steeply to the west. The dipping bedrock results in a significant thickening of basin-fill sediments to the west. Groundwater generally flows north-northwest across the Site. Additional information concerning the site's regional geology and hydrogeology is available in the Phase II hydrogeological investigations (Errol L. Montgomery & Associates 1991).

There are 15 groundwater wells screened within the UAU and UMAU, 14 of which are currently being used to monitor COC-affected groundwater. Figure 3-1 shows the locations of groundwater wells and the Site boundary. Table 3-1 summarizes well construction information, including the screen intervals, well depth, and screened hydrogeological zones.

Groundwater elevations in monitoring wells ranged from 973.10 feet amsl (MW-14) to 991.69 feet amsl (MW-8) in November 2023 (Jacobs 2024).

3.2 Land and Resource Use

The areas surrounding the Site are zoned for light industrial, commercial, residential, and public park usage, which is consistent with the land usage reported in the *McLaren Environmental Engineering Report, Property Transaction Environmental Assessment of 2222 West Peoria Avenue, Phoenix, Arizona (AZ0130801), dated December 29, 1988* (Jacobs 2020). Land use near the Site has not changed since at least 1988.

No drinking water production wells are known to be located near the Site. The nearest production wells identified are located about 1 mile north (downgradient) of well MW-10. These wells are used for golf course irrigation. In 2017, the City of Phoenix was granted a permit to install a production well at 2319 West Thunderbird Road, Phoenix, Arizona, which is approximately 1 mile downgradient of the Site. Based

on a discussion with the Arizona Department of Water Resources, the production well was not installed, and the permit was cancelled.

3.3 History of Contamination

From 1957 through 1978, four dry wells located along the southwestern boundary of the Site were used to discharge industrial wastewater generated during circuit-board plating operations. The primary organic solvents used for plant operations and discharged with the wastewater included perchloroethylene (PCE), TCE, and 1,1,1-trichloroethane. The disposal of these solvents with the wastewater ultimately resulted in a volatile organic compound (VOC)-contaminated plume of groundwater located beneath and to the north of the dry wells.

3.3.1 Contaminants of Concern

Beginning in 1985, soil and groundwater investigations were conducted at the Site to determine whether historical Site operations had impacted soil or groundwater, or both. As a result of the investigations, the following COCs were identified in the groundwater:

- 1,1-DCE
- TCE
- PCE
- 1,1,2-trichloroethane (1,1,2-TCA)

These COCs have been detected above Aquifer Water Quality Standards (AWQS) in groundwater samples collected from monitoring wells located near the former dry wells and in downgradient monitoring wells.

3.3.2 Nature and Extent of VOC-affected Groundwater

Groundwater monitoring began during Site investigations in 1985. VOC-impacted groundwater is limited to the UAU and the upper part of the MAU. Based on results from drilling and depth-discrete sampling, the top of a low-permeability clay layer that is potentially several hundred feet thick was identified at a depth of about 480 feet bgs (CH2M 2009). Depth-discrete groundwater samples could not be obtained from this clay layer, and geotechnical analysis indicates the clay likely restricts the movement of water.

Water quality samples collected in 2023 from wells EW-1, EW-2, MW-1a, MW-3, MW-4, MW-5, and MW-12 exhibited concentrations of COCs exceeding the AWQS, while no AWQS were exceeded in the samples collected from monitoring wells MW-6, MW-7, MW-8, MW 9, MW-13, and MW-14. Table 3-2 summarizes laboratory analytical results of groundwater sampling conducted in 2023. In general, COCs have historically either been less than laboratory reporting limits or detected at concentrations less than 1 microgram per liter (µg/L) in monitoring wells MW-6, MW 8, and MW-9.

Detectable concentrations of 1,1-DCE ranged from 0.87 µg/L (MW-9) to 1,800 µg/L (MW-1a), and detectable concentrations of TCE ranged from 0.56 µg/L (MW-7) to 190 µg/L (MW-1a) during 2023 (Figure 3-2). VOC-affected groundwater is present in two areas: a small plume near the former drywells that is contained by extraction well EW-1 and a downgradient plume that is contained by extraction well MW-10. VOCs also are present in the vicinity of monitoring well MW-4; groundwater modeling indicated that these VOCs are unrelated to VOC concentrations in the source area (Jacobs 2024).

3.3.3 Groundwater Flow

The direction of groundwater flow at the Site has ranged over time from north to north-northwest. A groundwater elevation contour map was developed from the depth-to-water data collected at the Site in

November 2023 (Figure 3-3). The groundwater elevation measured at active extraction well EW-1 was not used in development of the groundwater elevation contours. The groundwater flow direction at the Site continued to be to the north-northwest, with an average calculated gradient of 0.006 foot per foot, which is consistent with historical values.

3.4 Interim and Historical Remedial Actions

3.4.1 Dry Well Investigation and Abandonment

The dry well abandonment activities were described in the *Phase III Remedial Action Plan* (Errol L. Montgomery & Associates, Inc. 1993) and are summarized in this section.

Before 1979, dry wells DW-2 through DW-5, located east of North 23rd Avenue and south of monitoring wells MW-1a and MW-2, were used to dispose industrial waste and to control stormwater runoff. These dry wells were capped in 1982. However, in 1989 sanitary wastewater was estimated to have been discharged to dry well DW-4 at an approximate rate of 1,560,000 to 1,820,000 gallons per year during the period from 1974 to 1989 (Errol L. Montgomery & Associates, Inc. 1993). In 1989 Honeywell took corrective actions to prevent additional discharge, reported no further discharge occurred to the dry wells, and implemented an ongoing monitoring program to:

- Inspect for potential occurrence of water in soil borings and certain dry wells.
- Monitor groundwater level in monitoring wells.
- Obtain groundwater samples from monitoring wells for laboratory chemical analyses.

Results of periodic inspections indicated that, except for runoff from a rainstorm, water was not detected in the dry wells after April 6, 1989.

Investigations were conducted in March 1989 and April 1990 to locate and sample the dry wells. Before dry well removal operations began, 15 samples of solids were obtained for laboratory chemical analyses from dry wells DW-2, DW-3, DW-4, and DW-5. Results indicate TCE was detected at concentrations that exceeded established regulatory limits or guidelines in DW-2 and DW-3. TCE concentrations ranged from not detected to 490 milligrams per kilogram (mg/kg), and generally decreased with increase in depth sampled. TCE was not detected at concentrations that exceeded established regulatory limits or guidelines in the samples obtained from dry wells DW-4 and DW-5. TCE was not detected in the deepest samples obtained from dry wells DW-2 and DW-3.

When uncapped, dry wells DW-3, DW-4, and DW-5 contained volumes of water above the solids; dry well DW-2 did not contain water above the solids. Six samples of water were obtained for laboratory chemical analyses from dry wells DW-3, DW-4, and DW-5. Results indicated that, except for DW-3, TCE was not detected at concentrations that exceeded established regulatory limits or guidelines. TCE concentrations ranged from not-detected to 422 µg/L.

During March 1989, soil borings SB-1, SB-2, and SB-3 were drilled and sampled along the west side of Building A to provide data to assess chemical quality of soils near dry wells DW-2 through DW-5. Total depths for soil borings SB-2 and SB-3 were 50 or more feet below the reported drilled depths for the nearest dry wells. Sample results indicate that constituents analyzed were not detected at concentrations that exceed established regulatory limits or guidelines.

Results from the Phase II hydrogeological investigations (Errol L. Montgomery & Associates 1991) indicate that migration of VOCs to soil and groundwater at the facility has resulted from past disposal of industrial wastes into dry wells DW-2 through DW-5.

No COCs were identified for soils outside the dry wells at the facility. Results of laboratory chemical analyses for soil samples obtained from soil borings SB-1, SB-2, and SB-3, from the vadose zone at monitor well MW-9, from the base and sidewalls of the excavations for the dry wells, and from below the solids removed from the dry wells indicate that chemical constituents analyzed, including VOCs, were not detected at concentrations that exceed the ADEQ health-based guidance levels (HBGLs) for ingestion of soil or the U.S. Environmental Protection Agency (EPA) toxicity characteristic leaching procedure (TCLP) limits.

In 1992, the waste and surrounding soil were removed from dry wells DW-2, DW-3, and DW-4, and all four dry wells were abandoned in accordance with ADEQ abandonment guidelines. Depths excavated for the dry wells were as follows:

- 35 feet for dry well DW-2
- 34 feet for dry well DW-3
- 30.5 feet for dry well DW-4

Because results of investigations for dry wells indicated that no evidence of solid waste was found in samples obtained from dry well DW-5, solids were not removed from this dry well; ADEQ concurred with this decision.

Wastes and the surrounding soils were removed, and the excavations were filled with grout. Therefore, the potential for exposure at land surface to the constituents remaining in the soils was considered to be negligible. The grout plug, together with the ground cover of concrete and asphalt in the dry well area, greatly reduced, if not effectively eliminated, the potential for surface runoff to infiltrate and mobilize constituents to the groundwater, which is more than 300 feet below land surface at the facility. In the Phase III RAP, no further action was recommended for the vadose zone at the facility.

The monitoring program for the facility had included periodic inspection for potential occurrence of water in soil borings and dry wells DW-2 through DW-5. This part of the monitoring program was discontinued after the dry wells were removed.

3.4.2 Potassium Permanganate Pilot Test

An in situ chemical oxidation (ISCO) pilot test was conducted in June 2002 (ERM 2003). Approximately 6,500 gallons of potassium permanganate solution were injected into well MW-1a and approximately 25,700 gallons of the solution was injected into well MW-2. Potassium permanganate persisted in these wells for 6 to 11 months and was observed in well MW-3, located about 800 feet downgradient of the injection wells, in May 2003.

VOC concentrations in wells MW-1a and MW-2 declined after the pilot test. Concentrations of 1,1-DCE and TCE in well MW-1a later increased to concentrations above pretreatment levels, while concentrations in well MW-2 rebounded to concentrations less than pretreatment levels. Additional results of VOC concentration trend analysis are provided in Section 7.

3.5 Basis for Taking Action

Due to concentrations of VOCs in groundwater exceeding the AWQS, containment was implemented to prevent uncontrolled migration.

4. Remedial Actions

This section describes the selection and implementation of the approved remedy for the Site.

4.1 Remedy Selection – Remedial Action Plan

A feasibility study (RUST 1994) and RAP (RUST 1996) were developed for the Site. ADEQ approved the RAP on April 1, 1997 (ADEQ 1997). The approved RAP stipulated a groundwater containment remedy to prevent migration of groundwater impacted by COCs from the Site. Three extraction wells, EW-1, EW-2, and MW-10 were installed approximately 500, 1,800, and 3,000 feet, respectively, downgradient from the source area (located south of well MW-1a) to provide hydraulic control of the Site's VOC plume.

Although the RAP recommended groundwater extraction with ultraviolet light and oxidation with hydrogen peroxide as the treatment technology, a location to construct a treatment plant could not be obtained. After developing numerous alternatives and repeated attempts to negotiate with nearby landowners, it was determined that the RAP could not be fully implemented because there was no suitable location for a treatment system or discharge/injection point. Honeywell proposed that direct discharge to the City of Phoenix sewer system met the remedial objectives for the Site and was allowable under the ADWR Poor Quality Groundwater Withdrawal Permit because "no economically feasible end use exists" (ERM 2000). ADEQ approved the proposed remedy in 2009 (ADEQ, 2009).

4.2 Remedy Implementation

Groundwater extraction from well MW-10 began in 1997 and groundwater extraction from wells EW-1 and EW-2 began in 1999. Extraction well EW-2 ceased operations in September 2003 because it was not required to maintain hydraulic containment. Extracted groundwater from wells EW-1 and MW-10 is discharged to the City of Phoenix sanitary sewer in accordance with Class "A" Wastewater Discharge Permits. The extracted groundwater is subsequently treated offsite at the 91st Avenue Multi-cities Wastewater Treatment Plant and is eventually discharged to the Salt River.

Extraction well flow rates have been modified over time in coordination with ADEQ. Jacobs recommended extraction well flow rates to maintain hydraulic containment in the *Monitoring Well MW-13 and MW-14 Installation and Sampling Summary and the Development and Application of the Peoria Avenue Groundwater Flow Model* (Jacobs 2019). ADEQ agreed to extraction flow rates of 55 gallons per minute (gpm) at EW-1 and 30 gpm at MW-10 in its *Review of Monitoring Well MW-13 and MW-14 Installation and Sampling Summary and the Development and Application of the Peoria Avenue Groundwater Flow Model* letter (ADEQ 2019). EW-1 is currently operated at a minimum flow rate of 55 gpm. Flow rates at MW-10 are currently maintained between 31 gpm and 35 gpm.

4.2.1 Groundwater Monitoring Program

Groundwater monitoring wells were placed throughout the Site to determine the vertical and lateral extent of the VOC plume and provide ongoing monitoring data to evaluate COC concentration trends following operation of the approved groundwater containment remedy. Wells included in the groundwater monitoring program and their current uses are described here and shown on Figure 3-1.

- MW-1a: Used to monitor source area COC concentrations.
- EW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-12: Used to monitor downgradient COC concentrations.
- MW-8 and MW-9: Used to monitor upgradient and side gradient COC concentrations.

- MW-13 and MW-14: Sentinel wells used to monitor downgradient COC concentrations.
- EW-1: Used as source area extraction well.
- MW-10: Used as downgradient extraction well.

The use of passive diffusion bags for collection of groundwater samples at the Site started with monitoring well MW-5 in 2004. Sampling depths were established for all existing monitoring wells at the Site by 2011 after collecting multiple samples at varying depths and selecting the depth with the highest VOC concentrations. Sampling depths were re-established for monitoring wells MW-5 and MW-7 in 2016. Sampling depths were established for monitoring wells MW-12, MW-14, and MW-13 during well installation activities in 2017, 2018, and 2019, respectively.

Groundwater sampling events occur on an annual basis during the fourth quarter. In 2020, four wells were also designated to occur on a semiannual basis to during the second quarter, per a request by ADEQ. Those wells include MW-7, MW-12, MW-13, and MW-14.

4.2.2 Reporting

Results from groundwater monitoring activities completed each year are summarized in Annual Groundwater Monitoring Reports and submitted to ADEQ. Annual Groundwater Monitoring Reports will continue to be submitted to ADEQ by March 31 of the following year.

4.3 Current Action Level

Current action levels for the Site include the AWQS established for COCs in groundwater. Site COCs and their corresponding AWQS are described below.

- 1,1-DCE (7 µg/L)
- TCE (5 µg/L)
- PCE (5 µg/L)
- 1,1,2-TCA (5 µg/L)

Based on groundwater quality data collected in 2023, 1,1-DCE and TCE are present in groundwater at the Site at concentrations above their corresponding AWQS. Changes to AWQS for COCs at the Site will be documented in future reports as necessary.

5. Progress Since Remedy Implementation

The groundwater extraction was implemented in 1997 and is ongoing. The system provides hydraulic containment of the VOC plume in groundwater. Extraction of groundwater has removed VOC mass from the subsurface and contributed to lower VOC concentrations and a smaller VOC plume in groundwater. Section 6 discusses an additional data evaluation supporting these results. The remedy meets the remedial objectives for the Site.

6. Periodic Site Review Process and Findings

The following sections describe the process of identifying data for use in development of this PSR Report.

6.1 Document Review

Background documents selected for review focused primarily on those containing historical groundwater monitoring data and details of the remedy selection and progress toward remedial goals. The evaluated reports primarily included the RAP (RUST 1996), *Beneficial End Use/Feasibility Study*, and *2023 Annual Groundwater Monitoring Report* (Jacobs 2024), which includes groundwater monitoring results obtained from 1994 to 2023.

6.2 Data Review

The data and analytical results included in the *2023 Annual Groundwater Monitoring Report* (Jacobs 2024) were reviewed for the following evaluation.

6.2.1 Evaluation of Remedial Objective Metrics

The feasibility study (RUST 1994) and RAP developed for the Site (RUST 1996) stipulated a groundwater containment remedy to prevent the migration of groundwater-impacted by COCs from the Site. Thus, the main remedial objective metric is plume size stability and reduction.

The 2023 combined northern and southern plume area (1,1-DCE concentrations greater than 7 parts per billion) have remained stable since 2016 (550,000 square feet) and has decreased when compared to previous plume area estimates (for example, 1,425,000 square feet in 2008). The system has met the remedial objective metric.

6.2.2 Operation, Maintenance, and Monitoring Results

A review of groundwater quality data for monitoring well MW-1a indicates concentrations of both 1,1 DCE and TCE have decreased since 2010 (Figure 6-1).

COC concentrations in monitoring well MW-3 have been generally decreasing since 2000 (Figure 6-2) and have been less than AWQS since 2014, however, concentrations of TCE and 1,1-DCE have been above the AWQS since 2021. This supports the concept that the dissolved-phase VOC plume at the Site has separated into southern and northern components, which has been part of the conceptual site model since 2012 (CH2M 2012).

TCE and 1,1-DCE concentrations in well EW-2 decreased from 2022 to 2023. Data from monitoring well MW-5, located downgradient of well EW-2, indicate concentrations of 1,1 DCE and TCE have been decreasing since about 2019, with 1,1-DCE above the AWQS while TCE is below the AWQS in 2023 (Figure 6-3).

The concentrations of TCE and 1,1-DCE in monitoring well MW-7 had increased slowly between 2011 and 2016, remained stable from 2017 to 2018, have been decreasing since 2019, and were below the AWQS since 2019 and 2020, respectively.

TCE and 1,1-DCE were not detected at downgradient monitoring well MW-13. TCE was not detected at downgradient monitoring well MW-14, however, 1,1-DCE was detected at downgradient monitoring well MW-14 at a concentration below the AAWQS.

7. Technical Assessment

7.1 Is Remedy Proceeding as Expected?

The following sections summarize the trend analysis and evaluation of the remedial system. Trend analysis was performed using available data gained through the most recent annual groundwater sampling event in 2023. The main objective of the system is to provide hydraulic control of the Site's VOC plume. In general, the remedial system has maintained hydraulic control and has removed VOC mass from the subsurface. VOC concentrations at the groundwater wells generally are trending downward.

7.1.1 TCE Mann-Kendall Analysis evaluation - Entire Dataset

Mann-Kendall trend analyses were performed on 15 groundwater wells for which data are available. The Mann-Kendall trend analysis produces one of six different results for each well based on the data analyzed. The results indicate the data are trending upward, downward, or no trend is apparent. Additionally, all nondetect concentrations were used at their detection level for the evaluation. Due to the use of nondetect concentrations at their detection level, some wells and COCs may present trends that are the result of the changes of detection limits over time, and not an actual trend due to changing concentrations in groundwater. These trends are presented along with the rest of the analysis but are not discussed in this section.

Trend analyses were made on seven COCs that are regularly analyzed on this site and include all data collected since at least June 1994. The results of the Mann-Kendall trend analyses for the following parameters are presented in Table A-1 of Appendix A:

- 1,1-DCE
- 1,1-DCA
- trans-1,2-DCE
- Chloroform
- 1,1,2-TCA
- PCE
- TCE

Figures A-1 through A-15 of Appendix A provide a graphical representation of the data used for the trend analysis of 1,1-DCE, trans-1,2-DCE, PCE, and TCE. The remaining COCs are not presented in these figures as the data for these COCs included mostly nondetect concentrations.

When using all data available for trend analysis evaluation, only three wells presented an upward trend for TCE (MW-4, MW-12, and EW-2). Two of the wells also presented an upward trend for 1,1-DCE. No other upward trends were observed.

For well MW-4, the evaluation showed an upward trend for 1,1-DCE and TCE, and concentrations of 1,1-DCE were above the corresponding Aquifer Water Quality Standard (AWQS) while concentrations of TCE were below the AWQS (Figures A-4).

7.1.2 TCE Mann-Kendall Analysis evaluation - Rolling 5-year Window

Mann-Kendall trend analyses for the last 5 years of monitoring were performed on 15 groundwater wells with enough data to generate a trend. Nondetect concentrations were used at their detection level for the evaluation. Due to the use of nondetect concentrations at their detection level, some wells and COCs may present trends that are the result of the changes of detection limits over time, and not an actual trend due

to changing concentrations in groundwater. These trends are presented along with the rest of the analysis but are not discussed in this section.

The trend analyses included data collected since 2017 The results of the Mann-Kendall trend analyses for the following parameters are presented in Table A-2 of Appendix A:

- 1,1-DCE
- 1,1-DCA
- trans-1,2-DCE
- Chloroform1
- 1,2-TCA
- PCE
- TCE

Figures A-1 through A-15 of Appendix A provide a graphical representation of the data used for the trend analysis of 1,1-DCE, Trans-1,2-DCE, PCE, and TCE. The remaining COCs are not presented in these figures as the data for these COCs included mostly nondetect concentrations.

When using the data available during this period, two wells presented an upward trend for TCE (MW-3 and MW-12). MW-3, MW-4 and MW-12 presented an upward trend for 1,1-DCE. Upward trends were also observed for chloroform at two wells (MW-7 and MW-13). No other upward trends were observed.

The trend analysis indicates that the containment system is effective. Although VOC concentrations in MW-4 show increasing trends, groundwater modeling indicated that these VOCs are unrelated to VOC concentrations in the source area of the Site (Jacobs 2024).

7.1.3 Mass Removal Rates, Totals, and Remaining Mass

A total of 510 pounds of VOCs have been removed by the remedy since 1998. Most of the mass has been removed from well EW-1 (around 61 percent). Since 2021, the remedy has removed approximately 68 pounds of VOCs, of which about 87 percent were removed from well EW-1, and 13 percent from well MW-10. 1,1-DCE represented most of the VOC mass removed by the remedy.

The remedy removed approximately 24 pounds of VOCs in 2021, 22 pounds in 2022, and 22 pounds in 2023.

7.2 Monitoring Program Evaluation

A groundwater monitoring program was established at the Site in 1989. Groundwater monitoring wells and extraction wells were added to the program as described in Section 2. Wells included in the groundwater monitoring program are described in Section 4.2.1.

At this time, the monitoring network and monitoring frequency is adequate to monitor progress towards the remedial objectives. The monitoring program will undergo continued evaluation to determine whether changes are appropriate to monitor progress towards the remedial action objectives.

7.3 Monitored Natural Attenuation Evaluation

A compound-specific isotope analysis evaluation was completed in 2016 and documented in a memorandum titled Compound Specific Isotope Analysis Evaluation for the Honeywell Peoria Avenue Site, Phoenix AZ (CH2M 2016). The evaluation took place to discern whether natural degradation processes are

in effect at the Site, the degree of degradation that has occurred, and the rate of contaminant degradation. The following key points were drawn from this analysis:

- The compound-specific isotope analysis data indicate TCE is being transformed to cis-1,2-DCE at the Site due to natural degradation processes. There is some isotopic evidence that cis-1,2-DCE is degrading.
- The degradation rate based on an assumed biological degradation process and an estimated release date ranges from 0.004 to 0.024 per year, which corresponds to half-lives from 29 to 170 years.

No additional evaluation of natural degradation at the site is currently scheduled.

7.4 Remedial Timeline, Metrics, and Contingencies

The approved remedy includes groundwater containment to prevent the migration of COC-impacted groundwater from the Site with discharge of extracted groundwater to the City of Phoenix sewer system, as described in Section 4. Three extraction wells, EW-1, EW-2, and MW-10 were installed approximately 500, 1,800, and 3,000 feet, respectively, downgradient from the source area (located south of well MW-1a) to provide hydraulic control of the Site's VOC plume.

Groundwater is extracted from wells EW-1 and MW-10 to create a hydraulic capture zone and prevent the downgradient migration of VOC-impacted groundwater. Well EW-2 is no longer used as an extraction well. Based on concentrations observed in Site wells (Section 6.2.2), the system is currently achieving the remedial action objective of hydraulic control.

In addition, the system continues to remove mass from the subsurface. The system has removed approximately 510 pounds of COCs since system startup.

7.4.1 Remedial Timeframes and Milestones

Remedial timeframes have been estimated for the Site using two different methods with similar remedial end points. One estimate used a linear regression of TCE and 1,1-DCE concentrations at specific wells to estimate the time remaining for concentrations to fall to less than AWQS at the wells. The other method used a system decline curve, comparing mass removal rates vs total mass removed, to estimate the end point of the system remediation.

Figure 7-1 shows the linear regression performed on wells MW-1a, MW-5, MW-10, EW-1, and EW-2 and Figure 7-2 shows the linear regression performed on well MW-1a, MW-5, MW-10, and EW-1, for both 1,1-DCE and TCE. The regression line was extended into the future until the concentration is projected to reach the AWQS to estimate the remediation timeframe for each well except for source area extraction well EW-1, which did not show decreasing concentration trends. The estimates of the timeframes obtained using this method show timeframes varying from 2028 to 2130 for different wells. Given the significant uncertainty associated with these types of forecasts, 2040 can be used as an approximate timeframe for reaching the AWQS for both TCE and 1,1-DCE.

Figure 7-3 shows the system decline curves for extraction wells MW-10 and EW-1. The decline curve for MW-10 estimates there are around 50 pounds of mass left to remove, and at current removal rates (2 to 3 pounds per year), the expected timeframe for remediation varies from 17 to 25 years. This estimate presents great uncertainty but may be useful for system optimization purposes.

From 2021 through 2023, the system removed an average of 22.7 lbs of VOCs per year. Given this average, and including uncertainties in mass removal estimates, the system intermediate milestones include removing an approximate 50 lbs of VOCs in the next three years and 100 lbs in the next six years.

7.4.2 Metrics and Contingency Actions

Table 7-1 includes site metrics and associated contingency actions and indicates whether the metrics were met.

Table 7-1. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
Extraction remains at or above established flow rates. Flow rates for specific extraction wells are as follows: ▪ EW-1: 55 gpm ▪ MW-10: 30 gpm	No	If the metric is not met, the associated contingency actions include: ▪ Notify ADEQ within 30 days if the flow rate is reduced by more than 10% over 30 days. - The extraction pump in MW-10 was found to be operating below the discharge rate of 30 gpm and that the pump would need to be replaced. ▪ Notify ADEQ within 7 days of identifying a shutdown of pump operations greater than 72 hours. - On August 28, 2023, ADEQ was notified of further investigation of the extraction pump in well MW-10. ▪ Take steps to resume extraction flow rates. - Extraction pump in MW-10 is scheduled to be replaced during the first quarter of 2024. ▪ Evaluate capture at achieved flow rates if target flow rates are not resumed. - Well cleaning and pump replacement to resume target flow rate in MW-10 are being scheduled. ▪ Evaluate potential mitigation actions to resume the target flow rate, including pump replacement, well rehabilitation, or other appropriate actions. - Extraction pump in MW-10 is scheduled to be replaced in the first quarter after cleaning of the well casing.
Mass removal trends at extraction well MW-10 will be stable during the 3-year period of 2021 to 2023.	Yes	If the metric is not met, the associated contingency actions include: ▪ Notify ADEQ within 30 days. - Metric was met while MW-10 was in operation. On August 2023, the extraction pump in MW-10 was found to be operating below the discharge rate of 30 gpm and that the pump would need to be replaced. Mass removal rates are expected to remain stable once the extraction in MW-10 is started. ▪ Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - Metric met. No action required. ▪ Evaluate actions to be taken to change mass removal rates, as needed. - Metric met. No action required. ▪ Evaluate mass removal metric and update to reflect current conditions, as needed. - Metric met. No action required.

Table 7-1. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
Mass removal trends at extraction well EW-1 will be stable during the 3-year period of 2021 to 2023.	Yes	If the metric is not met, the associated contingency actions include: ▪ Notify ADEQ within 30 days. - Metric met. No action required. ▪ Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - Metric met. No action required. ▪ Evaluate actions to be taken to change mass removal rates, as needed. - Metric met. No action required. ▪ Evaluate mass removal metric and update to reflect current conditions, as needed. - Metric met. No action required.
TCE and 1,1-DCE concentration trends at sentinel well MW-13 do not show an increasing trend, including detectable concentrations above 50% of the AAWQS.	Yes	If the metric is not met, the associated contingency actions include: ▪ Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric met. No action required. ▪ Confirm trend by one or more subsequent sampling events. - Metric met. No action required. ▪ Evaluate increased sampling frequency. - Metric met. No action required. ▪ Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at EW-1, in situ remediation, or other appropriate options. - Metric met. No action required.
TCE and 1,1-DCE concentration trends at sentinel well MW-14 do not show an increasing trend, including detectable concentrations above 50% of the AAWQS.	Yes	If the metric is not met, the associated contingency actions include: ▪ Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric met. No action required. ▪ Confirm trend by one or more subsequent sampling events. - Metric met. No action required. ▪ Evaluate increased sampling frequency. - Metric met. No action required. ▪ Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at MW-10, in situ remediation, or other appropriate options. - Metric met. No action required.

Table 7-1. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
TCE and 1,1-DCE concentration trends at trigger well MW-12 do not show an increasing trend, including concentrations above 50% of the AAWQS.	No	If the metric is not met, the associated contingency actions include: ▪ Notify ADEQ after trend is confirmed by Mann-Kendall analysis, within 30 days of receiving data. - Metric not met. ADEQ notified of the exceedance of 1,1-DCE in MW-12. ▪ Confirm trend by one or more subsequent sampling events. - Metric not met. MW-12 scheduled for sampling during the semiannual groundwater sampling event in May 2024. ▪ Evaluate increased sampling frequency. - Metric not met. MW-12 is currently sampled on a semiannual basis. ▪ Evaluate potential mitigation actions if trends continue, including modifications to extraction flow rates at EW-1, in situ remediation, or other appropriate options. - Capture zone evaluation indicated that groundwater at MW-12 is contained by extraction well MW-10.
TCE and 1,1-DCE concentrations at sentinel and trigger monitoring wells do not exceed the AAWQS. Sentinel and trigger monitoring wells include the following: MW-6, MW-8, MW-13, and MW-14	Yes	If the metric is not met, the associated contingency actions include: ▪ Notify ADEQ within 15 days of receiving laboratory data. After notifying ADEQ, collect samples within 30 days to confirm concentrations. - Metric met. No action required. ▪ Evaluate increased sampling frequency. - Metric met. No action required. ▪ Evaluate factors contributing to concentrations that exceed AAWQS and downgradient impacts of concentrations that exceed AAWQS and explain overall impacts to site remediation. - Metric met. No action required. ▪ Re-evaluate the groundwater remedial action and present appropriate mitigation actions or modifications. - Metric met. No action required.

Table 7-1. Metrics and Contingency Actions

Honeywell Peoria Avenue Site, Phoenix, Arizona

Metrics	Was the Metric Met?	Contingency Actions
TCE and 1,1-DCE concentrations at trigger monitoring wells do not exceed the AAWQS. Sentinel and trigger monitoring wells include the following: MW-4, MW-7, MW-9, and MW-12	No	If the metric is not met, the associated contingency actions include: ▪ Notify ADEQ within 15 days of receiving laboratory data. After notifying ADEQ, collect samples within 30 days to confirm concentrations. - Metric was not met at monitoring well MW-4 during the annual sampling event. ADEQ was notified within 15 days of receiving laboratory data. Confirmation sample collection was unnecessary because a duplicate sample was collected at MW-4 during the annual sampling event. ▪ Evaluate increased sampling frequency. - Increase sampling frequency at monitoring well MW-4 from annual to semiannual. ▪ Evaluate factors contributing to concentrations that exceed AAWQS and downgradient impacts of concentrations that exceed AAWQS and explain overall impacts to site remediation. - Model simulations of 1,1-DCE at monitoring well MW-4 were run for 10 years starting in 2016 to include non-routine periods of downtime at extraction well EW-1 starting in 2018. Concentrations of 1,1-DCE at monitoring well MW-4 did not reach the AAWQS for 1,1-DCE (7 µg/L) in any simulation. The maximum simulated concentration of 1,1-DCE at monitoring well MW-4 was 2.69 µg/L. Simulations indicated that downtime of extraction well EW-1 did not result in increasing concentrations of 1,1-DCE at monitoring well MW-4, suggesting that increased TCE concentrations at monitoring well MW-4 are unrelated to TCE concentrations in the source area. - Additionally, groundwater flow direction at the site has been north–northwest since 2006. Well MW-4 is located cross gradient and approximately 1,080 feet northeast of source area well MW-1a. The direction of groundwater flow during periods of EW-1 downtime also suggests that increased TCE concentrations at well MW-4 are unrelated to TCE concentrations in the source area. ▪ Re-evaluate the groundwater remedial action and present appropriate mitigation actions or modifications. - Additional actions or modifications to the remedial action are not recommended.

ADEQ = Arizona Department of Environmental Quality

gpm = gallon(s) per minute

8. Issues

No significant issues were identified that adversely affect the performance of the remedy.

9. Recommendation and Follow-up Actions

This PSR Report recommends the following:

- Continued operation of the approved groundwater containment remedy as described in Section 4.1
- Continued groundwater monitoring as described in Section 4.2.1
- Submission of annual groundwater monitoring reports as described in Section 4.2.2
- Continue communication with ADEQ, ADWR, and the City of Phoenix as needed regarding operation of the approved remedy, associated reporting, and progress towards remedial goals as appropriate
- Submission of PSR Reports every 3 years to evaluate the performance of the approved remedy and recommend potential changes if warranted

10. Next Periodic Review

This PSR Report was prepared by Jacobs on behalf of Honeywell in accordance with ADEQ's request for submittal of PSR Reports every three years included in ADEQ's *Review of Annual Groundwater Monitoring Report for 2019* (ADEQ 2020). This PSR Report represents the report requested by ADEQ to be submitted by March 31, 2024. The next PSR Report will be submitted as an attachment to the 2026 Annual Groundwater Monitoring Report by March 31, 2027. Subsequent reports will be submitted every three years.

11. References

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Tables

Table 3-1. Summary of Well Specifications

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Arizona ID	Easting	Northing	TOC Elevation (feet)	ADWR Reg. No.	Casing Depth (feet)	Screen Interval (feet)
MW-1a	(A-3-2)24dcc1	641748.01	939875.97	1253.84	55-511917	500	430-465/475-500
MW-2	(A-3-2)24dcc2	641743.83	939838.60	1252.53	55-523950	379	199-369
MW-3	(A-3-2)24dcb	641797.71	940636.22	1254.96	55-523951	400	223-389
MW-4	(A-3-2)24dca	642372.83	940655.01	1254.73	55-523957	384	207-373
MW-5	(A-3-2)24acc	641788.48	942245.86	1265.78	55-527607	456	216-446
MW-6	(A-3-2)24acd	642987.26	942094.36	1265.60	55-527605	475	234-465
MW-7	(A-3-2)24cac	640656.50	940915.26	1255.04	55-527606	448	207-438
MW-8	(A-3-2)25baa	641671.63	938964.84	1245.73	55-527608	441	221-431
MW-9	(A-3-2)24cdd	641224.15	939771.47	1250.71	55-534737	400	194-390
MW-10	(A-3-2)24bca	641859.70	942752.39	1263.60	55-556637	430	200-425
MW-12	(A-3-2)24caa	641146.04	941304.84	1260.45	55-921044	503	260-500
MW-13	(A-3-2)23dca	638868.42	942843.46	1265.26	55-922500	500	258-500
MW-14	(A-3-2)24baa	641351.52	944355.48	1273.81	55-922027	502	260-502
EW-1	(A-3-2)24adc	641613.58	940199.37	1250.22	55-570189	425	265-415
EW-2	(A-3-2)24bbd	641873.10	941498.71	1257.33	55-570190	425	255-415

Notes:

Easting and Northing are in NAD83 coordinates

Elevations are based on NAVD88

ADWR = Arizona Department of Water Resources

Arizona ID = Arizona state well number (legal description of well location)

ID = identification

Reg. No. = registration number

TOC = top of casing

Originator: **HTS**	*HTS*
	(Signature)
Checked by: **Derek Foehr**	*Derek Foehr*
	(Signature)

Table 3-2. Summary of Laboratory Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Sample Depth (feet bgs)	Sample Date	1,1,2-TCA	1,1-DCE	PCE	TCE
EW-1	NA	11/14/2023	<0.50	**47**	<0.50	**15**
EW-2	360	11/14/2023	<0.50	<0.50	<0.50	**17**
MW-1A	435	11/14/2023	**7.7/8.0**	**1800/1800**	**10/11**	**170/190**
MW-3	355	11/14/2023	<0.50	**54**	<0.50	**61**
MW-4	355	11/14/2023	<0.50/<0.50	**18/19**	<0.50/0.59	**3.2/3.3**
MW-4	355	5/17/2023	<0.50/<0.50	**18/19**	<0.50/0.50	**4.5/4.5**
MW-5	310	11/14/2023	<0.50	**7.4**	<0.50	2.6
MW-6	355	11/14/2023	<0.50	<0.50	<0.50	<0.50
MW-7	285	11/14/2023	<0.50	1	<0.50	0.56
MW-7	285	5/17/2023	<0.50	1.2	<0.50	0.82
MW-8	355	11/14/2023	<0.50	<0.50	<0.50	<0.50
MW-9	355	11/14/2023	<0.50	0.87	<0.50	<0.50
MW-12	410	11/14/2023	<0.50	**10**	<0.50	4.3
MW-12	410	5/17/2023	<0.50	4.6	<0.50	2.2
MW-13	355	11/14/2023	<0.50	<0.50	<0.50	<0.50
MW-13	355	5/17/2023	<0.50	<0.50	<0.50	<0.50
MW-14	350	11/14/2023	<0.50	2.9	<0.50	<0.50
MW-14	350	5/17/2023	<0.50	<0.50	<0.50	<0.50
Aquifer Water Quality Standards			**5**	**7**	**5**	**5**

Notes:

All concentrations are reported in micrograms per liter

Bold values denote concentrations that exceed the Arizona Aquifer Water Quality Standard

Samples were analyzed using EPA Method 624.1

Where applicable, original and duplicate sample results are presented before and after a "/", respectively

< = less than

1,1,2-TCA = 1,1,2-trichloroethane

1,1-DCE = 1,1-dichloroethene

bgs = below ground surface

EPA = U.S. Environmental Protection Agency

ID = identification

NA = not applicable

PCE = tetrachloroethene

TCE = trichloroethene

Originator: **HTS**	*HTS* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Figures

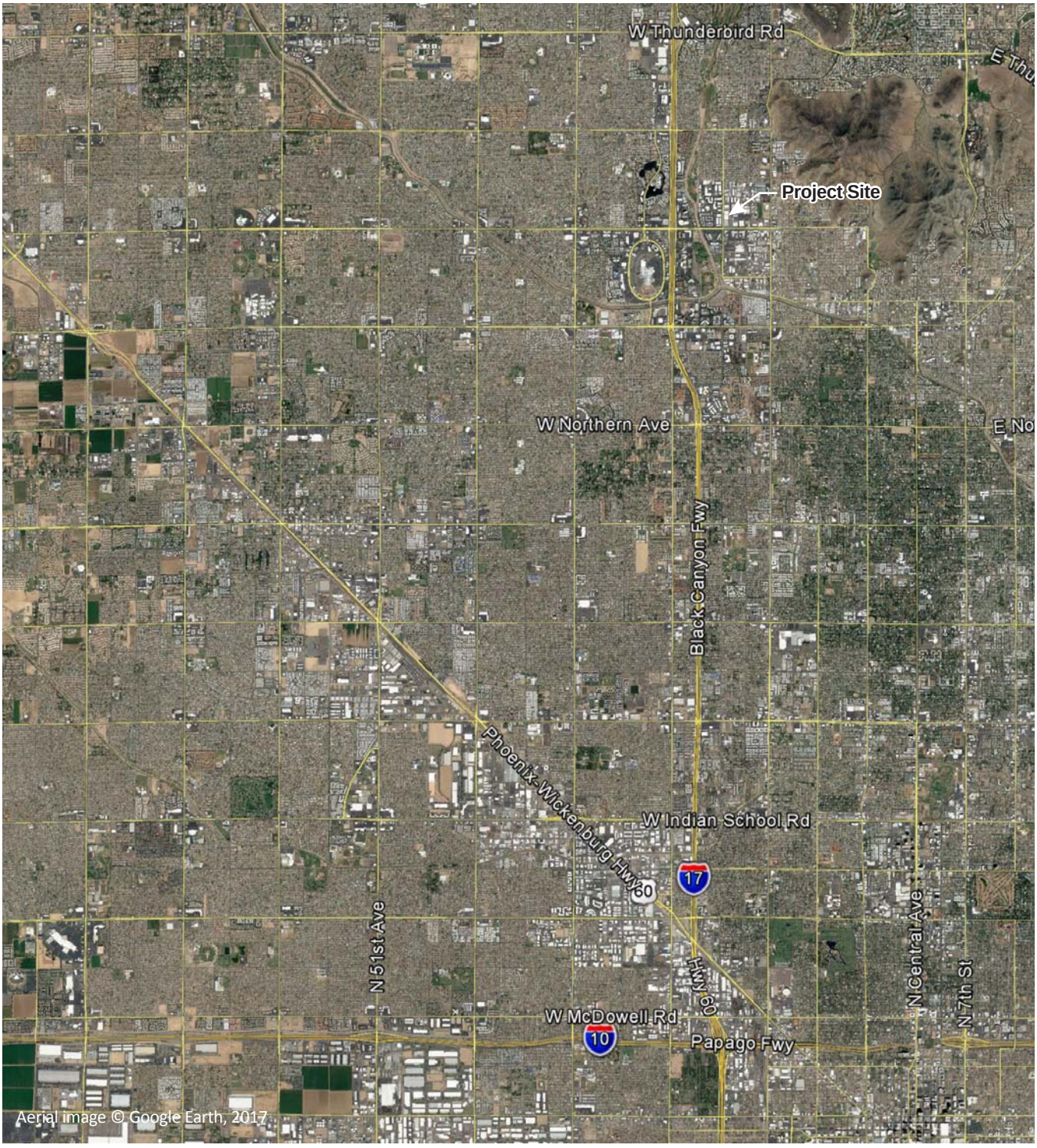

Figure 1-1
Site Location Map
Honeywell Peoria Avenue Site
Phoenix, Arizona

North

0 1.5 2.5

Approximate scale in miles

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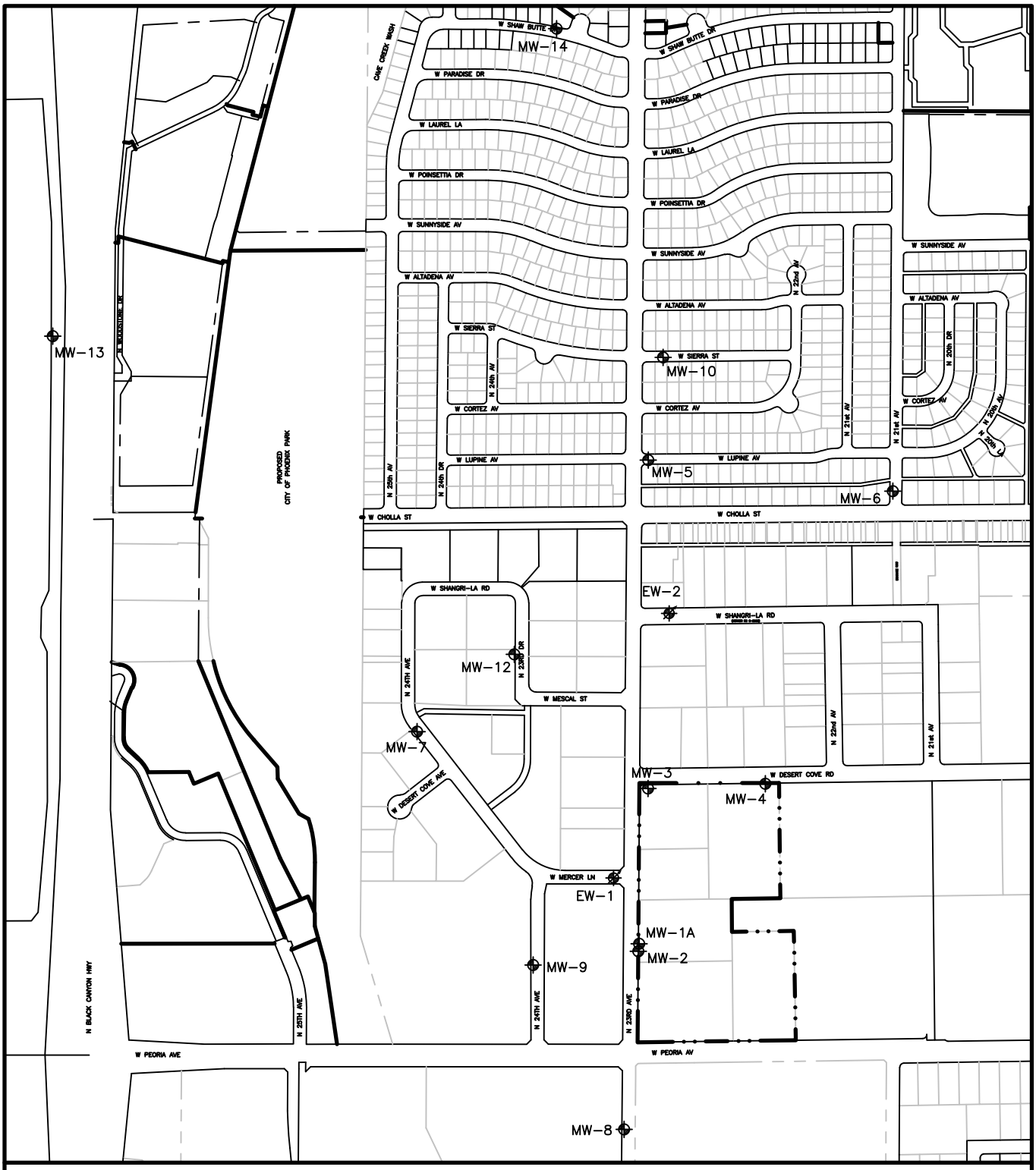

Figure 3-1
Well Location Map
Honeywell Peoria Avenue Site
Phoenix, Arizona

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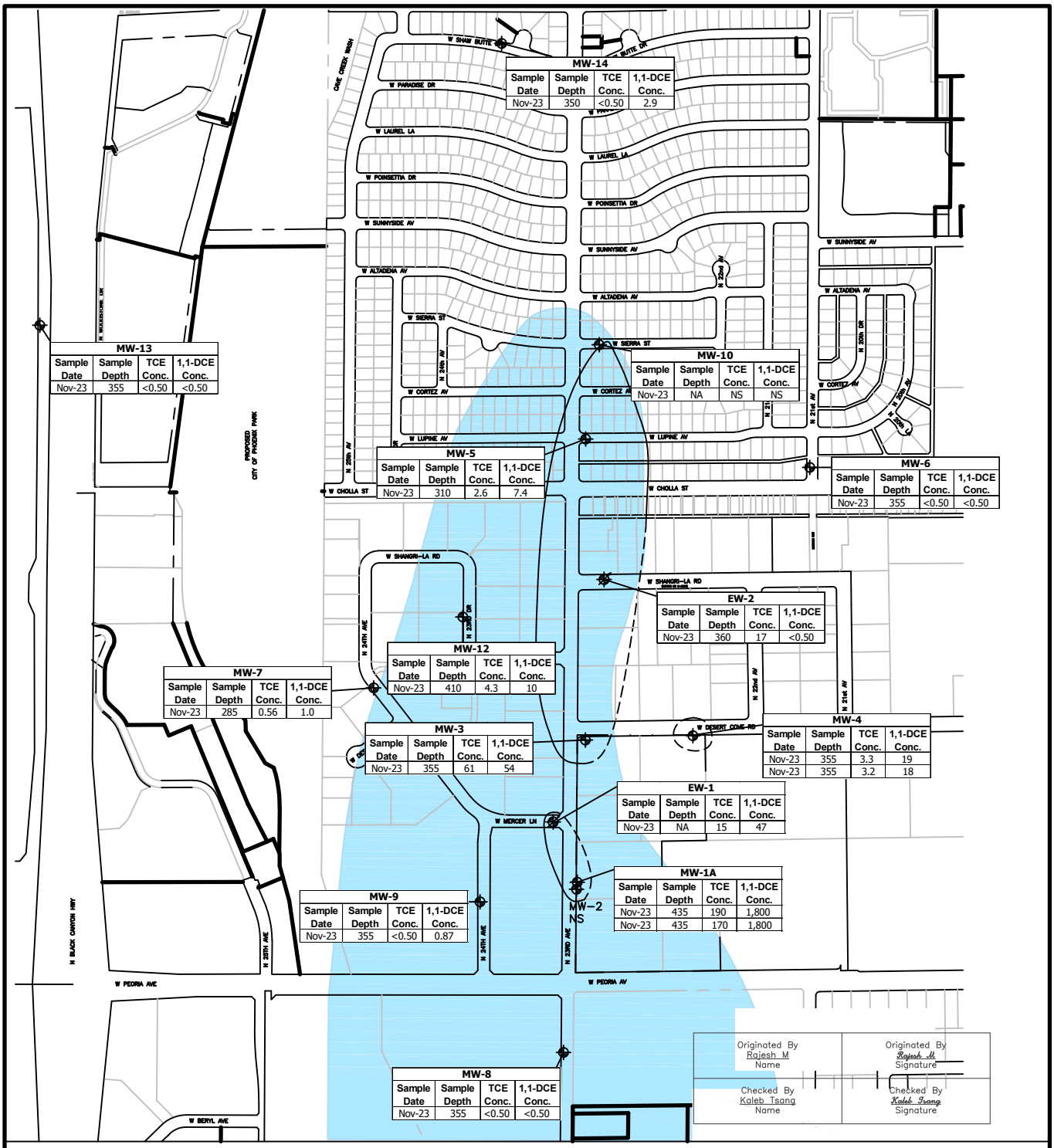

LEGEND

Estimated Capture Zone boundary

Extraction Well

Monitoring Well

Peoria Avenue Site Boundary

TCE Trichloroethene

11–DCE 1,1–Dichloroethene

Approximate area exceeding Aquifer Water Quality Standards (dashed line where inferred)

NS = Not Sampled
Conc. = concentration
J = estimated concentration
Sample depth (feet below ground surface)
All concentrations in ug/L

N

0 500
FEET

Figure 3-2
Fall 2023 TCE and 1,1-DCE Concentrations
Honeywell Peoria Avenue Site
Phoenix, Arizona

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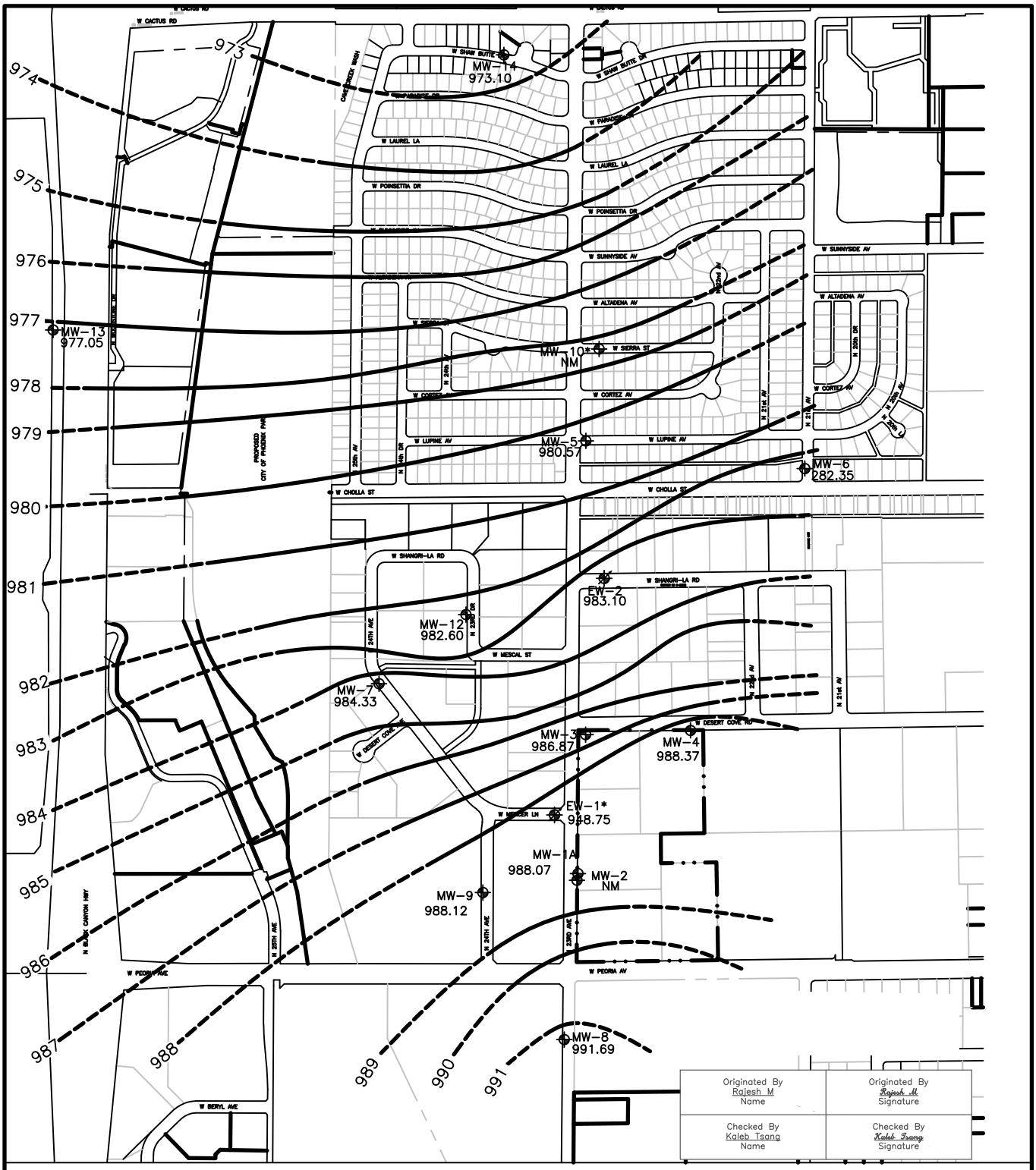

Figure 3-3
2023 Groundwater Elevations
Honeywell Peoria Avenue Site
Phoenix, Arizona

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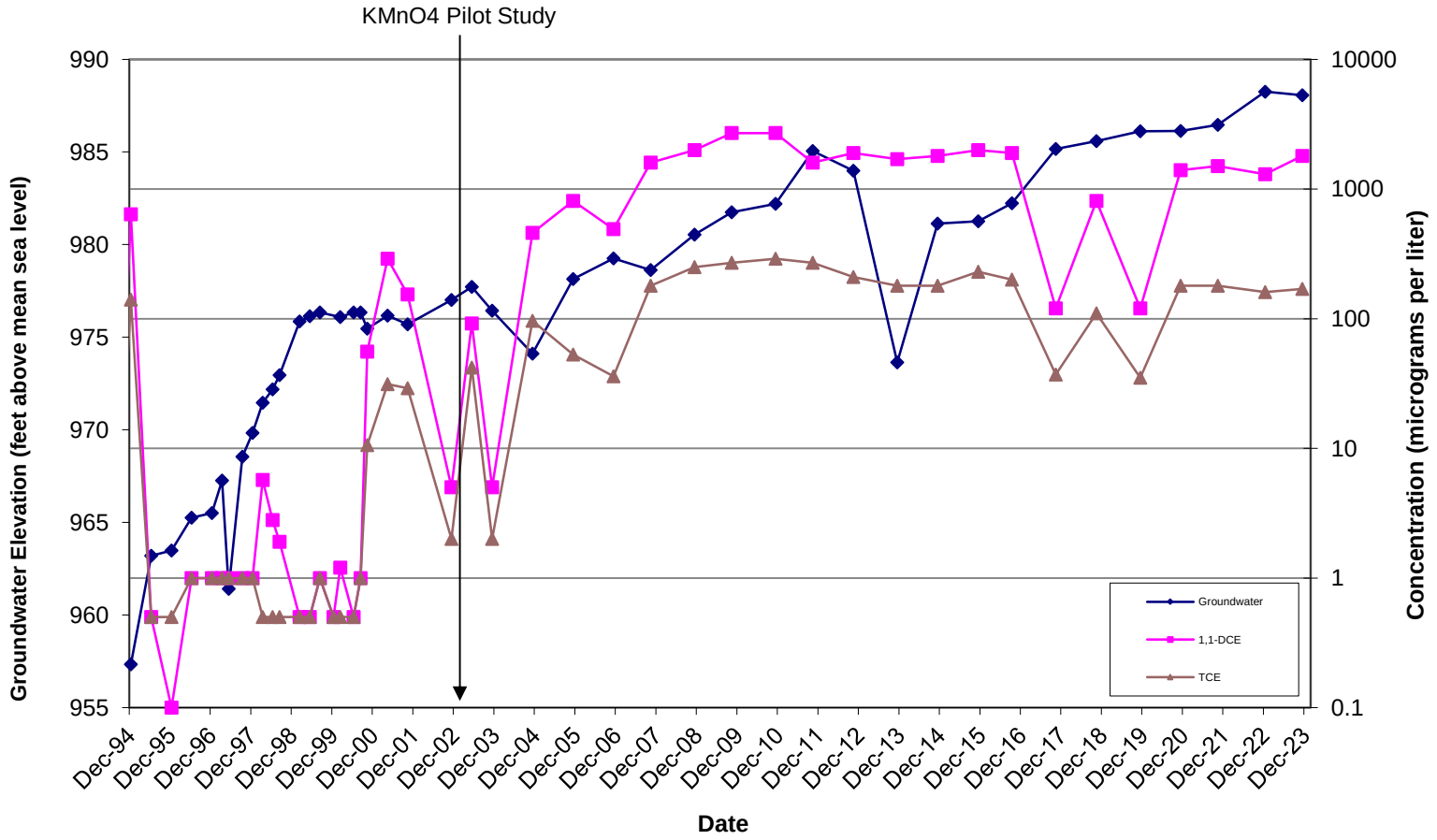

Notes: Non-detect chemical concentrations are plotted at the detection limit.
Sampling method was changed from submersible pump to passive diffusion bag in November 2005.

Originator: **Bhagya S**	*Bhagya S* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Figure 6-1
MW-1a Hydrograph and Concentration Data
Peoria Avenue Site, Phoenix, Arizona

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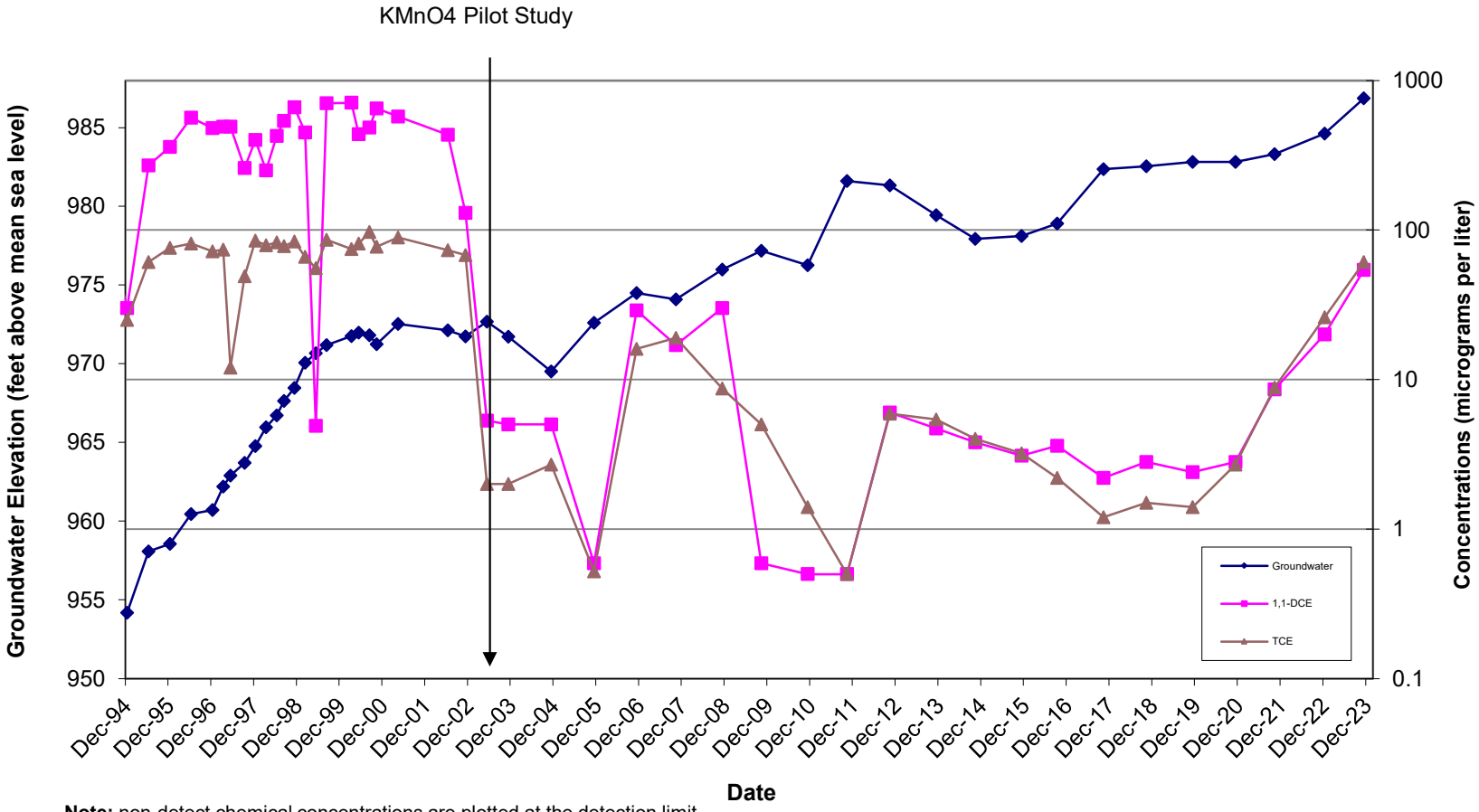

Note: non-detect chemical concentrations are plotted at the detection limit.

Originator: **Bhagya S**	*Bhagya S* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Figure 6-2
MW-3 Hydrograph and Concentration Data
Peoria Avenue Site, Phoenix, Arizona

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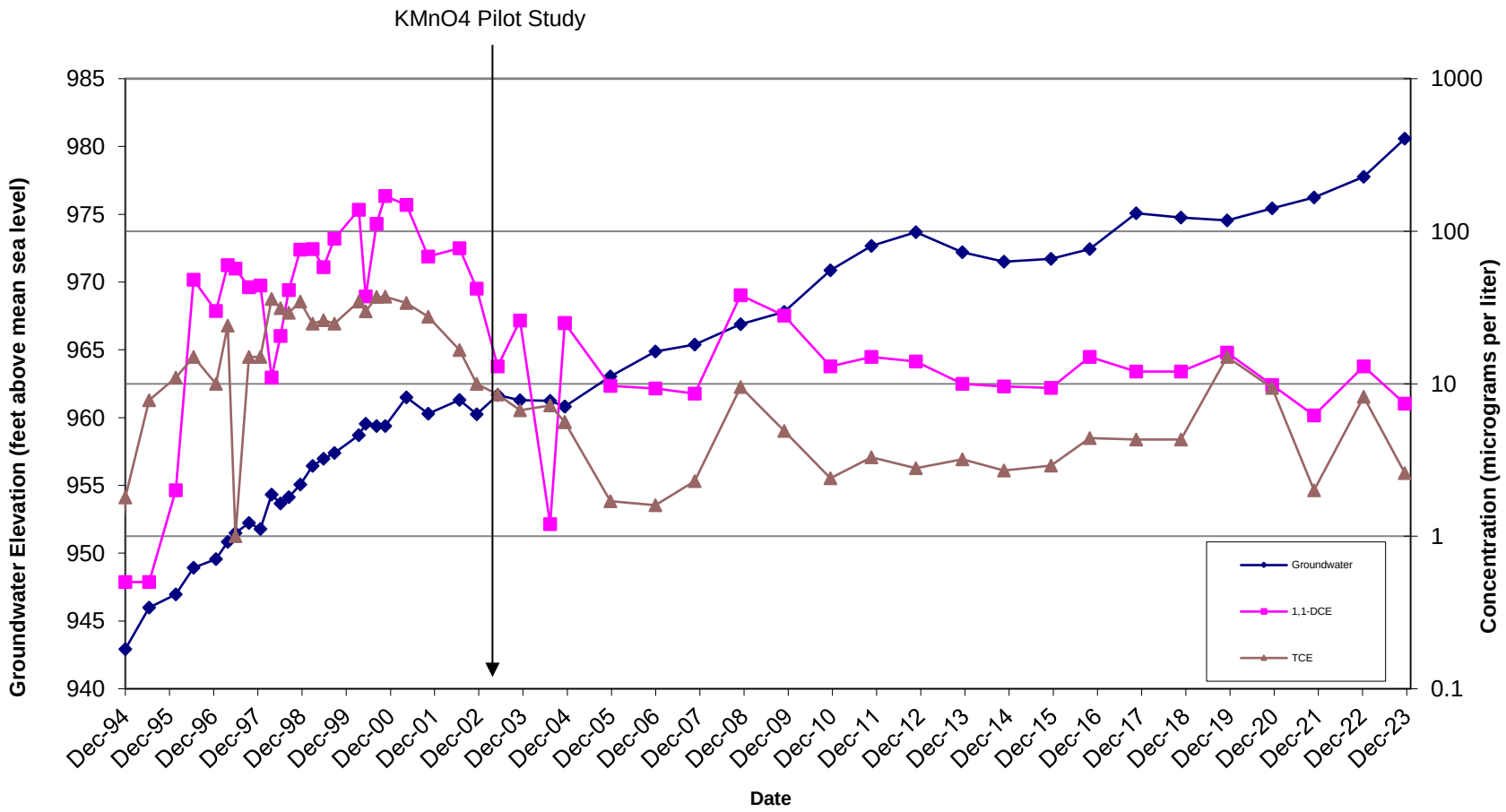

Notes: Non-detect chemical concentrations are plotted at the detection limit.
Sampling method was changed from submersible pump to passive diffusion bag in November 2005.

Originator: **Bhagya S**	*Bhagya S* (Signature)
Checked by: **Derek Foehr**	*Derek Foehr* (Signature)

Figure 6-3
MW-5 Hydrograph and Concentration Data
Peoria Avenue Site, Phoenix, Arizona

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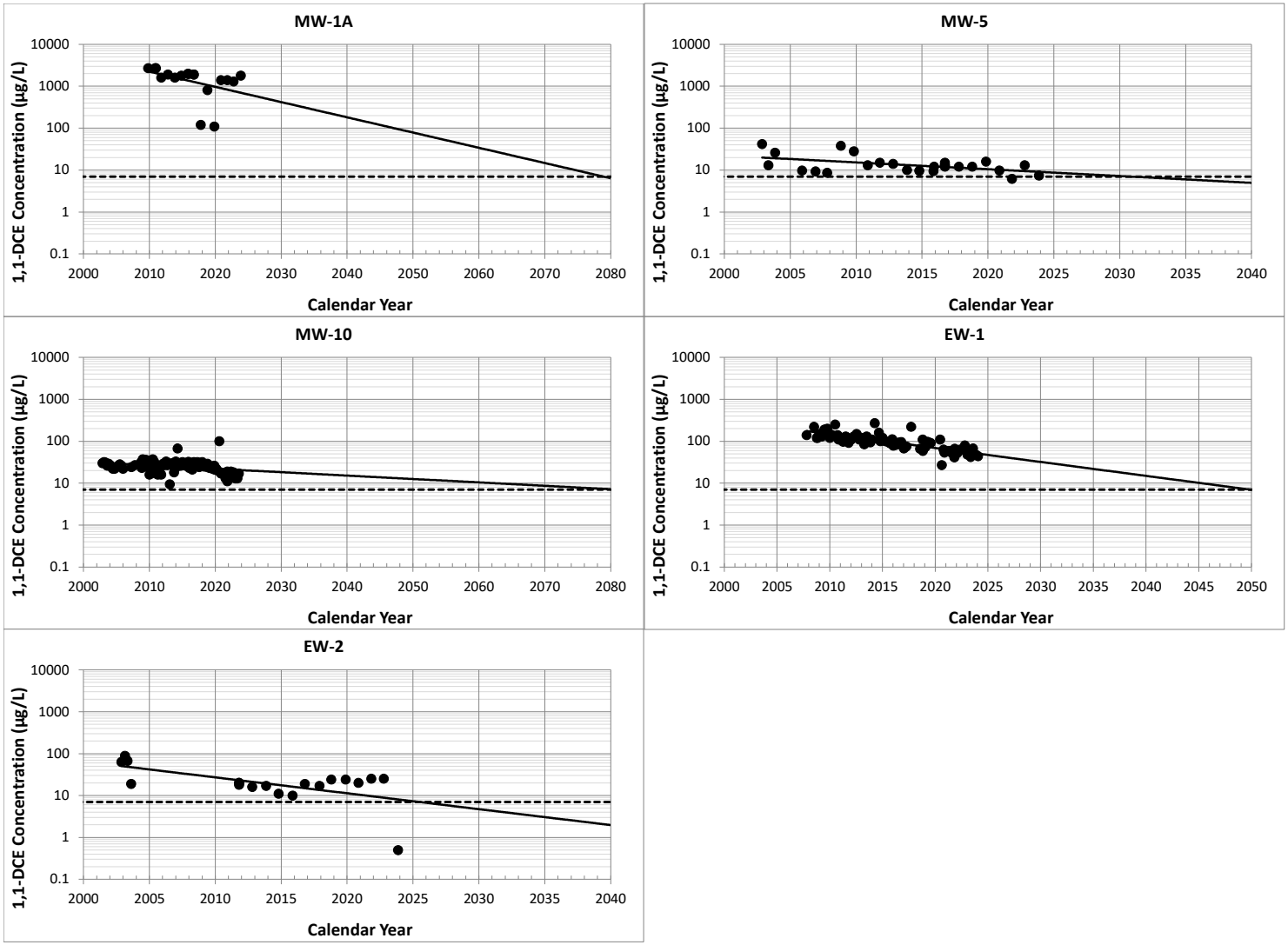

Figure 7-1. Linear Regression on Wells MW-1a
MW-5, MW-10, EW-1, and EW-2 for 1,1-DCE

Honeywell Peoria Avenue Site,
Phoenix, Arizona

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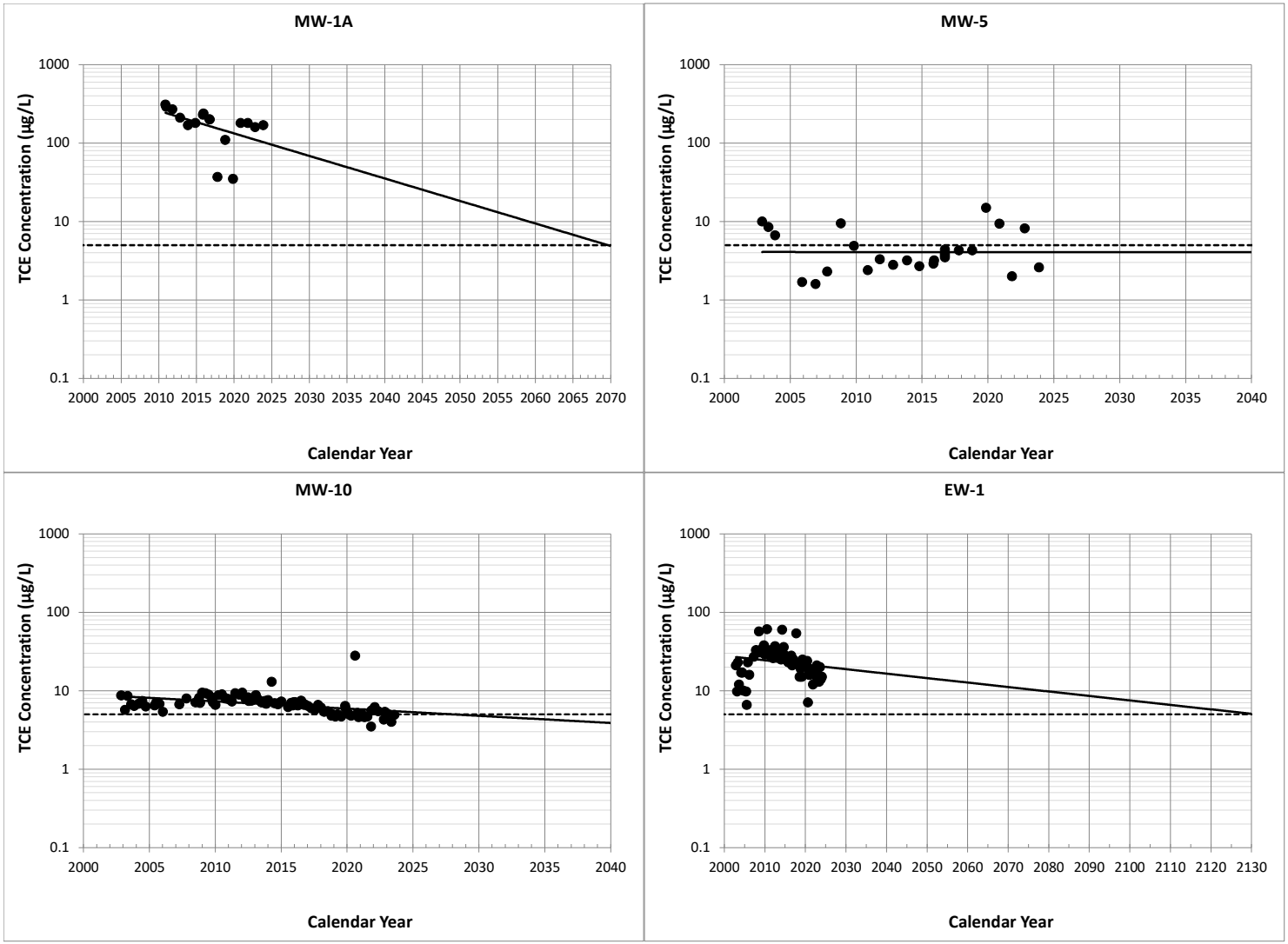

Figure 7-2. Linear Regression on Wells MW-1a, MW-5, MW-10, and EW-1 for TCE

Honeywell Peoria Avenue Site, Phoenix, Arizona

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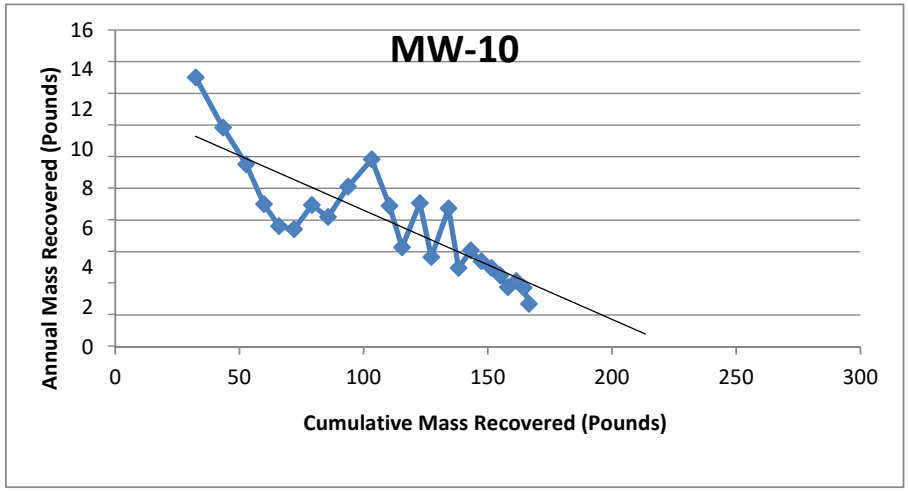

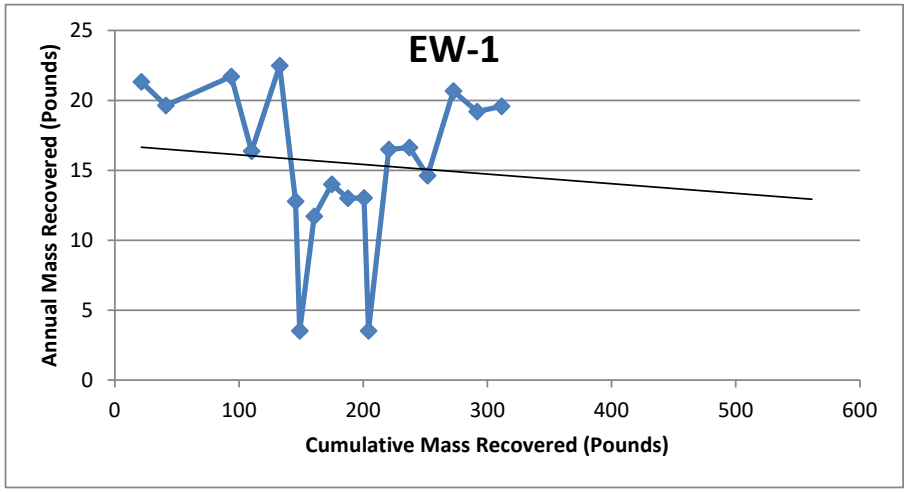

Notes:
Rates that appeared to be impacted by the permanganate pilot test (2002-2007) are not included

Figure 7-3. Decline Curves for Wells MW-10 and EW-1

Honeywell Peoria Avenue Site,
Phoenix, Arizona

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Appendix A
Trend Analysis and Monitoring Evaluation

Table A-1. Summary of Mann-Kendall Trend Statistical Analysis - All Years

2023 Periodic Site Review Report

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
MW-1a	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
MW-2	Decreasing	Decreasing	Prob. Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
MW-3	Prob. Increasing	Stable	Stable	Stable	Stable	Stable	No Trend
MW-4	Increasing	Stable	Stable	No Trend	Stable	Stable	Increasing
MW-5	Decreasing	Decreasing	Stable	No Trend	Stable	Stable	No Trend
MW-6	Stable	Stable	Stable	No Trend	Stable	Stable	Stable
MW-7	Stable	Stable	Stable	No Trend	Stable	Stable	Stable
MW-8	Stable	Stable	Stable	Stable	Stable	Stable	Prob. Decreasing
MW-9	Stable	Stable	Stable	Stable	Stable	Stable	Stable
MW-10	Prob. Decreasing	Decreasing	Stable	Prob. Decreasing	Stable	Stable	Decreasing
MW-12	Increasing	No Trend	Stable	Prob. Increasing	Stable	Stable	Increasing
MW-13	Stable	Stable	Stable	Prob. Increasing	Stable	Stable	Stable
MW-14	No Trend	No Trend	Stable	Stable	Stable	Stable	No Trend
EW-1	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
EW-2	No Trend	Prob. Decreasing	Stable	Stable	Stable	Stable	Increasing

Notes:
Non-detect concentrations were used at their detection level for purposes of the evaluation.
NA = Not Available

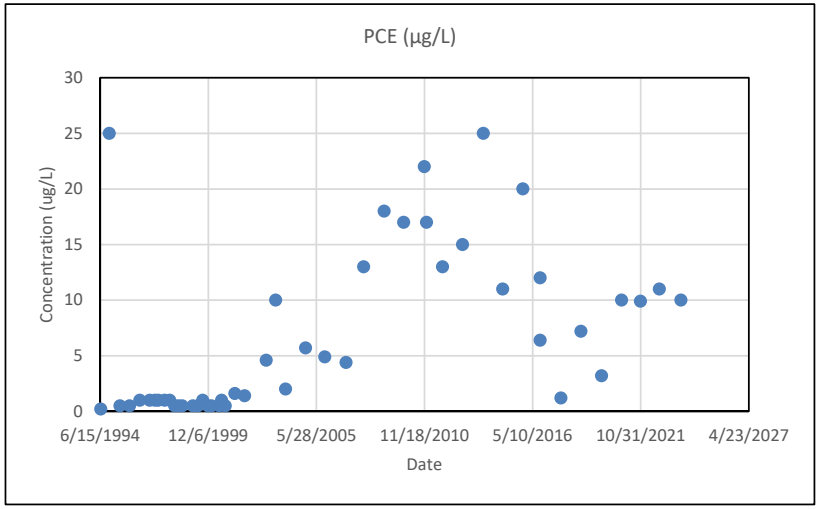
Table A-2. Summary of Mann-Kendall Trend Statistical Analysis - 5 Year

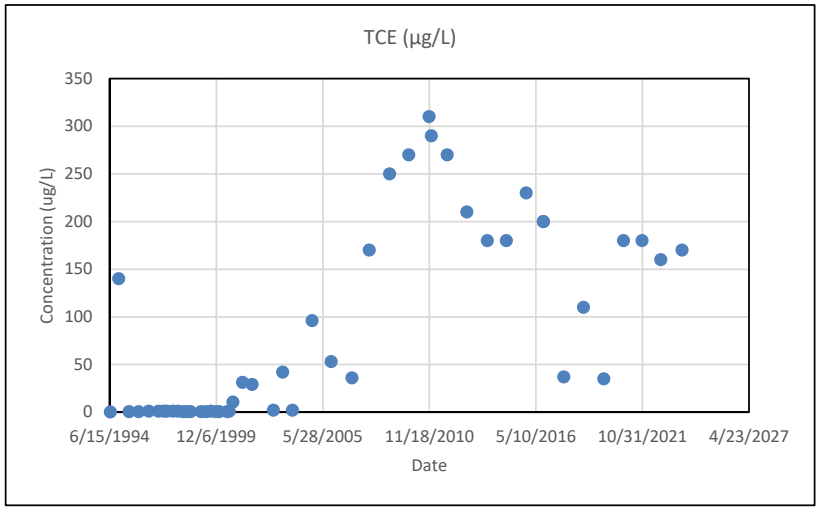
2023 Periodic Site Review Report

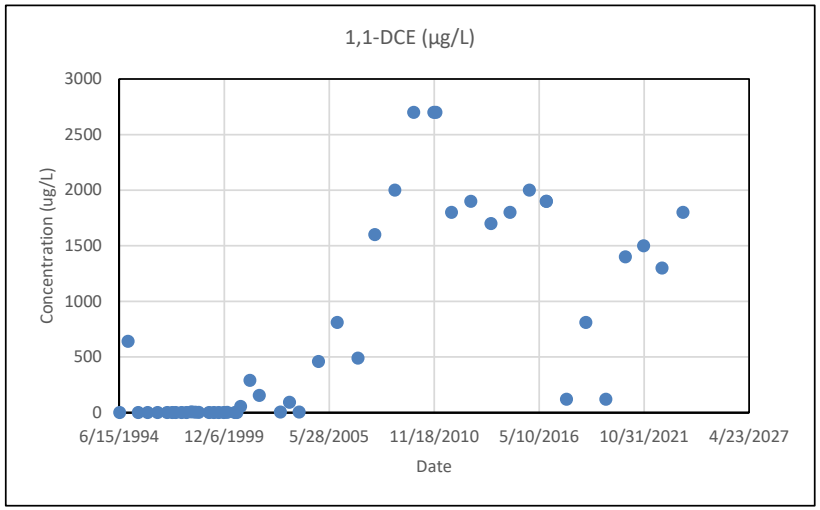
Honeywell Peoria Avenue Site, Phoenix, Arizona

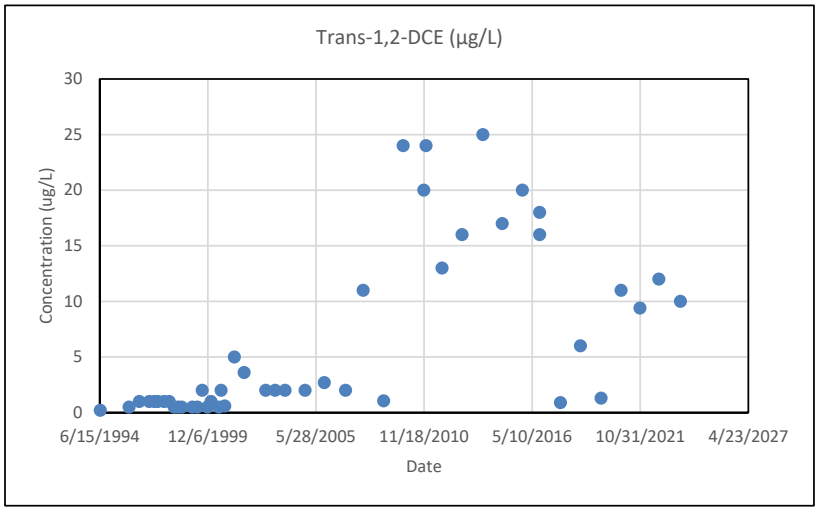
Well	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
MW-1a	No Trend	No Trend	No Trend	No Trend	Stable	No Trend	No Trend
MW-2	Stable	No Trend	No Trend	Stable	No Trend	Stable	No Trend
MW-3	Increasing	Stable	Stable	Stable	Stable	Stable	Increasing
MW-4	Increasing	Stable	Stable	Stable	Stable	Stable	No Trend
MW-5	Stable	No Trend	Stable	Stable	Stable	Stable	Stable
MW-6	Stable	Stable	Stable	Stable	Stable	Stable	Stable
MW-7	Decreasing	No Trend	No Trend	Increasing	No Trend	No Trend	Decreasing
MW-8	No Trend	Stable	Stable	No Trend	Stable	Stable	No Trend
MW-9	Stable	Stable	Stable	Stable	Stable	Stable	Stable
MW-10	Stable	Stable	No Trend	Stable	No Trend	No Trend	Stable
MW-12	Increasing	No Trend	No Trend	Stable	No Trend	No Trend	Increasing
MW-13	No Trend	No Trend	No Trend	Increasing	No Trend	No Trend	No Trend
MW-14	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
EW-1	No Trend	Stable	No Trend	Stable	No Trend	No Trend	Stable
EW-2	Stable	No Trend	Stable	No Trend	Stable	Stable	Stable

Notes:
Non-detect concentrations were used at their detection level for purposes of the evaluation.
NA = Not Available









Notes:
- Non detections are presented at the detection level.

Figure A-1. Groundwater Concentrations for MW-1a for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

Honeywell Peoria Avenue Site
Phoenix, Arizona

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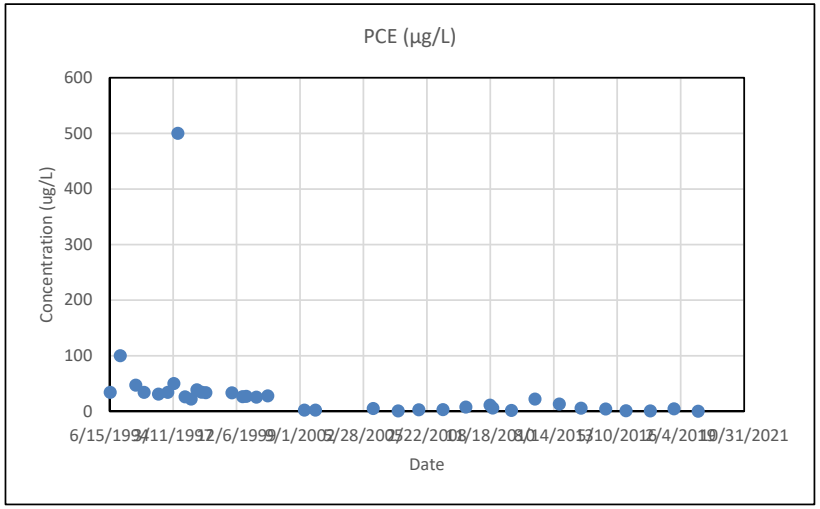
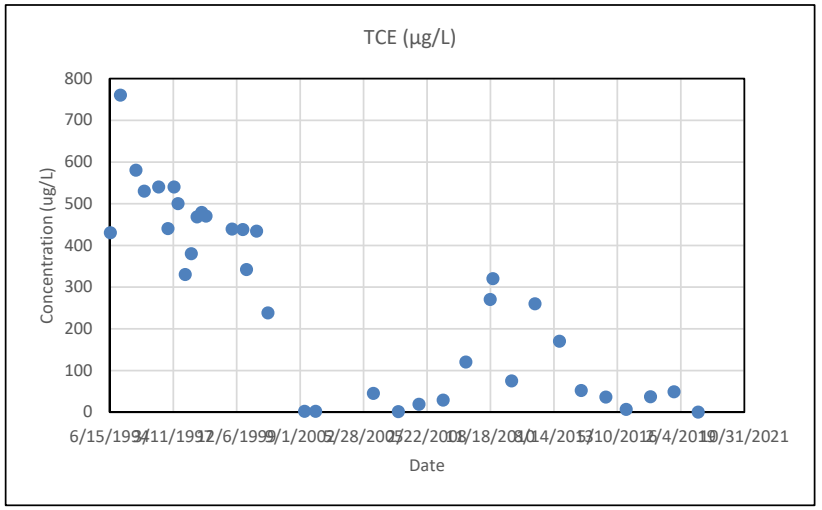
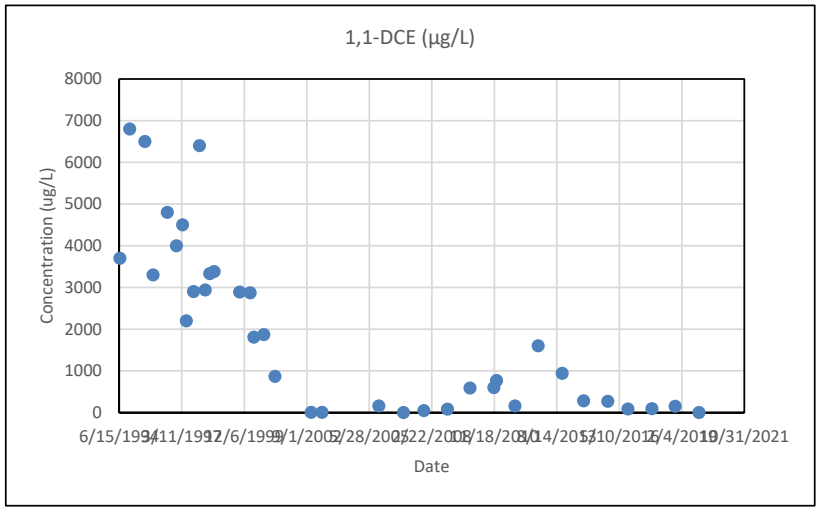
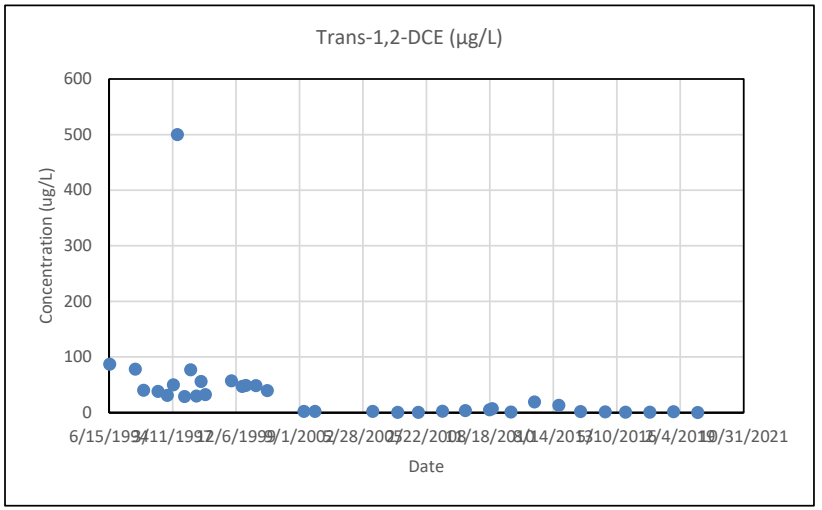






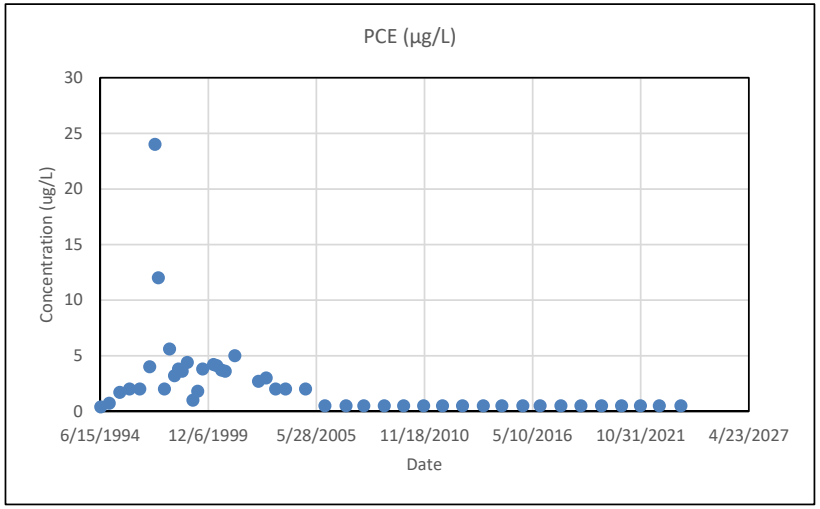


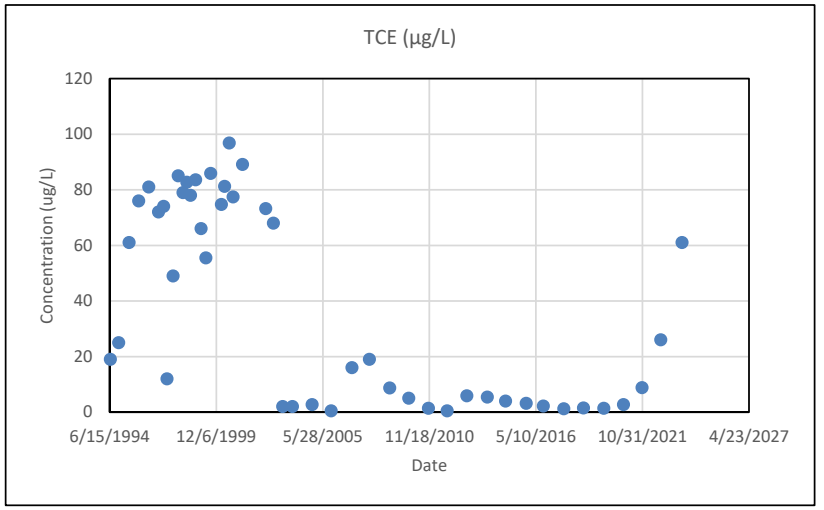
Notes:
- Non detections are presented at the detection level.

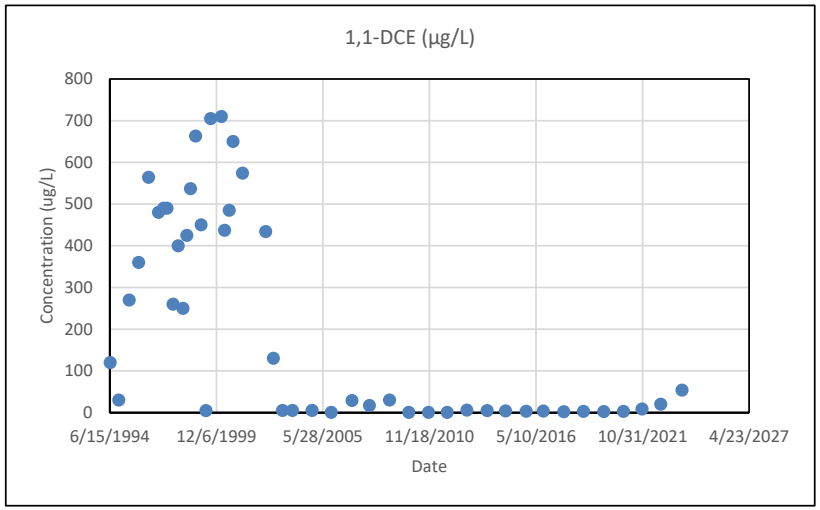
Figure A-2. Groundwater Concentrations for MW-2 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

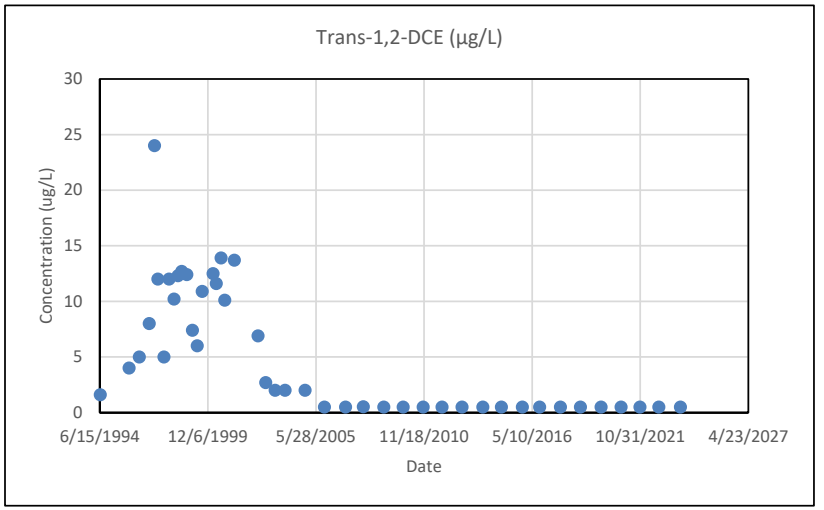
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS







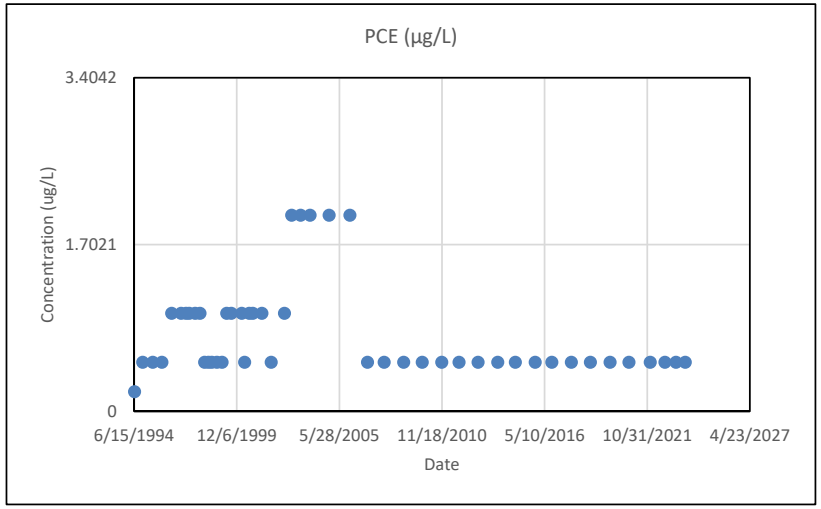


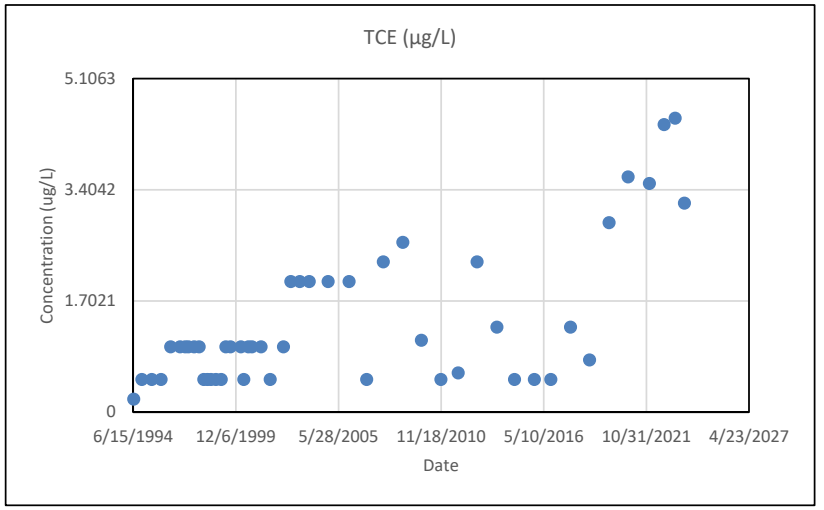
Notes:
- Non detections are presented at the detection level.

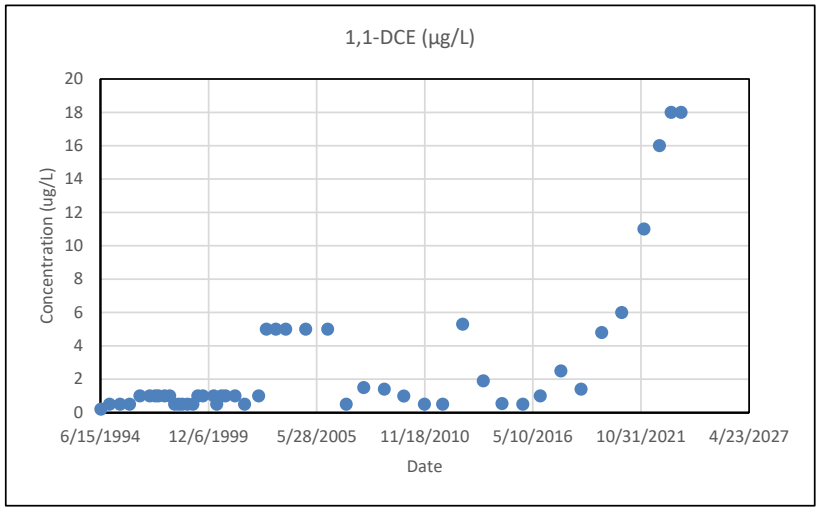
Figure A-3. Groundwater Concentrations for MW-3 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

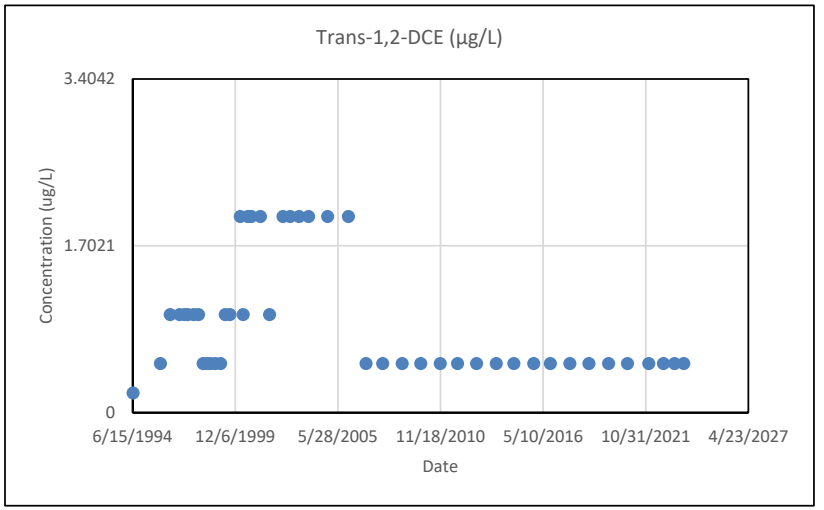
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS







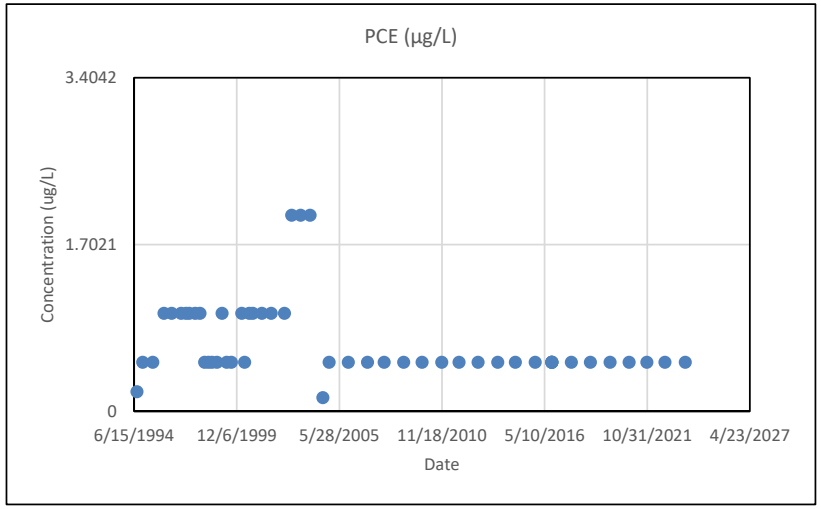


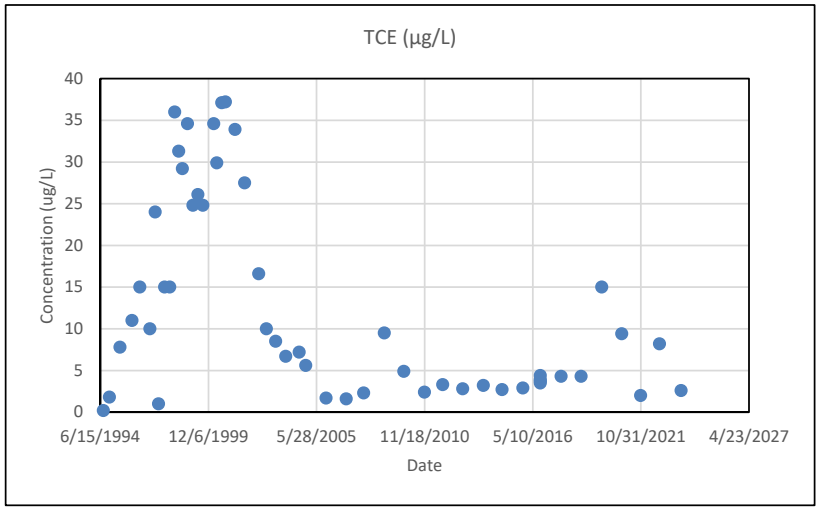
Notes:
- Non detections are presented at the detection level.

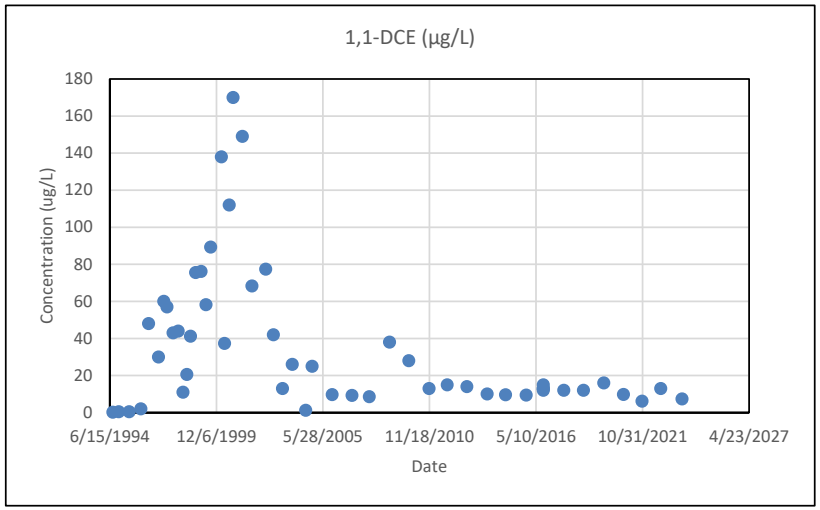
Figure A-4. Groundwater Concentrations for MW-4 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

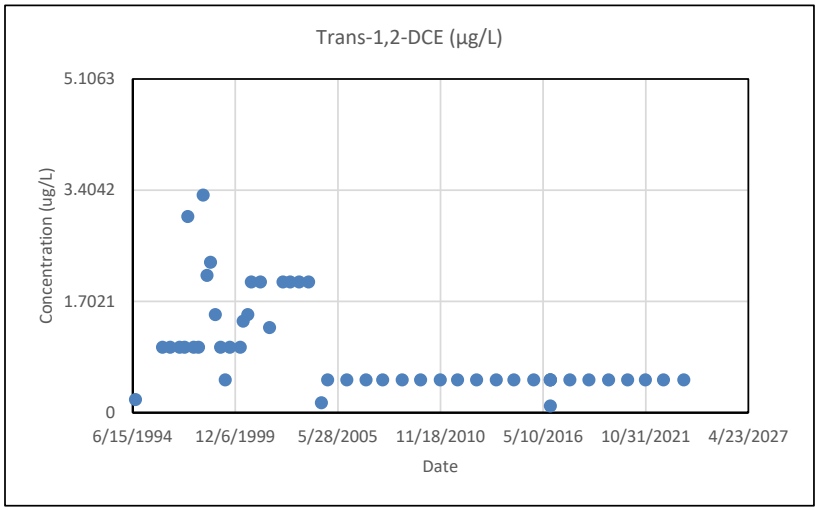
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS







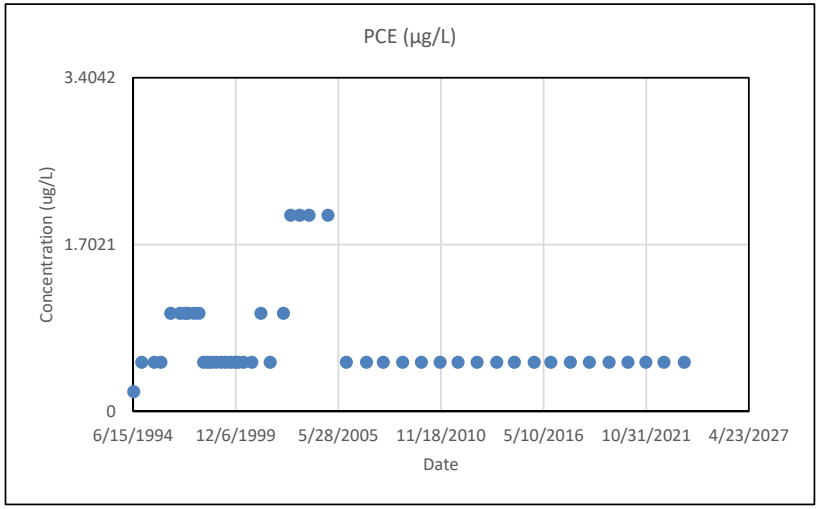


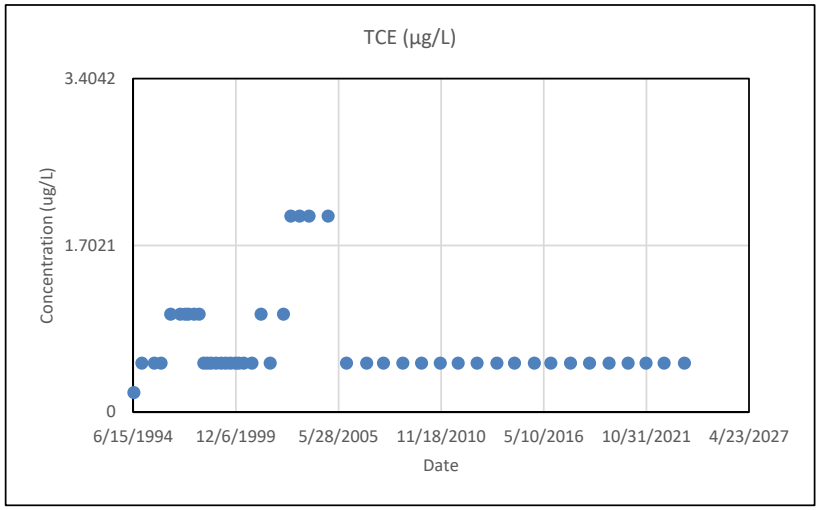
Notes:
- Non detections are presented at the detection level.

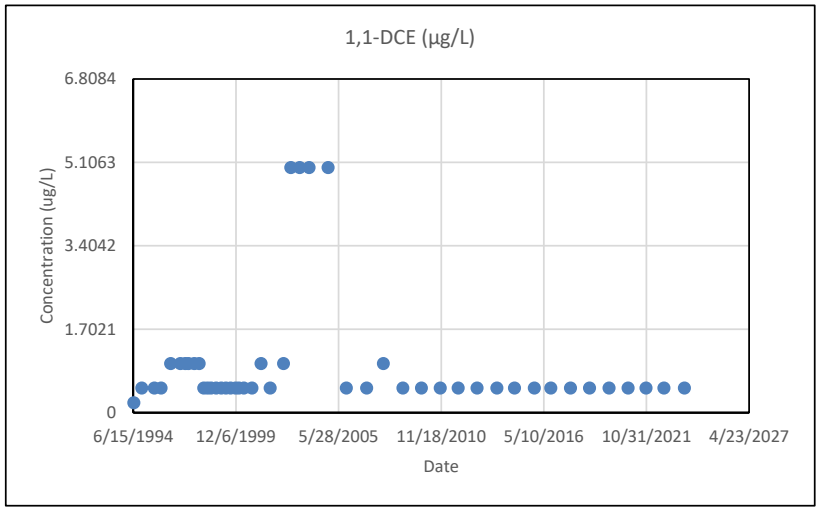
Figure A-5. Groundwater Concentrations for MW-5 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

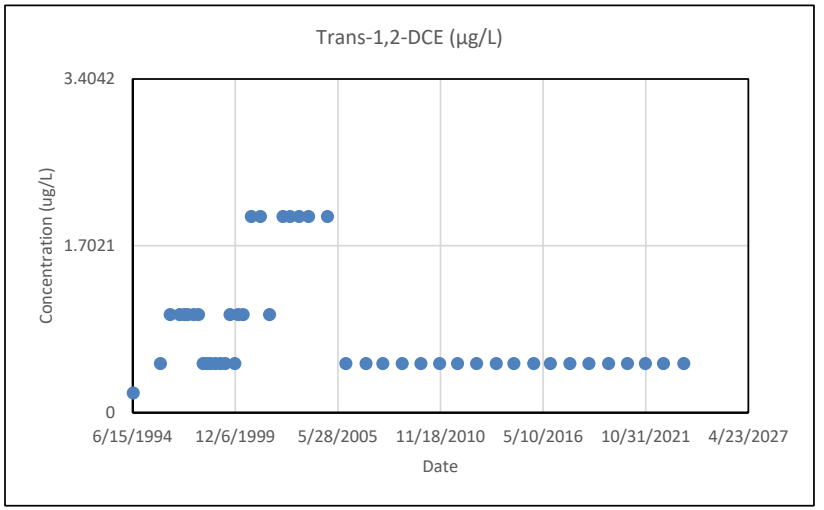
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS









Notes:
- Non detections are presented at the detection level.

Figure A-6. Groundwater Concentrations for MW-6 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

Honeywell Peoria Avenue Site
Phoenix, Arizona

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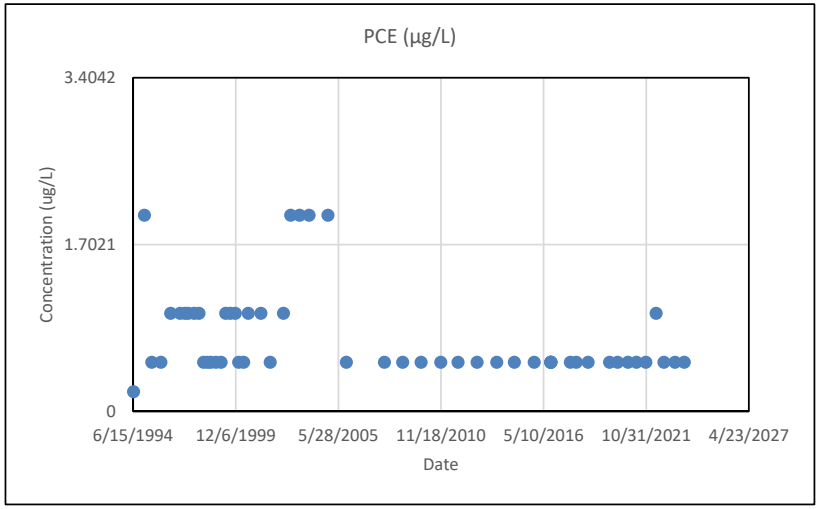
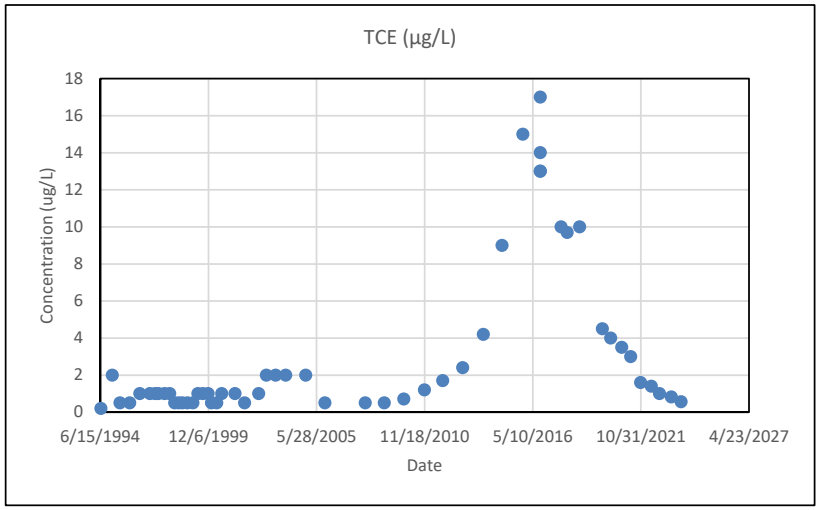
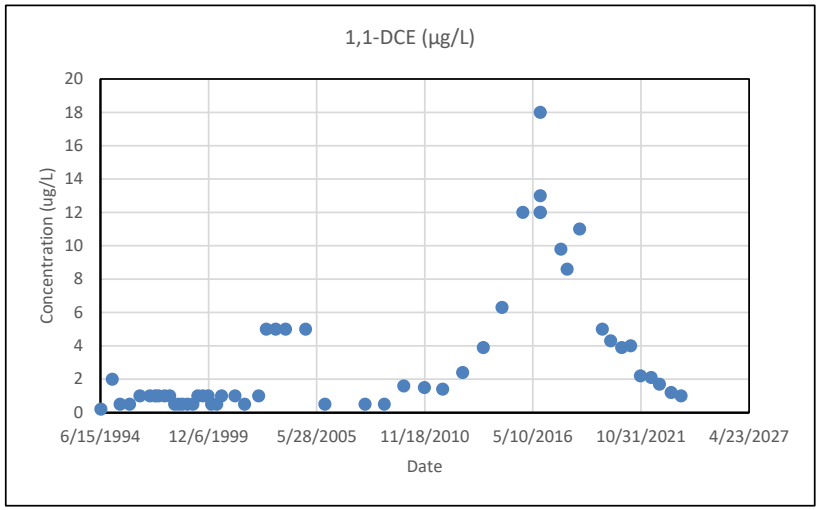
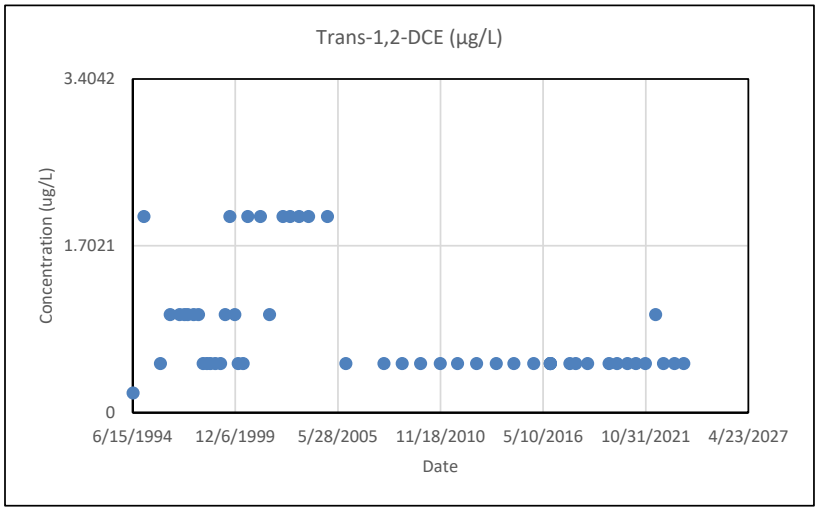






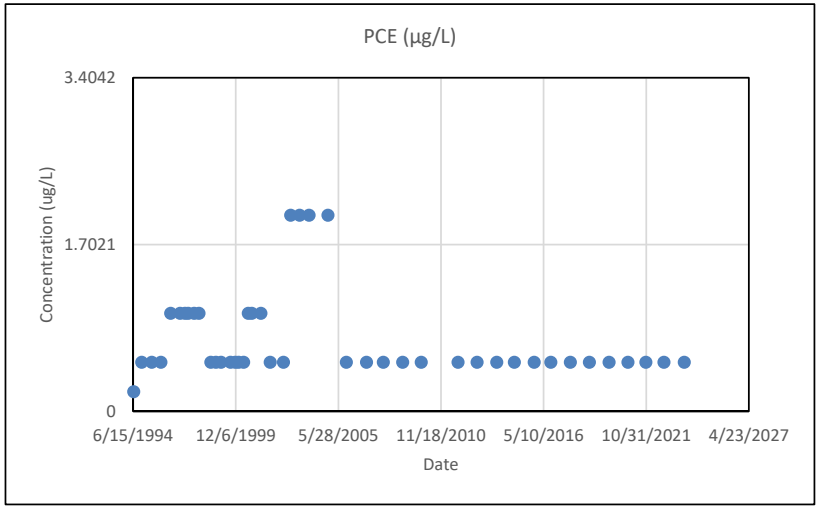


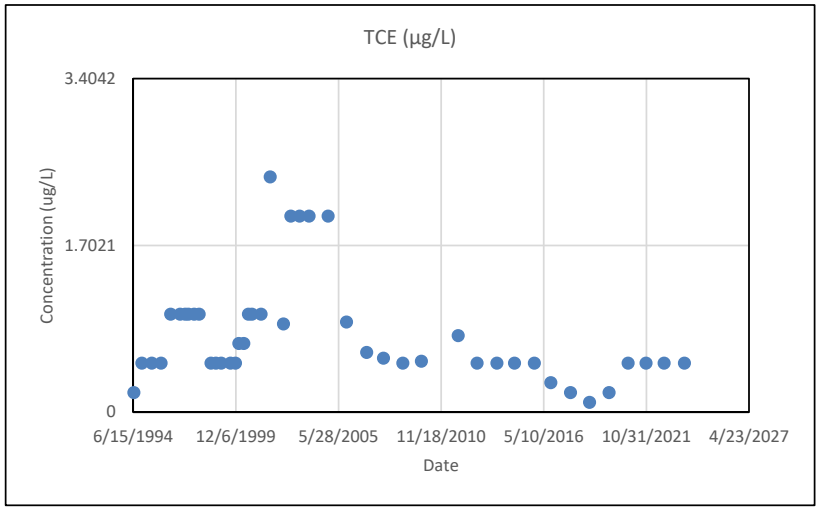
Notes:
- Non detections are presented at the detection level.

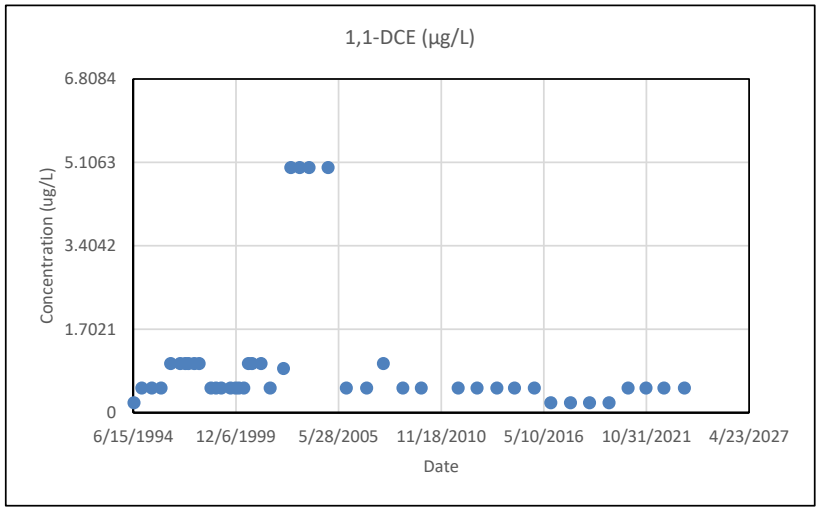
Figure A-7. Groundwater Concentrations for MW-7 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

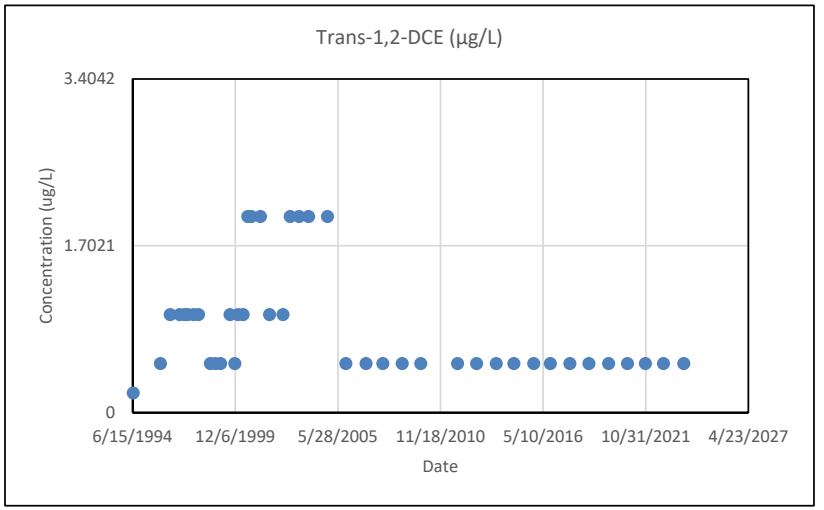
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS









Notes:
- Non detections are presented at the detection level.

Figure A-8. Groundwater Concentrations for MW-8 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

Honeywell Peoria Avenue Site
Phoenix, Arizona

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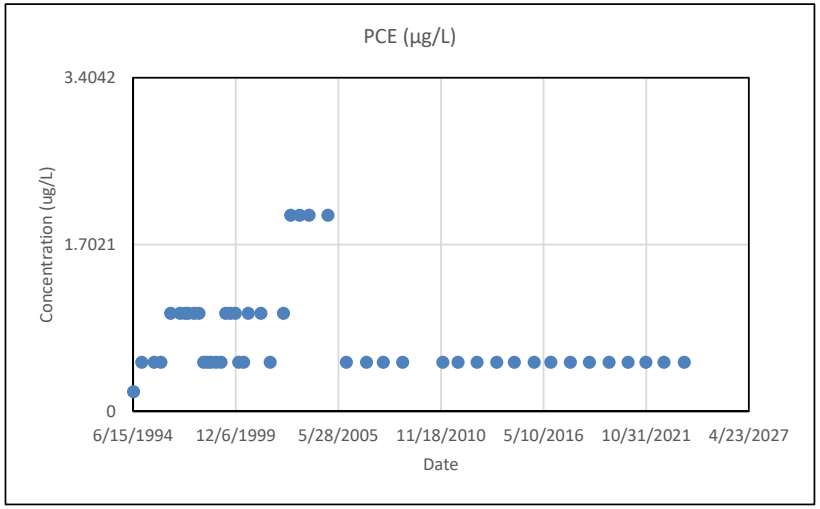
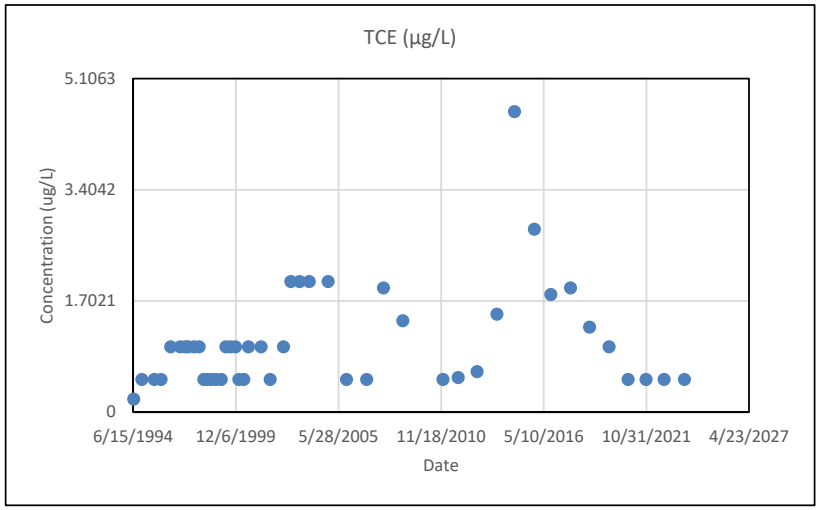
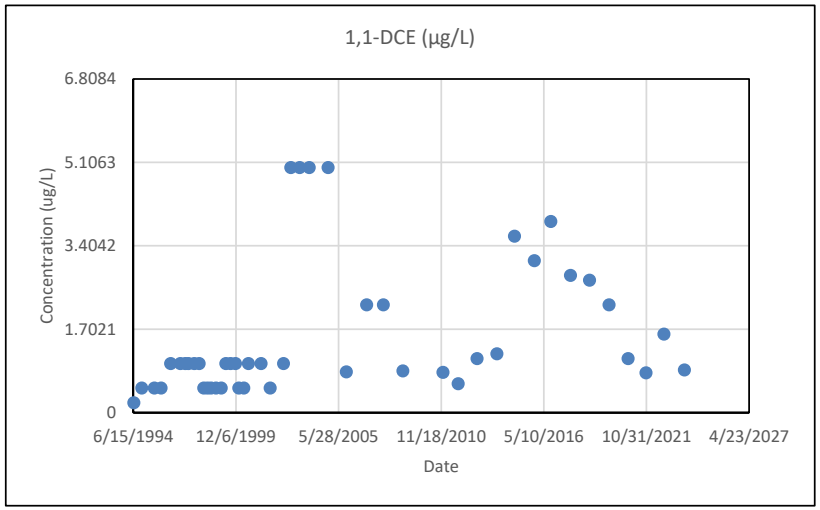
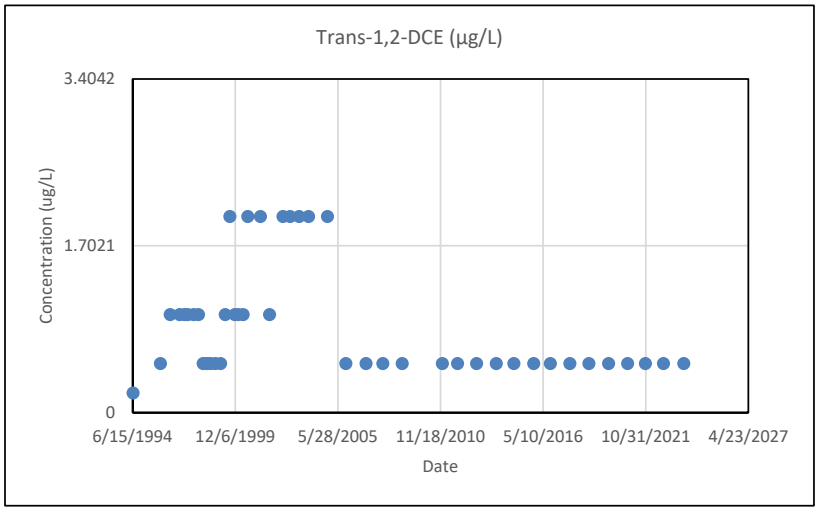






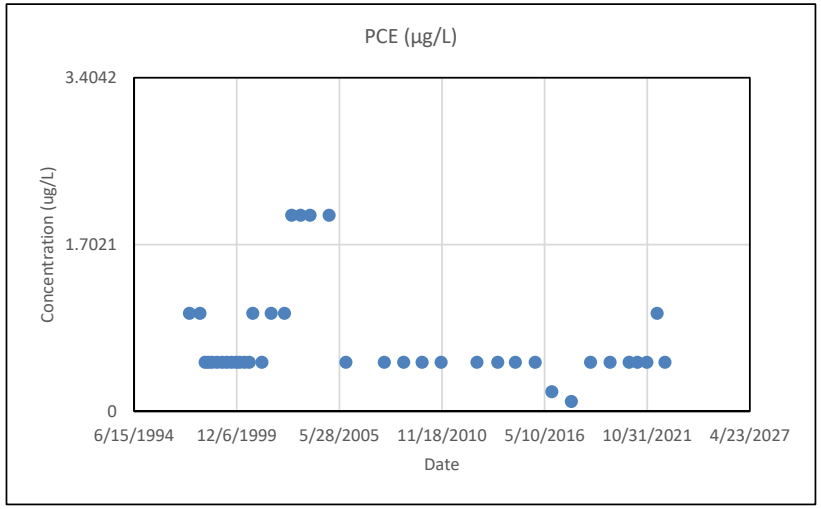


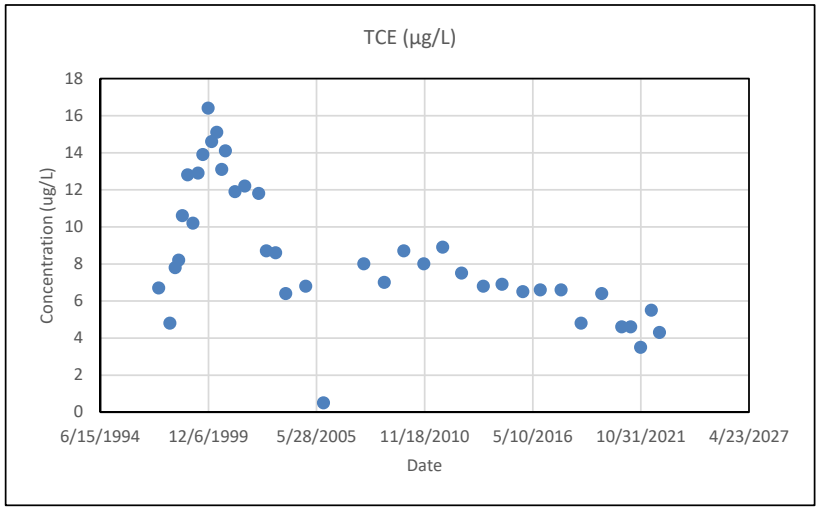
Notes:
- Non detections are presented at the detection level.

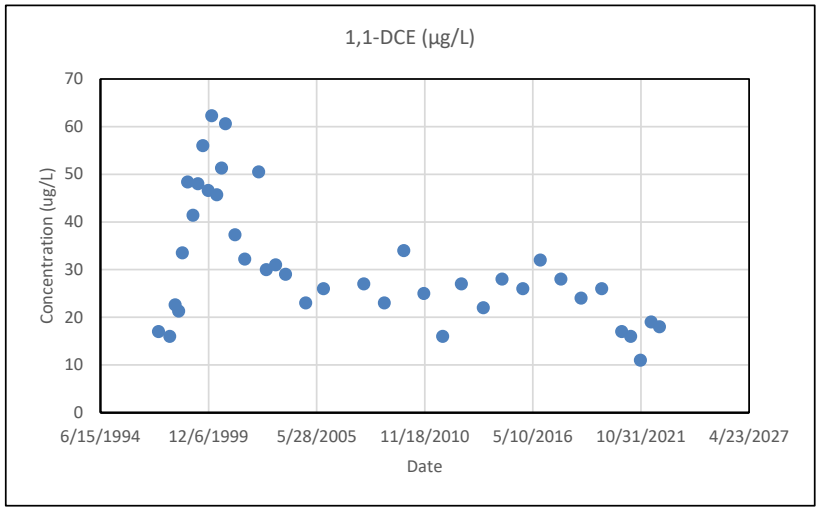
Figure A-9. Groundwater Concentrations for MW-9 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

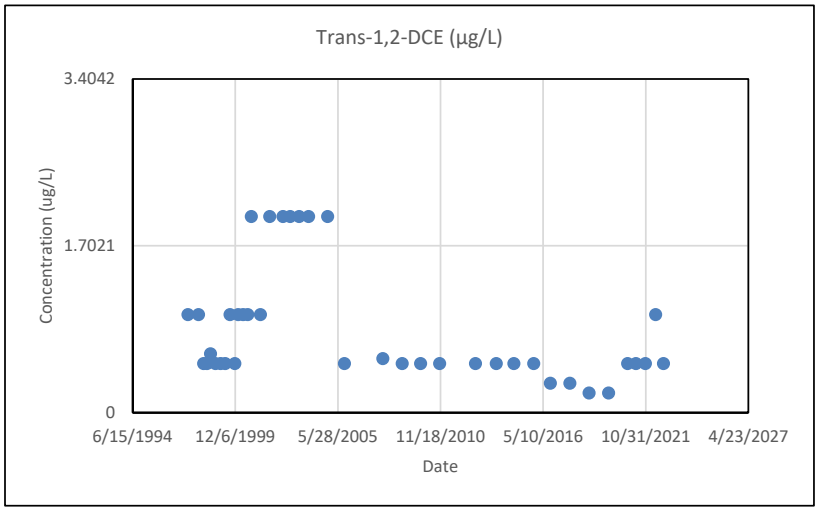
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS









Notes:
- Non detections are presented at the detection level.

Figure A-10. Groundwater Concentrations for MW-10 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

Honeywell Peoria Avenue Site
Phoenix, Arizona

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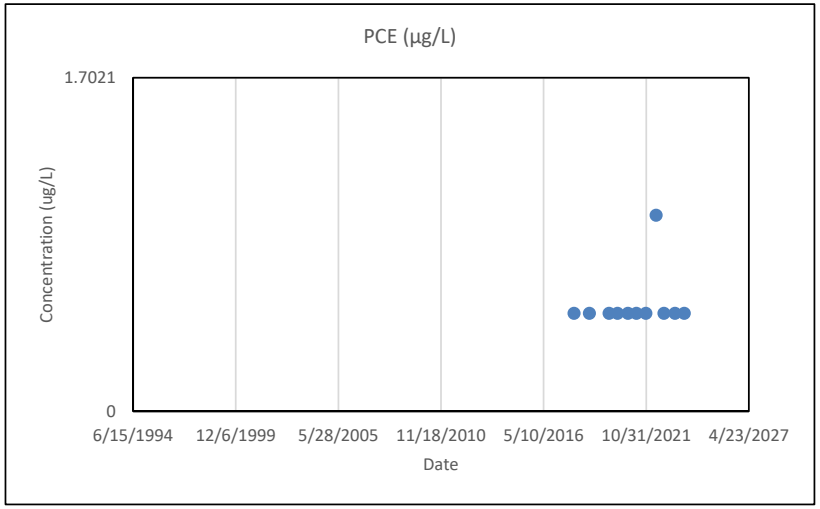

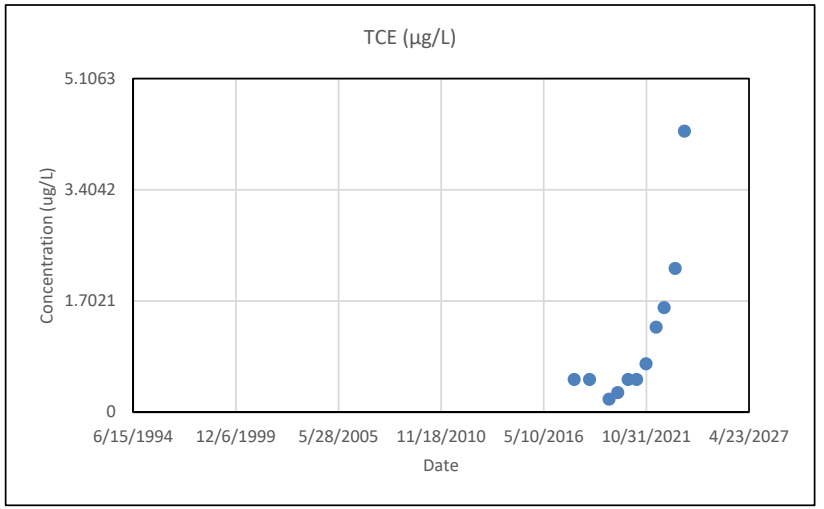

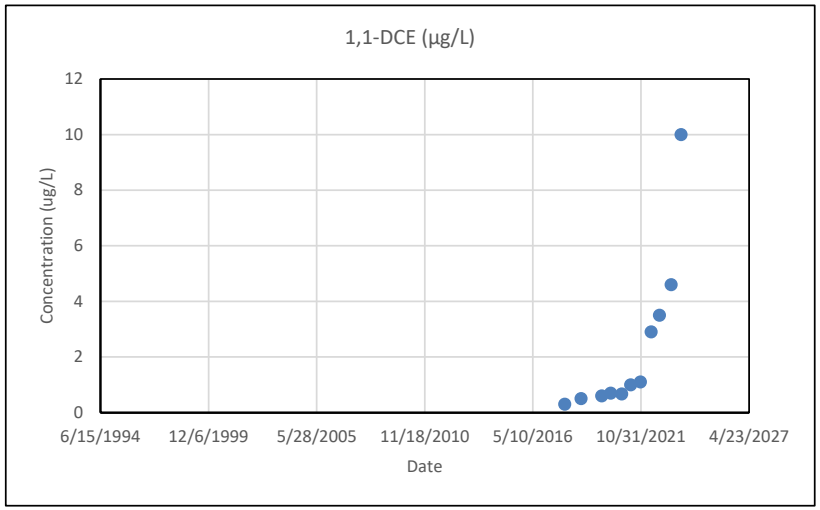

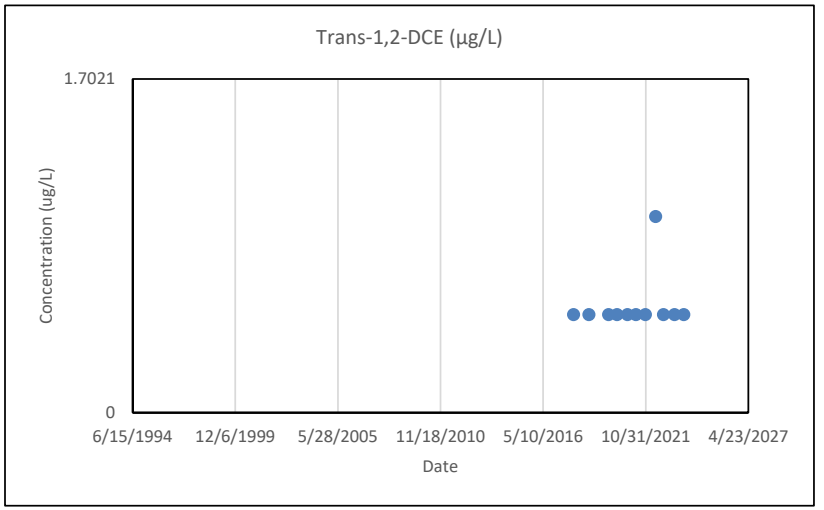

Notes:
- Non detections are presented at the detection level.

Figure A-11. Groundwater Concentrations for MW-12 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

Honeywell Peoria Avenue Site
Phoenix, Arizona

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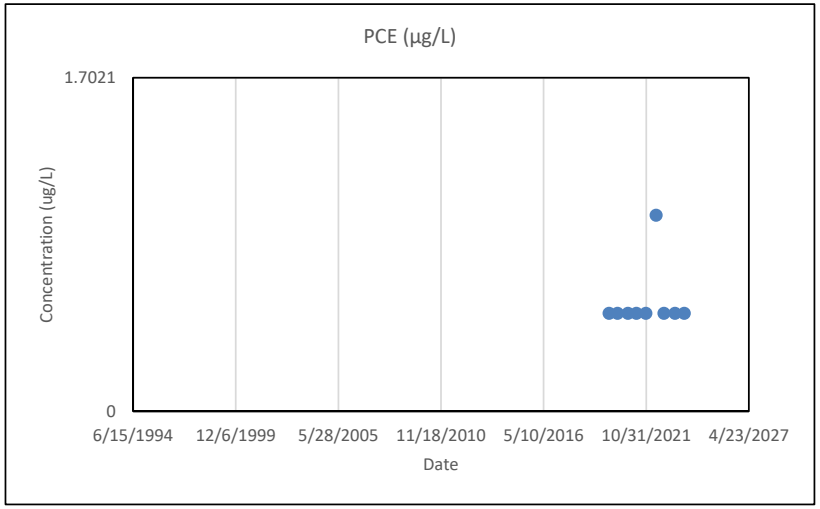

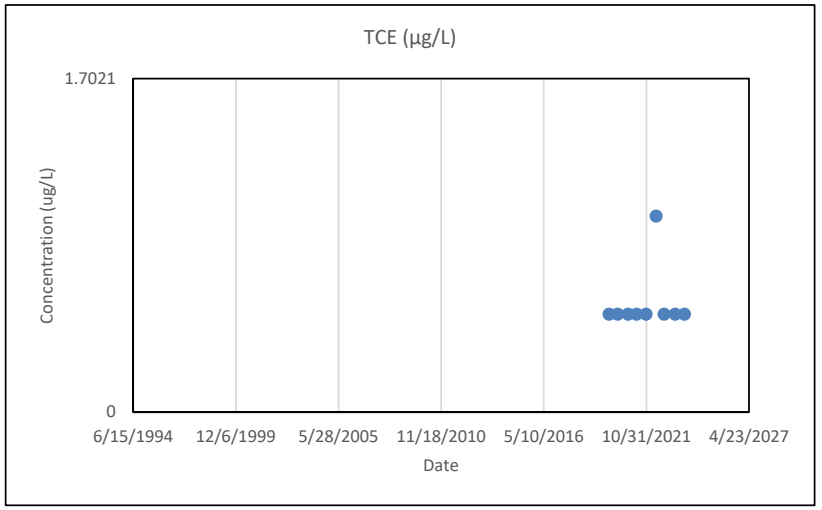

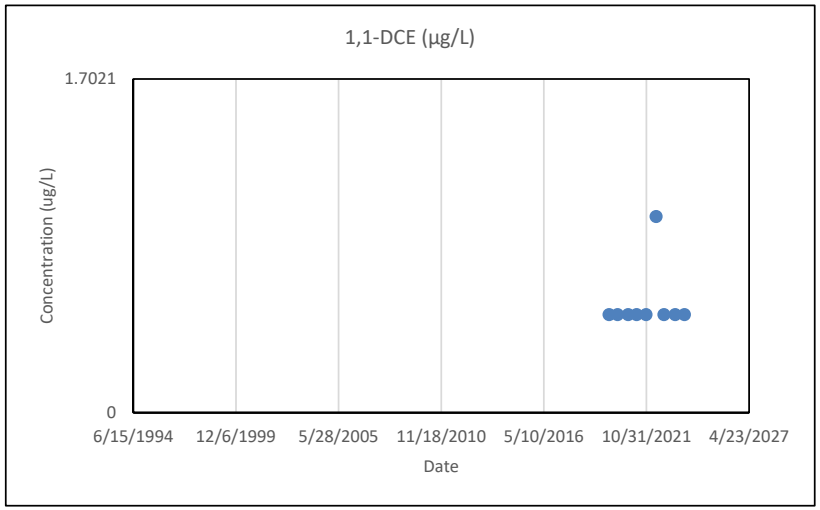

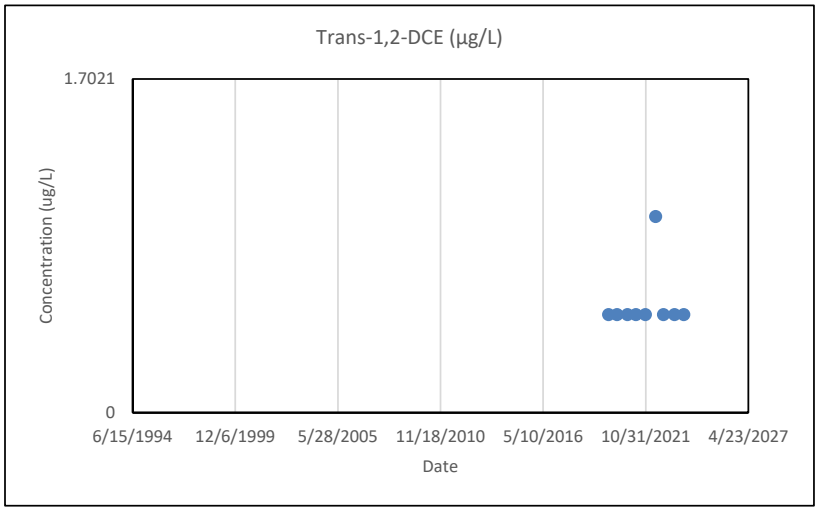

Notes:
- Non detections are presented at the detection level.

Figure A-12. Groundwater Concentrations for MW-13 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

Honeywell Peoria Avenue Site
Phoenix, Arizona

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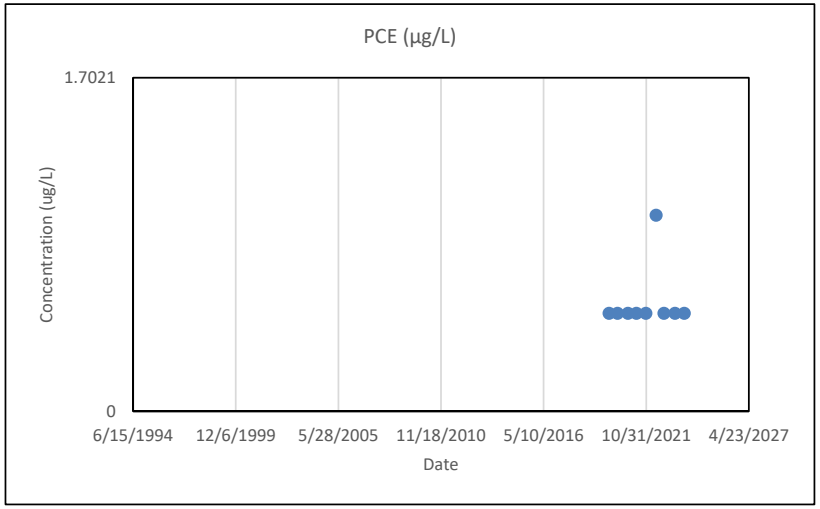
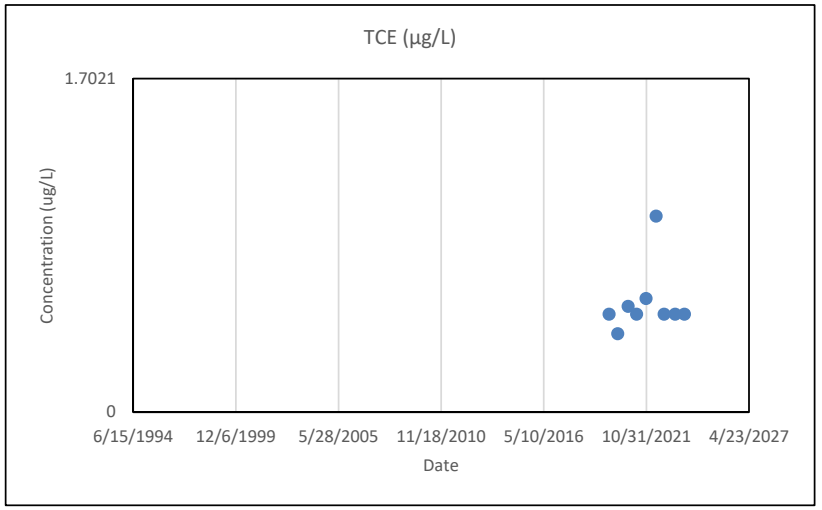
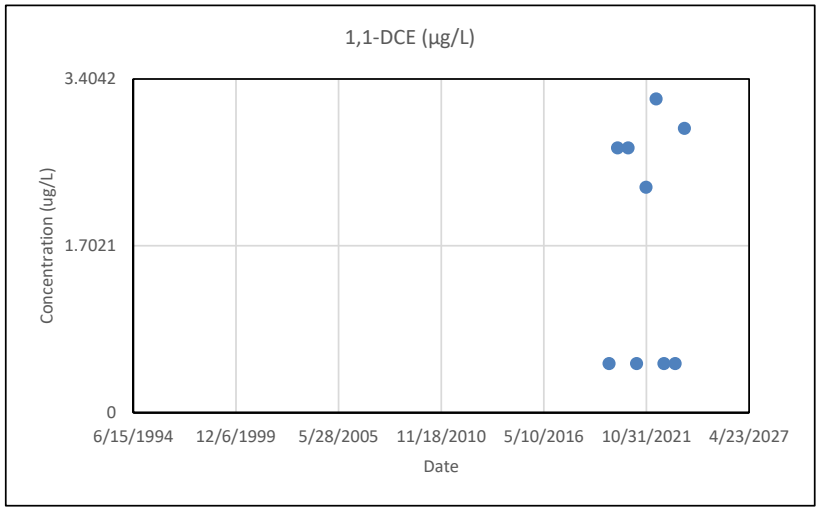
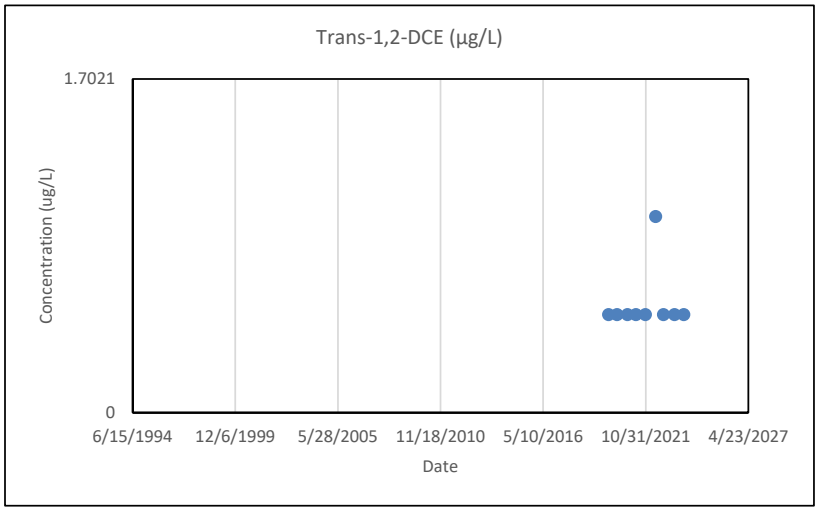






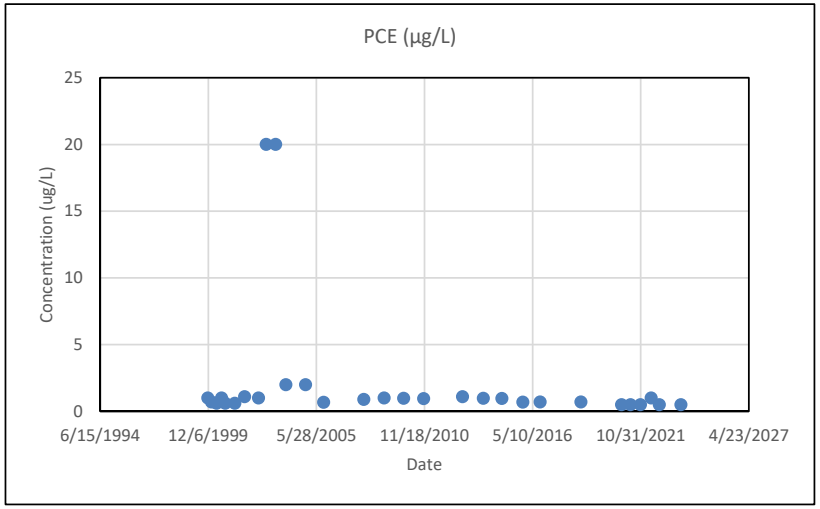


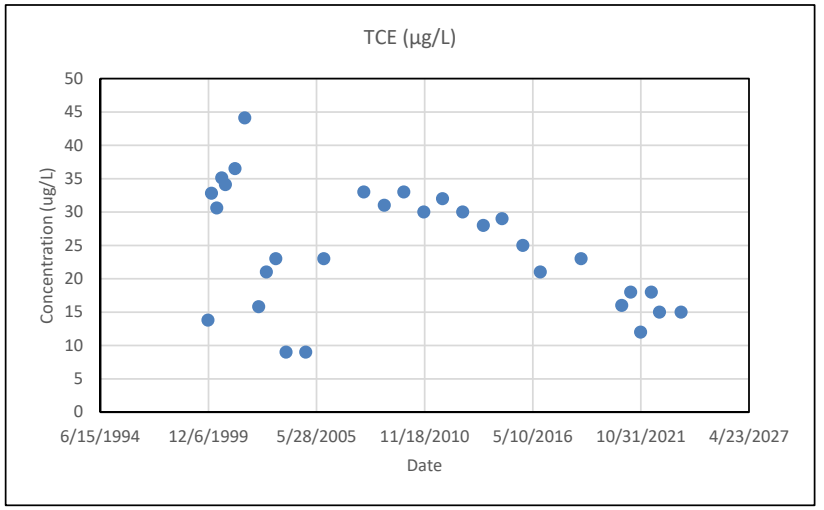
Notes:
- Non detections are presented at the detection level.

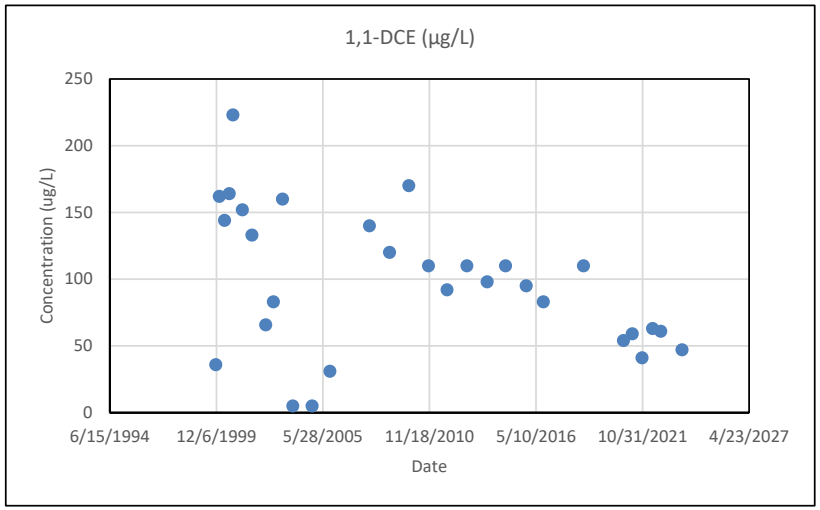
Figure A-13. Groundwater Concentrations for MW-14 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

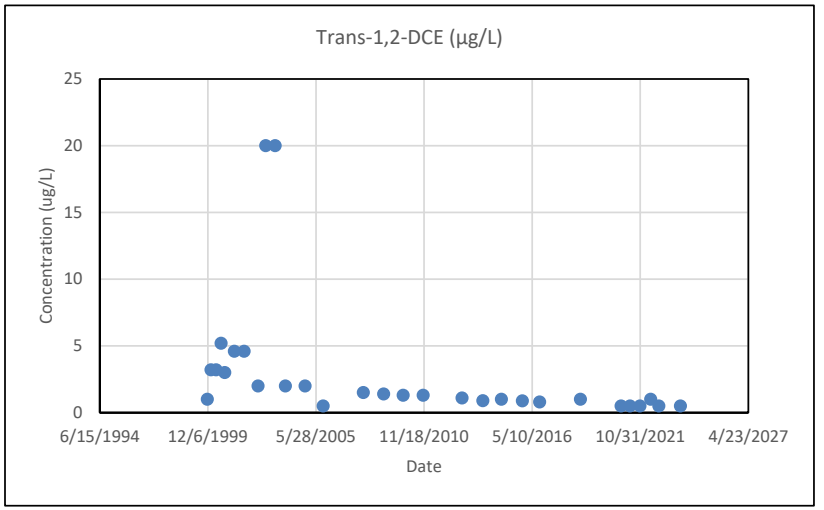
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS







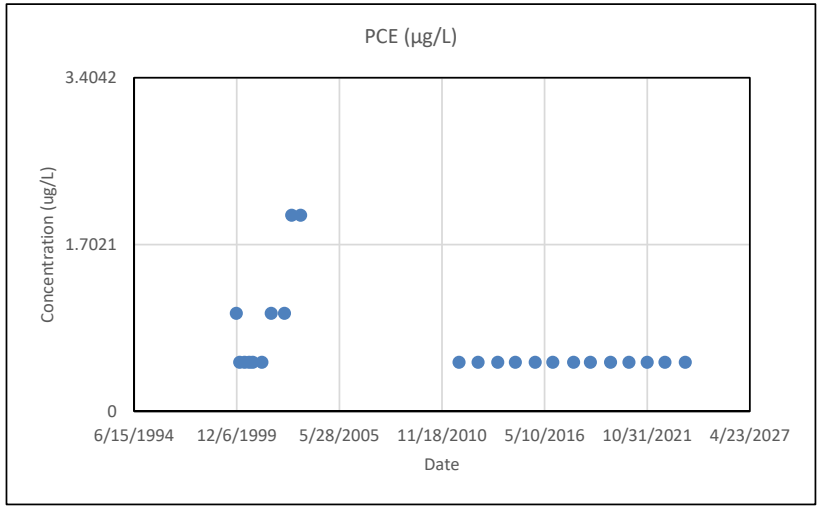


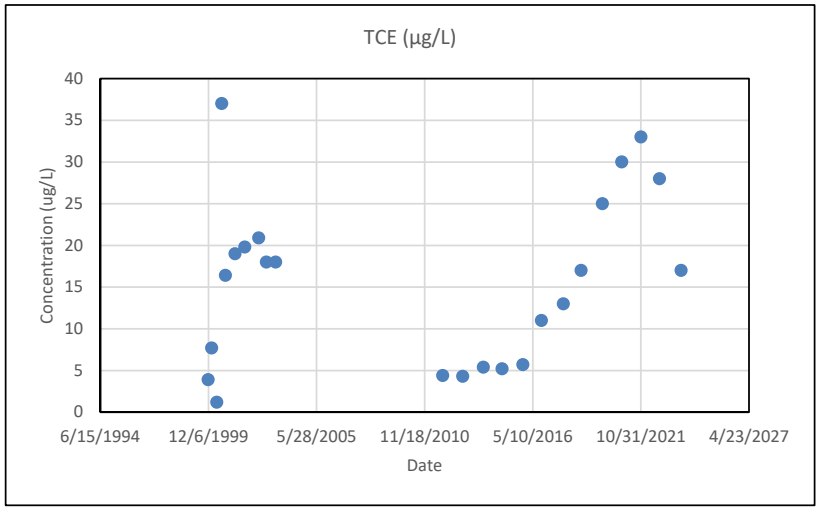
Notes:
- Non detections are presented at the detection level.

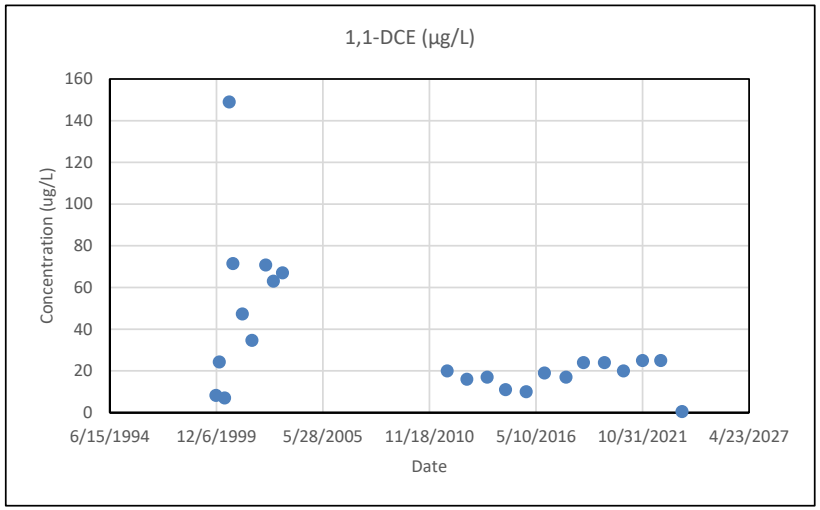
Figure A-14. Groundwater Concentrations for EW-1 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

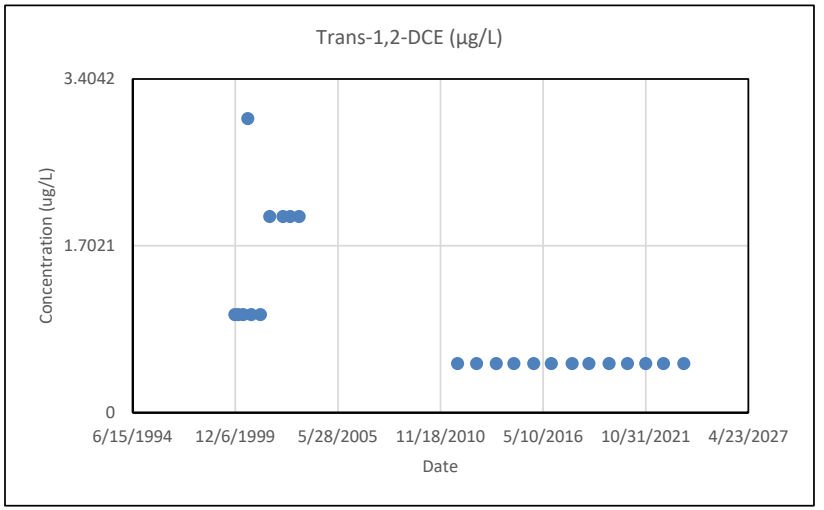
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS









Notes:
- Non detections are presented at the detection level.

Figure A-15. Groundwater Concentrations for EW-2 for PCE, TCE, 1,1-DCE and Trans-1,2-DCE

Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS

Appendix B
City of Phoenix Monthly Discharge Reports

1501 W. Fountainhead Pkwy
Suite 401
Tempe, Arizona 85282
United States
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

February 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – January 2023**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Engineering Group, Inc. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the January 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, January 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,459,602	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period January 1, 2023, through March 31, 2023, are included in this monthly report. Jacobs personnel performed compliance sampling for all required analytes on January 18, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 1806-5436

Attachment B – Operation and Maintenance Data Collection Forms and pH Log Sheet

Attachment C – Analytical Report

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 1806-5436

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85029
Permit №:	***1806-5436***
Compliance Sampling Point:	***5436.01***

Report Period: January 1, 2023 Through January 31, 2023

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 79,342	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 80,025	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,459,602	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☒ SMR Page 2 – Sampling Detail Page
- ☒ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B - Zero Discharge Certification (Only if Applicable)
- ☒ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☒ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☒ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	February 24, 2023

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Address: ***2305 West Mercer Lane***

Phoenix, Arizona 85029

Dates/Times Samples Collected: **01/18/2023 at 13:20 (grab), 13:17 (composite), 12:58 (pH)**

Names(s) and Affiliation of Person(s) Sampling: **Tom Kearsley/Jacobs Engineering**

Compliance Sampling Point № **5436.01** Lab Project or Reference ID № **550-196467-1**

Device Type: **½" Sampling tap**

Location Description: **Inside vault under the street in West Mercer Street**

Electronic pH meter calibrated prior to analysis? **Yes**

Sampling Methodology (indicate sample type, collection method, and preservation for all pollutants sampled):

Type	Collection Method	Preservation
pH	Grab	N/A
Metals	Composite	HNO3
Cyanide	Grab	NaOH
VOCs	Grab	HCl

NOTE: If sample collection method was Hand Composite; a log showing date, time, flow rate, aliquot volumes, and final calculations for the final hand composite must be included with the report.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Permit №: ***1806-5436***

Report Period: January 1, 2023 to January 31, 2023

Compliance Point №: ***5436.01***

Lab Project or Reference ID № ***550-196467-1***

Compliance Point Description: ***½" sampling tap inside vault***

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 01/18/2023	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method
1,1-Dichloroethane	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	4.5	EPA 624.1								
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	48	EPA 624.1								
Arsenic	**mg/L**	**0.13**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
Cadmium	**mg/L**	**0.047**	**1 per Quarter**	**FPC**	<0.001	EPA 200.7 Rev 4.4								
Chloroform	**µg/L**	**2000**	**1 per Quarter**	**Grab**	1.1	EPA 624.1								
Copper	**mg/L**	**1.5**	**1 per Quarter**	**FPC**	<0.01	EPA 200.7 Rev 4.4								
Cyanide (T)	**mg/L**	**2.0**	**1 per 6 Months**	**Grab**	NS	EPA 9010								
Lead	**mg/L**	**0.41**	**1 per Quarter**	**FPC**	<0.015	EPA 200.7 Rev 4.4								
Mercury	**mg/L**	**0.0023**	**1 per 6 Months**	**FPC**	NS	EPA 245.1								
Molybdenum	**mg/L**	**N/A**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
pH	**S.U.**	**5.0-10.5**	**1 per Quarter**	**Grab**	6.68	SM 4500-H+B								
Selenium	**mg/L**	**0.10**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
Silver	**mg/L**	**1.2**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
Trichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	19	EPA 624.1								
Zinc	**mg/L**	**3.5**	**1 per Quarter**	**FPC**	<0.05	EPA 200.7 Rev 4.4								

NOTES:
This form is to be submitted for <u>each</u> sampling point.

<u>Sampling Frequency</u> – The required minimum sampling frequency from your Permit.

<u>Sample Type</u> - FPC is a Flow Proportional Composite; G/FPC is a combination of Grab and Flow Proportional samples as specified in 40 CFR 136.

<u>Date</u> – Enter the date the sample was taken and enter the result for each parameter under the date. Do not enter the "ND" from the laboratory as a sample result. Enter less than (<) the detection limit for the parameter. For example <0.05.

<u>Analysis Method</u> - The analysis method used by the laboratory is to be entered for each result. All samples must be analyzed by the analytical methods required by the Permit. Copies of the laboratory analytical reports must be submitted with this form.

Compliance Sampling Point Nº 5436.01

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (Inches)	Measured Level (Inches)	☒ Meter Adjusted	☒ Sampling Point Cleaned
Last	12/20/2022	46,877,607				☐	☐
1.	01/06/2023	48,238,029	80,025			☐	☐
2.	01/18/2023	49,178,524	78,375			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow **79,342**

Maximum Flow **80,025**

Total Gallons **2,459,602**

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 1/6/23 Field Technician(s) T. Keasler

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1205	ON	4823 8029		-7	55.1	300.29	3063.6
Depart		ON						

Electrical Meter Readings

Power(kwh)	10984
Power Rate(KwMax)	9.05

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ___ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: ✓ Flow Rate: — mL/min

Aliquot Volume: ✓ mL x 20 aliquots = — mL total volume

Notes

Signature: T Keasler

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.21
2.92
300.29

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 1/18/23 Field Technician(s) T. Kleafisch

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1255	ON	49178524		-7	56.9	300.21	3025.5
Depart		ON						

Electrical Meter Readings

Power(kwh)	13572
Power Rate(KwMax)	8.98

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel ~ Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes X No ____

Laboratory Analyses and Method

- ✓ VOCs by USEPA 624
- ✓ pH by USEPA SM 4500-H+
- ✓ Metals by USEPA 200.7, 200.8
- ✓ Total Cyanide and Sulfide by SM 4500-CN-C, E
- ✓ Mercury by USEPA 245.1
- ☐ Other

Time pH Sample Collected: 1256

Time pH Sample Analyzed: 12:58
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 13:20

Composite Sample Log

Start Time: 1257 End Time: 1317 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 10,000 mL total volume

Notes

pH 6.68 @ 25.8°C

Signature: T Kleafisch

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.13
- 2.92
300.21

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № 030548

pH Calibration & Analysis Log

Compliance Sampling Point № 5436.01, 5383.01

Calibration Standard	Date	Analyst Initials	Analysis Time	Reading (Units)	Temp Reading (°C)	Calibration Slope (mV or %)	Comments
pH Buffer 4/Lot# E1D22B 6/30/24	1/18/23	TK	11:49	4.0	21.7	101.5	
pH Buffer 7/Lot# E1D22A 5/10/24			11:47	7.0	21.1	108.7	
pH Buffer 10/Lot# 1GC500 MAR/23			11:51	10.0	21.4	98.4	
2nd Buffer pH 7 (6.9 - 7.1)/Lot#			11:52	7.02	21.1	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	1/18/23	TK	1258	6.68	25.8	N/A	
Compliance pH result 5383.01 (MW-10)	1/18/23	TK	1218	6.54	25.4	N/A	
pH Buffer 4/Lot#	—						
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)	—					N/A	
Compliance pH result 5383.01 (MW-10)	—					N/A	
pH Buffer 4/Lot#	—						
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)	—					N/A	
Compliance pH result 5383.01 (MW-10)	—					N/A	
Once/Month Duplicate Sample (+/- 0.1 Acceptance)	1/18/23	TK	Orig Reading:	6.54	Dup Reading:	6.56	
Once/Month Verification Check/Buffer 7	1/18/23	TK	14:45	7.04	21.1	(Pass) or Fail	

NOTE: *Grab pH Analysis for purposes of compliance sampling* ***must be performed within 15 minutes sample collection*** *using one of the methods specified for* ***Hydrogen Ion*** *in Title 40 of the Code of Federal Regulations Part 136; typically SM4500 H+ B. Arizona Department of Environmental Quality has provided guidance for complying with the Calibration and QA/QC portions of the approved analytical methods. This pH callibration log may aid in meeting the minimum criteria. Please see the manufacturer's manual for your pH meter to determine the acceptable slope in mV or %.*

NOTE: *Permittees are required to calibrate field and/or bench pH meters* ***each day of use for Grab pH Analysis.***

NOTE: *Permittees are required to keep pH Calibration Logs* ***onsite and available for review for a minimum of three years; a copy of the hand-written original must be submitted with the monthly SMR.***

Attachment C
Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

IAC, Peoria
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-196467-1

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

See page two for job notes and contact information.

myEOL

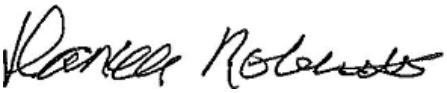
Job Notes

This report is issued solely for the use of the person or company to whom it is addressed. Any use, copying or disclosure other than by the intended recipient is unauthorized. If you have received this report in error, please notify the sender and destroy this report immediately. This report shall not be reproduced except in full, without prior express written approval by the laboratory.

The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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



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Revision 1

Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Qualifiers

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.

General Chemistry

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

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

Case Narrative

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Job ID: 550-196467-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-196467-1

Comments
The report being provided is a revision of the original report sent on 5/12/2022. The report (revision 1) is being revised due to: Added chloroform to sampleID EW-1-23Q1 (550-196467-3)

No additional comments.

Receipt
The samples were received on 1/18/2023 2:03 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0° C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-196467-1	MW-10-23Q1	Water	01/18/23 12:40	01/18/23 14:03
550-196467-2	MW-10-23Q1-comp	Water	01/18/23 12:36	01/18/23 14:03
550-196467-3	EW-1-23Q1	Water	01/18/23 13:20	01/18/23 14:03
550-196467-4	EW-1-23Q1-comp	Water	01/18/23 13:17	01/18/23 14:03
550-196467-5	TB-23Q1	Water	01/18/23 08:00	01/18/23 14:03

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q1 — Lab Sample ID: 550-196467-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.61		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	13		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	5.1		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q1-comp — Lab Sample ID: 550-196467-2

No Detections.

Client Sample ID: EW-1-23Q1 — Lab Sample ID: 550-196467-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.5		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	48		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.1		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	19		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q1-comp — Lab Sample ID: 550-196467-4

No Detections.

Client Sample ID: TB-23Q1 — Lab Sample ID: 550-196467-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q1

Lab Sample ID: 550-196467-1
Date Collected: 01/18/23 12:40
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.61		0.50		ug/L			01/27/23 00:11	1
1,1-Dichloroethene	13		0.50		ug/L			01/27/23 00:11	1
Benzene	ND		0.50		ug/L			01/27/23 00:11	1
Chloroform	ND		0.50		ug/L			01/27/23 00:11	1
Trichloroethene	5.1		0.50		ug/L			01/27/23 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*60 - 140*		*01/27/23 00:11*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*01/27/23 00:11*	*1*
Toluene-d8 (Surr)	*111*		*60 - 140*		*01/27/23 00:11*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		01/31/23 17:44	01/31/23 20:08	1

Client Sample ID: MW-10-23Q1-comp

Lab Sample ID: 550-196467-2
Date Collected: 01/18/23 12:36
Matrix: Water
Date Received: 01/18/23 14:03

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		01/19/23 07:57	01/20/23 15:36	1
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 15:36	1
Molybdenum	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Selenium	ND		0.10		mg/L		01/19/23 07:57	01/20/23 15:36	1
Silver	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 15:36	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		01/24/23 17:12	01/25/23 15:58	1

Client Sample ID: EW-1-23Q1

Lab Sample ID: 550-196467-3
Date Collected: 01/18/23 13:20
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	4.5		0.50		ug/L			01/27/23 00:32	1
1,1-Dichloroethene	48		0.50		ug/L			01/27/23 00:32	1
Chloroform	1.1		0.50		ug/L			01/27/23 00:32	1
Trichloroethene	19		0.50		ug/L			01/27/23 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*60 - 140*		*01/27/23 00:32*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*01/27/23 00:32*	*1*
Toluene-d8 (Surr)	*111*		*60 - 140*		*01/27/23 00:32*	*1*

Client Sample ID: EW-1-23Q1-comp

Lab Sample ID: 550-196467-4

Date Collected: 01/18/23 13:17
Matrix: Water
Date Received: 01/18/23 14:03

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 15:38	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:38	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 15:38	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 15:38	1

Client Sample ID: TB-23Q1

Lab Sample ID: 550-196467-5

Date Collected: 01/18/23 08:00
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			01/26/23 19:59	1
1,1-Dichloroethene	ND		0.50		ug/L			01/26/23 19:59	1
Benzene	ND		0.50		ug/L			01/26/23 19:59	1
Chloroform	ND		0.50		ug/L			01/26/23 19:59	1
Trichloroethene	ND		0.50		ug/L			01/26/23 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*		*01/26/23 19:59*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*01/26/23 19:59*	*1*
Toluene-d8 (Surr)	*118*		*60 - 140*		*01/26/23 19:59*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-196467-1	MW-10-23Q1	120	95	111
550-196467-3	EW-1-23Q1	117	95	111
550-196467-5	TB-23Q1	111	101	118
550-196579-F-2 MS	Matrix Spike	122	92	107
550-196579-F-2 MSD	Matrix Spike Duplicate	126	95	109
LCS 550-293288/4	Lab Control Sample	122	94	108
LCSD 550-293288/5	Lab Control Sample Dup	116	89	101
MB 550-293288/7	Method Blank	112	93	103

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-293288/7
Matrix: Water
Analysis Batch: 293288

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			01/26/23 19:38	1
Benzene	ND		0.50		ug/L			01/26/23 19:38	1
1,1-Dichloroethene	ND		0.50		ug/L			01/26/23 19:38	1
Chloroform	ND		0.50		ug/L			01/26/23 19:38	1
Trichloroethene	ND		0.50		ug/L			01/26/23 19:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*60 - 140*		*01/26/23 19:38*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*01/26/23 19:38*	*1*
Toluene-d8 (Surr)	*103*		*60 - 140*		*01/26/23 19:38*	*1*

Lab Sample ID: LCS 550-293288/4
Matrix: Water
Analysis Batch: 293288

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	47.0		ug/L		94	70 - 130		
Benzene			50.0	51.2		ug/L		102	65 - 135		
1,1-Dichloroethene			50.0	42.6		ug/L		85	50 - 150		
Chloroform			50.0	46.1		ug/L		92	70 - 135		
Trichloroethene			50.0	51.0		ug/L		102	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*60 - 140*
Dibromofluoromethane (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*108*		*60 - 140*

Lab Sample ID: LCSD 550-293288/5
Matrix: Water
Analysis Batch: 293288

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-Dichloroethane			50.0	44.7		ug/L		89	70 - 130	5	20
Benzene			50.0	49.0		ug/L		98	65 - 135	4	20
1,1-Dichloroethene			50.0	39.6		ug/L		79	50 - 150	7	20
Chloroform			50.0	44.0		ug/L		88	70 - 135	5	20
Trichloroethene			50.0	48.1		ug/L		96	65 - 135	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*60 - 140*
Dibromofluoromethane (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*101*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-196579-F-2 MS
Matrix: Water
Analysis Batch: 293288

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		
1,1-Dichloroethane	ND		50.0	46.9		ug/L		94	59 - 155		
Benzene	ND		50.0	51.8		ug/L		104	35 - 151		
1,1-Dichloroethene	ND		50.0	42.1		ug/L		84	10 - 234		
Chloroform	ND		50.0	46.1		ug/L		92	51 - 138		
Trichloroethene	ND		50.0	51.6		ug/L		103	70 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*60 - 140*
Dibromofluoromethane (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*107*		*60 - 140*

Lab Sample ID: 550-196579-F-2 MSD
Matrix: Water
Analysis Batch: 293288

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
1,1-Dichloroethane	ND		50.0	47.2		ug/L		94	59 - 155	1	40
Benzene	ND		50.0	51.5		ug/L		103	35 - 151	1	61
1,1-Dichloroethene	ND		50.0	41.5		ug/L		83	10 - 234	1	32
Chloroform	ND		50.0	46.5		ug/L		93	51 - 138	1	54
Trichloroethene	ND		50.0	50.9		ug/L		102	70 - 157	1	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*60 - 140*
Dibromofluoromethane (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*109*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-292815/1-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 292815

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		01/19/23 07:57	01/20/23 14:59	1
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 14:59	1
Molybdenum	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Selenium	ND		0.10		mg/L		01/19/23 07:57	01/20/23 14:59	1
Silver	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 14:59	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-292815/2-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	2.00	2.01	E2	mg/L		101	85 - 115
Cadmium	1.00	1.00		mg/L		100	85 - 115
Copper	1.00	1.01		mg/L		101	85 - 115
Lead	1.00	1.03		mg/L		103	85 - 115
Molybdenum	1.00	1.01		mg/L		101	85 - 115
Selenium	1.00	1.03		mg/L		103	85 - 115
Silver	0.0750	0.0742		mg/L		99	85 - 115
Zinc	1.00	1.07		mg/L		107	85 - 115

Lab Sample ID: LCSD 550-292815/3-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	2.00	2.06	E2	mg/L		103	85 - 115	2	20
Cadmium	1.00	1.02		mg/L		102	85 - 115	2	20
Copper	1.00	1.02		mg/L		102	85 - 115	2	20
Lead	1.00	1.05		mg/L		105	85 - 115	2	20
Molybdenum	1.00	1.04		mg/L		104	85 - 115	2	20
Selenium	1.00	1.05		mg/L		105	85 - 115	1	20
Silver	0.0750	0.0751		mg/L		100	85 - 115	1	20
Zinc	1.00	1.09		mg/L		109	85 - 115	1	20

Lab Sample ID: 550-196442-E-1-A MS
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		2.00	2.08	E2	mg/L		104	70 - 130
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130
Copper	ND		1.00	1.02		mg/L		102	70 - 130
Lead	ND		1.00	1.03		mg/L		103	70 - 130
Molybdenum	ND		1.00	1.04		mg/L		103	70 - 130
Selenium	ND		1.00	1.05		mg/L		105	70 - 130
Silver	ND		0.0750	0.0752		mg/L		100	70 - 130
Zinc	ND		1.00	1.06		mg/L		106	70 - 130

Lab Sample ID: 550-196442-E-1-B MSD
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		2.00	2.09	E2	mg/L		104	70 - 130	0	20
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130	0	20
Copper	ND		1.00	1.02		mg/L		102	70 - 130	0	20
Lead	ND		1.00	1.03		mg/L		103	70 - 130	0	20
Molybdenum	ND		1.00	1.04		mg/L		104	70 - 130	0	20
Selenium	ND		1.00	1.04		mg/L		104	70 - 130	0	20
Silver	ND		0.0750	0.0757		mg/L		101	70 - 130	1	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-196442-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 292995 — **Prep Batch: 292815**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	1.07		mg/L		107	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-293108/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		01/24/23 17:12	01/25/23 15:11	1

Lab Sample ID: LCS 550-293108/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00431		mg/L		86	85 - 115		

Lab Sample ID: LCSD 550-293108/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00517		mg/L		103	85 - 115	18	20

Lab Sample ID: 550-196526-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00386		mg/L		77	70 - 130		

Lab Sample ID: 550-196526-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00389		mg/L		78	70 - 130	1	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-293578/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293614 — **Prep Batch: 293578**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		01/31/23 17:44	01/31/23 20:08	1

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: LCS 550-293578/2-A
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293578

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0941		mg/L		94	90 - 110		

Lab Sample ID: LCSD 550-293578/3-A
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 293578

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0940		mg/L		94	90 - 110	0	20

Lab Sample ID: 550-196409-U-1-B MS
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 293578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	M2	0.100	0.0774	M2	mg/L		77	80 - 120		

Lab Sample ID: 550-196409-U-1-C MSD
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 293578

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2	0.100	0.0679	M2	mg/L		68	80 - 120	13	20

GC/MS VOA

Analysis Batch: 293288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	624.1	
550-196467-3	EW-1-23Q1	Total/NA	Water	624.1	
550-196467-5	TB-23Q1	Total/NA	Water	624.1	
MB 550-293288/7	Method Blank	Total/NA	Water	624.1	
LCS 550-293288/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-293288/5	Lab Control Sample Dup	Total/NA	Water	624.1	
550-196579-F-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-196579-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 292815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	200.7	
550-196467-4	EW-1-23Q1-comp	Total/NA	Water	200.7	
MB 550-292815/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-292815/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-292815/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-196442-E-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-196442-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 292995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	200.7 Rev 4.4	292815
550-196467-4	EW-1-23Q1-comp	Total/NA	Water	200.7 Rev 4.4	292815
MB 550-292815/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	292815
LCS 550-292815/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	292815
LCSD 550-292815/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	292815
550-196442-E-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	292815
550-196442-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	292815

Prep Batch: 293108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	245.1	
MB 550-293108/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-293108/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-293108/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-196526-B-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-196526-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 293196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	245.1	293108
MB 550-293108/1-A	Method Blank	Total/NA	Water	245.1	293108
LCS 550-293108/2-A	Lab Control Sample	Total/NA	Water	245.1	293108
LCSD 550-293108/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	293108
550-196526-B-1-B MS	Matrix Spike	Total/NA	Water	245.1	293108
550-196526-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	293108

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

General Chemistry

Prep Batch: 293578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	SM 4500 CN C	
MB 550-293578/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-293578/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-293578/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-196409-U-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-196409-U-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 293614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	SM 4500 CN E	293578
MB 550-293578/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	293578
LCS 550-293578/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	293578
LCSD 550-293578/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	293578
550-196409-U-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	293578
550-196409-U-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	293578

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q1
Date Collected: 01/18/23 12:40
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/27/23 00:11
Total/NA	Prep	SM 4500 CN C			293578	CXK	EET PHX	01/31/23 17:44
Total/NA	Analysis	SM 4500 CN E		1	293614	CXK	EET PHX	01/31/23 20:08

Client Sample ID: MW-10-23Q1-comp
Date Collected: 01/18/23 12:36
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			292815	SGO	EET PHX	01/19/23 07:57
Total/NA	Analysis	200.7 Rev 4.4		1	292995	CHS	EET PHX	01/20/23 15:36
Total/NA	Prep	245.1			293108	SRR	EET PHX	01/24/23 17:12
Total/NA	Analysis	245.1		1	293196	SRR	EET PHX	01/25/23 15:58

Client Sample ID: EW-1-23Q1
Date Collected: 01/18/23 13:20
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/27/23 00:32

Client Sample ID: EW-1-23Q1-comp
Date Collected: 01/18/23 13:17
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			292815	SGO	EET PHX	01/19/23 07:57
Total/NA	Analysis	200.7 Rev 4.4		1	292995	CHS	EET PHX	01/20/23 15:38

Client Sample ID: TB-23Q1
Date Collected: 01/18/23 08:00
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/26/23 19:59

Laboratory References:

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: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-23

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

196467

Chain Of Custody / Analysis Request

Test America - Phoenix
4625 East Cotton CTr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

AESI Ref: 44944.47592
COC#: 35008_011823

Privileged & Confidential		Site Name:	IAC, Peoria
Sampling Co.: Jacobs	EDD To: Bernice Kidd, Jacobs HTS	Location of Site:	Phoenix, AZ
Client Contact: (name, co., address)	Sampler: T. Kearsley		
Jacobs	PO #: A001036349		
1501 W. Fountainhead Parkway (suite 401)	Analysis Turnaround Time (TAT): 10		
Tempe, AZ 85282	Consultant		
Preliminary Data To: Berney Kidd Jacobs, Lakshmi@evi HTS,	Laboratory Contact: Danielle Roberts		
Sample Receipt Acknowledgement To: Sample Distribution List	Report Tier Level: 2		
Hard Copy To: Berney Kidd Jacobs,	Full Report TAT: 10		
Invoice To: Per OM&M Program process,Tao Wu, Honeywell/Copy Berney Kidd	HTS		

Phase:
Sampling Program: Quarterly
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Text & [redacted] File Drive | Excel & Text File Order

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)	SM5210B (BOD)	SM2540D (TSS)	E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)					Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units		8	10	15	10	0	0	10						
1	MW-10	----	----	MW-10-23Q1	1/18/2023	12:40	GW-GWS	WATER	REG	4	grab	N	X		X								-01		
2	MW-10	----	----	MW-10-23Q1-comp	1/18/2023	12:36	GW-GWS	WATER	REG	3	comp	N		X		X	X	X					-02		
3	EW-1	----	----	EW-1-23Q1	1/18/2023	13:20	GW-GWS	WATER	REG	3	grab	N								X			-03		
4	EW-1	----	----	EW-1-23Q1-comp	1/18/2023	13:17	GW-GWS	WATER	REG	1	comp	N							X				-04		
5	TRIPBLANK	----	----	TB-23Q1	1/18/2023	8:00	BLKWATER	WATER	TB	1	grab	N	X										-05		
6																									
7																									
8																									
9																									
10																									
11																									
12																									

550-196467 Chain of Custody

Relinquished by: Thomas Kearsley	Company: CH2M	Received by: FedEx	Company:	Condition:		Custody Seals Intact:	
	Date/Time: 1/18/22 14:03		Date/Time:	Cooler Temp.:			
Relinquished by:	Company:	Received by: EETA PHX	Company:	Condition:		Custody Seals Intact:	
	Date/Time:		Date/Time: 1/18/22 1403	Cooler Temp.:			

Preservatives: (Other; Specify): EW-1 Comp E200.7 Qrt-list only

0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, pH<2, 4 Deg C)); 8 (HCl, pH<2, 4 Deg C); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH. pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); 14 (1-MeOH, 4 Deg C and 2-NaHSO4, 4 Deg C): 15 (NaOH, pH>12, 4 Deg C); sp (special instructions)

1.0°C IR Gun

2/8/2023 (Rev. 1)

196467

Chain Of Custody / Analysis Request

Test America - Phoenix
4625 East Cotton CTr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Privileged & Confidential

Sampling Co.:	Jacobs	EDD To:	Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)		Sampler:	T. Kearsley
Jacobs		PO #	A001036349
1501 W. Fountainhead Parkway (suite 401)		Analysis Turnaround Time (TAT):	10
Tempe, AZ 85282		Consultant	
Preliminary Data To	Berney Kidd Jacobs, Lakshmi... HTS	Laboratory Contact	Danielle Roberts
Sample Receipt Acknowledgement To	Sample Distribution List	Report Tier Level	2
Hard Copy To	Berney Kidd Jacobs	Full Report TAT:	10
Invoice To:	Per OM&M Program process, Tao Wu, Honeywell/Copy Berney Kidd		HTS

Site Name:	IAC, Peoria	Phase:	
Location of Site:	Phoenix, AZ	Sampling Program	Quar

Analyses (Preservative): E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only) (8); E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn) (10); SM4500-CN-C,E (Cyanide) (15); E245.1 (mercury) (10); SM5210B (BOD) (0); SM2540D (TSS) (0); E200.7 (Cd, Cu, Pb, Zn) (Qrt list) (10); E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)

#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)	SM5210B (BOD)	SM2540D (TSS)	E200.7 (Cd, Cu, Pb, Zn) (Qrt list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)
1	MW-10	----	----	MW-10-23Q1	1/18/2023	12:40	GW-GWS	WATER	REG	4	grab	N	X		X					
2	MW-10	----	----	MW-10-23Q1-comp	1/18/2023	12:36	GW-GWS	WATER	REG	3	comp	N		X		X	(circled)	(circled)		
3	EW-1	----	----	EW-1-23Q1	1/18/2023	13:20	GW-GWS	WATER	REG	3	grab	N								X
4	EW-1	----	----	EW-1-23Q1-comp	1/18/2023	13:17	GW-GWS	WATER	REG	1	comp	N							X	
5	TRIPBLANK	----	----	TB-23Q1	1/18/2023	8:00	BLKWATER	WATER	TB	1	grab	N	X							
6																				
7																				
8																				
9																				
10																				
11																				
12																				

550-196467 Chain of Custody

Relinquished by: Thomas Kearsley	Company: CH2M	Date/Time: 1/18/22 17:03	Received by: FedEx	Company / Date/Time	Condition / Cooler Temp.
Relinquished by	Company / Date/Time		Received by: EETA PHX	Date/Time: 1/19/23 1403	Condition / Cooler Temp.

Preservatives: (Other; Specify): EW-1 Comp E200.7 Qrt-list only

0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH, pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); pH>12, 4 D... (special instructions)

1.0°

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-196467-1
SDG Number: Phoenix, AZ

Login Number: 196467
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

1501 W. Fountainhead Pkwy
Suite 401
Tempe, Arizona
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

February 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – January 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the January 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, January 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,453,311	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period January 1, 2023, through March 31, 2023, was collected on January 18, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms and pH Log Sheet

Attachment C – Analytical Report

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge
Permit No. 2208-5383

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc.*** ***Former Peoria Avenue Facility/MW-10***
Address:	***2251 West Sierra Street***
	Phoenix, Arizona 85029-3602
Permit Limits:	***Local Limits +***
Permit №:	***2208-5383***
Compliance Sampling Point:	***5383.01***

Report Period: January 1, 2023 Through January 31, 2023

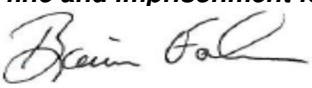
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 46,881	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 46,931	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,453,311	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☒ SMR Page 2 – Sampling Detail Page
- ☒ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☒ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☒ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☒ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	February 24, 2023
Phone Number/Email	602-327-3807, Baine.Foehr@jacobs.com

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

Facility Name: ***Honeywell International, Inc. Former Peoria Avenue Facility/MW-10***

Address: ***2251 West Sierra Street***

Phoenix, Arizona 85029-3602

Dates/Times Samples Collected: **01/18/2023 at 12:40 (grab), 12:36 (composite), 12:18 (pH)**

Names(s) and Affiliation of Person(s) Sampling: **Tom Kearsley/ Jacobs Engineering**

Compliance Sampling Point № **5383.01**

Lab Project or Reference ID № **550-196467-1**

Device Type: **½ inch sampling valve**

Location Description: **located inside the vault under Sierra Street**

Electronic pH meter calibrated prior to analysis? ***Yes***

Sampling Methodology (indicate sample type, collection method, and preservation for all pollutants sampled):

Type	*Collection Method*	*Preservation*
pH	*Grab*	*N/A*
Metals	*Composite*	*HNO3*
BOD/TSS		
COD		
Cyanide	*Grab*	*NaOH*
Oil & Grease		
VOCs	*Grab*	*HCL*
Semi-VOCs		

NOTE: If sample collection method was Hand Composite; a log showing date, time, flow rate, aliquot volumes, and final calculations for the final hand composite must be included with the report.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International, Inc. Former Peoria Avenue Facility/MW-10***

Permit №: ***2208-5383***

Report Period: January 1, 2023 to January 31, 2023

Compliance Point №: ***5383.01***

Lab Project or Reference ID № ***550-196467-1***

Compliance Point Description: ***½ inch sampling valve***

Parameter	Units	Daily Limit	Sampling Frequency	Sample Type	**Date:** 01/18/2023	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method
1,1-Dichloroethane	µg/L	**N/A**	1 per Quarter	**Grab**	0.61	EPA 624.1								
1,1-Dichloroethylene	µg/L	**N/A**	1 per Quarter	**Grab**	13	EPA 624.1								
Arsenic	mg/L	**0.13**	1 per Quarter	**FPC**	<0.10	EPA 200.7 Rev 4.4								
Benzene	µg/L	**35**	1 per Quarter	**Grab**	<0.50	EPA 624.1								
Cadmium	mg/L	**0.047**	1 per Quarter	**FPC**	<0.001	EPA 200.7 Rev 4.4								
Chloroform	µg/L	**2000**	1 per Quarter	**Grab**	<0.50	EPA 624.1								
Copper	mg/L	**1.5**	1 per Quarter	**FPC**	<0.01	EPA 200.7 Rev 4.4								
Cyanide (T)	mg/L	**2.0**	1 per Quarter	**Grab**	<0.05	EPA 9010								
Lead	mg/L	**0.41**	1 per Quarter	**FPC**	<0.015	EPA 200.7 Rev 4.4								
Mercury	mg/L	**0.0023**	1 per Quarter	**FPC**	<0.0002	EPA 245.1								
Molybdenum	mg/L	**N/A**	1 per Quarter	**FPC**	<0.010	EPA 200.7 Rev 4.4								
pH	S.U.	**5.0-10.5**	1 per Quarter	**Grab**	6.54	SM 4500-H+B								
Selenium	mg/L	**0.10**	1 per Quarter	**FPC**	<0.10	EPA 200.7 Rev 4.4								
Silver	mg/L	**1.2**	1 per Quarter	**FPC**	<0.010	EPA 200.7 Rev 4.4								
Trichloroethylene	µg/L	**N/A**	1 per Quarter	**Grab**	5.1	EPA 624.1								
Zinc	mg/L	**3.5**	1 per Quarter	**FPC**	<0.05	EPA 200.7 Rev 4.4								

NOTES:

This form is to be submitted for each sampling point.

Sampling Frequency – The required minimum sampling frequency from your Permit.

Sample Type - FPC is a Flow Proportional Composite; G/FPC is a combination of Grab and Flow Proportional samples as specified in 40 CFR 136.

Date – Enter the date the sample was taken and enter the result for each parameter under the date. Do not enter the "ND" from the laboratory as a sample result. Enter less than (<) the detection limit for the parameter. For example <0.05.

Analysis Method - The analysis method used by the laboratory is to be entered for each result. All samples must be analyzed by the analytical methods required by the Permit. Copies of the laboratory analytical reports must be submitted with this form.

Compliance Sampling Point № **5383.01**

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	12/20/2022	22,051,805				☐	☐
1.	01/06/2023	22,849,629	46,931			☐	☐
2.	01/18/2023	23,411,364	46,811			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		46,881				
	Maximum Flow		46,931				
	Total Gallons		1,453,311				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 1/6/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0735	ON	22849629	-2	32.4	300.03	92846.7
Depart		ON					

Electrical Meter Readings

Power(kwh)	44487
Power Rate(KwMax)	5.10

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

—	VOCs by USEPA 624	—	Total Cyanide and Sulfide by SM 4500-CN-C, E
—	pH by USEPA SM 4500-H+	—	Biological Oxygen Demand by SM 5210-B
—	Metals by USEPA 200.7, 200.8	—	Total Suspended Solids by SM 2540-D
—	Mercury by USEPA 245.1	—	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

305.13
5.1
300.03

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 1/18/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1213	ON	27411364	-2	32.3	300.88	9315.1
Depart		ON					

Electrical Meter Readings

Power(kwh)	45953
Power Rate(KwMax)	5.09

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

[✓] Inspect Totalizer Paddle Wheel [—] Clean Vault [—] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes X No ____

Laboratory Analyses and Method

- [✓] VOCs by USEPA 624
- [✓] pH by USEPA SM 4500-H+
- [✓] Metals by USEPA 200.7, 200.8
- [✓] Mercury by USEPA 245.1
- [✓] Total Cyanide and Sulfide by SM 4500-CN-C, E
- [✓] Biological Oxygen Demand by SM 5210-B
- [✓] Total Suspended Solids by SM 2540-D
- [ ] Other

Time pH Sample Collected: 12:15 Time pH Sample Analyzed: 1218
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 12:40

Composite Sample Log

Start Time: 12:16 End Time: 1236 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 10,000 mL total volume

Notes

PH 6.54 @ 25.4°C

Signature: T. Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

305.98
- 5.1
300.88

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № 030548

pH Calibration & Analysis Log

Compliance Sampling Point № 5436.01, 5383.01

Calibration Standard	Date	Analyst Initials	Analysis Time	Reading (Units)	Temp Reading (°C)	Calibration Slope (mV or %)	Comments
pH Buffer 4/Lot# E1D22B 6/30/24	1/18/23	TK	11:49	4.0	21.7	101.5	
pH Buffer 7/Lot# E1D22A 5/10/24			11:47	7.0	21.1	108.7	
pH Buffer 10/Lot# 1GC500 MAR/23			11:51	10.0	21.4	98.4	
2nd Buffer pH 7 (6.9 - 7.1)/Lot#			11:52	7.02	21.1	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	1/18/23	TK	1258	6.68	25.8	N/A	
Compliance pH result 5383.01 (MW-10)	1/18/23	TK	1218	6.54	25.4	N/A	
pH Buffer 4/Lot#	—						
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)	—					N/A	
Compliance pH result 5383.01 (MW-10)	—					N/A	
pH Buffer 4/Lot#	—						
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)	—					N/A	
Compliance pH result 5383.01 (MW-10)	—					N/A	
Once/Month Duplicate Sample (+/- 0.1 Acceptance)	1/18/23	TK	Orig Reading:	6.54	Dup Reading:	6.56	
Once/Month Verification Check/Buffer 7	1/18/23	TK	14:45	7.04	21.1	(Pass) or Fail	

NOTE: *Grab pH Analysis for purposes of compliance sampling* ***must be performed within 15 minutes sample collection*** *using one of the methods specified for* ***Hydrogen Ion*** *in Title 40 of the Code of Federal Regulations Part 136; typically SM4500 H+ B. Arizona Department of Environmental Quality has provided guidance for complying with the Calibration and QA/QC portions of the approved analytical methods. This pH callibration log may aid in meeting the minimum criteria. Please see the manufacturer's manual for your pH meter to determine the acceptable slope in mV or %.*

NOTE: *Permittees are required to calibrate field and/or bench pH meters* ***each day of use for Grab pH Analysis.***

NOTE: *Permittees are required to keep pH Calibration Logs* ***onsite and available for review for a minimum of three years; a copy of the hand-written original must be submitted with the monthly SMR.***

Attachment C
Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/8/2023 1:59:40 PM Revision 1

JOB DESCRIPTION

IAC, Peoria
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-196467-1

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

See page two for job notes and contact information.

myEOL

Job Notes

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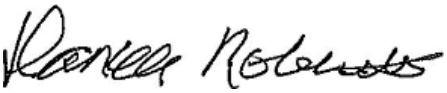
The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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



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Revision 1

Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Qualifiers

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.

General Chemistry

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

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

Case Narrative

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Job ID: 550-196467-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-196467-1

Comments
The report being provided is a revision of the original report sent on 5/12/2022. The report (revision 1) is being revised due to: Added chloroform to sampleID EW-1-23Q1 (550-196467-3)

No additional comments.

Receipt
The samples were received on 1/18/2023 2:03 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0° C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-196467-1	MW-10-23Q1	Water	01/18/23 12:40	01/18/23 14:03
550-196467-2	MW-10-23Q1-comp	Water	01/18/23 12:36	01/18/23 14:03
550-196467-3	EW-1-23Q1	Water	01/18/23 13:20	01/18/23 14:03
550-196467-4	EW-1-23Q1-comp	Water	01/18/23 13:17	01/18/23 14:03
550-196467-5	TB-23Q1	Water	01/18/23 08:00	01/18/23 14:03

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q1 — Lab Sample ID: 550-196467-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.61		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	13		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	5.1		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q1-comp — Lab Sample ID: 550-196467-2

No Detections.

Client Sample ID: EW-1-23Q1 — Lab Sample ID: 550-196467-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.5		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	48		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.1		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	19		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q1-comp — Lab Sample ID: 550-196467-4

No Detections.

Client Sample ID: TB-23Q1 — Lab Sample ID: 550-196467-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q1

Lab Sample ID: 550-196467-1
Date Collected: 01/18/23 12:40
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.61		0.50		ug/L			01/27/23 00:11	1
1,1-Dichloroethene	13		0.50		ug/L			01/27/23 00:11	1
Benzene	ND		0.50		ug/L			01/27/23 00:11	1
Chloroform	ND		0.50		ug/L			01/27/23 00:11	1
Trichloroethene	5.1		0.50		ug/L			01/27/23 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*60 - 140*		*01/27/23 00:11*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*01/27/23 00:11*	*1*
Toluene-d8 (Surr)	*111*		*60 - 140*		*01/27/23 00:11*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		01/31/23 17:44	01/31/23 20:08	1

Client Sample ID: MW-10-23Q1-comp

Lab Sample ID: 550-196467-2
Date Collected: 01/18/23 12:36
Matrix: Water
Date Received: 01/18/23 14:03

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		01/19/23 07:57	01/20/23 15:36	1
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 15:36	1
Molybdenum	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Selenium	ND		0.10		mg/L		01/19/23 07:57	01/20/23 15:36	1
Silver	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 15:36	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		01/24/23 17:12	01/25/23 15:58	1

Client Sample ID: EW-1-23Q1

Lab Sample ID: 550-196467-3
Date Collected: 01/18/23 13:20
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	4.5		0.50		ug/L			01/27/23 00:32	1
1,1-Dichloroethene	48		0.50		ug/L			01/27/23 00:32	1
Chloroform	1.1		0.50		ug/L			01/27/23 00:32	1
Trichloroethene	19		0.50		ug/L			01/27/23 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*60 - 140*		*01/27/23 00:32*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*01/27/23 00:32*	*1*
Toluene-d8 (Surr)	*111*		*60 - 140*		*01/27/23 00:32*	*1*

Client Sample ID: EW-1-23Q1-comp

Lab Sample ID: 550-196467-4

Date Collected: 01/18/23 13:17
Matrix: Water
Date Received: 01/18/23 14:03

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 15:38	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:38	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 15:38	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 15:38	1

Client Sample ID: TB-23Q1

Lab Sample ID: 550-196467-5

Date Collected: 01/18/23 08:00
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			01/26/23 19:59	1
1,1-Dichloroethene	ND		0.50		ug/L			01/26/23 19:59	1
Benzene	ND		0.50		ug/L			01/26/23 19:59	1
Chloroform	ND		0.50		ug/L			01/26/23 19:59	1
Trichloroethene	ND		0.50		ug/L			01/26/23 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*		*01/26/23 19:59*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*01/26/23 19:59*	*1*
Toluene-d8 (Surr)	*118*		*60 - 140*		*01/26/23 19:59*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-196467-1	MW-10-23Q1	120	95	111
550-196467-3	EW-1-23Q1	117	95	111
550-196467-5	TB-23Q1	111	101	118
550-196579-F-2 MS	Matrix Spike	122	92	107
550-196579-F-2 MSD	Matrix Spike Duplicate	126	95	109
LCS 550-293288/4	Lab Control Sample	122	94	108
LCSD 550-293288/5	Lab Control Sample Dup	116	89	101
MB 550-293288/7	Method Blank	112	93	103

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-293288/7
Matrix: Water
Analysis Batch: 293288

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			01/26/23 19:38	1
Benzene	ND		0.50		ug/L			01/26/23 19:38	1
1,1-Dichloroethene	ND		0.50		ug/L			01/26/23 19:38	1
Chloroform	ND		0.50		ug/L			01/26/23 19:38	1
Trichloroethene	ND		0.50		ug/L			01/26/23 19:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*60 - 140*		*01/26/23 19:38*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*01/26/23 19:38*	*1*
Toluene-d8 (Surr)	*103*		*60 - 140*		*01/26/23 19:38*	*1*

Lab Sample ID: LCS 550-293288/4
Matrix: Water
Analysis Batch: 293288

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	47.0		ug/L		94	70 - 130		
Benzene			50.0	51.2		ug/L		102	65 - 135		
1,1-Dichloroethene			50.0	42.6		ug/L		85	50 - 150		
Chloroform			50.0	46.1		ug/L		92	70 - 135		
Trichloroethene			50.0	51.0		ug/L		102	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*60 - 140*
Dibromofluoromethane (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*108*		*60 - 140*

Lab Sample ID: LCSD 550-293288/5
Matrix: Water
Analysis Batch: 293288

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-Dichloroethane			50.0	44.7		ug/L		89	70 - 130	5	20
Benzene			50.0	49.0		ug/L		98	65 - 135	4	20
1,1-Dichloroethene			50.0	39.6		ug/L		79	50 - 150	7	20
Chloroform			50.0	44.0		ug/L		88	70 - 135	5	20
Trichloroethene			50.0	48.1		ug/L		96	65 - 135	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*60 - 140*
Dibromofluoromethane (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*101*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-196579-F-2 MS
Matrix: Water
Analysis Batch: 293288

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		
1,1-Dichloroethane	ND		50.0	46.9		ug/L		94	59 - 155		
Benzene	ND		50.0	51.8		ug/L		104	35 - 151		
1,1-Dichloroethene	ND		50.0	42.1		ug/L		84	10 - 234		
Chloroform	ND		50.0	46.1		ug/L		92	51 - 138		
Trichloroethene	ND		50.0	51.6		ug/L		103	70 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*60 - 140*
Dibromofluoromethane (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*107*		*60 - 140*

Lab Sample ID: 550-196579-F-2 MSD
Matrix: Water
Analysis Batch: 293288

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
1,1-Dichloroethane	ND		50.0	47.2		ug/L		94	59 - 155	1	40
Benzene	ND		50.0	51.5		ug/L		103	35 - 151	1	61
1,1-Dichloroethene	ND		50.0	41.5		ug/L		83	10 - 234	1	32
Chloroform	ND		50.0	46.5		ug/L		93	51 - 138	1	54
Trichloroethene	ND		50.0	50.9		ug/L		102	70 - 157	1	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*60 - 140*
Dibromofluoromethane (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*109*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-292815/1-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 292815

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		01/19/23 07:57	01/20/23 14:59	1
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 14:59	1
Molybdenum	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Selenium	ND		0.10		mg/L		01/19/23 07:57	01/20/23 14:59	1
Silver	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 14:59	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-292815/2-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	2.00	2.01	E2	mg/L		101	85 - 115
Cadmium	1.00	1.00		mg/L		100	85 - 115
Copper	1.00	1.01		mg/L		101	85 - 115
Lead	1.00	1.03		mg/L		103	85 - 115
Molybdenum	1.00	1.01		mg/L		101	85 - 115
Selenium	1.00	1.03		mg/L		103	85 - 115
Silver	0.0750	0.0742		mg/L		99	85 - 115
Zinc	1.00	1.07		mg/L		107	85 - 115

Lab Sample ID: LCSD 550-292815/3-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	2.00	2.06	E2	mg/L		103	85 - 115	2	20
Cadmium	1.00	1.02		mg/L		102	85 - 115	2	20
Copper	1.00	1.02		mg/L		102	85 - 115	2	20
Lead	1.00	1.05		mg/L		105	85 - 115	2	20
Molybdenum	1.00	1.04		mg/L		104	85 - 115	2	20
Selenium	1.00	1.05		mg/L		105	85 - 115	1	20
Silver	0.0750	0.0751		mg/L		100	85 - 115	1	20
Zinc	1.00	1.09		mg/L		109	85 - 115	1	20

Lab Sample ID: 550-196442-E-1-A MS
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		2.00	2.08	E2	mg/L		104	70 - 130
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130
Copper	ND		1.00	1.02		mg/L		102	70 - 130
Lead	ND		1.00	1.03		mg/L		103	70 - 130
Molybdenum	ND		1.00	1.04		mg/L		103	70 - 130
Selenium	ND		1.00	1.05		mg/L		105	70 - 130
Silver	ND		0.0750	0.0752		mg/L		100	70 - 130
Zinc	ND		1.00	1.06		mg/L		106	70 - 130

Lab Sample ID: 550-196442-E-1-B MSD
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		2.00	2.09	E2	mg/L		104	70 - 130	0	20
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130	0	20
Copper	ND		1.00	1.02		mg/L		102	70 - 130	0	20
Lead	ND		1.00	1.03		mg/L		103	70 - 130	0	20
Molybdenum	ND		1.00	1.04		mg/L		104	70 - 130	0	20
Selenium	ND		1.00	1.04		mg/L		104	70 - 130	0	20
Silver	ND		0.0750	0.0757		mg/L		101	70 - 130	1	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-196442-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 292995 — **Prep Batch: 292815**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	1.07		mg/L		107	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-293108/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		01/24/23 17:12	01/25/23 15:11	1

Lab Sample ID: LCS 550-293108/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00431		mg/L		86	85 - 115		

Lab Sample ID: LCSD 550-293108/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00517		mg/L		103	85 - 115	18	20

Lab Sample ID: 550-196526-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00386		mg/L		77	70 - 130		

Lab Sample ID: 550-196526-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00389		mg/L		78	70 - 130	1	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-293578/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293614 — **Prep Batch: 293578**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		01/31/23 17:44	01/31/23 20:08	1

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: LCS 550-293578/2-A
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293578

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0941		mg/L		94	90 - 110		

Lab Sample ID: LCSD 550-293578/3-A
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 293578

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0940		mg/L		94	90 - 110	0	20

Lab Sample ID: 550-196409-U-1-B MS
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 293578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	M2	0.100	0.0774	M2	mg/L		77	80 - 120		

Lab Sample ID: 550-196409-U-1-C MSD
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 293578

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2	0.100	0.0679	M2	mg/L		68	80 - 120	13	20

GC/MS VOA

Analysis Batch: 293288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	624.1	
550-196467-3	EW-1-23Q1	Total/NA	Water	624.1	
550-196467-5	TB-23Q1	Total/NA	Water	624.1	
MB 550-293288/7	Method Blank	Total/NA	Water	624.1	
LCS 550-293288/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-293288/5	Lab Control Sample Dup	Total/NA	Water	624.1	
550-196579-F-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-196579-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 292815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	200.7	
550-196467-4	EW-1-23Q1-comp	Total/NA	Water	200.7	
MB 550-292815/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-292815/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-292815/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-196442-E-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-196442-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 292995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	200.7 Rev 4.4	292815
550-196467-4	EW-1-23Q1-comp	Total/NA	Water	200.7 Rev 4.4	292815
MB 550-292815/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	292815
LCS 550-292815/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	292815
LCSD 550-292815/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	292815
550-196442-E-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	292815
550-196442-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	292815

Prep Batch: 293108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	245.1	
MB 550-293108/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-293108/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-293108/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-196526-B-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-196526-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 293196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	245.1	293108
MB 550-293108/1-A	Method Blank	Total/NA	Water	245.1	293108
LCS 550-293108/2-A	Lab Control Sample	Total/NA	Water	245.1	293108
LCSD 550-293108/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	293108
550-196526-B-1-B MS	Matrix Spike	Total/NA	Water	245.1	293108
550-196526-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	293108

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

General Chemistry

Prep Batch: 293578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	SM 4500 CN C	
MB 550-293578/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-293578/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-293578/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-196409-U-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-196409-U-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 293614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	SM 4500 CN E	293578
MB 550-293578/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	293578
LCS 550-293578/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	293578
LCSD 550-293578/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	293578
550-196409-U-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	293578
550-196409-U-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	293578

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q1
Date Collected: 01/18/23 12:40
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/27/23 00:11
Total/NA	Prep	SM 4500 CN C			293578	CXK	EET PHX	01/31/23 17:44
Total/NA	Analysis	SM 4500 CN E		1	293614	CXK	EET PHX	01/31/23 20:08

Client Sample ID: MW-10-23Q1-comp
Date Collected: 01/18/23 12:36
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			292815	SGO	EET PHX	01/19/23 07:57
Total/NA	Analysis	200.7 Rev 4.4		1	292995	CHS	EET PHX	01/20/23 15:36
Total/NA	Prep	245.1			293108	SRR	EET PHX	01/24/23 17:12
Total/NA	Analysis	245.1		1	293196	SRR	EET PHX	01/25/23 15:58

Client Sample ID: EW-1-23Q1
Date Collected: 01/18/23 13:20
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/27/23 00:32

Client Sample ID: EW-1-23Q1-comp
Date Collected: 01/18/23 13:17
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			292815	SGO	EET PHX	01/19/23 07:57
Total/NA	Analysis	200.7 Rev 4.4		1	292995	CHS	EET PHX	01/20/23 15:38

Client Sample ID: TB-23Q1
Date Collected: 01/18/23 08:00
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/26/23 19:59

Laboratory References:

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: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-23

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

196467

Chain Of Custody / Analysis Request

Test America - Phoenix
4625 East Cotton CTr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

AESI Ref: 44944.47592
COC#: 35008_011823

Privileged & Confidential		Site Name:	IAC, Peoria
Sampling Co.: Jacobs	EDD To: Bernice Kidd, Jacobs HTS	Location of Site:	Phoenix, AZ
Client Contact: (name, co., address)	Sampler: T. Kearsley		
Jacobs	PO #: A001036349		
1501 W. Fountainhead Parkway (suite 401)	Analysis Turnaround Time (TAT): 10		
Tempe, AZ 85282	Consultant		
Preliminary Data To: Berney Kidd Jacobs, Lakshmi@evi HTS,	Laboratory Contact: Danielle Roberts		
Sample Receipt Acknowledgement To: Sample Distribution List	Report Tier Level: 2		
Hard Copy To: Berney Kidd Jacobs,	Full Report TAT: 10		
Invoice To: Per OM&M Program process,Tao Wu, Honeywell/Copy Berney Kidd	HTS		

Phase:
Sampling Program: Quarterly
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Text & [redacted] File Drive | Excel & Text File Order

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)	SM5210B (BOD)	SM2540D (TSS)	E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)					Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units		8	10	15	10	0	0	10						
1	MW-10	----	----	MW-10-23Q1	1/18/2023	12:40	GW-GWS	WATER	REG	4	grab	N	X		X								-01		
2	MW-10	----	----	MW-10-23Q1-comp	1/18/2023	12:36	GW-GWS	WATER	REG	3	comp	N		X		X	X	X					-02		
3	EW-1	----	----	EW-1-23Q1	1/18/2023	13:20	GW-GWS	WATER	REG	3	grab	N								X			-03		
4	EW-1	----	----	EW-1-23Q1-comp	1/18/2023	13:17	GW-GWS	WATER	REG	1	comp	N							X				-04		
5	TRIPBLANK	----	----	TB-23Q1	1/18/2023	8:00	BLKWATER	WATER	TB	1	grab	N	X										-05		
6																									
7																									
8																									
9																									
10																									
11																									
12																									

550-196467 Chain of Custody

Relinquished by: Thomas Kearsley	Company: CH2M	Received by: FedEx	Company:	Condition:		Custody Seals Intact:	
	Date/Time: 1/18/22 14:03		Date/Time:	Cooler Temp.:			
Relinquished by:	Company:	Received by: EETA PHX	Company:	Condition:		Custody Seals Intact:	
	Date/Time:		Date/Time: 1/18/22 1403	Cooler Temp.:			

Preservatives: (Other; Specify): EW-1 Comp E200.7 Qrt-list only

0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, pH<2, 4 Deg C)); 8 (HCl, pH<2, 4 Deg C); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH. pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); 14 (1-MeOH, 4 Deg C and 2-NaHSO4, 4 Deg C): 15 (NaOH, pH>12, 4 Deg C); sp (special instructions)

1.0°C IR Gun

2/8/2023 (Rev. 1)

196467

Chain Of Custody / Analysis Request

Test America - Phoenix
4625 East Cotton CTr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Sampling Co.:	Jacobs	**Privileged & Confidential**	
		EDD To:	Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)		Sampler:	T. Kearsley
Jacobs		PO #	A001036349
1501 W. Fountainhead Parkway (suite 401)		Analysis Turnaround Time (TAT):	10
Tempe, AZ 85282		Consultant	
Preliminary Data To	Berney Kidd Jacobs, Lakshmi..., HTS	Laboratory Contact	Danielle Roberts
Sample Receipt Acknowledgement To	Sample Distribution List	Report Tier Level	2
Hard Copy To	Berney Kidd Jacobs	Full Report TAT:	10
Invoice To:	Per OM&M Program process, Tao Wu, Honeywell/Copy Berney Kidd		HTS

Site Name: IAC, Peoria
Location of Site: Phoenix, AZ
Phase:
Sampling Program
Quar

#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245 1 (mercury)	SM5210B (BOD)	SM2540D (TSS)	E200.7 (Cd, Cu, Pb, Zn) (Qrt list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)
											Preservative		8	10	15	10	0	0	10	
											Units									
1	MW-10	----	----	MW-10-23Q1	1/18/2023	12:40	GW-GWS	WATER	REG	4	grab	N	X		X					
2	MW-10	----	----	MW-10-23Q1-comp	1/18/2023	12:36	GW-GWS	WATER	REG	3	comp	N		X		X	(X crossed out)	(X crossed out)		
3	EW-1	----	----	EW-1-23Q1	1/18/2023	13:20	GW-GWS	WATER	REG	3	grab	N								X
4	EW-1	----	----	EW-1-23Q1-comp	1/18/2023	13:17	GW-GWS	WATER	REG	1	comp	N							X	
5	TRIPBLANK	----	----	TB-23Q1	1/18/2023	8:00	BLKWATER	WATER	TB	1	grab	N	X							
6																				
7																				
8																				
9																				
10																				
11																				
12																				

550-196467 Chain of Custody

Relinquished by	Company: CH2M	Received by	Company	Condition	
Thomas Kearsley [signature]	Date/Time: 1/18/22 17:03	FedEx	Date/Time	Cooler Temp.	
Relinquished by	Company	Received by [signature] EETA PHX	Company	Condition	
	Date/Time		Date/Time 1/18/23 1403	Cooler Temp.	1.3°

Preservatives: (Other; Specify): EW-1 Comp E200.7 Qrt-list only

0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, ... 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH. pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); pH>12, 4 D... (special instructions)

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-196467-1
SDG Number: Phoenix, AZ

Login Number: 196467
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

March 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – February 2023**
Industrial Wastewater Discharge Permit Number 2302-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Company (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the February 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, February 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	2302-5436	2,279,536	28

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period January 1, 2023, through March 31, 2023, was collected on January 18, 2023. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 2302-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 2302-5436

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc. – Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85051
Permit Limits:	***Local Limits+***
Permit №:	***2302-5436***
Compliance Sampling Point:	***5436.01***
Report Period:	February 1, 2023 Through February 28, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 81,412	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 81,840	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,279,536	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment A - Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	March 24, 2023
Phone Number/Email	(602) 327-3807, Baine.Foehr@jacobs.com

Compliance Sampling Point № ***5436.01***

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	01/18/2023	49,178,524				☐	☐
1.	02/06/2023	50,733,491	81,840			☐	☒
2.	02/21/2023	51,946,517	80,868			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		81,412				
	Maximum Flow		81,840				
	Total Gallons		2,279,536				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 2/6/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	11:29	ON	50733491		-8	56.0	300.96	3138.3
Depart		ON						

Electrical Meter Readings

Power(kwh)	17685
Power Rate(KwMax)	9.08

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel 465 Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ___ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
~ pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.88
- 2.92
300.96

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 2/21/25 Field Technician(s) T Healy

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1130	ON	51946517		-7	54.98*	301.10	31740.0
Depart		ON						

Electrical Meter Readings

Power(kwh)	20919
Power Rate(KwMax)	9.03

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
~ pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

* Bumped flow up

Signature: T Healy

EW-1 Well Information
Total Depth = 425 feet bgs
Screen Interval = 265-415 feet bgs
Pump Intake Depth = 363 feet bgs

304.02
-2.92
301.10

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1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

March 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – February 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the February 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, February 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,323,280	28

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period January 1, 2023, through March 31, 2023, was collected on January 18, 2023. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc.*** ***Former Peoria Avenue Facility/MW-10***
Address:	***2251 West Sierra Street***
	Phoenix, Arizona 85029-3602
Permit Limits:	***Local Limits +***
Permit №:	***2208-5383***
Compliance Sampling Point:	***5383.01***

Report Period: February 1, 2023 Through February 28, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 47,260	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 47,532	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,323,280	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	March 24, 2023
Phone Number/Email	602-327-3807, Baine.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Compliance Sampling Point № **5383.01**

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	01/18/2023	23,411,364				☐	☐
1.	02/06/2023	24,305,239	47,046			☐	☒
2.	02/21/2023	25,018,215	47,532			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
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22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		47,260				
	Maximum Flow		47,532				
	Total Gallons		1,323,280				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 2/6/23 Field Technician(s) Thursby

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	11:00	ON	24305239	-2	33.1	299.81	93570.2
Depart		ON					

Electrical Meter Readings

Power(kwh)	48267
Power Rate(KwMax)	5.10

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel YES Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Mercury by USEPA 245.1
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Biological Oxygen Demand by SM 5210-B
— Total Suspended Solids by SM 2540-D
— Other

Time pH Sample Collected: N/A
Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Thursby

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

304.91
5.1
.81

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 2/21/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	11:00	ON	25018215	-2	33.4	~~304~~ (12)	93950.0
Depart		ON				299.55	

Electrical Meter Readings

Power(kwh)	50102
Power Rate(KwMax)	5.14

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

- [ ] Inspect Totalizer Paddle Wheel
- [ ] Clean Vault
- [ ] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

- [ ] VOCs by USEPA 624
- [ ] pH by USEPA SM 4500-H+
- [ ] Metals by USEPA 200.7, 200.8
- [ ] Mercury by USEPA 245.1
- [ ] Total Cyanide and Sulfide by SM 4500-CN-C, E
- [ ] Biological Oxygen Demand by SM 5210-B
- [ ] Total Suspended Solids by SM 2540-D
- [ ] Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

304.65
5.1
299.55

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Chase Torrence
Senior Water Quality Inspector
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2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

March 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – February 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the February 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, February 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,323,280	28

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period January 1, 2023, through March 31, 2023, was collected on January 18, 2023. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc.*** ***Former Peoria Avenue Facility/MW-10***
Address:	***2251 West Sierra Street***
	Phoenix, Arizona 85029-3602
Permit Limits:	***Local Limits +***
Permit №:	***2208-5383***
Compliance Sampling Point:	***5383.01***

Report Period: February 1, 2023 Through February 28, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 47,260	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 47,532	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,323,280	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	March 24, 2023
Phone Number/Email	602-327-3807, Baine.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Compliance Sampling Point № **5383.01**

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
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2.	02/21/2023	25,018,215	47,532			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
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31.						☐	☐
	Average Flow		47,260				
	Maximum Flow		47,532				
	Total Gallons		1,323,280				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 2/6/23 Field Technician(s) Thursby

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	11:00	ON	24305239	-2	33.1	299.81	93570.2
Depart		ON					

Electrical Meter Readings

Power(kwh)	48267
Power Rate(KwMax)	5.10

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel YES Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Mercury by USEPA 245.1
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Biological Oxygen Demand by SM 5210-B
— Total Suspended Solids by SM 2540-D
— Other

Time pH Sample Collected: N/A
Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Thursby

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

304.91
5.1
.81

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 2/21/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	11:00	ON	25018215	-2	33.4	~~304~~ (12)	93950.0
Depart		ON				299.55	

Electrical Meter Readings

Power(kwh)	50102
Power Rate(KwMax)	5.14

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

- [ ] Inspect Totalizer Paddle Wheel
- [ ] Clean Vault
- [ ] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

- [ ] VOCs by USEPA 624
- [ ] pH by USEPA SM 4500-H+
- [ ] Metals by USEPA 200.7, 200.8
- [ ] Mercury by USEPA 245.1
- [ ] Total Cyanide and Sulfide by SM 4500-CN-C, E
- [ ] Biological Oxygen Demand by SM 5210-B
- [ ] Total Suspended Solids by SM 2540-D
- [ ] Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

304.65
5.1
299.55

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

April 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – March 2023**
Industrial Wastewater Discharge Permit Number 2302-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Company (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the March 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, March 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	2302-5436	2,572,349	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period January 1, 2023, through March 31, 2023, was collected on January 18, 2023. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 2302-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 2302-5436

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc. – Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85051
Permit Limits:	***Local Limits+***
Permit №:	***2302-5436***
Compliance Sampling Point:	***5436.01***
Report Period:	March 1, 2023 Through March 31, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 82,979	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 83,801	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,572,349	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment A - Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	April 26, 2023
Phone Number/Email	(602) 327-3807, Baine.Foehr@jacobs.com

Compliance Sampling Point № ***5436.01***

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	02/21/2023	51,946,517				☐	☐
1.	03/06/2023	53,035,933	83,801			☐	☒
2.	03/23/2023	54,435,900	82,351			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
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27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		82,979				
	Maximum Flow		83,801				
	Total Gallons		2,572,349				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 3/6/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1030	ON	53035933		+7	57.9	301.05	3205.2
Depart		ON						

Electrical Meter Readings

Power(kwh)	23751
Power Rate(KwMax)	9.17

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel YES Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.97
2.92
301.05

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 3/23/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:25	ON	54435900		7	56.2	300.20	32459.1
Depart		ON						

Electrical Meter Readings

Power(kwh)	27454
Power Rate(KwMax)	9.17

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ___ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
✓ pH by USEPA SM 4500-H+
✓ Metals by USEPA 200.7, 200.8

— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): ✓

Composite Sample Log

Start Time: — End Time: ✓ Flow Rate: — mL/min

Aliquot Volume: ✓ mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.12
-2.92
220

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1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

April 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – March 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the March 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, March 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,478,700	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period January 1, 2023, through March 31, 2023, was collected on January 18, 2023. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc.*** ***Former Peoria Avenue Facility/MW-10***
Address:	***2251 West Sierra Street***
	Phoenix, Arizona 85029-3602
Permit Limits:	***Local Limits +***
Permit №:	***2208-5383***
Compliance Sampling Point:	***5383.01***

Report Period: March 1, 2023 Through March 31, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 47,700	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 47,784	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,478,700	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	April 26, 2023
Phone Number/Email	602-327-3807, Baine.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Compliance Sampling Point № **5383.01**

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	02/21/2023	25,018,215				☐	☐
1.	03/06/2023	25,636,887	47,590			☐	☒
2.	03/23/2023	26,449,218	47,784			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
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9.						☐	☐
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25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		47,700				
	Maximum Flow		47,784				
	Total Gallons		1,478,700				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 3/6/23 (RE) Field Technician(s) T. Keasley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1005	ON	25636887	-2	33.0	299.01	94261.2
Depart		ON					

Electrical Meter Readings

Power(kwh)	51658
Power Rate(KwMax)	5.11

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel | YES Clean Vault | — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

—	VOCs by USEPA 624	—	Total Cyanide and Sulfide by SM 4500-CN-C, E
—	pH by USEPA SM 4500-H+	—	Biological Oxygen Demand by SM 5210-B
—	Metals by USEPA 200.7, 200.8	—	Total Suspended Solids by SM 2540-D
—	Mercury by USEPA 245.1	—	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Keasley

MW-10 Well Information
Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

304.21
5.1
299.01

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 3/23/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:00	ON	2644218	~2	32.6	298.88	94669.0
Depart		ON					

Electrical Meter Readings

Power(kwh)	53766
Power Rate(KwMax)	5.13

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Mercury by USEPA 245.1
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Biological Oxygen Demand by SM 5210-B
— Total Suspended Solids by SM 2540-D
— Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T. Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

303.98
-5.1
298.88

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1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
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Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

May 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – April 2023**
Industrial Wastewater Discharge Permit Number 2302-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Company (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the April 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, April 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	2302-5436	2,428,980	30

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period April 1, 2023, through June 30, 2023, will be collected in May 2023.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 2302-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 2302-5436

Facility Name:	***Honeywell International, Inc. – Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85051
Permit Limits:	***Local Limits+***
Permit №:	***2302-5436***
Compliance Sampling Point:	***5436.01***
Report Period:	April 1, 2023 Through April 30, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 80,966	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 81,208	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,428,980	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment A - Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	May 26, 2023
Phone Number/Email	(602) 327-3807, Baine.Foehr@jacobs.com

Compliance Sampling Point № ***5436.01***

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	03/23/2023	54,435,900				☐	☐
1.	04/05/2023	55,491,599	81,208			☐	☒
2.	04/24/2023	57,026,802	80,800			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		80,966				
	Maximum Flow		81,208				
	Total Gallons		2,428,980				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 4/5/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1320	ON	554 915 99		-7	55.3	298.00	32714.1
Depart		ON						

Electrical Meter Readings

Power(kwh)	30308
Power Rate(KwMax)	9.10

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel YES Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ___ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

300.92
− 2.92
298.00

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 4/24/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:35	ON	5702688D2		7	55.7	~~299.06~~ 297.06	33227.5
Depart		ON					297.06	

Electrical Meter Readings

Power(kwh)	34371
Power Rate(KwMax)	9.09

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel YES Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
~ pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: [signature]

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

299.98
- 2.92
297.06

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

May 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – April 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the April 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, April 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,441,320	30

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated March 25, 2022, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period April 1, 2023, through June 30, 2023, will be collected in May 2023.

If you should require any additional information, please contact me at (602) 327-3807.

Respectfully submitted,

Baine Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Tao Wu, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc.*** ***Former Peoria Avenue Facility/MW-10***
Address:	***2251 West Sierra Street***
	Phoenix, Arizona 85029-3602
Permit Limits:	***Local Limits +***
Permit №:	***2208-5383***
Compliance Sampling Point:	***5383.01***

Report Period: April 1, 2023 Through April 30, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 48,044	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 48,379	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,441,320	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	May 26, 2023
Phone Number/Email	602-327-3807, Baine.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Compliance Sampling Point № **5383.01**

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	03/23/2023	26,449,218				☐	☐
1.	04/05/2023	27,078,143	48,379			☐	☒
2.	04/24/2023	27,986,631	47,815			☐	☒
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		48,044				
	Maximum Flow		48,379				
	Total Gallons		1,441,320				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 4/5/23 Field Technician(s) T. Keasling

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	13:00	ON	270 78143	2	33.2	296.11	94984.0
Depart		ON					

Electrical Meter Readings

Power(kwh)	55376
Power Rate(KwMax)	5.11

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

~ Inspect Totalizer Paddle Wheel | YES Clean Vault | ~ Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

~	VOCs by USEPA 624	~	Total Cyanide and Sulfide by SM 4500-CN-C, E
~	pH by USEPA SM 4500-H+	~	Biological Oxygen Demand by SM 5210-B
~	Metals by USEPA 200.7, 200.8	~	Total Suspended Solids by SM 2540-D
~	Mercury by USEPA 245.1	~	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: ~
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): ~

Composite Sample Log

Start Time: ~ End Time: ~ Flow Rate: ~ mL/min

Aliquot Volume: ~ mL x 20 aliquots = ~ mL total volume

Notes

Signature: T Keasling

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

301.21
5.1
296.11

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 4/24/23 Field Technician(s) T. KEARSley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1018	ON	27986631	~2	3.36	296.59	9543.5
Depart		ON					

Electrical Meter Readings

Power(kwh)	57693
Power Rate(KwMax)	5.15

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel | YES Clean Vault | — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

~	VOCs by USEPA 624	—	Total Cyanide and Sulfide by SM 4500-CN-C, E
~	pH by USEPA SM 4500-H+	—	Biological Oxygen Demand by SM 5210-B
~	Metals by USEPA 200.7, 200.8	—	Total Suspended Solids by SM 2540-D
~	Mercury by USEPA 245.1	—	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: ~ End Time: ~ Flow Rate: — mL/min

Aliquot Volume: ~ mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

301.69
- 5.1
296.59

1999 Bryan Street, Suite 1200
Dallas, Texas 75201
United States
T +1.214.638.0145480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

June 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – May 2023**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Engineering Group, Inc. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the May 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, May 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,509,884	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period April 1, 2023, through June 30, 2023, are included in this monthly report. Jacobs personnel performed compliance sampling for all required analytes on May 10, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 1806-5436

Attachment B – Operation and Maintenance Data Collection Forms and pH Log Sheet

Attachment C – Analytical Report

Copies to: Mr. Steve Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 1806-5436

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Address: *2305 West Mercer Lane*

Phoenix, Arizona 85029

Permit №: ***1806-5436***

Compliance Sampling Point: ***5436.01***

Report Period: May 1, 2023 Through May 31, 2023

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 80,964	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 81,812	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,509,884	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☒ SMR Page 2 – Sampling Detail Page
- ☒ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B - Zero Discharge Certification (Only if Applicable)
- ☒ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☒ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☒ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature 

Certifying Official Name Derek Foehr

Certifying Official Title Project Manager

Date June 26, 2023

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Address: *2305 West Mercer Lane*

Phoenix, Arizona 85029

Dates/Times Samples Collected: **05/10/2023 at 11:17 (grab), 11:15 (composite), 11:16 (pH)**

Names(s) and Affiliation of Person(s) Sampling: **Tom Kearsley/Jacobs Project Management Co.**

Compliance Sampling Point № **5436.01** Lab Project or Reference ID № **550-196467-1**

Device Type: **½" Sampling tap**

Location Description: **Inside vault under the street in West Mercer Street**

Electronic pH meter calibrated prior to analysis? **Yes**

Sampling Methodology (indicate sample type, collection method, and preservation for all pollutants sampled):

Type	Collection Method	Preservation
pH	Grab	N/A
Metals	Composite	HNO3
Cyanide	Grab	NaOH
VOCs	Grab	HCl

NOTE: If sample collection method was Hand Composite; a log showing date, time, flow rate, aliquot volumes, and final calculations for the final hand composite must be included with the report.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Permit №: *1806-5436*

Report Period: May 1, 2023 to May 31, 2023

Compliance Point №: ***5436.01***

Lab Project or Reference ID № ***550-196467-1***

Compliance Point Description: ***½" sampling tap inside vault***

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 05/10/2023	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method
1,1-Dichloroethane	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	3.4	EPA 624.1								
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	42	EPA 624.1								
Arsenic	**mg/L**	**0.13**	**1 per 6 Months**	**FPC**	<0.10	EPA 200.7 Rev 4.4								
Cadmium	**mg/L**	**0.047**	**1 per Quarter**	**FPC**	<0.0010	EPA 200.7 Rev 4.4								
Chloroform	**µg/L**	**2000**	**1 per Quarter**	**Grab**	0.98	EPA 624.1								
Copper	**mg/L**	**1.5**	**1 per Quarter**	**FPC**	<0.01	EPA 200.7 Rev 4.4								
Cyanide (T)	**mg/L**	**2.0**	**1 per 6 Months**	**Grab**	<0.050	EPA 9010								
Lead	**mg/L**	**0.41**	**1 per Quarter**	**FPC**	<0.015	EPA 200.7 Rev 4.4								
Mercury	**mg/L**	**0.0023**	**1 per 6 Months**	**FPC**	<0.00020	EPA 245.1								
Molybdenum	**mg/L**	**N/A**	**1 per 6 Months**	**FPC**	<0.010	EPA 200.7 Rev 4.4								
pH	**S.U.**	**5.0-10.5**	**1 per Quarter**	**Grab**	7.63	SM 4500-H+B								
Selenium	**mg/L**	**0.10**	**1 per 6 Months**	**FPC**	<0.10	EPA 200.7 Rev 4.4								
Silver	**mg/L**	**1.2**	**1 per 6 Months**	**FPC**	<0.010	EPA 200.7 Rev 4.4								
Trichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	13	EPA 624.1								
Zinc	**mg/L**	**3.5**	**1 per Quarter**	**FPC**	<0.050	EPA 200.7 Rev 4.4								

NOTES:
This form is to be submitted for <u>each</u> sampling point.

<u>Sampling Frequency</u> – The required minimum sampling frequency from your Permit.

Sample Type - FPC is a Flow Proportional Composite; G/FPC is a combination of Grab and Flow Proportional samples as specified in 40 CFR 136.

Date – Enter the date the sample was taken and enter the result for each parameter under the date. Do not enter the "ND" from the laboratory as a sample result. Enter less than (<) the detection limit for the parameter. For example <0.05.

Analysis Method - The analysis method used by the laboratory is to be entered for each result. All samples must be analyzed by the analytical methods required by the Permit. Copies of the laboratory analytical reports must be submitted with this form.

Compliance Sampling Point Nº 5436.01

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (Inches)	Measured Level (Inches)	☒ Meter Adjusted	☒ Sampling Point Cleaned
Last	04/24/2023	57,026,802				☐	☒
1.	05/10/2023	58,335,791	81,812			☐	☐
2.	05/24/2023	59,455,730	79,996			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow **80,964**

Maximum Flow **81,812**

Total Gallons **2,509,884**

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 5/10/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:54	ON	58335791		~7	57.6	299.84	3362.2
Depart		ON						

Electrical Meter Readings

Power(kwh)	37798
Power Rate(KwMax)	9.01

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes X No ____

Laboratory Analyses and Method

Yes	VOCs by USEPA 624	Yes	Total Cyanide and Sulfide by SM 4500-CN-C, E
Yes	pH by USEPA SM 4500-H+	Yes	Mercury by USEPA 245.1
Yes	Metals by USEPA 200.7, 200.8	—	Other

Time pH Sample Collected: 11:16 Time pH Sample Analyzed: 11:20
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 11:17

Composite Sample Log

Start Time: 10:55 End Time: 11:15 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 10,000 mL total volume

Notes

pH 7.63 @ 29.3°C

Signature: T. Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

302.76
2.92
299.84

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 5/24/23 Field Technician(s) T. Reavis/Loy

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:00	ON	59455730		7	53.9 *	~~299.25~~	~~33946.7~~
Depart		ON						33946.7

Electrical Meter Readings

Power(kwh)	40767
Power Rate(KwMax)	9.05

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

- [—] Inspect Totalizer Paddle Wheel
- [—] Clean Vault
- [—] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

- [—] VOCs by USEPA 624
- [—] pH by USEPA SM 4500-H+
- [—] Metals by USEPA 200.7, 200.8
- [—] Total Cyanide and Sulfide by SM 4500-CN-C, E
- [—] Mercury by USEPA 245.1
- [—] Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume —

Notes

* Raised flow to 57.96 GPM

Signature: T Reavis

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

302.17
- 2.92
299.25

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № 030548

pH Calibration & Analysis Log

Compliance Sampling Point № 5436.01, 5383.01

Calibration Standard	Date	Analyst Initials	Analysis Time	Reading (Units)	Temp Reading (°C)	Calibration Slope (mV or %)	Comments
pH Buffer 4/Lot# F1022B 6/10/2024	5/10/23	TK	09:23	4.0	24.7	99.4	
pH Buffer 7/Lot# E1022A 5/10/2024			09:15	7.0	24.2	98.3	
pH Buffer 10/Lot# D1322D 10/13/2023			09:19	10.0	24.7	103.4	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# CH-L8500-7 9/23			09:24	7.01	24.1	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	5/10/23	TK	11:20	7.63	29.3	N/A	
Compliance pH result 5383.01 (MW-10)	5/10/23	TK	10:28	7.52	27.7	N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
Once/Month Duplicate Sample (+/- 0.1 Acceptance)	5/10/23	TK	Orig Reading:	7.52	Dup Reading:	7.54	
Once/Month Verification Check/Buffer 7	5/10/23	TK	12:10	7.03	24.9	(Pass) or Fail	

NOTE: *Grab pH Analysis for purposes of compliance sampling* ***must be performed within 15 minutes sample collection*** *using one of the methods specified for* ***Hydrogen Ion*** *in Title 40 of the Code of Federal Regulations Part 136; typically SM4500 H+ B. Arizona Department of Environmental Quality has provided guidance for complying with the Calibration and QA/QC portions of the approved analytical methods. This pH callibration log may aid in meeting the minimum criteria. Please see the manufacturer's manual for your pH meter to determine the acceptable slope in mV or %.*

NOTE: *Permittees are required to calibrate field and/or bench pH meters* ***each day of use for Grab pH Analysis.***

NOTE: *Permittees are required to keep pH Calibration Logs* ***onsite and available for review for a minimum of three years; a copy of the hand-written original must be submitted with the monthly SMR.***

Attachment C
Analytical Report

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ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

Peoria (AZ)
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-202006-1

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

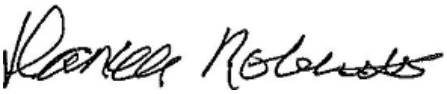
See page two for job notes and contact information.

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



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Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Qualifiers

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.

General Chemistry

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

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: 550-202006-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-202006-1

Comments
No additional comments.

Receipt
The samples were received on 5/10/2023 1:43 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2º C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-202006-1	MW-10-23Q2	Water	05/10/23 10:25	05/10/23 13:43
550-202006-2	MW-10-23Q2-comp	Water	05/10/23 10:23	05/10/23 13:43
550-202006-3	EW-1-23Q2	Water	05/10/23 11:17	05/10/23 13:43
550-202006-4	EW-1-23Q2-comp	Water	05/10/23 11:15	05/10/23 13:43
550-202006-5	TB-051222	Water	05/10/23 08:00	05/10/23 13:43

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q2 — Lab Sample ID: 550-202006-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.61		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	13		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.0		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q2-comp — Lab Sample ID: 550-202006-2

No Detections.

Client Sample ID: EW-1-23Q2 — Lab Sample ID: 550-202006-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.4		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	42		0.50		ug/L	1		624.1	Total/NA
Chloroform	0.98		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	13		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q2-comp — Lab Sample ID: 550-202006-4

No Detections.

Client Sample ID: TB-051222 — Lab Sample ID: 550-202006-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q2

Lab Sample ID: 550-202006-1
Date Collected: 05/10/23 10:25
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.61		0.50		ug/L			05/24/23 00:23	1
1,1-Dichloroethene	13		0.50		ug/L			05/24/23 00:23	1
Benzene	ND		0.50		ug/L			05/24/23 00:23	1
Chloroform	ND		0.50		ug/L			05/24/23 00:23	1
Trichloroethene	4.0		0.50		ug/L			05/24/23 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*05/24/23 00:23*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/24/23 00:23*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/24/23 00:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Client Sample ID: MW-10-23Q2-comp

Lab Sample ID: 550-202006-2
Date Collected: 05/10/23 10:23
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/15/23 08:19	06/01/23 20:10	1
Cadmium	ND		0.0010		mg/L		05/15/23 08:19	06/01/23 20:10	1
Copper	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Lead	ND		0.015		mg/L		05/15/23 08:19	05/23/23 19:53	1
Molybdenum	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Selenium	ND		0.10		mg/L		05/15/23 08:19	05/23/23 19:53	1
Silver	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Zinc	ND		0.050		mg/L		05/15/23 08:19	05/23/23 19:53	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:31	1

Client Sample ID: EW-1-23Q2

Lab Sample ID: 550-202006-3
Date Collected: 05/10/23 11:17
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	3.4		0.50		ug/L			05/24/23 00:44	1
1,1-Dichloroethene	42		0.50		ug/L			05/24/23 00:44	1
Chloroform	0.98		0.50		ug/L			05/24/23 00:44	1
Trichloroethene	13		0.50		ug/L			05/24/23 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/24/23 00:44*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/24/23 00:44*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/24/23 00:44*	*1*

Client Sample ID: EW-1-23Q2

Lab Sample ID: 550-202006-3

Date Collected: 05/10/23 11:17
Matrix: Water
Date Received: 05/10/23 13:43

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Client Sample ID: EW-1-23Q2-comp

Lab Sample ID: 550-202006-4

Date Collected: 05/10/23 11:15
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/15/23 08:19	06/01/23 20:13	1
Cadmium	ND		0.0010		mg/L		05/15/23 08:19	06/01/23 20:13	1
Copper	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Lead	ND		0.015		mg/L		05/15/23 08:19	05/23/23 19:55	1
Molybdenum	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Selenium	ND		0.10		mg/L		05/15/23 08:19	05/23/23 19:55	1
Silver	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Zinc	ND		0.050		mg/L		05/15/23 08:19	05/23/23 19:55	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:33	1

Client Sample ID: TB-051222

Lab Sample ID: 550-202006-5

Date Collected: 05/10/23 08:00
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			05/23/23 23:21	1
1,1-Dichloroethene	ND		0.50		ug/L			05/23/23 23:21	1
Benzene	ND		0.50		ug/L			05/23/23 23:21	1
Chloroform	ND		0.50		ug/L			05/23/23 23:21	1
Trichloroethene	ND		0.50		ug/L			05/23/23 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*05/23/23 23:21*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/23/23 23:21*	*1*
Toluene-d8 (Surr)	*96*		*60 - 140*		*05/23/23 23:21*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-202006-1	MW-10-23Q2	93	99	94
550-202006-1 MS	MW-10-23Q2	82	86	78
550-202006-1 MSD	MW-10-23Q2	86	90	82
550-202006-3	EW-1-23Q2	92	99	94
550-202006-5	TB-051222	93	99	96
LCS 550-300882/3	Lab Control Sample	83	87	84
LCSD 550-300882/4	Lab Control Sample Dup	90	93	87
MB 550-300882/6	Method Blank	89	99	95

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-300882/6
Matrix: Water
Analysis Batch: 300882

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			05/23/23 22:39	1
1,1-Dichloroethene	ND		0.50		ug/L			05/23/23 22:39	1
Benzene	ND		0.50		ug/L			05/23/23 22:39	1
Chloroform	ND		0.50		ug/L			05/23/23 22:39	1
Trichloroethene	ND		0.50		ug/L			05/23/23 22:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*05/23/23 22:39*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/23/23 22:39*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*05/23/23 22:39*	*1*

Lab Sample ID: LCS 550-300882/3
Matrix: Water
Analysis Batch: 300882

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	49.5		ug/L		99	70 - 130		
1,1-Dichloroethene			50.0	48.6		ug/L		97	50 - 150		
Benzene			50.0	46.4		ug/L		93	65 - 135		
Chloroform			50.0	52.4		ug/L		105	70 - 135		
Trichloroethene			50.0	50.5		ug/L		101	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*60 - 140*
Dibromofluoromethane (Surr)	*87*		*60 - 140*
Toluene-d8 (Surr)	*84*		*60 - 140*

Lab Sample ID: LCSD 550-300882/4
Matrix: Water
Analysis Batch: 300882

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-Dichloroethane			50.0	54.0		ug/L		108	70 - 130	9	20
1,1-Dichloroethene			50.0	52.8		ug/L		106	50 - 150	8	20
Benzene			50.0	50.5		ug/L		101	65 - 135	9	20
Chloroform			50.0	57.5		ug/L		115	70 - 135	9	20
Trichloroethene			50.0	53.1		ug/L		106	65 - 135	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*87*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-202006-1 MS
Matrix: Water
Analysis Batch: 300882

Client Sample ID: MW-10-23Q2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.61		50.0	53.2		ug/L		105	59 - 155
1,1-Dichloroethene	13		50.0	63.3		ug/L		101	10 - 234
Benzene	ND		50.0	49.4		ug/L		99	35 - 151
Chloroform	ND		50.0	56.7		ug/L		113	51 - 138
Trichloroethene	4.0		50.0	54.8		ug/L		102	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*60 - 140*
Dibromofluoromethane (Surr)	*86*		*60 - 140*
Toluene-d8 (Surr)	*78*		*60 - 140*

Lab Sample ID: 550-202006-1 MSD
Matrix: Water
Analysis Batch: 300882

Client Sample ID: MW-10-23Q2
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-Dichloroethane	0.61		50.0	51.4		ug/L		102	59 - 155	3	40
1,1-Dichloroethene	13		50.0	61.9		ug/L		98	10 - 234	2	32
Benzene	ND		50.0	48.0		ug/L		96	35 - 151	3	61
Chloroform	ND		50.0	54.5		ug/L		108	51 - 138	4	54
Trichloroethene	4.0		50.0	54.0		ug/L		100	70 - 157	2	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*
Dibromofluoromethane (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*82*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-300219/1-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300219

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Lead	ND		0.015	mg/L		05/15/23 08:19	05/23/23 18:59	1
Molybdenum	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Selenium	ND		0.10	mg/L		05/15/23 08:19	05/23/23 18:59	1
Silver	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Zinc	ND		0.050	mg/L		05/15/23 08:19	05/23/23 18:59	1

Lab Sample ID: MB 550-300219/1-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300219

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/15/23 08:19	06/01/23 19:28	1
Cadmium	ND		0.0010	mg/L		05/15/23 08:19	06/01/23 19:28	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-300219/2-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Copper			1.00	0.870		mg/L		87	85 - 115		
Lead			1.00	0.935		mg/L		94	85 - 115		
Molybdenum			1.00	0.912		mg/L		91	85 - 115		
Selenium			1.00	0.913		mg/L		91	85 - 115		
Silver			0.0750	0.0639		mg/L		85	85 - 115		
Zinc			1.00	1.01		mg/L		101	85 - 115		

Lab Sample ID: LCS 550-300219/2-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			1.00	1.01		mg/L		101	85 - 115		
Cadmium			1.00	1.01		mg/L		101	85 - 115		

Lab Sample ID: LCSD 550-300219/3-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper			1.00	0.874		mg/L		87	85 - 115	0	20
Lead			1.00	0.940		mg/L		94	85 - 115	1	20
Molybdenum			1.00	0.920		mg/L		92	85 - 115	1	20
Selenium			1.00	0.921		mg/L		92	85 - 115	1	20
Silver			0.0750	0.0637		mg/L		85	85 - 115	0	20
Zinc			1.00	0.992		mg/L		99	85 - 115	1	20

Lab Sample ID: LCSD 550-300219/3-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			1.00	1.02		mg/L		102	85 - 115	1	20
Cadmium			1.00	0.999		mg/L		100	85 - 115	1	20

Lab Sample ID: 550-201927-K-1-A MS
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Copper	ND		1.00	0.879		mg/L		88	70 - 130		
Lead	ND		1.00	0.928		mg/L		93	70 - 130		
Molybdenum	ND		1.00	0.946		mg/L		94	70 - 130		
Selenium	ND		1.00	0.951		mg/L		95	70 - 130		
Silver	ND		0.0750	0.0645		mg/L		86	70 - 130		
Zinc	ND		1.00	0.993		mg/L		99	70 - 130		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-201927-K-1-A MS
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	M1	1.00	2.07	E2 M1	mg/L		206	70 - 130
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130

Lab Sample ID: 550-201927-K-1-B MSD
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	ND		1.00	0.879		mg/L		88	70 - 130	0	20
Lead	ND		1.00	0.937		mg/L		94	70 - 130	1	20
Molybdenum	ND		1.00	0.955		mg/L		95	70 - 130	1	20
Selenium	ND		1.00	0.952		mg/L		95	70 - 130	0	20
Silver	ND		0.0750	0.0650		mg/L		87	70 - 130	1	20
Zinc	ND		1.00	1.00		mg/L		100	70 - 130	1	20

Lab Sample ID: 550-201927-K-1-B MSD
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND	M1	1.00	2.07	E2 M1	mg/L		206	70 - 130	0	20
Cadmium	ND		1.00	1.00		mg/L		100	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-300113/1-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300113

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:11	1

Lab Sample ID: LCS 550-300113/2-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300113

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.00500	0.00439		mg/L		88	85 - 115

Lab Sample ID: LCSD 550-300113/3-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300113

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00435		mg/L		87	85 - 115	1	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-201848-L-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300133 — **Prep Batch: 300113**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00422		mg/L		84	70 - 130

Lab Sample ID: 550-201848-L-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300133 — **Prep Batch: 300113**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00410		mg/L		82	70 - 130	3	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-300984/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Lab Sample ID: LCS 550-300984/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total			0.100	0.0945		mg/L		95	90 - 110

Lab Sample ID: LCSD 550-300984/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0945		mg/L		95	90 - 110	0	20

Lab Sample ID: 380-47276-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND	M2	0.100	0.0816	M2	mg/L		73	80 - 120

Lab Sample ID: 380-47276-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2	0.100	0.0794	M2	mg/L		71	80 - 120	3	20

GC/MS VOA

Analysis Batch: 300882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	624.1	
550-202006-3	EW-1-23Q2	Total/NA	Water	624.1	
550-202006-5	TB-051222	Total/NA	Water	624.1	
MB 550-300882/6	Method Blank	Total/NA	Water	624.1	
LCS 550-300882/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-300882/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-202006-1 MS	MW-10-23Q2	Total/NA	Water	624.1	
550-202006-1 MSD	MW-10-23Q2	Total/NA	Water	624.1	

Metals

Prep Batch: 300113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	245.1	
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	245.1	
MB 550-300113/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-300113/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-300113/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-201848-L-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-201848-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 300133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	245.1	300113
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	245.1	300113
MB 550-300113/1-A	Method Blank	Total/NA	Water	245.1	300113
LCS 550-300113/2-A	Lab Control Sample	Total/NA	Water	245.1	300113
LCSD 550-300113/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	300113
550-201848-L-1-B MS	Matrix Spike	Total/NA	Water	245.1	300113
550-201848-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	300113

Prep Batch: 300219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7	
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7	
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 300917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300219
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300219
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300219

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Metals

Analysis Batch: 301528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300219
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300219
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300219

General Chemistry

Prep Batch: 300984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	SM 4500 CN C	
550-202006-3	EW-1-23Q2	Total/NA	Water	SM 4500 CN C	
MB 550-300984/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-300984/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-300984/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
380-47276-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
380-47276-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 301036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	SM 4500 CN E	300984
550-202006-3	EW-1-23Q2	Total/NA	Water	SM 4500 CN E	300984
MB 550-300984/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	300984
LCS 550-300984/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	300984
LCSD 550-300984/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	300984
380-47276-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	300984
380-47276-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	300984

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q2
Date Collected: 05/10/23 10:25
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/24/23 00:23
Total/NA	Prep	SM 4500 CN C			300984	ZH	EET PHX	05/24/23 15:45
Total/NA	Analysis	SM 4500 CN E		1	301036	ZH	EET PHX	05/24/23 17:36

Client Sample ID: MW-10-23Q2-comp
Date Collected: 05/10/23 10:23
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	300917	GLW	EET PHX	05/23/23 19:53
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	301528	GLW	EET PHX	06/01/23 20:10
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:31

Client Sample ID: EW-1-23Q2
Date Collected: 05/10/23 11:17
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/24/23 00:44
Total/NA	Prep	SM 4500 CN C			300984	ZH	EET PHX	05/24/23 15:45
Total/NA	Analysis	SM 4500 CN E		1	301036	ZH	EET PHX	05/24/23 17:36

Client Sample ID: EW-1-23Q2-comp
Date Collected: 05/10/23 11:15
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	300917	GLW	EET PHX	05/23/23 19:55
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	301528	GLW	EET PHX	06/01/23 20:13
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:33

Client Sample ID: TB-051222
Date Collected: 05/10/23 08:00
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/23/23 23:21

Laboratory References:

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: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-23

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

202006

6/2/2023

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell

Chain of Custody / Analysis Request

Save with QC Check Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

Pricing Source (RFP, eAuction, etc)	RFP2019	HW Site Name	Peoria (AZ)	Task Type	OM&M	AESI Ref:	45056.49914
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS	Location of Site	Phoenix, AZ	WBS Code	6400	COC#	COC#
Sampler(s) names	T. Kearsley						Page 1 of 1
PO #	HW PO # A000651433					Lab Proj # (SDG):	JD11212
Analysis Turnaround Time (calendar days):	10					Lab Location ID	TAL-PHX
Consultant	Jacobs					HW Site R-Code	R35008
Laboratory Contact	Danielle Roberts					Sampling Program	Sampling program
Report Tier Level	2					Authorized User:	Honeywell
Full Report and EDD TAT (calendar days)	10					Lab Parent ID	TAL
Honeywell RM Name	Tao Wu (TW)					Text & Excel File Drive	Excel & Text File Order

Sampling Co.:	Jacobs		
Reporting Information (DocuSign First Signer)	Name	Jacobs	
	Address	1501 W. Fountainhead Parkway	
	City, State, Zip	Tempe, AZ 85282	
	Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com	
Billing Information (DocuSign Second Signer)	Co. Name	Honeywell	
	Address	111 South 34th Street M/S 158	
	City, State, Zip	Phoenix, AZ 85034	
	HW RM email	Tao.Wu@honeywell.com	

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)				E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)						Sampling Method (rt_sample_method)	Lab Sample Numbers
	Sample Identification										Units																
											Preservative		18	21	30	21			21	18							
1	MW-10	----	----	MW-10-23Q2	5/10/2023	10:25	GW-GWS	WATER	REG	4	N	N	X		X												
2	MW-10	----	----	MW-10-23Q2-comp	5/10/2023	10:23	GW-GWS	WATER	REG	1	Y	N		X		X											
3	EW-1	----	----	EW-1-23Q2	5/10/2023	11:17	GW-GWS	WATER	REG	4	N	N			X					X						
4	EW-1	----	----	EW-1-23Q2-comp	5/10/2023	11:15	GW-GWS	WATER	REG	1	Y	N		X		X											
5	Trip Blank			TB-051222	5/10/2023	8:00	BLKWATER	WATER	TB	1	N	N	X														
6																											
7																											
8																											
9																											
10																											
11																											
12																											

550-202006 Chain of Custody

Start at D66 to type instructions.

Relinquished by	Company	Jacobs	Received by	Company	EETA PHX	Condition	Custody Seals Intact
Thomas Kearsley	Date/Time	5/10/23 1843		Date/Time	5/10/23 1343	Cooler Temp.	3.2
Relinquished by	Company		Received by	Company		Condition	Custody Seals Intact
	Date/Time			Date/Time		Cooler Temp.	Lab Quote #

Preservatives: (Other; Specify):	EW-1 Comp E200.7 Qrt-list only	0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAci); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special);
		FedEx Tracking #

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-202006-1
SDG Number: Phoenix, AZ

Login Number: 202006
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

1501 W. Fountainhead Pkwy
Suite 401
Tempe, Arizona
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

June 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – May 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the May 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, May 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,492,960	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period April 1, 2023, through June 30, 2023, was collected on May 10, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms and pH Log Sheet

Attachment C – Analytical Report

Copies to: Mr. Steve Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge
Permit No. 2208-5383

Locked Form Instructions;
Use the TAB key to move to each data entry field.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc.*** ***Former Peoria Avenue Facility/MW-10***
Address:	***2251 West Sierra Street***
	Phoenix, Arizona 85029-3602
Permit Limits:	***Local Limits +***
Permit №:	***2208-5383***
Compliance Sampling Point:	***5383.01***
Report Period:	May 1, 2023 Through May 31, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured:	48,160	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured:	48,182	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured:	1,492,960	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☒ SMR Page 2 – Sampling Detail Page
- ☒ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☒ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☒ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☒ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	June 26, 2023
Phone Number/Email	480-234-8347, Derek.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

COMPLETE FOR <u>EACH SAMPLING EVENT</u> DURING THE REPORTING PERIOD

Facility Name: ***Honeywell International, Inc. Former Peoria Avenue Facility/MW-10***

Address: ***2251 West Sierra Street***

Phoenix, Arizona 85029-3602

Dates/Times Samples Collected: ***05/10/2023 at 10:25 (grab), 10:23 (composite), 10:26 (pH)***

Names(s) and Affiliation of Person(s) Sampling: ***Tom Kearsley / Jacobs Project Management Co.***

Compliance Sampling Point № ***5383.01*** *Lab Project or Reference ID №* ***550-202006-1***

Device Type: ***½ inch sampling valve***

Location Description: ***located inside the vault under Sierra Street***

Electronic pH meter calibrated prior to analysis? **Yes**

Sampling Methodology (indicate sample type, collection method, and preservation for all pollutants sampled):

Type	Collection Method	Preservation
pH	Grab	N/A
Metals	Composite	HNO3
BOD/TSS		
COD		
Cyanide	Grab	NaOH
Oil & Grease		
VOCs	Grab	HCl
Semi-VOCs		

NOTE: If sample collection method was Hand Composite; a log showing date, time, flow rate, aliquot volumes, and final calculations for the final hand composite must be included with the report.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International, Inc. Former Peoria Avenue Facility/MW-10***

Permit №: ***2208-5383***

Report Period: May 1, 2023 to May 31, 2023

Compliance Point №: ***5383.01***

Lab Project or Reference ID №: ***550-202006-1***

Compliance Point Description: ***½ inch sampling valve***

Parameter	Units	Daily Limit	Sampling Frequency	Sample Type	Date: 05/10/2023	Analysis Method	Date:	Analysis Method	Date:	Analysis Method	Date:	Analysis Method	Date:	Analysis Method
1,1-Dichloroethane	µg/L	**N/A**	1 per Quarter	**Grab**	0.61	EPA 624.1								
1,1-Dichloroethylene	µg/L	**N/A**	1 per Quarter	**Grab**	13	EPA 624.1								
Arsenic	mg/L	**0.13**	1 per Quarter	**FPC**	<0.10	EPA 200.7 Rev 4.4								
Benzene	µg/L	**35**	1 per Quarter	**Grab**	<0.50	EPA 624.1								
Cadmium	mg/L	**0.047**	1 per Quarter	**FPC**	<0.001	EPA 200.7 Rev 4.4								
Chloroform	µg/L	**2000**	1 per Quarter	**Grab**	<0.50	EPA 624.1								
Copper	mg/L	**1.5**	1 per Quarter	**FPC**	<0.01	EPA 200.7 Rev 4.4								
Cyanide (T)	mg/L	**2.0**	1 per Quarter	**Grab**	<0.05	EPA 9010								
Lead	mg/L	**0.41**	1 per Quarter	**FPC**	<0.015	EPA 200.7 Rev 4.4								
Mercury	mg/L	**0.0023**	1 per Quarter	**FPC**	<0.0002	EPA 245.1								
Molybdenum	mg/L	**N/A**	1 per Quarter	**FPC**	<0.010	EPA 200.7 Rev 4.4								
pH	S.U.	**5.0-10.5**	1 per Quarter	**Grab**	7.52	SM 4500-H+B								
Selenium	mg/L	**0.10**	1 per Quarter	**FPC**	<0.10	EPA 200.7 Rev 4.4								
Silver	mg/L	**1.2**	1 per Quarter	**FPC**	<0.010	EPA 200.7 Rev 4.4								

Trichloroethylene	µg/L	**N/A**	1 per Quarter	**Grab**	4.0	EPA 624.1								
Zinc	mg/L	**3.5**	1 per Quarter	**FPC**	<0.05	EPA 200.7 Rev 4.4								

NOTES:
This form is to be submitted for each sampling point.
Sampling Frequency – The required minimum sampling frequency from your Permit.
Sample Type - FPC is a Flow Proportional Composite; G/FPC is a combination of Grab and Flow Proportional samples as specified in 40 CFR 136.
Date – Enter the date the sample was taken and enter the result for each parameter under the date. Do not enter the "ND" from the laboratory as a sample result. Enter less than (<) the detection limit for the parameter. For example <0.05.
Analysis Method - The analysis method used by the laboratory is to be entered for each result. All samples must be analyzed by the analytical methods required by the Permit. Copies of the laboratory analytical reports must be submitted with this form.
Monthly Average - This column must be completed for all applicable parameters

Compliance Sampling Point № **5383.01**

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☐ Meter Adjusted	☐ Sampling Device Cleaned
Last	4/24/2023	27,986,631				☐	☒
1.	5/10/2023	28,756,875	48,140			☐	☒
2.	5/24/2023	29,431,416	48,182			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		48,160				
	Maximum Flow		48,182				
	Total Gallons		1,492,960				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 5/10/23 Field Technician(s) T. KEARSLEY

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:00	ON	28756875	-2	33.6	295.04	9521.6
Depart		ON					

Electrical Meter Readings

Power(kwh)	59656
Power Rate(KwMax)	5.13

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel | 9/25 Clean Vault | — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes X No ____

Laboratory Analyses and Method

Y	VOCs by USEPA 624	Y	Total Cyanide and Sulfide by SM 4500-CN-C, E
Y	pH by USEPA SM 4500-H+	N	Biological Oxygen Demand by SM 5210-B
Y	Metals by USEPA 200.7, 200.8	N	Total Suspended Solids by SM 2540-D
Y	Mercury by USEPA 245.1	—	Other

Time pH Sample Collected: 10:26 Time pH Sample Analyzed: 10:28
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 10:25

Composite Sample Log

Start Time: 10:03 End Time: 10:23 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 10,000 mL total volume

Notes

pH 7.52 @ 27.7

Signature: [signature]

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

300.14
5.1
295.04

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 5/24/23 Field Technician(s) T. Keasler

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0936	ON	29431416	2	33.8	295.25	46156.6
Depart							

Electrical Meter Readings

Power(kwh)	61363
Power Rate(KwMax)	5.13

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

~ Inspect Totalizer Paddle Wheel | YES * Clean Vault | — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

—	VOCs by USEPA 624	—	Total Cyanide and Sulfide by SM 4500-CN-C, E
—	pH by USEPA SM 4500-H+	—	Biological Oxygen Demand by SM 5210-B
—	Metals by USEPA 200.7, 200.8	—	Total Suspended Solids by SM 2540-D
—	Mercury by USEPA 245.1	—	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

* a great deal of spider webs

Signature: T. Keasler

MW-10 Well Information
Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

300.35
-5.10
295.25

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № 030548

pH Calibration & Analysis Log

Compliance Sampling Point № 5436.01, 5383.01

Calibration Standard	Date	Analyst Initials	Analysis Time	Reading (Units)	Temp Reading (°C)	Calibration Slope (mV or %)	Comments
pH Buffer 4/Lot# F1022B 6/10/2024	5/10/23	TK	09:23	4.0	24.7	99.4	
pH Buffer 7/Lot# E1022A 5/10/2024			09:15	7.0	24.2	98.3	
pH Buffer 10/Lot# D1322D 10/13/2023			09:19	10.0	24.7	103.4	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# CH-L8500-7 9/23			09:24	7.01	24.1	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	5/10/23	TK	11:20	7.63	29.3	N/A	
Compliance pH result 5383.01 (MW-10)	5/10/23	TK	10:28	7.52	27.7	N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
Once/Month Duplicate Sample (+/- 0.1 Acceptance)	5/10/23	TK	Orig Reading:	7.52	Dup Reading:	7.54	
Once/Month Verification Check/Buffer 7	5/10/23	TK	12:10	7.03	24.9	(Pass) or Fail	

NOTE: *Grab pH Analysis for purposes of compliance sampling* ***must be performed within 15 minutes sample collection*** *using one of the methods specified for* ***Hydrogen Ion*** *in Title 40 of the Code of Federal Regulations Part 136; typically SM4500 H+ B. Arizona Department of Environmental Quality has provided guidance for complying with the Calibration and QA/QC portions of the approved analytical methods. This pH callibration log may aid in meeting the minimum criteria. Please see the manufacturer's manual for your pH meter to determine the acceptable slope in mV or %.*

NOTE: *Permittees are required to calibrate field and/or bench pH meters* ***each day of use for Grab pH Analysis.***

NOTE: *Permittees are required to keep pH Calibration Logs* ***onsite and available for review for a minimum of three years; a copy of the hand-written original must be submitted with the monthly SMR.***

Attachment C
Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/2/2023 4:14:49 PM

JOB DESCRIPTION

Peoria (AZ)
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-202006-1

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

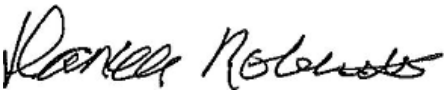
See page two for job notes and contact information.

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



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6/2/2023 4:14:49 PM

Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Qualifiers

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.

General Chemistry

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

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: 550-202006-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-202006-1

Comments
No additional comments.

Receipt
The samples were received on 5/10/2023 1:43 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2º C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-202006-1	MW-10-23Q2	Water	05/10/23 10:25	05/10/23 13:43
550-202006-2	MW-10-23Q2-comp	Water	05/10/23 10:23	05/10/23 13:43
550-202006-3	EW-1-23Q2	Water	05/10/23 11:17	05/10/23 13:43
550-202006-4	EW-1-23Q2-comp	Water	05/10/23 11:15	05/10/23 13:43
550-202006-5	TB-051222	Water	05/10/23 08:00	05/10/23 13:43

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q2 — Lab Sample ID: 550-202006-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.61		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	13		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.0		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q2-comp — Lab Sample ID: 550-202006-2

No Detections.

Client Sample ID: EW-1-23Q2 — Lab Sample ID: 550-202006-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.4		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	42		0.50		ug/L	1		624.1	Total/NA
Chloroform	0.98		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	13		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q2-comp — Lab Sample ID: 550-202006-4

No Detections.

Client Sample ID: TB-051222 — Lab Sample ID: 550-202006-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q2

Lab Sample ID: 550-202006-1
Date Collected: 05/10/23 10:25
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.61		0.50		ug/L			05/24/23 00:23	1
1,1-Dichloroethene	13		0.50		ug/L			05/24/23 00:23	1
Benzene	ND		0.50		ug/L			05/24/23 00:23	1
Chloroform	ND		0.50		ug/L			05/24/23 00:23	1
Trichloroethene	4.0		0.50		ug/L			05/24/23 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*05/24/23 00:23*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/24/23 00:23*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/24/23 00:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Client Sample ID: MW-10-23Q2-comp

Lab Sample ID: 550-202006-2
Date Collected: 05/10/23 10:23
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/15/23 08:19	06/01/23 20:10	1
Cadmium	ND		0.0010		mg/L		05/15/23 08:19	06/01/23 20:10	1
Copper	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Lead	ND		0.015		mg/L		05/15/23 08:19	05/23/23 19:53	1
Molybdenum	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Selenium	ND		0.10		mg/L		05/15/23 08:19	05/23/23 19:53	1
Silver	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Zinc	ND		0.050		mg/L		05/15/23 08:19	05/23/23 19:53	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:31	1

Client Sample ID: EW-1-23Q2

Lab Sample ID: 550-202006-3
Date Collected: 05/10/23 11:17
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	3.4		0.50		ug/L			05/24/23 00:44	1
1,1-Dichloroethene	42		0.50		ug/L			05/24/23 00:44	1
Chloroform	0.98		0.50		ug/L			05/24/23 00:44	1
Trichloroethene	13		0.50		ug/L			05/24/23 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/24/23 00:44*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/24/23 00:44*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/24/23 00:44*	*1*

Client Sample ID: EW-1-23Q2

Lab Sample ID: 550-202006-3

Date Collected: 05/10/23 11:17
Matrix: Water
Date Received: 05/10/23 13:43

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Client Sample ID: EW-1-23Q2-comp

Lab Sample ID: 550-202006-4

Date Collected: 05/10/23 11:15
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/15/23 08:19	06/01/23 20:13	1
Cadmium	ND		0.0010		mg/L		05/15/23 08:19	06/01/23 20:13	1
Copper	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Lead	ND		0.015		mg/L		05/15/23 08:19	05/23/23 19:55	1
Molybdenum	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Selenium	ND		0.10		mg/L		05/15/23 08:19	05/23/23 19:55	1
Silver	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Zinc	ND		0.050		mg/L		05/15/23 08:19	05/23/23 19:55	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:33	1

Client Sample ID: TB-051222

Lab Sample ID: 550-202006-5

Date Collected: 05/10/23 08:00
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			05/23/23 23:21	1
1,1-Dichloroethene	ND		0.50		ug/L			05/23/23 23:21	1
Benzene	ND		0.50		ug/L			05/23/23 23:21	1
Chloroform	ND		0.50		ug/L			05/23/23 23:21	1
Trichloroethene	ND		0.50		ug/L			05/23/23 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*05/23/23 23:21*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/23/23 23:21*	*1*
Toluene-d8 (Surr)	*96*		*60 - 140*		*05/23/23 23:21*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-202006-1	MW-10-23Q2	93	99	94
550-202006-1 MS	MW-10-23Q2	82	86	78
550-202006-1 MSD	MW-10-23Q2	86	90	82
550-202006-3	EW-1-23Q2	92	99	94
550-202006-5	TB-051222	93	99	96
LCS 550-300882/3	Lab Control Sample	83	87	84
LCSD 550-300882/4	Lab Control Sample Dup	90	93	87
MB 550-300882/6	Method Blank	89	99	95

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-300882/6
Matrix: Water
Analysis Batch: 300882

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			05/23/23 22:39	1
1,1-Dichloroethene	ND		0.50		ug/L			05/23/23 22:39	1
Benzene	ND		0.50		ug/L			05/23/23 22:39	1
Chloroform	ND		0.50		ug/L			05/23/23 22:39	1
Trichloroethene	ND		0.50		ug/L			05/23/23 22:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*05/23/23 22:39*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/23/23 22:39*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*05/23/23 22:39*	*1*

Lab Sample ID: LCS 550-300882/3
Matrix: Water
Analysis Batch: 300882

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	49.5		ug/L		99	70 - 130		
1,1-Dichloroethene			50.0	48.6		ug/L		97	50 - 150		
Benzene			50.0	46.4		ug/L		93	65 - 135		
Chloroform			50.0	52.4		ug/L		105	70 - 135		
Trichloroethene			50.0	50.5		ug/L		101	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*60 - 140*
Dibromofluoromethane (Surr)	*87*		*60 - 140*
Toluene-d8 (Surr)	*84*		*60 - 140*

Lab Sample ID: LCSD 550-300882/4
Matrix: Water
Analysis Batch: 300882

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-Dichloroethane			50.0	54.0		ug/L		108	70 - 130	9	20
1,1-Dichloroethene			50.0	52.8		ug/L		106	50 - 150	8	20
Benzene			50.0	50.5		ug/L		101	65 - 135	9	20
Chloroform			50.0	57.5		ug/L		115	70 - 135	9	20
Trichloroethene			50.0	53.1		ug/L		106	65 - 135	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*87*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-202006-1 MS
Matrix: Water
Analysis Batch: 300882

Client Sample ID: MW-10-23Q2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.61		50.0	53.2		ug/L		105	59 - 155
1,1-Dichloroethene	13		50.0	63.3		ug/L		101	10 - 234
Benzene	ND		50.0	49.4		ug/L		99	35 - 151
Chloroform	ND		50.0	56.7		ug/L		113	51 - 138
Trichloroethene	4.0		50.0	54.8		ug/L		102	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*60 - 140*
Dibromofluoromethane (Surr)	*86*		*60 - 140*
Toluene-d8 (Surr)	*78*		*60 - 140*

Lab Sample ID: 550-202006-1 MSD
Matrix: Water
Analysis Batch: 300882

Client Sample ID: MW-10-23Q2
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-Dichloroethane	0.61		50.0	51.4		ug/L		102	59 - 155	3	40
1,1-Dichloroethene	13		50.0	61.9		ug/L		98	10 - 234	2	32
Benzene	ND		50.0	48.0		ug/L		96	35 - 151	3	61
Chloroform	ND		50.0	54.5		ug/L		108	51 - 138	4	54
Trichloroethene	4.0		50.0	54.0		ug/L		100	70 - 157	2	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*
Dibromofluoromethane (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*82*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-300219/1-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300219

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Lead	ND		0.015	mg/L		05/15/23 08:19	05/23/23 18:59	1
Molybdenum	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Selenium	ND		0.10	mg/L		05/15/23 08:19	05/23/23 18:59	1
Silver	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Zinc	ND		0.050	mg/L		05/15/23 08:19	05/23/23 18:59	1

Lab Sample ID: MB 550-300219/1-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300219

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/15/23 08:19	06/01/23 19:28	1
Cadmium	ND		0.0010	mg/L		05/15/23 08:19	06/01/23 19:28	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-300219/2-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Copper			1.00	0.870		mg/L		87	85 - 115		
Lead			1.00	0.935		mg/L		94	85 - 115		
Molybdenum			1.00	0.912		mg/L		91	85 - 115		
Selenium			1.00	0.913		mg/L		91	85 - 115		
Silver			0.0750	0.0639		mg/L		85	85 - 115		
Zinc			1.00	1.01		mg/L		101	85 - 115		

Lab Sample ID: LCS 550-300219/2-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			1.00	1.01		mg/L		101	85 - 115		
Cadmium			1.00	1.01		mg/L		101	85 - 115		

Lab Sample ID: LCSD 550-300219/3-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper			1.00	0.874		mg/L		87	85 - 115	0	20
Lead			1.00	0.940		mg/L		94	85 - 115	1	20
Molybdenum			1.00	0.920		mg/L		92	85 - 115	1	20
Selenium			1.00	0.921		mg/L		92	85 - 115	1	20
Silver			0.0750	0.0637		mg/L		85	85 - 115	0	20
Zinc			1.00	0.992		mg/L		99	85 - 115	1	20

Lab Sample ID: LCSD 550-300219/3-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			1.00	1.02		mg/L		102	85 - 115	1	20
Cadmium			1.00	0.999		mg/L		100	85 - 115	1	20

Lab Sample ID: 550-201927-K-1-A MS
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Copper	ND		1.00	0.879		mg/L		88	70 - 130		
Lead	ND		1.00	0.928		mg/L		93	70 - 130		
Molybdenum	ND		1.00	0.946		mg/L		94	70 - 130		
Selenium	ND		1.00	0.951		mg/L		95	70 - 130		
Silver	ND		0.0750	0.0645		mg/L		86	70 - 130		
Zinc	ND		1.00	0.993		mg/L		99	70 - 130		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-201927-K-1-A MS
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	M1	1.00	2.07	E2 M1	mg/L		206	70 - 130
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130

Lab Sample ID: 550-201927-K-1-B MSD
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	ND		1.00	0.879		mg/L		88	70 - 130	0	20
Lead	ND		1.00	0.937		mg/L		94	70 - 130	1	20
Molybdenum	ND		1.00	0.955		mg/L		95	70 - 130	1	20
Selenium	ND		1.00	0.952		mg/L		95	70 - 130	0	20
Silver	ND		0.0750	0.0650		mg/L		87	70 - 130	1	20
Zinc	ND		1.00	1.00		mg/L		100	70 - 130	1	20

Lab Sample ID: 550-201927-K-1-B MSD
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND	M1	1.00	2.07	E2 M1	mg/L		206	70 - 130	0	20
Cadmium	ND		1.00	1.00		mg/L		100	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-300113/1-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300113

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:11	1

Lab Sample ID: LCS 550-300113/2-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300113

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.00500	0.00439		mg/L		88	85 - 115

Lab Sample ID: LCSD 550-300113/3-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300113

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00435		mg/L		87	85 - 115	1	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-201848-L-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300133 — **Prep Batch: 300113**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00422		mg/L		84	70 - 130

Lab Sample ID: 550-201848-L-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300133 — **Prep Batch: 300113**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00410		mg/L		82	70 - 130	3	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-300984/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Lab Sample ID: LCS 550-300984/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total			0.100	0.0945		mg/L		95	90 - 110

Lab Sample ID: LCSD 550-300984/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0945		mg/L		95	90 - 110	0	20

Lab Sample ID: 380-47276-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND	M2	0.100	0.0816	M2	mg/L		73	80 - 120

Lab Sample ID: 380-47276-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2	0.100	0.0794	M2	mg/L		71	80 - 120	3	20

GC/MS VOA

Analysis Batch: 300882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	624.1	
550-202006-3	EW-1-23Q2	Total/NA	Water	624.1	
550-202006-5	TB-051222	Total/NA	Water	624.1	
MB 550-300882/6	Method Blank	Total/NA	Water	624.1	
LCS 550-300882/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-300882/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-202006-1 MS	MW-10-23Q2	Total/NA	Water	624.1	
550-202006-1 MSD	MW-10-23Q2	Total/NA	Water	624.1	

Metals

Prep Batch: 300113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	245.1	
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	245.1	
MB 550-300113/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-300113/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-300113/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-201848-L-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-201848-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 300133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	245.1	300113
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	245.1	300113
MB 550-300113/1-A	Method Blank	Total/NA	Water	245.1	300113
LCS 550-300113/2-A	Lab Control Sample	Total/NA	Water	245.1	300113
LCSD 550-300113/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	300113
550-201848-L-1-B MS	Matrix Spike	Total/NA	Water	245.1	300113
550-201848-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	300113

Prep Batch: 300219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7	
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7	
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 300917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300219
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300219
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300219

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Metals

Analysis Batch: 301528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300219
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300219
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300219

General Chemistry

Prep Batch: 300984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	SM 4500 CN C	
550-202006-3	EW-1-23Q2	Total/NA	Water	SM 4500 CN C	
MB 550-300984/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-300984/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-300984/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
380-47276-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
380-47276-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 301036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	SM 4500 CN E	300984
550-202006-3	EW-1-23Q2	Total/NA	Water	SM 4500 CN E	300984
MB 550-300984/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	300984
LCS 550-300984/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	300984
LCSD 550-300984/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	300984
380-47276-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	300984
380-47276-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	300984

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q2
Date Collected: 05/10/23 10:25
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/24/23 00:23
Total/NA	Prep	SM 4500 CN C			300984	ZH	EET PHX	05/24/23 15:45
Total/NA	Analysis	SM 4500 CN E		1	301036	ZH	EET PHX	05/24/23 17:36

Client Sample ID: MW-10-23Q2-comp
Date Collected: 05/10/23 10:23
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	300917	GLW	EET PHX	05/23/23 19:53
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	301528	GLW	EET PHX	06/01/23 20:10
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:31

Client Sample ID: EW-1-23Q2
Date Collected: 05/10/23 11:17
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/24/23 00:44
Total/NA	Prep	SM 4500 CN C			300984	ZH	EET PHX	05/24/23 15:45
Total/NA	Analysis	SM 4500 CN E		1	301036	ZH	EET PHX	05/24/23 17:36

Client Sample ID: EW-1-23Q2-comp
Date Collected: 05/10/23 11:15
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	300917	GLW	EET PHX	05/23/23 19:55
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	301528	GLW	EET PHX	06/01/23 20:13
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:33

Client Sample ID: TB-051222
Date Collected: 05/10/23 08:00
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/23/23 23:21

Laboratory References:

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: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-23

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

202006

6/2/2023

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell

Chain of Custody / Analysis Request

Save with QC Check Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

Pricing Source (RFP, eAuction, etc)	RFP2019	HW Site Name	Peoria (AZ)	Task Type	OM&M	AESI Ref:	45056.49914
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS	Location of Site	Phoenix, AZ	WBS Code	6400	COC#	COC#
Sampler(s) names	T. Kearsley						Page 1 of 1
PO #	HW PO # A000651433					Lab Proj # (SDG):	JD11212
Analysis Turnaround Time (calendar days):	10					Lab Location ID	TAL-PHX
Consultant	Jacobs					HW Site R-Code	R35008
Laboratory Contact	Danielle Roberts					Sampling Program	Sampling program
Report Tier Level	2					Authorized User:	Honeywell
Full Report and EDD TAT (calendar days)	10					Lab Parent ID	TAL
Honeywell RM Name	Tao Wu (TW)					Text & Excel File Drive	Excel & Text File Order

Sampling Co.:	Jacobs		
Reporting Information (DocuSign First Signer)	Name	Jacobs	
	Address	1501 W. Fountainhead Parkway	
	City, State, Zip	Tempe, AZ 85282	
	Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com	
Billing Information (DocuSign Second Signer)	Co. Name	Honeywell	
	Address	111 South 34th Street M/S 158	
	City, State, Zip	Phoenix, AZ 85034	
	HW RM email	Tao.Wu@honeywell.com	

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)				E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)						Sampling Method (rt_sample_method)	Lab Sample Numbers
	Sample Identification										Units																
											Preservative		18	21	30	21			21	18							
1	MW-10	----	----	MW-10-23Q2	5/10/2023	10:25	GW-GWS	WATER	REG	4	N	N	X		X												
2	MW-10	----	----	MW-10-23Q2-comp	5/10/2023	10:23	GW-GWS	WATER	REG	1	Y	N		X		X											
3	EW-1	----	----	EW-1-23Q2	5/10/2023	11:17	GW-GWS	WATER	REG	4	N	N			X					X						
4	EW-1	----	----	EW-1-23Q2-comp	5/10/2023	11:15	GW-GWS	WATER	REG	1	Y	N		X		X											
5	Trip Blank			TB-051222	5/10/2023	8:00	BLKWATER	WATER	TB	1	N	N	X														
6																											
7																											
8																											
9																											
10																											
11																											
12																											

550-202006 Chain of Custody

Start at D66 to type instructions.

Relinquished by	Company	Jacobs	Received by	Company	EETA PHX	Condition	Custody Seals Intact
Thomas Kearsley	Date/Time	5/10/23 1843		Date/Time	5/10/23 1343	Cooler Temp.	3.2
Relinquished by	Company		Received by	Company		Condition	Custody Seals Intact
	Date/Time			Date/Time		Cooler Temp.	Lab Quote #

Preservatives: (Other; Specify):	EW-1 Comp E200.7 Qrt-list only	0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAci); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special);
		FedEx Tracking #

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-202006-1
SDG Number: Phoenix, AZ

Login Number: 202006
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

July 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – June 2023**
Industrial Wastewater Discharge Permit Number 2302-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Company (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the June 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, June 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	2302-5436	2,733,780	30

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period April 1, 2023, through June 30, 2023, were collected on May 10, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 2302-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Steve Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 2302-5436

Facility Name:	***Honeywell International, Inc. – Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85051
Permit Limits:	***Local Limits+***
Permit №:	***2302-5436***
Compliance Sampling Point:	***5436.01***
Report Period:	June 1, 2023 Through June 30, 2023

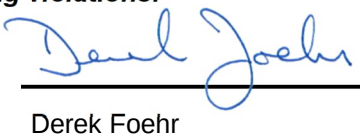
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 91,126	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 93,784	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,733,780	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment A - Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	July 24, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

Compliance Sampling Point № ***5436.01***

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	05/24/2023	59,455,730				☐	☐
1.	06/06/2023	60,674,927	93,784			☐	☐
2.	06/21/2023	62,007,260	88,822			☐	☒
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		91,126				
	Maximum Flow		93,784				
	Total Gallons		2,733,780				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 6/6/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1200	ON	60674927		7	65.4*	300.12	342609
Depart		ON						

Electrical Meter Readings

Power(kwh)	43619
Power Rate(KwMax)	9.23

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

* adjust Flow to 60 GPM

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs
Screen Interval = 265-415 feet bgs
Pump Intake Depth = 363 feet bgs

303.04
-2.92
300.12

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 6/21/23 Field Technician(s) T. Keasling

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1010		62007260		7	60.1	300.36	34619.2
Depart								

Electrical Meter Readings

Power(kwh)	46823
Power Rate(KwMax)	9.01

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel YES Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume —

Notes

Signature: T Keasling

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.28
- 2.92
300.36

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Chase Torrence
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

July 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – June 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Torrence,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the June 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, June 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,445,460	30

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period April 1, 2023, through June 30, 2023, were collected on May 10, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Steve Bowles, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	*Honeywell International, Inc. Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street*
	Phoenix, Arizona 85029-3602
Permit Limits:	*Local Limits +*
Permit №:	*2208-5383*
Compliance Sampling Point:	*5383.01*
Report Period:	June 1, 2023 Through June 30, 2023

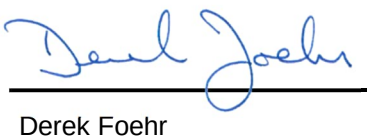
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 48,182	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 48,595	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,445,460	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	July 24, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Compliance Sampling Point № 5383.01

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	05/24/2023	29,431,416				☐	☒
1.	06/06/2023	30,063,152	48,595			☐	☒
2.	06/21/2023	30,780,522	47,825			☐	☒
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
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26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		48,182				
	Maximum Flow		48,595				
	Total Gallons		1,445,460				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 6/6/23 Field Technician(s) T. KEATING

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1135	ON	30063152	2	33.2	295.89	96470.8
Depart		ON					

Electrical Meter Readings

Power(kwh)	62956
Power Rate(KwMax)	9.14

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel | YES Clean Vault | — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

—	VOCs by USEPA 624	—	Total Cyanide and Sulfide by SM 4500-CN-C, E
—	pH by USEPA SM 4500-H+	—	Biological Oxygen Demand by SM 5210-B
—	Metals by USEPA 200.7, 200.8	—	Total Suspended Solids by SM 2540-D
—	Mercury by USEPA 245.1	—	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Keating

300.99
-5.1
295.89

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 6/21/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0950	ON	30780522	2	33.2	29.645	16829.0
Depart		ON					

Electrical Meter Readings

Power(kwh)	64791
Power Rate(KwMax)	5.13

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

- [ ] Inspect Totalizer Paddle Wheel
- [YES] Clean Vault
- [ ] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

- [ ] VOCs by USEPA 624
- [ ] pH by USEPA SM 4500-H+
- [ ] Metals by USEPA 200.7, 200.8
- [ ] Mercury by USEPA 245.1
- [ ] Total Cyanide and Sulfide by SM 4500-CN-C, E
- [ ] Biological Oxygen Demand by SM 5210-B
- [ ] Total Suspended Solids by SM 2540-D
- [ ] Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: ~
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): ~

Composite Sample Log

Start Time: ~ End Time: ~ Flow Rate: ~ mL/min

Aliquot Volume: ~ mL x 20 aliquots = ~ mL total volume

Notes

Signature: T. Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

301.55
- 5.1
296.45

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

August 25, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – July 2023**
Industrial Wastewater Discharge Permit Number 2302-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Company (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the June 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, July 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	2302-5436	2,583,044	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period July 1, 2023, through September 30, 2023, will be collected in August 2023.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 2302-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 2302-5436

Facility Name:	***Honeywell International, Inc. – Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85051
Permit Limits:	***Local Limits+***
Permit №:	***2302-5436***
Compliance Sampling Point:	***5436.01***
Report Period:	July 1, 2023 Through July 31, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 83,324	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 86,887	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,583,044	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment A - Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	August 25, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

Compliance Sampling Point № ***5436.01***

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	06/21/2023	62,007,260				☐	☒
1.	07/03/2023	62,946,579	78,277			☐	☐
2.	07/20/2023	64,423,666	86,887			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
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26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		83,324				
	Maximum Flow		86,887				
	Total Gallons		2,583,044				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 7/3/23 Field Technician(s) T Kay

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0758	ON	62946579		-7	50.2	301.19	34905.1
Depart		ON						

Electrical Meter Readings

Power(kwh)	49335
Power Rate(KwMax)	5.79

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

- ~ Inspect Totalizer Paddle Wheel
- ~ Clean Vault
- ~ Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

- ~ VOCs by USEPA 624
- ~ pH by USEPA SM 4500-H+
- ~ Metals by USEPA 200.7, 200.8
- ~ Total Cyanide and Sulfide by SM 4500-CN-C, E
- ~ Mercury by USEPA 245.1
- ~ Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: ~
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): ~

Composite Sample Log

Start Time: ~ End Time: ~ Flow Rate: ~ mL/min

Aliquot Volume: ~ mL x 20 aliquots = ~ mL total volume

Notes

X adjust to 61.3 GPM

Signature: T Kay

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

304.11
-2.92
301.19

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 7/20/23 Field Technician(s) T. Keasley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0712	ON	64423666		-1	~~52.9~~	300.97	35312.7
Depart		ON						

Electrical Meter Readings

Power(kwh)	52979
Power Rate(KwMax)	9.03

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

~ Inspect Totalizer Paddle Wheel ~ Clean Vault ~ Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

~ VOCs by USEPA 624
~ pH by USEPA SM 4500-H+
~ Metals by USEPA 200.7, 200.8
~ Total Cyanide and Sulfide by SM 4500-CN-C, E
~ Mercury by USEPA 245.1
~ Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: ~
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): ~

Composite Sample Log

Start Time: ~ End Time: ~ Flow Rate: ~ mL/min

Aliquot Volume: ~ mL x 20 aliquots = ~ mL total volume

Notes

* Raised flow to 57.2

Signature: T Keasley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.89
-2.92
300.97

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

August 25, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – July 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the July 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, July 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,491,193	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period July 1, 2023, through September 30, 2023, will be collected in August 2023.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc. Former Peoria Avenue Facility/MW-10***
Address:	***2251 West Sierra Street***
	Phoenix, Arizona 85029-3602
Permit Limits:	***Local Limits +***
Permit №:	***2208-5383***
Compliance Sampling Point:	***5383.01***
Report Period:	July 1, 2023 Through July 31, 2023

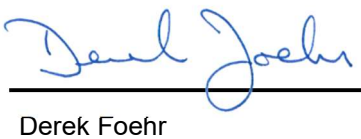
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 48,103	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 48,301	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,491,193	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	August 25, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Compliance Sampling Point № **5383.01**

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	06/21/2023	30,780,522				☐	☒
1.	07/03/2023	31,354,388	47,822			☐	☐
2.	07/20/2023	32,175,506	48,301			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
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27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		48,103				
	Maximum Flow		48,301				
	Total Gallons		1,491,193				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 7/3/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0740	ON	31354388	~2	33.3	297.01	9711.50
Depart		ON	~~5~~				

Electrical Meter Readings

Power(kwh)	~~6614~~ 66247
Power Rate(KwMax)	5.11

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

- [—] Inspect Totalizer Paddle Wheel
- [—] Clean Vault
- [—] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

- [—] VOCs by USEPA 624
- [—] pH by USEPA SM 4500-H+
- [—] Metals by USEPA 200.7, 200.8
- [—] Mercury by USEPA 245.1
- [—] Total Cyanide and Sulfide by SM 4500-CN-C, E
- [—] Biological Oxygen Demand by SM 5210-B
- [—] Total Suspended Solids by SM 2540-D
- [—] Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

302.91
-5.10
297.01

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 7/20/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0655	ON	32175506	-2	33.9	297.45	97522.6
Depart		ON					

Electrical Meter Readings

Power(kwh)	68322
Power Rate(KwMax)	5.12

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

—	VOCs by USEPA 624	—	Total Cyanide and Sulfide by SM 4500-CN-C, E
—	pH by USEPA SM 4500-H+	—	Biological Oxygen Demand by SM 5210-B
—	Metals by USEPA 200.7, 200.8	—	Total Suspended Solids by SM 2540-D
—	Mercury by USEPA 245.1	—	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

MW-10 Well Information
Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

302.55
- 5.10
297.45

JACOBS

1501 West Fountainhead Pkwy
Suite 401
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480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

September 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – August 2023**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Engineering Group, Inc. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the August 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, August 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,511,837	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period July 1, 2023, through September 30, 2023, are included in this monthly report. Jacobs personnel performed compliance sampling for all required analytes on August 3, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 1806-5436

Attachment B – Operation and Maintenance Data Collection Forms and pH Log Sheet

Attachment C – Analytical Report

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 1806-5436

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Address: ***2305 West Mercer Lane***

Phoenix, Arizona 85029

Permit №: ***1806-5436***

Compliance Sampling Point: ***5436.01***

Report Period: August 1, 2023 Through August 31, 2023

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 81,027	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 81,524	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,511,837	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☒ SMR Page 2 – Sampling Detail Page
- ☒ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B - Zero Discharge Certification (Only if Applicable)
- ☒ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☒ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☒ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature 

Certifying Official Name Derek Foehr

Certifying Official Title Project Manager

Date September 26, 2023

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Address: ***2305 West Mercer Lane***

Phoenix, Arizona 85029

Dates/Times Samples Collected: **08/03/2023 at 09:15 (grab), 09:12 (composite), 08:51 (pH)**

Names(s) and Affiliation of Person(s) Sampling: **Tom Kearsley/Jacobs Project Management Co.**

Compliance Sampling Point № **5436.01** Lab Project or Reference ID № **550-205887-1**

Device Type: **½" Sampling tap**

Location Description: **Inside vault under the street in West Mercer Street**

Electronic pH meter calibrated prior to analysis? **Yes**

Sampling Methodology (indicate sample type, collection method, and preservation for all pollutants sampled):

Type	Collection Method	Preservation
pH	Grab	N/A
Metals	Composite	HNO3
Cyanide	Grab	NaOH
VOCs	Grab	HCl

NOTE: If sample collection method was Hand Composite; a log showing date, time, flow rate, aliquot volumes, and final calculations for the final hand composite must be included with the report.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Permit №: ***1806-5436***

Report Period: August 1, 2023 to August 31, 2023

Compliance Point №: ***5436.01***

Lab Project or Reference ID № ***550-205887-1***

Compliance Point Description: ***½" sampling tap inside vault***

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 8/3/2023	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method
1,1-Dichloroethane	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	4.6	EPA 624.1								
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	67	EPA 624.1								
Arsenic	**mg/L**	**0.13**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
Cadmium	**mg/L**	**0.047**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
Chloroform	**µg/L**	**2000**	**1 per Quarter**	**Grab**	1.2	EPA 624.1								
Copper	**mg/L**	**1.5**	**1 per Quarter**	**FPC**	<0.01	EPA 200.7 Rev 4.4								
Cyanide (T)	**mg/L**	**2.0**	**1 per 6 Months**	**Grab**	NS	EPA 9010								
Lead	**mg/L**	**0.41**	**1 per Quarter**	**FPC**	<0.015	EPA 200.7 Rev 4.4								
Mercury	**mg/L**	**0.0023**	**1 per 6 Months**	**FPC**	NS	EPA 245.1								
Molybdenum	**mg/L**	**N/A**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
pH	**S.U.**	**5.0-10.5**	**1 per Quarter**	**Grab**	7.39	SM 4500-H+B								
Selenium	**mg/L**	**0.10**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
Silver	**mg/L**	**1.2**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								
Trichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	20	EPA 624.1								
Zinc	**mg/L**	**3.5**	**1 per 6 Months**	**FPC**	NS	EPA 200.7 Rev 4.4								

NOTES:
This form is to be submitted for <u>each</u> sampling point.

<u>Sampling Frequency</u> – The required minimum sampling frequency from your Permit.

<u>Sample Type</u> - FPC is a Flow Proportional Composite; G/FPC is a combination of Grab and Flow Proportional samples as specified in 40 CFR 136.

<u>Date</u> – Enter the date the sample was taken and enter the result for each parameter under the date. Do not enter the "ND" from the laboratory as a sample result. Enter less than (<) the detection limit for the parameter. For example <0.05.

<u>Analysis Method</u> - The analysis method used by the laboratory is to be entered for each result. All samples must be analyzed by the analytical methods required by the Permit. Copies of the laboratory analytical reports must be submitted with this form.

Compliance Sampling Point Nº 5436.01

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (Inches)	Measured Level (Inches)	☒ Meter Adjusted	☒ Sampling Point Cleaned
Last	07/20/2023	64,423,666				☐	☐
1.	08/03/2023	65,565,005	81,524			☐	☐
2.	08/21/2023	67,016,526	80,640			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow **81,027**

Maximum Flow **81,524**

Total Gallons **2,511,837**

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 8-3-23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0850	ON	6556 5005		7	56.1	301.71	35650.2
Depart								

Electrical Meter Readings

Power(kwh)	56049
Power Rate(KwMax)	9.20

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

~ Inspect Totalizer Paddle Wheel — — Clean Vault — — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes X No ____

Laboratory Analyses and Method

- ✓ VOCs by USEPA 624
- ✓ pH by USEPA SM 4500-H+
- ✓ Metals by USEPA 200.7, 200.8
- — Total Cyanide and Sulfide by SM 4500-CN-C, E
- — Mercury by USEPA 245.1
- ____ Other

Time pH Sample Collected: 0851

Time pH Sample Analyzed: 0856
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 0915

Composite Sample Log

Start Time: 0852 End Time: 0912 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 10,000 mL total volume

Notes

pH 7.39 @ 28.1°C

Signature: [signature]

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

304.63
- 2.92
301.71

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 8/21/23 Field Technician(s) Stephen Steinbugs

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	12:35	ON	67016526		7	55.03	293.85	36086.0
Depart								

Electrical Meter Readings

Power(kwh)	59995
Power Rate(KwMax)	9.18

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

- Inspect Totalizer Paddle Wheel
- Clean Vault
- Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No J

Laboratory Analyses and Method

- VOCs by USEPA 624
- pH by USEPA SM 4500-H+
- Metals by USEPA 200.7, 200.8
- Total Cyanide and Sulfide by SM 4500-CN-C, E
- Mercury by USEPA 245.1
- Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: ____
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): ____

Composite Sample Log

Start Time: ____ End Time: ____ Flow Rate: ____ mL/min

Aliquot Volume: mL x 20 aliquots = mL total volume

Notes

Signature: SMB

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

296.8
292

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № 030548

pH Calibration & Analysis Log

Compliance Sampling Point № 5436.01, 5383.01

Calibration Standard	Date	Analyst Initials	Analysis Time	Reading (Units)	Temp Reading (°C)	Calibration Slope (mV or %)	Comments
pH Buffer 4/Lot# F10228 6/10/2024	8-3-23	TK	0724	4.0	25.1	100.1	
pH Buffer 7/Lot# E1022A 5/10/2024			0716	7.0	25.0	99.5	
pH Buffer 10/Lot# D1322D 10/13/2023			0720	10.0	25.2	102.3	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# CHL8500 7-9-23			0725	7.02	25.3	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	8-3-23	TK	0856	7.39	28.1	N/A	
Compliance pH result 5383.01 (MW-10)	8-3-23	TK	0815	7.22	26.5	N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
Once/Month Duplicate Sample (+/- 0.1 Acceptance)	8-3-23	TK	Orig Reading:	7.22	Dup Reading:	7.28	
Once/Month Verification Check/Buffer 7	8-3-23	TK	0950	7.05	25.6	(Pass) or Fail	

NOTE: *Grab pH Analysis for purposes of compliance sampling* ***must be performed within 15 minutes sample collection*** *using one of the methods specified for* ***Hydrogen Ion*** *in Title 40 of the Code of Federal Regulations Part 136; typically SM4500 H+ B. Arizona Department of Environmental Quality has provided guidance for complying with the Calibration and QA/QC portions of the approved analytical methods. This pH callibration log may aid in meeting the minimum criteria. Please see the manufacturer's manual for your pH meter to determine the acceptable slope in mV or %.*

NOTE: *Permittees are required to calibrate field and/or bench pH meters* ***each day of use for Grab pH Analysis.***

NOTE: *Permittees are required to keep pH Calibration Logs* ***onsite and available for review for a minimum of three years; a copy of the hand-written original must be submitted with the monthly SMR.***

Attachment C
Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/8/2023 8:44:34 AM Revision 1

JOB DESCRIPTION

Peoria
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-205887-1

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

See page two for job notes and contact information.

myEOL

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
9/8/2023 8:44:34 AM
Revision 1

Authorized for release by
Rachel Sester, Project Manager I
Rachel.Sester@et.eurofinsus.com
Designee for
Linda Eshelman, Project Manager II
linda.eshelman@et.eurofinsus.com
(602)659-7681

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Qualifiers

General Chemistry

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

Case Narrative

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Job ID: 550-205887-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-205887-1

Revision
This report was revised on 9/8/23 to add Cd and Zn to MW-10, per client request. This final report replaces the report that was generated on 8/14/23 at 3:14 PM.

Comments
No additional comments.

Receipt
The samples were received on 8/3/2023 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.7º C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-205887-1	MW-10-23Q3	Water	08/03/23 08:35	08/03/23 12:54
550-205887-2	MW-10-23Q3-comp	Water	08/03/23 08:32	08/03/23 12:54
550-205887-3	EW-1-23Q3	Water	08/03/23 09:15	08/03/23 12:54
550-205887-4	EW-1-23Q3-comp	Water	08/03/23 09:12	08/03/23 12:54
550-205887-5	TB-23Q3	Water	08/03/23 08:00	08/03/23 12:54

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q3 — Lab Sample ID: 550-205887-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.60		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	17		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.9		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q3-comp — Lab Sample ID: 550-205887-2

No Detections.

Client Sample ID: EW-1-23Q3 — Lab Sample ID: 550-205887-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.6		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	67		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.2		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	20		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q3-comp — Lab Sample ID: 550-205887-4

No Detections.

Client Sample ID: TB-23Q3 — Lab Sample ID: 550-205887-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q3

Lab Sample ID: 550-205887-1
Date Collected: 08/03/23 08:35
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.60		0.50		ug/L			08/08/23 07:12	1
1,1-Dichloroethene	17		0.50		ug/L			08/08/23 07:12	1
Benzene	ND		0.50		ug/L			08/08/23 07:12	1
Chloroform	ND		0.50		ug/L			08/08/23 07:12	1
Trichloroethene	4.9		0.50		ug/L			08/08/23 07:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*08/08/23 07:12*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*		*08/08/23 07:12*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*08/08/23 07:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		08/11/23 12:15	08/11/23 13:20	1

Client Sample ID: MW-10-23Q3-comp

Lab Sample ID: 550-205887-2
Date Collected: 08/03/23 08:32
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		08/08/23 04:55	08/09/23 15:41	1
Cadmium	ND		0.0010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 15:41	1
Molybdenum	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Selenium	ND		0.10		mg/L		08/08/23 04:55	08/09/23 15:41	1
Silver	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Zinc	ND		0.050		mg/L		08/08/23 04:55	08/09/23 15:41	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/09/23 14:16	08/09/23 17:27	1

Client Sample ID: EW-1-23Q3

Lab Sample ID: 550-205887-3
Date Collected: 08/03/23 09:15
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	4.6		0.50		ug/L			08/08/23 07:34	1
1,1-Dichloroethene	67		0.50		ug/L			08/08/23 07:34	1
Chloroform	1.2		0.50		ug/L			08/08/23 07:34	1
Trichloroethene	20		0.50		ug/L			08/08/23 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*08/08/23 07:34*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*08/08/23 07:34*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*08/08/23 07:34*	*1*

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-23Q3-comp

Lab Sample ID: 550-205887-4

Date Collected: 08/03/23 09:12
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:44	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 15:44	1

Client Sample ID: TB-23Q3

Lab Sample ID: 550-205887-5

Date Collected: 08/03/23 08:00
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			08/08/23 02:03	1
1,1-Dichloroethene	ND		0.50		ug/L			08/08/23 02:03	1
Benzene	ND		0.50		ug/L			08/08/23 02:03	1
Chloroform	ND		0.50		ug/L			08/08/23 02:03	1
Trichloroethene	ND		0.50		ug/L			08/08/23 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*08/08/23 02:03*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*		*08/08/23 02:03*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*08/08/23 02:03*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-205887-1	MW-10-23Q3	90	92	94
550-205887-3	EW-1-23Q3	90	93	95
550-205887-5	TB-23Q3	89	92	94
550-205960-A-1 MS	Matrix Spike	103	94	99
550-205960-A-1 MSD	Matrix Spike Duplicate	103	93	99
LCS 550-305363/4	Lab Control Sample	89	80	84
LCSD 550-305363/5	Lab Control Sample Dup	96	89	92
MB 550-305363/7	Method Blank	91	89	93

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-305363/7
Matrix: Water
Analysis Batch: 305363

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			08/08/23 01:40	1
1,1-Dichloroethene	ND		0.50		ug/L			08/08/23 01:40	1
Benzene	ND		0.50		ug/L			08/08/23 01:40	1
Chloroform	ND		0.50		ug/L			08/08/23 01:40	1
Trichloroethene	ND		0.50		ug/L			08/08/23 01:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*08/08/23 01:40*	*1*
Dibromofluoromethane (Surr)	*89*		*60 - 140*		*08/08/23 01:40*	*1*
Toluene-d8 (Surr)	*93*		*60 - 140*		*08/08/23 01:40*	*1*

Lab Sample ID: LCS 550-305363/4
Matrix: Water
Analysis Batch: 305363

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	43.1		ug/L		86	70 - 130		
1,1-Dichloroethene			50.0	43.9		ug/L		88	50 - 150		
Benzene			50.0	44.8		ug/L		90	65 - 135		
Chloroform			50.0	42.3		ug/L		85	70 - 135		
Trichloroethene			50.0	45.0		ug/L		90	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*
Dibromofluoromethane (Surr)	*80*		*60 - 140*
Toluene-d8 (Surr)	*84*		*60 - 140*

Lab Sample ID: LCSD 550-305363/5
Matrix: Water
Analysis Batch: 305363

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-Dichloroethane			50.0	44.5		ug/L		89	70 - 130	3	20
1,1-Dichloroethene			50.0	45.4		ug/L		91	50 - 150	3	20
Benzene			50.0	46.1		ug/L		92	65 - 135	3	20
Chloroform			50.0	43.5		ug/L		87	70 - 135	3	20
Trichloroethene			50.0	45.1		ug/L		90	65 - 135	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*
Dibromofluoromethane (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*92*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-205960-A-1 MS
Matrix: Water
Analysis Batch: 305363

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
1,1-Dichloroethane	ND		50.0	50.2		ug/L		100	59 - 155
1,1-Dichloroethene	3.0		50.0	53.7		ug/L		101	10 - 234
Benzene	ND		50.0	52.5		ug/L		105	35 - 151
Chloroform	0.85		50.0	48.8		ug/L		96	51 - 138
Trichloroethene	23		50.0	70.5		ug/L		95	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*

Lab Sample ID: 550-205960-A-1 MSD
Matrix: Water
Analysis Batch: 305363

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
1,1-Dichloroethane	ND		50.0	48.9		ug/L		98	59 - 155	3	40
1,1-Dichloroethene	3.0		50.0	53.6		ug/L		101	10 - 234	0	32
Benzene	ND		50.0	51.7		ug/L		103	35 - 151	1	61
Chloroform	0.85		50.0	47.8		ug/L		94	51 - 138	2	54
Trichloroethene	23		50.0	69.5		ug/L		93	70 - 157	2	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-305383/1-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305383

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		08/08/23 04:55	08/09/23 14:34	1
Cadmium	ND		0.0010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 14:34	1
Molybdenum	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Selenium	ND		0.10		mg/L		08/08/23 04:55	08/09/23 14:34	1
Silver	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Zinc	ND		0.050		mg/L		08/08/23 04:55	08/09/23 14:34	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-305383/2-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	1.04		mg/L		104	85 - 115
Cadmium	1.00	0.983		mg/L		98	85 - 115
Copper	1.00	0.949		mg/L		95	85 - 115
Lead	1.00	1.02		mg/L		102	85 - 115
Molybdenum	1.00	1.01		mg/L		101	85 - 115
Selenium	1.00	1.06		mg/L		106	85 - 115
Silver	0.0750	0.0842		mg/L		112	85 - 115
Zinc	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: LCSD 550-305383/3-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	1.04		mg/L		104	85 - 115	0	20
Cadmium	1.00	1.02		mg/L		102	85 - 115	3	20
Copper	1.00	0.973		mg/L		97	85 - 115	2	20
Lead	1.00	1.03		mg/L		103	85 - 115	1	20
Molybdenum	1.00	1.03		mg/L		103	85 - 115	2	20
Selenium	1.00	1.07		mg/L		107	85 - 115	0	20
Silver	0.0750	0.0814		mg/L		109	85 - 115	3	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-205468-A-1-B MS
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.08		mg/L		107	70 - 130
Cadmium	ND		1.00	1.00		mg/L		100	70 - 130
Copper	0.021		1.00	0.996		mg/L		98	70 - 130
Lead	ND		1.00	0.997		mg/L		100	70 - 130
Molybdenum	ND		1.00	1.04		mg/L		104	70 - 130
Selenium	ND		1.00	1.08		mg/L		107	70 - 130
Silver	ND		0.0750	0.0822		mg/L		110	70 - 130
Zinc	ND		1.00	1.01		mg/L		101	70 - 130

Lab Sample ID: 550-205468-A-1-C MSD
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.07		mg/L		106	70 - 130	1	20
Cadmium	ND		1.00	0.972		mg/L		97	70 - 130	3	20
Copper	0.021		1.00	0.989		mg/L		97	70 - 130	1	20
Lead	ND		1.00	0.971		mg/L		97	70 - 130	3	20
Molybdenum	ND		1.00	1.02		mg/L		102	70 - 130	2	20
Selenium	ND		1.00	1.05		mg/L		105	70 - 130	2	20
Silver	ND		0.0750	0.0797		mg/L		106	70 - 130	3	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-205468-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305527 — **Prep Batch: 305383**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	0.991		mg/L		99	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-305513/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/09/23 14:16	08/09/23 16:55	1

Lab Sample ID: LCS 550-305513/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00484		mg/L		97	85 - 115		

Lab Sample ID: LCSD 550-305513/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00474		mg/L		95	85 - 115	2	20

Lab Sample ID: 550-205046-U-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00496		mg/L		99	70 - 130		

Lab Sample ID: 550-205046-U-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00513		mg/L		103	70 - 130	3	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-305653/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305709 — **Prep Batch: 305653**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		08/11/23 12:15	08/11/23 13:20	1

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: LCS 550-305653/2-A
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305653

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0941		mg/L		94	90 - 110		

Lab Sample ID: LCSD 550-305653/3-A
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305653

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0942		mg/L		94	90 - 110	0	20

Lab Sample ID: 550-205757-C-1-B MS
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 305653

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	R4 M2	0.100	0.120		mg/L		120	80 - 120		

Lab Sample ID: 550-205757-C-1-C MSD
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 305653

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	R4 M2	0.100	0.0678	M2 R4	mg/L		68	80 - 120	55	20

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

GC/MS VOA

Analysis Batch: 305363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	624.1	
550-205887-3	EW-1-23Q3	Total/NA	Water	624.1	
550-205887-5	TB-23Q3	Total/NA	Water	624.1	
MB 550-305363/7	Method Blank	Total/NA	Water	624.1	
LCS 550-305363/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-305363/5	Lab Control Sample Dup	Total/NA	Water	624.1	
550-205960-A-1 MS	Matrix Spike	Total/NA	Water	624.1	
550-205960-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 305383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	200.7	
550-205887-4	EW-1-23Q3-comp	Total/NA	Water	200.7	
MB 550-305383/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-305383/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-305383/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-205468-A-1-B MS	Matrix Spike	Total/NA	Water	200.7	
550-205468-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 305513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	245.1	
MB 550-305513/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-305513/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-305513/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-205046-U-1-E MS	Matrix Spike	Total/NA	Water	245.1	
550-205046-U-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 305527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	200.7 Rev 4.4	305383
550-205887-4	EW-1-23Q3-comp	Total/NA	Water	200.7 Rev 4.4	305383
MB 550-305383/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	305383
LCS 550-305383/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	305383
LCSD 550-305383/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	305383
550-205468-A-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	305383
550-205468-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	305383

Analysis Batch: 305535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	245.1	305513
MB 550-305513/1-A	Method Blank	Total/NA	Water	245.1	305513
LCS 550-305513/2-A	Lab Control Sample	Total/NA	Water	245.1	305513
LCSD 550-305513/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	305513
550-205046-U-1-E MS	Matrix Spike	Total/NA	Water	245.1	305513
550-205046-U-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	305513

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

General Chemistry

Prep Batch: 305653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	SM 4500 CN C	
MB 550-305653/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-305653/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-305653/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-205757-C-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-205757-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 305709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	SM 4500 CN E	305653
MB 550-305653/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	305653
LCS 550-305653/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	305653
LCSD 550-305653/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	305653
550-205757-C-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	305653
550-205757-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	305653

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q3
Date Collected: 08/03/23 08:35
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 07:12
Total/NA	Prep	SM 4500 CN C			305653	ZH	EET PHX	08/11/23 12:15
Total/NA	Analysis	SM 4500 CN E		1	305709	ZH	EET PHX	08/11/23 13:20

Client Sample ID: MW-10-23Q3-comp
Date Collected: 08/03/23 08:32
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			305383	SGO	EET PHX	08/08/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	305527	GLW	EET PHX	08/09/23 15:41
Total/NA	Prep	245.1			305513	HHL	EET PHX	08/09/23 14:16
Total/NA	Analysis	245.1		1	305535	HHL	EET PHX	08/09/23 17:27

Client Sample ID: EW-1-23Q3
Date Collected: 08/03/23 09:15
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 07:34

Client Sample ID: EW-1-23Q3-comp
Date Collected: 08/03/23 09:12
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			305383	SGO	EET PHX	08/08/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	305527	GLW	EET PHX	08/09/23 15:44

Client Sample ID: TB-23Q3
Date Collected: 08/03/23 08:00
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 02:03

Laboratory References:

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: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

205887

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell

Chain of Custody / Analysis Request

Save with QC Check: Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

AESI Ref:	45141.43455
COC#	R35008080323
	Page 1 of 1
Lab Proj # (SDG):	JD11212
Lab Location ID	TAL-PHX
HW Site R-Code	R35008
Sampling Program	Sampling program
Authorized User:	Honeywell
Lab Parent ID	TAL

Text & Excel File Drive | Excel & Text File Order | Create Excel Output | Create Text Output

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Pricing Source (RFP, eAuction, etc)	RFP2019
HW Site Name	Peoria (AZ)
Task Type	OM&M
Location of Site	Phoenix, AZ
WBS Code	6400
Sampling Co.:	Jacobs
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS
Sampler(s) names	T. Kearsley
PO #	HW PO # A000651433
Analysis Turnaround Time (calendar days):	10
Consultant	Jacobs
Laboratory Contact	Danielle Roberts
Report Tier Level	2
Full Report and EDD TAT (calendar days)	10
Honeywell RM Name	Steve Bowles

Reporting Information (DocuSign First Signer)	
Name	Jacobs
Address	1501 W. Fountainhead Parkway
City, State, Zip	Tempe, AZ 85282
Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com

Billing Information (DocuSign Second Signer)	
Co. Name	Honeywell
Address	111 South 34th Street M/S 158
City, State, Zip	Phoenix, AZ 85034
HW RM email	steven.bowles@honeywell.com

More Rows | Less Rows

Sample Identification

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)	E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)	Sampling Method (rt_sample_method)	Lab Sample Numbers
Analytical Group Name																				
Preservative													18	21	30	21	21	18		
Units																				
1 1	MW-10	----	----	MW-10-23Q3	8/3/2023	8:35	GW-GWS	WATER	REG	4	N	N	X		X					
2 2	MW-10	----	----	MW-10-23Q3-comp	8/3/2023	8:32	GW-GWS	WATER	REG	1	Y	N		X		X				
3 3	EW-1	----	----	EW-1-23Q3	8/3/2023	9:15	GW-GWS	WATER	REG	3	N	N						X		
4 4	EW-1	----	----	EW-1-23Q3-comp	8/3/2023	9:12	GW-GWS	WATER	REG	1	Y	N					X			
5 5	TRIPBLANK	----	----	TB-23Q3	8/3/2023	8:00	BLKWATER	WATER	TB	1	N	N	X							
6																				
7																				
8																				
9																				
10																				
11																				
12																				

550-205887 Chain of Custody

Start at D66 to type instructions.

[redacted]

Relinquished by	Company	Jacobs	Received by	Company		Condition		Custody Seals Intact	
Thomas Kearsley	Date/Time 8-3-23		EETA-PHX	Date/Time	8/3/23	Cooler Temp	1.7°C		
Relinquished by	Company 1224		Received by	Company	12:54	Condition		Custody Seals Intact	
	Date/Time			Date/Time		Cooler Temp.		Lab Quote #	

Preservatives: (Other; Specify):	EW-1 Comp E200.7 Qrt-list only COC	0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAci); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special);	FedEx Tracking #	

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-205887-1
SDG Number: Phoenix, AZ

Login Number: 205887
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

1501 W. Fountainhead Pkwy
Suite 401
Tempe, Arizona
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

September 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – August 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the August 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, August 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,077,575	25

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period July 1, 2023, through September 30, 2023, was collected on August 3, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for MW-10. During the site visit on August 21, 2023, the flowrate at MW-10 was observed to be low at 19.84 gallons per minute (gpm). On August 23, 2023, a new, certified flowmeter was installed at MW-10 to verify the flowrate. During a site visit on September 5, 2023, the pump was observed to be offline. Replacement of the extraction pump at MW-10 is currently scheduled for October 2023.

It is estimated that the pump went offline on August 25, 2023, based on the flowrate of 18.65 gpm observed on August 23, 2023, and the totalizer reading of 51,271,132 gallons collected on September 5, 2023, as presented in Attachment B.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Operation and Maintenance Data Collection Forms and pH Log Sheet

Attachment C – Analytical Report

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge
Permit No. 2208-5383

Locked Form Instructions;
Use the TAB key to move to each data entry field.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	***Honeywell International, Inc.*** ***Former Peoria Avenue Facility/MW-10***
Address:	***2251 West Sierra Street***
	Phoenix, Arizona 85029-3602
Permit Limits:	***Local Limits +***
Permit №:	***2208-5383***
Compliance Sampling Point:	***5383.01***
Report Period:	August 1, 2023 Through August 31, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured:	43,103	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured:	48,472	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured:	1,077,575	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☒ SMR Page 2 – Sampling Detail Page
- ☒ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☒ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☒ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☒ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	September 26, 2023
Phone Number/Email	480-234-8347, Derek.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

COMPLETE FOR <u>EACH SAMPLING EVENT</u> DURING THE REPORTING PERIOD

Facility Name: ***Honeywell International, Inc. Former Peoria Avenue Facility/MW-10***

Address: ***2251 West Sierra Street***

Phoenix, Arizona 85029-3602

Dates/Times Samples Collected: ***08/03/2023 at 08:35 (grab), 08:32 (composite), 08:11 (pH)***

Names(s) and Affiliation of Person(s) Sampling: ***Tom Kearsley / Jacobs Project Management Co.***

Compliance Sampling Point № ***5383.01*** *Lab Project or Reference ID №* ***550-205887-1***

Device Type: ***½ inch sampling valve***

Location Description: ***located inside the vault under Sierra Street***

Electronic pH meter calibrated prior to analysis? **Yes**

Sampling Methodology (indicate sample type, collection method, and preservation for all pollutants sampled):

Type	Collection Method	Preservation
pH	Grab	N/A
Metals	Composite	HNO3
BOD/TSS		
COD		
Cyanide	Grab	NaOH
Oil & Grease		
VOCs	Grab	HCl
Semi-VOCs		

NOTE: If sample collection method was Hand Composite; a log showing date, time, flow rate, aliquot volumes, and final calculations for the final hand composite must be included with the report.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International, Inc.*** ***Former Peoria Avenue Facility/MW-10***

Permit №: ***2208-5383***

Report Period: August 1, 2023 to August 31, 2023

Compliance Point №: ***5383.01***

Lab Project or Reference ID №: 550-205887-1

Compliance Point Description: ***½ inch sampling valve***

Parameter	Units	Daily Limit	Sampling Frequency	Sample Type	Date: 8/3/2023	Analysis Method	Date:	Analysis Method	Date:	Analysis Method	Date:	Analysis Method	Date:	Analysis Method
1,1-Dichloroethane	µg/L	**N/A**	1 per Quarter	**Grab**	0.60	EPA 624.1								
1,1-Dichloroethylene	µg/L	**N/A**	1 per Quarter	**Grab**	17	EPA 624.1								
Arsenic	mg/L	**0.13**	1 per Quarter	**FPC**	<0.10	EPA 200.7 Rev 4.4								
Benzene	µg/L	**35**	1 per Quarter	**Grab**	<0.50	EPA 624.1								
Cadmium	mg/L	**0.047**	1 per Quarter	**FPC**	<0.001	EPA 200.7 Rev 4.4								
Chloroform	µg/L	**2000**	1 per Quarter	**Grab**	<0.50	EPA 624.1								
Copper	mg/L	**1.5**	1 per Quarter	**FPC**	<0.01	EPA 200.7 Rev 4.4								
Cyanide (T)	mg/L	**2.0**	1 per Quarter	**Grab**	<0.05	EPA 9010								
Lead	mg/L	**0.41**	1 per Quarter	**FPC**	<0.015	EPA 200.7 Rev 4.4								
Mercury	mg/L	**0.0023**	1 per Quarter	**FPC**	<0.0002	EPA 245.1								
Molybdenum	mg/L	**N/A**	1 per Quarter	**FPC**	<0.010	EPA 200.7 Rev 4.4								
pH	S.U.	**5.0-10.5**	1 per Quarter	**Grab**	7.22	SM 4500-H+B								
Selenium	mg/L	**0.10**	1 per Quarter	**FPC**	<0.10	EPA 200.7 Rev 4.4								
Silver	mg/L	**1.2**	1 per Quarter	**FPC**	<0.010	EPA 200.7 Rev 4.4								
Trichloroethylene	µg/L	**N/A**	1 per Quarter	**Grab**	4.9	EPA 624.1								

Zinc	mg/L	**3.5**	1 per Quarter	**FPC**	<0.05	EPA 200.7 Rev 4.4								

NOTES:
This form is to be submitted for each sampling point.
Sampling Frequency – The required minimum sampling frequency from your Permit.
Sample Type - FPC is a Flow Proportional Composite; G/FPC is a combination of Grab and Flow Proportional samples as specified in 40 CFR 136.
Date – Enter the date the sample was taken and enter the result for each parameter under the date. Do not enter the "ND" from the laboratory as a sample result. Enter less than (<) the detection limit for the parameter. For example <0.05.
Analysis Method - The analysis method used by the laboratory is to be entered for each result. All samples must be analyzed by the analytical methods required by the Permit. Copies of the laboratory analytical reports must be submitted with this form.
Monthly Average - This column must be completed for all applicable parameters

Compliance Sampling Point № **5383.01**

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☐ Meter Adjusted	☐ Sampling Device Cleaned
Last	07/20/2023	32,175,506				☐	☐
1.	08/03/2023	32,854,107	48,472			☐	☐
2.	08/21/2023	33,622,110	42,667			☐	☐
3.	08/23/2023	33,676,741	27,316			☐	☐
4.	08/23/2023	51,220,652				☐	☐
5.	08/25/2023[1]	51,271,132[1]	25,240			☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		43,103				
	Maximum Flow		48,472				
	Total Gallons		1,077,575				

NOTE: A calibrated totalizer/flowmeter was installed at MW-10 on 8/23/2023. Totalizer/flowmeter start at 51,220,652 gallons. Pump off on 9/5/2023 site visit.

[1]Pump estimated to be offline on 8/25/2023 based on flowrate observed on 8/23/2023 and totalizer reading collected on 9/5/2023.

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 8/3/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0810	ON	32854107	4	33.3	198.85	97459.8
Depart		ON					

Electrical Meter Readings

Power(kwh)	70037
Power Rate(KwMax)	5.18

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes X No ____

Laboratory Analyses and Method

✓	VOCs by USEPA 624	✓	Total Cyanide and Sulfide by SM 4500-CN-C, E
✓	pH by USEPA SM 4500-H+	—	Biological Oxygen Demand by SM 5210-B
✓	Metals by USEPA 200.7, 200.8	—	Total Suspended Solids by SM 2540-D
✓	Mercury by USEPA 245.1		Other

Time pH Sample Collected: 0811

Time pH Sample Analyzed: 0815
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 0835

Composite Sample Log

Start Time: 0812 End Time: 0832 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 10,000 mL total volume

Notes

pH 7.22 @ 26.5°C

Signature: TS A Kay

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

303.95
-5.1
198.85

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 8/21/23 Field Technician(s) Stephen Steinbergs

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	12:00	ON	3362210	2	~~19.89~~	291.7	98295.3
Depart							

Electrical Meter Readings

Power(kwh)	72647
Power Rate(KwMax)	5.05

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

- [-] Inspect Totalizer Paddle Wheel
- [-] Clean Vault
- [-] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No ✓

Laboratory Analyses and Method

- [-] VOCs by USEPA 624
- [-] pH by USEPA SM 4500-H+
- [-] Metals by USEPA 200.7, 200.8
- [-] Mercury by USEPA 245.1
- [-] Total Cyanide and Sulfide by SM 4500-CN-C, E
- [-] Biological Oxygen Demand by SM 5210-B
- [-] Total Suspended Solids by SM 2540-D
- [-] Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: N/A
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): N/A

Composite Sample Log

Start Time: - End Time: - Flow Rate: - mL/min

Aliquot Volume: - mL x 20 aliquots = - mL total volume

Notes

* Low Flow

Signature: SmBS

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

296.8
- 5.1
291.7

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 8/23/23 Field Technician(s) T. Krasslay

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:40	ON/OFF	33676741	2	19.19	—	—
Depart	10:50	OFF/ON	*51220652	2	18.65	—	—

Electrical Meter Readings

Power(kwh)	—
Power Rate(KwMax)	—

Max. Permitted Discharge: 62.5 gpm (90,000 gpd total)

Maintenance Items

Replaced Inspect Totalizer Paddle Wheel — [—] Clean Vault — [—] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

—	VOCs by USEPA 624	—	Total Cyanide and Sulfide by SM 4500-CN-C, E
~	pH by USEPA SM 4500-H+	—	Biological Oxygen Demand by SM 5210-B
—	Metals by USEPA 200.7, 200.8	—	Total Suspended Solids by SM 2540-D
—	Mercury by USEPA 245.1	—	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —

(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

* Installed factory calibrated flow meter

Signature: T Krasslay

MW-10 Well Information

Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

Peoria Ave. Site O&M Data Collection Form
MW-10

Date 9/5/23 Field Technician(s) E. Keasling

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	08:50	OFF *	5127132	0	0	290.51	98651.9
Depart		OFF					

Electrical Meter Readings

Power(kwh)	74038
Power Rate(KwMax)	5.06

Max. Permitted Discharge: 62.5 gpm
(90,000 gpd total)

Maintenance Items

~ Inspect Totalizer Paddle Wheel ~ Clean Vault ~ Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

~ VOCs by USEPA 624
~ pH by USEPA SM 4500-H+
~ Metals by USEPA 200.7, 200.8
~ Mercury by USEPA 245.1
~ Total Cyanide and Sulfide by SM 4500-CN-C, E
~ Biological Oxygen Demand by SM 5210-B
~ Total Suspended Solids by SM 2540-D
~ Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: ~
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): ~

Composite Sample Log

Start Time: ~ End Time: ~ Flow Rate: ~ mL/min

Aliquot Volume: ~ mL x 20 aliquots = ~ mL total volume

Notes

* Found well off, KEAF tripping breaker

Signature: [signature]

MW-10 Well Information
Total Depth = 430 feet bgs Screen Interval = 200-425 feet bgs Pump Intake Depth = 338 feet bgs

Revised 12/21/2017

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № 030548

pH Calibration & Analysis Log

Compliance Sampling Point № 5436.01, 5383.01

Calibration Standard	Date	Analyst Initials	Analysis Time	Reading (Units)	Temp Reading (°C)	Calibration Slope (mV or %)	Comments
pH Buffer 4/Lot# F10228 6/10/2024	8-3-23	TK	0724	4.0	25.1	100.1	
pH Buffer 7/Lot# E1022A 5/10/2024			0716	7.0	25.0	99.5	
pH Buffer 10/Lot# D1322D 10/13/2023			0720	10.0	25.2	102.3	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# CHL8500 7-9-23			0725	7.02	25.3	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	8-3-23	TK	0856	7.39	28.1	N/A	
Compliance pH result 5383.01 (MW-10)	8-3-23	TK	0815	7.22	26.5	N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
Once/Month Duplicate Sample (+/- 0.1 Acceptance)	8-3-23	TK	Orig Reading:	7.22	Dup Reading:	7.28	
Once/Month Verification Check/Buffer 7	8-3-23	TK	0950	7.05	25.6	(Pass) or Fail	

NOTE: *Grab pH Analysis for purposes of compliance sampling* ***must be performed within 15 minutes sample collection*** *using one of the methods specified for* ***Hydrogen Ion*** *in Title 40 of the Code of Federal Regulations Part 136; typically SM4500 H+ B. Arizona Department of Environmental Quality has provided guidance for complying with the Calibration and QA/QC portions of the approved analytical methods. This pH callibration log may aid in meeting the minimum criteria. Please see the manufacturer's manual for your pH meter to determine the acceptable slope in mV or %.*

NOTE: *Permittees are required to calibrate field and/or bench pH meters* ***each day of use for Grab pH Analysis.***

NOTE: *Permittees are required to keep pH Calibration Logs* ***onsite and available for review for a minimum of three years; a copy of the hand-written original must be submitted with the monthly SMR.***

Attachment C
Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/8/2023 8:44:34 AM Revision 1

JOB DESCRIPTION

Peoria
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-205887-1

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

See page two for job notes and contact information.

myEOL

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
9/8/2023 8:44:34 AM
Revision 1

Authorized for release by
Rachel Sester, Project Manager I
Rachel.Sester@et.eurofinsus.com
Designee for
Linda Eshelman, Project Manager II
linda.eshelman@et.eurofinsus.com
(602)659-7681

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Qualifiers

General Chemistry

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

Case Narrative

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Job ID: 550-205887-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-205887-1

Revision
This report was revised on 9/8/23 to add Cd and Zn to MW-10, per client request. This final report replaces the report that was generated on 8/14/23 at 3:14 PM.

Comments
No additional comments.

Receipt
The samples were received on 8/3/2023 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.7º C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-205887-1	MW-10-23Q3	Water	08/03/23 08:35	08/03/23 12:54
550-205887-2	MW-10-23Q3-comp	Water	08/03/23 08:32	08/03/23 12:54
550-205887-3	EW-1-23Q3	Water	08/03/23 09:15	08/03/23 12:54
550-205887-4	EW-1-23Q3-comp	Water	08/03/23 09:12	08/03/23 12:54
550-205887-5	TB-23Q3	Water	08/03/23 08:00	08/03/23 12:54

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q3 — Lab Sample ID: 550-205887-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.60		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	17		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.9		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q3-comp — Lab Sample ID: 550-205887-2

No Detections.

Client Sample ID: EW-1-23Q3 — Lab Sample ID: 550-205887-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.6		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	67		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.2		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	20		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q3-comp — Lab Sample ID: 550-205887-4

No Detections.

Client Sample ID: TB-23Q3 — Lab Sample ID: 550-205887-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q3

Lab Sample ID: 550-205887-1
Date Collected: 08/03/23 08:35
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.60		0.50		ug/L			08/08/23 07:12	1
1,1-Dichloroethene	17		0.50		ug/L			08/08/23 07:12	1
Benzene	ND		0.50		ug/L			08/08/23 07:12	1
Chloroform	ND		0.50		ug/L			08/08/23 07:12	1
Trichloroethene	4.9		0.50		ug/L			08/08/23 07:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*08/08/23 07:12*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*		*08/08/23 07:12*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*08/08/23 07:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		08/11/23 12:15	08/11/23 13:20	1

Client Sample ID: MW-10-23Q3-comp

Lab Sample ID: 550-205887-2
Date Collected: 08/03/23 08:32
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		08/08/23 04:55	08/09/23 15:41	1
Cadmium	ND		0.0010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 15:41	1
Molybdenum	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Selenium	ND		0.10		mg/L		08/08/23 04:55	08/09/23 15:41	1
Silver	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Zinc	ND		0.050		mg/L		08/08/23 04:55	08/09/23 15:41	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/09/23 14:16	08/09/23 17:27	1

Client Sample ID: EW-1-23Q3

Lab Sample ID: 550-205887-3
Date Collected: 08/03/23 09:15
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	4.6		0.50		ug/L			08/08/23 07:34	1
1,1-Dichloroethene	67		0.50		ug/L			08/08/23 07:34	1
Chloroform	1.2		0.50		ug/L			08/08/23 07:34	1
Trichloroethene	20		0.50		ug/L			08/08/23 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*08/08/23 07:34*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*08/08/23 07:34*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*08/08/23 07:34*	*1*

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-23Q3-comp

Lab Sample ID: 550-205887-4

Date Collected: 08/03/23 09:12
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:44	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 15:44	1

Client Sample ID: TB-23Q3

Lab Sample ID: 550-205887-5

Date Collected: 08/03/23 08:00
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			08/08/23 02:03	1
1,1-Dichloroethene	ND		0.50		ug/L			08/08/23 02:03	1
Benzene	ND		0.50		ug/L			08/08/23 02:03	1
Chloroform	ND		0.50		ug/L			08/08/23 02:03	1
Trichloroethene	ND		0.50		ug/L			08/08/23 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*08/08/23 02:03*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*		*08/08/23 02:03*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*08/08/23 02:03*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-205887-1	MW-10-23Q3	90	92	94
550-205887-3	EW-1-23Q3	90	93	95
550-205887-5	TB-23Q3	89	92	94
550-205960-A-1 MS	Matrix Spike	103	94	99
550-205960-A-1 MSD	Matrix Spike Duplicate	103	93	99
LCS 550-305363/4	Lab Control Sample	89	80	84
LCSD 550-305363/5	Lab Control Sample Dup	96	89	92
MB 550-305363/7	Method Blank	91	89	93

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-305363/7
Matrix: Water
Analysis Batch: 305363

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			08/08/23 01:40	1
1,1-Dichloroethene	ND		0.50		ug/L			08/08/23 01:40	1
Benzene	ND		0.50		ug/L			08/08/23 01:40	1
Chloroform	ND		0.50		ug/L			08/08/23 01:40	1
Trichloroethene	ND		0.50		ug/L			08/08/23 01:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*08/08/23 01:40*	*1*
Dibromofluoromethane (Surr)	*89*		*60 - 140*		*08/08/23 01:40*	*1*
Toluene-d8 (Surr)	*93*		*60 - 140*		*08/08/23 01:40*	*1*

Lab Sample ID: LCS 550-305363/4
Matrix: Water
Analysis Batch: 305363

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	43.1		ug/L		86	70 - 130		
1,1-Dichloroethene			50.0	43.9		ug/L		88	50 - 150		
Benzene			50.0	44.8		ug/L		90	65 - 135		
Chloroform			50.0	42.3		ug/L		85	70 - 135		
Trichloroethene			50.0	45.0		ug/L		90	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*
Dibromofluoromethane (Surr)	*80*		*60 - 140*
Toluene-d8 (Surr)	*84*		*60 - 140*

Lab Sample ID: LCSD 550-305363/5
Matrix: Water
Analysis Batch: 305363

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-Dichloroethane			50.0	44.5		ug/L		89	70 - 130	3	20
1,1-Dichloroethene			50.0	45.4		ug/L		91	50 - 150	3	20
Benzene			50.0	46.1		ug/L		92	65 - 135	3	20
Chloroform			50.0	43.5		ug/L		87	70 - 135	3	20
Trichloroethene			50.0	45.1		ug/L		90	65 - 135	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*
Dibromofluoromethane (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*92*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-205960-A-1 MS
Matrix: Water
Analysis Batch: 305363

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
1,1-Dichloroethane	ND		50.0	50.2		ug/L		100	59 - 155
1,1-Dichloroethene	3.0		50.0	53.7		ug/L		101	10 - 234
Benzene	ND		50.0	52.5		ug/L		105	35 - 151
Chloroform	0.85		50.0	48.8		ug/L		96	51 - 138
Trichloroethene	23		50.0	70.5		ug/L		95	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*

Lab Sample ID: 550-205960-A-1 MSD
Matrix: Water
Analysis Batch: 305363

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
1,1-Dichloroethane	ND		50.0	48.9		ug/L		98	59 - 155	3	40
1,1-Dichloroethene	3.0		50.0	53.6		ug/L		101	10 - 234	0	32
Benzene	ND		50.0	51.7		ug/L		103	35 - 151	1	61
Chloroform	0.85		50.0	47.8		ug/L		94	51 - 138	2	54
Trichloroethene	23		50.0	69.5		ug/L		93	70 - 157	2	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-305383/1-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305383

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		08/08/23 04:55	08/09/23 14:34	1
Cadmium	ND		0.0010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 14:34	1
Molybdenum	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Selenium	ND		0.10		mg/L		08/08/23 04:55	08/09/23 14:34	1
Silver	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Zinc	ND		0.050		mg/L		08/08/23 04:55	08/09/23 14:34	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-305383/2-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	1.04		mg/L		104	85 - 115
Cadmium	1.00	0.983		mg/L		98	85 - 115
Copper	1.00	0.949		mg/L		95	85 - 115
Lead	1.00	1.02		mg/L		102	85 - 115
Molybdenum	1.00	1.01		mg/L		101	85 - 115
Selenium	1.00	1.06		mg/L		106	85 - 115
Silver	0.0750	0.0842		mg/L		112	85 - 115
Zinc	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: LCSD 550-305383/3-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	1.04		mg/L		104	85 - 115	0	20
Cadmium	1.00	1.02		mg/L		102	85 - 115	3	20
Copper	1.00	0.973		mg/L		97	85 - 115	2	20
Lead	1.00	1.03		mg/L		103	85 - 115	1	20
Molybdenum	1.00	1.03		mg/L		103	85 - 115	2	20
Selenium	1.00	1.07		mg/L		107	85 - 115	0	20
Silver	0.0750	0.0814		mg/L		109	85 - 115	3	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-205468-A-1-B MS
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.08		mg/L		107	70 - 130
Cadmium	ND		1.00	1.00		mg/L		100	70 - 130
Copper	0.021		1.00	0.996		mg/L		98	70 - 130
Lead	ND		1.00	0.997		mg/L		100	70 - 130
Molybdenum	ND		1.00	1.04		mg/L		104	70 - 130
Selenium	ND		1.00	1.08		mg/L		107	70 - 130
Silver	ND		0.0750	0.0822		mg/L		110	70 - 130
Zinc	ND		1.00	1.01		mg/L		101	70 - 130

Lab Sample ID: 550-205468-A-1-C MSD
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.07		mg/L		106	70 - 130	1	20
Cadmium	ND		1.00	0.972		mg/L		97	70 - 130	3	20
Copper	0.021		1.00	0.989		mg/L		97	70 - 130	1	20
Lead	ND		1.00	0.971		mg/L		97	70 - 130	3	20
Molybdenum	ND		1.00	1.02		mg/L		102	70 - 130	2	20
Selenium	ND		1.00	1.05		mg/L		105	70 - 130	2	20
Silver	ND		0.0750	0.0797		mg/L		106	70 - 130	3	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-205468-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305527 — **Prep Batch: 305383**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	0.991		mg/L		99	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-305513/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/09/23 14:16	08/09/23 16:55	1

Lab Sample ID: LCS 550-305513/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00484		mg/L		97	85 - 115		

Lab Sample ID: LCSD 550-305513/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00474		mg/L		95	85 - 115	2	20

Lab Sample ID: 550-205046-U-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00496		mg/L		99	70 - 130		

Lab Sample ID: 550-205046-U-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00513		mg/L		103	70 - 130	3	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-305653/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305709 — **Prep Batch: 305653**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		08/11/23 12:15	08/11/23 13:20	1

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: LCS 550-305653/2-A
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305653

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0941		mg/L		94	90 - 110		

Lab Sample ID: LCSD 550-305653/3-A
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305653

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0942		mg/L		94	90 - 110	0	20

Lab Sample ID: 550-205757-C-1-B MS
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 305653

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	R4 M2	0.100	0.120		mg/L		120	80 - 120		

Lab Sample ID: 550-205757-C-1-C MSD
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 305653

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	R4 M2	0.100	0.0678	M2 R4	mg/L		68	80 - 120	55	20

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

GC/MS VOA

Analysis Batch: 305363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	624.1	
550-205887-3	EW-1-23Q3	Total/NA	Water	624.1	
550-205887-5	TB-23Q3	Total/NA	Water	624.1	
MB 550-305363/7	Method Blank	Total/NA	Water	624.1	
LCS 550-305363/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-305363/5	Lab Control Sample Dup	Total/NA	Water	624.1	
550-205960-A-1 MS	Matrix Spike	Total/NA	Water	624.1	
550-205960-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 305383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	200.7	
550-205887-4	EW-1-23Q3-comp	Total/NA	Water	200.7	
MB 550-305383/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-305383/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-305383/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-205468-A-1-B MS	Matrix Spike	Total/NA	Water	200.7	
550-205468-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 305513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	245.1	
MB 550-305513/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-305513/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-305513/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-205046-U-1-E MS	Matrix Spike	Total/NA	Water	245.1	
550-205046-U-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 305527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	200.7 Rev 4.4	305383
550-205887-4	EW-1-23Q3-comp	Total/NA	Water	200.7 Rev 4.4	305383
MB 550-305383/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	305383
LCS 550-305383/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	305383
LCSD 550-305383/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	305383
550-205468-A-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	305383
550-205468-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	305383

Analysis Batch: 305535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	245.1	305513
MB 550-305513/1-A	Method Blank	Total/NA	Water	245.1	305513
LCS 550-305513/2-A	Lab Control Sample	Total/NA	Water	245.1	305513
LCSD 550-305513/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	305513
550-205046-U-1-E MS	Matrix Spike	Total/NA	Water	245.1	305513
550-205046-U-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	305513

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

General Chemistry

Prep Batch: 305653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	SM 4500 CN C	
MB 550-305653/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-305653/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-305653/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-205757-C-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-205757-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 305709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	SM 4500 CN E	305653
MB 550-305653/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	305653
LCS 550-305653/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	305653
LCSD 550-305653/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	305653
550-205757-C-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	305653
550-205757-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	305653

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q3
Date Collected: 08/03/23 08:35
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 07:12
Total/NA	Prep	SM 4500 CN C			305653	ZH	EET PHX	08/11/23 12:15
Total/NA	Analysis	SM 4500 CN E		1	305709	ZH	EET PHX	08/11/23 13:20

Client Sample ID: MW-10-23Q3-comp
Date Collected: 08/03/23 08:32
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			305383	SGO	EET PHX	08/08/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	305527	GLW	EET PHX	08/09/23 15:41
Total/NA	Prep	245.1			305513	HHL	EET PHX	08/09/23 14:16
Total/NA	Analysis	245.1		1	305535	HHL	EET PHX	08/09/23 17:27

Client Sample ID: EW-1-23Q3
Date Collected: 08/03/23 09:15
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 07:34

Client Sample ID: EW-1-23Q3-comp
Date Collected: 08/03/23 09:12
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			305383	SGO	EET PHX	08/08/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	305527	GLW	EET PHX	08/09/23 15:44

Client Sample ID: TB-23Q3
Date Collected: 08/03/23 08:00
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 02:03

Laboratory References:

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: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

205887

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell
Chain of Custody / Analysis Request

Save with QC Check: Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

AESI Ref:	45141.43455
COC#	R35008080323
	Page 1 of 1
Lab Proj # (SDG):	JD11212
Lab Location ID	TAL-PHX
HW Site R-Code	R35008
Sampling Program	Sampling program
Authorized User:	Honeywell
Lab Parent ID	TAL

Text & Excel File Drive | Excel & Text File Order | Create Excel Output | Create Text Output

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Pricing Source (RFP, eAuction, etc)	RFP2019	HW Site Name	Peoria (AZ)
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS	Location of Site	Phoenix, AZ
Task Type	OM&M	WBS Code	6400

Sampling Co.:		Jacobs
Reporting Information (DocuSign First Signer)	Name	Jacobs
	Address	1501 W. Fountainhead Parkway
	City, State, Zip	Tempe, AZ 85282
	Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com
Billing Information (DocuSign Second Signer)	Co. Name	Honeywell
	Address	111 South 34th Street M/S 158
	City, State, Zip	Phoenix, AZ 85034
	HW RM email	steven.bowles@honeywell.com

Sampler(s) names	T. Kearsley
PO #	HW PO # A000651433
Analysis Turnaround Time (calendar days):	10
Consultant	Jacobs
Laboratory Contact	Danielle Roberts
Report Tier Level	2
Full Report and EDD TAT (calendar days)	10
Honeywell RM Name	Steve Bowles

More Rows | Less Rows

Sample Identification

#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)	E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)	Sampling Method (rt_sample_method)	Lab Sample Numbers
Preservative													18	21	30	21	21	18		
											Units									
1	MW-10	----	----	MW-10-23Q3	8/3/2023	8:35	GW-GWS	WATER	REG	4	N	N	X		X					
2	MW-10	----	----	MW-10-23Q3-comp	8/3/2023	8:32	GW-GWS	WATER	REG	1	Y	N		X		X				
3	EW-1	----	----	EW-1-23Q3	8/3/2023	9:15	GW-GWS	WATER	REG	3	N	N						X		
4	EW-1	----	----	EW-1-23Q3-comp	8/3/2023	9:12	GW-GWS	WATER	REG	1	Y	N					X			
5	TRIPBLANK	----	----	TB-23Q3	8/3/2023	8:00	BLKWATER	WATER	TB	1	N	N	X							
6																				
7																				
8																				
9																				
10																				
11																				
12																				

550-205887 Chain of Custody

Start at D66 to type instructions.

[redacted]

Relinquished by	Company	Jacobs	Received by	Company		Condition		Custody Seals Intact	
Thomas Kearsley	Date/Time	8-3-23	EETA-PHX	Date/Time	8/3/23	Cooler Temp	1.7°C		
Relinquished by	Company	1221	Received by	Company	1254	Condition		Custody Seals Intact	
	Date/Time			Date/Time		Cooler Temp.		Lab Quote #	
Preservatives: (Other; Specify):	EW-1 Comp E200.7 Qrt-list only COC		0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAci); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special);				FedEx Tracking #	

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-205887-1
SDG Number: Phoenix, AZ

Login Number: 205887
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

October 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – September 2023**
Industrial Wastewater Discharge Permit Number 2302-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Company (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the September 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, September 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	2302-5436	2,502,030	30

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period July 1, 2023, through September 30, 2023, were collected on August 3, 2023. Sample results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 2302-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 2302-5436

Facility Name:	***Honeywell International, Inc. – Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85051
Permit Limits:	***Local Limits+***
Permit №:	***2302-5436***
Compliance Sampling Point:	***5436.01***

Report Period: September 1, 2023 Through September 30, 2023

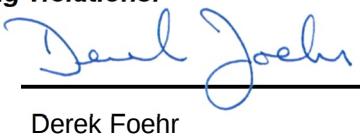
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 83,401	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 89,347	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,502,030	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment A - Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	October 26, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

Compliance Sampling Point № ***5436.01***

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	08/21/2023	67,016,526				☐	☐
1.	09/05/2023	68,190,226	78,247			☐	☐
2.	09/18/2023	69,351,740	89,347			☐	☒
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		83,401				
	Maximum Flow		89,347				
	Total Gallons		2,502,030				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 9/5/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	09:15	ON	68190226		7	55.78	299.98	36442.5
Depart		ON						

Electrical Meter Readings

Power(kwh)	63214
Power Rate(KwMax)	9.18

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 9-13-23 Field Technician(s) M. BRANCH

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1147	ON	69351740		7	42.37	299.31	36757.2
Depart	—	ON	—		—	—	—	—

Electrical Meter Readings

Power(kwh)	1.6033
Power Rate(KwMax)	9.03

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel [INSP.] Clean Vault [—] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

—	VOCs by USEPA 624	—	Total Cyanide and Sulfide by SM 4500-CN-C, E
—	pH by USEPA SM 4500-H+	—	Mercury by USEPA 245.1
—	Metals by USEPA 200.7, 200.8	—	Other

Time pH Sample Collected: —

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: mL x 20 aliquots = mL total volume

Notes

MODERATE TURBIDITY ON CORNER.

Signature: [signature]

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

VAULT ELEV = 302.23
-2.92

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

October 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – September 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the September 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, September 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	0	0

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. The Zero Discharge Certification is included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period July 1, 2023, through September 30, 2023, was collected on August 3, 2023. Sample results indicate that no water quality parameters exceeded the daily limits set forth in the permit for MW-10. No discharge from extraction well MW-10 occurred during September 2023. The pump is scheduled to be replaced and operational in mid-November.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Zero Discharge Certification

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	*Honeywell International, Inc.* *Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street* *Phoenix, Arizona 85029-3602*
Permit Limits:	*Local Limits +*
Permit №:	*2208-5383*
Compliance Sampling Point:	*5383.01*

Report Period: September 1, 2023 Through September 30, 2023

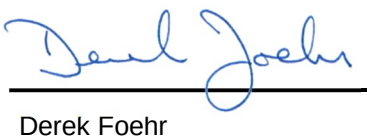
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 0	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 0	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 0	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☒ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☐ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	October 26, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

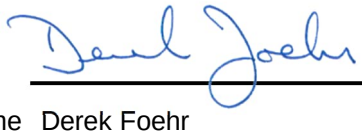
Attachment B
Zero Discharge Certification

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM
ATTACHMENT B

Zero Discharge Certification:

Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitations, I certify that to the best of my knowledge and belief, no discharge to sewer of industrial process wastewaters specified in the Wastewater Discharge Permit occurred during the monitoring period covered by this report. I am aware of the potential for significant penalties for submission of false information, including the possibility of fines and imprisonment for knowing violations. I will retain copies of all manifests and/or waste hauler receipts on-site for no less than 3 years and make them available to City of Phoenix personnel upon request.

Report Period:	September 1, 2023	Through	September 30, 2023

Facility Name:	*Honeywell International, Inc.* *Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street* *Phoenix, Arizona 85029-3602*
Permit №:	***2208-5383***
Compliance Sampling Point*:	***5383.01***
Certifying Official Signature	
Certifying Official Printed Name	Derek Foehr
Certifying Official Title	Project Manager
Date	October 26, 2023

1501 West Fountainhead Pkwy
Suite 401
Tempe, Arizona 85282
United States
480.966.8188 www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

November 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – October 2023**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Engineering Group, Inc. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the October 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, October 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,172,666	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period October 1, 2023, through December 31, 2023, are included in this monthly report. Jacobs personnel performed compliance sampling for all required analytes on October 3, 2023. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 1806-5436

Attachment B – Operation and Maintenance Data Collection Forms and pH Log Sheet

Attachment C – Analytical Report

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 1806-5436

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Address: *2305 West Mercer Lane*

Phoenix, Arizona 85029

Permit №: ***1806-5436***

Compliance Sampling Point: ***5436.01***

Report Period: October 1, 2023 Through October 31, 2023

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 70,086	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 84,766	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,172,666	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☒ SMR Page 2 – Sampling Detail Page
- ☒ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment B - Zero Discharge Certification (Only if Applicable)
- ☒ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☒ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☒ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature 

Certifying Official Name Derek Foehr

Certifying Official Title Project Manager

Date November 24, 2023

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Address: *2305 West Mercer Lane*

Phoenix, Arizona 85029

Dates/Times Samples Collected: **10/03/2023 at 10:59 (grab), 10:56 (composite), 10:35 (pH)**

Names(s) and Affiliation of Person(s) Sampling: **Tom Kearsley/Jacobs Project Management Co.**

Compliance Sampling Point № **5436.01** Lab Project or Reference ID № **550-208544-1**

Device Type: **½" Sampling tap**

Location Description: **Inside vault under the street in West Mercer Street**

Electronic pH meter calibrated prior to analysis? **Yes**

Sampling Methodology (indicate sample type, collection method, and preservation for all pollutants sampled):

Type	Collection Method	Preservation
pH	Grab	N/A
Metals	Composite	HNO3
Cyanide	Grab	NaOH
VOCs	Grab	HCl

NOTE: If sample collection method was Hand Composite; a log showing date, time, flow rate, aliquot volumes, and final calculations for the final hand composite must be included with the report.

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name: ***Honeywell International Inc., Former Peoria Avenue Facility/EW-1***

Permit №: *1806-5436*

Report Period: October 1, 2023 to October 31, 2023

Compliance Point №: ***5436.01***

Lab Project or Reference ID № ***550-208544-1***

Compliance Point Description: ***½" sampling tap inside vault***

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 10/3/2023	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method
1,1-Dichloroethane	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	3.4	EPA 624.1								
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	47	EPA 624.1								
Arsenic	**mg/L**	**0.13**	**1 per 6 Months**	**FPC**	<0.1	EPA 200.7 Rev 4.4								
Cadmium	**mg/L**	**0.047**	**1 per 6 Months**	**FPC**	<0.001	EPA 200.7 Rev 4.4								
Chloroform	**µg/L**	**2000**	**1 per Quarter**	**Grab**	0.92	EPA 624.1								
Copper	**mg/L**	**1.5**	**1 per Quarter**	**FPC**	<0.01	EPA 200.7 Rev 4.4								
Cyanide (T)	**mg/L**	**2.0**	**1 per 6 Months**	**Grab**	<0.05	EPA 9010								
Lead	**mg/L**	**0.41**	**1 per Quarter**	**FPC**	<0.015	EPA 200.7 Rev 4.4								
Mercury	**mg/L**	**0.0023**	**1 per 6 Months**	**FPC**	<0.0002	EPA 245.1								
Molybdenum	**mg/L**	**N/A**	**1 per 6 Months**	**FPC**	<0.01	EPA 200.7 Rev 4.4								
pH	**S.U.**	**5.0-10.5**	**1 per Quarter**	**Grab**	7.32	SM 4500-H+B								
Selenium	**mg/L**	**0.10**	**1 per 6 Months**	**FPC**	<0.1	EPA 200.7 Rev 4.4								
Silver	**mg/L**	**1.2**	**1 per 6 Months**	**FPC**	<0.01	EPA 200.7 Rev 4.4								
Trichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	14	EPA 624.1								
Zinc	**mg/L**	**3.5**	**1 per 6 Months**	**FPC**	<0.05	EPA 200.7 Rev 4.4								

NOTES:
This form is to be submitted for <u>each</u> sampling point.

<u>Sampling Frequency</u> – The required minimum sampling frequency from your Permit.

<u>Sample Type</u> - FPC is a Flow Proportional Composite; G/FPC is a combination of Grab and Flow Proportional samples as specified in 40 CFR 136.

<u>Date</u> – Enter the date the sample was taken and enter the result for each parameter under the date. Do not enter the "ND" from the laboratory as a sample result. Enter less than (<) the detection limit for the parameter. For example <0.05.

<u>Analysis Method</u> - The analysis method used by the laboratory is to be entered for each result. All samples must be analyzed by the analytical methods required by the Permit. Copies of the laboratory analytical reports must be submitted with this form.

Compliance Sampling Point Nº 5436.01

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (Inches)	Measured Level (Inches)	☒ Meter Adjusted	☒ Sampling Point Cleaned
Last	09/18/2023	69,351,740				☐	☒
1.	10/03/2023	70,175,552	54,921			☐	☐
2.	10/04/2023	70,252,918	77,366			☐	☐
3.	10/19/2023	71,524,406	84,766			☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow	**70,086**
Maximum Flow	**84,766**
Total Gallons	**2,172,666**

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 10/3/23 Field Technician(s): T. KEASSEY

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1020	ON	70175552 *		7	54.38	295.64	37116.8
Depart		ON						

Electrical Meter Readings

Power(kwh)	69221
Power Rate(KwMax)	8.99

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

- ✓ Inspect Totalizer Paddle Wheel
- — Clean Vault
- — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes X No ____

Laboratory Analyses and Method

- ✓ VOCs by USEPA 624
- ✓ pH by USEPA SM 4500-H+
- ✓ Metals by USEPA 200.7, 200.8
- ✓ Total Cyanide and Sulfide by SM 4500-CN-C, E
- ✓ Mercury by USEPA 245.1
- — Other

Time pH Sample Collected: 10:35

Time pH Sample Analyzed: 10:38
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 10:59

Composite Sample Log

Start Time: 10:36 End Time: 10:56 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 10,000 mL total volume

Notes

* Found well on but zero on flowmeter, cleaned & back on

pH 7.32 @ 29.9°C

Signature: [signature]

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

298.56
2.92

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 10/4/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1005	ON	70252918		7	55.3*	—	—
Depart		ON						

Electrical Meter Readings

Power(kwh)	—
Power Rate(KwMax)	—

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: ____
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

* Check to make sure flow meter was working

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

Peoria Ave. Site O&M Data Collection Form
EW-1

Date 10-19-23 Field Technician(s) M. Branch

Standard O&M Measurements

EW-1	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0758	ON	71524406	10	52.9	297.78	37497.4
Depart	0817	ON					

Electrical Meter Readings

Power(kwh)	72605
Power Rate(KwMax)	8.93

Max. Permitted Discharge: 97 gpm
(140,000 gpd total)

Maintenance Items

[✓] Inspect Totalizer Paddle Wheel [✓] Clean Vault [✓] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes____ No X

Laboratory Analyses and Method

[ ] VOCs by USEPA 624
[ ] pH by USEPA SM 4500-H+
[ ] Metals by USEPA 200.7, 200.8
[ ] Total Cyanide and Sulfide by SM 4500-CN-C, E
[ ] Mercury by USEPA 245.1
[ ] Other

Time pH Sample Collected:_____ Time pH Sample Analyzed:_____
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): _____

Composite Sample Log

Start Time: _____ End Time: _____ Flow Rate: _____ mL/min

Aliquot Volume:_____ mL x 20 aliquots = _____ mL total volume

Notes

Signature: _____

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № Oyster 030548

pH Calibration & Analysis Log

Compliance Sampling Point № 5436.01, 5383.01

Calibration Standard	Date	Analyst Initials	Analysis Time	Reading (Units)	Temp Reading (°C)	Calibration Slope (mV or %)	Comments
pH Buffer 4/Lot# 10126 6/10/2024	10/3/23	TK	09:45	4.00	24.6	99.3	
pH Buffer 7/Lot# E1022A 5/10/2024			09:40	7.00	24.9	98.3	
pH Buffer 10/Lot# D1322D 10/13/2023			09:42	10.00	24.7	102.7	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# G1123A 7/10/25			09:47	7.00	24.4	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	10/3/23	TK	10:38	7.32	29.9	N/A	
Compliance pH result 5383.01 (MW-10)	—	—	—	—	—	N/A	Well is 005
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
pH Buffer 4/Lot#							
pH Buffer 7/Lot#							
pH Buffer 10/Lot#							
2nd Buffer pH 7 (6.9 - 7.1)/Lot#						Pass or Fail	
Compliance pH result 5436.01 (EW-1)						N/A	
Compliance pH result 5383.01 (MW-10)						N/A	
Once/Month Duplicate Sample (+/- 0.1 Acceptance)	10/3/23	TK	Orig Reading:	7.32	Dup Reading:	7.37	
Once/Month Verification Check/Buffer 7	10/3/23	TK	11:40	7.01	24.2	(Pass) or Fail	

NOTE: *Grab pH Analysis for purposes of compliance sampling* ***must be performed within 15 minutes sample collection*** *using one of the methods specified for* ***Hydrogen Ion*** *in Title 40 of the Code of Federal Regulations Part 136; typically SM4500 H+ B. Arizona Department of Environmental Quality has provided guidance for complying with the Calibration and QA/QC portions of the approved analytical methods. This pH callibration log may aid in meeting the minimum criteria. Please see the manufacturer's manual for your pH meter to determine the acceptable slope in mV or %.*

NOTE: *Permittees are required to calibrate field and/or bench pH meters* ***each day of use for Grab pH Analysis.***

NOTE: *Permittees are required to keep pH Calibration Logs* ***onsite and available for review for a minimum of three years; a copy of the hand-written original must be submitted with the monthly SMR.***

Attachment C
Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/18/2023 11:11:55 AM Revision 1

JOB DESCRIPTION

Peoria (AZ)

JOB NUMBER

550-208544-1

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

See page two for job notes and contact information.

Job Notes

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Authorization

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Revision 1

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

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Qualifiers

Metals

Qualifier	Qualifier Description
L4	The associated blank spike recovery was below method acceptance limits.

General Chemistry

Qualifier	Qualifier Description
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
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

Case Narrative

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Job ID: 550-208544-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-208544-1

Revision
The report being provided is a revision of the original report sent on 10/17/2023. The report (revision 1) is being revised due to: Client emailed 10/18/2023 requesting the Benzene result for EW-1-23Q4 be removed from the reportable list as per the chain of custody. This revised report (1) reflects this revision.

Receipt
The samples were received on 10/3/2023 12:28 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 8.3º C.

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

Metals
Method 200.7 Rev 4.4: The laboratory control sample (LCS) associated with preparation batch 550-308745 and analytical batch 550-309021 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance. EW-1-23Q4-comp (550-208544-2)

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-208544-1	EW-1-23Q4	Water	10/03/23 10:59	10/03/23 12:28
550-208544-2	EW-1-23Q4-comp	Water	10/03/23 10:56	10/03/23 12:28
550-208544-3	TB-23Q4	Water	10/03/23 08:00	10/03/23 12:28

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Client Sample ID: EW-1-23Q4 — Lab Sample ID: 550-208544-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.4		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	47		0.50		ug/L	1		624.1	Total/NA
Chloroform	0.92		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	14		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q4-comp — Lab Sample ID: 550-208544-2

No Detections.

Client Sample ID: TB-23Q4 — Lab Sample ID: 550-208544-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: EW-1-23Q4
Lab Sample ID: 550-208544-1
Date Collected: 10/03/23 10:59
Matrix: Water
Date Received: 10/03/23 12:28

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	3.4		0.50		ug/L			10/05/23 15:55	1
1,1-Dichloroethene	47		0.50		ug/L			10/05/23 15:55	1
Chloroform	0.92		0.50		ug/L			10/05/23 15:55	1
Trichloroethene	14		0.50		ug/L			10/05/23 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*10/05/23 15:55*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*		*10/05/23 15:55*	*1*
Toluene-d8 (Surr)	*103*		*60 - 140*		*10/05/23 15:55*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		10/05/23 15:00	10/05/23 16:03	1

Client Sample ID: EW-1-23Q4-comp
Lab Sample ID: 550-208544-2
Date Collected: 10/03/23 10:56
Matrix: Water
Date Received: 10/03/23 12:28

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		10/04/23 09:56	10/06/23 18:35	1
Copper	ND		0.010		mg/L		10/04/23 09:56	10/06/23 18:35	1
Lead	ND		0.015		mg/L		10/04/23 09:56	10/06/23 18:35	1
Zinc	ND		0.050		mg/L		10/04/23 09:56	10/06/23 18:35	1
Molybdenum	ND		0.010		mg/L		10/04/23 09:56	10/06/23 18:35	1
Silver	ND	L4	0.010		mg/L		10/04/23 09:56	10/06/23 18:35	1
Arsenic	ND		0.10		mg/L		10/04/23 09:56	10/06/23 18:35	1
Selenium	ND		0.10		mg/L		10/04/23 09:56	10/06/23 18:35	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		10/04/23 12:25	10/04/23 16:08	1

Client Sample ID: TB-23Q4
Lab Sample ID: 550-208544-3
Date Collected: 10/03/23 08:00
Matrix: Water
Date Received: 10/03/23 12:28

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			10/05/23 11:18	1
1,1-Dichloroethene	ND		0.50		ug/L			10/05/23 11:18	1
Benzene	ND		0.50		ug/L			10/05/23 11:18	1
Chloroform	ND		0.50		ug/L			10/05/23 11:18	1
Trichloroethene	ND		0.50		ug/L			10/05/23 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*10/05/23 11:18*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*10/05/23 11:18*	*1*
Toluene-d8 (Surr)	*101*		*60 - 140*		*10/05/23 11:18*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-208544-1	EW-1-23Q4	95	103	103
550-208544-3	TB-23Q4	94	101	101
550-208593-A-1 MS	Matrix Spike	91	90	91
550-208593-A-1 MSD	Matrix Spike Duplicate	92	91	91
LCS 550-308823/3	Lab Control Sample	105	109	105
LCSD 550-308823/4	Lab Control Sample Dup	103	108	103
MB 550-308823/6	Method Blank	93	102	101

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-308823/6
Matrix: Water
Analysis Batch: 308823

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			10/05/23 10:15	1
1,1-Dichloroethene	ND		0.50		ug/L			10/05/23 10:15	1
Benzene	ND		0.50		ug/L			10/05/23 10:15	1
Chloroform	ND		0.50		ug/L			10/05/23 10:15	1
Trichloroethene	ND		0.50		ug/L			10/05/23 10:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*10/05/23 10:15*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*		*10/05/23 10:15*	*1*
Toluene-d8 (Surr)	*101*		*60 - 140*		*10/05/23 10:15*	*1*

Lab Sample ID: LCS 550-308823/3
Matrix: Water
Analysis Batch: 308823

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	47.0		ug/L		94	70 - 130		
1,1-Dichloroethene			50.0	43.0		ug/L		86	50 - 150		
Benzene			50.0	45.2		ug/L		90	65 - 135		
Chloroform			50.0	47.5		ug/L		95	70 - 135		
Trichloroethene			50.0	45.9		ug/L		92	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*
Dibromofluoromethane (Surr)	*109*		*60 - 140*
Toluene-d8 (Surr)	*105*		*60 - 140*

Lab Sample ID: LCSD 550-308823/4
Matrix: Water
Analysis Batch: 308823

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-Dichloroethane			50.0	47.2		ug/L		94	70 - 130	0	20
1,1-Dichloroethene			50.0	43.6		ug/L		87	50 - 150	1	20
Benzene			50.0	44.7		ug/L		89	65 - 135	1	20
Chloroform			50.0	47.4		ug/L		95	70 - 135	0	20
Trichloroethene			50.0	45.3		ug/L		91	65 - 135	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*108*		*60 - 140*
Toluene-d8 (Surr)	*103*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-208593-A-1 MS
Matrix: Water
Analysis Batch: 308823

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
1,1-Dichloroethane	ND		50.0	48.0		ug/L		96	59 - 155
1,1-Dichloroethene	ND		50.0	43.8		ug/L		88	10 - 234
Benzene	ND		50.0	47.4		ug/L		95	35 - 151
Chloroform	ND		50.0	48.1		ug/L		96	51 - 138
Trichloroethene	ND		50.0	48.0		ug/L		96	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*
Dibromofluoromethane (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*91*		*60 - 140*

Lab Sample ID: 550-208593-A-1 MSD
Matrix: Water
Analysis Batch: 308823

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
1,1-Dichloroethane	ND		50.0	47.6		ug/L		95	59 - 155	1	40
1,1-Dichloroethene	ND		50.0	44.3		ug/L		89	10 - 234	1	32
Benzene	ND		50.0	47.1		ug/L		94	35 - 151	0	61
Chloroform	ND		50.0	47.8		ug/L		96	51 - 138	1	54
Trichloroethene	ND		50.0	48.3		ug/L		97	70 - 157	1	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*
Dibromofluoromethane (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*91*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-308745/1-A
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308745

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		10/04/23 09:56	10/06/23 17:55	1
Copper	ND		0.010		mg/L		10/04/23 09:56	10/06/23 17:55	1
Lead	ND		0.015		mg/L		10/04/23 09:56	10/06/23 17:55	1
Zinc	ND		0.050		mg/L		10/04/23 09:56	10/06/23 17:55	1
Molybdenum	ND		0.010		mg/L		10/04/23 09:56	10/06/23 17:55	1
Silver	ND		0.010		mg/L		10/04/23 09:56	10/06/23 17:55	1
Arsenic	ND		0.10		mg/L		10/04/23 09:56	10/06/23 17:55	1
Selenium	ND		0.10		mg/L		10/04/23 09:56	10/06/23 17:55	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-308745/2-A
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308745

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	1.00	0.952		mg/L		95	85 - 115
Copper	1.00	0.928		mg/L		93	85 - 115
Lead	1.00	0.934		mg/L		93	85 - 115
Zinc	1.00	0.935		mg/L		94	85 - 115
Molybdenum	1.00	0.969		mg/L		97	85 - 115
Silver	0.0750	0.0626	L4	mg/L		83	85 - 115
Arsenic	1.00	1.05		mg/L		105	85 - 115
Selenium	1.00	0.954		mg/L		95	85 - 115

Lab Sample ID: LCSD 550-308745/3-A
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 308745

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	1.00	0.970		mg/L		97	85 - 115	2	20
Copper	1.00	0.937		mg/L		94	85 - 115	1	20
Lead	1.00	0.928		mg/L		93	85 - 115	1	20
Zinc	1.00	0.931		mg/L		93	85 - 115	1	20
Molybdenum	1.00	0.971		mg/L		97	85 - 115	0	20
Silver	0.0750	0.0616	L4	mg/L		82	85 - 115	2	20
Arsenic	1.00	1.06		mg/L		106	85 - 115	1	20
Selenium	1.00	0.959		mg/L		96	85 - 115	1	20

Lab Sample ID: 550-208533-F-1-A MS
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 308745

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		1.00	0.970		mg/L		97	70 - 130
Copper	ND		1.00	0.949		mg/L		95	70 - 130
Lead	ND		1.00	0.904		mg/L		90	70 - 130
Zinc	ND		1.00	0.931		mg/L		93	70 - 130
Molybdenum	ND		1.00	0.991		mg/L		98	70 - 130
Silver	ND	L4	0.0750	0.0632		mg/L		84	70 - 130
Arsenic	ND		1.00	1.11		mg/L		109	70 - 130
Selenium	ND		1.00	0.973		mg/L		97	70 - 130

Lab Sample ID: 550-208533-F-1-B MSD
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 308745

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		1.00	0.981		mg/L		98	70 - 130	1	20
Copper	ND		1.00	0.943		mg/L		94	70 - 130	1	20
Lead	ND		1.00	0.902		mg/L		90	70 - 130	0	20
Zinc	ND		1.00	0.932		mg/L		93	70 - 130	0	20
Molybdenum	ND		1.00	0.988		mg/L		98	70 - 130	0	20
Silver	ND	L4	0.0750	0.0635		mg/L		85	70 - 130	1	20
Arsenic	ND		1.00	1.12		mg/L		109	70 - 130	0	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-208533-F-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309021 — **Prep Batch: 308745**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		1.00	0.981		mg/L		98	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-308758/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		10/04/23 12:25	10/04/23 15:16	1

Lab Sample ID: LCS 550-308758/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00476		mg/L		95	85 - 115		

Lab Sample ID: LCSD 550-308758/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00481		mg/L		96	85 - 115	1	20

Lab Sample ID: 550-208413-B-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00465		mg/L		93	70 - 130	4	20

Lab Sample ID: 550-208527-C-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00505		mg/L		101	70 - 130		

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-308884/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308975 — **Prep Batch: 308884**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		10/05/23 15:00	10/05/23 16:03	1

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: LCS 550-308884/2-A
Matrix: Water
Analysis Batch: 308975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308884

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0927		mg/L		93	90 - 110		

Lab Sample ID: LCSD 550-308884/3-A
Matrix: Water
Analysis Batch: 308975

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 308884

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0937		mg/L		94	90 - 110	1	20

Lab Sample ID: 550-208413-A-1-B MS
Matrix: Water
Analysis Batch: 308975

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 308884

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	M2 M1 R4	0.100	0.0773	M2	mg/L		77	80 - 120		

Lab Sample ID: 550-208413-A-1-C MSD
Matrix: Water
Analysis Batch: 308975

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 308884

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2 M1 R4	0.100	0.123	M1 R4	mg/L		123	80 - 120	45	20

GC/MS VOA

Analysis Batch: 308823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-1	EW-1-23Q4	Total/NA	Water	624.1	
550-208544-3	TB-23Q4	Total/NA	Water	624.1	
MB 550-308823/6	Method Blank	Total/NA	Water	624.1	
LCS 550-308823/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-308823/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-208593-A-1 MS	Matrix Spike	Total/NA	Water	624.1	
550-208593-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 308745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-2	EW-1-23Q4-comp	Total/NA	Water	200.7	
MB 550-308745/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-308745/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-308745/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-208533-F-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-208533-F-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 308758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-2	EW-1-23Q4-comp	Total/NA	Water	245.1	
MB 550-308758/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-308758/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-308758/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-208413-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	
550-208527-C-2-C MS	Matrix Spike	Total/NA	Water	245.1	

Analysis Batch: 308799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-2	EW-1-23Q4-comp	Total/NA	Water	245.1	308758
MB 550-308758/1-A	Method Blank	Total/NA	Water	245.1	308758
LCS 550-308758/2-A	Lab Control Sample	Total/NA	Water	245.1	308758
LCSD 550-308758/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	308758
550-208413-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	308758
550-208527-C-2-C MS	Matrix Spike	Total/NA	Water	245.1	308758

Analysis Batch: 309021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-2	EW-1-23Q4-comp	Total/NA	Water	200.7 Rev 4.4	308745
MB 550-308745/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	308745
LCS 550-308745/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	308745
LCSD 550-308745/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	308745
550-208533-F-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	308745
550-208533-F-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	308745

General Chemistry

Prep Batch: 308884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-1	EW-1-23Q4	Total/NA	Water	SM 4500 CN C	
MB 550-308884/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	

General Chemistry (Continued)

Prep Batch: 308884 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 550-308884/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-308884/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-208413-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-208413-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 308975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-1	EW-1-23Q4	Total/NA	Water	SM 4500 CN E	308884
MB 550-308884/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	308884
LCS 550-308884/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	308884
LCSD 550-308884/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	308884
550-208413-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	308884
550-208413-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	308884

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Client Sample ID: EW-1-23Q4

Lab Sample ID: 550-208544-1

Date Collected: 10/03/23 10:59

Matrix: Water

Date Received: 10/03/23 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	308823	R1K	EET PHX	10/05/23 15:55
Total/NA	Prep	SM 4500 CN C			308884	ZH	EET PHX	10/05/23 15:00
Total/NA	Analysis	SM 4500 CN E		1	308975	ZH	EET PHX	10/05/23 16:03

Client Sample ID: EW-1-23Q4-comp

Lab Sample ID: 550-208544-2

Date Collected: 10/03/23 10:56

Matrix: Water

Date Received: 10/03/23 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			308745	SGO	EET PHX	10/04/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	309021	GLW	EET PHX	10/06/23 18:35
Total/NA	Prep	245.1			308758	HHL	EET PHX	10/04/23 12:25
Total/NA	Analysis	245.1		1	308799	HHL	EET PHX	10/04/23 16:08

Client Sample ID: TB-23Q4

Lab Sample ID: 550-208544-3

Date Collected: 10/03/23 08:00

Matrix: Water

Date Received: 10/03/23 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	308823	R1K	EET PHX	10/05/23 11:18

Laboratory References:

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. Job ID: 550-208544-1
Project/Site: Peoria (AZ)

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

208544

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell
Chain of Custody / Analysis Request

Save with QC Check: Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

AESI Ref:	45202.48654
COC#	35008-100323
	Page 1 of 1
Lab Proj # (SDG):	JD11212
Lab Location ID	TAL-PHX
HW Site R-Code	R35008
Sampling Program	Sampling program
Authorized User:	Honeywell
Lab Parent ID	TAL

Pricing Source (RFP, eAuction, etc)	RFP2019
HW Site Name	Peoria (AZ)
Task Type	OM&M
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS
Location of Site	Phoenix, AZ
WBS Code	6400
Sampler(s) names	T. Kearsley
PO #	HW PO # A001368503
Analysis Turnaround Time (calendar days):	10
Consultant	Jacobs
Laboratory Contact	Linda Eshelman
Report Tier Level	2
Full Report and EDD TAT (calendar days)	10
Honeywell RM Name	Steve Bowles

Sampling Co.:		Jacobs
Reporting Information (DocuSign First Signer)	Name	Jacobs
	Address	1501 W. Fountainhead Parkway
	City, State, Zip	Tempe, AZ 85282
	Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com
Billing Information (DocuSign Second Signer)	Co. Name	Honeywell
	Address	111 South 34th Street M/S 158
	City, State, Zip	Phoenix, AZ 85034
	HW RM email	steven.bowles@honeywell.com

More Rows | Sample Identification | Less Rows

Text & Excel File Name | Excel & Text File Order | Create Excel Output | Create Text Output

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#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)			E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)					Sampling Method (rt_sample_method)	Lab Sample Numbers
										Preservative			18	21	30	21			21	18						
										Units																
1	EW-1	----	----	EW-1-23Q4	10/3/2023	10:59	GW-GWS	WATER	REG	4	N	N			X					X			-01			
2	EW-1	----	----	EW-1-23Q4-comp	10/3/2023	10:56	GW-GWS	WATER	REG	1	Y	N		X		X							-02			
3	TRIPBLANK	----	----	TB-23Q4	10/3/2023	8:00	BLKWATER	WATER	TB	1	N	N	X										-03			
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

550-208544 Chain of Custody

[redacted]

Start at D66 to type instructions.

COO

Relinquished by	Company	Jacobs	Received by	Company	10/3/23	Condition		Custody Seals Intact
Thomas Kearsley	Date/Time	10/3/23 / 1228	[signature]	Date/Time	EETA-PHX 12:28	Cooler Temp.	8.3 °C on Ice	NA
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact
	Date/Time			Date/Time		Cooler Temp.		Lab Quote #

Preservatives: (Other; Specify): EW-1 Comp E200.7 Qrt-list only

0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAci); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special).

FedEx Tracking #

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-208544-1

Login Number: 208544
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

November 24, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – October 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the October 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, October 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	0	0

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. The Zero Discharge Certification is included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period October 1, 2023, through December 31, 2023, will be collected in December 2023. No discharge from extraction well MW-10 occurred during October 2023. The pump is scheduled to be replaced and operational in mid-November.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Zero Discharge Certification

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	*Honeywell International, Inc.* *Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street* *Phoenix, Arizona 85029-3602*
Permit Limits:	*Local Limits +*
Permit №:	*2208-5383*
Compliance Sampling Point:	*5383.01*
Report Period:	October 1, 2023 Through October 31, 2023

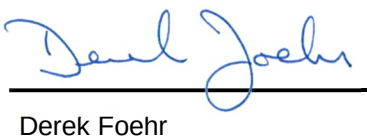
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 0	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 0	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 0	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☒ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☐ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	November 24, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment B
Zero Discharge Certification

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM
ATTACHMENT B

Zero Discharge Certification:

Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitations, I certify that to the best of my knowledge and belief, no discharge to sewer of industrial process wastewaters specified in the Wastewater Discharge Permit occurred during the monitoring period covered by this report. I am aware of the potential for significant penalties for submission of false information, including the possibility of fines and imprisonment for knowing violations. I will retain copies of all manifests and/or waste hauler receipts on-site for no less than 3 years and make them available to City of Phoenix personnel upon request.

Report Period:	October 1, 2023	Through	October 31, 2023

Facility Name:	*Honeywell International, Inc.* *Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street* *Phoenix, Arizona 85029-3602*
Permit №:	***2208-5383***
Compliance Sampling Point*:	***5383.01***
Certifying Official Signature	Derek Foehr
Certifying Official Printed Name	Derek Foehr
Certifying Official Title	Project Manager
Date	November 24, 2023

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

December 22, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – November 2023**
Industrial Wastewater Discharge Permit Number 2302-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Company (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the November 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, November 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	2302-5436	2,482,590	30

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period October 1, 2023, through December 31, 2023, were collected on October 3, 2023. Sample results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 2302-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 2302-5436

Facility Name:	***Honeywell International, Inc. – Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85051
Permit Limits:	***Local Limits+***
Permit №:	***2302-5436***
Compliance Sampling Point:	***5436.01***

Report Period: November 1, 2023 Through November 30, 2023

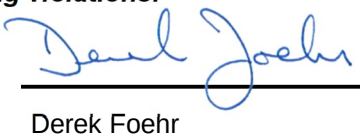
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 82,753	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 88,977	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,482,590	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment A - Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	December 22, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

Compliance Sampling Point № ***5436.01***

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	10/19/2023	71,524,406				☐	☐
1.	11/03/2023	72,697,250	78,190			☐	☐
2.	11/14/2023	73,675,996	88,977			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
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26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		82,753				
	Maximum Flow		88,977				
	Total Gallons		2,482,590				

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 11/3/23 Field Technician(s) T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0845	ON	72697250		7	*50.75	297.48	37858.0
Depart		ON				62.35		

Electrical Meter Readings

Power(kwh)	75803
Power Rate(KwMax)	8.91

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes * adjusted flow to (TK) 62.35

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 11/14/23 Field Technician(s) T. Kearsley / S.S.

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1340	ON	73675996		-.7	57.8	4301.47	38127.9
Depart		ON						

Electrical Meter Readings

Power(kwh)	78255
Power Rate(KwMax)	9.17

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

— VOCs by USEPA 624
— pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

Collect ANNUAL samples associated with ADWR annual report, not associated with City of Phoenix compliance samples.

Signature: T Kearsley

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

December 22, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – November 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the November 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, November 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	0	0

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. The Zero Discharge Certification is included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period October 1, 2023, through December 31, 2023, will be collected in December 2023. No discharge from extraction well MW-10 occurred during November 2023. The pump is scheduled to be replaced and operational in December 2024.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Zero Discharge Certification

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	*Honeywell International, Inc.* *Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street* *Phoenix, Arizona 85029-3602*
Permit Limits:	*Local Limits +*
Permit №:	*2208-5383*
Compliance Sampling Point:	*5383.01*
Report Period:	November 1, 2023 Through November 30, 2023

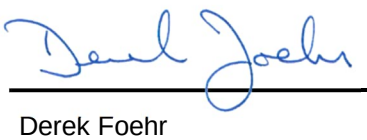
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 0	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 0	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 0	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☒ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☐ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	December 22, 2023
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment B
Zero Discharge Certification

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM
ATTACHMENT B

Zero Discharge Certification:

Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitations, I certify that to the best of my knowledge and belief, no discharge to sewer of industrial process wastewaters specified in the Wastewater Discharge Permit occurred during the monitoring period covered by this report. I am aware of the potential for significant penalties for submission of false information, including the possibility of fines and imprisonment for knowing violations. I will retain copies of all manifests and/or waste hauler receipts on-site for no less than 3 years and make them available to City of Phoenix personnel upon request.

Report Period:	November 1, 2023	Through	November 30, 2023

Facility Name:	*Honeywell International, Inc.* *Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street* *Phoenix, Arizona 85029-3602*
Permit №:	***2208-5383***
Compliance Sampling Point*:	***5383.01***
Certifying Official Signature	Derek Foehr
Certifying Official Printed Name	Derek Foehr
Certifying Official Title	Project Manager
Date	December 22, 2023

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

January 16, 2024

Subject: **Monthly Industrial Wastewater Discharge Report – December 2023**
Industrial Wastewater Discharge Permit Number 2302-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Company (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (EW-1) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the December 2023 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, December 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	2302-5436	2,529,445	31

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. A copy of the Operation and Maintenance Data Collection Forms for the extraction well are included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period October 1, 2023, through December 31, 2023, were collected on October 3, 2023. Sample results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for EW-1 Industrial Wastewater Discharge Permit No. 2302-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for EW-1
Industrial Wastewater Discharge
Permit No. 2302-5436

Facility Name:	***Honeywell International, Inc. – Former Peoria Avenue Facility/EW-1***
Address:	***2305 West Mercer Lane***
	Phoenix, Arizona 85051
Permit Limits:	***Local Limits+***
Permit №:	***2302-5436***
Compliance Sampling Point:	***5436.01***

Report Period: December 1, 2023 Through December 31, 2023

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 81,595	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 81,602	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,529,445	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☐ Attachment A - Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☒ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	Derek Foehr
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	January 16, 2024
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

Compliance Sampling Point № ***5436.01***

Daily Flows, Device Calibration, & Device Maintenance Log

	Date	Totalizer Reading	Daily Flow to Sewer (gpd)	Meter Level (inches)	Measured Level (inches)	☒ Meter Adjusted	☒ Sampling Device Cleaned
Last	11/14/2023	73,675,996				☐	☐
1.	12/6/2023	75,470,985	81,590			☒	☐
2.	12/6/2023	33,678,075				☐	☐
3.	12/20/2023	34,820,505	81,602			☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		81,595				
	Maximum Flow		81,602				
	Total Gallons		2,529,445				

NOTE: A factory calibrated totalizer/flowmeter was installed at EW-1 on 12/6/2023. Totalizer/flowmeter start at 33,678,075 gallons.

Attachment B
Operation and Maintenance Data Collection Forms

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 12/6/23 Field Technician(s) TKGARSKY

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1110	ON	* 75470985 *		7	55.8	301.02	3852.5
Depart		ON	33678075		7	56.5		

Electrical Meter Readings

Power(kwh)	83009
Power Rate(KwMax)	9.16

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

Replaced Inspect Totalizer Paddle Wheel ~ Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

~ VOCs by USEPA 624
~ pH by USEPA SM 4500-H+
— Metals by USEPA 200.7, 200.8
— Total Cyanide and Sulfide by SM 4500-CN-C, E
— Mercury by USEPA 245.1
— Other

Time pH Sample Collected: N/A Time pH Sample Analyzed: —
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): —

Composite Sample Log

Start Time: — End Time: — Flow Rate: — mL/min

Aliquot Volume: — mL x 20 aliquots = — mL total volume

Notes

* Replaced with factory calibrated meter.

Signature: T Kgarsky

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.94
- 2.92
301.02

Peoria Ave. Site O&M Data Collection Form
EW-1

Date: 12/20/23 Field Technician(s) T. Kessler

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	08:38	ON	34820505		7	57.72		3895.9
Depart		ON						

Electrical Meter Readings

Power(kwh)	86028
Power Rate(KwMax)	9.11

Max. Permitted Discharge: Not to exceed 200 gpm
(Average 140,000 gpd total)

Maintenance Items

— Inspect Totalizer Paddle Wheel — Clean Vault — Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

~	VOCs by USEPA 624	~	Total Cyanide and Sulfide by SM 4500-CN-C, E
~	pH by USEPA SM 4500-H+	~	Mercury by USEPA 245.1
~	Metals by USEPA 200.7, 200.8	~	Other

Time pH Sample Collected: N/A

Time pH Sample Analyzed: ____
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): ~

Composite Sample Log

Start Time: ~ End Time: ~ Flow Rate: ~ mL/min

Aliquot Volume: ~ mL x 20 aliquots = ~ mL total volume

Notes

Signature: T Kessler

EW-1 Well Information
Total Depth = 425 feet bgs Screen Interval = 265-415 feet bgs Pump Intake Depth = 363 feet bgs

303.70
− 2.92
300.78

1501 W. Fountainhead Pkwy,
Suite 401
Tempe, Arizona 85282
T +1.480.966.8188
www.jacobs.com

Joel Gandara
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

January 16, 2024

Subject: **Monthly Industrial Wastewater Discharge Report – December 2023**
Industrial Wastewater Discharge Permit Number 2208-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Mr. Gandara,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Project Management Co. (Jacobs) has completed the Significant Industrial User Self-Monitoring Report Form for a groundwater extraction well (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the December 2023 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, December 2023

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	0	0

The Significant Industrial User Self-Monitoring Report Form (SMR) is attached (Attachment A). Per authorization from Honeywell, Jacobs has signed the forms on their behalf. Written authorization dated June 23, 2023, was previously submitted to the City of Phoenix. The Zero Discharge Certification is included as Attachment B.

Quarterly compliance data and sampling chain of custody for the reporting period October 1, 2023, through December 31, 2023, was not collected due to the well being out of service. No discharge from extraction well MW-10 occurred during December 2023. The pump is scheduled to be replaced and operational in the first quarter of 2024.

If you should require any additional information, please contact me at (480) 234-8347.

Respectfully submitted,

Derek Foehr
Project Manager

Attachment(s): Attachment A – Significant Industrial User Self-Monitoring Report Form for MW-10 Industrial Wastewater Discharge Permit No. 2208-5383

Attachment B – Zero Discharge Certification

Copies to: Mr. Steven Bowles, Honeywell International Inc.
File

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Facility Name:	*Honeywell International, Inc.* *Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street* *Phoenix, Arizona 85029-3602*
Permit Limits:	*Local Limits +*
Permit №:	*2208-5383*
Compliance Sampling Point:	*5383.01*
Report Period:	December 1, 2023 Through December 31, 2023

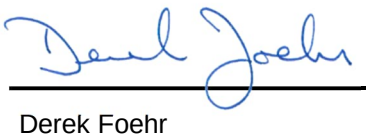
Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 0	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 0	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 0	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- ☒ SMR Page 1 – Flow Page with Signed and Dated Certification
- ☐ SMR Page 2 – Sampling Detail Page
- ☐ SMR Page 3 – Laboratory Results Reporting Table
- ☒ Attachment B- Zero Discharge Certification (Only if Applicable)
- ☐ pH Calibration & Analysis Log with Method QC Data
- ☐ Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- ☐ ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- ☐ Sampling Chain of Custody (Must be Readable)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Official Signature	
Certifying Official Name	Derek Foehr
Certifying Official Title	Project Manager
Date	January 16, 2024
Phone Number/Email	(480) 234-8347, Derek.Foehr@jacobs.com

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Attachment B
Zero Discharge Certification

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM
ATTACHMENT B

Zero Discharge Certification:

Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitations, I certify that to the best of my knowledge and belief, no discharge to sewer of industrial process wastewaters specified in the Wastewater Discharge Permit occurred during the monitoring period covered by this report. I am aware of the potential for significant penalties for submission of false information, including the possibility of fines and imprisonment for knowing violations. I will retain copies of all manifests and/or waste hauler receipts on-site for no less than 3 years and make them available to City of Phoenix personnel upon request.

Report Period:	December 1, 2023	Through	December 31, 2023

Facility Name:	*Honeywell International, Inc.* *Former Peoria Avenue Facility/MW-10*
Address:	*2251 West Sierra Street* *Phoenix, Arizona 85029-3602*
Permit №:	***2208-5383***
Compliance Sampling Point*:	***5383.01***
Certifying Official Signature	Derek Foehr
Certifying Official Printed Name	Derek Foehr
Certifying Official Title	Project Manager
Date	January 16, 2024

Appendix C
Historical Groundwater Elevations and Analytical Results

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	--	--	--	**5**	**5**	--	**5**
MW-1a	MW-1a	27-Jun-94	958.10	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	MW-1a	2-Dec-94	957.34	**640**	275	NA	88	**36**	**25**	<0.5	**140**
	MW-1a	16-Jun-95	963.20	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	MW-1a	12-Dec-95	963.49	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5
	MW-1a	17-Jun-96	965.26	<1	<1	<1	<1	<1	<1	<1	<1
	MW-1a	18-Dec-96	965.51	<1	<1	<1	<1	<1	<1	<1	<1
	MW-1a	27-Mar-97	967.26	<1	<1	<1	<1	<1	<1	<1	<1
	MW-1a	28-May-97	961.41	<1	<1	<1	<1	<1	<1	<1	<1
	MW-1a	19-Sep-97	968.55	<1	<1	<1	<1	<1	<1	<1	<1
	MW-1a	23-Dec-97	969.83	<1	<1	<1	<1	<1	<1	<1	<1
	MW-1a	27-Mar-98	971.47	5.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-1a	5-Jun-98	972.19	2.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-1a	12-Aug-98	972.95	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-1a	17-Nov-98	979.49	NA	NA	NA	NA	NA	NA	NA	NA
	MW-1a	26-Feb-99	975.85	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-1a	28-May-99	976.14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-1a	27-Aug-99	976.34	<1	<1	<2	<1	<1	<1	<1	<1
	MW-1a	1-Dec-99	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-1a	4-Feb-00	976.08	1.2	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-1a	29-Jun-00	976.34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-1a	8-Aug-00	976.34	<1	<1	<2	<1	<1	<1	<1	<1
	MW-1a	16-Oct-00	975.46	**55.8**	10.6	0.6	1.8	1.1	<0.5	<0.5	**10.6**
	MW-1a	13-Apr-01	976.16	**290**	26.3	5	2.5	2	1.6	<0.5	**31.2**
	MW-1a	9-Oct-01	975.70	**154**	18.4	3.6	1.2	1.4	1.4	<1.0	**29.1**
	MW-1a	24-Jun-02	978.67	NA	NA	NA	NA	NA	NA	NA	NA
	MW-1a	14-Nov-02	977.01	<5.0	120	<2.0	40	**28**	4.6	<2	<2.0
	MW-1a	6-May-03	977.71	**92**	130	<2.0	44	**22**	**10**	<2.0	**42**
	MW-1a	6-Nov-03	976.44	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-1a	10-Nov-04	974.11	**460**	88	<2.0	20	**13**	**5.7**	<2.0	**96**
	MW-1a	1-Nov-05	978.14	**810**	15	2.7	3.4	<2.0	4.9	<1.0	**53**
	MW-1a	29-Nov-06	979.13	**490**	33	2.0	6.0	1.8	4.4	<0.50	**36**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-1a (Cont)	MW-1a	19-Oct-07	978.51	**1600**	110	11.0	44	**24**	**13**	<0.50	**170**
	MW-1a	3-Nov-08	980.54	**2000/2000**	120/120	1.1	1/50	**22/22**	**18/18**	<12/<12	**240/250**
	MW-1a	29-Oct-09	981.63	**2700**	150	24	49	**26**	**17**	<0.5	**270**
	MW-1a	17-Oct-10	983.68	NS	NS	NS	NS	NS	NS	NS	NS
	MW-1a	15-Nov-10	NM	**2700**	160	20	42	**26**	**22**	**5**	**310**
	MW-1a	27-Dec-10	NM	**2700**	180	24	45	**24**	**17**	<5.0	**290**
	MW-1a	19-Oct-11	985.05	**1800**	91	13	25	**14**	**13**	**10**	**270**
	MW-1a	22-Oct-12	983.99	**1900**	120	16	36	**16**	**15**	<10	**210**
	MW-1a	10-Nov-13	973.64	**1600/1700**	100/110	<20/<25	28/33	<20/<25	<20/<25	<20/<25	**170/180**
	MW-1A	5-Nov-14	981.14	**1800**	100	17	30	**16**	**11**	<0.50	**180**
	MW-1A	11-Nov-15	981.26	**2000**	110	<20	35	<20	**<20**	<20	**230**
	MW-1A	28-Sep-16	982.23	**1900**	89	18	26	**10 J**	**12 J**	<17	**200**
	MW-1A	28-Sep-16	982.23	**1900/1700**	89/87	16 J/16 J	29/27	**12 J/15 J**	**6.4 J/6.0 J**	<17/<17	**200/190**
	MW-1A	16-Oct-17	985.16	**120/100**	6.9/6.1	0.9 J/0.8 J	1.8/1.6	0.7 J/0.5 J	1.2/1.1	<1.0/<1.0	**37/33**
	MW-1A	22-Oct-18	985.59	**810/720**	39/39	6.0/6.0	12/12	**5.4/5.8**	**7.2/7.1**	<1.0/<1.0	**110/110**
	MW-1A	7-Nov-19	986.12	**110/120**	7.0/6.9	1.3/1.2	2.1/2.0	0.7/0.6	3.1/3.2	<0.5/<0.5	**35/35**
	MW-1A	11-Nov-20	986.14	**1400**	72	11	18	**10**	**10**	<5.0	**180**
	MW-1A	26-Oct-21	986.46	**1400/1500**	52/60	7.6/9.4	15/17	**7.8/8.1**	**9.2/9.9**	<0.5/<0.5	**180/190**
	MW-1A	12-Oct-22	988.26	**1300/1200**	81/83	12/13	20/20	**9.6/9.6**	**11/11**	<0.5/<0.5	**160/150**
	MW-1A	14-Nov-23	988.07	**1800/1800**	67/70	10/11	17/18	**7.7/8.0**	**10/11**	<0.50/<0.50	**170/190**
MW-2	MW-2	27-Jun-94	959.75	**3700**	350	87	47	**50**	**34**	<1	**430**
	MW-2	2-Dec-94	959.23	**6800**	490	NA	<100	<100	<100	<100	**760**
	MW-2	3-Aug-95	964.01	**6500**	540	78	46	**54.0**	**47**	<2	**580**
	MW-2	12-Dec-95	964.33	**3300**	470	40	44	**50**	**34**	<1	**530**
	MW-2	26-Jul-96	966.19	**4800**	490	38	41	**46**	**31**	<5	**540**
	MW-2	19-Dec-96	966.43	**4000**	380	31	40	**43**	**34**	<5	**440**
	MW-2	26-Mar-97	967.76	**4500**	460	<50	<50	<50	<50	<50	**540**
	MW-2	27-May-97	968.48	**2200**	<500	<500	<500	<500	<500	<500	<500
	MW-2	18-Sep-97	969.34	**2900**	290	29	24	**20**	**26**	<1	**330**
	MW-2	23-Dec-97	970.16	**6400**	350.0	77	40.0	**38**	**22**	<5	**380**
	MW-2	24-Mar-98	971.74	**2940**	344.0	29.7	36.1	**33.2**	**38.7**	<2	**468**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	--	--	--	**5**	**5**	--	**5**
MW-2 (Cont)	MW-2	5-Jun-98	972.58	**3330**	357.0	55.9	35.2	**37.6**	**34.2**	0.7	**479**
	MW-2	12-Aug-98	973.68	**3380**	332.0	32.2	33.0	**34.6**	**33.6**	<2	**470**
	MW-2	17-Nov-98	974.58	NA	NA	NA	NA	NA	NA	NA	NA
	MW-2	26-Feb-99	976.14	NA	NA	NA	NA	NA	NA	NA	NA
	MW-2	28-May-99	976.81	NA	NA	NA	NA	NA	NA	NA	NA
	MW-2	27-Sep-99	978.28	**2890**	320	57.2	33.5	**31.5**	**33.3**	<2	**439**
	MW-2	1-Dec-99	NM	NA	NA	NA	NA	NA	NA	NA	NA
	MW-2	14-Mar-00	977.61	**2871**	247	47.1	25.5	**26.6**	**26.2**	<0.5	**438**
	MW-2	11-May-00	978.41	**1810**	247	48.8	27.6	**27.4**	**26.8**	<0.5	**342**
	MW-2	17-Oct-00	978.13	**1870**	261	48.4	28.2	**27.5**	**25.3**	<1	**434**
	MW-2	13-Apr-01	978.51	**870**	301	39.6	22.3	**22.4**	**27.8**	<0.5	**238**
	MW-2	9-Oct-01	977.78	NA	NA	NA	NA	NA	NA	NA	NA
	MW-2	24-Jun-02	978.42	NA	NA	NA	NA	NA	NA	NA	NA
	MW-2	13-Nov-02	976.84	<5.0	6.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-2	6-May-03	977.58	<5.0	10	<2.0	4.3	<2.0	<2.0	<2.0	<2.0
	MW-2	5-Nov-03	975.94	NA	NA	NA	NA	NA	NA	NA	NA
	MW-2	9-Nov-04	NM	NA	NA	NA	NA	NA	NA	NA	NA
	MW-2	1-Nov-05	976.08	**160**	190	<2.0	18	**17**	4.9	<1.0	**45**
	MW-2	29-Nov-06	978.92	2.0	130	<0.50	17	**19**	0.72	<0.50	1.2
	MW-2	19-Oct-07	978.22	**48**	180	<0.50	18	**19**	2.8	<0.50	**19**
	MW-2	3-Nov-08	980.50	**82**	180	<2.5	20	**17**	3	<2.5	**29**
	MW-2	29-Oct-09	981.47	**590**	200	3.6	20	**23**	**7.7**	<1.0	**120**
	MW-2	17-Oct-10	983.59	NS	NS	NS	NS	NS	NS	NS	NS
	MW-2	15-Nov-10	NM	**600**	230	5	15	**26**	**11**	5	**270**
	MW-2	27-Dec-10	NM	**770**	290	7.0	22	**35**	**5.9**	<2.5	**320**
	MW-2	19-Oct-11	985.1	**160**	13	1.1	2.5	1.4	1.4	<1.0	**75**
	MW-2	22-Oct-12	983.96	**1600**	180	19	39	**20**	**22**	<10	**260**
	MW-2	10-Nov-13	982.53	**940**	70	<13	17	<13	<13	<13	**170**
	MW-2	20-Oct-14	980.96	**280**	150	1.8	17	**20**	**5.6**	<1.0	**52**
	MW-2	11-Nov-15	981.21	**270**	77	1.3	5.0	**9.0**	**4.2**	<0.50	**36**
	MW-2	28-Sep-16	982.25	**86**	12	0.6	0.2 J	0.5	1.1	0.6	**6.8**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	--	--	--	**5**	**5**	--	**5**
MW-3	MW-3	16-Oct-17	985.41	**93**	7.8	0.7	1.6	0.7	0.8	<0.5	**37**
	MW-3	22-Oct-18	985.32	**150**	12	1.4	3.1	1.4	4.3	<0.5	**49**
	MW-3	7-Nov-19	986.23	NS	NS	NS	NS	NS	NS	NS	**NS**
	MW-3	11-Nov-20	NM	NM	NS	NS	NS	NS	NS	NS	**NS**
	MW-3	26-Oct-21	NM	NM	NS	NS	NS	NS	NS	NS	**NS**
	MW-3	12-Oct-22	NM	NM	NS	NS	NS	NS	NS	NS	NS
	MW-3	27-Jun-94	954.44	**120**	5.8	1.6	1.3	<0.2	0.4	<0.2	**19**
	MW-3	2-Dec-94	954.18	**30**	7	NA	<0.5	1.2	0.72	<0.5	**25**
	MW-3	15-Jun-95	958.08	**270**	19	NA	<2	2.2	1.7	<0.5	**61**
	MW-3	11-Dec-95	958.56	**360**	24	4.0	4.0	<0.5	2.0	<0.5	**76**
	MW-3	17-Jun-96	960.45	**564**	27	5	6	<1	2	<1	**81**
	MW-3	18-Dec-96	960.71	**480**	29	8	<1	4	4	<1	**72**
	MW-3	26-Mar-97	962.19	**490**	24	<24	<24	<24	<24	<24	**74**
	MW-3	27-May-97	962.89	**490**	60	<12	<12	<12	<12	<12	<12
	MW-3	18-Sep-97	963.71	**260**	17	5	6	2	2	<1	**49**
	MW-3	22-Dec-97	964.77	**400**	38	12	15	**7.5**	**5.6**	<1	**85**
	MW-3	24-Mar-98	965.96	**250**	21	10.2	8.7	4.7	3.2	<0.5	**79**
	MW-3	4-Jun-98	966.71	**425**	34.7	12.3	9.7	**5.5**	3.8	<0.5	**82.7**
	MW-3	11-Aug-98	967.63	**537**	35.5	12.7	8.5	**5.1**	3.6	<0.5	**78**
	MW-3	16-Nov-98	968.46	**663**	36	12.4	9.7	**5.8**	4.4	<0.5	**83.6**
	MW-3	25-Feb-99	970.07	**450**	25.7	7.4	5.2	2.8	<1	<1	**66**
	MW-3	27-May-99	970.66	4.9	27.2	6	5.5	3.2	1.8	<1	**55.5**
	MW-3	26-Aug-99	971.19	**705**	37.8	10.9	8.9	**5.3**	3.8	<1	**85.9**
	MW-3	1-Dec-99	NM	NA	NA	NA	NA	NA	NA	NA	NA
	MW-3	14-Mar-00	971.75	**710**	36.5	12.5	10.4	**6.3**	4.2	<0.5	**74.7**
	MW-3	11-May-00	971.97	**437**	35.8	11.6	10.7	**6.1**	4.1	<0.5	**81.2**
	MW-3	8-Aug-00	971.80	**485**	48.2	13.9	9	**5**	3.7	<1	**96.8**
	MW-3	17-Oct-00	971.23	**650**	39.3	10.1	9.8	4.5	3.6	<1	**77.4**
	MW-3	13-Apr-01	972.53	**574**	38.1	13.7	11.1	**5.8**	**5.0**	<0.5	**89.1**
	MW-3	8-Oct-01	971.97	NA	NA	NA	NA	NA	NA	NA	NA
	MW-3	24-Jun-02	972.12	**434**	33.1	6.9	5.7	2.5	2.7	<1.0	**73.2**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	--	--	--	**5**	**5**	--	**5**
MW-3 (Cont)	MW-3	13-Nov-02	971.73	**130**	29	2.7	6.0	3.3	3.0	<2.0	**68**
	MW-3	6-May-03	972.67	5.3	41	<2.0	9.5	**5.2**	<2.0	<2.0	<2.0
	MW-3	6-Nov-03	971.71	<5.0	41	<2.0	9.7	**5.9**	<2.0	<2.0	<2.0
	MW-3	10-Nov-04	969.51	<5.0	17	<2.0	4.2	2.3	<2.0	<2.0	2.7
	MW-3	2-Nov-05	972.60	<0.50	42	<0.50	8.6	0.3	<0.50	<0.50	<0.50
	MW-3	29-Nov-06	974.50	**29**	4.2	<0.50	1.6	0.64	<0.50	<0.50	**16.0**
	MW-3	22-Oct-07	974.08	**17**/2.3	3.1/3.1	0.52/<0.50	1.3/1.2	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	**19/19**
	MW-3	4-Nov-08	975.98	**30/30**	1.2/1.3	<0.50/<0.50	<0.66/<0.66	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	**8.7/8.7**
	MW-3	29-Oct-09	977.18	0.59 J	0.64J	<0.50	<0.50	<0.50	<0.50	<0.50	**5.0 J**
	MW-3	3-Nov-10	NM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4
	MW-3	6-Dec-10	980.16	NS	NS	NS	NS	NS	NS	NS	NS
	MW-3	19-Oct-11	981.60	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-3	22-Oct-12	981.33	6.0/5.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**5.9/5.5**
	MW-3	10-Nov-13	979.44	4.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.4**
	MW-3	20-Oct-14	977.94	3.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.0
	MW-3	11-Nov-15	978.11	3.1/3.1	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	3.2/3.2
	MW-3	28-Sep-16	978.90	3.6/3.3	<0.5 J/<0.5	<0.5 J/<0.5	0.3 J/0.3 J	<0.5 J/<0.5	<0.5 J/<0.5	<0.5 J/<0.5	2.2/2.1
	MW-3	16-Oct-17	982.37	2.2/2.0	<0.5/<0.5	<0.5/<0.5	0.1 J/0.1 J	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	1.2/1.1
	MW-3	22-Oct-18	982.54	2.8/2.2	<0.5/<0.5	<0.5/<0.5	0.3 J/0.2 J	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	1.5/1.3
	MW-3	7-Nov-19	982.83	2.4	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	1.4
	MW-3	11-Nov-20	982.82	2.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.7
	MW-3	26-Oct-21	983.31	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.8
	MW-3	12-Oct-22	984.63	**20**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**26**
	MW-3	14-Nov-23	986.87	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**61**
MW-4	MW-4	27-Jun-94	954.57	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	MW-4	1-Dec-94	954.29	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	15-Jun-95	957.87	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	MW-4	11-Dec-95	958.36	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	MW-4	17-Jun-96	960.37	<1	<1	<1	<1	<1	<1	<1	<1
	MW-4	18-Dec-96	960.42	<1	<1	<1	<1	<1	<1	<1	<1
	MW-4	26-Mar-97	962.02	<1	<1	<1	<1	<1	<1	<1	<1

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-4 (Cont)	MW-4	27-May-97	962.64	<1	<1	<1	<1	<1	<1	<1	<1
	MW-4	18-Sep-97	963.42	<1	<1	<1	<1	<1	<1	<1	<1
	MW-4	22-Dec-97	964.58	<1	<1	<1	<1	<1	<1	<1	<1
	MW-4	24-Mar-98	965.78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	4-Jun-98	966.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	11-Aug-98	967.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	16-Nov-98	968.26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	25-Feb-99	969.96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	27-May-99	970.61	<1	<1	<1	<1	<1	<1	<1	<1
	MW-4	26-Aug-99	971.39	<1	<1	<2	<1	<1	<1	<1	<1
	MW-4	1-Dec-99	NM	NA	NA	NA	NA	NA	NA	NA	NA
	MW-4	14-Mar-00	971.29	<1	<1	<2	<1	<1	<1	<1	<1
	MW-4	10-May-00	972.60	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	8-Aug-00	972.22	<1	<1	<2	<1	<1	<1	<1	<1
	MW-4	16-Oct-00	971.78	<1	<1	<2	<1	<1	<1	<1	<1
	MW-4	12-Apr-01	973.03	<1	<1	<2	<1	<1	<1	<1	<1
	MW-4	8-Oct-01	972.23	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4	24-Jun-02	972.93	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	14-Nov-02	971.42	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-4	6-May-03	972.63	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-4	6-Nov-03	971.28	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-4	10-Nov-04	969.10	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-4	21-Dec-05	973.44	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0
	MW-4	29-Nov-06	974.85	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-4	19-Oct-07	974.82	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3
	MW-4	3-Nov-08	976.86	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6
	MW-4	30-Oct-09	978.02	0.99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1
	MW-4	17-Oct-10	980.77	NS	NS	NS	NS	NS	NS	NS	NS
	MW-4	15-Nov-10	NM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-4	19-Oct-11	982.62	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.6
	MW-4	22-Oct-12	982.02	5.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.3

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-4 (Cont)	MW-4	10-Nov-13	980.37	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3
	MW-4	20-Oct-14	978.87	0.54	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-4	11-Nov-15	979.05	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-4	28-Sep-16	979.98	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5 J
	MW-4	16-Oct-17	983.27	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.3
	MW-4	22-Oct-18	983.29	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8
	MW-4	7-Nov-19	983.89	4.6/4.8	<0.5/<0.5	<0.5/<0.5	<2.0/<2.0	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	2.7/2.9
	MW-4	11-Nov-20	983.99	6.0/5.3	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	3.6/3.2
	MW-4	26-Oct-21	985.00	**9.0/9.5**	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	3.7/4.0
	MW-4	29-Dec-21	NM	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.5
	MW-4	12-Oct-22	986.02	**16/17**	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	4.4/4.5
	MW-4	17-May-23	985.85	**18/19**	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/0.50	<0.50/<0.50	4.5/4.5
	MW-4	14-Nov-23	985.85	**18/19**	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/0.59	<0.50/<0.50	3.2/3.3
MW-5	MW-5	12-Aug-94	942.09	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	MW-5	1-Dec-94	942.93	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	1.8
	MW-5	15-Jun-95	946.00	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	**7.8**
	MW-5	22-Jan-96	946.97	2	<1	<1	<1	<1	<1	<1	**11**
	MW-5	17-Jun-96	948.93	**48**	2	1	<1	<1	<1	<1	**15**
	MW-5	19-Dec-96	949.56	**30**	2	<1	<1	<1	<1	<1	**10**
	MW-5	27-Mar-97	950.83	**60**	2	<1	<1	<1	<1	<1	**24**
	MW-5	28-May-97	951.50	**57**	5	3	4	1	<1	<1	<1
	MW-5	18-Sep-97	952.22	**43**	2	<1	1	<1	<1	<1	**15**
	MW-5	22-Dec-97	951.78	**44**	2.3	<1	1.0	<1	<1	<1	**15**
	MW-5	24-Mar-98	954.32	**11**	4.8	3.33	2.9	1.1	<0.5	<0.5	**36**
	MW-5	4-Jun-98	953.66	**20.6**	3.5	2.1	1.9	0.8	<0.5	<0.5	**31.3**
	MW-5	12-Aug-98	954.13	**41.2**	3.4	2.3	1.8	0.8	<0.5	<0.5	**29.2**
	MW-5	16-Nov-98	955.06	**75.6**	3.8	1.5	1.4	<0.5	<0.5	<0.5	**34.6**
	MW-5	25-Feb-99	956.44	**76.2**	2	<1	<1	<1	<1	<1	**24.8**
	MW-5	27-May-99	956.97	**58.2**	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	**26.1**
	MW-5	26-Aug-99	957.39	**89.3**	3.4	<1	<0.5	<0.5	<0.5	<0.5	**24.8**
	MW-5	1-Dec-99	957.96	NA	NA	NA	NA	NA	NA	NA	NA

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	--	--	--	**5**	**5**	--	**5**
MW-5 (Cont)	MW-5	14-Mar-00	958.71	**138**	6.6	1	2.9	<1	<1	<1	**34.6**
	MW-5	10-May-00	959.54	**37**	6.2	1.4	1.4	0.7	<0.5	<0.5	**29.9**
	MW-5	8-Aug-00	959.38	**112**	9.6	1.5	1.8	<1	<1	<1	**37.1**
	MW-5	17-Oct-00	959.38	**170**	7.6	<2	1.4	<1	<1	<1	**37.2**
	MW-5	12-Apr-01	961.50	**149**	6.3	<2	1.6	<1	<1	<1	**33.9**
	MW-5	8-Oct-01	960.30	**68**	5.6	1.3	1.7	<1.0	<1.0	<1.0	**27.5**
	MW-5	24-Jun-02	961.30	**77.4**	2.2	<2.0	<1.0	<1.0	<1.0	<1.0	**16.6**
	MW-5	13-Nov-02	960.25	**42**	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**10.0**
	MW-5	5-May-03	961.66	**13**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**8.5**
	MW-5	5-Nov-03	961.28	**26**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**6.7**
	MW-5	13-Jul-04	961.25	1.2	1.5	<0.15	0.6	<0.14	<0.14	<0.14	**7.2**
	MW-5	10-Nov-04	960.81	**25**	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	**5.6**
	MW-5	21-Nov-05	963.55	**9.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7
	MW-5	29-Nov-06	964.89	**9.3**	0.52	<0.50	<0.50	<0.50	<0.50	<0.50	1.6
	MW-5	19-Oct-07	965.39	**8.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3
	MW-5	3-Nov-08	966.90	**38**	2.2	<0.50	0.81	<0.50	<0.50	<0.50	**9.5**
	MW-5	29-Oct-09	967.81	**28**	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	4.9
	MW-5	17-Oct-10	970.87	NS	NS	NS	NS	NS	NS	NS	NS
	MW-5	15-Nov-10	NM	**13**	0.56	<0.50	<0.50	<0.50	<0.50	<0.50	2.4
	MW-5	19-Oct-11	972.67	**15**	0.73	<0.50	<0.50	<0.50	<0.50	<0.50	3.3
	MW-5	22-Oct-12	973.69	**14**	0.67	<0.5	<0.5	<0.5	<0.5	<0.5	2.8
	MW-5	10-Nov-13	972.21	**10**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2
	MW-5	20-Oct-14	971.51	**9.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7
	MW-5	11-Nov-15	971.71	**9.4**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.9
	MW-5	28-Sep-16	972.43	**13**	0.5 J	<0.5	0.2 J	<0.5	<0.5	<0.5	3.5
	MW-5	28-Sep-16	972.43	**15**	0.5	0.1 J	0.2 J	<0.5	<0.5	<0.5	4.4
	MW-5	28-Sep-16	972.43	**13**	0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	3.9
	MW-5	28-Sep-16	972.43	**12**	0.5 J	<0.5	0.2 J	<0.5	<0.5	<0.5	3.7
	MW-5	16-Oct-17	975.07	**12**	0.5 J	<0.5	0.2 J	<0.5	<0.5	<0.5	4.3
	MW-5	22-Oct-18	974.75	**12**	0.4 J	<0.5	<0.5	<0.5	<0.5	<0.5	4.3
	MW-5	7-Nov-19	974.54	**16**	0.3 J	<0.5	<2.0	<0.5	<0.5	<0.5	**15**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-5 (Cont)	MW-5	12-Nov-20	975.43	**9.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**9.4**
	MW-5	26-Oct-21	976.25	6.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.0
	MW-5	12-Oct-22	977.76	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.2**
	MW-5	14-Nov-23	980.57	**7.4**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**2.6**
MW-6	MW-6	28-Jun-94	941.87	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	MW-6	1-Dec-94	942.33	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	3-Aug-95	945.39	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	MW-6	11-Dec-95	945.53	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	MW-6	17-Jun-96	947.93	<1	<1	<1	<1	<1	<1	<1	<1
	MW-6	19-Dec-96	948.22	<1	<1	<1	<1	<1	<1	<1	<1
	MW-6	26-Mar-97	949.90	<1	<1	<1	<1	<1	<1	<1	<1
	MW-6	27-May-97	950.61	<1	<1	<1	<1	<1	<1	<1	<1
	MW-6	18-Sep-97	950.84	<1	<1	<1	<1	<1	<1	<1	<1
	MW-6	22-Dec-97	951.68	<1	<1	<1	<1	<1	<1	<1	<1
	MW-6	24-Mar-98	953.36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	4-Jun-98	952.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	12-Aug-98	954.76	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	17-Nov-98	955.44	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	25-Feb-99	957.32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	27-May-99	958.04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	27-Aug-99	958.23	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	1-Dec-99	958.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	3-Feb-00	959.20	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	10-May-00	960.80	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	17-Oct-00	959.65	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	12-Apr-01	961.81	<1	<1	<2	<1	<1	<1	<1	<1
	MW-6	8-Oct-01	960.71	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	24-Jun-02	961.90	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	13-Nov-02	960.34	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-6	5-May-03	962.72	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-6	5-Nov-03	960.88	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-6 (Cont)	MW-6	9-Nov-04	960.27	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-6	1-Nov-05	963.04	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	29-Nov-06	965.06	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	22-Oct-07	966.11	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	4-Nov-08	967.85	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	2-Nov-09	968.56	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	3-Nov-10	973.10	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50
	MW-6	19-Oct-11	974.96	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	22-Oct-12	974.75	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	10-Nov-13	973.44	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	20-Oct-14	972.59	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	11-Nov-15	973.17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-6	28-Sep-16	973.98	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J
	MW-6	16-Oct-17	977.09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	22-Oct-18	976.20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	7-Nov-19	976.09	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	0.2 J	<0.5
	MW-6	11-Nov-20	977.39	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	26-Oct-21	978.26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	12-Oct-22	979.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-6	14-Nov-23	983.25	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-7	MW-7	27-Jun-94	951.01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	MW-7	25-Jan-95	951.77	<2	<2	<2	<8	<2	<2	<2	<2
	MW-7	15-Jun-95	955.19	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	MW-7	11-Dec-95	955.95	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	MW-7	17-Jun-96	957.83	<1	<1	<1	<1	<1	<1	<1	<1
	MW-7	19-Dec-96	959.10	<1	<1	<1	<1	<1	<1	<1	<1
	MW-7	26-Mar-97	960.04	<1	<1	<1	<1	<1	<1	<1	<1
	MW-7	27-May-97	960.80	<1	<1	<1	<1	<1	<1	<1	<1
	MW-7	18-Sep-97	961.62	<1	<1	<1	<1	<1	<1	<1	<1
	MW-7	22-Dec-97	962.86	<1	<1	<1	<1	<1	<1	<1	<1
	MW-7	24-Mar-98	963.86	<0.5	<0.5	<0.5	0.57	<0.5	<0.5	<0.5	<0.5

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-7 (Cont)	MW-7	4-Jun-98	964.43	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5
	MW-7	11-Aug-98	965.72	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5
	MW-7	16-Nov-98	966.38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-7	25-Feb-99	967.86	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-7	27-May-99	968.32	<1	<1	<1	<1	<1	<1	<1	<1
	MW-7	26-Aug-99	969.41	<1	<1	<2	<1	<1	<1	<1	<1
	MW-7	1-Dec-99	969.74	<1	<1	<1	<1	<1	<1	<1	<1
	MW-7	3-Feb-00	970.01	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-7	10-May-00	970.94	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-7	8-Aug-00	970.84	<1	<1	<2	<1	<1	<1	<1	<1
	MW-7	12-Apr-01	971.14	<1	<1	<2	<1	<1	<1	<1	<1
	MW-7	8-Oct-01	970.92	<0.5	<0.5	<1.0	0.5	<0.5	<0.5	<0.5	<0.5
	MW-7	24-Jun-02	971.35	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	12-Nov-02	970.50	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-7	5-May-03	970.96	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-7	5-Nov-03	970.25	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-7	9-Nov-04	968.78	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-7	1-Nov-05	970.48	<0.50	<0.50	<0.50	0.72	<0.50	<0.50	<0.50	<0.50
	MW-7	29-Nov-06	971.84	NA	NA	NA	NA	NA	NA	NA	NA
	MW-7	15-Nov-07	971.81	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-7	3-Nov-08	973.28	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-7	29-Oct-09	974.24	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.71
	MW-7	17-Oct-10	976.44	NS	NS	NS	NS	NS	NS	NS	NS
	MW-7	15-Nov-10	NM	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2
	MW-7	19-Oct-11	978.03	1.4	0.5	0.5	0.5	0.5	0.5	0.5	1.7
	MW-7	22-Oct-12	978.21	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.4
	MW-7	10-Nov-13	977.41	3.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.2
	MW-7	20-Oct-14	976.36	6.3/6.2	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	**9.0/8.6**
	MW-7	11-Nov-15	976.16	**12**	0.71	<0.50	<0.50	<0.50	<0.50	<0.50	**15**
	MW-7	28-Sep-16	976.81	**18**	0.7	<0.5	0.4 J	<0.5	<0.5	<0.5	**17**
	MW-7	28-Sep-16	976.81	**13**	0.5 J	<0.5	0.4 J	<0.5	<0.5	<0.5	**14**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-7 (Cont)	MW-7	28-Sep-16	976.81	**12**	0.5	<0.5	0.4 J	<0.5	<0.5	<0.5	**13**
	MW-7	28-Sep-16	976.81	**12**	0.4 J	<0.5	0.4 J	<0.5	<0.5	<0.5	**13**
	MW-7	16-Oct-17	979.61	**9.8**	0.2 J	<0.5	0.3 J	<0.5	<0.5	<0.5	**10**
	MW-7	6-Feb-18	NM	**8.6**	0.1 J	<0.5	0.3 J	<0.5	<0.5	<0.5	**9.7**
	MW-7	26-Sep-18	979.93	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**10**
	MW-7	19-Nov-19	980.40	**5**	<0.5	<0.5	0.4 J	<0.5	<0.5	<0.5	4.5
	MW-7	21-Apr-20	980.96	4.3	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	4.0
	MW-7	11-Nov-20	981.18	3.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.5
	MW-7	26-Apr-21	NM	4.0	<0.5	NA	<0.5	NA	NA	NA	3.0
	MW-7	26-Oct-21	981.50	2.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.6
	MW-7	12-May-22	982.00	2.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4
	MW-7	12-Oct-22	982.60	1.7	<0.5	<0.5	0.59	<0.5	<0.5	<0.5	1.0
	MW-7	17-May-23	983.72	1.2	<0.50	<0.50	0.8	<0.50	<0.50	<0.50	0.82
	MW-7	14-Nov-23	983.72	1	<0.50	<0.50	0.73	<0.50	<0.50	<0.50	0.56
MW-8	MW-8	29-Jun-94	963.51	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	MW-8	1-Dec-94	962.69	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-8	15-Jun-95	962.69	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	MW-8	11-Dec-95	969.15	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	MW-8	17-Jun-96	968.99	<1	<1	<1	<1	<1	<1	<1	<1
	MW-8	18-Dec-96	970.67	<1	<1	<1	<1	<1	<1	<1	<1
	MW-8	26-Mar-97	971.12	<1	<1	<1	<1	<1	<1	<1	<1
	MW-8	27-May-97	972.51	<1	<1	<1	<1	<1	<1	<1	<1
	MW-8	18-Sep-97	973.36	<1	<1	<1	<1	<1	<1	<1	<1
	MW-8	22-Dec-97	974.41	<1	<1	<1	<1	<1	<1	<1	<1
	MW-8	24-Mar-98	975.91	NA	NA	NA	NA	NA	NA	NA	NA
	MW-8	4-Jun-98	976.97	NA	NA	NA	NA	NA	NA	NA	NA
	MW-8	11-Aug-98	977.95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6
	MW-8	16-Nov-98	978.80	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-8	25-Feb-99	988.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-8	28-May-99	981.04	NA	NA	NA	NA	NA	NA	NA	NA
	MW-8	27-Aug-99	982.19	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-8 (Cont)	MW-8	1-Dec-99	982.27	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-8	3-Feb-00	982.74	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	0.7
	MW-8	10-May-00	982.74	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	0.7
	MW-8	8-Aug-00	983.33	<1	<1	<2	<1	<1	<1	<1	<1
	MW-8	17-Oct-00	983.33	<1	<1	<2	<1	<1	<1	<1	<1
	MW-8	12-Apr-01	982.77	<1	<1	<2	<1	<1	<1	<1	<1
	MW-8	8-Oct-01	982.11	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	2.4
	MW-8	24-Jun-02	981.96	0.9	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.9
	MW-8	12-Nov-02	980.24	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-8	5-May-03	980.86	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-8	5-Nov-03	978.46	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-8	9-Nov-04	975.66	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-8	1-Nov-05	978.52	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.92
	MW-8	29-Nov-06	981.27	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.61
	MW-8	22-Oct-07	980.82	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.55
	MW-8	3-Nov-08	983.02	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-8	30-Oct-09	984.15	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.52
	MW-8	30-Oct-10	986.44	NS	NS	NS	NS	NS	NS	NS	NS
	MW-8	19-Oct-11	987.77	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.78
	MW-8	22-Oct-12	987.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-8	10-Nov-13	986.64	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-8	20-Oct-14	981.74	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-8	11-Nov-15	982.61	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-8	28-Sep-16	983.57	0.2 J	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	0.3 J
	MW-8	16-Oct-17	988.02	0.2 J	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	0.2 J
	MW-8	22-Oct-18	987.84	0.2 J	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	0.1 J
	MW-8	7-Nov-19	988.55	0.2 J	<0.5	<0.5	0.4 J	<0.5	<0.5	<0.5	0.2 J
	MW-8	11-Nov-20	988.91	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-8	26-Oct-21	989.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-8	12-Oct-22	990.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-8	14-Nov-23	991.69	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-9	MW-9	27-Jun-94	958.04	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	MW-9	1-Dec-94	957.30	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	3-Aug-95	964.14	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	MW-9	11-Dec-95	964.39	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	MW-9	17-Jun-96	965.94	<1	<1	<1	<1	<1	<1	<1	<1
	MW-9	19-Dec-96	966.71	<1	<1	<1	<1	<1	<1	<1	<1
	MW-9	26-Mar-97	967.77	<1	<1	<1	<1	<1	<1	<1	<1
	MW-9	27-May-97	968.71	<1	<1	<1	<1	<1	<1	<1	<1
	MW-9	18-Sep-97	969.76	<1	<1	<1	<1	<1	<1	<1	<1
	MW-9	22-Dec-97	970.83	<1	<1	<1	<1	<1	<1	<1	<1
	MW-9	24-Mar-98	971.99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	4-Jun-98	972.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	11-Aug-98	973.99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	16-Nov-98	974.97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	25-Feb-99	976.67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	27-May-99	977.33	<1	<1	<1	<1	<1	<1	<1	<1
	MW-9	26-Aug-99	978.50	<1	<1	<2	<1	<1	<1	<1	<1
	MW-9	1-Dec-99	978.78	<1	<1	<1	<1	<1	<1	<1	<1
	MW-9	3-Feb-00	979.25	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	10-May-00	978.78	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	8-Aug-00	979.36	<1	<1	<2	<1	<1	<1	<1	<1
	MW-9	12-Apr-01	978.98	<1	<1	<2	<1	<1	<1	<1	<1
	MW-9	8-Oct-01	975.38	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	24-Jun-02	978.51	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-9	14-Nov-02	977.20	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-9	5-May-03	977.43	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-9	6-Nov-03	976.31	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-9	9-Nov-04	973.55	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	MW-9	1-Nov-05	975.53	0.83	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-9	29-Nov-06	977.78	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-9	22-Oct-07	977.73	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.9

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-9 (Cont)	MW-9	3-Nov-08	979.59	0.85	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4
	MW-9	29-Oct-09	980.60	NS	NS	NS	NS	NS	NS	NS	NS
	MW-9	23-Nov-10	982.64	NS	NS	NS	NS	NS	NS	NS	NS
	MW-9	27-Dec-10	NM	0.82	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-9	19-Oct-11	983.83	0.59	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.53
	MW-9	22-Oct-12	982.88	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.62
	MW-9	10-Nov-13	981.47	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5
	MW-9	20-Oct-14	979.97	3.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.6
	MW-9	11-Nov-15	980.02	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.8
	MW-9	28-Sep-16	980.89	3.9	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	1.8
	MW-9	16-Oct-17	984.09	2.8	<0.5	<0.5	0.3 J	<0.5	<0.5	<0.5	1.9
	MW-9	22-Oct-18	984.53	2.7	<0.5	<0.5	0.3 J	<0.5	<0.5	<0.5	1.3
	MW-9	7-Nov-19	985.10	2.2	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	1
	MW-9	12-Nov-20	985.89	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	26-Oct-21	986.15	0.81	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	12-Oct-22	987.25	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-9	14-Nov-23	988.12	0.87	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-10 (Cont)	MW-10	30-May-97	948.39	**17**	2.9	<1	<1	<1	<1	<1	**6.7**
	MW-10	23-Dec-97	934.11	**16**	<1	<1	<1	<1	<1	<1	4.8
	MW-10	1-Apr-98	951.30	**22.6**	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	**7.8**
	MW-10	5-Jun-98	936.39	**21.3**	1.4	<0.5	0.7	<0.5	<0.5	<0.5	**8.2**
	MW-10	13-Aug-98	932.83	**33.5**	2	0.6	0.8	<0.5	<0.5	<0.5	**10.6**
	MW-10	17-Nov-98	938.15	**48.4**	2	<0.5	<0.5	<0.5	<0.5	<0.5	**12.8**
	MW-10	25-Feb-99	938.57	**41.4**	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	**10.2**
	MW-10	28-May-99	939.58	**48**	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	**12.9**
	MW-10	27-Aug-99	941.04	**56**	2.4	<1	<0.5	<0.5	<0.5	<0.5	**13.9**
	MW-10	1-Dec-99	NM	**46.6**	3.1	<0.5	0.5	<0.5	<0.5	<0.5	**16.4**
	MW-10	4-Feb-00	944.45	**62.3**	2.6	<1	<0.5	<0.5	<0.5	<0.5	**14.6**
	MW-10	10-May-00	944.14	**45.7**	2.5	<1	<0.5	<0.5	<0.5	<0.5	**15.1**
	MW-10	8-Aug-00	944.50	**51.3**	3.3	<1	<0.5	<0.5	<0.5	<0.5	**13.1**
	MW-10	16-Oct-00	944.15	**60.6**	1.7	<2	<1	<1	<1	<1	**14.1**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-10 (Cont)	MW-10	12-Apr-01	940.48	**37.3**	2.0	<1	<0.5	<0.5	<0.5	<0.5	**11.9**
	MW-10	9-Oct-01	941.82	**32.2**	2.0	<2.0	<1.0	<1.0	<1.0	<1.0	**12.2**
	MW-10	24-Jun-02	947.00	**50.5**	1.2	<2.0	<1.0	<1.0	<1.0	<1.0	**11.8**
	MW-10	12-Nov-02	940.34	**30**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**8.7**
	MW-10	5-May-03	940.73	**31**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**8.6**
	MW-10	5-Nov-03	941.52	**29**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**6.4**
	MW-10	10-Nov-04	NM	**23**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**6.8**
	MW-10	5-Oct-05	939.20	**26**	1.0	<0.50	<0.50	<0.50	<0.50	**6.8**	<0.50
	MW-10	3-Oct-06	946.01	NA	NA	NA	3	NA	NA	NA	NA
	MW-10	22-Oct-07	943.00	**27**	1.6	0.55	0.72	<0.50	<0.50	<0.50	**8**
	MW-10	3-Nov-08	NM	**23**	1.2	<0.50	0.55	<0.50	<0.50	<0.50	**7**
	MW-10	29-Oct-09	944.80	**24J/34J**	1.4/1.7	<0.50/<0.50	0.55/0.69	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	**7.1/8.7**
	MW-10	3-Nov-10	947.57	**25**	1.5	<0.50	<0.63	<0.50	<0.50	<0.50	**8**
	MW-10	19-Oct-11	NM	**16**	1.2	NM	<0.50	NM	NM	NM	**8.9**
	MW-10	1-Oct-12	939.1	**27**	1.3	<0.50	0.57	<0.50	<0.50	<0.50	**7.5**
	MW-10	10-Nov-13	956.30	**22**	1.1	<0.50	0.67	<0.50	<0.50	<0.50	**6.8**
	MW-10	20-Oct-14	955.70	**28J**	1.4J	<0.50J	0.59J	<0.50J	<0.50J	<0.50J	**6.9J**
	MW-10	11-Nov-15	956.2	**26**	1.2	<0.50	0.51	<0.50	<0.50	<0.50	**6.5**
	MW-10	28-Sep-16	956.33	**32**	1.2	0.3 J	0.6	<0.5 J	0.2 J	<0.5 J	**6.6**
	MW-10	16-Oct-17	965.07	**28**	1.3	0.3 J	0.6	<0.5	0.1 J	<0.5	**6.6**
	MW-10	23-Oct-18	964.85	**24**	0.9	0.2 J	<0.5	<0.5	<0.5	<0.5	4.8
	MW-10	7-Nov-19	958.49	**26**	1.1	0.2 J	0.7	<0.5	<0.5	<0.5	**6.4**
	MW-10	12-Nov-20	959.27	**17**	0.64	<0.5	<0.5	<0.5	<0.5	<0.5	4.6
	MW-10	26-Oct-21	959.58	**11**	0.51	<0.5	<0.5	<0.5	<0.5	<0.5	3.5
	MW-10	12-Oct-22	962.11	**18**	0.61	<0.5	<0.5	<0.5	<0.5	<0.5	4.3

Appendix C. Historical Groundwater Elevations and Analytical Results
Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-12	MW-12	26-Dec-17	978.34	0.3 J	<0.5	<0.5	<1.8	<0.5	<0.5	<0.5	<0.5
	MW-12	22-Oct-18	978.12	0.5	<0.5	<0.5	3.8	<0.5	<0.5	<0.5	<0.5
	MW-12	7-Nov-19	978.23	0.6	<0.5	<0.5	4.8	<0.5	<0.5	<0.5	0.2 J
	MW-12	21-Apr-20	979.42	0.7	<0.5	<0.5	4.9	<0.5	<0.5	<0.5	0.3 J
	MW-12	11-Nov-20	978.67	0.67	<0.5	<0.5	4	<0.5	<0.5	<0.5	<0.5
	MW-12	26-Apr-21	NM	1.0	<0.5	NA	4.5	NA	NA	NA	0.50
	MW-12	26-Oct-21	979.35	1.1	<0.5	<0.5	4	<0.5	<0.5	<0.5	0.74
	MW-12	12-May-22	980.05	2.9	<1.0	<1.0	4.8	<1.0	<1.0	<1.0	1.3
	MW-12	12-Oct-22	980.57	3.5	<0.5	<0.5	4.6	<0.5	<0.5	<0.5	1.6
	MW-12	17-May-23	982.32	4.6	<0.50	<0.50	5.4	<0.50	<0.50	<0.50	2.2
	MW-12	14-Nov-23	982.32	10	0.97	<0.50	4.4	<0.50	<0.50	<0.50	4.3
MW-13	MW-13	7-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	8-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	8-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	11-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	12-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	0.59	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	30-Sep-19	NM	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
MW-13 (Cont)	MW-13	7-Nov-19	971.77	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	0.8/0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5
	MW-13	21-Apr-20	972.52	<0.5 J	<0.5 J	<0.5 J	<2.0	<0.5 J	<0.5 J	<0.5 J	<0.5 J
	MW-13	11-Nov-20	972.81	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-13	26-Apr-21	NM	<0.5	<0.5	NA	0.80	NA	NA	NA	<0.5
	MW-13	26-Oct-21	973.47	<0.5	<0.5	<0.5	0.65	<0.5	<0.5	<0.5	<0.5
	MW-13	12-May-22	974.24	<1.0	<1.0	<1.0	1.50	<1.0	<1.0	<1.0	<1.0
	MW-13	12-Oct-22	975.35	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5
	MW-13	17-May-23	976.57	<0.50	<0.50	<0.50	1.6	<0.50	<0.50	<0.50	<0.50
	MW-13	14-Nov-23	976.57	<0.50	<0.50	<0.50	1.2	<0.50	<0.50	<0.50	<0.50
MW-14	MW-14	23-Oct-18	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-14	23-Oct-18	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-14	23-Oct-18	NM	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	MW-14	23-Oct-18	NM	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	MW-14	23-Oct-18	NM	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	MW-14	23-Oct-18	NM	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	MW-14	23-Oct-18	NM	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	MW-14	23-Oct-18	NM	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	MW-14	23-Oct-18	NM	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	MW-14	23-Oct-18	NM	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	MW-14	4-Feb-19	NM	1.2	<0.5	<0.5	0.4 J	<0.5	<0.5	<0.5	0.2 J
	MW-14	23-Apr-19	NM	1.1	<0.5	<0.5	0.3 J	<0.5	<0.5	<0.5	0.2 J
	MW-14	30-Sep-19	NM	2.1	0.1 J	<0.5	<0.5	<0.5	<0.5	<0.5	0.4 J
	MW-14	7-Nov-19	966.33	<0.5	<0.5	<0.5	<0.8	<0.5	<0.5	<0.5	<0.5
	MW-14	21-Apr-20	968.37	2.7 J	0.2 J	<0.5 J	<2.0 J	<0.5 J	<0.5 J	<0.5 J	0.4 J
	MW-14	11-Nov-20	967.99	2.0/2.7	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	0.50/0.54
	MW-14	26-Apr-21	NM	<0.5	<0.5	NA	<0.50	NA	NA	NA	<0.5
	MW-14	26-Oct-21	968.59	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.58
	MW-14	12-May-22	970.04	3.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-14	12-Oct-22	970.70	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-14	17-May-23	972.53	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	MW-14	14-Nov-23	972.53	2.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
EW-1	EW-1	29-Nov-99	953.55	**35.9**	2.6	<1	<1	<1	<1	<1	**13.8**
	EW-1	3-Feb-00	880.51	**162**	14	3.2	2.6	<1	0.7	<1	**32.8**
	EW-1	10-May-00	875.50	**144**	13.9	3.2	2.6	1.7	0.6	<0.5	**30.6**
	EW-1	8-Aug-00	893.17	**164**	19.9	5.2	2.9	1.7	1	<0.5	**35.1**
	EW-1	16-Oct-00	900.12	**223**	14.2	3	2.7	1.4	0.6	<0.5	**34.1**
	EW-1	12-Apr-01	908.88	**152**	15.5	4.6	3.6	1.9	0.6	<0.5	**36.5**
	EW-1	9-Oct-01	900.21	**133**	15.2	4.6	3.2	1.9	1.1	<1.0	**44.1**
	EW-1	24-Jun-02	975.57[a]	**66**	6.7	<2.0	<1.0	<1.0	<1.0	<1.0	**15.8**
	EW-1	14-Nov-02	973.84[a]	**83.0**	<20	<20	<20	<20	<20	<20	**21**
	EW-1	6-May-03	974.83[a]	**160.0**	11.0	<20	2.9	<20	<20	<20	**23**
	EW-1	13-Nov-03	975.84[a]	<5.0	16.0	<2.0	3.6	<2.0	<2.0	<2.0	**9.0**
	EW-1	10-Nov-04	929.08	<5.0	8.1	<2.0	<2.0	<2.0	<2.0	<2.0	**9.0**
	EW-1	10-Oct-05	NM	**31.0**	15.0	<0.50	3.6	1.9	0.67	<0.50	**23**
	EW-1	3-Oct-06	945.58	NA	NA	NA	0.57	NA	NA	NA	NA
	EW-1	22-Oct-07	946.38	**140.0**	17.0	1.5	5	2.5	0.89	<0.50	**33.0**
	EW-1	3-Nov-08	943.43	**120**	12	1.4	3.7	1.7	1	<0.50	**31**
	EW-1	29-Oct-09	956.38	**170**	14	1.3	3.4	2.1	0.98	<0.50	**33**
	EW-1	3-Nov-10	958.04	**110**	13	1.3	<3.2	1.8	0.95	<0.50	**30**
	EW-1	17-Oct-11	961.58	**92**	11	NM	2.4	NM	NM	NM	**32**
	EW-1	23-Oct-12	959.28	**110/110**	13/13	1.1/1.0	3.2/3.1	1.4/1.4	0.92/1.1	<0.5/<0.5	**30/30**
	EW-1	10-Nov-13	964.08	**94/98**	11/11	0.83/0.89	2.9/2.7	1.3/0.99	0.87/0.97	<0.50/<0.50	**28/27**
	EW-1	20-Oct-14	947.18	**100/110**	11/12	1.0/0.99	2.4/2.7	1.3/1.5	0.82/0.96	<0.50/<0.50	**27/29**
	EW-1	11-Nov-15	957.08	**95J/88J**	8.8J/8.4J	0.88J/0.86J	2.0J/1.9J	1.0J/1.0J	0.69J/0.69J	<0.50/<0.50	**25J/24J**
	EW-1	28-Sep-16	952.95	**83**	7.1	0.8 J	1.6	1	0.7 J	<0.8	**21**
	EW-1	23-Oct-18	985.79	**110**	9.9	1.0 J	<2.2	1.0 J	0.7 J	<1.0	**23**
	EW-1	12-Nov-19	983.42	NS	NS	NS	NS	NS	NS	NS	NS
	EW-1	12-Nov-20	954.45	**54**	4.8	<0.5	<0.5	<0.5	<0.5	<0.5	**16**
	EW-1	26-Oct-21	954.07	**41**	3.2	<0.5	0.95	<0.5	<0.5	<0.5	**12**
	EW-1	12-Oct-22	950.4	**61**	4.4	<0.5	1.1	0.51	<0.5	<0.5	**15**
	EW-1	14-Nov-23	948.75	**47**	3.5	<0.50	0.95	<0.50	<0.50	<0.50	**15**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
EW-2	EW-2	1-Dec-99	903.95	**8.2**	<1	<1	<1	<1	<1	<1	3.9
	EW-2	4-Feb-00	897.94	**24.3**	0.5	<1	<0.5	<0.5	<0.5	<0.5	**7.7**
	EW-2	11-May-00	901.35	**7.0**	0.5	<1	<0.5	<0.5	<0.5	<0.5	1.2
	EW-2	8-Aug-00	917.95	**149**	8.3	3	<0.5	<0.5	<0.5	<0.5	**37**
	EW-2	16-Oct-00	910.05	**71.5**	1.5	<1	<0.5	<0.5	<0.5	<0.5	**16.4**
	EW-2	12-Apr-01	913.20	**47.3**	2.2	<1	0.7	<0.5	<0.5	<0.5	**19**
	EW-2	9-Oct-01	914.24	**34.6**	2.5	<2.0	<1.0	<1.0	<1.0	<1.0	**19.8**
	EW-2	24-Jun-02	918.31	**70.8**	1.8	<2.0	<1.0	<1.0	<1.0	<1.0	**20.9**
	EW-2	13-Nov-02	921.60	**63**	3	<2.0	<2.0	<2.0	<2.0	<2.0	**18**
	EW-2	5-May-03	931.36	**67**	3.1	<2.0	<2.0	<2.0	<2.0	<2.0	**18**
	EW-2	5-Nov-03	965.61[a]	NA	NA	NA	NA	NA	NA	NA	NA
	EW-2	9-Nov-03	964.58	NA	NA	NA	NA	NA	NA	NA	NA
	EW-2	5-Oct-05	966.95[a]	NA	NA	NA	NA	NA	NA	NA	NA
	EW-2	16-Oct-06	968.45[a]	NA	NA	NA	NA	NA	NA	NA	NA
	EW-2	22-Oct-07	969.09[a]	NA	NA	NA	NA	NA	NA	NA	NA
	EW-2	3-Nov-08	970.82[a]	NA	NA	NA	NA	NA	NA	NA	NA
	EW-2	29-Oct-09	971.75[a]	NA	NA	NA	NA	NA	NA	NA	NA
	EW-2	3-Nov-10	NM	NA	NA	NA	NA	NA	NA	NA	NA
	EW-2	19-Oct-11	975.95	**20**	0.75	<0.5	<0.5	<0.5	<0.5	<0.5	4.4
	EW-2	22-Oct-12	976.54	**16**	0.63	<0.5	<0.5	<0.5	<0.5	<0.5	4.3
	EW-2	10-Nov-13	976.35	**17**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.4**
	EW-2	20-Oct-14	974.45	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.2**
	EW-2	11-Nov-15	974.55	**10**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.7**
	EW-2	18-Oct-16	975.17	**19**	0.4 J	<0.5	0.2 J	<0.5	<0.5	<0.5	**11**
	EW-2	27-Nov-17	976.43	**17 J**	0.4 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	**13 J**
	EW-2	22-Oct-18	978.14	**24**	0.3 J	<0.5	0.2 J	<0.5	<0.5	<0.5	**17**

Appendix C. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well ID	Well ID	Sample Date	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Trans-1,2-DCE (µg/L)	Chloroform (µg/L)	1,1,2-TCA (µg/L)	PCE (µg/L)	1,2-DCA (µg/L)	TCE (µg/L)
Aquifer Water Quality Standards				**7**	**--**	**--**	**--**	**5**	**5**	**--**	**5**
EW-2 (Cont)	EW-2	19-Nov-19	978.48	**24**	0.3 J	<0.5	0.3 J	<0.5	<0.5	<0.5	**25**
	EW-2	11-Nov-20	978.90	**20**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**30**
	EW-2	2-Nov-21	979.40	**25**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**33**
	EW-2	13-Oct-22	980.88	NM	NM	NM	NM	NM	NM	NM	NM
	EW-2	12-Oct-22	NM	**25**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**28**
	EW-2	14-Nov-23	983.10	**<0.50**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**17**

[a]Groundwater elevation for an extraction well that was not operational at the time of gauging

[b]Sample results reflect highest contaminant concentrations detected using multiple passive diffusion bags deployed in the well

Notes:

Bold values denote concentrations that exceed the Arizona Aquifer Water Quality Standard

-- = no standards

< = less than

µg/L = microgram per liter

1,1,2-TCA = 1,1,2-trichloroethane

1,1-DCA = 1,1-dichloroethane

1,1-DCE = 1,1-dichloroethene

1,2-DCA = 1,2-dichloroethane

amsl = above mean sea level

ID = identification

J = estimated value

NA = not analyzed

NM = not measured

NS = not sampled

NC = not calculated

PCE = tetrachloroethene

TCE = trichloroethene

trans-1,2-DCE = trans-1,2-dichloroethene

Appendix D
Laboratory Analytical Results for Monitoring Wells - 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

IAC, Peoria
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-196467-1

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

See page two for job notes and contact information.

myEOL

Job Notes

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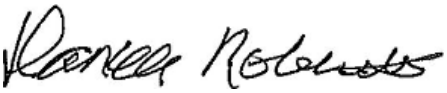
The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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



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Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Qualifiers

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.

General Chemistry

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

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

Case Narrative

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Job ID: 550-196467-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-196467-1

Comments
The report being provided is a revision of the original report sent on 5/12/2022. The report (revision 1) is being revised due to: Added chloroform to sampleID EW-1-23Q1 (550-196467-3)

No additional comments.

Receipt
The samples were received on 1/18/2023 2:03 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0° C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-196467-1	MW-10-23Q1	Water	01/18/23 12:40	01/18/23 14:03
550-196467-2	MW-10-23Q1-comp	Water	01/18/23 12:36	01/18/23 14:03
550-196467-3	EW-1-23Q1	Water	01/18/23 13:20	01/18/23 14:03
550-196467-4	EW-1-23Q1-comp	Water	01/18/23 13:17	01/18/23 14:03
550-196467-5	TB-23Q1	Water	01/18/23 08:00	01/18/23 14:03

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q1 — Lab Sample ID: 550-196467-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.61		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	13		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	5.1		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q1-comp — Lab Sample ID: 550-196467-2

No Detections.

Client Sample ID: EW-1-23Q1 — Lab Sample ID: 550-196467-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.5		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	48		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.1		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	19		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q1-comp — Lab Sample ID: 550-196467-4

No Detections.

Client Sample ID: TB-23Q1 — Lab Sample ID: 550-196467-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q1

Lab Sample ID: 550-196467-1
Date Collected: 01/18/23 12:40
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.61		0.50		ug/L			01/27/23 00:11	1
1,1-Dichloroethene	13		0.50		ug/L			01/27/23 00:11	1
Benzene	ND		0.50		ug/L			01/27/23 00:11	1
Chloroform	ND		0.50		ug/L			01/27/23 00:11	1
Trichloroethene	5.1		0.50		ug/L			01/27/23 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*60 - 140*		*01/27/23 00:11*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*01/27/23 00:11*	*1*
Toluene-d8 (Surr)	*111*		*60 - 140*		*01/27/23 00:11*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		01/31/23 17:44	01/31/23 20:08	1

Client Sample ID: MW-10-23Q1-comp

Lab Sample ID: 550-196467-2
Date Collected: 01/18/23 12:36
Matrix: Water
Date Received: 01/18/23 14:03

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		01/19/23 07:57	01/20/23 15:36	1
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 15:36	1
Molybdenum	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Selenium	ND		0.10		mg/L		01/19/23 07:57	01/20/23 15:36	1
Silver	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:36	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 15:36	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		01/24/23 17:12	01/25/23 15:58	1

Client Sample ID: EW-1-23Q1

Lab Sample ID: 550-196467-3
Date Collected: 01/18/23 13:20
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	4.5		0.50		ug/L			01/27/23 00:32	1
1,1-Dichloroethene	48		0.50		ug/L			01/27/23 00:32	1
Chloroform	1.1		0.50		ug/L			01/27/23 00:32	1
Trichloroethene	19		0.50		ug/L			01/27/23 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*60 - 140*		*01/27/23 00:32*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*01/27/23 00:32*	*1*
Toluene-d8 (Surr)	*111*		*60 - 140*		*01/27/23 00:32*	*1*

Client Sample ID: EW-1-23Q1-comp

Lab Sample ID: 550-196467-4

Date Collected: 01/18/23 13:17
Matrix: Water
Date Received: 01/18/23 14:03

Method: 40CFR136A 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 15:38	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 15:38	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 15:38	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 15:38	1

Client Sample ID: TB-23Q1

Lab Sample ID: 550-196467-5

Date Collected: 01/18/23 08:00
Matrix: Water
Date Received: 01/18/23 14:03

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			01/26/23 19:59	1
1,1-Dichloroethene	ND		0.50		ug/L			01/26/23 19:59	1
Benzene	ND		0.50		ug/L			01/26/23 19:59	1
Chloroform	ND		0.50		ug/L			01/26/23 19:59	1
Trichloroethene	ND		0.50		ug/L			01/26/23 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*		*01/26/23 19:59*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*01/26/23 19:59*	*1*
Toluene-d8 (Surr)	*118*		*60 - 140*		*01/26/23 19:59*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-196467-1	MW-10-23Q1	120	95	111
550-196467-3	EW-1-23Q1	117	95	111
550-196467-5	TB-23Q1	111	101	118
550-196579-F-2 MS	Matrix Spike	122	92	107
550-196579-F-2 MSD	Matrix Spike Duplicate	126	95	109
LCS 550-293288/4	Lab Control Sample	122	94	108
LCSD 550-293288/5	Lab Control Sample Dup	116	89	101
MB 550-293288/7	Method Blank	112	93	103

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-293288/7
Matrix: Water
Analysis Batch: 293288

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			01/26/23 19:38	1
Benzene	ND		0.50		ug/L			01/26/23 19:38	1
1,1-Dichloroethene	ND		0.50		ug/L			01/26/23 19:38	1
Chloroform	ND		0.50		ug/L			01/26/23 19:38	1
Trichloroethene	ND		0.50		ug/L			01/26/23 19:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*60 - 140*		*01/26/23 19:38*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*01/26/23 19:38*	*1*
Toluene-d8 (Surr)	*103*		*60 - 140*		*01/26/23 19:38*	*1*

Lab Sample ID: LCS 550-293288/4
Matrix: Water
Analysis Batch: 293288

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	47.0		ug/L		94	70 - 130		
Benzene			50.0	51.2		ug/L		102	65 - 135		
1,1-Dichloroethene			50.0	42.6		ug/L		85	50 - 150		
Chloroform			50.0	46.1		ug/L		92	70 - 135		
Trichloroethene			50.0	51.0		ug/L		102	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*60 - 140*
Dibromofluoromethane (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*108*		*60 - 140*

Lab Sample ID: LCSD 550-293288/5
Matrix: Water
Analysis Batch: 293288

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-Dichloroethane			50.0	44.7		ug/L		89	70 - 130	5	20
Benzene			50.0	49.0		ug/L		98	65 - 135	4	20
1,1-Dichloroethene			50.0	39.6		ug/L		79	50 - 150	7	20
Chloroform			50.0	44.0		ug/L		88	70 - 135	5	20
Trichloroethene			50.0	48.1		ug/L		96	65 - 135	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*60 - 140*
Dibromofluoromethane (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*101*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-196579-F-2 MS
Matrix: Water
Analysis Batch: 293288

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		
1,1-Dichloroethane	ND		50.0	46.9		ug/L		94	59 - 155		
Benzene	ND		50.0	51.8		ug/L		104	35 - 151		
1,1-Dichloroethene	ND		50.0	42.1		ug/L		84	10 - 234		
Chloroform	ND		50.0	46.1		ug/L		92	51 - 138		
Trichloroethene	ND		50.0	51.6		ug/L		103	70 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*60 - 140*
Dibromofluoromethane (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*107*		*60 - 140*

Lab Sample ID: 550-196579-F-2 MSD
Matrix: Water
Analysis Batch: 293288

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
1,1-Dichloroethane	ND		50.0	47.2		ug/L		94	59 - 155	1	40
Benzene	ND		50.0	51.5		ug/L		103	35 - 151	1	61
1,1-Dichloroethene	ND		50.0	41.5		ug/L		83	10 - 234	1	32
Chloroform	ND		50.0	46.5		ug/L		93	51 - 138	1	54
Trichloroethene	ND		50.0	50.9		ug/L		102	70 - 157	1	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*60 - 140*
Dibromofluoromethane (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*109*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-292815/1-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 292815

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		01/19/23 07:57	01/20/23 14:59	1
Cadmium	ND		0.0010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Copper	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Lead	ND		0.015		mg/L		01/19/23 07:57	01/20/23 14:59	1
Molybdenum	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Selenium	ND		0.10		mg/L		01/19/23 07:57	01/20/23 14:59	1
Silver	ND		0.010		mg/L		01/19/23 07:57	01/20/23 14:59	1
Zinc	ND		0.050		mg/L		01/19/23 07:57	01/20/23 14:59	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-292815/2-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	2.00	2.01	E2	mg/L		101	85 - 115
Cadmium	1.00	1.00		mg/L		100	85 - 115
Copper	1.00	1.01		mg/L		101	85 - 115
Lead	1.00	1.03		mg/L		103	85 - 115
Molybdenum	1.00	1.01		mg/L		101	85 - 115
Selenium	1.00	1.03		mg/L		103	85 - 115
Silver	0.0750	0.0742		mg/L		99	85 - 115
Zinc	1.00	1.07		mg/L		107	85 - 115

Lab Sample ID: LCSD 550-292815/3-A
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	2.00	2.06	E2	mg/L		103	85 - 115	2	20
Cadmium	1.00	1.02		mg/L		102	85 - 115	2	20
Copper	1.00	1.02		mg/L		102	85 - 115	2	20
Lead	1.00	1.05		mg/L		105	85 - 115	2	20
Molybdenum	1.00	1.04		mg/L		104	85 - 115	2	20
Selenium	1.00	1.05		mg/L		105	85 - 115	1	20
Silver	0.0750	0.0751		mg/L		100	85 - 115	1	20
Zinc	1.00	1.09		mg/L		109	85 - 115	1	20

Lab Sample ID: 550-196442-E-1-A MS
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		2.00	2.08	E2	mg/L		104	70 - 130
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130
Copper	ND		1.00	1.02		mg/L		102	70 - 130
Lead	ND		1.00	1.03		mg/L		103	70 - 130
Molybdenum	ND		1.00	1.04		mg/L		103	70 - 130
Selenium	ND		1.00	1.05		mg/L		105	70 - 130
Silver	ND		0.0750	0.0752		mg/L		100	70 - 130
Zinc	ND		1.00	1.06		mg/L		106	70 - 130

Lab Sample ID: 550-196442-E-1-B MSD
Matrix: Water
Analysis Batch: 292995

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 292815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		2.00	2.09	E2	mg/L		104	70 - 130	0	20
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130	0	20
Copper	ND		1.00	1.02		mg/L		102	70 - 130	0	20
Lead	ND		1.00	1.03		mg/L		103	70 - 130	0	20
Molybdenum	ND		1.00	1.04		mg/L		104	70 - 130	0	20
Selenium	ND		1.00	1.04		mg/L		104	70 - 130	0	20
Silver	ND		0.0750	0.0757		mg/L		101	70 - 130	1	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-196442-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 292995 — **Prep Batch: 292815**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	1.07		mg/L		107	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-293108/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		01/24/23 17:12	01/25/23 15:11	1

Lab Sample ID: LCS 550-293108/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00431		mg/L		86	85 - 115		

Lab Sample ID: LCSD 550-293108/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00517		mg/L		103	85 - 115	18	20

Lab Sample ID: 550-196526-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00386		mg/L		77	70 - 130		

Lab Sample ID: 550-196526-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293196 — **Prep Batch: 293108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00389		mg/L		78	70 - 130	1	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-293578/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293614 — **Prep Batch: 293578**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		01/31/23 17:44	01/31/23 20:08	1

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: LCS 550-293578/2-A
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293578

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0941		mg/L		94	90 - 110		

Lab Sample ID: LCSD 550-293578/3-A
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 293578

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0940		mg/L		94	90 - 110	0	20

Lab Sample ID: 550-196409-U-1-B MS
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 293578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	M2	0.100	0.0774	M2	mg/L		77	80 - 120		

Lab Sample ID: 550-196409-U-1-C MSD
Matrix: Water
Analysis Batch: 293614

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 293578

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2	0.100	0.0679	M2	mg/L		68	80 - 120	13	20

GC/MS VOA

Analysis Batch: 293288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	624.1	
550-196467-3	EW-1-23Q1	Total/NA	Water	624.1	
550-196467-5	TB-23Q1	Total/NA	Water	624.1	
MB 550-293288/7	Method Blank	Total/NA	Water	624.1	
LCS 550-293288/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-293288/5	Lab Control Sample Dup	Total/NA	Water	624.1	
550-196579-F-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-196579-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 292815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	200.7	
550-196467-4	EW-1-23Q1-comp	Total/NA	Water	200.7	
MB 550-292815/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-292815/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-292815/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-196442-E-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-196442-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 292995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	200.7 Rev 4.4	292815
550-196467-4	EW-1-23Q1-comp	Total/NA	Water	200.7 Rev 4.4	292815
MB 550-292815/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	292815
LCS 550-292815/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	292815
LCSD 550-292815/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	292815
550-196442-E-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	292815
550-196442-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	292815

Prep Batch: 293108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	245.1	
MB 550-293108/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-293108/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-293108/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-196526-B-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-196526-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 293196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-2	MW-10-23Q1-comp	Total/NA	Water	245.1	293108
MB 550-293108/1-A	Method Blank	Total/NA	Water	245.1	293108
LCS 550-293108/2-A	Lab Control Sample	Total/NA	Water	245.1	293108
LCSD 550-293108/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	293108
550-196526-B-1-B MS	Matrix Spike	Total/NA	Water	245.1	293108
550-196526-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	293108

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

General Chemistry

Prep Batch: 293578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	SM 4500 CN C	
MB 550-293578/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-293578/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-293578/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-196409-U-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-196409-U-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 293614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-196467-1	MW-10-23Q1	Total/NA	Water	SM 4500 CN E	293578
MB 550-293578/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	293578
LCS 550-293578/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	293578
LCSD 550-293578/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	293578
550-196409-U-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	293578
550-196409-U-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	293578

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q1
Date Collected: 01/18/23 12:40
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/27/23 00:11
Total/NA	Prep	SM 4500 CN C			293578	CXK	EET PHX	01/31/23 17:44
Total/NA	Analysis	SM 4500 CN E		1	293614	CXK	EET PHX	01/31/23 20:08

Client Sample ID: MW-10-23Q1-comp
Date Collected: 01/18/23 12:36
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			292815	SGO	EET PHX	01/19/23 07:57
Total/NA	Analysis	200.7 Rev 4.4		1	292995	CHS	EET PHX	01/20/23 15:36
Total/NA	Prep	245.1			293108	SRR	EET PHX	01/24/23 17:12
Total/NA	Analysis	245.1		1	293196	SRR	EET PHX	01/25/23 15:58

Client Sample ID: EW-1-23Q1
Date Collected: 01/18/23 13:20
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/27/23 00:32

Client Sample ID: EW-1-23Q1-comp
Date Collected: 01/18/23 13:17
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			292815	SGO	EET PHX	01/19/23 07:57
Total/NA	Analysis	200.7 Rev 4.4		1	292995	CHS	EET PHX	01/20/23 15:38

Client Sample ID: TB-23Q1
Date Collected: 01/18/23 08:00
Date Received: 01/18/23 14:03

Lab Sample ID: 550-196467-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	293288	R1K	EET PHX	01/26/23 19:59

Laboratory References:

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: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-23

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: IAC, Peoria

Job ID: 550-196467-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

196467

Chain Of Custody / Analysis Request

Test America - Phoenix
4625 East Cotton CTr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

AESI Ref: 44944.47592
COC#: 35008_011823

Privileged & Confidential		Site Name:	IAC, Peoria
Sampling Co.: Jacobs	EDD To: Bernice Kidd, Jacobs HTS	Location of Site:	Phoenix, AZ
Client Contact: (name, co., address)	Sampler: T. Kearsley		
Jacobs	PO #: A001036349		
1501 W. Fountainhead Parkway (suite 401)	Analysis Turnaround Time (TAT): 10		
Tempe, AZ 85282	Consultant		
Preliminary Data To: Berney Kidd Jacobs, Lakshmi@evi HTS,	Laboratory Contact: Danielle Roberts		
Sample Receipt Acknowledgement To: Sample Distribution List	Report Tier Level: 2		
Hard Copy To: Berney Kidd Jacobs,	Full Report TAT: 10		
Invoice To: Per OM&M Program process,Tao Wu, Honeywell/Copy Berney Kidd	HTS		

Phase:
Sampling Program: Quarterly
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Text & [redacted] File Drive | Excel & Text File Order

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)	SM5210B (BOD)	SM2540D (TSS)	E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)					Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units		8	10	15	10	0	0	10						
1	MW-10	----	----	MW-10-23Q1	1/18/2023	12:40	GW-GWS	WATER	REG	4	grab	N	X		X								-01		
2	MW-10	----	----	MW-10-23Q1-comp	1/18/2023	12:36	GW-GWS	WATER	REG	3	comp	N		X		X	X	X					-02		
3	EW-1	----	----	EW-1-23Q1	1/18/2023	13:20	GW-GWS	WATER	REG	3	grab	N								X			-03		
4	EW-1	----	----	EW-1-23Q1-comp	1/18/2023	13:17	GW-GWS	WATER	REG	1	comp	N							X				-04		
5	TRIPBLANK	----	----	TB-23Q1	1/18/2023	8:00	BLKWATER	WATER	TB	1	grab	N	X										-05		
6																									
7																									
8																									
9																									
10																									
11																									
12																									

550-196467 Chain of Custody

Relinquished by: Thomas Kearsley	Company: CH2M	Received by: FedEx	Company:	Condition:		Custody Seals Intact:	
	Date/Time: 1/18/22 14:03		Date/Time:	Cooler Temp.:			
Relinquished by:	Company:	Received by: EETA PHX	Company:	Condition:		Custody Seals Intact:	
	Date/Time:		Date/Time: 1/18/22 1403	Cooler Temp.:			

Preservatives: (Other; Specify): EW-1 Comp E200.7 Qrt-list only

0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, pH<2, 4 Deg C)); 8 (HCl, pH<2, 4 Deg C); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH. pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); 14 (1-MeOH, 4 Deg C and 2-NaHSO4, 4 Deg C): 15 (NaOH, pH>12, 4 Deg C); sp (special instructions)

1.0°C IR Gun

2/8/2023 (Rev. 1)

196467

Chain Of Custody / Analysis Request

Test America - Phoenix
4625 East Cotton CTr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Privileged & Confidential

Sampling Co.:	Jacobs	EDD To:	Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)		Sampler:	T. Kearsley
Jacobs		PO #	A001036349
1501 W. Fountainhead Parkway (suite 401)		Analysis Turnaround Time (TAT):	10
Tempe, AZ 85282		Consultant	
Preliminary Data To	Berney Kidd Jacobs, Lakshmi...HTS	Laboratory Contact	Danielle Roberts
Sample Receipt Acknowledgement To	Sample Distribution List	Report Tier Level	2
Hard Copy To	Berney Kidd Jacobs	Full Report TAT:	10
Invoice To:	Per OM&M Program process,Tao Wu, Honeywell/Copy Berney Kidd		HTS

Site Name:	IAC, Peoria
Location of Site:	Phoenix, AZ
Phase:	
Sampling Program	Quar

#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C.E (Cyanide)	E245 1 (mercury)	SM5210B (BOD)	SM2540D (TSS)	E200.7 (Cd, Cu, Pb, Zn) (Qrt list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)
Preservative													8	10	15	10	0	0	10	
											Units									
1	MW-10	----	----	MW-10-23Q1	1/18/2023	12:40	GW-GWS	WATER	REG	4	grab	N	X		X					
2	MW-10	----	----	MW-10-23Q1-comp	1/18/2023	12:36	GW-GWS	WATER	REG	3	comp	N		X		X	(circled)	(circled)		
3	EW-1	----	----	EW-1-23Q1	1/18/2023	13:20	GW-GWS	WATER	REG	3	grab	N								X
4	EW-1	----	----	EW-1-23Q1-comp	1/18/2023	13:17	GW-GWS	WATER	REG	1	comp	N							X	
5	TRIPBLANK	----	----	TB-23Q1	1/18/2023	8:00	BLKWATER	WATER	TB	1	grab	N	X							
6																				
7																				
8																				
9																				
10																				
11																				
12																				

550-196467 Chain of Custody

Relinquished by	Company: CH2M	Received by	Company	Condition	
Thomas Kearsley	Date/Time: 1/18/22 14:03	FedEx	Date/Time	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	
	Date/Time	EETA PHX	Date/Time: 1/18/23 1403	Cooler Temp.	1.3°

Preservatives: (Other; Specify): EW-1 Comp E200.7 Qrt-list only

0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, ... 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH, pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); pH>12, 4 D... (special instructions)

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-196467-1
SDG Number: Phoenix, AZ

Login Number: 196467
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

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ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

Peoria (AZ)
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-202006-1

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

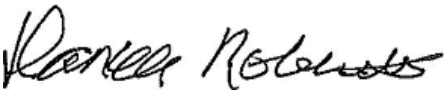
See page two for job notes and contact information.

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



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Authorized for release by
Danielle Roberts, Senior Project Manager
Danielle.Roberts@et.eurofinsus.com
(657)210-6355

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Qualifiers

Metals

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.

General Chemistry

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

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: 550-202006-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-202006-1

Comments
No additional comments.

Receipt
The samples were received on 5/10/2023 1:43 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2º C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-202006-1	MW-10-23Q2	Water	05/10/23 10:25	05/10/23 13:43
550-202006-2	MW-10-23Q2-comp	Water	05/10/23 10:23	05/10/23 13:43
550-202006-3	EW-1-23Q2	Water	05/10/23 11:17	05/10/23 13:43
550-202006-4	EW-1-23Q2-comp	Water	05/10/23 11:15	05/10/23 13:43
550-202006-5	TB-051222	Water	05/10/23 08:00	05/10/23 13:43

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q2 — Lab Sample ID: 550-202006-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.61		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	13		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.0		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q2-comp — Lab Sample ID: 550-202006-2

No Detections.

Client Sample ID: EW-1-23Q2 — Lab Sample ID: 550-202006-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.4		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	42		0.50		ug/L	1		624.1	Total/NA
Chloroform	0.98		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	13		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q2-comp — Lab Sample ID: 550-202006-4

No Detections.

Client Sample ID: TB-051222 — Lab Sample ID: 550-202006-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q2

Lab Sample ID: 550-202006-1
Date Collected: 05/10/23 10:25
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.61		0.50		ug/L			05/24/23 00:23	1
1,1-Dichloroethene	13		0.50		ug/L			05/24/23 00:23	1
Benzene	ND		0.50		ug/L			05/24/23 00:23	1
Chloroform	ND		0.50		ug/L			05/24/23 00:23	1
Trichloroethene	4.0		0.50		ug/L			05/24/23 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*05/24/23 00:23*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/24/23 00:23*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/24/23 00:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Client Sample ID: MW-10-23Q2-comp

Lab Sample ID: 550-202006-2
Date Collected: 05/10/23 10:23
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/15/23 08:19	06/01/23 20:10	1
Cadmium	ND		0.0010		mg/L		05/15/23 08:19	06/01/23 20:10	1
Copper	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Lead	ND		0.015		mg/L		05/15/23 08:19	05/23/23 19:53	1
Molybdenum	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Selenium	ND		0.10		mg/L		05/15/23 08:19	05/23/23 19:53	1
Silver	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:53	1
Zinc	ND		0.050		mg/L		05/15/23 08:19	05/23/23 19:53	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:31	1

Client Sample ID: EW-1-23Q2

Lab Sample ID: 550-202006-3
Date Collected: 05/10/23 11:17
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	3.4		0.50		ug/L			05/24/23 00:44	1
1,1-Dichloroethene	42		0.50		ug/L			05/24/23 00:44	1
Chloroform	0.98		0.50		ug/L			05/24/23 00:44	1
Trichloroethene	13		0.50		ug/L			05/24/23 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/24/23 00:44*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/24/23 00:44*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/24/23 00:44*	*1*

Client Sample ID: EW-1-23Q2

Lab Sample ID: 550-202006-3

Date Collected: 05/10/23 11:17
Matrix: Water
Date Received: 05/10/23 13:43

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Client Sample ID: EW-1-23Q2-comp

Lab Sample ID: 550-202006-4

Date Collected: 05/10/23 11:15
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/15/23 08:19	06/01/23 20:13	1
Cadmium	ND		0.0010		mg/L		05/15/23 08:19	06/01/23 20:13	1
Copper	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Lead	ND		0.015		mg/L		05/15/23 08:19	05/23/23 19:55	1
Molybdenum	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Selenium	ND		0.10		mg/L		05/15/23 08:19	05/23/23 19:55	1
Silver	ND		0.010		mg/L		05/15/23 08:19	05/23/23 19:55	1
Zinc	ND		0.050		mg/L		05/15/23 08:19	05/23/23 19:55	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:33	1

Client Sample ID: TB-051222

Lab Sample ID: 550-202006-5

Date Collected: 05/10/23 08:00
Matrix: Water
Date Received: 05/10/23 13:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			05/23/23 23:21	1
1,1-Dichloroethene	ND		0.50		ug/L			05/23/23 23:21	1
Benzene	ND		0.50		ug/L			05/23/23 23:21	1
Chloroform	ND		0.50		ug/L			05/23/23 23:21	1
Trichloroethene	ND		0.50		ug/L			05/23/23 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*05/23/23 23:21*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/23/23 23:21*	*1*
Toluene-d8 (Surr)	*96*		*60 - 140*		*05/23/23 23:21*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-202006-1	MW-10-23Q2	93	99	94
550-202006-1 MS	MW-10-23Q2	82	86	78
550-202006-1 MSD	MW-10-23Q2	86	90	82
550-202006-3	EW-1-23Q2	92	99	94
550-202006-5	TB-051222	93	99	96
LCS 550-300882/3	Lab Control Sample	83	87	84
LCSD 550-300882/4	Lab Control Sample Dup	90	93	87
MB 550-300882/6	Method Blank	89	99	95

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-300882/6
Matrix: Water
Analysis Batch: 300882

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			05/23/23 22:39	1
1,1-Dichloroethene	ND		0.50		ug/L			05/23/23 22:39	1
Benzene	ND		0.50		ug/L			05/23/23 22:39	1
Chloroform	ND		0.50		ug/L			05/23/23 22:39	1
Trichloroethene	ND		0.50		ug/L			05/23/23 22:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*05/23/23 22:39*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/23/23 22:39*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*05/23/23 22:39*	*1*

Lab Sample ID: LCS 550-300882/3
Matrix: Water
Analysis Batch: 300882

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	49.5		ug/L		99	70 - 130		
1,1-Dichloroethene			50.0	48.6		ug/L		97	50 - 150		
Benzene			50.0	46.4		ug/L		93	65 - 135		
Chloroform			50.0	52.4		ug/L		105	70 - 135		
Trichloroethene			50.0	50.5		ug/L		101	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*60 - 140*
Dibromofluoromethane (Surr)	*87*		*60 - 140*
Toluene-d8 (Surr)	*84*		*60 - 140*

Lab Sample ID: LCSD 550-300882/4
Matrix: Water
Analysis Batch: 300882

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-Dichloroethane			50.0	54.0		ug/L		108	70 - 130	9	20
1,1-Dichloroethene			50.0	52.8		ug/L		106	50 - 150	8	20
Benzene			50.0	50.5		ug/L		101	65 - 135	9	20
Chloroform			50.0	57.5		ug/L		115	70 - 135	9	20
Trichloroethene			50.0	53.1		ug/L		106	65 - 135	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*87*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-202006-1 MS
Matrix: Water
Analysis Batch: 300882

Client Sample ID: MW-10-23Q2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.61		50.0	53.2		ug/L		105	59 - 155
1,1-Dichloroethene	13		50.0	63.3		ug/L		101	10 - 234
Benzene	ND		50.0	49.4		ug/L		99	35 - 151
Chloroform	ND		50.0	56.7		ug/L		113	51 - 138
Trichloroethene	4.0		50.0	54.8		ug/L		102	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*60 - 140*
Dibromofluoromethane (Surr)	*86*		*60 - 140*
Toluene-d8 (Surr)	*78*		*60 - 140*

Lab Sample ID: 550-202006-1 MSD
Matrix: Water
Analysis Batch: 300882

Client Sample ID: MW-10-23Q2
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-Dichloroethane	0.61		50.0	51.4		ug/L		102	59 - 155	3	40
1,1-Dichloroethene	13		50.0	61.9		ug/L		98	10 - 234	2	32
Benzene	ND		50.0	48.0		ug/L		96	35 - 151	3	61
Chloroform	ND		50.0	54.5		ug/L		108	51 - 138	4	54
Trichloroethene	4.0		50.0	54.0		ug/L		100	70 - 157	2	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*
Dibromofluoromethane (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*82*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-300219/1-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300219

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Lead	ND		0.015	mg/L		05/15/23 08:19	05/23/23 18:59	1
Molybdenum	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Selenium	ND		0.10	mg/L		05/15/23 08:19	05/23/23 18:59	1
Silver	ND		0.010	mg/L		05/15/23 08:19	05/23/23 18:59	1
Zinc	ND		0.050	mg/L		05/15/23 08:19	05/23/23 18:59	1

Lab Sample ID: MB 550-300219/1-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300219

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/15/23 08:19	06/01/23 19:28	1
Cadmium	ND		0.0010	mg/L		05/15/23 08:19	06/01/23 19:28	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-300219/2-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Copper			1.00	0.870		mg/L		87	85 - 115		
Lead			1.00	0.935		mg/L		94	85 - 115		
Molybdenum			1.00	0.912		mg/L		91	85 - 115		
Selenium			1.00	0.913		mg/L		91	85 - 115		
Silver			0.0750	0.0639		mg/L		85	85 - 115		
Zinc			1.00	1.01		mg/L		101	85 - 115		

Lab Sample ID: LCS 550-300219/2-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			1.00	1.01		mg/L		101	85 - 115		
Cadmium			1.00	1.01		mg/L		101	85 - 115		

Lab Sample ID: LCSD 550-300219/3-A
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper			1.00	0.874		mg/L		87	85 - 115	0	20
Lead			1.00	0.940		mg/L		94	85 - 115	1	20
Molybdenum			1.00	0.920		mg/L		92	85 - 115	1	20
Selenium			1.00	0.921		mg/L		92	85 - 115	1	20
Silver			0.0750	0.0637		mg/L		85	85 - 115	0	20
Zinc			1.00	0.992		mg/L		99	85 - 115	1	20

Lab Sample ID: LCSD 550-300219/3-A
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300219

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			1.00	1.02		mg/L		102	85 - 115	1	20
Cadmium			1.00	0.999		mg/L		100	85 - 115	1	20

Lab Sample ID: 550-201927-K-1-A MS
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Copper	ND		1.00	0.879		mg/L		88	70 - 130		
Lead	ND		1.00	0.928		mg/L		93	70 - 130		
Molybdenum	ND		1.00	0.946		mg/L		94	70 - 130		
Selenium	ND		1.00	0.951		mg/L		95	70 - 130		
Silver	ND		0.0750	0.0645		mg/L		86	70 - 130		
Zinc	ND		1.00	0.993		mg/L		99	70 - 130		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-201927-K-1-A MS
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND	M1	1.00	2.07	E2 M1	mg/L		206	70 - 130
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130

Lab Sample ID: 550-201927-K-1-B MSD
Matrix: Water
Analysis Batch: 300917

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	ND		1.00	0.879		mg/L		88	70 - 130	0	20
Lead	ND		1.00	0.937		mg/L		94	70 - 130	1	20
Molybdenum	ND		1.00	0.955		mg/L		95	70 - 130	1	20
Selenium	ND		1.00	0.952		mg/L		95	70 - 130	0	20
Silver	ND		0.0750	0.0650		mg/L		87	70 - 130	1	20
Zinc	ND		1.00	1.00		mg/L		100	70 - 130	1	20

Lab Sample ID: 550-201927-K-1-B MSD
Matrix: Water
Analysis Batch: 301528

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 300219

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND	M1	1.00	2.07	E2 M1	mg/L		206	70 - 130	0	20
Cadmium	ND		1.00	1.00		mg/L		100	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-300113/1-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300113

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/11/23 15:30	05/11/23 19:11	1

Lab Sample ID: LCS 550-300113/2-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300113

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.00500	0.00439		mg/L		88	85 - 115

Lab Sample ID: LCSD 550-300113/3-A
Matrix: Water
Analysis Batch: 300133

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 300113

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00435		mg/L		87	85 - 115	1	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-201848-L-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300133 — **Prep Batch: 300113**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00422		mg/L		84	70 - 130

Lab Sample ID: 550-201848-L-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300133 — **Prep Batch: 300113**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00410		mg/L		82	70 - 130	3	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-300984/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/24/23 15:45	05/24/23 17:36	1

Lab Sample ID: LCS 550-300984/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total			0.100	0.0945		mg/L		95	90 - 110

Lab Sample ID: LCSD 550-300984/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0945		mg/L		95	90 - 110	0	20

Lab Sample ID: 380-47276-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND	M2	0.100	0.0816	M2	mg/L		73	80 - 120

Lab Sample ID: 380-47276-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301036 — **Prep Batch: 300984**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2	0.100	0.0794	M2	mg/L		71	80 - 120	3	20

GC/MS VOA

Analysis Batch: 300882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	624.1	
550-202006-3	EW-1-23Q2	Total/NA	Water	624.1	
550-202006-5	TB-051222	Total/NA	Water	624.1	
MB 550-300882/6	Method Blank	Total/NA	Water	624.1	
LCS 550-300882/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-300882/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-202006-1 MS	MW-10-23Q2	Total/NA	Water	624.1	
550-202006-1 MSD	MW-10-23Q2	Total/NA	Water	624.1	

Metals

Prep Batch: 300113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	245.1	
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	245.1	
MB 550-300113/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-300113/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-300113/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-201848-L-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-201848-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 300133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	245.1	300113
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	245.1	300113
MB 550-300113/1-A	Method Blank	Total/NA	Water	245.1	300113
LCS 550-300113/2-A	Lab Control Sample	Total/NA	Water	245.1	300113
LCSD 550-300113/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	300113
550-201848-L-1-B MS	Matrix Spike	Total/NA	Water	245.1	300113
550-201848-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	300113

Prep Batch: 300219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7	
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7	
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 300917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300219
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300219
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300219

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Metals

Analysis Batch: 301528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-2	MW-10-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
550-202006-4	EW-1-23Q2-comp	Total/NA	Water	200.7 Rev 4.4	300219
MB 550-300219/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	300219
LCS 550-300219/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	300219
LCSD 550-300219/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	300219
550-201927-K-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	300219

General Chemistry

Prep Batch: 300984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	SM 4500 CN C	
550-202006-3	EW-1-23Q2	Total/NA	Water	SM 4500 CN C	
MB 550-300984/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-300984/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-300984/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
380-47276-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
380-47276-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 301036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202006-1	MW-10-23Q2	Total/NA	Water	SM 4500 CN E	300984
550-202006-3	EW-1-23Q2	Total/NA	Water	SM 4500 CN E	300984
MB 550-300984/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	300984
LCS 550-300984/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	300984
LCSD 550-300984/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	300984
380-47276-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	300984
380-47276-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	300984

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q2
Date Collected: 05/10/23 10:25
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/24/23 00:23
Total/NA	Prep	SM 4500 CN C			300984	ZH	EET PHX	05/24/23 15:45
Total/NA	Analysis	SM 4500 CN E		1	301036	ZH	EET PHX	05/24/23 17:36

Client Sample ID: MW-10-23Q2-comp
Date Collected: 05/10/23 10:23
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	300917	GLW	EET PHX	05/23/23 19:53
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	301528	GLW	EET PHX	06/01/23 20:10
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:31

Client Sample ID: EW-1-23Q2
Date Collected: 05/10/23 11:17
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/24/23 00:44
Total/NA	Prep	SM 4500 CN C			300984	ZH	EET PHX	05/24/23 15:45
Total/NA	Analysis	SM 4500 CN E		1	301036	ZH	EET PHX	05/24/23 17:36

Client Sample ID: EW-1-23Q2-comp
Date Collected: 05/10/23 11:15
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	300917	GLW	EET PHX	05/23/23 19:55
Total/NA	Prep	200.7			300219	SGO	EET PHX	05/15/23 08:19
Total/NA	Analysis	200.7 Rev 4.4		1	301528	GLW	EET PHX	06/01/23 20:13
Total/NA	Prep	245.1			300113	SRR	EET PHX	05/11/23 15:30
Total/NA	Analysis	245.1		1	300133	SRR	EET PHX	05/11/23 19:33

Client Sample ID: TB-051222
Date Collected: 05/10/23 08:00
Date Received: 05/10/23 13:43

Lab Sample ID: 550-202006-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	300882	R1K	EET PHX	05/23/23 23:21

Laboratory References:

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: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-23

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202006-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

202006

6/2/2023

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell

Chain of Custody / Analysis Request

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Pricing Source (RFP, eAuction, etc)	RFP2019	HW Site Name	Peoria (AZ)	Task Type	OM&M	AESI Ref:	45056.49914
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS	Location of Site	Phoenix, AZ	WBS Code	6400	COC#	COC#
Sampler(s) names	T. Kearsley						Page 1 of 1
PO #	HW PO # A000651433					Lab Proj # (SDG):	JD11212
Analysis Turnaround Time (calendar days):	10					Lab Location ID	TAL-PHX
Consultant	Jacobs					HW Site R-Code	R35008
Laboratory Contact	Danielle Roberts					Sampling Program	Sampling program
Report Tier Level	2					Authorized User:	Honeywell
Full Report and EDD TAT (calendar days)	10					Lab Parent ID	TAL
Honeywell RM Name	Tao Wu (TW)					Text & Excel File Drive	Excel & Text File Order

Sampling Co.:	Jacobs		
Reporting Information (DocuSign First Signer)	Name	Jacobs	
	Address	1501 W. Fountainhead Parkway	
	City, State, Zip	Tempe, AZ 85282	
	Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com	
Billing Information (DocuSign Second Signer)	Co. Name	Honeywell	
	Address	111 South 34th Street M/S 158	
	City, State, Zip	Phoenix, AZ 85034	
	HW RM email	Tao.Wu@honeywell.com	

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)				E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)						Sampling Method (rt_sample_method)	Lab Sample Numbers
	Sample Identification										Units																
											Preservative		18	21	30	21			21	18							
1	MW-10	----	----	MW-10-23Q2	5/10/2023	10:25	GW-GWS	WATER	REG	4	N	N	X		X												
2	MW-10	----	----	MW-10-23Q2-comp	5/10/2023	10:23	GW-GWS	WATER	REG	1	Y	N		X		X											
3	EW-1	----	----	EW-1-23Q2	5/10/2023	11:17	GW-GWS	WATER	REG	4	N	N			X					X						
4	EW-1	----	----	EW-1-23Q2-comp	5/10/2023	11:15	GW-GWS	WATER	REG	1	Y	N		X		X											
5	Trip Blank			TB-051222	5/10/2023	8:00	BLKWATER	WATER	TB	1	N	N	X														
6																											
7																											
8																											
9																											
10																											
11																											
12																											

550-202006 Chain of Custody

Start at D66 to type instructions.

Relinquished by	Company	Jacobs	Received by	Company	EETA PHX	Condition	Custody Seals Intact
Thomas Kearsley	Date/Time	5/10/23 1843		Date/Time	5/10/23 1343	Cooler Temp.	3.2
Relinquished by	Company		Received by	Company		Condition	Custody Seals Intact
	Date/Time			Date/Time		Cooler Temp.	Lab Quote #

Preservatives: (Other; Specify):	EW-1 Comp E200.7 Qrt-list only	0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAci); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special);
		FedEx Tracking #

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-202006-1
SDG Number: Phoenix, AZ

Login Number: 202006
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 1/8/2024 2:24:07 PM Revision 1

JOB DESCRIPTION

Peoria (AZ)
Phoenix, AZ

JOB NUMBER

550-202414-1

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

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1/8/2024 2:24:07 PM
Revision 1

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

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
T2	Cited ADHS licensed method does not contain this analyte as part of the method compound list.
T5	Laboratory not licensed for this parameter

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 Narrative
550-202414-1

REVISION
The report being provided is a revision of the original report sent on 6/20/2023. The report (revision 1) is being revised due to Client emailed 1/5/2024 requesting the sample ID be updated per the emailed instructions.

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 5/18/2023 1:48 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

GC/MS VOA
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: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-202414-1	MW-04-355-23SA1	Water	05/17/23 13:08	05/18/23 13:48
550-202414-2	MW-07-285-23SA1	Water	05/17/23 12:26	05/18/23 13:48
550-202414-3	MW-12-410-23SA1	Water	05/17/23 11:30	05/18/23 13:48
550-202414-4	MW-13-355-23SA1	Water	05/17/23 10:51	05/18/23 13:48
550-202414-5	MW-14-350-23SA1	Water	05/17/23 10:12	05/18/23 13:48
550-202414-6	TB-23SA1	Water	05/17/23 08:00	05/18/23 13:48
550-202414-7	PHX-01-23SA1	Water	05/17/23 13:10	05/18/23 13:48

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: MW-04-355-23SA1 — Lab Sample ID: 550-202414-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	18		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.5		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-07-285-23SA1 — Lab Sample ID: 550-202414-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.2		0.50		ug/L	1		624.1	Total/NA
Chloroform	0.80		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	0.82		0.50		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	0.80	T5	0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-12-410-23SA1 — Lab Sample ID: 550-202414-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	4.6		0.50		ug/L	1		624.1	Total/NA
Chloroform	5.4		0.50		ug/L	1		624.1	Total/NA
Dichlorobromomethane	1.1		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	2.2		0.50		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	6.5	T5	0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-13-355-23SA1 — Lab Sample ID: 550-202414-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.6		0.50		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	1.6	T5	0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-14-350-23SA1 — Lab Sample ID: 550-202414-5

No Detections.

Client Sample ID: TB-23SA1 — Lab Sample ID: 550-202414-6

No Detections.

Client Sample ID: PHX-01-23SA1 — Lab Sample ID: 550-202414-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	19		0.50		ug/L	1		624.1	Total/NA
Tetrachloroethene	0.50		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.5		0.50		ug/L	1		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: MW-04-355-23SA1
Date Collected: 05/17/23 13:08
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-1
Matrix: Water

Method: EPA 624.1 - 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			05/26/23 16:35	1
1,1,1-Trichloroethane	ND		0.50		ug/L			05/26/23 16:35	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			05/26/23 16:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			05/26/23 16:35	1
1,1,2-Trichloroethane	ND		0.50		ug/L			05/26/23 16:35	1
1,1-Dichloroethane	ND		0.50		ug/L			05/26/23 16:35	1
1,1-Dichloroethene	**18**		0.50		ug/L			05/26/23 16:35	1
1,1-Dichloropropene	ND		0.50		ug/L			05/26/23 16:35	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			05/26/23 16:35	1
1,2,3-Trichloropropane	ND		2.0		ug/L			05/26/23 16:35	1
1,2,4-Trichlorobenzene	ND	T2 T5	2.0		ug/L			05/26/23 16:35	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			05/26/23 16:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/23 16:35	1
1,2-Dichlorobenzene	ND		0.50		ug/L			05/26/23 16:35	1
1,2-Dichloroethane	ND		0.50		ug/L			05/26/23 16:35	1
1,2-Dichloropropane	ND		0.50		ug/L			05/26/23 16:35	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			05/26/23 16:35	1
1,3-Dichlorobenzene	ND		0.50		ug/L			05/26/23 16:35	1
1,3-Dichloropropane	ND		0.50		ug/L			05/26/23 16:35	1
1,4-Dichlorobenzene	ND		0.50		ug/L			05/26/23 16:35	1
2,2-Dichloropropane	ND		1.0		ug/L			05/26/23 16:35	1
2-Butanone (MEK)	ND		10		ug/L			05/26/23 16:35	1
2-Chlorotoluene	ND		0.50		ug/L			05/26/23 16:35	1
2-Hexanone	ND		5.0		ug/L			05/26/23 16:35	1
4-Chlorotoluene	ND		0.50		ug/L			05/26/23 16:35	1
4-Isopropyltoluene	ND		0.50		ug/L			05/26/23 16:35	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			05/26/23 16:35	1
Acetone	ND		10		ug/L			05/26/23 16:35	1
Benzene	ND		0.50		ug/L			05/26/23 16:35	1
Bromobenzene	ND		1.0		ug/L			05/26/23 16:35	1
Bromoform	ND		1.0		ug/L			05/26/23 16:35	1
Bromomethane	ND		5.0		ug/L			05/26/23 16:35	1
Carbon disulfide	ND		5.0		ug/L			05/26/23 16:35	1
Carbon tetrachloride	ND		0.50		ug/L			05/26/23 16:35	1
Chlorobenzene	ND		0.50		ug/L			05/26/23 16:35	1
Chlorobromomethane	ND		0.50		ug/L			05/26/23 16:35	1
Chlorodibromomethane	ND		0.50		ug/L			05/26/23 16:35	1
Chloroethane	ND		1.0		ug/L			05/26/23 16:35	1
Chloroform	ND		0.50		ug/L			05/26/23 16:35	1
Chloromethane	ND		1.0		ug/L			05/26/23 16:35	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 16:35	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 16:35	1
Dibromomethane	ND		0.50		ug/L			05/26/23 16:35	1
Dichlorobromomethane	ND		0.50		ug/L			05/26/23 16:35	1
Dichlorodifluoromethane	ND		1.0		ug/L			05/26/23 16:35	1
Ethanol	ND		150		ug/L			05/26/23 16:35	1
Ethylbenzene	ND		0.50		ug/L			05/26/23 16:35	1
Ethylene Dibromide	ND		0.50		ug/L			05/26/23 16:35	1
Hexachlorobutadiene	ND		5.0		ug/L			05/26/23 16:35	1

Client Sample ID: MW-04-355-23SA1

Lab Sample ID: 550-202414-1

Date Collected: 05/17/23 13:08

Matrix: Water

Date Received: 05/18/23 13:48

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		2.0		ug/L			05/26/23 16:35	1
Isopropylbenzene	ND		0.50		ug/L			05/26/23 16:35	1
Methyl tert-butyl ether	ND		0.50		ug/L			05/26/23 16:35	1
Methylene Chloride	ND		5.0		ug/L			05/26/23 16:35	1
m-Xylene & p-Xylene	ND		1.0		ug/L			05/26/23 16:35	1
Naphthalene	ND		5.0		ug/L			05/26/23 16:35	1
n-Butylbenzene	ND		1.0		ug/L			05/26/23 16:35	1
N-Propylbenzene	ND		0.50		ug/L			05/26/23 16:35	1
o-Xylene	ND		0.50		ug/L			05/26/23 16:35	1
sec-Butylbenzene	ND		0.50		ug/L			05/26/23 16:35	1
Styrene	ND		1.0		ug/L			05/26/23 16:35	1
tert-Butylbenzene	ND		0.50		ug/L			05/26/23 16:35	1
Tetrachloroethene	ND		0.50		ug/L			05/26/23 16:35	1
Toluene	ND		0.50		ug/L			05/26/23 16:35	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 16:35	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 16:35	1
Trichloroethene	**4.5**		0.50		ug/L			05/26/23 16:35	1
Trichlorofluoromethane	ND		1.0		ug/L			05/26/23 16:35	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			05/26/23 16:35	1
Vinyl acetate	ND		5.0		ug/L			05/26/23 16:35	1
Vinyl chloride	ND		1.0		ug/L			05/26/23 16:35	1
Xylenes, Total	ND		0.50		ug/L			05/26/23 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/26/23 16:35*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/26/23 16:35*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*05/26/23 16:35*	*1*

Client Sample ID: MW-07-285-23SA1

Lab Sample ID: 550-202414-2

Date Collected: 05/17/23 12:26

Matrix: Water

Date Received: 05/18/23 13:48

Method: EPA 624.1 - 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			05/26/23 16:56	1
1,1,1-Trichloroethane	ND		0.50		ug/L			05/26/23 16:56	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			05/26/23 16:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			05/26/23 16:56	1
1,1,2-Trichloroethane	ND		0.50		ug/L			05/26/23 16:56	1
1,1-Dichloroethane	ND		0.50		ug/L			05/26/23 16:56	1
1,1-Dichloroethene	**1.2**		0.50		ug/L			05/26/23 16:56	1
1,1-Dichloropropene	ND		0.50		ug/L			05/26/23 16:56	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			05/26/23 16:56	1
1,2,3-Trichloropropane	ND		2.0		ug/L			05/26/23 16:56	1
1,2,4-Trichlorobenzene	ND	T2 T5	2.0		ug/L			05/26/23 16:56	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			05/26/23 16:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/23 16:56	1
1,2-Dichlorobenzene	ND		0.50		ug/L			05/26/23 16:56	1
1,2-Dichloroethane	ND		0.50		ug/L			05/26/23 16:56	1
1,2-Dichloropropane	ND		0.50		ug/L			05/26/23 16:56	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: MW-07-285-23SA1
Date Collected: 05/17/23 12:26
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-2
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50		ug/L			05/26/23 16:56	1
1,3-Dichlorobenzene	ND		0.50		ug/L			05/26/23 16:56	1
1,3-Dichloropropane	ND		0.50		ug/L			05/26/23 16:56	1
1,4-Dichlorobenzene	ND		0.50		ug/L			05/26/23 16:56	1
2,2-Dichloropropane	ND		1.0		ug/L			05/26/23 16:56	1
2-Butanone (MEK)	ND		10		ug/L			05/26/23 16:56	1
2-Chlorotoluene	ND		0.50		ug/L			05/26/23 16:56	1
2-Hexanone	ND		5.0		ug/L			05/26/23 16:56	1
4-Chlorotoluene	ND		0.50		ug/L			05/26/23 16:56	1
4-Isopropyltoluene	ND		0.50		ug/L			05/26/23 16:56	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			05/26/23 16:56	1
Acetone	ND		10		ug/L			05/26/23 16:56	1
Benzene	ND		0.50		ug/L			05/26/23 16:56	1
Bromobenzene	ND		1.0		ug/L			05/26/23 16:56	1
Bromoform	ND		1.0		ug/L			05/26/23 16:56	1
Bromomethane	ND		5.0		ug/L			05/26/23 16:56	1
Carbon disulfide	ND		5.0		ug/L			05/26/23 16:56	1
Carbon tetrachloride	ND		0.50		ug/L			05/26/23 16:56	1
Chlorobenzene	ND		0.50		ug/L			05/26/23 16:56	1
Chlorobromomethane	ND		0.50		ug/L			05/26/23 16:56	1
Chlorodibromomethane	ND		0.50		ug/L			05/26/23 16:56	1
Chloroethane	ND		1.0		ug/L			05/26/23 16:56	1
Chloroform	**0.80**		0.50		ug/L			05/26/23 16:56	1
Chloromethane	ND		1.0		ug/L			05/26/23 16:56	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 16:56	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 16:56	1
Dibromomethane	ND		0.50		ug/L			05/26/23 16:56	1
Dichlorobromomethane	ND		0.50		ug/L			05/26/23 16:56	1
Dichlorodifluoromethane	ND		1.0		ug/L			05/26/23 16:56	1
Ethanol	ND		150		ug/L			05/26/23 16:56	1
Ethylbenzene	ND		0.50		ug/L			05/26/23 16:56	1
Ethylene Dibromide	ND		0.50		ug/L			05/26/23 16:56	1
Hexachlorobutadiene	ND		5.0		ug/L			05/26/23 16:56	1
Iodomethane	ND		2.0		ug/L			05/26/23 16:56	1
Isopropylbenzene	ND		0.50		ug/L			05/26/23 16:56	1
Methyl tert-butyl ether	ND		0.50		ug/L			05/26/23 16:56	1
Methylene Chloride	ND		5.0		ug/L			05/26/23 16:56	1
m-Xylene & p-Xylene	ND		1.0		ug/L			05/26/23 16:56	1
Naphthalene	ND		5.0		ug/L			05/26/23 16:56	1
n-Butylbenzene	ND		1.0		ug/L			05/26/23 16:56	1
N-Propylbenzene	ND		0.50		ug/L			05/26/23 16:56	1
o-Xylene	ND		0.50		ug/L			05/26/23 16:56	1
sec-Butylbenzene	ND		0.50		ug/L			05/26/23 16:56	1
Styrene	ND		1.0		ug/L			05/26/23 16:56	1
tert-Butylbenzene	ND		0.50		ug/L			05/26/23 16:56	1
Tetrachloroethene	ND		0.50		ug/L			05/26/23 16:56	1
Toluene	ND		0.50		ug/L			05/26/23 16:56	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 16:56	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 16:56	1

Client Sample ID: MW-07-285-23SA1

Lab Sample ID: 550-202414-2

Date Collected: 05/17/23 12:26

Matrix: Water

Date Received: 05/18/23 13:48

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**0.82**		0.50		ug/L			05/26/23 16:56	1
Trichlorofluoromethane	ND		1.0		ug/L			05/26/23 16:56	1
Trihalomethanes, Total	**0.80**	**T5**	0.50		ug/L			05/26/23 16:56	1
Vinyl acetate	ND		5.0		ug/L			05/26/23 16:56	1
Vinyl chloride	ND		1.0		ug/L			05/26/23 16:56	1
Xylenes, Total	ND		0.50		ug/L			05/26/23 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/26/23 16:56*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/26/23 16:56*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/26/23 16:56*	*1*

Client Sample ID: MW-12-410-23SA1

Lab Sample ID: 550-202414-3

Date Collected: 05/17/23 11:30

Matrix: Water

Date Received: 05/18/23 13:48

Method: EPA 624.1 - 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			05/26/23 17:17	1
1,1,1-Trichloroethane	ND		0.50		ug/L			05/26/23 17:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			05/26/23 17:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			05/26/23 17:17	1
1,1,2-Trichloroethane	ND		0.50		ug/L			05/26/23 17:17	1
1,1-Dichloroethane	ND		0.50		ug/L			05/26/23 17:17	1
1,1-Dichloroethene	**4.6**		0.50		ug/L			05/26/23 17:17	1
1,1-Dichloropropene	ND		0.50		ug/L			05/26/23 17:17	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			05/26/23 17:17	1
1,2,3-Trichloropropane	ND		2.0		ug/L			05/26/23 17:17	1
1,2,4-Trichlorobenzene	ND	T2 T5	2.0		ug/L			05/26/23 17:17	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			05/26/23 17:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/23 17:17	1
1,2-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:17	1
1,2-Dichloroethane	ND		0.50		ug/L			05/26/23 17:17	1
1,2-Dichloropropane	ND		0.50		ug/L			05/26/23 17:17	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			05/26/23 17:17	1
1,3-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:17	1
1,3-Dichloropropane	ND		0.50		ug/L			05/26/23 17:17	1
1,4-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:17	1
2,2-Dichloropropane	ND		1.0		ug/L			05/26/23 17:17	1
2-Butanone (MEK)	ND		10		ug/L			05/26/23 17:17	1
2-Chlorotoluene	ND		0.50		ug/L			05/26/23 17:17	1
2-Hexanone	ND		5.0		ug/L			05/26/23 17:17	1
4-Chlorotoluene	ND		0.50		ug/L			05/26/23 17:17	1
4-Isopropyltoluene	ND		0.50		ug/L			05/26/23 17:17	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			05/26/23 17:17	1
Acetone	ND		10		ug/L			05/26/23 17:17	1
Benzene	ND		0.50		ug/L			05/26/23 17:17	1
Bromobenzene	ND		1.0		ug/L			05/26/23 17:17	1
Bromoform	ND		1.0		ug/L			05/26/23 17:17	1
Bromomethane	ND		5.0		ug/L			05/26/23 17:17	1

Client Sample ID: MW-12-410-23SA1

Date Collected: 05/17/23 11:30
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-3

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0		ug/L			05/26/23 17:17	1
Carbon tetrachloride	ND		0.50		ug/L			05/26/23 17:17	1
Chlorobenzene	ND		0.50		ug/L			05/26/23 17:17	1
Chlorobromomethane	ND		0.50		ug/L			05/26/23 17:17	1
Chlorodibromomethane	ND		0.50		ug/L			05/26/23 17:17	1
Chloroethane	ND		1.0		ug/L			05/26/23 17:17	1
Chloroform	**5.4**		0.50		ug/L			05/26/23 17:17	1
Chloromethane	ND		1.0		ug/L			05/26/23 17:17	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 17:17	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 17:17	1
Dibromomethane	ND		0.50		ug/L			05/26/23 17:17	1
Dichlorobromomethane	**1.1**		0.50		ug/L			05/26/23 17:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			05/26/23 17:17	1
Ethanol	ND		150		ug/L			05/26/23 17:17	1
Ethylbenzene	ND		0.50		ug/L			05/26/23 17:17	1
Ethylene Dibromide	ND		0.50		ug/L			05/26/23 17:17	1
Hexachlorobutadiene	ND		5.0		ug/L			05/26/23 17:17	1
Iodomethane	ND		2.0		ug/L			05/26/23 17:17	1
Isopropylbenzene	ND		0.50		ug/L			05/26/23 17:17	1
Methyl tert-butyl ether	ND		0.50		ug/L			05/26/23 17:17	1
Methylene Chloride	ND		5.0		ug/L			05/26/23 17:17	1
m-Xylene & p-Xylene	ND		1.0		ug/L			05/26/23 17:17	1
Naphthalene	ND		5.0		ug/L			05/26/23 17:17	1
n-Butylbenzene	ND		1.0		ug/L			05/26/23 17:17	1
N-Propylbenzene	ND		0.50		ug/L			05/26/23 17:17	1
o-Xylene	ND		0.50		ug/L			05/26/23 17:17	1
sec-Butylbenzene	ND		0.50		ug/L			05/26/23 17:17	1
Styrene	ND		1.0		ug/L			05/26/23 17:17	1
tert-Butylbenzene	ND		0.50		ug/L			05/26/23 17:17	1
Tetrachloroethene	ND		0.50		ug/L			05/26/23 17:17	1
Toluene	ND		0.50		ug/L			05/26/23 17:17	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 17:17	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 17:17	1
Trichloroethene	**2.2**		0.50		ug/L			05/26/23 17:17	1
Trichlorofluoromethane	ND		1.0		ug/L			05/26/23 17:17	1
Trihalomethanes, Total	**6.5**	**T5**	0.50		ug/L			05/26/23 17:17	1
Vinyl acetate	ND		5.0		ug/L			05/26/23 17:17	1
Vinyl chloride	ND		1.0		ug/L			05/26/23 17:17	1
Xylenes, Total	ND		0.50		ug/L			05/26/23 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*05/26/23 17:17*	*1*
Dibromofluoromethane (Surr)	*100*		*60 - 140*		*05/26/23 17:17*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/26/23 17:17*	*1*

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: MW-13-355-23SA1
Date Collected: 05/17/23 10:51
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-4
Matrix: Water

Method: EPA 624.1 - 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			05/26/23 17:38	1
1,1,1-Trichloroethane	ND		0.50		ug/L			05/26/23 17:38	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			05/26/23 17:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			05/26/23 17:38	1
1,1,2-Trichloroethane	ND		0.50		ug/L			05/26/23 17:38	1
1,1-Dichloroethane	ND		0.50		ug/L			05/26/23 17:38	1
1,1-Dichloroethene	ND		0.50		ug/L			05/26/23 17:38	1
1,1-Dichloropropene	ND		0.50		ug/L			05/26/23 17:38	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			05/26/23 17:38	1
1,2,3-Trichloropropane	ND		2.0		ug/L			05/26/23 17:38	1
1,2,4-Trichlorobenzene	ND	T2 T5	2.0		ug/L			05/26/23 17:38	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			05/26/23 17:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/23 17:38	1
1,2-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:38	1
1,2-Dichloroethane	ND		0.50		ug/L			05/26/23 17:38	1
1,2-Dichloropropane	ND		0.50		ug/L			05/26/23 17:38	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			05/26/23 17:38	1
1,3-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:38	1
1,3-Dichloropropane	ND		0.50		ug/L			05/26/23 17:38	1
1,4-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:38	1
2,2-Dichloropropane	ND		1.0		ug/L			05/26/23 17:38	1
2-Butanone (MEK)	ND		10		ug/L			05/26/23 17:38	1
2-Chlorotoluene	ND		0.50		ug/L			05/26/23 17:38	1
2-Hexanone	ND		5.0		ug/L			05/26/23 17:38	1
4-Chlorotoluene	ND		0.50		ug/L			05/26/23 17:38	1
4-Isopropyltoluene	ND		0.50		ug/L			05/26/23 17:38	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			05/26/23 17:38	1
Acetone	ND		10		ug/L			05/26/23 17:38	1
Benzene	ND		0.50		ug/L			05/26/23 17:38	1
Bromobenzene	ND		1.0		ug/L			05/26/23 17:38	1
Bromoform	ND		1.0		ug/L			05/26/23 17:38	1
Bromomethane	ND		5.0		ug/L			05/26/23 17:38	1
Carbon disulfide	ND		5.0		ug/L			05/26/23 17:38	1
Carbon tetrachloride	ND		0.50		ug/L			05/26/23 17:38	1
Chlorobenzene	ND		0.50		ug/L			05/26/23 17:38	1
Chlorobromomethane	ND		0.50		ug/L			05/26/23 17:38	1
Chlorodibromomethane	ND		0.50		ug/L			05/26/23 17:38	1
Chloroethane	ND		1.0		ug/L			05/26/23 17:38	1
Chloroform	**1.6**		0.50		ug/L			05/26/23 17:38	1
Chloromethane	ND		1.0		ug/L			05/26/23 17:38	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 17:38	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 17:38	1
Dibromomethane	ND		0.50		ug/L			05/26/23 17:38	1
Dichlorobromomethane	ND		0.50		ug/L			05/26/23 17:38	1
Dichlorodifluoromethane	ND		1.0		ug/L			05/26/23 17:38	1
Ethanol	ND		150		ug/L			05/26/23 17:38	1
Ethylbenzene	ND		0.50		ug/L			05/26/23 17:38	1
Ethylene Dibromide	ND		0.50		ug/L			05/26/23 17:38	1
Hexachlorobutadiene	ND		5.0		ug/L			05/26/23 17:38	1

Client Sample ID: MW-13-355-23SA1

Lab Sample ID: 550-202414-4

Date Collected: 05/17/23 10:51

Matrix: Water

Date Received: 05/18/23 13:48

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		2.0		ug/L			05/26/23 17:38	1
Isopropylbenzene	ND		0.50		ug/L			05/26/23 17:38	1
Methyl tert-butyl ether	ND		0.50		ug/L			05/26/23 17:38	1
Methylene Chloride	ND		5.0		ug/L			05/26/23 17:38	1
m-Xylene & p-Xylene	ND		1.0		ug/L			05/26/23 17:38	1
Naphthalene	ND		5.0		ug/L			05/26/23 17:38	1
n-Butylbenzene	ND		1.0		ug/L			05/26/23 17:38	1
N-Propylbenzene	ND		0.50		ug/L			05/26/23 17:38	1
o-Xylene	ND		0.50		ug/L			05/26/23 17:38	1
sec-Butylbenzene	ND		0.50		ug/L			05/26/23 17:38	1
Styrene	ND		1.0		ug/L			05/26/23 17:38	1
tert-Butylbenzene	ND		0.50		ug/L			05/26/23 17:38	1
Tetrachloroethene	ND		0.50		ug/L			05/26/23 17:38	1
Toluene	ND		0.50		ug/L			05/26/23 17:38	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 17:38	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 17:38	1
Trichloroethene	ND		0.50		ug/L			05/26/23 17:38	1
Trichlorofluoromethane	ND		1.0		ug/L			05/26/23 17:38	1
Trihalomethanes, Total	**1.6**	**T5**	0.50		ug/L			05/26/23 17:38	1
Vinyl acetate	ND		5.0		ug/L			05/26/23 17:38	1
Vinyl chloride	ND		1.0		ug/L			05/26/23 17:38	1
Xylenes, Total	ND		0.50		ug/L			05/26/23 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/26/23 17:38*	*1*
Dibromofluoromethane (Surr)	*100*		*60 - 140*		*05/26/23 17:38*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*05/26/23 17:38*	*1*

Client Sample ID: MW-14-350-23SA1

Lab Sample ID: 550-202414-5

Date Collected: 05/17/23 10:12

Matrix: Water

Date Received: 05/18/23 13:48

Method: EPA 624.1 - 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			05/26/23 17:59	1
1,1,1-Trichloroethane	ND		0.50		ug/L			05/26/23 17:59	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			05/26/23 17:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			05/26/23 17:59	1
1,1,2-Trichloroethane	ND		0.50		ug/L			05/26/23 17:59	1
1,1-Dichloroethane	ND		0.50		ug/L			05/26/23 17:59	1
1,1-Dichloroethene	ND		0.50		ug/L			05/26/23 17:59	1
1,1-Dichloropropene	ND		0.50		ug/L			05/26/23 17:59	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			05/26/23 17:59	1
1,2,3-Trichloropropane	ND		2.0		ug/L			05/26/23 17:59	1
1,2,4-Trichlorobenzene	ND	T2 T5	2.0		ug/L			05/26/23 17:59	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			05/26/23 17:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/23 17:59	1
1,2-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:59	1
1,2-Dichloroethane	ND		0.50		ug/L			05/26/23 17:59	1
1,2-Dichloropropane	ND		0.50		ug/L			05/26/23 17:59	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: MW-14-350-23SA1
Date Collected: 05/17/23 10:12
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-5
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50		ug/L			05/26/23 17:59	1
1,3-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:59	1
1,3-Dichloropropane	ND		0.50		ug/L			05/26/23 17:59	1
1,4-Dichlorobenzene	ND		0.50		ug/L			05/26/23 17:59	1
2,2-Dichloropropane	ND		1.0		ug/L			05/26/23 17:59	1
2-Butanone (MEK)	ND		10		ug/L			05/26/23 17:59	1
2-Chlorotoluene	ND		0.50		ug/L			05/26/23 17:59	1
2-Hexanone	ND		5.0		ug/L			05/26/23 17:59	1
4-Chlorotoluene	ND		0.50		ug/L			05/26/23 17:59	1
4-Isopropyltoluene	ND		0.50		ug/L			05/26/23 17:59	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			05/26/23 17:59	1
Acetone	ND		10		ug/L			05/26/23 17:59	1
Benzene	ND		0.50		ug/L			05/26/23 17:59	1
Bromobenzene	ND		1.0		ug/L			05/26/23 17:59	1
Bromoform	ND		1.0		ug/L			05/26/23 17:59	1
Bromomethane	ND		5.0		ug/L			05/26/23 17:59	1
Carbon disulfide	ND		5.0		ug/L			05/26/23 17:59	1
Carbon tetrachloride	ND		0.50		ug/L			05/26/23 17:59	1
Chlorobenzene	ND		0.50		ug/L			05/26/23 17:59	1
Chlorobromomethane	ND		0.50		ug/L			05/26/23 17:59	1
Chlorodibromomethane	ND		0.50		ug/L			05/26/23 17:59	1
Chloroethane	ND		1.0		ug/L			05/26/23 17:59	1
Chloroform	ND		0.50		ug/L			05/26/23 17:59	1
Chloromethane	ND		1.0		ug/L			05/26/23 17:59	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 17:59	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 17:59	1
Dibromomethane	ND		0.50		ug/L			05/26/23 17:59	1
Dichlorobromomethane	ND		0.50		ug/L			05/26/23 17:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			05/26/23 17:59	1
Ethanol	ND		150		ug/L			05/26/23 17:59	1
Ethylbenzene	ND		0.50		ug/L			05/26/23 17:59	1
Ethylene Dibromide	ND		0.50		ug/L			05/26/23 17:59	1
Hexachlorobutadiene	ND		5.0		ug/L			05/26/23 17:59	1
Iodomethane	ND		2.0		ug/L			05/26/23 17:59	1
Isopropylbenzene	ND		0.50		ug/L			05/26/23 17:59	1
Methyl tert-butyl ether	ND		0.50		ug/L			05/26/23 17:59	1
Methylene Chloride	ND		5.0		ug/L			05/26/23 17:59	1
m-Xylene & p-Xylene	ND		1.0		ug/L			05/26/23 17:59	1
Naphthalene	ND		5.0		ug/L			05/26/23 17:59	1
n-Butylbenzene	ND		1.0		ug/L			05/26/23 17:59	1
N-Propylbenzene	ND		0.50		ug/L			05/26/23 17:59	1
o-Xylene	ND		0.50		ug/L			05/26/23 17:59	1
sec-Butylbenzene	ND		0.50		ug/L			05/26/23 17:59	1
Styrene	ND		1.0		ug/L			05/26/23 17:59	1
tert-Butylbenzene	ND		0.50		ug/L			05/26/23 17:59	1
Tetrachloroethene	ND		0.50		ug/L			05/26/23 17:59	1
Toluene	ND		0.50		ug/L			05/26/23 17:59	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 17:59	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 17:59	1

Client Sample ID: MW-14-350-23SA1

Lab Sample ID: 550-202414-5

Date Collected: 05/17/23 10:12

Matrix: Water

Date Received: 05/18/23 13:48

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.50		ug/L			05/26/23 17:59	1
Trichlorofluoromethane	ND		1.0		ug/L			05/26/23 17:59	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			05/26/23 17:59	1
Vinyl acetate	ND		5.0		ug/L			05/26/23 17:59	1
Vinyl chloride	ND		1.0		ug/L			05/26/23 17:59	1
Xylenes, Total	ND		0.50		ug/L			05/26/23 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*05/26/23 17:59*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*05/26/23 17:59*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*05/26/23 17:59*	*1*

Client Sample ID: TB-23SA1

Lab Sample ID: 550-202414-6

Date Collected: 05/17/23 08:00

Matrix: Water

Date Received: 05/18/23 13:48

Method: EPA 624.1 - 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			05/26/23 18:20	1
1,1,1-Trichloroethane	ND		0.50		ug/L			05/26/23 18:20	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			05/26/23 18:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			05/26/23 18:20	1
1,1,2-Trichloroethane	ND		0.50		ug/L			05/26/23 18:20	1
1,1-Dichloroethane	ND		0.50		ug/L			05/26/23 18:20	1
1,1-Dichloroethene	ND		0.50		ug/L			05/26/23 18:20	1
1,1-Dichloropropene	ND		0.50		ug/L			05/26/23 18:20	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			05/26/23 18:20	1
1,2,3-Trichloropropane	ND		2.0		ug/L			05/26/23 18:20	1
1,2,4-Trichlorobenzene	ND	T2 T5	2.0		ug/L			05/26/23 18:20	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			05/26/23 18:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/23 18:20	1
1,2-Dichlorobenzene	ND		0.50		ug/L			05/26/23 18:20	1
1,2-Dichloroethane	ND		0.50		ug/L			05/26/23 18:20	1
1,2-Dichloropropane	ND		0.50		ug/L			05/26/23 18:20	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			05/26/23 18:20	1
1,3-Dichlorobenzene	ND		0.50		ug/L			05/26/23 18:20	1
1,3-Dichloropropane	ND		0.50		ug/L			05/26/23 18:20	1
1,4-Dichlorobenzene	ND		0.50		ug/L			05/26/23 18:20	1
2,2-Dichloropropane	ND		1.0		ug/L			05/26/23 18:20	1
2-Butanone (MEK)	ND		10		ug/L			05/26/23 18:20	1
2-Chlorotoluene	ND		0.50		ug/L			05/26/23 18:20	1
2-Hexanone	ND		5.0		ug/L			05/26/23 18:20	1
4-Chlorotoluene	ND		0.50		ug/L			05/26/23 18:20	1
4-Isopropyltoluene	ND		0.50		ug/L			05/26/23 18:20	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			05/26/23 18:20	1
Acetone	ND		10		ug/L			05/26/23 18:20	1
Benzene	ND		0.50		ug/L			05/26/23 18:20	1
Bromobenzene	ND		1.0		ug/L			05/26/23 18:20	1
Bromoform	ND		1.0		ug/L			05/26/23 18:20	1
Bromomethane	ND		5.0		ug/L			05/26/23 18:20	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: TB-23SA1
Date Collected: 05/17/23 08:00
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-6
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0		ug/L			05/26/23 18:20	1
Carbon tetrachloride	ND		0.50		ug/L			05/26/23 18:20	1
Chlorobenzene	ND		0.50		ug/L			05/26/23 18:20	1
Chlorobromomethane	ND		0.50		ug/L			05/26/23 18:20	1
Chlorodibromomethane	ND		0.50		ug/L			05/26/23 18:20	1
Chloroethane	ND		1.0		ug/L			05/26/23 18:20	1
Chloroform	ND		0.50		ug/L			05/26/23 18:20	1
Chloromethane	ND		1.0		ug/L			05/26/23 18:20	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 18:20	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 18:20	1
Dibromomethane	ND		0.50		ug/L			05/26/23 18:20	1
Dichlorobromomethane	ND		0.50		ug/L			05/26/23 18:20	1
Dichlorodifluoromethane	ND		1.0		ug/L			05/26/23 18:20	1
Ethanol	ND		150		ug/L			05/26/23 18:20	1
Ethylbenzene	ND		0.50		ug/L			05/26/23 18:20	1
Ethylene Dibromide	ND		0.50		ug/L			05/26/23 18:20	1
Hexachlorobutadiene	ND		5.0		ug/L			05/26/23 18:20	1
Iodomethane	ND		2.0		ug/L			05/26/23 18:20	1
Isopropylbenzene	ND		0.50		ug/L			05/26/23 18:20	1
Methyl tert-butyl ether	ND		0.50		ug/L			05/26/23 18:20	1
Methylene Chloride	ND		5.0		ug/L			05/26/23 18:20	1
m-Xylene & p-Xylene	ND		1.0		ug/L			05/26/23 18:20	1
Naphthalene	ND		5.0		ug/L			05/26/23 18:20	1
n-Butylbenzene	ND		1.0		ug/L			05/26/23 18:20	1
N-Propylbenzene	ND		0.50		ug/L			05/26/23 18:20	1
o-Xylene	ND		0.50		ug/L			05/26/23 18:20	1
sec-Butylbenzene	ND		0.50		ug/L			05/26/23 18:20	1
Styrene	ND		1.0		ug/L			05/26/23 18:20	1
tert-Butylbenzene	ND		0.50		ug/L			05/26/23 18:20	1
Tetrachloroethene	ND		0.50		ug/L			05/26/23 18:20	1
Toluene	ND		0.50		ug/L			05/26/23 18:20	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 18:20	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 18:20	1
Trichloroethene	ND		0.50		ug/L			05/26/23 18:20	1
Trichlorofluoromethane	ND		1.0		ug/L			05/26/23 18:20	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			05/26/23 18:20	1
Vinyl acetate	ND		5.0		ug/L			05/26/23 18:20	1
Vinyl chloride	ND		1.0		ug/L			05/26/23 18:20	1
Xylenes, Total	ND		0.50		ug/L			05/26/23 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*05/26/23 18:20*	*1*
Dibromofluoromethane (Surr)	*100*		*60 - 140*		*05/26/23 18:20*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/26/23 18:20*	*1*

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: PHX-01-23SA1
Date Collected: 05/17/23 13:10
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-7
Matrix: Water

Method: EPA 624.1 - 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			05/26/23 18:42	1
1,1,1-Trichloroethane	ND		0.50		ug/L			05/26/23 18:42	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			05/26/23 18:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			05/26/23 18:42	1
1,1,2-Trichloroethane	ND		0.50		ug/L			05/26/23 18:42	1
1,1-Dichloroethane	ND		0.50		ug/L			05/26/23 18:42	1
1,1-Dichloroethene	**19**		0.50		ug/L			05/26/23 18:42	1
1,1-Dichloropropene	ND		0.50		ug/L			05/26/23 18:42	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			05/26/23 18:42	1
1,2,3-Trichloropropane	ND		2.0		ug/L			05/26/23 18:42	1
1,2,4-Trichlorobenzene	ND	T2 T5	2.0		ug/L			05/26/23 18:42	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			05/26/23 18:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/23 18:42	1
1,2-Dichlorobenzene	ND		0.50		ug/L			05/26/23 18:42	1
1,2-Dichloroethane	ND		0.50		ug/L			05/26/23 18:42	1
1,2-Dichloropropane	ND		0.50		ug/L			05/26/23 18:42	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			05/26/23 18:42	1
1,3-Dichlorobenzene	ND		0.50		ug/L			05/26/23 18:42	1
1,3-Dichloropropane	ND		0.50		ug/L			05/26/23 18:42	1
1,4-Dichlorobenzene	ND		0.50		ug/L			05/26/23 18:42	1
2,2-Dichloropropane	ND		1.0		ug/L			05/26/23 18:42	1
2-Butanone (MEK)	ND		10		ug/L			05/26/23 18:42	1
2-Chlorotoluene	ND		0.50		ug/L			05/26/23 18:42	1
2-Hexanone	ND		5.0		ug/L			05/26/23 18:42	1
4-Chlorotoluene	ND		0.50		ug/L			05/26/23 18:42	1
4-Isopropyltoluene	ND		0.50		ug/L			05/26/23 18:42	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			05/26/23 18:42	1
Acetone	ND		10		ug/L			05/26/23 18:42	1
Benzene	ND		0.50		ug/L			05/26/23 18:42	1
Bromobenzene	ND		1.0		ug/L			05/26/23 18:42	1
Bromoform	ND		1.0		ug/L			05/26/23 18:42	1
Bromomethane	ND		5.0		ug/L			05/26/23 18:42	1
Carbon disulfide	ND		5.0		ug/L			05/26/23 18:42	1
Carbon tetrachloride	ND		0.50		ug/L			05/26/23 18:42	1
Chlorobenzene	ND		0.50		ug/L			05/26/23 18:42	1
Chlorobromomethane	ND		0.50		ug/L			05/26/23 18:42	1
Chlorodibromomethane	ND		0.50		ug/L			05/26/23 18:42	1
Chloroethane	ND		1.0		ug/L			05/26/23 18:42	1
Chloroform	ND		0.50		ug/L			05/26/23 18:42	1
Chloromethane	ND		1.0		ug/L			05/26/23 18:42	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 18:42	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 18:42	1
Dibromomethane	ND		0.50		ug/L			05/26/23 18:42	1
Dichlorobromomethane	ND		0.50		ug/L			05/26/23 18:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			05/26/23 18:42	1
Ethanol	ND		150		ug/L			05/26/23 18:42	1
Ethylbenzene	ND		0.50		ug/L			05/26/23 18:42	1
Ethylene Dibromide	ND		0.50		ug/L			05/26/23 18:42	1
Hexachlorobutadiene	ND		5.0		ug/L			05/26/23 18:42	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: PHX-01-23SA1
Date Collected: 05/17/23 13:10
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-7
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		2.0		ug/L			05/26/23 18:42	1
Isopropylbenzene	ND		0.50		ug/L			05/26/23 18:42	1
Methyl tert-butyl ether	ND		0.50		ug/L			05/26/23 18:42	1
Methylene Chloride	ND		5.0		ug/L			05/26/23 18:42	1
m-Xylene & p-Xylene	ND		1.0		ug/L			05/26/23 18:42	1
Naphthalene	ND		5.0		ug/L			05/26/23 18:42	1
n-Butylbenzene	ND		1.0		ug/L			05/26/23 18:42	1
N-Propylbenzene	ND		0.50		ug/L			05/26/23 18:42	1
o-Xylene	ND		0.50		ug/L			05/26/23 18:42	1
sec-Butylbenzene	ND		0.50		ug/L			05/26/23 18:42	1
Styrene	ND		1.0		ug/L			05/26/23 18:42	1
tert-Butylbenzene	ND		0.50		ug/L			05/26/23 18:42	1
Tetrachloroethene	**0.50**		0.50		ug/L			05/26/23 18:42	1
Toluene	ND		0.50		ug/L			05/26/23 18:42	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 18:42	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 18:42	1
Trichloroethene	**4.5**		0.50		ug/L			05/26/23 18:42	1
Trichlorofluoromethane	ND		1.0		ug/L			05/26/23 18:42	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			05/26/23 18:42	1
Vinyl acetate	ND		5.0		ug/L			05/26/23 18:42	1
Vinyl chloride	ND		1.0		ug/L			05/26/23 18:42	1
Xylenes, Total	ND		0.50		ug/L			05/26/23 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*05/26/23 18:42*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*05/26/23 18:42*	*1*
Toluene-d8 (Surr)	*93*		*60 - 140*		*05/26/23 18:42*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-202346-D-1 MS	Matrix Spike	91	98	90
550-202346-D-1 MSD	Matrix Spike Duplicate	90	95	88
550-202414-1	MW-04-355-23SA1	92	99	95
550-202414-2	MW-07-285-23SA1	92	99	94
550-202414-3	MW-12-410-23SA1	90	100	94
550-202414-4	MW-13-355-23SA1	92	100	95
550-202414-5	MW-14-350-23SA1	90	101	95
550-202414-6	TB-23SA1	90	100	94
550-202414-7	PHX-01-23SA1	93	101	93
LCS 550-301138/3	Lab Control Sample	90	96	90
LCSD 550-301138/4	Lab Control Sample Dup	90	95	89
MB 550-301138/6	Method Blank	89	99	94

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-301138/6
Matrix: Water
Analysis Batch: 301138

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			05/26/23 12:45	1
1,1,1-Trichloroethane	ND		0.50		ug/L			05/26/23 12:45	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			05/26/23 12:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			05/26/23 12:45	1
1,1,2-Trichloroethane	ND		0.50		ug/L			05/26/23 12:45	1
1,1-Dichloroethane	ND		0.50		ug/L			05/26/23 12:45	1
1,1-Dichloroethene	ND		0.50		ug/L			05/26/23 12:45	1
1,1-Dichloropropene	ND		0.50		ug/L			05/26/23 12:45	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			05/26/23 12:45	1
1,2,3-Trichloropropane	ND		2.0		ug/L			05/26/23 12:45	1
1,2,4-Trichlorobenzene	ND	T2	2.0		ug/L			05/26/23 12:45	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			05/26/23 12:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/23 12:45	1
1,2-Dichlorobenzene	ND		0.50		ug/L			05/26/23 12:45	1
1,2-Dichloroethane	ND		0.50		ug/L			05/26/23 12:45	1
1,2-Dichloropropane	ND		0.50		ug/L			05/26/23 12:45	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			05/26/23 12:45	1
1,3-Dichlorobenzene	ND		0.50		ug/L			05/26/23 12:45	1
1,3-Dichloropropane	ND		0.50		ug/L			05/26/23 12:45	1
1,4-Dichlorobenzene	ND		0.50		ug/L			05/26/23 12:45	1
2,2-Dichloropropane	ND		1.0		ug/L			05/26/23 12:45	1
2-Butanone (MEK)	ND		10		ug/L			05/26/23 12:45	1
2-Chlorotoluene	ND		0.50		ug/L			05/26/23 12:45	1
2-Hexanone	ND		5.0		ug/L			05/26/23 12:45	1
4-Chlorotoluene	ND		0.50		ug/L			05/26/23 12:45	1
4-Isopropyltoluene	ND		0.50		ug/L			05/26/23 12:45	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			05/26/23 12:45	1
Acetone	ND		10		ug/L			05/26/23 12:45	1
Benzene	ND		0.50		ug/L			05/26/23 12:45	1
Bromobenzene	ND		1.0		ug/L			05/26/23 12:45	1
Bromoform	ND		1.0		ug/L			05/26/23 12:45	1
Bromomethane	ND		5.0		ug/L			05/26/23 12:45	1
Carbon disulfide	ND		5.0		ug/L			05/26/23 12:45	1
Carbon tetrachloride	ND		0.50		ug/L			05/26/23 12:45	1
Chlorobenzene	ND		0.50		ug/L			05/26/23 12:45	1
Chlorobromomethane	ND		0.50		ug/L			05/26/23 12:45	1
Chlorodibromomethane	ND		0.50		ug/L			05/26/23 12:45	1
Chloroethane	ND		1.0		ug/L			05/26/23 12:45	1
Chloroform	ND		0.50		ug/L			05/26/23 12:45	1
Chloromethane	ND		1.0		ug/L			05/26/23 12:45	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 12:45	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 12:45	1
Dibromomethane	ND		0.50		ug/L			05/26/23 12:45	1
Dichlorobromomethane	ND		0.50		ug/L			05/26/23 12:45	1
Dichlorodifluoromethane	ND		1.0		ug/L			05/26/23 12:45	1
Ethanol	ND		150		ug/L			05/26/23 12:45	1
Ethylbenzene	ND		0.50		ug/L			05/26/23 12:45	1
Ethylene Dibromide	ND		0.50		ug/L			05/26/23 12:45	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 550-301138/6
Matrix: Water
Analysis Batch: 301138

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		5.0		ug/L			05/26/23 12:45	1
Iodomethane	ND		2.0		ug/L			05/26/23 12:45	1
Isopropylbenzene	ND		0.50		ug/L			05/26/23 12:45	1
Methyl tert-butyl ether	ND		0.50		ug/L			05/26/23 12:45	1
Methylene Chloride	ND		5.0		ug/L			05/26/23 12:45	1
m-Xylene & p-Xylene	ND		1.0		ug/L			05/26/23 12:45	1
Naphthalene	ND		5.0		ug/L			05/26/23 12:45	1
n-Butylbenzene	ND		1.0		ug/L			05/26/23 12:45	1
N-Propylbenzene	ND		0.50		ug/L			05/26/23 12:45	1
o-Xylene	ND		0.50		ug/L			05/26/23 12:45	1
sec-Butylbenzene	ND		0.50		ug/L			05/26/23 12:45	1
Styrene	ND		1.0		ug/L			05/26/23 12:45	1
tert-Butylbenzene	ND		0.50		ug/L			05/26/23 12:45	1
Tetrachloroethene	ND		0.50		ug/L			05/26/23 12:45	1
Toluene	ND		0.50		ug/L			05/26/23 12:45	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			05/26/23 12:45	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/26/23 12:45	1
Trichloroethene	ND		0.50		ug/L			05/26/23 12:45	1
Trichlorofluoromethane	ND		1.0		ug/L			05/26/23 12:45	1
Trihalomethanes, Total	ND		0.50		ug/L			05/26/23 12:45	1
Vinyl acetate	ND		5.0		ug/L			05/26/23 12:45	1
Vinyl chloride	ND		1.0		ug/L			05/26/23 12:45	1
Xylenes, Total	ND		0.50		ug/L			05/26/23 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*05/26/23 12:45*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*05/26/23 12:45*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*05/26/23 12:45*	*1*

Lab Sample ID: LCS 550-301138/3
Matrix: Water
Analysis Batch: 301138

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	54.1		ug/L		108	60 - 140
1,1,1-Trichloroethane	50.0	57.4		ug/L		115	70 - 130
1,1,2,2-Tetrachloroethane	50.0	50.0		ug/L		100	60 - 140
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	70 - 130
1,1-Dichloroethane	50.0	50.7		ug/L		101	70 - 130
1,1-Dichloroethene	50.0	49.0		ug/L		98	50 - 150
1,1-Dichloropropene	50.0	51.8		ug/L		104	60 - 140
1,2,3-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 140
1,2,3-Trichloropropane	50.0	54.5		ug/L		109	60 - 140
1,2,4-Trichlorobenzene	50.0	49.6	T2	ug/L		99	60 - 140
1,2,4-Trimethylbenzene	50.0	54.1		ug/L		108	60 - 140
1,2-Dibromo-3-Chloropropane	50.0	62.9		ug/L		126	60 - 140
1,2-Dichlorobenzene	50.0	49.6		ug/L		99	65 - 135
1,2-Dichloroethane	50.0	59.0		ug/L		118	70 - 130

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-301138/3
Matrix: Water
Analysis Batch: 301138

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloropropane	50.0	46.9		ug/L		94	35 - 165
1,3,5-Trimethylbenzene	50.0	54.1		ug/L		108	60 - 140
1,3-Dichlorobenzene	50.0	50.0		ug/L		100	70 - 130
1,3-Dichloropropane	50.0	49.3		ug/L		99	60 - 140
1,4-Dichlorobenzene	50.0	48.6		ug/L		97	65 - 135
2,2-Dichloropropane	50.0	58.6		ug/L		117	60 - 140
2-Butanone (MEK)	50.0	51.6		ug/L		103	60 - 140
2-Chlorotoluene	50.0	53.2		ug/L		106	60 - 140
2-Hexanone	50.0	54.8		ug/L		110	60 - 140
4-Chlorotoluene	50.0	51.6		ug/L		103	60 - 140
4-Isopropyltoluene	50.0	54.0		ug/L		108	60 - 140
4-Methyl-2-pentanone (MIBK)	50.0	53.2		ug/L		106	60 - 140
Acetone	50.0	53.9		ug/L		108	18 - 150
Benzene	50.0	48.0		ug/L		96	65 - 135
Bromobenzene	50.0	51.3		ug/L		103	60 - 140
Bromoform	50.0	60.1		ug/L		120	70 - 130
Bromomethane	50.0	52.2		ug/L		104	15 - 185
Carbon disulfide	50.0	48.6		ug/L		97	60 - 140
Carbon tetrachloride	50.0	58.8		ug/L		118	70 - 130
Chlorobenzene	50.0	49.0		ug/L		98	65 - 135
Chlorobromomethane	50.0	46.9		ug/L		94	60 - 140
Chlorodibromomethane	50.0	56.9		ug/L		114	70 - 135
Chloroethane	50.0	50.8		ug/L		102	40 - 160
Chloroform	50.0	53.6		ug/L		107	70 - 135
Chloromethane	50.0	43.6		ug/L		87	10 - 205
cis-1,2-Dichloroethene	50.0	49.9		ug/L		100	60 - 140
cis-1,3-Dichloropropene	50.0	53.6		ug/L		107	25 - 175
Dibromomethane	50.0	49.6		ug/L		99	70 - 130
Dichlorobromomethane	50.0	56.6		ug/L		113	65 - 135
Dichlorodifluoromethane	50.0	49.1		ug/L		98	60 - 140
Ethanol	1000	868		ug/L		87	60 - 140
Ethylbenzene	50.0	50.6		ug/L		101	60 - 140
Ethylene Dibromide	50.0	50.8		ug/L		102	60 - 140
Hexachlorobutadiene	50.0	48.0		ug/L		96	60 - 140
Iodomethane	50.0	50.8		ug/L		102	60 - 140
Isopropylbenzene	50.0	53.8		ug/L		108	60 - 140
Methyl tert-butyl ether	50.0	56.9		ug/L		114	60 - 140
Methylene Chloride	50.0	48.8		ug/L		98	60 - 140
m-Xylene & p-Xylene	50.0	51.7		ug/L		103	60 - 140
Naphthalene	50.0	51.6		ug/L		103	60 - 140
n-Butylbenzene	50.0	51.7		ug/L		103	60 - 140
N-Propylbenzene	50.0	52.1		ug/L		104	60 - 140
o-Xylene	50.0	52.7		ug/L		105	60 - 140
sec-Butylbenzene	50.0	52.4		ug/L		105	60 - 140
Styrene	50.0	53.0		ug/L		106	60 - 140
tert-Butylbenzene	50.0	54.2		ug/L		108	60 - 140
Tetrachloroethene	50.0	49.6		ug/L		99	70 - 130
Toluene	50.0	49.4		ug/L		99	70 - 130
trans-1,2-Dichloroethene	50.0	50.2		ug/L		100	70 - 130

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-301138/3
Matrix: Water
Analysis Batch: 301138

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
trans-1,3-Dichloropropene			50.0	57.2		ug/L		114	50 - 150		
Trichloroethene			50.0	50.3		ug/L		101	65 - 135		
Trichlorofluoromethane			50.0	56.1		ug/L		112	50 - 150		
Vinyl acetate			50.0	58.9		ug/L		118	60 - 140		
Vinyl chloride			50.0	49.5		ug/L		99	5 - 195		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*
Dibromofluoromethane (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*90*		*60 - 140*

Lab Sample ID: LCSD 550-301138/4
Matrix: Water
Analysis Batch: 301138

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	53.3		ug/L		107	60 - 140	1	20
1,1,1-Trichloroethane			50.0	58.0		ug/L		116	70 - 130	1	20
1,1,2,2-Tetrachloroethane			50.0	49.7		ug/L		99	60 - 140	1	20
1,1,2-Trichloroethane			50.0	49.2		ug/L		98	70 - 130	1	20
1,1-Dichloroethane			50.0	50.7		ug/L		101	70 - 130	0	20
1,1-Dichloroethene			50.0	49.6		ug/L		99	50 - 150	1	20
1,1-Dichloropropene			50.0	50.9		ug/L		102	60 - 140	2	20
1,2,3-Trichlorobenzene			50.0	50.9		ug/L		102	60 - 140	3	20
1,2,3-Trichloropropane			50.0	54.3		ug/L		109	60 - 140	0	20
1,2,4-Trichlorobenzene			50.0	50.9	T2	ug/L		102	60 - 140	3	20
1,2,4-Trimethylbenzene			50.0	53.2		ug/L		106	60 - 140	2	20
1,2-Dibromo-3-Chloropropane			50.0	64.3		ug/L		129	60 - 140	2	20
1,2-Dichlorobenzene			50.0	49.7		ug/L		99	65 - 135	0	20
1,2-Dichloroethane			50.0	57.7		ug/L		115	70 - 130	2	20
1,2-Dichloropropane			50.0	46.7		ug/L		93	35 - 165	1	20
1,3,5-Trimethylbenzene			50.0	52.9		ug/L		106	60 - 140	2	20
1,3-Dichlorobenzene			50.0	50.4		ug/L		101	70 - 130	1	20
1,3-Dichloropropane			50.0	49.9		ug/L		100	60 - 140	1	20
1,4-Dichlorobenzene			50.0	49.1		ug/L		98	65 - 135	1	20
2,2-Dichloropropane			50.0	58.6		ug/L		117	60 - 140	0	20
2-Butanone (MEK)			50.0	52.0		ug/L		104	60 - 140	1	20
2-Chlorotoluene			50.0	52.4		ug/L		105	60 - 140	2	20
2-Hexanone			50.0	54.1		ug/L		108	60 - 140	1	20
4-Chlorotoluene			50.0	51.8		ug/L		104	60 - 140	0	20
4-Isopropyltoluene			50.0	53.6		ug/L		107	60 - 140	1	20
4-Methyl-2-pentanone (MIBK)			50.0	53.1		ug/L		106	60 - 140	0	20
Acetone			50.0	51.0		ug/L		102	18 - 150	5	20
Benzene			50.0	47.4		ug/L		95	65 - 135	1	20
Bromobenzene			50.0	51.1		ug/L		102	60 - 140	0	20
Bromoform			50.0	60.4		ug/L		121	70 - 130	0	20
Bromomethane			50.0	52.9		ug/L		106	15 - 185	1	20
Carbon disulfide			50.0	49.1		ug/L		98	60 - 140	1	20

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 550-301138/4
Matrix: Water
Analysis Batch: 301138

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 tetrachloride			50.0	57.8		ug/L		116	70 - 130	2	20
Chlorobenzene			50.0	48.8		ug/L		98	65 - 135	0	20
Chlorobromomethane			50.0	46.9		ug/L		94	60 - 140	0	20
Chlorodibromomethane			50.0	56.6		ug/L		113	70 - 135	1	20
Chloroethane			50.0	51.8		ug/L		104	40 - 160	2	20
Chloroform			50.0	53.5		ug/L		107	70 - 135	0	20
Chloromethane			50.0	45.9		ug/L		92	10 - 205	5	20
cis-1,2-Dichloroethene			50.0	48.5		ug/L		97	60 - 140	3	20
cis-1,3-Dichloropropene			50.0	53.6		ug/L		107	25 - 175	0	20
Dibromomethane			50.0	48.6		ug/L		97	70 - 130	2	20
Dichlorobromomethane			50.0	55.9		ug/L		112	65 - 135	1	20
Dichlorodifluoromethane			50.0	52.0		ug/L		104	60 - 140	6	20
Ethanol			1000	867		ug/L		87	60 - 140	0	20
Ethylbenzene			50.0	51.0		ug/L		102	60 - 140	1	20
Ethylene Dibromide			50.0	51.6		ug/L		103	60 - 140	2	20
Hexachlorobutadiene			50.0	50.1		ug/L		100	60 - 140	4	20
Iodomethane			50.0	51.3		ug/L		103	60 - 140	1	20
Isopropylbenzene			50.0	53.0		ug/L		106	60 - 140	1	20
Methyl tert-butyl ether			50.0	56.3		ug/L		113	60 - 140	1	20
Methylene Chloride			50.0	48.4		ug/L		97	60 - 140	1	20
m-Xylene & p-Xylene			50.0	51.2		ug/L		102	60 - 140	1	20
Naphthalene			50.0	53.6		ug/L		107	60 - 140	4	20
n-Butylbenzene			50.0	52.1		ug/L		104	60 - 140	1	20
N-Propylbenzene			50.0	52.0		ug/L		104	60 - 140	0	20
o-Xylene			50.0	51.8		ug/L		104	60 - 140	2	20
sec-Butylbenzene			50.0	51.6		ug/L		103	60 - 140	2	20
Styrene			50.0	53.1		ug/L		106	60 - 140	0	20
tert-Butylbenzene			50.0	53.6		ug/L		107	60 - 140	1	20
Tetrachloroethene			50.0	49.5		ug/L		99	70 - 130	0	20
Toluene			50.0	49.4		ug/L		99	70 - 130	0	20
trans-1,2-Dichloroethene			50.0	50.1		ug/L		100	70 - 130	0	20
trans-1,3-Dichloropropene			50.0	57.8		ug/L		116	50 - 150	1	20
Trichloroethene			50.0	50.1		ug/L		100	65 - 135	0	20
Trichlorofluoromethane			50.0	57.4		ug/L		115	50 - 150	2	20
Vinyl acetate			50.0	59.6		ug/L		119	60 - 140	1	20
Vinyl chloride			50.0	51.1		ug/L		102	5 - 195	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*
Dibromofluoromethane (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*89*		*60 - 140*

Lab Sample ID: 550-202346-D-1 MS
Matrix: Water
Analysis Batch: 301138

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
1,1,1,2-Tetrachloroethane	ND		50.0	52.5		ug/L		105	50 - 150

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-202346-D-1 MS
Matrix: Water
Analysis Batch: 301138

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
1,1,1-Trichloroethane	ND		50.0	56.8		ug/L		114	52 - 162
1,1,2,2-Tetrachloroethane	ND		50.0	48.4		ug/L		96	46 - 157
1,1,2-Trichloroethane	ND		50.0	48.2		ug/L		96	52 - 150
1,1-Dichloroethane	ND		50.0	49.8		ug/L		99	59 - 155
1,1-Dichloroethene	ND		50.0	47.8		ug/L		96	10 - 234
1,1-Dichloropropene	ND		50.0	48.6		ug/L		97	50 - 150
1,2,3-Trichlorobenzene	ND		50.0	49.3		ug/L		95	50 - 150
1,2,3-Trichloropropane	ND		50.0	53.4		ug/L		107	50 - 150
1,2,4-Trichlorobenzene	ND	T2	50.0	49.4	T2	ug/L		96	50 - 150
1,2,4-Trimethylbenzene	ND		50.0	51.5		ug/L		102	50 - 150
1,2-Dibromo-3-Chloropropane	ND		50.0	64.8		ug/L		130	50 - 150
1,2-Dichlorobenzene	0.78		50.0	48.7		ug/L		96	18 - 190
1,2-Dichloroethane	ND		50.0	57.5		ug/L		115	49 - 155
1,2-Dichloropropane	ND		50.0	45.4		ug/L		91	10 - 210
1,3,5-Trimethylbenzene	ND		50.0	51.4		ug/L		103	50 - 150
1,3-Dichlorobenzene	0.56		50.0	48.7		ug/L		96	59 - 156
1,3-Dichloropropane	ND		50.0	49.2		ug/L		98	50 - 150
1,4-Dichlorobenzene	0.69		50.0	48.0		ug/L		95	18 - 190
2,2-Dichloropropane	ND		50.0	56.2		ug/L		112	50 - 150
2-Butanone (MEK)	ND		50.0	50.0		ug/L		100	50 - 150
2-Chlorotoluene	ND		50.0	51.0		ug/L		102	50 - 150
2-Hexanone	ND		50.0	50.2		ug/L		100	50 - 150
4-Chlorotoluene	ND		50.0	50.4		ug/L		100	50 - 150
4-Isopropyltoluene	ND		50.0	51.6		ug/L		103	50 - 150
4-Methyl-2-pentanone (MIBK)	ND		50.0	49.7		ug/L		99	50 - 150
Acetone	ND		50.0	45.2		ug/L		90	18 - 150
Benzene	ND		50.0	45.4		ug/L		91	35 - 151
Bromobenzene	ND		50.0	50.1		ug/L		100	50 - 150
Bromoform	ND		50.0	59.7		ug/L		119	45 - 169
Bromomethane	ND		50.0	50.6		ug/L		101	10 - 242
Carbon disulfide	ND		50.0	47.3		ug/L		95	50 - 150
Carbon tetrachloride	ND		50.0	56.1		ug/L		112	70 - 140
Chlorobenzene	ND		50.0	47.6		ug/L		95	37 - 160
Chlorobromomethane	ND		50.0	46.8		ug/L		94	50 - 150
Chlorodibromomethane	ND		50.0	56.1		ug/L		112	53 - 149
Chloroethane	ND		50.0	48.2		ug/L		96	14 - 230
Chloroform	ND		50.0	52.7		ug/L		105	51 - 138
Chloromethane	ND		50.0	42.2		ug/L		84	10 - 273
cis-1,2-Dichloroethene	ND		50.0	46.6		ug/L		93	50 - 150
cis-1,3-Dichloropropene	ND		50.0	51.5		ug/L		103	10 - 227
Dibromomethane	ND		50.0	47.9		ug/L		96	50 - 150
Dichlorobromomethane	ND		50.0	54.8		ug/L		110	35 - 155
Dichlorodifluoromethane	ND		50.0	50.7		ug/L		101	50 - 150
Ethanol	ND		1000	826		ug/L		83	50 - 150
Ethylbenzene	ND		50.0	49.6		ug/L		99	37 - 162
Ethylene Dibromide	ND		50.0	50.9		ug/L		102	50 - 150
Hexachlorobutadiene	ND		50.0	47.5		ug/L		95	50 - 150
Iodomethane	ND		50.0	49.5		ug/L		98	50 - 150
Isopropylbenzene	ND		50.0	51.2		ug/L		102	50 - 150

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-202346-D-1 MS
Matrix: Water
Analysis Batch: 301138

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
Methyl tert-butyl ether	ND		50.0	56.9		ug/L		114	50 - 150
Methylene Chloride	ND		50.0	48.4		ug/L		97	10 - 221
m-Xylene & p-Xylene	ND		50.0	49.7		ug/L		99	50 - 150
Naphthalene	ND		50.0	51.5		ug/L		96	50 - 150
n-Butylbenzene	ND		50.0	49.1		ug/L		97	50 - 150
N-Propylbenzene	ND		50.0	49.8		ug/L		100	50 - 150
o-Xylene	ND		50.0	50.3		ug/L		101	50 - 150
sec-Butylbenzene	ND		50.0	50.0		ug/L		100	50 - 150
Styrene	ND		50.0	51.7		ug/L		103	50 - 150
tert-Butylbenzene	ND		50.0	52.2		ug/L		104	50 - 150
Tetrachloroethene	ND		50.0	47.9		ug/L		96	64 - 148
Toluene	ND		50.0	47.8		ug/L		95	47 - 150
trans-1,2-Dichloroethene	ND		50.0	48.8		ug/L		98	54 - 156
trans-1,3-Dichloropropene	ND		50.0	56.6		ug/L		113	17 - 183
Trichloroethene	ND		50.0	47.5		ug/L		95	70 - 157
Trichlorofluoromethane	ND		50.0	56.4		ug/L		113	17 - 181
Vinyl acetate	ND		50.0	58.9		ug/L		118	50 - 150
Vinyl chloride	ND		50.0	48.6		ug/L		97	10 - 251

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*90*		*60 - 140*

Lab Sample ID: 550-202346-D-1 MSD
Matrix: Water
Analysis Batch: 301138

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
1,1,1,2-Tetrachloroethane	ND		50.0	53.7		ug/L		107	50 - 150	2	35
1,1,1-Trichloroethane	ND		50.0	57.2		ug/L		114	52 - 162	1	36
1,1,2,2-Tetrachloroethane	ND		50.0	51.8		ug/L		103	46 - 157	7	61
1,1,2-Trichloroethane	ND		50.0	50.1		ug/L		100	52 - 150	4	45
1,1-Dichloroethane	ND		50.0	50.1		ug/L		99	59 - 155	1	40
1,1-Dichloroethene	ND		50.0	48.7		ug/L		97	10 - 234	2	32
1,1-Dichloropropene	ND		50.0	50.3		ug/L		101	50 - 150	3	35
1,2,3-Trichlorobenzene	ND		50.0	49.2		ug/L		95	50 - 150	0	35
1,2,3-Trichloropropane	ND		50.0	57.4		ug/L		115	50 - 150	7	35
1,2,4-Trichlorobenzene	ND	T2	50.0	48.9	T2	ug/L		95	50 - 150	1	35
1,2,4-Trimethylbenzene	ND		50.0	52.9		ug/L		105	50 - 150	3	35
1,2-Dibromo-3-Chloropropane	ND		50.0	66.1		ug/L		132	50 - 150	2	35
1,2-Dichlorobenzene	0.78		50.0	50.0		ug/L		98	18 - 190	3	57
1,2-Dichloroethane	ND		50.0	58.7		ug/L		117	49 - 155	2	49
1,2-Dichloropropane	ND		50.0	47.0		ug/L		94	10 - 210	4	55
1,3,5-Trimethylbenzene	ND		50.0	52.9		ug/L		106	50 - 150	3	35
1,3-Dichlorobenzene	0.56		50.0	49.9		ug/L		99	59 - 156	3	43
1,3-Dichloropropane	ND		50.0	50.5		ug/L		101	50 - 150	3	35
1,4-Dichlorobenzene	0.69		50.0	48.6		ug/L		96	18 - 190	1	57

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-202346-D-1 MSD
Matrix: Water
Analysis Batch: 301138

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
2,2-Dichloropropane	ND		50.0	55.9		ug/L		112	50 - 150	1	35
2-Butanone (MEK)	ND		50.0	53.0		ug/L		106	50 - 150	6	35
2-Chlorotoluene	ND		50.0	52.2		ug/L		104	50 - 150	2	35
2-Hexanone	ND		50.0	54.1		ug/L		108	50 - 150	7	35
4-Chlorotoluene	ND		50.0	51.1		ug/L		101	50 - 150	1	35
4-Isopropyltoluene	ND		50.0	52.7		ug/L		105	50 - 150	2	35
4-Methyl-2-pentanone (MIBK)	ND		50.0	54.2		ug/L		108	50 - 150	9	35
Acetone	ND		50.0	48.7		ug/L		97	18 - 150	8	35
Benzene	ND		50.0	47.0		ug/L		94	35 - 151	3	61
Bromobenzene	ND		50.0	51.6		ug/L		103	50 - 150	3	35
Bromoform	ND		50.0	60.9		ug/L		122	45 - 169	2	42
Bromomethane	ND		50.0	52.2		ug/L		104	10 - 242	3	61
Carbon disulfide	ND		50.0	47.5		ug/L		95	50 - 150	0	35
Carbon tetrachloride	ND		50.0	57.4		ug/L		115	70 - 140	2	41
Chlorobenzene	ND		50.0	48.5		ug/L		97	37 - 160	2	53
Chlorobromomethane	ND		50.0	46.9		ug/L		94	50 - 150	0	35
Chlorodibromomethane	ND		50.0	57.4		ug/L		115	53 - 149	2	50
Chloroethane	ND		50.0	49.6		ug/L		99	14 - 230	3	78
Chloroform	ND		50.0	53.2		ug/L		106	51 - 138	1	54
Chloromethane	ND		50.0	41.9		ug/L		84	10 - 273	1	60
cis-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	50 - 150	5	35
cis-1,3-Dichloropropene	ND		50.0	52.6		ug/L		105	10 - 227	2	58
Dibromomethane	ND		50.0	49.9		ug/L		100	50 - 150	4	35
Dichlorobromomethane	ND		50.0	56.2		ug/L		112	35 - 155	2	56
Dichlorodifluoromethane	ND		50.0	48.3		ug/L		97	50 - 150	5	35
Ethanol	ND		1000	867		ug/L		87	50 - 150	5	35
Ethylbenzene	ND		50.0	49.9		ug/L		100	37 - 162	1	63
Ethylene Dibromide	ND		50.0	52.1		ug/L		104	50 - 150	2	35
Hexachlorobutadiene	ND		50.0	46.3		ug/L		93	50 - 150	3	35
Iodomethane	ND		50.0	51.1		ug/L		101	50 - 150	3	35
Isopropylbenzene	ND		50.0	52.8		ug/L		106	50 - 150	3	35
Methyl tert-butyl ether	ND		50.0	58.0		ug/L		116	50 - 150	2	35
Methylene Chloride	ND		50.0	49.3		ug/L		99	10 - 221	2	28
m-Xylene & p-Xylene	ND		50.0	51.6		ug/L		103	50 - 150	4	35
Naphthalene	ND		50.0	53.9		ug/L		101	50 - 150	4	35
n-Butylbenzene	ND		50.0	49.7		ug/L		98	50 - 150	1	35
N-Propylbenzene	ND		50.0	51.1		ug/L		102	50 - 150	3	35
o-Xylene	ND		50.0	52.4		ug/L		105	50 - 150	4	35
sec-Butylbenzene	ND		50.0	51.3		ug/L		103	50 - 150	2	35
Styrene	ND		50.0	53.2		ug/L		106	50 - 150	3	35
tert-Butylbenzene	ND		50.0	53.7		ug/L		107	50 - 150	3	35
Tetrachloroethene	ND		50.0	48.5		ug/L		97	64 - 148	1	39
Toluene	ND		50.0	48.7		ug/L		97	47 - 150	2	41
trans-1,2-Dichloroethene	ND		50.0	49.0		ug/L		98	54 - 156	0	45
trans-1,3-Dichloropropene	ND		50.0	57.1		ug/L		114	17 - 183	1	86
Trichloroethene	ND		50.0	49.1		ug/L		98	70 - 157	3	48
Trichlorofluoromethane	ND		50.0	54.8		ug/L		110	17 - 181	3	84
Vinyl acetate	ND		50.0	60.7		ug/L		121	50 - 150	3	35
Vinyl chloride	ND		50.0	46.8		ug/L		94	10 - 251	4	66

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		60 - 140
Dibromofluoromethane (Surr)	95		60 - 140
Toluene-d8 (Surr)	88		60 - 140

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

GC/MS VOA

Analysis Batch: 301138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-202414-1	MW-04-355-23SA1	Total/NA	Water	624.1	
550-202414-2	MW-07-285-23SA1	Total/NA	Water	624.1	
550-202414-3	MW-12-410-23SA1	Total/NA	Water	624.1	
550-202414-4	MW-13-355-23SA1	Total/NA	Water	624.1	
550-202414-5	MW-14-350-23SA1	Total/NA	Water	624.1	
550-202414-6	TB-23SA1	Total/NA	Water	624.1	
550-202414-7	PHX-01-23SA1	Total/NA	Water	624.1	
MB 550-301138/6	Method Blank	Total/NA	Water	624.1	
LCS 550-301138/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-301138/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-202346-D-1 MS	Matrix Spike	Total/NA	Water	624.1	
550-202346-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Client Sample ID: MW-04-355-23SA1
Date Collected: 05/17/23 13:08
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	301138	TC1	EET PHX	05/26/23 16:35

Client Sample ID: MW-07-285-23SA1
Date Collected: 05/17/23 12:26
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	301138	TC1	EET PHX	05/26/23 16:56

Client Sample ID: MW-12-410-23SA1
Date Collected: 05/17/23 11:30
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	301138	TC1	EET PHX	05/26/23 17:17

Client Sample ID: MW-13-355-23SA1
Date Collected: 05/17/23 10:51
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	301138	TC1	EET PHX	05/26/23 17:38

Client Sample ID: MW-14-350-23SA1
Date Collected: 05/17/23 10:12
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	301138	TC1	EET PHX	05/26/23 17:59

Client Sample ID: TB-23SA1
Date Collected: 05/17/23 08:00
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	301138	TC1	EET PHX	05/26/23 18:20

Client Sample ID: PHX-01-23SA1
Date Collected: 05/17/23 13:10
Date Received: 05/18/23 13:48

Lab Sample ID: 550-202414-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	301138	TC1	EET PHX	05/26/23 18:42

Laboratory References:

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: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-09-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
624.1		Water	1,2,4-Trichlorobenzene
624.1		Water	Trihalomethanes, Total

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-202414-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

202414

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell
Chain of Custody / Analysis Request

Save with QC Check: Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

AESI Ref:	45064.51601
COC#	R35008-051723
	Page 1 of 1
Lab Proj # (SDG):	JD11212
Lab Location ID	TAL-PHX
HW Site R-Code	R35008
Sampling Program	Annual (Semi)
Authorized User:	Honeywell
Lab Parent ID	TAL

Pricing Source (RFP, eAuction, etc)	RFP2019
HW Site Name	Peoria (AZ)
Task Type	OM&M
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS
Location of Site	Phoenix, AZ
WBS Code	6400
Sampling Co.:	Jacobs

Reporting Information (DocuSign First Signer)

Name	Jacobs
Address	1501 W. Fountainhead Parkway
City, State, Zip	Tempe, AZ 85282
Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com
Sampler(s) names	T. Kearsley
PO #	HW PO # A000651433
Analysis Turnaround Time (calendar days):	10
Consultant	Jacobs

Billing Information (DocuSign Second Signer)

Co. Name	Honeywell
Address	111 South 34th Street M/S 158
City, State, Zip	Phoenix, AZ 85034
HW RM email	Tao.Wu@honeywell.com
Laboratory Contact	Danielle Roberts
Report Tier Level	2
Full Report and EDD TAT (calendar days)	10
Honeywell RM Name	Tao Wu (TW)

Analytical Group Name — Preservative: 18 — E624 (VOC)

Text & Excel File Drive | Excel & Text File Order | Create Excel Output | Create Text Output

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Sample Identification

	#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (VOC)	Sampling Method (rt_sample_method)	Lab Sample Numbers
												Units				
1	1	MW-4	355.0	355.0	MW-04-355-23SA1	5/17/2023	13:08	GW-GWS	WATER	REG	3	N	N	X		
2	2	MW-7	285.0	285.0	MW-07-285-23SA1	5/17/2023	12:26	GW-GWS	WATER	REG	3	N	N	X		
3	3	MW-12	410.0	410.0	MW-12-410-23SA1	5/17/2023	11:30	GW-GWS	WATER	REG	3	N	N	X		
4	4	MW-13	355.0	355.0	MW-13-355-23SA1	5/17/2023	10:51	GW-GWS	WATER	REG	3	N	N	X		
5	5	MW-14	350.0	350.0	MW-14-350-23SA1	5/18/2023	10:12	GW-GWS	WATER	REG	3	N	N	X		
6	6	Trip Blank			TB-23SA1	5/17/2023	8:00	BLKWATER	WATER	TB	1	N	N	X		
7	7	FD			PHX-01-23A1	5/17/23	1310	FD	Wtr	FD	3	N	N	X		
	8															
	9															
	10															
	11															
	12															

550-202414 Chain of Custody

[redacted]

Start at D66 to type instructions.

COC 4c 2.0

Relinquished by	Company	Jacobs	Received by	Company	13:48	Condition	Custody Seals Intact
Thomas Kearsley	Date/Time 5/18/23	1348	EETA PHX	Date/Time 5/18/23	1348	Cooler Temp.	
Relinquished by	Company		Received by	Company		Condition	Custody Seals Intact
	Date/Time			Date/Time		Cooler Temp.	Lab Quote #

Preservatives: (Other; Specify):

0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAcid); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special).

FedEx Tracking #

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-202414-1
SDG Number: Phoenix, AZ

Login Number: 202414
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

Emily Petrunia

From: Kidd, Bernice <Bernice.Kidd@jacobs.com>
Sent: Friday, January 5, 2024 11:59 AM
To: Emily Petrunia
Cc: Narayana, Chandrashekar (CSW); hts-res-dmdv (HTS-RES-DMDV@Honeywell.com); Foehr, Derek
Subject: Peoria Sample ID Revisions

Hi Emily,

We just noticed we have some sample ID errors in Peoria report 550-202414-1. Can you update these and send a revised pdf? No need for a revised EDD, we can fix on our end.

Sample -01, update from MW-04-355-2SA1 to MW-04-355-23SA1
Sample -07, update from the PHX-01-23A1 to PHX-01-23SA1

Thank you,
Berney Kidd
Jacobs
Project Chemist | Global Environmental Solutions
530-229-3203 office
530-209-3480 mobile
Bernice.Kidd@jacobs.com

www.jacobs.com

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/8/2023 8:44:34 AM Revision 1

JOB DESCRIPTION

Peoria
SDG NUMBER Phoenix, AZ

JOB NUMBER

550-205887-1

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

See page two for job notes and contact information.

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Job Notes

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Authorization

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Revision 1

Authorized for release by
Rachel Sester, Project Manager I
Rachel.Sester@et.eurofinsus.com
Designee for
Linda Eshelman, Project Manager II
linda.eshelman@et.eurofinsus.com
(602)659-7681

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Qualifiers

General Chemistry

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

Case Narrative

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Job ID: 550-205887-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-205887-1

Revision
This report was revised on 9/8/23 to add Cd and Zn to MW-10, per client request. This final report replaces the report that was generated on 8/14/23 at 3:14 PM.

Comments
No additional comments.

Receipt
The samples were received on 8/3/2023 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.7º C.

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

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-205887-1	MW-10-23Q3	Water	08/03/23 08:35	08/03/23 12:54
550-205887-2	MW-10-23Q3-comp	Water	08/03/23 08:32	08/03/23 12:54
550-205887-3	EW-1-23Q3	Water	08/03/23 09:15	08/03/23 12:54
550-205887-4	EW-1-23Q3-comp	Water	08/03/23 09:12	08/03/23 12:54
550-205887-5	TB-23Q3	Water	08/03/23 08:00	08/03/23 12:54

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q3 — Lab Sample ID: 550-205887-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.60		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	17		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.9		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-23Q3-comp — Lab Sample ID: 550-205887-2

No Detections.

Client Sample ID: EW-1-23Q3 — Lab Sample ID: 550-205887-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.6		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	67		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.2		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	20		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q3-comp — Lab Sample ID: 550-205887-4

No Detections.

Client Sample ID: TB-23Q3 — Lab Sample ID: 550-205887-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10-23Q3

Lab Sample ID: 550-205887-1
Date Collected: 08/03/23 08:35
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.60		0.50		ug/L			08/08/23 07:12	1
1,1-Dichloroethene	17		0.50		ug/L			08/08/23 07:12	1
Benzene	ND		0.50		ug/L			08/08/23 07:12	1
Chloroform	ND		0.50		ug/L			08/08/23 07:12	1
Trichloroethene	4.9		0.50		ug/L			08/08/23 07:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*08/08/23 07:12*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*		*08/08/23 07:12*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*08/08/23 07:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		08/11/23 12:15	08/11/23 13:20	1

Client Sample ID: MW-10-23Q3-comp

Lab Sample ID: 550-205887-2
Date Collected: 08/03/23 08:32
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		08/08/23 04:55	08/09/23 15:41	1
Cadmium	ND		0.0010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 15:41	1
Molybdenum	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Selenium	ND		0.10		mg/L		08/08/23 04:55	08/09/23 15:41	1
Silver	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:41	1
Zinc	ND		0.050		mg/L		08/08/23 04:55	08/09/23 15:41	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/09/23 14:16	08/09/23 17:27	1

Client Sample ID: EW-1-23Q3

Lab Sample ID: 550-205887-3
Date Collected: 08/03/23 09:15
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	4.6		0.50		ug/L			08/08/23 07:34	1
1,1-Dichloroethene	67		0.50		ug/L			08/08/23 07:34	1
Chloroform	1.2		0.50		ug/L			08/08/23 07:34	1
Trichloroethene	20		0.50		ug/L			08/08/23 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*08/08/23 07:34*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*08/08/23 07:34*	*1*
Toluene-d8 (Surr)	*95*		*60 - 140*		*08/08/23 07:34*	*1*

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-23Q3-comp

Lab Sample ID: 550-205887-4

Date Collected: 08/03/23 09:12
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 15:44	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 15:44	1

Client Sample ID: TB-23Q3

Lab Sample ID: 550-205887-5

Date Collected: 08/03/23 08:00
Matrix: Water
Date Received: 08/03/23 12:54

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			08/08/23 02:03	1
1,1-Dichloroethene	ND		0.50		ug/L			08/08/23 02:03	1
Benzene	ND		0.50		ug/L			08/08/23 02:03	1
Chloroform	ND		0.50		ug/L			08/08/23 02:03	1
Trichloroethene	ND		0.50		ug/L			08/08/23 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*08/08/23 02:03*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*		*08/08/23 02:03*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*08/08/23 02:03*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-205887-1	MW-10-23Q3	90	92	94
550-205887-3	EW-1-23Q3	90	93	95
550-205887-5	TB-23Q3	89	92	94
550-205960-A-1 MS	Matrix Spike	103	94	99
550-205960-A-1 MSD	Matrix Spike Duplicate	103	93	99
LCS 550-305363/4	Lab Control Sample	89	80	84
LCSD 550-305363/5	Lab Control Sample Dup	96	89	92
MB 550-305363/7	Method Blank	91	89	93

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-305363/7
Matrix: Water
Analysis Batch: 305363

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			08/08/23 01:40	1
1,1-Dichloroethene	ND		0.50		ug/L			08/08/23 01:40	1
Benzene	ND		0.50		ug/L			08/08/23 01:40	1
Chloroform	ND		0.50		ug/L			08/08/23 01:40	1
Trichloroethene	ND		0.50		ug/L			08/08/23 01:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*08/08/23 01:40*	*1*
Dibromofluoromethane (Surr)	*89*		*60 - 140*		*08/08/23 01:40*	*1*
Toluene-d8 (Surr)	*93*		*60 - 140*		*08/08/23 01:40*	*1*

Lab Sample ID: LCS 550-305363/4
Matrix: Water
Analysis Batch: 305363

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	43.1		ug/L		86	70 - 130		
1,1-Dichloroethene			50.0	43.9		ug/L		88	50 - 150		
Benzene			50.0	44.8		ug/L		90	65 - 135		
Chloroform			50.0	42.3		ug/L		85	70 - 135		
Trichloroethene			50.0	45.0		ug/L		90	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*
Dibromofluoromethane (Surr)	*80*		*60 - 140*
Toluene-d8 (Surr)	*84*		*60 - 140*

Lab Sample ID: LCSD 550-305363/5
Matrix: Water
Analysis Batch: 305363

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-Dichloroethane			50.0	44.5		ug/L		89	70 - 130	3	20
1,1-Dichloroethene			50.0	45.4		ug/L		91	50 - 150	3	20
Benzene			50.0	46.1		ug/L		92	65 - 135	3	20
Chloroform			50.0	43.5		ug/L		87	70 - 135	3	20
Trichloroethene			50.0	45.1		ug/L		90	65 - 135	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*
Dibromofluoromethane (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*92*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-205960-A-1 MS
Matrix: Water
Analysis Batch: 305363

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
1,1-Dichloroethane	ND		50.0	50.2		ug/L		100	59 - 155
1,1-Dichloroethene	3.0		50.0	53.7		ug/L		101	10 - 234
Benzene	ND		50.0	52.5		ug/L		105	35 - 151
Chloroform	0.85		50.0	48.8		ug/L		96	51 - 138
Trichloroethene	23		50.0	70.5		ug/L		95	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*

Lab Sample ID: 550-205960-A-1 MSD
Matrix: Water
Analysis Batch: 305363

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
1,1-Dichloroethane	ND		50.0	48.9		ug/L		98	59 - 155	3	40
1,1-Dichloroethene	3.0		50.0	53.6		ug/L		101	10 - 234	0	32
Benzene	ND		50.0	51.7		ug/L		103	35 - 151	1	61
Chloroform	0.85		50.0	47.8		ug/L		94	51 - 138	2	54
Trichloroethene	23		50.0	69.5		ug/L		93	70 - 157	2	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-305383/1-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305383

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		08/08/23 04:55	08/09/23 14:34	1
Cadmium	ND		0.0010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Copper	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Lead	ND		0.015		mg/L		08/08/23 04:55	08/09/23 14:34	1
Molybdenum	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Selenium	ND		0.10		mg/L		08/08/23 04:55	08/09/23 14:34	1
Silver	ND		0.010		mg/L		08/08/23 04:55	08/09/23 14:34	1
Zinc	ND		0.050		mg/L		08/08/23 04:55	08/09/23 14:34	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-305383/2-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	1.04		mg/L		104	85 - 115
Cadmium	1.00	0.983		mg/L		98	85 - 115
Copper	1.00	0.949		mg/L		95	85 - 115
Lead	1.00	1.02		mg/L		102	85 - 115
Molybdenum	1.00	1.01		mg/L		101	85 - 115
Selenium	1.00	1.06		mg/L		106	85 - 115
Silver	0.0750	0.0842		mg/L		112	85 - 115
Zinc	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: LCSD 550-305383/3-A
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	1.04		mg/L		104	85 - 115	0	20
Cadmium	1.00	1.02		mg/L		102	85 - 115	3	20
Copper	1.00	0.973		mg/L		97	85 - 115	2	20
Lead	1.00	1.03		mg/L		103	85 - 115	1	20
Molybdenum	1.00	1.03		mg/L		103	85 - 115	2	20
Selenium	1.00	1.07		mg/L		107	85 - 115	0	20
Silver	0.0750	0.0814		mg/L		109	85 - 115	3	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-205468-A-1-B MS
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.08		mg/L		107	70 - 130
Cadmium	ND		1.00	1.00		mg/L		100	70 - 130
Copper	0.021		1.00	0.996		mg/L		98	70 - 130
Lead	ND		1.00	0.997		mg/L		100	70 - 130
Molybdenum	ND		1.00	1.04		mg/L		104	70 - 130
Selenium	ND		1.00	1.08		mg/L		107	70 - 130
Silver	ND		0.0750	0.0822		mg/L		110	70 - 130
Zinc	ND		1.00	1.01		mg/L		101	70 - 130

Lab Sample ID: 550-205468-A-1-C MSD
Matrix: Water
Analysis Batch: 305527

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 305383

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.07		mg/L		106	70 - 130	1	20
Cadmium	ND		1.00	0.972		mg/L		97	70 - 130	3	20
Copper	0.021		1.00	0.989		mg/L		97	70 - 130	1	20
Lead	ND		1.00	0.971		mg/L		97	70 - 130	3	20
Molybdenum	ND		1.00	1.02		mg/L		102	70 - 130	2	20
Selenium	ND		1.00	1.05		mg/L		105	70 - 130	2	20
Silver	ND		0.0750	0.0797		mg/L		106	70 - 130	3	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-205468-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305527 — **Prep Batch: 305383**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	0.991		mg/L		99	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-305513/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/09/23 14:16	08/09/23 16:55	1

Lab Sample ID: LCS 550-305513/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00484		mg/L		97	85 - 115		

Lab Sample ID: LCSD 550-305513/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00474		mg/L		95	85 - 115	2	20

Lab Sample ID: 550-205046-U-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00496		mg/L		99	70 - 130		

Lab Sample ID: 550-205046-U-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305535 — **Prep Batch: 305513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00513		mg/L		103	70 - 130	3	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-305653/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305709 — **Prep Batch: 305653**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		08/11/23 12:15	08/11/23 13:20	1

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: LCS 550-305653/2-A
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305653

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0941		mg/L		94	90 - 110		

Lab Sample ID: LCSD 550-305653/3-A
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305653

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0942		mg/L		94	90 - 110	0	20

Lab Sample ID: 550-205757-C-1-B MS
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 305653

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	R4 M2	0.100	0.120		mg/L		120	80 - 120		

Lab Sample ID: 550-205757-C-1-C MSD
Matrix: Water
Analysis Batch: 305709

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 305653

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	R4 M2	0.100	0.0678	M2 R4	mg/L		68	80 - 120	55	20

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

GC/MS VOA

Analysis Batch: 305363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	624.1	
550-205887-3	EW-1-23Q3	Total/NA	Water	624.1	
550-205887-5	TB-23Q3	Total/NA	Water	624.1	
MB 550-305363/7	Method Blank	Total/NA	Water	624.1	
LCS 550-305363/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-305363/5	Lab Control Sample Dup	Total/NA	Water	624.1	
550-205960-A-1 MS	Matrix Spike	Total/NA	Water	624.1	
550-205960-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 305383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	200.7	
550-205887-4	EW-1-23Q3-comp	Total/NA	Water	200.7	
MB 550-305383/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-305383/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-305383/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-205468-A-1-B MS	Matrix Spike	Total/NA	Water	200.7	
550-205468-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 305513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	245.1	
MB 550-305513/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-305513/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-305513/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-205046-U-1-E MS	Matrix Spike	Total/NA	Water	245.1	
550-205046-U-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 305527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	200.7 Rev 4.4	305383
550-205887-4	EW-1-23Q3-comp	Total/NA	Water	200.7 Rev 4.4	305383
MB 550-305383/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	305383
LCS 550-305383/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	305383
LCSD 550-305383/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	305383
550-205468-A-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	305383
550-205468-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	305383

Analysis Batch: 305535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-2	MW-10-23Q3-comp	Total/NA	Water	245.1	305513
MB 550-305513/1-A	Method Blank	Total/NA	Water	245.1	305513
LCS 550-305513/2-A	Lab Control Sample	Total/NA	Water	245.1	305513
LCSD 550-305513/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	305513
550-205046-U-1-E MS	Matrix Spike	Total/NA	Water	245.1	305513
550-205046-U-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	305513

QC Association Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

General Chemistry

Prep Batch: 305653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	SM 4500 CN C	
MB 550-305653/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-305653/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-305653/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-205757-C-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-205757-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 305709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-205887-1	MW-10-23Q3	Total/NA	Water	SM 4500 CN E	305653
MB 550-305653/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	305653
LCS 550-305653/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	305653
LCSD 550-305653/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	305653
550-205757-C-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	305653
550-205757-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	305653

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Client Sample ID: MW-10-23Q3
Date Collected: 08/03/23 08:35
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 07:12
Total/NA	Prep	SM 4500 CN C			305653	ZH	EET PHX	08/11/23 12:15
Total/NA	Analysis	SM 4500 CN E		1	305709	ZH	EET PHX	08/11/23 13:20

Client Sample ID: MW-10-23Q3-comp
Date Collected: 08/03/23 08:32
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			305383	SGO	EET PHX	08/08/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	305527	GLW	EET PHX	08/09/23 15:41
Total/NA	Prep	245.1			305513	HHL	EET PHX	08/09/23 14:16
Total/NA	Analysis	245.1		1	305535	HHL	EET PHX	08/09/23 17:27

Client Sample ID: EW-1-23Q3
Date Collected: 08/03/23 09:15
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 07:34

Client Sample ID: EW-1-23Q3-comp
Date Collected: 08/03/23 09:12
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			305383	SGO	EET PHX	08/08/23 04:55
Total/NA	Analysis	200.7 Rev 4.4		1	305527	GLW	EET PHX	08/09/23 15:44

Client Sample ID: TB-23Q3
Date Collected: 08/03/23 08:00
Date Received: 08/03/23 12:54

Lab Sample ID: 550-205887-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	305363	R1K	EET PHX	08/08/23 02:03

Laboratory References:

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: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-205887-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

205887

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell
Chain of Custody / Analysis Request

Save with QC Check: Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

AESI Ref:	45141.43455
COC#	R35008080323
	Page 1 of 1
Lab Proj # (SDG):	JD11212
Lab Location ID	TAL-PHX
HW Site R-Code	R35008
Sampling Program	Sampling program
Authorized User:	Honeywell
Lab Parent ID	TAL

Text & Excel File Drive | Excel & Text File Order | Create Excel Output | Create Text Output

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Pricing Source (RFP, eAuction, etc)	RFP2019
HW Site Name	Peoria (AZ)
Task Type	OM&M
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS
Location of Site	Phoenix, AZ
WBS Code	6400
Sampling Co.:	Jacobs
Sampler(s) names	T. Kearsley
PO #	HW PO # A000651433
Analysis Turnaround Time (calendar days):	10
Consultant	Jacobs
Laboratory Contact	Danielle Roberts
Report Tier Level	2
Full Report and EDD TAT (calendar days)	10
Honeywell RM Name	Steve Bowles

Reporting Information (DocuSign First Signer)	
Name	Jacobs
Address	1501 W. Fountainhead Parkway
City, State, Zip	Tempe, AZ 85282
Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com

Billing Information (DocuSign Second Signer)	
Co. Name	Honeywell
Address	111 South 34th Street M/S 158
City, State, Zip	Phoenix, AZ 85034
HW RM email	steven.bowles@honeywell.com

More Rows | Less Rows

Sample Identification

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)	E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)	Sampling Method (rt_sample_method)	Lab Sample Numbers
											Preservative		18	21	30	21	21	18		
											Units									
1	MW-10	----	----	MW-10-23Q3	8/3/2023	8:35	GW-GWS	WATER	REG	4	N	N	X		X					
2	MW-10	----	----	MW-10-23Q3-comp	8/3/2023	8:32	GW-GWS	WATER	REG	1	Y	N		X		X				
3	EW-1	----	----	EW-1-23Q3	8/3/2023	9:15	GW-GWS	WATER	REG	3	N	N						X		
4	EW-1	----	----	EW-1-23Q3-comp	8/3/2023	9:12	GW-GWS	WATER	REG	1	Y	N					X			
5	TRIPBLANK	----	----	TB-23Q3	8/3/2023	8:00	BLKWATER	WATER	TB	1	N	N	X							
6																				
7																				
8																				
9																				
10																				
11																				
12																				

550-205887 Chain of Custody

Start at D66 to type instructions.

[redacted]

Relinquished by	Company	Jacobs	Received by	Company		Condition		Custody Seals Intact	
Thomas Kearsley	Date/Time 8-3-23		EETA-PHX	Date/Time	8/3/23	Cooler Temp	1.7°C		
Relinquished by	Company 1224		Received by	Company	12:54	Condition		Custody Seals Intact	
	Date/Time			Date/Time		Cooler Temp.		Lab Quote #	

Preservatives: (Other; Specify): EW-1 Comp E200.7 Qrt-list only COC

0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAci); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special);

FedEx Tracking #

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-205887-1
SDG Number: Phoenix, AZ

Login Number: 205887
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/18/2023 11:11:55 AM Revision 1

JOB DESCRIPTION

Peoria (AZ)

JOB NUMBER

550-208544-1

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
10/18/2023 11:11:55 AM
Revision 1

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

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Qualifiers

Metals

Qualifier	Qualifier Description
L4	The associated blank spike recovery was below method acceptance limits.

General Chemistry

Qualifier	Qualifier Description
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
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

Case Narrative

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Job ID: 550-208544-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-208544-1

Revision
The report being provided is a revision of the original report sent on 10/17/2023. The report (revision 1) is being revised due to: Client emailed 10/18/2023 requesting the Benzene result for EW-1-23Q4 be removed from the reportable list as per the chain of custody. This revised report (1) reflects this revision.

Receipt
The samples were received on 10/3/2023 12:28 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 8.3º C.

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

Metals
Method 200.7 Rev 4.4: The laboratory control sample (LCS) associated with preparation batch 550-308745 and analytical batch 550-309021 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance. EW-1-23Q4-comp (550-208544-2)

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

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

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

Sample Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-208544-1	EW-1-23Q4	Water	10/03/23 10:59	10/03/23 12:28
550-208544-2	EW-1-23Q4-comp	Water	10/03/23 10:56	10/03/23 12:28
550-208544-3	TB-23Q4	Water	10/03/23 08:00	10/03/23 12:28

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Client Sample ID: EW-1-23Q4 — Lab Sample ID: 550-208544-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.4		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	47		0.50		ug/L	1		624.1	Total/NA
Chloroform	0.92		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	14		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-23Q4-comp — Lab Sample ID: 550-208544-2

No Detections.

Client Sample ID: TB-23Q4 — Lab Sample ID: 550-208544-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: EW-1-23Q4
Lab Sample ID: 550-208544-1
Date Collected: 10/03/23 10:59
Matrix: Water
Date Received: 10/03/23 12:28

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	3.4		0.50		ug/L			10/05/23 15:55	1
1,1-Dichloroethene	47		0.50		ug/L			10/05/23 15:55	1
Chloroform	0.92		0.50		ug/L			10/05/23 15:55	1
Trichloroethene	14		0.50		ug/L			10/05/23 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*10/05/23 15:55*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*		*10/05/23 15:55*	*1*
Toluene-d8 (Surr)	*103*		*60 - 140*		*10/05/23 15:55*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050		mg/L		10/05/23 15:00	10/05/23 16:03	1

Client Sample ID: EW-1-23Q4-comp
Lab Sample ID: 550-208544-2
Date Collected: 10/03/23 10:56
Matrix: Water
Date Received: 10/03/23 12:28

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		10/04/23 09:56	10/06/23 18:35	1
Copper	ND		0.010		mg/L		10/04/23 09:56	10/06/23 18:35	1
Lead	ND		0.015		mg/L		10/04/23 09:56	10/06/23 18:35	1
Zinc	ND		0.050		mg/L		10/04/23 09:56	10/06/23 18:35	1
Molybdenum	ND		0.010		mg/L		10/04/23 09:56	10/06/23 18:35	1
Silver	ND	L4	0.010		mg/L		10/04/23 09:56	10/06/23 18:35	1
Arsenic	ND		0.10		mg/L		10/04/23 09:56	10/06/23 18:35	1
Selenium	ND		0.10		mg/L		10/04/23 09:56	10/06/23 18:35	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		10/04/23 12:25	10/04/23 16:08	1

Client Sample ID: TB-23Q4
Lab Sample ID: 550-208544-3
Date Collected: 10/03/23 08:00
Matrix: Water
Date Received: 10/03/23 12:28

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			10/05/23 11:18	1
1,1-Dichloroethene	ND		0.50		ug/L			10/05/23 11:18	1
Benzene	ND		0.50		ug/L			10/05/23 11:18	1
Chloroform	ND		0.50		ug/L			10/05/23 11:18	1
Trichloroethene	ND		0.50		ug/L			10/05/23 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*10/05/23 11:18*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*10/05/23 11:18*	*1*
Toluene-d8 (Surr)	*101*		*60 - 140*		*10/05/23 11:18*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-208544-1	EW-1-23Q4	95	103	103
550-208544-3	TB-23Q4	94	101	101
550-208593-A-1 MS	Matrix Spike	91	90	91
550-208593-A-1 MSD	Matrix Spike Duplicate	92	91	91
LCS 550-308823/3	Lab Control Sample	105	109	105
LCSD 550-308823/4	Lab Control Sample Dup	103	108	103
MB 550-308823/6	Method Blank	93	102	101

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-308823/6
Matrix: Water
Analysis Batch: 308823

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			10/05/23 10:15	1
1,1-Dichloroethene	ND		0.50		ug/L			10/05/23 10:15	1
Benzene	ND		0.50		ug/L			10/05/23 10:15	1
Chloroform	ND		0.50		ug/L			10/05/23 10:15	1
Trichloroethene	ND		0.50		ug/L			10/05/23 10:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*10/05/23 10:15*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*		*10/05/23 10:15*	*1*
Toluene-d8 (Surr)	*101*		*60 - 140*		*10/05/23 10:15*	*1*

Lab Sample ID: LCS 550-308823/3
Matrix: Water
Analysis Batch: 308823

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethane			50.0	47.0		ug/L		94	70 - 130		
1,1-Dichloroethene			50.0	43.0		ug/L		86	50 - 150		
Benzene			50.0	45.2		ug/L		90	65 - 135		
Chloroform			50.0	47.5		ug/L		95	70 - 135		
Trichloroethene			50.0	45.9		ug/L		92	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*
Dibromofluoromethane (Surr)	*109*		*60 - 140*
Toluene-d8 (Surr)	*105*		*60 - 140*

Lab Sample ID: LCSD 550-308823/4
Matrix: Water
Analysis Batch: 308823

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-Dichloroethane			50.0	47.2		ug/L		94	70 - 130	0	20
1,1-Dichloroethene			50.0	43.6		ug/L		87	50 - 150	1	20
Benzene			50.0	44.7		ug/L		89	65 - 135	1	20
Chloroform			50.0	47.4		ug/L		95	70 - 135	0	20
Trichloroethene			50.0	45.3		ug/L		91	65 - 135	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*108*		*60 - 140*
Toluene-d8 (Surr)	*103*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-208593-A-1 MS
Matrix: Water
Analysis Batch: 308823

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
1,1-Dichloroethane	ND		50.0	48.0		ug/L		96	59 - 155
1,1-Dichloroethene	ND		50.0	43.8		ug/L		88	10 - 234
Benzene	ND		50.0	47.4		ug/L		95	35 - 151
Chloroform	ND		50.0	48.1		ug/L		96	51 - 138
Trichloroethene	ND		50.0	48.0		ug/L		96	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*
Dibromofluoromethane (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*91*		*60 - 140*

Lab Sample ID: 550-208593-A-1 MSD
Matrix: Water
Analysis Batch: 308823

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
1,1-Dichloroethane	ND		50.0	47.6		ug/L		95	59 - 155	1	40
1,1-Dichloroethene	ND		50.0	44.3		ug/L		89	10 - 234	1	32
Benzene	ND		50.0	47.1		ug/L		94	35 - 151	0	61
Chloroform	ND		50.0	47.8		ug/L		96	51 - 138	1	54
Trichloroethene	ND		50.0	48.3		ug/L		97	70 - 157	1	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*
Dibromofluoromethane (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*91*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-308745/1-A
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308745

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		10/04/23 09:56	10/06/23 17:55	1
Copper	ND		0.010		mg/L		10/04/23 09:56	10/06/23 17:55	1
Lead	ND		0.015		mg/L		10/04/23 09:56	10/06/23 17:55	1
Zinc	ND		0.050		mg/L		10/04/23 09:56	10/06/23 17:55	1
Molybdenum	ND		0.010		mg/L		10/04/23 09:56	10/06/23 17:55	1
Silver	ND		0.010		mg/L		10/04/23 09:56	10/06/23 17:55	1
Arsenic	ND		0.10		mg/L		10/04/23 09:56	10/06/23 17:55	1
Selenium	ND		0.10		mg/L		10/04/23 09:56	10/06/23 17:55	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 550-308745/2-A
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308745

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	1.00	0.952		mg/L		95	85 - 115
Copper	1.00	0.928		mg/L		93	85 - 115
Lead	1.00	0.934		mg/L		93	85 - 115
Zinc	1.00	0.935		mg/L		94	85 - 115
Molybdenum	1.00	0.969		mg/L		97	85 - 115
Silver	0.0750	0.0626	L4	mg/L		83	85 - 115
Arsenic	1.00	1.05		mg/L		105	85 - 115
Selenium	1.00	0.954		mg/L		95	85 - 115

Lab Sample ID: LCSD 550-308745/3-A
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 308745

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	1.00	0.970		mg/L		97	85 - 115	2	20
Copper	1.00	0.937		mg/L		94	85 - 115	1	20
Lead	1.00	0.928		mg/L		93	85 - 115	1	20
Zinc	1.00	0.931		mg/L		93	85 - 115	1	20
Molybdenum	1.00	0.971		mg/L		97	85 - 115	0	20
Silver	0.0750	0.0616	L4	mg/L		82	85 - 115	2	20
Arsenic	1.00	1.06		mg/L		106	85 - 115	1	20
Selenium	1.00	0.959		mg/L		96	85 - 115	1	20

Lab Sample ID: 550-208533-F-1-A MS
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 308745

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		1.00	0.970		mg/L		97	70 - 130
Copper	ND		1.00	0.949		mg/L		95	70 - 130
Lead	ND		1.00	0.904		mg/L		90	70 - 130
Zinc	ND		1.00	0.931		mg/L		93	70 - 130
Molybdenum	ND		1.00	0.991		mg/L		98	70 - 130
Silver	ND	L4	0.0750	0.0632		mg/L		84	70 - 130
Arsenic	ND		1.00	1.11		mg/L		109	70 - 130
Selenium	ND		1.00	0.973		mg/L		97	70 - 130

Lab Sample ID: 550-208533-F-1-B MSD
Matrix: Water
Analysis Batch: 309021

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 308745

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		1.00	0.981		mg/L		98	70 - 130	1	20
Copper	ND		1.00	0.943		mg/L		94	70 - 130	1	20
Lead	ND		1.00	0.902		mg/L		90	70 - 130	0	20
Zinc	ND		1.00	0.932		mg/L		93	70 - 130	0	20
Molybdenum	ND		1.00	0.988		mg/L		98	70 - 130	0	20
Silver	ND	L4	0.0750	0.0635		mg/L		85	70 - 130	1	20
Arsenic	ND		1.00	1.12		mg/L		109	70 - 130	0	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 550-208533-F-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309021 — **Prep Batch: 308745**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		1.00	0.981		mg/L		98	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-308758/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		10/04/23 12:25	10/04/23 15:16	1

Lab Sample ID: LCS 550-308758/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00476		mg/L		95	85 - 115		

Lab Sample ID: LCSD 550-308758/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00481		mg/L		96	85 - 115	1	20

Lab Sample ID: 550-208413-B-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00465		mg/L		93	70 - 130	4	20

Lab Sample ID: 550-208527-C-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308799 — **Prep Batch: 308758**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00505		mg/L		101	70 - 130		

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-308884/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308975 — **Prep Batch: 308884**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		10/05/23 15:00	10/05/23 16:03	1

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: LCS 550-308884/2-A
Matrix: Water
Analysis Batch: 308975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308884

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0927		mg/L		93	90 - 110		

Lab Sample ID: LCSD 550-308884/3-A
Matrix: Water
Analysis Batch: 308975

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 308884

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0937		mg/L		94	90 - 110	1	20

Lab Sample ID: 550-208413-A-1-B MS
Matrix: Water
Analysis Batch: 308975

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 308884

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	M2 M1 R4	0.100	0.0773	M2	mg/L		77	80 - 120		

Lab Sample ID: 550-208413-A-1-C MSD
Matrix: Water
Analysis Batch: 308975

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 308884

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2 M1 R4	0.100	0.123	M1 R4	mg/L		123	80 - 120	45	20

GC/MS VOA

Analysis Batch: 308823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-1	EW-1-23Q4	Total/NA	Water	624.1	
550-208544-3	TB-23Q4	Total/NA	Water	624.1	
MB 550-308823/6	Method Blank	Total/NA	Water	624.1	
LCS 550-308823/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-308823/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-208593-A-1 MS	Matrix Spike	Total/NA	Water	624.1	
550-208593-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 308745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-2	EW-1-23Q4-comp	Total/NA	Water	200.7	
MB 550-308745/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-308745/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-308745/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-208533-F-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-208533-F-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 308758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-2	EW-1-23Q4-comp	Total/NA	Water	245.1	
MB 550-308758/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-308758/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-308758/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-208413-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	
550-208527-C-2-C MS	Matrix Spike	Total/NA	Water	245.1	

Analysis Batch: 308799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-2	EW-1-23Q4-comp	Total/NA	Water	245.1	308758
MB 550-308758/1-A	Method Blank	Total/NA	Water	245.1	308758
LCS 550-308758/2-A	Lab Control Sample	Total/NA	Water	245.1	308758
LCSD 550-308758/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	308758
550-208413-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	308758
550-208527-C-2-C MS	Matrix Spike	Total/NA	Water	245.1	308758

Analysis Batch: 309021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-2	EW-1-23Q4-comp	Total/NA	Water	200.7 Rev 4.4	308745
MB 550-308745/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	308745
LCS 550-308745/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	308745
LCSD 550-308745/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	308745
550-208533-F-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	308745
550-208533-F-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	308745

General Chemistry

Prep Batch: 308884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-1	EW-1-23Q4	Total/NA	Water	SM 4500 CN C	
MB 550-308884/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	

General Chemistry (Continued)

Prep Batch: 308884 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 550-308884/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-308884/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-208413-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-208413-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 308975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-208544-1	EW-1-23Q4	Total/NA	Water	SM 4500 CN E	308884
MB 550-308884/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	308884
LCS 550-308884/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	308884
LCSD 550-308884/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	308884
550-208413-A-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	308884
550-208413-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	308884

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Client Sample ID: EW-1-23Q4

Lab Sample ID: 550-208544-1

Date Collected: 10/03/23 10:59

Matrix: Water

Date Received: 10/03/23 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	308823	R1K	EET PHX	10/05/23 15:55
Total/NA	Prep	SM 4500 CN C			308884	ZH	EET PHX	10/05/23 15:00
Total/NA	Analysis	SM 4500 CN E		1	308975	ZH	EET PHX	10/05/23 16:03

Client Sample ID: EW-1-23Q4-comp

Lab Sample ID: 550-208544-2

Date Collected: 10/03/23 10:56

Matrix: Water

Date Received: 10/03/23 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			308745	SGO	EET PHX	10/04/23 09:56
Total/NA	Analysis	200.7 Rev 4.4		1	309021	GLW	EET PHX	10/06/23 18:35
Total/NA	Prep	245.1			308758	HHL	EET PHX	10/04/23 12:25
Total/NA	Analysis	245.1		1	308799	HHL	EET PHX	10/04/23 16:08

Client Sample ID: TB-23Q4

Lab Sample ID: 550-208544-3

Date Collected: 10/03/23 08:00

Matrix: Water

Date Received: 10/03/23 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	308823	R1K	EET PHX	10/05/23 11:18

Laboratory References:

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. Job ID: 550-208544-1
Project/Site: Peoria (AZ)

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria (AZ)

Job ID: 550-208544-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX
200.7 Rev 4.4	Metals (ICP)	EPA	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
200.7	Preparation, Total Metals	EPA	EET PHX
245.1	Preparation, Mercury	EPA	EET PHX
SM 4500 CN C	Cyanide, Distillation	SM	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

208544

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell
Chain of Custody / Analysis Request

Save with QC Check: Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

AESI Ref:	45202.48654
COC#	35008-100323
	Page 1 of 1
Lab Proj # (SDG):	JD11212
Lab Location ID	TAL-PHX
HW Site R-Code	R35008
Sampling Program	Sampling program
Authorized User:	Honeywell
Lab Parent ID	TAL

Sampling Co.:	Jacobs	Pricing Source (RFP, eAuction, etc)	RFP2019
		Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS
Reporting Information (DocuSign First Signer)	Name: Jacobs	Sampler(s) names	T. Kearsley
	Address: 1501 W. Fountainhead Parkway	PO #	HW PO # A001368503
	City, State, Zip: Tempe, AZ 85282	Analysis Turnaround Time (calendar days):	10
	Contact; email: Berney Kidd; Bernice.Kidd@jacobs.com	Consultant	Jacobs
Billing Information (DocuSign Second Signer)	Co. Name: Honeywell	Laboratory Contact	Linda Eshelman
	Address: 111 South 34th Street M/S 158	Report Tier Level	2
	City, State, Zip: Phoenix, AZ 85034	Full Report and EDD TAT (calendar days)	10
	HW RM email: steven.bowles@honeywell.com	Honeywell RM Name	Steve Bowles

HW Site Name	Peoria (AZ)	Task Type	OM&M
Location of Site	Phoenix, AZ	WBS Code	6400

More Rows | Less Rows

Sample Identification

#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (TCE, benzene, chloroform, 1,1-DCE and 1,1-DCA only)	E200.7 (As, Cd, Cu, Pb, Mo, Se, Ag, Zn)	SM4500-CN-C,E (Cyanide)	E245.1 (mercury)			E200.7 (Cd, Cu, Pb, Zn) (Qrt-list)	E624 (TCE, chloroform, 1,1-DCE and 1,1-DCA only)					Sampling Method (rt_sample_method)	Lab Sample Numbers
										Preservative			18	21	30	21			21	18						
										Units																
1	EW-1	----	----	EW-1-23Q4	10/3/2023	10:59	GW-GWS	WATER	REG	4	N	N			X					X			-01			
2	EW-1	----	----	EW-1-23Q4-comp	10/3/2023	10:56	GW-GWS	WATER	REG	1	Y	N		X		X							-02			
3	TRIPBLANK	----	----	TB-23Q4	10/3/2023	8:00	BLKWATER	WATER	TB	1	N	N	X										-03			
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

550-208544 Chain of Custody

Start at D66 to type instructions.

[redacted]

CDO

Relinquished by	Company	Jacobs	Received by	Company	10/3/23	Condition		Custody Seals Intact
Thomas Kearsley	Date/Time [signature]	10/3/23 / 228	[signature]	Date/Time	EETA-PHX 12:28	Cooler Temp.	8.3°c on Ice	NA
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact
	Date/Time			Date/Time		Cooler Temp.	Lab Quote #	

Preservatives: (Other; Specify):	EW-1 Comp E200 7 Qrt-list only	0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAci); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (Nitric Acid, 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special).	FedEx Tracking #	

Create Excel Output | Create Text Output

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-208544-1

Login Number: 208544
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/21/2023 6:54:05 PM

JOB DESCRIPTION

Peoria

JOB NUMBER

550-210535-1

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
11/21/2023 6:54:05 PM

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

Table of Contents

Definitions/Glossary

Client: Jacobs Engineering Group, Inc. Job ID: 550-210535-1
Project/Site: Peoria

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
D2	Sample required dilution due to high concentration of analyte.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
R4	MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
T5	Laboratory not licensed for this parameter

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: 550-210535-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-210535-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/14/2023 5:18 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C

GC/MS VOA
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: Peoria

Job ID: 550-210535-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210535-1	MW-01A-435-23A1	Water	11/14/23 14:35	11/14/23 17:18
550-210535-2	PHX-01-23A1	Water	11/14/23 14:36	11/14/23 17:18
550-210535-3	MW-03-355-23A1	Water	11/14/23 09:30	11/14/23 17:18
550-210535-4	MW-04-355-23A1	Water	11/14/23 15:00	11/14/23 17:18
550-210535-5	PHX-02-23A1	Water	11/14/23 15:01	11/14/23 17:18
550-210535-6	MW-05-310-23A1	Water	11/14/23 11:15	11/14/23 17:18
550-210535-7	TB-23A1	Water	11/14/23 08:00	11/14/23 17:18
550-210535-8	EW-1-23A1	Water	11/14/23 13:45	11/14/23 17:18
550-210535-9	EW-2-360-23A1	Water	11/14/23 12:02	11/14/23 17:18
550-210535-10	MW-06-355-23A1	Water	11/14/23 10:50	11/14/23 17:18
550-210535-11	MW-08-355-23A1	Water	11/14/23 14:00	11/14/23 17:18
550-210535-12	MW-09-355-23A1	Water	11/14/23 10:10	11/14/23 17:18
550-210535-13	MW-12-410-23A1	Water	11/14/23 10:31	11/14/23 17:18
550-210535-14	MW-13-355-23A1	Water	11/14/23 15:50	11/14/23 17:18
550-210535-15	MW-14-350-23A1	Water	11/14/23 15:25	11/14/23 17:18
550-210535-16	MW-07-285-23A1	Water	11/14/23 09:50	11/14/23 17:18

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-01A-435-23A1 — Lab Sample ID: 550-210535-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	7.7		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethane	67		0.50		ug/L	1		624.1	Total/NA
Benzene	0.98		0.50		ug/L	1		624.1	Total/NA
Chloroform	17		0.50		ug/L	1		624.1	Total/NA
cis-1,2-Dichloroethene	7.9		0.50		ug/L	1		624.1	Total/NA
Tetrachloroethene	10		0.50		ug/L	1		624.1	Total/NA
trans-1,2-Dichloroethene	10		0.50		ug/L	1		624.1	Total/NA
Trichlorofluoromethane	1.8		1.0		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	17	T5	0.50		ug/L	1		624.1	Total/NA
Trichloroethene - DL	170	D2	2.5		ug/L	5		624.1	Total/NA
1,1-Dichloroethene - DL2	1800	D2	25		ug/L	50		624.1	Total/NA

Client Sample ID: PHX-01-23A1 — Lab Sample ID: 550-210535-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	8.0		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethane	70		0.50		ug/L	1		624.1	Total/NA
Benzene	1.0		0.50		ug/L	1		624.1	Total/NA
Chloroform	18		0.50		ug/L	1		624.1	Total/NA
cis-1,2-Dichloroethene	8.3		0.50		ug/L	1		624.1	Total/NA
Tetrachloroethene	11		0.50		ug/L	1		624.1	Total/NA
trans-1,2-Dichloroethene	11		0.50		ug/L	1		624.1	Total/NA
Trichlorofluoromethane	1.8		1.0		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	18	T5	0.50		ug/L	1		624.1	Total/NA
Trichloroethene - DL	190	D2	2.5		ug/L	5		624.1	Total/NA
1,1-Dichloroethene - DL2	1800	D2	25		ug/L	50		624.1	Total/NA

Client Sample ID: MW-03-355-23A1 — Lab Sample ID: 550-210535-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	54		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	61		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-04-355-23A1 — Lab Sample ID: 550-210535-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	18		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	3.2		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: PHX-02-23A1 — Lab Sample ID: 550-210535-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	19		0.50		ug/L	1		624.1	Total/NA
Tetrachloroethene	0.59		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	3.3		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-05-310-23A1 — Lab Sample ID: 550-210535-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	7.4		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	2.6		0.50		ug/L	1		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Detection Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: TB-23A1 — Lab Sample ID: 550-210535-7

No Detections.

Client Sample ID: EW-1-23A1 — Lab Sample ID: 550-210535-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.5		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	47		0.50		ug/L	1		624.1	Total/NA
Chloroform	0.95		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	15		0.50		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	0.95	T5	0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-2-360-23A1 — Lab Sample ID: 550-210535-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	17		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-06-355-23A1 — Lab Sample ID: 550-210535-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
tert-Butylbenzene	0.65		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-08-355-23A1 — Lab Sample ID: 550-210535-11

No Detections.

Client Sample ID: MW-09-355-23A1 — Lab Sample ID: 550-210535-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.87		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-12-410-23A1 — Lab Sample ID: 550-210535-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.97		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	10		0.50		ug/L	1		624.1	Total/NA
Chloroform	4.4		0.50		ug/L	1		624.1	Total/NA
Dichlorobromomethane	0.72		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	4.3		0.50		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	5.1	T5	0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-13-355-23A1 — Lab Sample ID: 550-210535-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.2		0.50		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	1.2	T5	0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-14-350-23A1 — Lab Sample ID: 550-210535-15

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.9		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-07-285-23A1 — Lab Sample ID: 550-210535-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.0		0.50		ug/L	1		624.1	Total/NA
Chloroform	0.73		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	0.56		0.50		ug/L	1		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-07-285-23A1 (Continued)

Lab Sample ID: 550-210535-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Trihalomethanes, Total	0.73	T5	0.50		ug/L	1		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-01A-435-23A1
Date Collected: 11/14/23 14:35
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-1
Matrix: Water

Method: EPA 624.1 - 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			11/15/23 14:24	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 14:24	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 14:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 14:24	1
1,1,2-Trichloroethane	**7.7**		0.50		ug/L			11/15/23 14:24	1
1,1-Dichloroethane	**67**		0.50		ug/L			11/15/23 14:24	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 14:24	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 14:24	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 14:24	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 14:24	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 14:24	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:24	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 14:24	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 14:24	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:24	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:24	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 14:24	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:24	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 14:24	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 14:24	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:24	1
2-Hexanone	ND		5.0		ug/L			11/15/23 14:24	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:24	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 14:24	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 14:24	1
Acetone	ND		10		ug/L			11/15/23 14:24	1
Benzene	**0.98**		0.50		ug/L			11/15/23 14:24	1
Bromobenzene	ND		1.0		ug/L			11/15/23 14:24	1
Bromoform	ND		1.0		ug/L			11/15/23 14:24	1
Bromomethane	ND		5.0		ug/L			11/15/23 14:24	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 14:24	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 14:24	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 14:24	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 14:24	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 14:24	1
Chloroethane	ND		1.0		ug/L			11/15/23 14:24	1
Chloroform	**17**		0.50		ug/L			11/15/23 14:24	1
Chloromethane	ND		1.0		ug/L			11/15/23 14:24	1
cis-1,2-Dichloroethene	**7.9**		0.50		ug/L			11/15/23 14:24	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:24	1
Dibromomethane	ND		0.50		ug/L			11/15/23 14:24	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 14:24	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 14:24	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 14:24	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 14:24	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 14:24	1
Iodomethane	ND		2.0		ug/L			11/15/23 14:24	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 14:24	1

Client Sample ID: MW-01A-435-23A1

Date Collected: 11/14/23 14:35
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-1

Matrix: Water

Method: EPA 624.1 - 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			11/15/23 14:24	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 14:24	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 14:24	1
Naphthalene	ND		5.0		ug/L			11/15/23 14:24	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 14:24	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 14:24	1
o-Xylene	ND		0.50		ug/L			11/15/23 14:24	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 14:24	1
Styrene	ND		1.0		ug/L			11/15/23 14:24	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 14:24	1
Tetrachloroethene	**10**		0.50		ug/L			11/15/23 14:24	1
Toluene	ND		0.50		ug/L			11/15/23 14:24	1
trans-1,2-Dichloroethene	**10**		0.50		ug/L			11/15/23 14:24	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:24	1
Trichlorofluoromethane	**1.8**		1.0		ug/L			11/15/23 14:24	1
Trihalomethanes, Total	**17**	**T5**	0.50		ug/L			11/15/23 14:24	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 14:24	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 14:24	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*11/15/23 14:24*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*11/15/23 14:24*	*1*
Toluene-d8 (Surr)	*91*		*60 - 140*		*11/15/23 14:24*	*1*

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**170**	**D2**	2.5		ug/L			11/16/23 13:11	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*11/16/23 13:11*	*5*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*11/16/23 13:11*	*5*
Toluene-d8 (Surr)	*87*		*60 - 140*		*11/16/23 13:11*	*5*

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**1800**	**D2**	25		ug/L			11/16/23 12:49	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*11/16/23 12:49*	*50*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*11/16/23 12:49*	*50*
Toluene-d8 (Surr)	*87*		*60 - 140*		*11/16/23 12:49*	*50*

Client Sample ID: PHX-01-23A1

Date Collected: 11/14/23 14:36
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-2

Matrix: Water

Method: EPA 624.1 - 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			11/15/23 14:03	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 14:03	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: PHX-01-23A1
Date Collected: 11/14/23 14:36
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-2
Matrix: Water

Method: EPA 624.1 - 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			11/15/23 14:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 14:03	1
1,1,2-Trichloroethane	**8.0**		0.50		ug/L			11/15/23 14:03	1
1,1-Dichloroethane	**70**		0.50		ug/L			11/15/23 14:03	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 14:03	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 14:03	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 14:03	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 14:03	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 14:03	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:03	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 14:03	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 14:03	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:03	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:03	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 14:03	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:03	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 14:03	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 14:03	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:03	1
2-Hexanone	ND		5.0		ug/L			11/15/23 14:03	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:03	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 14:03	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 14:03	1
Acetone	ND		10		ug/L			11/15/23 14:03	1
Benzene	**1.0**		0.50		ug/L			11/15/23 14:03	1
Bromobenzene	ND		1.0		ug/L			11/15/23 14:03	1
Bromoform	ND		1.0		ug/L			11/15/23 14:03	1
Bromomethane	ND		5.0		ug/L			11/15/23 14:03	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 14:03	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 14:03	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 14:03	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 14:03	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 14:03	1
Chloroethane	ND		1.0		ug/L			11/15/23 14:03	1
Chloroform	**18**		0.50		ug/L			11/15/23 14:03	1
Chloromethane	ND		1.0		ug/L			11/15/23 14:03	1
cis-1,2-Dichloroethene	**8.3**		0.50		ug/L			11/15/23 14:03	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:03	1
Dibromomethane	ND		0.50		ug/L			11/15/23 14:03	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 14:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 14:03	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 14:03	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 14:03	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 14:03	1
Iodomethane	ND		2.0		ug/L			11/15/23 14:03	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 14:03	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 14:03	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 14:03	1

Client Sample ID: PHX-01-23A1

Date Collected: 11/14/23 14:36
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-2

Matrix: Water

Method: EPA 624.1 - 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			11/15/23 14:03	1
Naphthalene	ND		5.0		ug/L			11/15/23 14:03	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 14:03	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 14:03	1
o-Xylene	ND		0.50		ug/L			11/15/23 14:03	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 14:03	1
Styrene	ND		1.0		ug/L			11/15/23 14:03	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 14:03	1
Tetrachloroethene	**11**		0.50		ug/L			11/15/23 14:03	1
Toluene	ND		0.50		ug/L			11/15/23 14:03	1
trans-1,2-Dichloroethene	**11**		0.50		ug/L			11/15/23 14:03	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:03	1
Trichlorofluoromethane	**1.8**		1.0		ug/L			11/15/23 14:03	1
Trihalomethanes, Total	**18**	**T5**	0.50		ug/L			11/15/23 14:03	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 14:03	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 14:03	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*11/15/23 14:03*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*11/15/23 14:03*	*1*
Toluene-d8 (Surr)	*91*		*60 - 140*		*11/15/23 14:03*	*1*

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**190**	**D2**	2.5		ug/L			11/16/23 13:55	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*60 - 140*		*11/16/23 13:55*	*5*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*11/16/23 13:55*	*5*
Toluene-d8 (Surr)	*87*		*60 - 140*		*11/16/23 13:55*	*5*

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**1800**	**D2**	25		ug/L			11/16/23 13:33	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*60 - 140*		*11/16/23 13:33*	*50*
Dibromofluoromethane (Surr)	*100*		*60 - 140*		*11/16/23 13:33*	*50*
Toluene-d8 (Surr)	*86*		*60 - 140*		*11/16/23 13:33*	*50*

Client Sample ID: MW-03-355-23A1

Date Collected: 11/14/23 09:30
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-3

Matrix: Water

Method: EPA 624.1 - 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			11/15/23 13:42	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 13:42	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 13:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 13:42	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-03-355-23A1
Date Collected: 11/14/23 09:30
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-3
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 13:42	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 13:42	1
1,1-Dichloroethene	**54**		0.50		ug/L			11/15/23 13:42	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 13:42	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 13:42	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 13:42	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 13:42	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 13:42	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:42	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 13:42	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 13:42	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:42	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:42	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 13:42	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:42	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 13:42	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 13:42	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:42	1
2-Hexanone	ND		5.0		ug/L			11/15/23 13:42	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:42	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 13:42	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 13:42	1
Acetone	ND		10		ug/L			11/15/23 13:42	1
Benzene	ND		0.50		ug/L			11/15/23 13:42	1
Bromobenzene	ND		1.0		ug/L			11/15/23 13:42	1
Bromoform	ND		1.0		ug/L			11/15/23 13:42	1
Bromomethane	ND		5.0		ug/L			11/15/23 13:42	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 13:42	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 13:42	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 13:42	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 13:42	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 13:42	1
Chloroethane	ND		1.0		ug/L			11/15/23 13:42	1
Chloroform	ND		0.50		ug/L			11/15/23 13:42	1
Chloromethane	ND		1.0		ug/L			11/15/23 13:42	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:42	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:42	1
Dibromomethane	ND		0.50		ug/L			11/15/23 13:42	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 13:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 13:42	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 13:42	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 13:42	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 13:42	1
Iodomethane	ND		2.0		ug/L			11/15/23 13:42	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 13:42	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 13:42	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 13:42	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 13:42	1

Client Sample ID: MW-03-355-23A1

Date Collected: 11/14/23 09:30
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-3

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			11/15/23 13:42	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 13:42	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 13:42	1
o-Xylene	ND		0.50		ug/L			11/15/23 13:42	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 13:42	1
Styrene	ND		1.0		ug/L			11/15/23 13:42	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 13:42	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 13:42	1
Toluene	ND		0.50		ug/L			11/15/23 13:42	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:42	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:42	1
Trichloroethene	**61**		0.50		ug/L			11/15/23 13:42	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 13:42	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 13:42	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 13:42	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 13:42	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*11/15/23 13:42*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*11/15/23 13:42*	*1*
Toluene-d8 (Surr)	*91*		*60 - 140*		*11/15/23 13:42*	*1*

Client Sample ID: MW-04-355-23A1

Date Collected: 11/14/23 15:00
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-4

Matrix: Water

Method: EPA 624.1 - 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			11/15/23 13:20	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 13:20	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 13:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 13:20	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 13:20	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 13:20	1
1,1-Dichloroethene	**18**		0.50		ug/L			11/15/23 13:20	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 13:20	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 13:20	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 13:20	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 13:20	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 13:20	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:20	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 13:20	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 13:20	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:20	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:20	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 13:20	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:20	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 13:20	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-04-355-23A1
Date Collected: 11/14/23 15:00
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-4
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		10		ug/L			11/15/23 13:20	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:20	1
2-Hexanone	ND		5.0		ug/L			11/15/23 13:20	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:20	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 13:20	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 13:20	1
Acetone	ND		10		ug/L			11/15/23 13:20	1
Benzene	ND		0.50		ug/L			11/15/23 13:20	1
Bromobenzene	ND		1.0		ug/L			11/15/23 13:20	1
Bromoform	ND		1.0		ug/L			11/15/23 13:20	1
Bromomethane	ND		5.0		ug/L			11/15/23 13:20	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 13:20	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 13:20	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 13:20	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 13:20	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 13:20	1
Chloroethane	ND		1.0		ug/L			11/15/23 13:20	1
Chloroform	ND		0.50		ug/L			11/15/23 13:20	1
Chloromethane	ND		1.0		ug/L			11/15/23 13:20	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:20	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:20	1
Dibromomethane	ND		0.50		ug/L			11/15/23 13:20	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 13:20	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 13:20	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 13:20	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 13:20	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 13:20	1
Iodomethane	ND		2.0		ug/L			11/15/23 13:20	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 13:20	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 13:20	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 13:20	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 13:20	1
Naphthalene	ND		5.0		ug/L			11/15/23 13:20	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 13:20	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 13:20	1
o-Xylene	ND		0.50		ug/L			11/15/23 13:20	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 13:20	1
Styrene	ND		1.0		ug/L			11/15/23 13:20	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 13:20	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 13:20	1
Toluene	ND		0.50		ug/L			11/15/23 13:20	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:20	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:20	1
Trichloroethene	**3.2**		0.50		ug/L			11/15/23 13:20	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 13:20	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 13:20	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 13:20	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 13:20	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 13:20	1

Client Sample ID: MW-04-355-23A1

Lab Sample ID: 550-210535-4

Date Collected: 11/14/23 15:00

Matrix: Water

Date Received: 11/14/23 17:18

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*11/15/23 13:20*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*11/15/23 13:20*	*1*
Toluene-d8 (Surr)	*91*		*60 - 140*		*11/15/23 13:20*	*1*

Client Sample ID: PHX-02-23A1

Lab Sample ID: 550-210535-5

Date Collected: 11/14/23 15:01

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - 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			11/15/23 11:12	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 11:12	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 11:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 11:12	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 11:12	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 11:12	1
1,1-Dichloroethene	**19**		0.50		ug/L			11/15/23 11:12	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 11:12	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 11:12	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 11:12	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 11:12	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 11:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 11:12	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/16/23 14:17	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 11:12	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 11:12	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 11:12	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 11:12	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 11:12	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/16/23 14:17	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 11:12	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 11:12	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 11:12	1
2-Hexanone	ND		5.0		ug/L			11/15/23 11:12	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 11:12	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 11:12	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 11:12	1
Acetone	ND		10		ug/L			11/15/23 11:12	1
Benzene	ND		0.50		ug/L			11/15/23 11:12	1
Bromobenzene	ND		1.0		ug/L			11/15/23 11:12	1
Bromoform	ND		1.0		ug/L			11/15/23 11:12	1
Bromomethane	ND		5.0		ug/L			11/15/23 11:12	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 11:12	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 11:12	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 11:12	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 11:12	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 11:12	1
Chloroethane	ND		1.0		ug/L			11/15/23 11:12	1
Chloroform	ND		0.50		ug/L			11/15/23 11:12	1
Chloromethane	ND		1.0		ug/L			11/15/23 11:12	1

Client Sample ID: PHX-02-23A1

Date Collected: 11/14/23 15:01
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-5

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 11:12	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 11:12	1
Dibromomethane	ND		0.50		ug/L			11/15/23 11:12	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 11:12	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 11:12	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 11:12	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 11:12	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 11:12	1
Iodomethane	ND		2.0		ug/L			11/15/23 11:12	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 11:12	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 11:12	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 11:12	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 11:12	1
Naphthalene	ND		5.0		ug/L			11/15/23 11:12	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 11:12	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 11:12	1
o-Xylene	ND		0.50		ug/L			11/15/23 11:12	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 11:12	1
Styrene	ND		1.0		ug/L			11/15/23 11:12	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 11:12	1
Tetrachloroethene	**0.59**		0.50		ug/L			11/16/23 14:17	1
Toluene	ND		0.50		ug/L			11/15/23 11:12	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 11:12	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 11:12	1
Trichloroethene	**3.3**		0.50		ug/L			11/15/23 11:12	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 11:12	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 11:12	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 11:12	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 11:12	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*11/15/23 11:12*	*1*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*11/16/23 14:17*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*		*11/15/23 11:12*	*1*
Dibromofluoromethane (Surr)	*100*		*60 - 140*		*11/16/23 14:17*	*1*
Toluene-d8 (Surr)	*93*		*60 - 140*		*11/15/23 11:12*	*1*
Toluene-d8 (Surr)	*85*		*60 - 140*		*11/16/23 14:17*	*1*

Client Sample ID: MW-05-310-23A1

Date Collected: 11/14/23 11:15
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-6

Matrix: Water

Method: EPA 624.1 - 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			11/15/23 11:59	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 11:59	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 11:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 11:59	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 11:59	1

Client Sample ID: MW-05-310-23A1
Date Collected: 11/14/23 11:15
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-6
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 11:59	1
1,1-Dichloroethene	**7.4**		0.50		ug/L			11/15/23 11:59	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 11:59	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 11:59	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 11:59	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 11:59	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 11:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 11:59	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 11:59	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 11:59	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 11:59	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 11:59	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 11:59	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 11:59	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 11:59	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 11:59	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 11:59	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 11:59	1
2-Hexanone	ND		5.0		ug/L			11/15/23 11:59	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 11:59	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 11:59	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 11:59	1
Acetone	ND		10		ug/L			11/15/23 11:59	1
Benzene	ND		0.50		ug/L			11/15/23 11:59	1
Bromobenzene	ND		1.0		ug/L			11/15/23 11:59	1
Bromoform	ND		1.0		ug/L			11/15/23 11:59	1
Bromomethane	ND		5.0		ug/L			11/15/23 11:59	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 11:59	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 11:59	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 11:59	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 11:59	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 11:59	1
Chloroethane	ND		1.0		ug/L			11/15/23 11:59	1
Chloroform	ND		0.50		ug/L			11/15/23 11:59	1
Chloromethane	ND		1.0		ug/L			11/15/23 11:59	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 11:59	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 11:59	1
Dibromomethane	ND		0.50		ug/L			11/15/23 11:59	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 11:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 11:59	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 11:59	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 11:59	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 11:59	1
Iodomethane	ND		2.0		ug/L			11/15/23 11:59	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 11:59	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 11:59	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 11:59	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 11:59	1
Naphthalene	ND		5.0		ug/L			11/15/23 11:59	1

Client Sample ID: MW-05-310-23A1

Lab Sample ID: 550-210535-6

Date Collected: 11/14/23 11:15

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			11/15/23 11:59	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 11:59	1
o-Xylene	ND		0.50		ug/L			11/15/23 11:59	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 11:59	1
Styrene	ND		1.0		ug/L			11/15/23 11:59	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 11:59	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 11:59	1
Toluene	ND		0.50		ug/L			11/15/23 11:59	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 11:59	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 11:59	1
Trichloroethene	**2.6**		0.50		ug/L			11/15/23 11:59	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 11:59	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 11:59	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 11:59	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 11:59	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*		*11/15/23 11:59*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*		*11/15/23 11:59*	*1*
Toluene-d8 (Surr)	*85*		*60 - 140*		*11/15/23 11:59*	*1*

Client Sample ID: TB-23A1

Lab Sample ID: 550-210535-7

Date Collected: 11/14/23 08:00

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - 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			11/15/23 10:34	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 10:34	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 10:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 10:34	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 10:34	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 10:34	1
1,1-Dichloroethene	ND		0.50		ug/L			11/15/23 10:34	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 10:34	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 10:34	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 10:34	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 10:34	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 10:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 10:34	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:34	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 10:34	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 10:34	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 10:34	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:34	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 10:34	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:34	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 10:34	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 10:34	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: TB-23A1
Date Collected: 11/14/23 08:00
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-7
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 10:34	1
2-Hexanone	ND		5.0		ug/L			11/15/23 10:34	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 10:34	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 10:34	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 10:34	1
Acetone	ND		10		ug/L			11/15/23 10:34	1
Benzene	ND		0.50		ug/L			11/15/23 10:34	1
Bromobenzene	ND		1.0		ug/L			11/15/23 10:34	1
Bromoform	ND		1.0		ug/L			11/15/23 10:34	1
Bromomethane	ND		5.0		ug/L			11/15/23 10:34	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 10:34	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 10:34	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 10:34	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 10:34	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 10:34	1
Chloroethane	ND		1.0		ug/L			11/15/23 10:34	1
Chloroform	ND		0.50		ug/L			11/15/23 10:34	1
Chloromethane	ND		1.0		ug/L			11/15/23 10:34	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 10:34	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 10:34	1
Dibromomethane	ND		0.50		ug/L			11/15/23 10:34	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 10:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 10:34	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 10:34	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 10:34	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 10:34	1
Iodomethane	ND		2.0		ug/L			11/15/23 10:34	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 10:34	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 10:34	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 10:34	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 10:34	1
Naphthalene	ND		5.0		ug/L			11/15/23 10:34	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 10:34	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 10:34	1
o-Xylene	ND		0.50		ug/L			11/15/23 10:34	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 10:34	1
Styrene	ND		1.0		ug/L			11/15/23 10:34	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 10:34	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 10:34	1
Toluene	ND		0.50		ug/L			11/15/23 10:34	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 10:34	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 10:34	1
Trichloroethene	ND		0.50		ug/L			11/15/23 10:34	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 10:34	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 10:34	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 10:34	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 10:34	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 10:34	1

Client Sample ID: TB-23A1

Date Collected: 11/14/23 08:00
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-7
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*11/15/23 10:34*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*11/15/23 10:34*	*1*
Toluene-d8 (Surr)	*86*		*60 - 140*		*11/15/23 10:34*	*1*

Client Sample ID: EW-1-23A1

Date Collected: 11/14/23 13:45
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-8
Matrix: Water

Method: EPA 624.1 - 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			11/15/23 12:19	1
1,1,1-Trichloroethane	ND		0.50	ug/L			11/15/23 12:19	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			11/15/23 12:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0	ug/L			11/15/23 12:19	1
1,1,2-Trichloroethane	ND		0.50	ug/L			11/15/23 12:19	1
1,1-Dichloroethane	**3.5**		0.50	ug/L			11/15/23 12:19	1
1,1-Dichloroethene	**47**		0.50	ug/L			11/15/23 12:19	1
1,1-Dichloropropene	ND		0.50	ug/L			11/15/23 12:19	1
1,2,3-Trichlorobenzene	ND		3.0	ug/L			11/15/23 12:19	1
1,2,3-Trichloropropane	ND		2.0	ug/L			11/15/23 12:19	1
1,2,4-Trichlorobenzene	ND	T5	2.0	ug/L			11/15/23 12:19	1
1,2,4-Trimethylbenzene	ND		0.50	ug/L			11/15/23 12:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			11/15/23 12:19	1
1,2-Dichlorobenzene	ND		0.50	ug/L			11/15/23 12:19	1
1,2-Dichloroethane	ND		0.50	ug/L			11/15/23 12:19	1
1,2-Dichloropropane	ND		0.50	ug/L			11/15/23 12:19	1
1,3,5-Trimethylbenzene	ND		0.50	ug/L			11/15/23 12:19	1
1,3-Dichlorobenzene	ND		0.50	ug/L			11/15/23 12:19	1
1,3-Dichloropropane	ND		0.50	ug/L			11/15/23 12:19	1
1,4-Dichlorobenzene	ND		0.50	ug/L			11/15/23 12:19	1
2,2-Dichloropropane	ND		1.0	ug/L			11/15/23 12:19	1
2-Butanone (MEK)	ND		10	ug/L			11/15/23 12:19	1
2-Chlorotoluene	ND		0.50	ug/L			11/15/23 12:19	1
2-Hexanone	ND		5.0	ug/L			11/15/23 12:19	1
4-Chlorotoluene	ND		0.50	ug/L			11/15/23 12:19	1
4-Isopropyltoluene	ND		0.50	ug/L			11/15/23 12:19	1
4-Methyl-2-pentanone (MIBK)	ND		2.5	ug/L			11/15/23 12:19	1
Acetone	ND		10	ug/L			11/15/23 12:19	1
Benzene	ND		0.50	ug/L			11/15/23 12:19	1
Bromobenzene	ND		1.0	ug/L			11/15/23 12:19	1
Bromoform	ND		1.0	ug/L			11/15/23 12:19	1
Bromomethane	ND		5.0	ug/L			11/15/23 12:19	1
Carbon disulfide	ND		5.0	ug/L			11/15/23 12:19	1
Carbon tetrachloride	ND		0.50	ug/L			11/15/23 12:19	1
Chlorobenzene	ND		0.50	ug/L			11/15/23 12:19	1
Chlorobromomethane	ND		0.50	ug/L			11/15/23 12:19	1
Chlorodibromomethane	ND		0.50	ug/L			11/15/23 12:19	1
Chloroethane	ND		1.0	ug/L			11/15/23 12:19	1
Chloroform	**0.95**		0.50	ug/L			11/15/23 12:19	1
Chloromethane	ND		1.0	ug/L			11/15/23 12:19	1

Client Sample ID: EW-1-23A1

Lab Sample ID: 550-210535-8

Date Collected: 11/14/23 13:45

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 12:19	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 12:19	1
Dibromomethane	ND		0.50		ug/L			11/15/23 12:19	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 12:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 12:19	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 12:19	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 12:19	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 12:19	1
Iodomethane	ND		2.0		ug/L			11/15/23 12:19	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 12:19	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 12:19	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 12:19	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 12:19	1
Naphthalene	ND		5.0		ug/L			11/15/23 12:19	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 12:19	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 12:19	1
o-Xylene	ND		0.50		ug/L			11/15/23 12:19	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 12:19	1
Styrene	ND		1.0		ug/L			11/15/23 12:19	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 12:19	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 12:19	1
Toluene	ND		0.50		ug/L			11/15/23 12:19	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 12:19	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 12:19	1
Trichloroethene	**15**		0.50		ug/L			11/15/23 12:19	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 12:19	1
Trihalomethanes, Total	**0.95**	**T5**	0.50		ug/L			11/15/23 12:19	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 12:19	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 12:19	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*		*11/15/23 12:19*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*11/15/23 12:19*	*1*
Toluene-d8 (Surr)	*86*		*60 - 140*		*11/15/23 12:19*	*1*

Client Sample ID: EW-2-360-23A1

Lab Sample ID: 550-210535-9

Date Collected: 11/14/23 12:02

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - 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			11/15/23 12:40	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 12:40	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 12:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 12:40	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 12:40	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 12:40	1
1,1-Dichloroethene	ND		0.50		ug/L			11/15/23 12:40	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 12:40	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: EW-2-360-23A1
Date Collected: 11/14/23 12:02
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-9
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 12:40	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 12:40	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 12:40	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 12:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 12:40	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 12:40	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 12:40	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 12:40	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 12:40	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 12:40	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 12:40	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 12:40	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 12:40	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 12:40	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 12:40	1
2-Hexanone	ND		5.0		ug/L			11/15/23 12:40	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 12:40	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 12:40	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 12:40	1
Acetone	ND		10		ug/L			11/15/23 12:40	1
Benzene	ND		0.50		ug/L			11/15/23 12:40	1
Bromobenzene	ND		1.0		ug/L			11/15/23 12:40	1
Bromoform	ND		1.0		ug/L			11/15/23 12:40	1
Bromomethane	ND		5.0		ug/L			11/15/23 12:40	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 12:40	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 12:40	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 12:40	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 12:40	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 12:40	1
Chloroethane	ND		1.0		ug/L			11/15/23 12:40	1
Chloroform	ND		0.50		ug/L			11/15/23 12:40	1
Chloromethane	ND		1.0		ug/L			11/15/23 12:40	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 12:40	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 12:40	1
Dibromomethane	ND		0.50		ug/L			11/15/23 12:40	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 12:40	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 12:40	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 12:40	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 12:40	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 12:40	1
Iodomethane	ND		2.0		ug/L			11/15/23 12:40	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 12:40	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 12:40	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 12:40	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 12:40	1
Naphthalene	ND		5.0		ug/L			11/15/23 12:40	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 12:40	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 12:40	1
o-Xylene	ND		0.50		ug/L			11/15/23 12:40	1

Client Sample ID: EW-2-360-23A1

Date Collected: 11/14/23 12:02
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-9
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 12:40	1
Styrene	ND		1.0		ug/L			11/15/23 12:40	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 12:40	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 12:40	1
Toluene	ND		0.50		ug/L			11/15/23 12:40	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 12:40	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 12:40	1
Trichloroethene	**17**		0.50		ug/L			11/15/23 12:40	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 12:40	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 12:40	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 12:40	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 12:40	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*11/15/23 12:40*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*11/15/23 12:40*	*1*
Toluene-d8 (Surr)	*82*		*60 - 140*		*11/15/23 12:40*	*1*

Client Sample ID: MW-06-355-23A1

Date Collected: 11/14/23 10:50
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-10
Matrix: Water

Method: EPA 624.1 - 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			11/15/23 11:38	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 11:38	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 11:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 11:38	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 11:38	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 11:38	1
1,1-Dichloroethene	ND		0.50		ug/L			11/15/23 11:38	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 11:38	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 11:38	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 11:38	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 11:38	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 11:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 11:38	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 11:38	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 11:38	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 11:38	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 11:38	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 11:38	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 11:38	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 11:38	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 11:38	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 11:38	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 11:38	1
2-Hexanone	ND		5.0		ug/L			11/15/23 11:38	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 11:38	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-06-355-23A1
Date Collected: 11/14/23 10:50
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-10
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 11:38	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 11:38	1
Acetone	ND		10		ug/L			11/15/23 11:38	1
Benzene	ND		0.50		ug/L			11/15/23 11:38	1
Bromobenzene	ND		1.0		ug/L			11/15/23 11:38	1
Bromoform	ND		1.0		ug/L			11/15/23 11:38	1
Bromomethane	ND		5.0		ug/L			11/15/23 11:38	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 11:38	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 11:38	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 11:38	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 11:38	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 11:38	1
Chloroethane	ND		1.0		ug/L			11/15/23 11:38	1
Chloroform	ND		0.50		ug/L			11/15/23 11:38	1
Chloromethane	ND		1.0		ug/L			11/15/23 11:38	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 11:38	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 11:38	1
Dibromomethane	ND		0.50		ug/L			11/15/23 11:38	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 11:38	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 11:38	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 11:38	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 11:38	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 11:38	1
Iodomethane	ND		2.0		ug/L			11/15/23 11:38	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 11:38	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 11:38	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 11:38	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 11:38	1
Naphthalene	ND		5.0		ug/L			11/15/23 11:38	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 11:38	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 11:38	1
o-Xylene	ND		0.50		ug/L			11/15/23 11:38	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 11:38	1
Styrene	ND		1.0		ug/L			11/15/23 11:38	1
tert-Butylbenzene	**0.65**		0.50		ug/L			11/15/23 11:38	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 11:38	1
Toluene	ND		0.50		ug/L			11/15/23 11:38	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 11:38	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 11:38	1
Trichloroethene	ND		0.50		ug/L			11/15/23 11:38	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 11:38	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 11:38	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 11:38	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 11:38	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*		*11/15/23 11:38*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*11/15/23 11:38*	*1*
Toluene-d8 (Surr)	*88*		*60 - 140*		*11/15/23 11:38*	*1*

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-08-355-23A1

Date Collected: 11/14/23 14:00
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-11

Matrix: Water

Method: EPA 624.1 - 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			11/15/23 13:02	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 13:02	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 13:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 13:02	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 13:02	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 13:02	1
1,1-Dichloroethene	ND		0.50		ug/L			11/15/23 13:02	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 13:02	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 13:02	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 13:02	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 13:02	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 13:02	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:02	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 13:02	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 13:02	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:02	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:02	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 13:02	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:02	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 13:02	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 13:02	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:02	1
2-Hexanone	ND		5.0		ug/L			11/15/23 13:02	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:02	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 13:02	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 13:02	1
Acetone	ND		10		ug/L			11/15/23 13:02	1
Benzene	ND		0.50		ug/L			11/15/23 13:02	1
Bromobenzene	ND		1.0		ug/L			11/15/23 13:02	1
Bromoform	ND		1.0		ug/L			11/15/23 13:02	1
Bromomethane	ND		5.0		ug/L			11/15/23 13:02	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 13:02	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 13:02	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 13:02	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 13:02	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 13:02	1
Chloroethane	ND		1.0		ug/L			11/15/23 13:02	1
Chloroform	ND		0.50		ug/L			11/15/23 13:02	1
Chloromethane	ND		1.0		ug/L			11/15/23 13:02	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:02	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:02	1
Dibromomethane	ND		0.50		ug/L			11/15/23 13:02	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 13:02	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 13:02	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 13:02	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 13:02	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 13:02	1
Iodomethane	ND		2.0		ug/L			11/15/23 13:02	1

Client Sample ID: MW-08-355-23A1

Date Collected: 11/14/23 14:00
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-11

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.50		ug/L			11/15/23 13:02	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 13:02	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 13:02	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 13:02	1
Naphthalene	ND		5.0		ug/L			11/15/23 13:02	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 13:02	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 13:02	1
o-Xylene	ND		0.50		ug/L			11/15/23 13:02	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 13:02	1
Styrene	ND		1.0		ug/L			11/15/23 13:02	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 13:02	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 13:02	1
Toluene	ND		0.50		ug/L			11/15/23 13:02	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:02	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:02	1
Trichloroethene	ND		0.50		ug/L			11/15/23 13:02	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 13:02	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 13:02	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 13:02	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 13:02	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*60 - 140*		*11/15/23 13:02*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*		*11/15/23 13:02*	*1*
Toluene-d8 (Surr)	*88*		*60 - 140*		*11/15/23 13:02*	*1*

Client Sample ID: MW-09-355-23A1

Date Collected: 11/14/23 10:10
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-12

Matrix: Water

Method: EPA 624.1 - 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			11/15/23 13:23	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 13:23	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 13:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 13:23	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 13:23	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 13:23	1
1,1-Dichloroethene	**0.87**		0.50		ug/L			11/15/23 13:23	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 13:23	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 13:23	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 13:23	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 13:23	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 13:23	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:23	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 13:23	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 13:23	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:23	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-09-355-23A1
Date Collected: 11/14/23 10:10
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-12
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:23	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 13:23	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:23	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 13:23	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 13:23	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:23	1
2-Hexanone	ND		5.0		ug/L			11/15/23 13:23	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:23	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 13:23	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 13:23	1
Acetone	ND		10		ug/L			11/15/23 13:23	1
Benzene	ND		0.50		ug/L			11/15/23 13:23	1
Bromobenzene	ND		1.0		ug/L			11/15/23 13:23	1
Bromoform	ND		1.0		ug/L			11/15/23 13:23	1
Bromomethane	ND		5.0		ug/L			11/15/23 13:23	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 13:23	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 13:23	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 13:23	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 13:23	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 13:23	1
Chloroethane	ND		1.0		ug/L			11/15/23 13:23	1
Chloroform	ND		0.50		ug/L			11/15/23 13:23	1
Chloromethane	ND		1.0		ug/L			11/15/23 13:23	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:23	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:23	1
Dibromomethane	ND		0.50		ug/L			11/15/23 13:23	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 13:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 13:23	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 13:23	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 13:23	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 13:23	1
Iodomethane	ND		2.0		ug/L			11/15/23 13:23	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 13:23	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 13:23	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 13:23	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 13:23	1
Naphthalene	ND		5.0		ug/L			11/15/23 13:23	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 13:23	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 13:23	1
o-Xylene	ND		0.50		ug/L			11/15/23 13:23	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 13:23	1
Styrene	ND		1.0		ug/L			11/15/23 13:23	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 13:23	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 13:23	1
Toluene	ND		0.50		ug/L			11/15/23 13:23	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:23	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:23	1
Trichloroethene	ND		0.50		ug/L			11/15/23 13:23	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 13:23	1

Client Sample ID: MW-09-355-23A1

Lab Sample ID: 550-210535-12

Date Collected: 11/14/23 10:10

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 13:23	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 13:23	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 13:23	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*11/15/23 13:23*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*11/15/23 13:23*	*1*
Toluene-d8 (Surr)	*85*		*60 - 140*		*11/15/23 13:23*	*1*

Client Sample ID: MW-12-410-23A1

Lab Sample ID: 550-210535-13

Date Collected: 11/14/23 10:31

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - 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			11/15/23 13:44	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 13:44	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 13:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 13:44	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 13:44	1
1,1-Dichloroethane	**0.97**		0.50		ug/L			11/15/23 13:44	1
1,1-Dichloroethene	**10**		0.50		ug/L			11/15/23 13:44	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 13:44	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 13:44	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 13:44	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 13:44	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 13:44	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:44	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 13:44	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 13:44	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 13:44	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:44	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 13:44	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 13:44	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 13:44	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 13:44	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:44	1
2-Hexanone	ND		5.0		ug/L			11/15/23 13:44	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 13:44	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 13:44	1
Acetone	ND		10		ug/L			11/15/23 13:44	1
Benzene	ND		0.50		ug/L			11/15/23 13:44	1
Bromobenzene	ND		1.0		ug/L			11/15/23 13:44	1
Bromoform	ND		1.0		ug/L			11/15/23 13:44	1
Bromomethane	ND		5.0		ug/L			11/15/23 13:44	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 13:44	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 13:44	1

Client Sample ID: MW-12-410-23A1

Lab Sample ID: 550-210535-13

Date Collected: 11/14/23 10:31

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.50		ug/L			11/15/23 13:44	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 13:44	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 13:44	1
Chloroethane	ND		1.0		ug/L			11/15/23 13:44	1
Chloroform	**4.4**		0.50		ug/L			11/15/23 13:44	1
Chloromethane	ND		1.0		ug/L			11/15/23 13:44	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:44	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:44	1
Dibromomethane	ND		0.50		ug/L			11/15/23 13:44	1
Dichlorobromomethane	**0.72**		0.50		ug/L			11/15/23 13:44	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 13:44	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 13:44	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 13:44	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 13:44	1
Iodomethane	ND		2.0		ug/L			11/15/23 13:44	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 13:44	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 13:44	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 13:44	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 13:44	1
Naphthalene	ND		5.0		ug/L			11/15/23 13:44	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 13:44	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 13:44	1
o-Xylene	ND		0.50		ug/L			11/15/23 13:44	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 13:44	1
Styrene	ND		1.0		ug/L			11/15/23 13:44	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 13:44	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 13:44	1
Toluene	ND		0.50		ug/L			11/15/23 13:44	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 13:44	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 13:44	1
Trichloroethene	**4.3**		0.50		ug/L			11/15/23 13:44	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 13:44	1
Trihalomethanes, Total	**5.1**	**T5**	0.50		ug/L			11/15/23 13:44	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 13:44	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 13:44	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*11/15/23 13:44*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*11/15/23 13:44*	*1*
Toluene-d8 (Surr)	*86*		*60 - 140*		*11/15/23 13:44*	*1*

Client Sample ID: MW-13-355-23A1

Lab Sample ID: 550-210535-14

Date Collected: 11/14/23 15:50

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - 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			11/15/23 14:05	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 14:05	1

Client Sample ID: MW-13-355-23A1
Date Collected: 11/14/23 15:50
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-14
Matrix: Water

Method: EPA 624.1 - 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			11/15/23 14:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 14:05	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 14:05	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 14:05	1
1,1-Dichloroethene	ND		0.50		ug/L			11/15/23 14:05	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 14:05	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 14:05	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 14:05	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 14:05	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 14:05	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:05	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 14:05	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 14:05	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:05	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:05	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 14:05	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:05	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 14:05	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 14:05	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:05	1
2-Hexanone	ND		5.0		ug/L			11/15/23 14:05	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:05	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 14:05	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 14:05	1
Acetone	ND		10		ug/L			11/15/23 14:05	1
Benzene	ND		0.50		ug/L			11/15/23 14:05	1
Bromobenzene	ND		1.0		ug/L			11/15/23 14:05	1
Bromoform	ND		1.0		ug/L			11/15/23 14:05	1
Bromomethane	ND		5.0		ug/L			11/15/23 14:05	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 14:05	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 14:05	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 14:05	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 14:05	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 14:05	1
Chloroethane	ND		1.0		ug/L			11/15/23 14:05	1
Chloroform	**1.2**		0.50		ug/L			11/15/23 14:05	1
Chloromethane	ND		1.0		ug/L			11/15/23 14:05	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 14:05	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:05	1
Dibromomethane	ND		0.50		ug/L			11/15/23 14:05	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 14:05	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 14:05	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 14:05	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 14:05	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 14:05	1
Iodomethane	ND		2.0		ug/L			11/15/23 14:05	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 14:05	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 14:05	1

Client Sample ID: MW-13-355-23A1

Lab Sample ID: 550-210535-14

Date Collected: 11/14/23 15:50

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0		ug/L			11/15/23 14:05	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 14:05	1
Naphthalene	ND		5.0		ug/L			11/15/23 14:05	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 14:05	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 14:05	1
o-Xylene	ND		0.50		ug/L			11/15/23 14:05	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 14:05	1
Styrene	ND		1.0		ug/L			11/15/23 14:05	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 14:05	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 14:05	1
Toluene	ND		0.50		ug/L			11/15/23 14:05	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 14:05	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:05	1
Trichloroethene	ND		0.50		ug/L			11/15/23 14:05	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 14:05	1
Trihalomethanes, Total	**1.2**	**T5**	0.50		ug/L			11/15/23 14:05	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 14:05	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 14:05	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*11/15/23 14:05*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*11/15/23 14:05*	*1*
Toluene-d8 (Surr)	*87*		*60 - 140*		*11/15/23 14:05*	*1*

Client Sample ID: MW-14-350-23A1

Lab Sample ID: 550-210535-15

Date Collected: 11/14/23 15:25

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - 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			11/15/23 14:25	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 14:25	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 14:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 14:25	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 14:25	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 14:25	1
1,1-Dichloroethene	**2.9**		0.50		ug/L			11/15/23 14:25	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 14:25	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 14:25	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 14:25	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 14:25	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 14:25	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:25	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 14:25	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 14:25	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:25	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:25	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 14:25	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-14-350-23A1
Date Collected: 11/14/23 15:25
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-15
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:25	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 14:25	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 14:25	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:25	1
2-Hexanone	ND		5.0		ug/L			11/15/23 14:25	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:25	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 14:25	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 14:25	1
Acetone	ND		10		ug/L			11/15/23 14:25	1
Benzene	ND		0.50		ug/L			11/15/23 14:25	1
Bromobenzene	ND		1.0		ug/L			11/15/23 14:25	1
Bromoform	ND		1.0		ug/L			11/15/23 14:25	1
Bromomethane	ND		5.0		ug/L			11/15/23 14:25	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 14:25	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 14:25	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 14:25	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 14:25	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 14:25	1
Chloroethane	ND		1.0		ug/L			11/15/23 14:25	1
Chloroform	ND		0.50		ug/L			11/15/23 14:25	1
Chloromethane	ND		1.0		ug/L			11/15/23 14:25	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 14:25	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:25	1
Dibromomethane	ND		0.50		ug/L			11/15/23 14:25	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 14:25	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 14:25	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 14:25	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 14:25	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 14:25	1
Iodomethane	ND		2.0		ug/L			11/15/23 14:25	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 14:25	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 14:25	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 14:25	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 14:25	1
Naphthalene	ND		5.0		ug/L			11/15/23 14:25	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 14:25	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 14:25	1
o-Xylene	ND		0.50		ug/L			11/15/23 14:25	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 14:25	1
Styrene	ND		1.0		ug/L			11/15/23 14:25	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 14:25	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 14:25	1
Toluene	ND		0.50		ug/L			11/15/23 14:25	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 14:25	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:25	1
Trichloroethene	ND		0.50		ug/L			11/15/23 14:25	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 14:25	1
Trihalomethanes, Total	ND	T5	0.50		ug/L			11/15/23 14:25	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 14:25	1

Client Sample ID: MW-14-350-23A1

Lab Sample ID: 550-210535-15

Date Collected: 11/14/23 15:25

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0		ug/L			11/15/23 14:25	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*11/15/23 14:25*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*11/15/23 14:25*	*1*
Toluene-d8 (Surr)	*85*		*60 - 140*		*11/15/23 14:25*	*1*

Client Sample ID: MW-07-285-23A1

Lab Sample ID: 550-210535-16

Date Collected: 11/14/23 09:50

Matrix: Water

Date Received: 11/14/23 17:18

Method: EPA 624.1 - 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			11/15/23 14:46	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 14:46	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 14:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	T5	5.0		ug/L			11/15/23 14:46	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 14:46	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 14:46	1
1,1-Dichloroethene	**1.0**		0.50		ug/L			11/15/23 14:46	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 14:46	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 14:46	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 14:46	1
1,2,4-Trichlorobenzene	ND	T5	2.0		ug/L			11/15/23 14:46	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 14:46	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:46	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 14:46	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 14:46	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 14:46	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:46	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 14:46	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 14:46	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 14:46	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 14:46	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:46	1
2-Hexanone	ND		5.0		ug/L			11/15/23 14:46	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 14:46	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 14:46	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 14:46	1
Acetone	ND		10		ug/L			11/15/23 14:46	1
Benzene	ND		0.50		ug/L			11/15/23 14:46	1
Bromobenzene	ND		1.0		ug/L			11/15/23 14:46	1
Bromoform	ND		1.0		ug/L			11/15/23 14:46	1
Bromomethane	ND		5.0		ug/L			11/15/23 14:46	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 14:46	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 14:46	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 14:46	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 14:46	1

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-07-285-23A1
Date Collected: 11/14/23 09:50
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-16
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 14:46	1
Chloroethane	ND		1.0		ug/L			11/15/23 14:46	1
Chloroform	**0.73**		0.50		ug/L			11/15/23 14:46	1
Chloromethane	ND		1.0		ug/L			11/15/23 14:46	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 14:46	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:46	1
Dibromomethane	ND		0.50		ug/L			11/15/23 14:46	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 14:46	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 14:46	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 14:46	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 14:46	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 14:46	1
Iodomethane	ND		2.0		ug/L			11/15/23 14:46	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 14:46	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 14:46	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 14:46	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 14:46	1
Naphthalene	ND		5.0		ug/L			11/15/23 14:46	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 14:46	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 14:46	1
o-Xylene	ND		0.50		ug/L			11/15/23 14:46	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 14:46	1
Styrene	ND		1.0		ug/L			11/15/23 14:46	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 14:46	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 14:46	1
Toluene	ND		0.50		ug/L			11/15/23 14:46	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 14:46	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 14:46	1
Trichloroethene	**0.56**		0.50		ug/L			11/15/23 14:46	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 14:46	1
Trihalomethanes, Total	**0.73**	**T5**	0.50		ug/L			11/15/23 14:46	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 14:46	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 14:46	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*11/15/23 14:46*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*11/15/23 14:46*	*1*
Toluene-d8 (Surr)	*85*		*60 - 140*		*11/15/23 14:46*	*1*

Surrogate Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Method: 624.1 - 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	(60-140)	(60-140)	(60-140)
550-210535-1	MW-01A-435-23A1	90	93	91
550-210535-1 - DL2	MW-01A-435-23A1	88	97	87
550-210535-1 - DL	MW-01A-435-23A1	91	97	87
550-210535-2	PHX-01-23A1	89	93	91
550-210535-2 - DL2	PHX-01-23A1	87	100	86
550-210535-2 - DL	PHX-01-23A1	87	101	87
550-210535-3	MW-03-355-23A1	89	93	91
550-210535-4	MW-04-355-23A1	89	93	91
550-210535-5	PHX-02-23A1	92	96	93
550-210535-5	PHX-02-23A1	88	100	85
550-210535-5 MS	PHX-02-23A1	97	101	95
550-210535-5 MSD	PHX-02-23A1	100	103	98
550-210535-6	MW-05-310-23A1	86	96	85
550-210535-7	TB-23A1	89	99	86
550-210535-8	EW-1-23A1	86	98	86
550-210535-9	EW-2-360-23A1	88	97	82
550-210535-10	MW-06-355-23A1	86	99	88
550-210535-10 MS	MW-06-355-23A1	104	100	97
550-210535-10 MSD	MW-06-355-23A1	103	99	96
550-210535-11	MW-08-355-23A1	87	96	88
550-210535-12	MW-09-355-23A1	89	97	85
550-210535-13	MW-12-410-23A1	88	97	86
550-210535-14	MW-13-355-23A1	89	98	87
550-210535-15	MW-14-350-23A1	88	97	85
550-210535-16	MW-07-285-23A1	89	98	85
550-210565-A-2 MS	Matrix Spike	121	117	111
550-210565-A-2 MSD	Matrix Spike Duplicate	125	125	116
LCS 550-311114/1002	Lab Control Sample	94	89	85
LCS 550-311120/3	Lab Control Sample	97	98	94
LCS 550-311203/3	Lab Control Sample	99	102	97
LCSD 550-311114/4	Lab Control Sample Dup	103	99	99
LCSD 550-311120/4	Lab Control Sample Dup	100	102	98
LCSD 550-311203/4	Lab Control Sample Dup	99	103	94
MB 550-311114/6	Method Blank	87	97	88
MB 550-311120/6	Method Blank	92	94	94
MB 550-311203/6	Method Blank	84	95	85

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 550-311114/6
Matrix: Water
Analysis Batch: 311114

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			11/15/23 10:13	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 10:13	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 10:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			11/15/23 10:13	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 10:13	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 10:13	1
1,1-Dichloroethene	ND		0.50		ug/L			11/15/23 10:13	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 10:13	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 10:13	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 10:13	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/15/23 10:13	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 10:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 10:13	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:13	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 10:13	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 10:13	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 10:13	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:13	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 10:13	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:13	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 10:13	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 10:13	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 10:13	1
2-Hexanone	ND		5.0		ug/L			11/15/23 10:13	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 10:13	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 10:13	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 10:13	1
Acetone	ND		10		ug/L			11/15/23 10:13	1
Benzene	ND		0.50		ug/L			11/15/23 10:13	1
Bromobenzene	ND		1.0		ug/L			11/15/23 10:13	1
Bromoform	ND		1.0		ug/L			11/15/23 10:13	1
Bromomethane	ND		5.0		ug/L			11/15/23 10:13	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 10:13	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 10:13	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 10:13	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 10:13	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 10:13	1
Chloroethane	ND		1.0		ug/L			11/15/23 10:13	1
Chloroform	ND		0.50		ug/L			11/15/23 10:13	1
Chloromethane	ND		1.0		ug/L			11/15/23 10:13	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 10:13	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 10:13	1
Dibromomethane	ND		0.50		ug/L			11/15/23 10:13	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 10:13	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 10:13	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 10:13	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 10:13	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 10:13	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 550-311114/6
Matrix: Water
Analysis Batch: 311114

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		2.0		ug/L			11/15/23 10:13	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 10:13	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 10:13	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 10:13	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 10:13	1
Naphthalene	ND		5.0		ug/L			11/15/23 10:13	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 10:13	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 10:13	1
o-Xylene	ND		0.50		ug/L			11/15/23 10:13	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 10:13	1
Styrene	ND		1.0		ug/L			11/15/23 10:13	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 10:13	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 10:13	1
Toluene	ND		0.50		ug/L			11/15/23 10:13	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 10:13	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 10:13	1
Trichloroethene	ND		0.50		ug/L			11/15/23 10:13	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 10:13	1
Trihalomethanes, Total	ND		0.50		ug/L			11/15/23 10:13	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 10:13	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 10:13	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 10:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*60 - 140*		*11/15/23 10:13*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*11/15/23 10:13*	*1*
Toluene-d8 (Surr)	*88*		*60 - 140*		*11/15/23 10:13*	*1*

Lab Sample ID: LCS 550-311114/1002
Matrix: Water
Analysis Batch: 311114

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane			50.0	48.2		ug/L		96	60 - 140		
1,1,1-Trichloroethane			50.0	47.1		ug/L		94	70 - 130		
1,1,2,2-Tetrachloroethane			50.0	53.9		ug/L		108	60 - 140		
1,1,2-Trichloroethane			50.0	52.3		ug/L		105	70 - 130		
1,1-Dichloroethane			50.0	46.0		ug/L		92	70 - 130		
1,1-Dichloroethene			50.0	45.3		ug/L		91	50 - 150		
1,1-Dichloropropene			50.0	43.8		ug/L		88	60 - 140		
1,2,3-Trichlorobenzene			50.0	51.5		ug/L		103	60 - 140		
1,2,3-Trichloropropane			50.0	55.7		ug/L		111	60 - 140		
1,2,4-Trichlorobenzene			50.0	51.9		ug/L		104	60 - 140		
1,2,4-Trimethylbenzene			50.0	48.4		ug/L		97	60 - 140		
1,2-Dibromo-3-Chloropropane			50.0	54.9		ug/L		110	60 - 140		
1,2-Dichlorobenzene			50.0	50.2		ug/L		100	65 - 135		
1,2-Dichloroethane			50.0	46.4		ug/L		93	70 - 130		
1,2-Dichloropropane			50.0	47.2		ug/L		94	35 - 165		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-311114/1002
Matrix: Water
Analysis Batch: 311114

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trimethylbenzene	50.0	45.6		ug/L		91	60 - 140
1,3-Dichlorobenzene	50.0	49.4		ug/L		99	70 - 130
1,3-Dichloropropane	50.0	50.7		ug/L		101	60 - 140
1,4-Dichlorobenzene	50.0	48.4		ug/L		97	65 - 135
2,2-Dichloropropane	50.0	48.3		ug/L		97	60 - 140
2-Butanone (MEK)	50.0	50.4		ug/L		101	60 - 140
2-Chlorotoluene	50.0	49.5		ug/L		99	60 - 140
2-Hexanone	50.0	54.9		ug/L		110	60 - 140
4-Chlorotoluene	50.0	47.2		ug/L		94	60 - 140
4-Isopropyltoluene	50.0	52.3		ug/L		105	60 - 140
4-Methyl-2-pentanone (MIBK)	50.0	49.8		ug/L		100	60 - 140
Acetone	50.0	51.0		ug/L		102	18 - 150
Benzene	50.0	43.8		ug/L		88	65 - 135
Bromobenzene	50.0	53.2		ug/L		106	60 - 140
Bromoform	50.0	52.1		ug/L		104	70 - 130
Bromomethane	50.0	43.3		ug/L		87	15 - 185
Carbon disulfide	50.0	40.8		ug/L		82	60 - 140
Carbon tetrachloride	50.0	44.9		ug/L		90	70 - 130
Chlorobenzene	50.0	48.4		ug/L		97	65 - 135
Chlorobromomethane	50.0	52.7		ug/L		105	60 - 140
Chlorodibromomethane	50.0	51.7		ug/L		103	70 - 135
Chloroethane	50.0	52.7		ug/L		105	40 - 160
Chloroform	50.0	46.6		ug/L		93	70 - 135
Chloromethane	50.0	35.9		ug/L		72	10 - 205
cis-1,2-Dichloroethene	50.0	45.2		ug/L		90	60 - 140
cis-1,3-Dichloropropene	50.0	50.3		ug/L		101	25 - 175
Dibromomethane	50.0	51.7		ug/L		103	70 - 130
Dichlorobromomethane	50.0	47.9		ug/L		96	65 - 135
Dichlorodifluoromethane	50.0	44.2		ug/L		88	60 - 140
Ethylbenzene	50.0	45.2		ug/L		90	60 - 140
Ethylene Dibromide	50.0	54.4		ug/L		109	60 - 140
Hexachlorobutadiene	50.0	47.2		ug/L		94	60 - 140
Iodomethane	50.0	45.8		ug/L		92	60 - 140
Isopropylbenzene	50.0	51.9		ug/L		104	60 - 140
Methyl tert-butyl ether	50.0	48.8		ug/L		98	60 - 140
Methylene Chloride	50.0	44.9		ug/L		90	60 - 140
m-Xylene & p-Xylene	50.0	51.7		ug/L		103	60 - 140
Naphthalene	50.0	52.7		ug/L		105	60 - 140
n-Butylbenzene	50.0	48.3		ug/L		97	60 - 140
N-Propylbenzene	50.0	49.4		ug/L		99	60 - 140
o-Xylene	50.0	50.5		ug/L		101	60 - 140
sec-Butylbenzene	50.0	52.3		ug/L		105	60 - 140
Styrene	50.0	50.9		ug/L		102	60 - 140
tert-Butylbenzene	50.0	47.1		ug/L		94	60 - 140
Tetrachloroethene	50.0	48.1		ug/L		96	70 - 130
Toluene	50.0	47.0		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	47.3		ug/L		95	70 - 130
trans-1,3-Dichloropropene	50.0	52.5		ug/L		105	50 - 150
Trichloroethene	50.0	45.5		ug/L		91	65 - 135

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-311114/1002
Matrix: Water
Analysis Batch: 311114

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Trichlorofluoromethane			50.0	48.0		ug/L		96	50 - 150		
Vinyl acetate			50.0	59.6		ug/L		119	60 - 140		
Vinyl chloride			50.0	40.8		ug/L		82	5 - 195		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*
Dibromofluoromethane (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*85*		*60 - 140*

Lab Sample ID: LCSD 550-311114/4
Matrix: Water
Analysis Batch: 311114

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	53.1		ug/L		106	60 - 140	10	20
1,1,1-Trichloroethane			50.0	52.5		ug/L		105	70 - 130	11	20
1,1,2,2-Tetrachloroethane			50.0	52.5		ug/L		105	60 - 140	3	20
1,1,2-Trichloroethane			50.0	52.9		ug/L		106	70 - 130	1	20
1,1-Dichloroethane			50.0	49.8		ug/L		100	70 - 130	8	20
1,1-Dichloroethene			50.0	52.9		ug/L		106	50 - 150	15	20
1,1-Dichloropropene			50.0	49.9		ug/L		100	60 - 140	13	20
1,2,3-Trichlorobenzene			50.0	57.7		ug/L		115	60 - 140	11	20
1,2,3-Trichloropropane			50.0	52.8		ug/L		106	60 - 140	5	20
1,2,4-Trichlorobenzene			50.0	57.1		ug/L		114	60 - 140	10	20
1,2,4-Trimethylbenzene			50.0	53.7		ug/L		107	60 - 140	10	20
1,2-Dibromo-3-Chloropropane			50.0	53.8		ug/L		108	60 - 140	2	20
1,2-Dichlorobenzene			50.0	54.1		ug/L		108	65 - 135	8	20
1,2-Dichloroethane			50.0	48.3		ug/L		97	70 - 130	4	20
1,2-Dichloropropane			50.0	51.0		ug/L		102	35 - 165	8	20
1,3,5-Trimethylbenzene			50.0	51.4		ug/L		103	60 - 140	12	20
1,3-Dichlorobenzene			50.0	53.3		ug/L		107	70 - 130	8	20
1,3-Dichloropropane			50.0	51.4		ug/L		103	60 - 140	1	20
1,4-Dichlorobenzene			50.0	52.4		ug/L		105	65 - 135	8	20
2,2-Dichloropropane			50.0	54.1		ug/L		108	60 - 140	11	20
2-Butanone (MEK)			50.0	42.6		ug/L		85	60 - 140	17	20
2-Chlorotoluene			50.0	54.1		ug/L		108	60 - 140	9	20
2-Hexanone			50.0	50.1		ug/L		100	60 - 140	9	20
4-Chlorotoluene			50.0	51.0		ug/L		102	60 - 140	8	20
4-Isopropyltoluene			50.0	59.8		ug/L		120	60 - 140	13	20
4-Methyl-2-pentanone (MIBK)			50.0	46.3		ug/L		93	60 - 140	7	20
Acetone			50.0	41.9		ug/L		84	18 - 150	20	20
Benzene			50.0	49.1		ug/L		98	65 - 135	12	20
Bromobenzene			50.0	56.1		ug/L		112	60 - 140	5	20
Bromoform			50.0	51.6		ug/L		103	70 - 130	1	20
Bromomethane			50.0	50.0		ug/L		100	15 - 185	14	20
Carbon disulfide			50.0	47.4		ug/L		95	60 - 140	15	20
Carbon tetrachloride			50.0	52.2		ug/L		104	70 - 130	15	20
Chlorobenzene			50.0	53.2		ug/L		106	65 - 135	9	20

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 550-311114/4
Matrix: Water
Analysis Batch: 311114

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
Chlorobromomethane			50.0	54.0		ug/L		108	60 - 140	2	20
Chlorodibromomethane			50.0	54.4		ug/L		109	70 - 135	5	20
Chloroethane			50.0	61.7		ug/L		123	40 - 160	16	20
Chloroform			50.0	50.1		ug/L		100	70 - 135	7	20
Chloromethane			50.0	42.0		ug/L		84	10 - 205	16	20
cis-1,2-Dichloroethene			50.0	50.0		ug/L		100	60 - 140	10	20
cis-1,3-Dichloropropene			50.0	53.7		ug/L		107	25 - 175	7	20
Dibromomethane			50.0	52.3		ug/L		105	70 - 130	1	20
Dichlorobromomethane			50.0	52.2		ug/L		104	65 - 135	9	20
Dichlorodifluoromethane			50.0	51.1		ug/L		102	60 - 140	14	20
Ethylbenzene			50.0	50.6		ug/L		101	60 - 140	11	20
Ethylene Dibromide			50.0	54.1		ug/L		108	60 - 140	1	20
Hexachlorobutadiene			50.0	55.5		ug/L		111	60 - 140	16	20
Iodomethane			50.0	53.1		ug/L		106	60 - 140	15	20
Isopropylbenzene			50.0	58.7		ug/L		117	60 - 140	12	20
Methyl tert-butyl ether			50.0	48.6		ug/L		97	60 - 140	0	20
Methylene Chloride			50.0	50.4		ug/L		101	60 - 140	12	20
m-Xylene & p-Xylene			50.0	56.1		ug/L		112	60 - 140	8	20
Naphthalene			50.0	56.5		ug/L		113	60 - 140	7	20
n-Butylbenzene			50.0	55.3		ug/L		111	60 - 140	14	20
N-Propylbenzene			50.0	54.1		ug/L		108	60 - 140	9	20
o-Xylene			50.0	55.6		ug/L		111	60 - 140	10	20
sec-Butylbenzene			50.0	60.4		ug/L		121	60 - 140	14	20
Styrene			50.0	54.7		ug/L		109	60 - 140	7	20
tert-Butylbenzene			50.0	54.9		ug/L		110	60 - 140	15	20
Tetrachloroethene			50.0	54.5		ug/L		109	70 - 130	12	20
Toluene			50.0	52.3		ug/L		105	70 - 130	11	20
trans-1,2-Dichloroethene			50.0	52.9		ug/L		106	70 - 130	11	20
trans-1,3-Dichloropropene			50.0	54.8		ug/L		110	50 - 150	4	20
Trichloroethene			50.0	52.3		ug/L		105	65 - 135	14	20
Trichlorofluoromethane			50.0	55.4		ug/L		111	50 - 150	14	20
Vinyl acetate			50.0	52.2		ug/L		104	60 - 140	13	20
Vinyl chloride			50.0	46.0		ug/L		92	5 - 195	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*

Lab Sample ID: 550-210535-10 MS
Matrix: Water
Analysis Batch: 311114

Client Sample ID: MW-06-355-23A1
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	48.9		ug/L		97	50 - 150
1,1,1-Trichloroethane	ND		50.0	48.4		ug/L		97	52 - 162
1,1,2,2-Tetrachloroethane	ND		50.0	54.6		ug/L		109	46 - 157
1,1,2-Trichloroethane	ND		50.0	54.4		ug/L		109	52 - 150

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210535-10 MS
Matrix: Water
Analysis Batch: 311114

Client Sample ID: MW-06-355-23A1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	ND		50.0	48.5		ug/L		97	59 - 155
1,1-Dichloroethene	ND		50.0	45.6		ug/L		91	10 - 234
1,1-Dichloropropene	ND		50.0	45.6		ug/L		91	50 - 150
1,2,3-Trichlorobenzene	ND		50.0	53.3		ug/L		104	50 - 150
1,2,3-Trichloropropane	ND		50.0	57.4		ug/L		115	50 - 150
1,2,4-Trichlorobenzene	ND	T5	50.0	51.9		ug/L		102	50 - 150
1,2,4-Trimethylbenzene	ND		50.0	48.6		ug/L		97	50 - 150
1,2-Dibromo-3-Chloropropane	ND		50.0	56.6		ug/L		113	50 - 150
1,2-Dichlorobenzene	ND		50.0	50.5		ug/L		100	18 - 190
1,2-Dichloroethane	ND		50.0	48.4		ug/L		97	49 - 155
1,2-Dichloropropane	ND		50.0	49.3		ug/L		99	10 - 210
1,3,5-Trimethylbenzene	ND		50.0	46.7		ug/L		93	50 - 150
1,3-Dichlorobenzene	ND		50.0	50.4		ug/L		100	59 - 156
1,3-Dichloropropane	ND		50.0	53.2		ug/L		106	50 - 150
1,4-Dichlorobenzene	ND		50.0	50.1		ug/L		99	18 - 190
2,2-Dichloropropane	ND		50.0	49.1		ug/L		98	50 - 150
2-Butanone (MEK)	ND		50.0	52.7		ug/L		105	50 - 150
2-Chlorotoluene	ND		50.0	49.6		ug/L		99	50 - 150
2-Hexanone	ND		50.0	51.7		ug/L		103	50 - 150
4-Chlorotoluene	ND		50.0	49.2		ug/L		98	50 - 150
4-Isopropyltoluene	ND		50.0	53.6		ug/L		107	50 - 150
4-Methyl-2-pentanone (MIBK)	ND		50.0	51.3		ug/L		103	50 - 150
Acetone	ND		50.0	42.4		ug/L		85	18 - 150
Benzene	ND		50.0	46.4		ug/L		93	35 - 151
Bromobenzene	ND		50.0	54.5		ug/L		109	50 - 150
Bromoform	ND		50.0	53.7		ug/L		107	45 - 169
Bromomethane	ND		50.0	45.5		ug/L		91	10 - 242
Carbon disulfide	ND		50.0	41.9		ug/L		84	50 - 150
Carbon tetrachloride	ND		50.0	45.5		ug/L		91	70 - 140
Chlorobenzene	ND		50.0	51.2		ug/L		102	37 - 160
Chlorobromomethane	ND		50.0	54.4		ug/L		109	50 - 150
Chlorodibromomethane	ND		50.0	54.0		ug/L		108	53 - 149
Chloroethane	ND		50.0	52.6		ug/L		105	14 - 230
Chloroform	ND		50.0	49.3		ug/L		98	51 - 138
Chloromethane	ND		50.0	37.7		ug/L		75	10 - 273
cis-1,2-Dichloroethene	ND		50.0	47.2		ug/L		94	50 - 150
cis-1,3-Dichloropropene	ND		50.0	53.9		ug/L		108	10 - 227
Dibromomethane	ND		50.0	53.7		ug/L		107	50 - 150
Dichlorobromomethane	ND		50.0	50.7		ug/L		101	35 - 155
Dichlorodifluoromethane	ND		50.0	44.3		ug/L		89	50 - 150
Ethylbenzene	ND		50.0	46.7		ug/L		93	37 - 162
Ethylene Dibromide	ND		50.0	56.8		ug/L		114	50 - 150
Hexachlorobutadiene	ND		50.0	49.7		ug/L		99	50 - 150
Iodomethane	ND		50.0	47.9		ug/L		96	50 - 150
Isopropylbenzene	ND		50.0	52.1		ug/L		104	50 - 150
Methyl tert-butyl ether	ND		50.0	50.3		ug/L		100	50 - 150
Methylene Chloride	ND		50.0	46.4		ug/L		93	10 - 221
m-Xylene & p-Xylene	ND		50.0	52.6		ug/L		105	50 - 150
Naphthalene	ND		50.0	53.4		ug/L		102	50 - 150

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210535-10 MS
Matrix: Water
Analysis Batch: 311114

Client Sample ID: MW-06-355-23A1
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	48.2		ug/L		95	50 - 150
N-Propylbenzene	ND		50.0	49.4		ug/L		99	50 - 150
o-Xylene	ND		50.0	51.9		ug/L		104	50 - 150
sec-Butylbenzene	ND		50.0	54.5		ug/L		109	50 - 150
Styrene	ND		50.0	53.1		ug/L		106	50 - 150
tert-Butylbenzene	0.65		50.0	49.7		ug/L		98	50 - 150
Tetrachloroethene	ND		50.0	50.1		ug/L		100	64 - 148
Toluene	ND		50.0	49.5		ug/L		99	47 - 150
trans-1,2-Dichloroethene	ND		50.0	49.5		ug/L		99	54 - 156
trans-1,3-Dichloropropene	ND		50.0	56.3		ug/L		113	17 - 183
Trichloroethene	ND		50.0	48.6		ug/L		97	70 - 157
Trichlorofluoromethane	ND		50.0	48.9		ug/L		98	17 - 181
Vinyl acetate	ND		50.0	61.7		ug/L		123	50 - 150
Vinyl chloride	ND		50.0	41.5		ug/L		83	10 - 251

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*97*		*60 - 140*

Lab Sample ID: 550-210535-10 MSD
Matrix: Water
Analysis Batch: 311114

Client Sample ID: MW-06-355-23A1
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	50.6		ug/L		101	50 - 150	3	35
1,1,1-Trichloroethane	ND		50.0	47.3		ug/L		95	52 - 162	2	36
1,1,2,2-Tetrachloroethane	ND		50.0	54.9		ug/L		110	46 - 157	0	61
1,1,2-Trichloroethane	ND		50.0	55.2		ug/L		110	52 - 150	1	45
1,1-Dichloroethane	ND		50.0	47.3		ug/L		95	59 - 155	3	40
1,1-Dichloroethene	ND		50.0	48.6		ug/L		97	10 - 234	6	32
1,1-Dichloropropene	ND		50.0	45.1		ug/L		90	50 - 150	1	35
1,2,3-Trichlorobenzene	ND		50.0	56.0		ug/L		109	50 - 150	5	35
1,2,3-Trichloropropane	ND		50.0	56.2		ug/L		112	50 - 150	2	35
1,2,4-Trichlorobenzene	ND	T5	50.0	54.5		ug/L		107	50 - 150	5	35
1,2,4-Trimethylbenzene	ND		50.0	49.4		ug/L		98	50 - 150	2	35
1,2-Dibromo-3-Chloropropane	ND		50.0	56.1		ug/L		112	50 - 150	1	35
1,2-Dichlorobenzene	ND		50.0	52.1		ug/L		103	18 - 190	3	57
1,2-Dichloroethane	ND		50.0	48.2		ug/L		96	49 - 155	1	49
1,2-Dichloropropane	ND		50.0	50.3		ug/L		101	10 - 210	2	55
1,3,5-Trimethylbenzene	ND		50.0	47.3		ug/L		95	50 - 150	1	35
1,3-Dichlorobenzene	ND		50.0	50.9		ug/L		101	59 - 156	1	43
1,3-Dichloropropane	ND		50.0	53.5		ug/L		107	50 - 150	1	35
1,4-Dichlorobenzene	ND		50.0	50.7		ug/L		101	18 - 190	1	57
2,2-Dichloropropane	ND		50.0	48.5		ug/L		97	50 - 150	1	35
2-Butanone (MEK)	ND		50.0	48.5		ug/L		97	50 - 150	8	35
2-Chlorotoluene	ND		50.0	49.8		ug/L		100	50 - 150	0	35
2-Hexanone	ND		50.0	55.6		ug/L		111	50 - 150	7	35

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210535-10 MSD
Matrix: Water
Analysis Batch: 311114

Client Sample ID: MW-06-355-23A1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Chlorotoluene	ND		50.0	49.7		ug/L		99	50 - 150	1	35
4-Isopropyltoluene	ND		50.0	53.6		ug/L		107	50 - 150	0	35
4-Methyl-2-pentanone (MIBK)	ND		50.0	51.8		ug/L		104	50 - 150	1	35
Acetone	ND		50.0	37.1		ug/L		74	18 - 150	13	35
Benzene	ND		50.0	45.8		ug/L		92	35 - 151	1	61
Bromobenzene	ND		50.0	55.5		ug/L		111	50 - 150	2	35
Bromoform	ND		50.0	53.4		ug/L		107	45 - 169	1	42
Bromomethane	ND		50.0	46.6		ug/L		93	10 - 242	2	61
Carbon disulfide	ND		50.0	43.2		ug/L		86	50 - 150	3	35
Carbon tetrachloride	ND		50.0	45.6		ug/L		91	70 - 140	0	41
Chlorobenzene	ND		50.0	51.9		ug/L		103	37 - 160	1	53
Chlorobromomethane	ND		50.0	55.2		ug/L		110	50 - 150	1	35
Chlorodibromomethane	ND		50.0	56.0		ug/L		112	53 - 149	4	50
Chloroethane	ND		50.0	54.7		ug/L		109	14 - 230	4	78
Chloroform	ND		50.0	48.3		ug/L		96	51 - 138	2	54
Chloromethane	ND		50.0	37.8		ug/L		76	10 - 273	0	60
cis-1,2-Dichloroethene	ND		50.0	46.8		ug/L		94	50 - 150	1	35
cis-1,3-Dichloropropene	ND		50.0	55.2		ug/L		110	10 - 227	2	58
Dibromomethane	ND		50.0	54.9		ug/L		109	50 - 150	2	35
Dichlorobromomethane	ND		50.0	51.6		ug/L		103	35 - 155	2	56
Dichlorodifluoromethane	ND		50.0	45.1		ug/L		90	50 - 150	2	35
Ethylbenzene	ND		50.0	47.1		ug/L		94	37 - 162	1	63
Ethylene Dibromide	ND		50.0	56.0		ug/L		112	50 - 150	1	35
Hexachlorobutadiene	ND		50.0	50.5		ug/L		101	50 - 150	2	35
Iodomethane	ND		50.0	50.4		ug/L		101	50 - 150	5	35
Isopropylbenzene	ND		50.0	52.3		ug/L		105	50 - 150	0	35
Methyl tert-butyl ether	ND		50.0	48.6		ug/L		96	50 - 150	3	35
Methylene Chloride	ND		50.0	48.8		ug/L		98	10 - 221	5	28
m-Xylene & p-Xylene	ND		50.0	52.1		ug/L		104	50 - 150	1	35
Naphthalene	ND		50.0	56.4		ug/L		108	50 - 150	5	35
n-Butylbenzene	ND		50.0	49.3		ug/L		98	50 - 150	2	35
N-Propylbenzene	ND		50.0	49.3		ug/L		99	50 - 150	0	35
o-Xylene	ND		50.0	52.1		ug/L		104	50 - 150	0	35
sec-Butylbenzene	ND		50.0	54.1		ug/L		108	50 - 150	1	35
Styrene	ND		50.0	52.9		ug/L		106	50 - 150	0	35
tert-Butylbenzene	0.65		50.0	51.0		ug/L		101	50 - 150	3	35
Tetrachloroethene	ND		50.0	50.1		ug/L		100	64 - 148	0	39
Toluene	ND		50.0	49.4		ug/L		99	47 - 150	0	41
trans-1,2-Dichloroethene	ND		50.0	48.5		ug/L		97	54 - 156	2	45
trans-1,3-Dichloropropene	ND		50.0	55.5		ug/L		111	17 - 183	1	86
Trichloroethene	ND		50.0	48.8		ug/L		98	70 - 157	1	48
Trichlorofluoromethane	ND		50.0	49.2		ug/L		98	17 - 181	1	84
Vinyl acetate	ND		50.0	55.7		ug/L		111	50 - 150	10	35
Vinyl chloride	ND		50.0	41.7		ug/L		83	10 - 251	0	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*
Dibromofluoromethane (Surr)	*99*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210535-10 MSD
Matrix: Water
Analysis Batch: 311114

Client Sample ID: MW-06-355-23A1
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*96*		*60 - 140*

Lab Sample ID: MB 550-311120/6
Matrix: Water
Analysis Batch: 311120

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			11/15/23 10:08	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/15/23 10:08	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/15/23 10:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			11/15/23 10:08	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/15/23 10:08	1
1,1-Dichloroethane	ND		0.50		ug/L			11/15/23 10:08	1
1,1-Dichloroethene	ND		0.50		ug/L			11/15/23 10:08	1
1,1-Dichloropropene	ND		0.50		ug/L			11/15/23 10:08	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/15/23 10:08	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/15/23 10:08	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/15/23 10:08	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/15/23 10:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/15/23 10:08	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:08	1
1,2-Dichloroethane	ND		0.50		ug/L			11/15/23 10:08	1
1,2-Dichloropropane	ND		0.50		ug/L			11/15/23 10:08	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/15/23 10:08	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:08	1
1,3-Dichloropropane	ND		0.50		ug/L			11/15/23 10:08	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/15/23 10:08	1
2,2-Dichloropropane	ND		1.0		ug/L			11/15/23 10:08	1
2-Butanone (MEK)	ND		10		ug/L			11/15/23 10:08	1
2-Chlorotoluene	ND		0.50		ug/L			11/15/23 10:08	1
2-Hexanone	ND		5.0		ug/L			11/15/23 10:08	1
4-Chlorotoluene	ND		0.50		ug/L			11/15/23 10:08	1
4-Isopropyltoluene	ND		0.50		ug/L			11/15/23 10:08	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/15/23 10:08	1
Acetone	ND		10		ug/L			11/15/23 10:08	1
Benzene	ND		0.50		ug/L			11/15/23 10:08	1
Bromobenzene	ND		1.0		ug/L			11/15/23 10:08	1
Bromoform	ND		1.0		ug/L			11/15/23 10:08	1
Bromomethane	ND		5.0		ug/L			11/15/23 10:08	1
Carbon disulfide	ND		5.0		ug/L			11/15/23 10:08	1
Carbon tetrachloride	ND		0.50		ug/L			11/15/23 10:08	1
Chlorobenzene	ND		0.50		ug/L			11/15/23 10:08	1
Chlorobromomethane	ND		0.50		ug/L			11/15/23 10:08	1
Chlorodibromomethane	ND		0.50		ug/L			11/15/23 10:08	1
Chloroethane	ND		1.0		ug/L			11/15/23 10:08	1
Chloroform	ND		0.50		ug/L			11/15/23 10:08	1
Chloromethane	ND		1.0		ug/L			11/15/23 10:08	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 10:08	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 550-311120/6
Matrix: Water
Analysis Batch: 311120

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 10:08	1
Dibromomethane	ND		0.50		ug/L			11/15/23 10:08	1
Dichlorobromomethane	ND		0.50		ug/L			11/15/23 10:08	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/23 10:08	1
Ethylbenzene	ND		0.50		ug/L			11/15/23 10:08	1
Ethylene Dibromide	ND		0.50		ug/L			11/15/23 10:08	1
Hexachlorobutadiene	ND		5.0		ug/L			11/15/23 10:08	1
Iodomethane	ND		2.0		ug/L			11/15/23 10:08	1
Isopropylbenzene	ND		0.50		ug/L			11/15/23 10:08	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/15/23 10:08	1
Methylene Chloride	ND		5.0		ug/L			11/15/23 10:08	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/15/23 10:08	1
Naphthalene	ND		5.0		ug/L			11/15/23 10:08	1
n-Butylbenzene	ND		1.0		ug/L			11/15/23 10:08	1
N-Propylbenzene	ND		0.50		ug/L			11/15/23 10:08	1
o-Xylene	ND		0.50		ug/L			11/15/23 10:08	1
sec-Butylbenzene	ND		0.50		ug/L			11/15/23 10:08	1
Styrene	ND		1.0		ug/L			11/15/23 10:08	1
tert-Butylbenzene	ND		0.50		ug/L			11/15/23 10:08	1
Tetrachloroethene	ND		0.50		ug/L			11/15/23 10:08	1
Toluene	ND		0.50		ug/L			11/15/23 10:08	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/15/23 10:08	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/15/23 10:08	1
Trichloroethene	ND		0.50		ug/L			11/15/23 10:08	1
Trichlorofluoromethane	ND		1.0		ug/L			11/15/23 10:08	1
Trihalomethanes, Total	ND		0.50		ug/L			11/15/23 10:08	1
Vinyl acetate	ND		5.0		ug/L			11/15/23 10:08	1
Vinyl chloride	ND		1.0		ug/L			11/15/23 10:08	1
Xylenes, Total	ND		0.50		ug/L			11/15/23 10:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*11/15/23 10:08*	*1*
Dibromofluoromethane (Surr)	*94*		*60 - 140*		*11/15/23 10:08*	*1*
Toluene-d8 (Surr)	*94*		*60 - 140*		*11/15/23 10:08*	*1*

Lab Sample ID: LCS 550-311120/3
Matrix: Water
Analysis Batch: 311120

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	54.3		ug/L		109	60 - 140		
1,1,1-Trichloroethane			50.0	52.2		ug/L		104	70 - 130		
1,1,2,2-Tetrachloroethane			50.0	53.6		ug/L		107	60 - 140		
1,1,2-Trichloroethane			50.0	52.7		ug/L		105	70 - 130		
1,1-Dichloroethane			50.0	50.5		ug/L		101	70 - 130		
1,1-Dichloroethene			50.0	49.9		ug/L		100	50 - 150		
1,1-Dichloropropene			50.0	50.2		ug/L		100	60 - 140		
1,2,3-Trichlorobenzene			50.0	52.0		ug/L		104	60 - 140		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-311120/3
Matrix: Water
Analysis Batch: 311120

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	53.5		ug/L		107	60 - 140
1,2,4-Trichlorobenzene	50.0	53.2		ug/L		106	60 - 140
1,2,4-Trimethylbenzene	50.0	52.8		ug/L		106	60 - 140
1,2-Dibromo-3-Chloropropane	50.0	56.6		ug/L		113	60 - 140
1,2-Dichlorobenzene	50.0	51.8		ug/L		104	65 - 135
1,2-Dichloroethane	50.0	49.9		ug/L		100	70 - 130
1,2-Dichloropropane	50.0	51.1		ug/L		102	35 - 165
1,3,5-Trimethylbenzene	50.0	52.1		ug/L		104	60 - 140
1,3-Dichlorobenzene	50.0	53.6		ug/L		107	70 - 130
1,3-Dichloropropane	50.0	52.0		ug/L		104	60 - 140
1,4-Dichlorobenzene	50.0	51.6		ug/L		103	65 - 135
2,2-Dichloropropane	50.0	54.4		ug/L		109	60 - 140
2-Butanone (MEK)	50.0	59.1		ug/L		118	60 - 140
2-Chlorotoluene	50.0	52.4		ug/L		105	60 - 140
2-Hexanone	50.0	59.9		ug/L		120	60 - 140
4-Chlorotoluene	50.0	51.9		ug/L		104	60 - 140
4-Isopropyltoluene	50.0	54.3		ug/L		109	60 - 140
4-Methyl-2-pentanone (MIBK)	50.0	53.9		ug/L		108	60 - 140
Acetone	50.0	59.1		ug/L		118	18 - 150
Benzene	50.0	49.4		ug/L		99	65 - 135
Bromobenzene	50.0	52.9		ug/L		106	60 - 140
Bromoform	50.0	60.8		ug/L		122	70 - 130
Bromomethane	50.0	54.8		ug/L		110	15 - 185
Carbon disulfide	50.0	47.9		ug/L		96	60 - 140
Carbon tetrachloride	50.0	51.6		ug/L		103	70 - 130
Chlorobenzene	50.0	51.7		ug/L		103	65 - 135
Chlorobromomethane	50.0	53.1		ug/L		106	60 - 140
Chlorodibromomethane	50.0	56.8		ug/L		114	70 - 135
Chloroethane	50.0	51.2		ug/L		102	40 - 160
Chloroform	50.0	51.0		ug/L		102	70 - 135
Chloromethane	50.0	47.9		ug/L		96	10 - 205
cis-1,2-Dichloroethene	50.0	50.4		ug/L		101	60 - 140
cis-1,3-Dichloropropene	50.0	55.2		ug/L		110	25 - 175
Dibromomethane	50.0	52.3		ug/L		105	70 - 130
Dichlorobromomethane	50.0	53.1		ug/L		106	65 - 135
Dichlorodifluoromethane	50.0	48.7		ug/L		97	60 - 140
Ethylbenzene	50.0	52.4		ug/L		105	60 - 140
Ethylene Dibromide	50.0	54.2		ug/L		108	60 - 140
Hexachlorobutadiene	50.0	54.0		ug/L		108	60 - 140
Iodomethane	50.0	43.4		ug/L		87	60 - 140
Isopropylbenzene	50.0	52.8		ug/L		106	60 - 140
Methyl tert-butyl ether	50.0	52.4		ug/L		105	60 - 140
Methylene Chloride	50.0	48.2		ug/L		96	60 - 140
m-Xylene & p-Xylene	50.0	51.9		ug/L		104	60 - 140
Naphthalene	50.0	53.2		ug/L		106	60 - 140
n-Butylbenzene	50.0	54.0		ug/L		108	60 - 140
N-Propylbenzene	50.0	52.1		ug/L		104	60 - 140
o-Xylene	50.0	53.0		ug/L		106	60 - 140
sec-Butylbenzene	50.0	52.5		ug/L		105	60 - 140

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-311120/3
Matrix: Water
Analysis Batch: 311120

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Styrene	50.0	53.7		ug/L		107	60 - 140
tert-Butylbenzene	50.0	53.1		ug/L		106	60 - 140
Tetrachloroethene	50.0	52.1		ug/L		104	70 - 130
Toluene	50.0	51.6		ug/L		103	70 - 130
trans-1,2-Dichloroethene	50.0	51.2		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	56.9		ug/L		114	50 - 150
Trichloroethene	50.0	49.7		ug/L		99	65 - 135
Trichlorofluoromethane	50.0	51.4		ug/L		103	50 - 150
Vinyl acetate	50.0	68.1		ug/L		136	60 - 140
Vinyl chloride	50.0	49.4		ug/L		99	5 - 195

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*94*		*60 - 140*

Lab Sample ID: LCSD 550-311120/4
Matrix: Water
Analysis Batch: 311120

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	54.8		ug/L		110	60 - 140	1	20
1,1,1-Trichloroethane	50.0	53.7		ug/L		107	70 - 130	3	20
1,1,2,2-Tetrachloroethane	50.0	53.3		ug/L		107	60 - 140	1	20
1,1,2-Trichloroethane	50.0	53.0		ug/L		106	70 - 130	1	20
1,1-Dichloroethane	50.0	51.5		ug/L		103	70 - 130	2	20
1,1-Dichloroethene	50.0	51.5		ug/L		103	50 - 150	3	20
1,1-Dichloropropene	50.0	51.2		ug/L		102	60 - 140	2	20
1,2,3-Trichlorobenzene	50.0	52.6		ug/L		105	60 - 140	1	20
1,2,3-Trichloropropane	50.0	53.5		ug/L		107	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	54.1		ug/L		108	60 - 140	2	20
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	60 - 140	1	20
1,2-Dibromo-3-Chloropropane	50.0	57.0		ug/L		114	60 - 140	1	20
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	65 - 135	1	20
1,2-Dichloroethane	50.0	49.8		ug/L		100	70 - 130	0	20
1,2-Dichloropropane	50.0	51.0		ug/L		102	35 - 165	0	20
1,3,5-Trimethylbenzene	50.0	53.0		ug/L		106	60 - 140	2	20
1,3-Dichlorobenzene	50.0	53.9		ug/L		108	70 - 130	1	20
1,3-Dichloropropane	50.0	52.4		ug/L		105	60 - 140	1	20
1,4-Dichlorobenzene	50.0	52.4		ug/L		105	65 - 135	2	20
2,2-Dichloropropane	50.0	56.3		ug/L		113	60 - 140	3	20
2-Butanone (MEK)	50.0	57.7		ug/L		115	60 - 140	2	20
2-Chlorotoluene	50.0	53.3		ug/L		107	60 - 140	2	20
2-Hexanone	50.0	57.2		ug/L		114	60 - 140	5	20
4-Chlorotoluene	50.0	52.4		ug/L		105	60 - 140	1	20
4-Isopropyltoluene	50.0	55.4		ug/L		111	60 - 140	2	20
4-Methyl-2-pentanone (MIBK)	50.0	53.5		ug/L		107	60 - 140	1	20
Acetone	50.0	54.8		ug/L		110	18 - 150	8	20

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 550-311120/4
Matrix: Water
Analysis Batch: 311120

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
Benzene			50.0	49.8		ug/L		100	65 - 135	1	20
Bromobenzene			50.0	53.3		ug/L		107	60 - 140	1	20
Bromoform			50.0	60.9		ug/L		122	70 - 130	0	20
Bromomethane			50.0	55.4		ug/L		111	15 - 185	1	20
Carbon disulfide			50.0	49.6		ug/L		99	60 - 140	4	20
Carbon tetrachloride			50.0	53.0		ug/L		106	70 - 130	3	20
Chlorobenzene			50.0	52.2		ug/L		104	65 - 135	1	20
Chlorobromomethane			50.0	53.7		ug/L		107	60 - 140	1	20
Chlorodibromomethane			50.0	57.2		ug/L		114	70 - 135	1	20
Chloroethane			50.0	53.6		ug/L		107	40 - 160	5	20
Chloroform			50.0	51.7		ug/L		103	70 - 135	1	20
Chloromethane			50.0	48.2		ug/L		96	10 - 205	0	20
cis-1,2-Dichloroethene			50.0	51.1		ug/L		102	60 - 140	1	20
cis-1,3-Dichloropropene			50.0	55.3		ug/L		111	25 - 175	0	20
Dibromomethane			50.0	52.3		ug/L		105	70 - 130	0	20
Dichlorobromomethane			50.0	53.2		ug/L		106	65 - 135	0	20
Dichlorodifluoromethane			50.0	49.4		ug/L		99	60 - 140	1	20
Ethylbenzene			50.0	53.2		ug/L		106	60 - 140	2	20
Ethylene Dibromide			50.0	54.2		ug/L		108	60 - 140	0	20
Hexachlorobutadiene			50.0	55.5		ug/L		111	60 - 140	3	20
Iodomethane			50.0	44.4		ug/L		89	60 - 140	2	20
Isopropylbenzene			50.0	53.7		ug/L		107	60 - 140	2	20
Methyl tert-butyl ether			50.0	52.0		ug/L		104	60 - 140	1	20
Methylene Chloride			50.0	49.0		ug/L		98	60 - 140	2	20
m-Xylene & p-Xylene			50.0	52.6		ug/L		105	60 - 140	1	20
Naphthalene			50.0	53.0		ug/L		106	60 - 140	0	20
n-Butylbenzene			50.0	55.6		ug/L		111	60 - 140	3	20
N-Propylbenzene			50.0	53.4		ug/L		107	60 - 140	2	20
o-Xylene			50.0	54.0		ug/L		108	60 - 140	2	20
sec-Butylbenzene			50.0	53.8		ug/L		108	60 - 140	2	20
Styrene			50.0	54.7		ug/L		109	60 - 140	2	20
tert-Butylbenzene			50.0	53.8		ug/L		108	60 - 140	1	20
Tetrachloroethene			50.0	52.9		ug/L		106	70 - 130	2	20
Toluene			50.0	52.4		ug/L		105	70 - 130	1	20
trans-1,2-Dichloroethene			50.0	52.1		ug/L		104	70 - 130	2	20
trans-1,3-Dichloropropene			50.0	57.2		ug/L		114	50 - 150	1	20
Trichloroethene			50.0	50.6		ug/L		101	65 - 135	2	20
Trichlorofluoromethane			50.0	52.9		ug/L		106	50 - 150	3	20
Vinyl acetate			50.0	68.0		ug/L		136	60 - 140	0	20
Vinyl chloride			50.0	50.9		ug/L		102	5 - 195	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*
Dibromofluoromethane (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*98*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210535-5 MS
Matrix: Water
Analysis Batch: 311120

Client Sample ID: PHX-02-23A1
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	53.8		ug/L		108	50 - 150
1,1,1-Trichloroethane	ND		50.0	51.6		ug/L		103	52 - 162
1,1,2,2-Tetrachloroethane	ND		50.0	52.5		ug/L		105	46 - 157
1,1,2-Trichloroethane	ND		50.0	51.6		ug/L		103	52 - 150
1,1-Dichloroethane	ND		50.0	50.0		ug/L		100	59 - 155
1,1-Dichloroethene	19		50.0	67.9		ug/L		98	10 - 234
1,1-Dichloropropene	ND		50.0	50.7		ug/L		101	50 - 150
1,2,3-Trichlorobenzene	ND		50.0	51.3		ug/L		99	50 - 150
1,2,3-Trichloropropane	ND		50.0	52.7		ug/L		105	50 - 150
1,2,4-Trichlorobenzene	ND	T5	50.0	51.0		ug/L		99	50 - 150
1,2,4-Trimethylbenzene	ND		50.0	52.0		ug/L		104	50 - 150
1,2-Dibromo-3-Chloropropane	ND		50.0	55.2		ug/L		110	50 - 150
1,2-Dichlorobenzene	0.59		50.0	50.3		ug/L		100	18 - 190
1,2-Dichloroethane	ND		50.0	49.8		ug/L		100	49 - 155
1,2-Dichloropropane	ND		50.0	50.1		ug/L		100	10 - 210
1,3,5-Trimethylbenzene	ND		50.0	51.2		ug/L		102	50 - 150
1,3-Dichlorobenzene	ND		50.0	51.4		ug/L		102	59 - 156
1,3-Dichloropropane	ND		50.0	51.2		ug/L		102	50 - 150
1,4-Dichlorobenzene	0.60		50.0	49.7		ug/L		98	18 - 190
2,2-Dichloropropane	ND		50.0	53.0		ug/L		106	50 - 150
2-Butanone (MEK)	ND		50.0	50.5		ug/L		101	50 - 150
2-Chlorotoluene	ND		50.0	52.1		ug/L		104	50 - 150
2-Hexanone	ND		50.0	53.8		ug/L		108	50 - 150
4-Chlorotoluene	ND		50.0	50.1		ug/L		100	50 - 150
4-Isopropyltoluene	ND		50.0	53.6		ug/L		107	50 - 150
4-Methyl-2-pentanone (MIBK)	ND		50.0	53.1		ug/L		106	50 - 150
Acetone	ND		50.0	41.7		ug/L		83	18 - 150
Benzene	ND		50.0	49.3		ug/L		99	35 - 151
Bromobenzene	ND		50.0	51.6		ug/L		103	50 - 150
Bromoform	ND		50.0	59.2		ug/L		118	45 - 169
Bromomethane	ND		50.0	55.8		ug/L		112	10 - 242
Carbon disulfide	ND		50.0	48.3		ug/L		97	50 - 150
Carbon tetrachloride	ND		50.0	52.5		ug/L		105	70 - 140
Chlorobenzene	ND		50.0	50.5		ug/L		101	37 - 160
Chlorobromomethane	ND		50.0	52.6		ug/L		105	50 - 150
Chlorodibromomethane	ND		50.0	56.1		ug/L		112	53 - 149
Chloroethane	ND		50.0	51.8		ug/L		104	14 - 230
Chloroform	ND		50.0	50.4		ug/L		101	51 - 138
Chloromethane	ND		50.0	47.2		ug/L		94	10 - 273
cis-1,2-Dichloroethene	ND		50.0	50.5		ug/L		101	50 - 150
cis-1,3-Dichloropropene	ND		50.0	53.8		ug/L		108	10 - 227
Dibromomethane	ND		50.0	51.8		ug/L		104	50 - 150
Dichlorobromomethane	ND		50.0	52.7		ug/L		105	35 - 155
Dichlorodifluoromethane	ND		50.0	50.1		ug/L		100	50 - 150
Ethylbenzene	ND		50.0	51.2		ug/L		102	37 - 162
Ethylene Dibromide	ND		50.0	53.0		ug/L		106	50 - 150
Hexachlorobutadiene	ND		50.0	52.9		ug/L		106	50 - 150
Iodomethane	ND		50.0	43.0		ug/L		86	50 - 150

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210535-5 MS
Matrix: Water
Analysis Batch: 311120

Client Sample ID: PHX-02-23A1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Isopropylbenzene	ND		50.0	52.3		ug/L		105	50 - 150
Methyl tert-butyl ether	ND		50.0	52.3		ug/L		105	50 - 150
Methylene Chloride	ND		50.0	48.1		ug/L		96	10 - 221
m-Xylene & p-Xylene	ND		50.0	51.0		ug/L		102	50 - 150
Naphthalene	ND		50.0	52.3		ug/L		100	50 - 150
n-Butylbenzene	ND		50.0	52.8		ug/L		104	50 - 150
N-Propylbenzene	ND		50.0	51.5		ug/L		103	50 - 150
o-Xylene	ND		50.0	52.3		ug/L		105	50 - 150
sec-Butylbenzene	ND		50.0	52.5		ug/L		105	50 - 150
Styrene	ND		50.0	52.5		ug/L		105	50 - 150
tert-Butylbenzene	ND		50.0	52.7		ug/L		105	50 - 150
Tetrachloroethene	0.51		50.0	52.3		ug/L		104	64 - 148
Toluene	ND		50.0	50.6		ug/L		101	47 - 150
trans-1,2-Dichloroethene	ND		50.0	51.1		ug/L		102	54 - 156
trans-1,3-Dichloropropene	ND		50.0	54.8		ug/L		110	17 - 183
Trichloroethene	3.3		50.0	53.4		ug/L		100	70 - 157
Trichlorofluoromethane	ND		50.0	52.0		ug/L		104	17 - 181
Vinyl acetate	ND		50.0	65.6		ug/L		131	50 - 150
Vinyl chloride	ND		50.0	49.2		ug/L		98	10 - 251

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*
Dibromofluoromethane (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*95*		*60 - 140*

Lab Sample ID: 550-210535-5 MSD
Matrix: Water
Analysis Batch: 311120

Client Sample ID: PHX-02-23A1
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	52.5		ug/L		105	50 - 150	2	35
1,1,1-Trichloroethane	ND		50.0	51.7		ug/L		103	52 - 162	0	36
1,1,2,2-Tetrachloroethane	ND		50.0	52.5		ug/L		105	46 - 157	0	61
1,1,2-Trichloroethane	ND		50.0	51.1		ug/L		102	52 - 150	1	45
1,1-Dichloroethane	ND		50.0	49.9		ug/L		100	59 - 155	0	40
1,1-Dichloroethene	19		50.0	68.6		ug/L		100	10 - 234	1	32
1,1-Dichloropropene	ND		50.0	50.0		ug/L		100	50 - 150	1	35
1,2,3-Trichlorobenzene	ND		50.0	51.0		ug/L		99	50 - 150	1	35
1,2,3-Trichloropropane	ND		50.0	53.5		ug/L		107	50 - 150	2	35
1,2,4-Trichlorobenzene	ND	T5	50.0	51.1		ug/L		99	50 - 150	0	35
1,2,4-Trimethylbenzene	ND		50.0	51.4		ug/L		103	50 - 150	1	35
1,2-Dibromo-3-Chloropropane	ND		50.0	57.4		ug/L		115	50 - 150	4	35
1,2-Dichlorobenzene	0.59		50.0	50.2		ug/L		99	18 - 190	0	57
1,2-Dichloroethane	ND		50.0	48.7		ug/L		97	49 - 155	2	49
1,2-Dichloropropane	ND		50.0	49.4		ug/L		99	10 - 210	1	55
1,3,5-Trimethylbenzene	ND		50.0	51.8		ug/L		104	50 - 150	1	35
1,3-Dichlorobenzene	ND		50.0	51.9		ug/L		103	59 - 156	1	43
1,3-Dichloropropane	ND		50.0	51.2		ug/L		102	50 - 150	0	35

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210535-5 MSD
Matrix: Water
Analysis Batch: 311120

Client Sample ID: PHX-02-23A1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.60		50.0	50.4		ug/L		100	18 - 190	1	57
2,2-Dichloropropane	ND		50.0	53.8		ug/L		108	50 - 150	1	35
2-Butanone (MEK)	ND		50.0	51.8		ug/L		104	50 - 150	2	35
2-Chlorotoluene	ND		50.0	51.4		ug/L		103	50 - 150	1	35
2-Hexanone	ND		50.0	55.7		ug/L		111	50 - 150	3	35
4-Chlorotoluene	ND		50.0	50.0		ug/L		99	50 - 150	0	35
4-Isopropyltoluene	ND		50.0	53.3		ug/L		107	50 - 150	1	35
4-Methyl-2-pentanone (MIBK)	ND		50.0	53.8		ug/L		108	50 - 150	1	35
Acetone	ND		50.0	43.9		ug/L		88	18 - 150	5	35
Benzene	ND		50.0	48.4		ug/L		97	35 - 151	2	61
Bromobenzene	ND		50.0	51.6		ug/L		103	50 - 150	0	35
Bromoform	ND		50.0	59.5		ug/L		119	45 - 169	0	42
Bromomethane	ND		50.0	55.1		ug/L		110	10 - 242	1	61
Carbon disulfide	ND		50.0	48.2		ug/L		96	50 - 150	0	35
Carbon tetrachloride	ND		50.0	51.2		ug/L		102	70 - 140	2	41
Chlorobenzene	ND		50.0	50.5		ug/L		101	37 - 160	0	53
Chlorobromomethane	ND		50.0	52.0		ug/L		104	50 - 150	1	35
Chlorodibromomethane	ND		50.0	55.2		ug/L		110	53 - 149	2	50
Chloroethane	ND		50.0	52.7		ug/L		105	14 - 230	2	78
Chloroform	ND		50.0	50.2		ug/L		100	51 - 138	0	54
Chloromethane	ND		50.0	48.8		ug/L		98	10 - 273	3	60
cis-1,2-Dichloroethene	ND		50.0	48.9		ug/L		98	50 - 150	3	35
cis-1,3-Dichloropropene	ND		50.0	53.2		ug/L		106	10 - 227	1	58
Dibromomethane	ND		50.0	50.9		ug/L		102	50 - 150	2	35
Dichlorobromomethane	ND		50.0	51.1		ug/L		102	35 - 155	3	56
Dichlorodifluoromethane	ND		50.0	50.8		ug/L		102	50 - 150	1	35
Ethylbenzene	ND		50.0	51.6		ug/L		103	37 - 162	1	63
Ethylene Dibromide	ND		50.0	52.7		ug/L		105	50 - 150	0	35
Hexachlorobutadiene	ND		50.0	53.8		ug/L		108	50 - 150	2	35
Iodomethane	ND		50.0	42.5		ug/L		85	50 - 150	1	35
Isopropylbenzene	ND		50.0	51.9		ug/L		104	50 - 150	1	35
Methyl tert-butyl ether	ND		50.0	51.0		ug/L		102	50 - 150	3	35
Methylene Chloride	ND		50.0	47.5		ug/L		95	10 - 221	1	28
m-Xylene & p-Xylene	ND		50.0	51.0		ug/L		102	50 - 150	0	35
Naphthalene	ND		50.0	52.2		ug/L		100	50 - 150	0	35
n-Butylbenzene	ND		50.0	53.2		ug/L		105	50 - 150	1	35
N-Propylbenzene	ND		50.0	51.7		ug/L		103	50 - 150	0	35
o-Xylene	ND		50.0	51.7		ug/L		103	50 - 150	1	35
sec-Butylbenzene	ND		50.0	52.0		ug/L		104	50 - 150	1	35
Styrene	ND		50.0	53.0		ug/L		106	50 - 150	1	35
tert-Butylbenzene	ND		50.0	52.0		ug/L		104	50 - 150	1	35
Tetrachloroethene	0.51		50.0	52.0		ug/L		103	64 - 148	1	39
Toluene	ND		50.0	50.4		ug/L		101	47 - 150	0	41
trans-1,2-Dichloroethene	ND		50.0	50.9		ug/L		102	54 - 156	0	45
trans-1,3-Dichloropropene	ND		50.0	55.4		ug/L		111	17 - 183	1	86
Trichloroethene	3.3		50.0	52.6		ug/L		99	70 - 157	1	48
Trichlorofluoromethane	ND		50.0	52.1		ug/L		104	17 - 181	0	84
Vinyl acetate	ND		50.0	66.2		ug/L		132	50 - 150	1	35
Vinyl chloride	ND		50.0	51.2		ug/L		102	10 - 251	4	66

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		60 - 140
Dibromofluoromethane (Surr)	103		60 - 140
Toluene-d8 (Surr)	98		60 - 140

Lab Sample ID: MB 550-311203/6
Matrix: Water
Analysis Batch: 311203

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			11/16/23 10:34	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/16/23 10:34	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/16/23 10:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			11/16/23 10:34	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/16/23 10:34	1
1,1-Dichloroethane	ND		0.50		ug/L			11/16/23 10:34	1
1,1-Dichloroethene	ND		0.50		ug/L			11/16/23 10:34	1
1,1-Dichloropropene	ND		0.50		ug/L			11/16/23 10:34	1
1,2,3-Trichlorobenzene	ND		3.0		ug/L			11/16/23 10:34	1
1,2,3-Trichloropropane	ND		2.0		ug/L			11/16/23 10:34	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/16/23 10:34	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/16/23 10:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/16/23 10:34	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/16/23 10:34	1
1,2-Dichloroethane	ND		0.50		ug/L			11/16/23 10:34	1
1,2-Dichloropropane	ND		0.50		ug/L			11/16/23 10:34	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/16/23 10:34	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/16/23 10:34	1
1,3-Dichloropropane	ND		0.50		ug/L			11/16/23 10:34	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/16/23 10:34	1
2,2-Dichloropropane	ND		1.0		ug/L			11/16/23 10:34	1
2-Butanone (MEK)	ND		10		ug/L			11/16/23 10:34	1
2-Chlorotoluene	ND		0.50		ug/L			11/16/23 10:34	1
2-Hexanone	ND		5.0		ug/L			11/16/23 10:34	1
4-Chlorotoluene	ND		0.50		ug/L			11/16/23 10:34	1
4-Isopropyltoluene	ND		0.50		ug/L			11/16/23 10:34	1
4-Methyl-2-pentanone (MIBK)	ND		2.5		ug/L			11/16/23 10:34	1
Acetone	ND		10		ug/L			11/16/23 10:34	1
Benzene	ND		0.50		ug/L			11/16/23 10:34	1
Bromobenzene	ND		1.0		ug/L			11/16/23 10:34	1
Bromoform	ND		1.0		ug/L			11/16/23 10:34	1
Bromomethane	ND		5.0		ug/L			11/16/23 10:34	1
Carbon disulfide	ND		5.0		ug/L			11/16/23 10:34	1
Carbon tetrachloride	ND		0.50		ug/L			11/16/23 10:34	1
Chlorobenzene	ND		0.50		ug/L			11/16/23 10:34	1
Chlorobromomethane	ND		0.50		ug/L			11/16/23 10:34	1
Chlorodibromomethane	ND		0.50		ug/L			11/16/23 10:34	1
Chloroethane	ND		1.0		ug/L			11/16/23 10:34	1
Chloroform	ND		0.50		ug/L			11/16/23 10:34	1
Chloromethane	ND		1.0		ug/L			11/16/23 10:34	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/16/23 10:34	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/16/23 10:34	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 550-311203/6
Matrix: Water
Analysis Batch: 311203

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.50		ug/L			11/16/23 10:34	1
Dichlorobromomethane	ND		0.50		ug/L			11/16/23 10:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/16/23 10:34	1
Ethanol	ND		150		ug/L			11/16/23 10:34	1
Ethylbenzene	ND		0.50		ug/L			11/16/23 10:34	1
Ethylene Dibromide	ND		0.50		ug/L			11/16/23 10:34	1
Hexachlorobutadiene	ND		5.0		ug/L			11/16/23 10:34	1
Iodomethane	ND		2.0		ug/L			11/16/23 10:34	1
Isopropylbenzene	ND		0.50		ug/L			11/16/23 10:34	1
Methyl tert-butyl ether	ND		0.50		ug/L			11/16/23 10:34	1
Methylene Chloride	ND		5.0		ug/L			11/16/23 10:34	1
m-Xylene & p-Xylene	ND		1.0		ug/L			11/16/23 10:34	1
Naphthalene	ND		5.0		ug/L			11/16/23 10:34	1
n-Butylbenzene	ND		1.0		ug/L			11/16/23 10:34	1
N-Propylbenzene	ND		0.50		ug/L			11/16/23 10:34	1
o-Xylene	ND		0.50		ug/L			11/16/23 10:34	1
sec-Butylbenzene	ND		0.50		ug/L			11/16/23 10:34	1
Styrene	ND		1.0		ug/L			11/16/23 10:34	1
tert-Butylbenzene	ND		0.50		ug/L			11/16/23 10:34	1
Tetrachloroethene	ND		0.50		ug/L			11/16/23 10:34	1
Toluene	ND		0.50		ug/L			11/16/23 10:34	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/16/23 10:34	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/16/23 10:34	1
Trichloroethene	ND		0.50		ug/L			11/16/23 10:34	1
Trichlorofluoromethane	ND		1.0		ug/L			11/16/23 10:34	1
Trihalomethanes, Total	ND		0.50		ug/L			11/16/23 10:34	1
Vinyl acetate	ND		5.0		ug/L			11/16/23 10:34	1
Vinyl chloride	ND		1.0		ug/L			11/16/23 10:34	1
Xylenes, Total	ND		0.50		ug/L			11/16/23 10:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*60 - 140*		*11/16/23 10:34*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*11/16/23 10:34*	*1*
Toluene-d8 (Surr)	*85*		*60 - 140*		*11/16/23 10:34*	*1*

Lab Sample ID: LCS 550-311203/3
Matrix: Water
Analysis Batch: 311203

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane			50.0	51.5		ug/L		103	60 - 140		
1,1,1-Trichloroethane			50.0	52.3		ug/L		105	70 - 130		
1,1,2,2-Tetrachloroethane			50.0	52.1		ug/L		104	60 - 140		
1,1,2-Trichloroethane			50.0	49.5		ug/L		99	70 - 130		
1,1-Dichloroethane			50.0	49.8		ug/L		100	70 - 130		
1,1-Dichloroethene			50.0	53.6		ug/L		107	50 - 150		
1,1-Dichloropropene			50.0	51.0		ug/L		102	60 - 140		
1,2,3-Trichlorobenzene			50.0	52.6		ug/L		105	60 - 140		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-311203/3
Matrix: Water
Analysis Batch: 311203

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	53.0		ug/L		106	60 - 140
1,2,4-Trichlorobenzene	50.0	51.8		ug/L		104	60 - 140
1,2,4-Trimethylbenzene	50.0	52.2		ug/L		104	60 - 140
1,2-Dibromo-3-Chloropropane	50.0	52.0		ug/L		104	60 - 140
1,2-Dichlorobenzene	50.0	50.7		ug/L		101	65 - 135
1,2-Dichloroethane	50.0	49.7		ug/L		99	70 - 130
1,2-Dichloropropane	50.0	49.6		ug/L		99	35 - 165
1,3,5-Trimethylbenzene	50.0	52.4		ug/L		105	60 - 140
1,3-Dichlorobenzene	50.0	50.9		ug/L		102	70 - 130
1,3-Dichloropropane	50.0	48.6		ug/L		97	60 - 140
1,4-Dichlorobenzene	50.0	50.6		ug/L		101	65 - 135
2,2-Dichloropropane	50.0	52.2		ug/L		104	60 - 140
2-Butanone (MEK)	50.0	54.1		ug/L		108	60 - 140
2-Chlorotoluene	50.0	51.2		ug/L		102	60 - 140
2-Hexanone	50.0	48.9		ug/L		98	60 - 140
4-Chlorotoluene	50.0	50.3		ug/L		101	60 - 140
4-Isopropyltoluene	50.0	54.1		ug/L		108	60 - 140
4-Methyl-2-pentanone (MIBK)	50.0	48.9		ug/L		98	60 - 140
Acetone	50.0	56.5		ug/L		113	18 - 150
Benzene	50.0	49.1		ug/L		98	65 - 135
Bromobenzene	50.0	50.7		ug/L		101	60 - 140
Bromoform	50.0	49.7		ug/L		99	70 - 130
Bromomethane	50.0	46.2		ug/L		92	15 - 185
Carbon disulfide	50.0	47.7		ug/L		95	60 - 140
Carbon tetrachloride	50.0	53.4		ug/L		107	70 - 130
Chlorobenzene	50.0	50.6		ug/L		101	65 - 135
Chlorobromomethane	50.0	50.3		ug/L		101	60 - 140
Chlorodibromomethane	50.0	52.3		ug/L		105	70 - 135
Chloroethane	50.0	49.9		ug/L		100	40 - 160
Chloroform	50.0	50.1		ug/L		100	70 - 135
Chloromethane	50.0	43.5		ug/L		87	10 - 205
cis-1,2-Dichloroethene	50.0	50.2		ug/L		100	60 - 140
cis-1,3-Dichloropropene	50.0	49.5		ug/L		99	25 - 175
Dibromomethane	50.0	50.6		ug/L		101	70 - 130
Dichlorobromomethane	50.0	50.8		ug/L		102	65 - 135
Dichlorodifluoromethane	50.0	53.4		ug/L		107	60 - 140
Ethanol	1000	905		ug/L		91	60 - 140
Ethylbenzene	50.0	48.7		ug/L		97	60 - 140
Ethylene Dibromide	50.0	49.9		ug/L		100	60 - 140
Hexachlorobutadiene	50.0	53.2		ug/L		106	60 - 140
Iodomethane	50.0	49.9		ug/L		100	60 - 140
Isopropylbenzene	50.0	54.5		ug/L		109	60 - 140
Methyl tert-butyl ether	50.0	49.5		ug/L		99	60 - 140
Methylene Chloride	50.0	47.2		ug/L		94	60 - 140
m-Xylene & p-Xylene	50.0	51.7		ug/L		103	60 - 140
Naphthalene	50.0	54.3		ug/L		109	60 - 140
n-Butylbenzene	50.0	51.8		ug/L		104	60 - 140
N-Propylbenzene	50.0	51.5		ug/L		103	60 - 140
o-Xylene	50.0	50.5		ug/L		101	60 - 140

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 550-311203/3
Matrix: Water
Analysis Batch: 311203

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
sec-Butylbenzene	50.0	54.4		ug/L		109	60 - 140
Styrene	50.0	51.9		ug/L		104	60 - 140
tert-Butylbenzene	50.0	55.2		ug/L		110	60 - 140
Tetrachloroethene	50.0	51.9		ug/L		104	70 - 130
Toluene	50.0	50.7		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	51.3		ug/L		103	70 - 130
trans-1,3-Dichloropropene	50.0	49.7		ug/L		99	50 - 150
Trichloroethene	50.0	50.6		ug/L		101	65 - 135
Trichlorofluoromethane	50.0	53.9		ug/L		108	50 - 150
Vinyl acetate	50.0	47.7		ug/L		95	60 - 140
Vinyl chloride	50.0	50.6		ug/L		101	5 - 195

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*
Dibromofluoromethane (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*97*		*60 - 140*

Lab Sample ID: LCSD 550-311203/4
Matrix: Water
Analysis Batch: 311203

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	52.0		ug/L		104	60 - 140	1	20
1,1,1-Trichloroethane	50.0	51.4		ug/L		103	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	53.3		ug/L		107	60 - 140	2	20
1,1,2-Trichloroethane	50.0	51.6		ug/L		103	70 - 130	4	20
1,1-Dichloroethane	50.0	49.9		ug/L		100	70 - 130	0	20
1,1-Dichloroethene	50.0	51.9		ug/L		104	50 - 150	3	20
1,1-Dichloropropene	50.0	48.8		ug/L		98	60 - 140	5	20
1,2,3-Trichlorobenzene	50.0	53.3		ug/L		107	60 - 140	1	20
1,2,3-Trichloropropane	50.0	52.7		ug/L		105	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	52.3		ug/L		105	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	50.9		ug/L		102	60 - 140	2	20
1,2-Dibromo-3-Chloropropane	50.0	53.3		ug/L		107	60 - 140	2	20
1,2-Dichlorobenzene	50.0	50.6		ug/L		101	65 - 135	0	20
1,2-Dichloroethane	50.0	49.4		ug/L		99	70 - 130	0	20
1,2-Dichloropropane	50.0	50.1		ug/L		100	35 - 165	1	20
1,3,5-Trimethylbenzene	50.0	51.0		ug/L		102	60 - 140	3	20
1,3-Dichlorobenzene	50.0	50.8		ug/L		102	70 - 130	0	20
1,3-Dichloropropane	50.0	50.5		ug/L		101	60 - 140	4	20
1,4-Dichlorobenzene	50.0	50.4		ug/L		101	65 - 135	0	20
2,2-Dichloropropane	50.0	51.8		ug/L		104	60 - 140	1	20
2-Butanone (MEK)	50.0	59.1		ug/L		118	60 - 140	9	20
2-Chlorotoluene	50.0	50.2		ug/L		100	60 - 140	2	20
2-Hexanone	50.0	53.7		ug/L		107	60 - 140	9	20
4-Chlorotoluene	50.0	50.3		ug/L		101	60 - 140	0	20
4-Isopropyltoluene	50.0	51.9		ug/L		104	60 - 140	4	20
4-Methyl-2-pentanone (MIBK)	50.0	50.8		ug/L		102	60 - 140	4	20

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 550-311203/4
Matrix: Water
Analysis Batch: 311203

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
Acetone			50.0	58.8		ug/L		118	18 - 150	4	20
Benzene			50.0	48.7		ug/L		97	65 - 135	1	20
Bromobenzene			50.0	51.4		ug/L		103	60 - 140	1	20
Bromoform			50.0	51.3		ug/L		103	70 - 130	3	20
Bromomethane			50.0	46.7		ug/L		93	15 - 185	1	20
Carbon disulfide			50.0	47.1		ug/L		94	60 - 140	1	20
Carbon tetrachloride			50.0	50.6		ug/L		101	70 - 130	5	20
Chlorobenzene			50.0	51.0		ug/L		102	65 - 135	1	20
Chlorobromomethane			50.0	51.5		ug/L		103	60 - 140	2	20
Chlorodibromomethane			50.0	54.3		ug/L		109	70 - 135	4	20
Chloroethane			50.0	49.9		ug/L		100	40 - 160	0	20
Chloroform			50.0	50.4		ug/L		101	70 - 135	1	20
Chloromethane			50.0	44.0		ug/L		88	10 - 205	1	20
cis-1,2-Dichloroethene			50.0	50.2		ug/L		100	60 - 140	0	20
cis-1,3-Dichloropropene			50.0	51.2		ug/L		102	25 - 175	3	20
Dibromomethane			50.0	51.3		ug/L		103	70 - 130	1	20
Dichlorobromomethane			50.0	51.4		ug/L		103	65 - 135	1	20
Dichlorodifluoromethane			50.0	50.3		ug/L		101	60 - 140	6	20
Ethanol			1000	939		ug/L		94	60 - 140	4	20
Ethylbenzene			50.0	48.0		ug/L		96	60 - 140	1	20
Ethylene Dibromide			50.0	51.6		ug/L		103	60 - 140	3	20
Hexachlorobutadiene			50.0	50.4		ug/L		101	60 - 140	5	20
Iodomethane			50.0	49.4		ug/L		99	60 - 140	1	20
Isopropylbenzene			50.0	52.5		ug/L		105	60 - 140	4	20
Methyl tert-butyl ether			50.0	51.4		ug/L		103	60 - 140	4	20
Methylene Chloride			50.0	48.1		ug/L		96	60 - 140	2	20
m-Xylene & p-Xylene			50.0	51.1		ug/L		102	60 - 140	1	20
Naphthalene			50.0	55.3		ug/L		111	60 - 140	2	20
n-Butylbenzene			50.0	50.1		ug/L		100	60 - 140	3	20
N-Propylbenzene			50.0	49.9		ug/L		100	60 - 140	3	20
o-Xylene			50.0	49.9		ug/L		100	60 - 140	1	20
sec-Butylbenzene			50.0	51.9		ug/L		104	60 - 140	5	20
Styrene			50.0	52.2		ug/L		104	60 - 140	1	20
tert-Butylbenzene			50.0	53.3		ug/L		107	60 - 140	4	20
Tetrachloroethene			50.0	50.4		ug/L		101	70 - 130	3	20
Toluene			50.0	50.2		ug/L		100	70 - 130	1	20
trans-1,2-Dichloroethene			50.0	50.8		ug/L		102	70 - 130	1	20
trans-1,3-Dichloropropene			50.0	51.5		ug/L		103	50 - 150	4	20
Trichloroethene			50.0	49.4		ug/L		99	65 - 135	2	20
Trichlorofluoromethane			50.0	52.1		ug/L		104	50 - 150	3	20
Vinyl acetate			50.0	47.9		ug/L		96	60 - 140	0	20
Vinyl chloride			50.0	49.9		ug/L		100	5 - 195	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*
Dibromofluoromethane (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*94*		*60 - 140*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210565-A-2 MS
Matrix: Water
Analysis Batch: 311203

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
1,1,1,2-Tetrachloroethane	ND		50.0	58.9		ug/L		118	50 - 150
1,1,1-Trichloroethane	ND		50.0	59.7		ug/L		119	52 - 162
1,1,2,2-Tetrachloroethane	ND		50.0	65.4		ug/L		131	46 - 157
1,1,2-Trichloroethane	ND		50.0	58.2		ug/L		116	52 - 150
1,1-Dichloroethane	ND		50.0	56.6		ug/L		113	59 - 155
1,1-Dichloroethene	ND		50.0	60.2		ug/L		120	10 - 234
1,1-Dichloropropene	ND		50.0	58.9		ug/L		118	50 - 150
1,2,3-Trichlorobenzene	ND	R4	50.0	33.7		ug/L		67	50 - 150
1,2,3-Trichloropropane	ND	M1	50.0	68.8		ug/L		138	50 - 150
1,2,4-Trichlorobenzene	ND		50.0	37.9		ug/L		76	50 - 150
1,2,4-Trimethylbenzene	3.0		50.0	59.8		ug/L		114	50 - 150
1,2-Dibromo-3-Chloropropane	ND	M1	50.0	63.1		ug/L		126	50 - 150
1,2-Dichlorobenzene	ND		50.0	55.4		ug/L		111	18 - 190
1,2-Dichloroethane	ND		50.0	58.7		ug/L		117	49 - 155
1,2-Dichloropropane	ND		50.0	57.2		ug/L		114	10 - 210
1,3,5-Trimethylbenzene	0.82		50.0	57.0		ug/L		112	50 - 150
1,3-Dichlorobenzene	ND		50.0	55.6		ug/L		111	59 - 156
1,3-Dichloropropane	ND		50.0	56.7		ug/L		113	50 - 150
1,4-Dichlorobenzene	ND		50.0	55.3		ug/L		111	18 - 190
2,2-Dichloropropane	ND		50.0	56.3		ug/L		113	50 - 150
2-Butanone (MEK)	ND	M1	50.0	71.1		ug/L		131	50 - 150
2-Chlorotoluene	ND		50.0	57.8		ug/L		116	50 - 150
2-Hexanone	ND		50.0	59.5		ug/L		119	50 - 150
4-Chlorotoluene	ND		50.0	57.2		ug/L		114	50 - 150
4-Isopropyltoluene	ND		50.0	51.6		ug/L		103	50 - 150
4-Methyl-2-pentanone (MIBK)	ND		50.0	59.6		ug/L		119	50 - 150
Acetone	96	M1	50.0	158	E2	ug/L		125	18 - 150
Benzene	ND		50.0	56.9		ug/L		114	35 - 151
Bromobenzene	ND		50.0	60.6		ug/L		121	50 - 150
Bromoform	ND		50.0	65.6		ug/L		129	45 - 169
Bromomethane	ND		50.0	54.7		ug/L		109	10 - 242
Carbon disulfide	ND		50.0	55.0		ug/L		110	50 - 150
Carbon tetrachloride	ND		50.0	61.9		ug/L		124	70 - 140
Chlorobenzene	ND		50.0	56.4		ug/L		113	37 - 160
Chlorobromomethane	ND		50.0	58.5		ug/L		117	50 - 150
Chlorodibromomethane	1.0		50.0	62.0		ug/L		122	53 - 149
Chloroethane	ND		50.0	57.7		ug/L		115	14 - 230
Chloroform	50		50.0	104	E2	ug/L		108	51 - 138
Chloromethane	ND		50.0	50.8		ug/L		102	10 - 273
cis-1,2-Dichloroethene	ND		50.0	59.1		ug/L		118	50 - 150
cis-1,3-Dichloropropene	ND		50.0	56.1		ug/L		112	10 - 227
Dibromomethane	ND		50.0	61.0		ug/L		122	50 - 150
Dichlorobromomethane	1.1		50.0	60.1		ug/L		118	35 - 155
Dichlorodifluoromethane	ND		50.0	60.8		ug/L		122	50 - 150
Ethanol	3300	E2 M1	1000	4510	E2	ug/L		123	50 - 150
Ethylbenzene	7.5		50.0	60.7		ug/L		106	37 - 162
Ethylene Dibromide	ND		50.0	59.1		ug/L		118	50 - 150
Hexachlorobutadiene	ND		50.0	25.8		ug/L		52	50 - 150

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210565-A-2 MS
Matrix: Water
Analysis Batch: 311203

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
Iodomethane	ND		50.0	56.4		ug/L		113	50 - 150
Isopropylbenzene	ND		50.0	61.7		ug/L		123	50 - 150
Methyl tert-butyl ether	ND		50.0	56.8		ug/L		114	50 - 150
Methylene Chloride	ND		50.0	55.0		ug/L		110	10 - 221
m-Xylene & p-Xylene	33		50.0	99.1		ug/L		133	50 - 150
Naphthalene	ND		50.0	45.7		ug/L		91	50 - 150
n-Butylbenzene	ND		50.0	45.3		ug/L		91	50 - 150
N-Propylbenzene	ND		50.0	56.3		ug/L		113	50 - 150
o-Xylene	15		50.0	77.8		ug/L		125	50 - 150
sec-Butylbenzene	ND		50.0	51.8		ug/L		104	50 - 150
Styrene	ND		50.0	63.2		ug/L		126	50 - 150
tert-Butylbenzene	ND		50.0	55.7		ug/L		111	50 - 150
Tetrachloroethene	ND		50.0	57.3		ug/L		115	64 - 148
Toluene	0.83		50.0	58.9		ug/L		116	47 - 150
trans-1,2-Dichloroethene	ND		50.0	59.6		ug/L		119	54 - 156
trans-1,3-Dichloropropene	ND		50.0	56.4		ug/L		113	17 - 183
Trichloroethene	ND		50.0	58.4		ug/L		117	70 - 157
Trichlorofluoromethane	ND		50.0	59.8		ug/L		120	17 - 181
Vinyl acetate	ND		50.0	34.2		ug/L		68	50 - 150
Vinyl chloride	ND		50.0	58.4		ug/L		117	10 - 251

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*60 - 140*
Dibromofluoromethane (Surr)	*117*		*60 - 140*
Toluene-d8 (Surr)	*111*		*60 - 140*

Lab Sample ID: 550-210565-A-2 MSD
Matrix: Water
Analysis Batch: 311203

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
1,1,1,2-Tetrachloroethane	ND		50.0	64.1		ug/L		128	50 - 150	8	35
1,1,1-Trichloroethane	ND		50.0	65.3		ug/L		131	52 - 162	9	36
1,1,2,2-Tetrachloroethane	ND		50.0	72.4		ug/L		145	46 - 157	10	61
1,1,2-Trichloroethane	ND		50.0	64.8		ug/L		130	52 - 150	11	45
1,1-Dichloroethane	ND		50.0	61.2		ug/L		122	59 - 155	8	40
1,1-Dichloroethene	ND		50.0	65.9		ug/L		132	10 - 234	9	32
1,1-Dichloropropene	ND		50.0	63.0		ug/L		126	50 - 150	7	35
1,2,3-Trichlorobenzene	ND	R4	50.0	50.3	R4	ug/L		101	50 - 150	40	35
1,2,3-Trichloropropane	ND	M1	50.0	75.3	M1	ug/L		151	50 - 150	9	35
1,2,4-Trichlorobenzene	ND		50.0	51.1		ug/L		102	50 - 150	30	35
1,2,4-Trimethylbenzene	3.0		50.0	65.6		ug/L		125	50 - 150	9	35
1,2-Dibromo-3-Chloropropane	ND	M1	50.0	77.6	M1	ug/L		155	50 - 150	21	35
1,2-Dichlorobenzene	ND		50.0	61.9		ug/L		124	18 - 190	11	57
1,2-Dichloroethane	ND		50.0	62.8		ug/L		126	49 - 155	7	49
1,2-Dichloropropane	ND		50.0	61.4		ug/L		123	10 - 210	7	55
1,3,5-Trimethylbenzene	0.82		50.0	62.8		ug/L		124	50 - 150	10	35
1,3-Dichlorobenzene	ND		50.0	61.4		ug/L		123	59 - 156	10	43

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210565-A-2 MSD
Matrix: Water
Analysis Batch: 311203

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
1,3-Dichloropropane	ND		50.0	62.4		ug/L		125	50 - 150	10	35
1,4-Dichlorobenzene	ND		50.0	61.2		ug/L		122	18 - 190	10	57
2,2-Dichloropropane	ND		50.0	60.9		ug/L		122	50 - 150	8	35
2-Butanone (MEK)	ND	M1	50.0	86.1	M1	ug/L		161	50 - 150	19	35
2-Chlorotoluene	ND		50.0	63.0		ug/L		126	50 - 150	9	35
2-Hexanone	ND		50.0	68.3		ug/L		137	50 - 150	14	35
4-Chlorotoluene	ND		50.0	61.8		ug/L		124	50 - 150	8	35
4-Isopropyltoluene	ND		50.0	58.3		ug/L		117	50 - 150	12	35
4-Methyl-2-pentanone (MIBK)	ND		50.0	68.0		ug/L		136	50 - 150	13	35
Acetone	96	M1	50.0	182	E2 M1	ug/L		172	18 - 150	14	35
Benzene	ND		50.0	61.2		ug/L		122	35 - 151	7	61
Bromobenzene	ND		50.0	65.1		ug/L		130	50 - 150	7	35
Bromoform	ND		50.0	71.5		ug/L		141	45 - 169	9	42
Bromomethane	ND		50.0	58.9		ug/L		118	10 - 242	7	61
Carbon disulfide	ND		50.0	60.5		ug/L		121	50 - 150	10	35
Carbon tetrachloride	ND		50.0	67.5		ug/L		135	70 - 140	9	41
Chlorobenzene	ND		50.0	61.7		ug/L		123	37 - 160	9	53
Chlorobromomethane	ND		50.0	64.1		ug/L		128	50 - 150	9	35
Chlorodibromomethane	1.0		50.0	69.1		ug/L		136	53 - 149	11	50
Chloroethane	ND		50.0	62.5		ug/L		125	14 - 230	8	78
Chloroform	50		50.0	114	E2	ug/L		128	51 - 138	9	54
Chloromethane	ND		50.0	56.1		ug/L		112	10 - 273	10	60
cis-1,2-Dichloroethene	ND		50.0	62.9		ug/L		126	50 - 150	6	35
cis-1,3-Dichloropropene	ND		50.0	60.9		ug/L		122	10 - 227	8	58
Dibromomethane	ND		50.0	66.1		ug/L		132	50 - 150	8	35
Dichlorobromomethane	1.1		50.0	64.8		ug/L		127	35 - 155	7	56
Dichlorodifluoromethane	ND		50.0	66.6		ug/L		133	50 - 150	9	35
Ethanol	3300	E2 M1	1000	5070	E2 M1	ug/L		179	50 - 150	12	35
Ethylbenzene	7.5		50.0	66.8		ug/L		119	37 - 162	10	63
Ethylene Dibromide	ND		50.0	65.8		ug/L		132	50 - 150	11	35
Hexachlorobutadiene	ND		50.0	33.2		ug/L		66	50 - 150	25	35
Iodomethane	ND		50.0	62.4		ug/L		125	50 - 150	10	35
Isopropylbenzene	ND		50.0	67.0		ug/L		134	50 - 150	8	35
Methyl tert-butyl ether	ND		50.0	62.9		ug/L		126	50 - 150	10	35
Methylene Chloride	ND		50.0	59.6		ug/L		119	10 - 221	8	28
m-Xylene & p-Xylene	33		50.0	104	E2	ug/L		142	50 - 150	4	35
Naphthalene	ND		50.0	65.5		ug/L		131	50 - 150	35	35
n-Butylbenzene	ND		50.0	52.8		ug/L		106	50 - 150	15	35
N-Propylbenzene	ND		50.0	61.7		ug/L		123	50 - 150	9	35
o-Xylene	15		50.0	81.6		ug/L		132	50 - 150	5	35
sec-Butylbenzene	ND		50.0	58.8		ug/L		118	50 - 150	13	35
Styrene	ND		50.0	67.1		ug/L		134	50 - 150	6	35
tert-Butylbenzene	ND		50.0	62.6		ug/L		125	50 - 150	12	35
Tetrachloroethene	ND		50.0	63.6		ug/L		127	64 - 148	10	39
Toluene	0.83		50.0	63.6		ug/L		126	47 - 150	8	41
trans-1,2-Dichloroethene	ND		50.0	64.0		ug/L		128	54 - 156	7	45
trans-1,3-Dichloropropene	ND		50.0	61.8		ug/L		124	17 - 183	9	86
Trichloroethene	ND		50.0	62.9		ug/L		126	70 - 157	7	48
Trichlorofluoromethane	ND		50.0	66.2		ug/L		132	17 - 181	10	84

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 550-210565-A-2 MSD
Matrix: Water
Analysis Batch: 311203

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
Vinyl acetate	ND		50.0	40.9		ug/L		82	50 - 150	18	35
Vinyl chloride	ND		50.0	62.7		ug/L		125	10 - 251	7	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*60 - 140*
Dibromofluoromethane (Surr)	*125*		*60 - 140*
Toluene-d8 (Surr)	*116*		*60 - 140*

GC/MS VOA

Analysis Batch: 311114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210535-6	MW-05-310-23A1	Total/NA	Water	624.1	
550-210535-7	TB-23A1	Total/NA	Water	624.1	
550-210535-8	EW-1-23A1	Total/NA	Water	624.1	
550-210535-9	EW-2-360-23A1	Total/NA	Water	624.1	
550-210535-10	MW-06-355-23A1	Total/NA	Water	624.1	
550-210535-11	MW-08-355-23A1	Total/NA	Water	624.1	
550-210535-12	MW-09-355-23A1	Total/NA	Water	624.1	
550-210535-13	MW-12-410-23A1	Total/NA	Water	624.1	
550-210535-14	MW-13-355-23A1	Total/NA	Water	624.1	
550-210535-15	MW-14-350-23A1	Total/NA	Water	624.1	
550-210535-16	MW-07-285-23A1	Total/NA	Water	624.1	
MB 550-311114/6	Method Blank	Total/NA	Water	624.1	
LCS 550-311114/1002	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-311114/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-210535-10 MS	MW-06-355-23A1	Total/NA	Water	624.1	
550-210535-10 MSD	MW-06-355-23A1	Total/NA	Water	624.1	

Analysis Batch: 311120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210535-1	MW-01A-435-23A1	Total/NA	Water	624.1	
550-210535-2	PHX-01-23A1	Total/NA	Water	624.1	
550-210535-3	MW-03-355-23A1	Total/NA	Water	624.1	
550-210535-4	MW-04-355-23A1	Total/NA	Water	624.1	
550-210535-5	PHX-02-23A1	Total/NA	Water	624.1	
MB 550-311120/6	Method Blank	Total/NA	Water	624.1	
LCS 550-311120/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-311120/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-210535-5 MS	PHX-02-23A1	Total/NA	Water	624.1	
550-210535-5 MSD	PHX-02-23A1	Total/NA	Water	624.1	

Analysis Batch: 311203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210535-1 - DL2	MW-01A-435-23A1	Total/NA	Water	624.1	
550-210535-1 - DL	MW-01A-435-23A1	Total/NA	Water	624.1	
550-210535-2 - DL2	PHX-01-23A1	Total/NA	Water	624.1	
550-210535-2 - DL	PHX-01-23A1	Total/NA	Water	624.1	
550-210535-5	PHX-02-23A1	Total/NA	Water	624.1	
MB 550-311203/6	Method Blank	Total/NA	Water	624.1	
LCS 550-311203/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-311203/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-210565-A-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-210565-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-01A-435-23A1
Lab Sample ID: 550-210535-1
Date Collected: 11/14/23 14:35
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1	DL2	50	311203	TC1	EET PHX	11/16/23 12:49
Total/NA	Analysis	624.1	DL	5	311203	TC1	EET PHX	11/16/23 13:11
Total/NA	Analysis	624.1		1	311120	R1K	EET PHX	11/15/23 14:24

Client Sample ID: PHX-01-23A1
Lab Sample ID: 550-210535-2
Date Collected: 11/14/23 14:36
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1	DL2	50	311203	TC1	EET PHX	11/16/23 13:33
Total/NA	Analysis	624.1	DL	5	311203	TC1	EET PHX	11/16/23 13:55
Total/NA	Analysis	624.1		1	311120	R1K	EET PHX	11/15/23 14:03

Client Sample ID: MW-03-355-23A1
Lab Sample ID: 550-210535-3
Date Collected: 11/14/23 09:30
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311120	R1K	EET PHX	11/15/23 13:42

Client Sample ID: MW-04-355-23A1
Lab Sample ID: 550-210535-4
Date Collected: 11/14/23 15:00
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311120	R1K	EET PHX	11/15/23 13:20

Client Sample ID: PHX-02-23A1
Lab Sample ID: 550-210535-5
Date Collected: 11/14/23 15:01
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311203	TC1	EET PHX	11/16/23 14:17
Total/NA	Analysis	624.1		1	311120	R1K	EET PHX	11/15/23 11:12

Client Sample ID: MW-05-310-23A1
Lab Sample ID: 550-210535-6
Date Collected: 11/14/23 11:15
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 11:59

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: TB-23A1
Date Collected: 11/14/23 08:00
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 10:34

Client Sample ID: EW-1-23A1
Date Collected: 11/14/23 13:45
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 12:19

Client Sample ID: EW-2-360-23A1
Date Collected: 11/14/23 12:02
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 12:40

Client Sample ID: MW-06-355-23A1
Date Collected: 11/14/23 10:50
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 11:38

Client Sample ID: MW-08-355-23A1
Date Collected: 11/14/23 14:00
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 13:02

Client Sample ID: MW-09-355-23A1
Date Collected: 11/14/23 10:10
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 13:23

Client Sample ID: MW-12-410-23A1
Date Collected: 11/14/23 10:31
Date Received: 11/14/23 17:18

Lab Sample ID: 550-210535-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 13:44

Lab Chronicle

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Client Sample ID: MW-13-355-23A1
Lab Sample ID: 550-210535-14
Date Collected: 11/14/23 15:50
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 14:05

Client Sample ID: MW-14-350-23A1
Lab Sample ID: 550-210535-15
Date Collected: 11/14/23 15:25
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 14:25

Client Sample ID: MW-07-285-23A1
Lab Sample ID: 550-210535-16
Date Collected: 11/14/23 09:50
Matrix: Water
Date Received: 11/14/23 17:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	311114	TC1	EET PHX	11/15/23 14:46

Laboratory References:

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. Job ID: 550-210535-1
Project/Site: Peoria

Laboratory: Eurofins Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
624.1		Water	1,2,4-Trichlorobenzene
624.1		Water	Trihalomethanes, Total

Method Summary

Client: Jacobs Engineering Group, Inc.
Project/Site: Peoria

Job ID: 550-210535-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

210535

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell

Chain of Custody / Analysis Request

Save with QC Check: Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

AESI Ref:	45244.67629
COC#	R35008111423-1
	Page 1 of 2
Lab Proj # (SDG):	JD11212
Lab Location ID	TAL-PHX
HW Site R-Code	R35008
Sampling Program	Sampling program
Authorized User:	Honeywell
Lab Parent ID	TAL

Text & Excel File Drive | Excel & Text File Order | Create Excel Output | Create Text Output

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Sampling Co.:	Jacobs	Pricing Source (RFP, eAuction, etc)	RFP2019
		Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS
HW Site Name	Peoria (AZ)	Task Type	OM&M
Location of Site	Phoenix, AZ	WBS Code	6400

Reporting Information (DocuSign First Signer)				
Name	Jacobs	Sampler(s) names	T. Kearsley
Address	1501 W. Fountainhead Parkway	PO #	HW PO # A001368503
City, State, Zip	Tempe, AZ 85282	Analysis Turnaround Time (calendar days):	10
Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com	Consultant	Jacobs

Billing Information (DocuSign Second Signer)			
Co. Name	Honeywell	Laboratory Contact	Linda Eshelman
Address	111 South 34th Street M/S 158	Report Tier Level	2
City, State, Zip	Phoenix, AZ 85034	Full Report and EDD TAT (calendar days)	10
HW RM email	steven.bowles@honeywell.com	Honeywell RM Name	Steve Bowles

More Rows | Less Rows

Analytical Group Name | Preservative | Units

Sample Identification

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (VOC)	Sampling Method (rt_sample_method)	Lab Sample Numbers
1	MW-1a	435.0	435.0	MW-01A-435-23A1	11/14/2023	14:35	GW-GWS	WATER	REG	3	N	N	X		1
2	MW-1a	350.0	350.0	PHX-01-23A1	11/14/2023	14:36	GW-GWS	WATER	REG	3	N	N	X		2
3	MW-3	355.0	355.0	MW-03-355-23A1	11/14/2023	9:30	GW-GWS	WATER	REG	3	N	N	X		3
4	MW-4	355.0	355.0	MW-04-355-23A1	11/14/2023	15:00	GW-GWS	WATER	REG	3	N	N	X		4
5	MW-4	355.0	355.0	PHX-02-23A1	11/14/2023	15:01	GW-GWS	WATER	FD	3	N	N	X		5
6	MW-5	310.0	310.0	MW-05-310-23A1	11/14/2023	11:15	GW-GWS	WATER	REG	3	N	N	X		6
7	Trip Blank			TB-23A1	11/14/2023	8:00	BLKWATER	WATER	TB	1	N	N	X		7
8	EW-1			EW-1-23A1	11/14/2023	13:45	GW-GWS	WATER	REG	3	N	N	X		8
9	EW-2	360.0	360.0	EW-2-360-23A1	11/14/2023	12:02	GW-GWS	WATER	REG	3	N	N	X		9
10															
11															
12															

550-210535 Chain of Custody

Start at D66 to type instructions.

[redacted]

EETA PHX

Relinquished by	Company	Jacobs	Received by	Company		Condition		Custody Seals Intact	
Thomas Kearsley	Date/Time 11/14/23 1718		[signature]	Date/Time	11/14/23 1718	Cooler Temp.	2.4°C		
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		Cooler Temp.		Lab Quote #	

Preservatives: (Other; Specify):

0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAcl); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (N... 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special);

FedEx Tracking #

210535

Eurofins Test America - Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
602-437-3340

Honeywell

Chain of Custody / Analysis Request

Save with QC Check Gray Cells Required | More Columns | Less Columns | Print Short COC | Print Expanded COC

AESI Ref:	45244.67856
COC#	R35008111423-2
	Page 2 of 2
Lab Proj # (SDG):	JD11212
Lab Location ID	TAL-PHX
HW Site R-Code	R35008
Sampling Program	Sampling program
Authorized User:	Honeywell
Lab Parent ID	TAL

Text & Excel File Drive | Excel & Text File Order | Create Excel Output | Create Text Output

Pricing Source (RFP, eAuction, etc)	RFP2019	HW Site Name	Peoria (AZ)
Email of person receiving EDD	Bernice.Kidd@jacobs.com, EQUIS	Location of Site	Phoenix, AZ
Task Type	OM&M	WBS Code	6400

Sampling Co.:		Jacobs	Sampler(s) names	Tom/Stephen
Reporting Information (DocuSign First Signer)	Name	Jacobs	PO #	HW PO # A001368503
	Address	1501 W. Fountainhead Parkway	Analysis Turnaround Time (calendar days):	10
	City, State, Zip	Tempe, AZ 85282	Consultant	Jacobs
	Contact; email	Berney Kidd; Bernice.Kidd@jacobs.com	Laboratory Contact	Linda Eshelman
Billing Information (DocuSign Second Signer)	Co. Name	Honeywell	Report Tier Level	2
	Address	111 South 34th Street M/S 158	Full Report and EDD TAT (calendar days)	10
	City, State, Zip	Phoenix, AZ 85034	Honeywell RM Name	Steve Bowles
	HW RM email	steven.bowles@honeywell.com		

More Rows

Analytical Group Name | Preservative | Units

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Sample Identification

#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Medium	# of Cont.	Composite (Y, N)	Field Filtered Sample (Y, N)	E624 (VOC)	Sampling Method (rt_sample_method)	Lab Sample Numbers
1	MW-6	355.0	355.0	MW-06-355-23A1	11/14/2023	10:50	GW-GWS	WATER	REG	3	N	N	X		10
2	MW-6	355.0	355.0	MW-06-355-23A1-MS	11/14/2023	10:51	GW-GWS	WATER	MS	3	N	N	X		10 ~~11~~
3	MW-6	355.0	355.0	MW-06-355-23A1-MSD	11/14/2023	10:52	GW-GWS	WATER	MSD	3	N	N	X		10 ~~12~~
4	MW-8	355.0	355.0	MW-08-355-23A1	11/14/2023	14:00	GW-GWS	WATER	REG	3	N	N	X		11 ~~13~~
5	MW-9	355.0	355.0	MW-09-355-23A1	11/14/2023	10:10	GW-GWS	WATER	REG	3	N	N	X		12 ~~14~~
6	MW-12	410.0	410.0	MW-12-410-23A1	11/14/2023	10:31	GW-GWS	WATER	REG	3	N	N	X		13 ~~15~~
7	MW-13	355.0	355.0	MW-13-355-23A1	11/14/2023	15:50	GW-GWS	WATER	REG	3	N	N	X		14 ~~16~~
8	MW-14	350.0	350.0	MW-14-350-23A1	11/14/2023	15:25	GW-GWS	WATER	REG	3	N	N	X		15 ~~17~~
9	MW-7	285.0	285.0	MW-07-285-23A1	11/14/2023	9:50	GW-GWS	WATER	REG	3	N	N	X		16 ~~18~~
10															
11															
12															

LOW 11/14/23

Start at D66 to type instructions.

EETA PHX

Relinquished by	Company	Jacobs	Received by	Company		Condition		Custody Seals Intact	
Thomas Kearsley	Date/Time	11/14/23 1718	[signature]	Date/Time	11/14/23 1718	Cooler Temp.	2.4°C		
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		Cooler Temp.		Lab Quote #	

Preservatives: (Other; Specify):

0 (None); 1 (4 Deg C); 2 (4C HCl-Na2SO3 (pH<2)); 3 (4C HNO3); 4 (4C HNO3 (pH<2)); 5 (4C none); 6 (4CH2SO4pH<2)Na2S2O3); 7 (4CNaOH(pH>12)&AscAcI); 8 (ASCACI); 9 (BrCl); 10 (DI H2O); 11 (EDTA); 12 (H2O); 13 (H2SO4 (pH<2)); 14 (H2SO4 (pH<2), 4 DegC); 15 (H3PO4); 16 (HCl); 17 (HCl (pH<2)); 18 (HCl (pH<2), 4 Deg C); 19 (HCL, 4 Deg C); 20 (HNO3 (pH<2)); 21 (HNO3 (pH<2), 4 Deg C); 22 (MCAA,Na2SO3); 23 (Methanol); 24 (Na2SO3); 25 (Na2SO4); 26 (Na3PO4); 27 (NaHSO4); 28 (NaOH); 29 (NaOH (pH>12)); 30 (NaOH (pH>12), 4 DegC); 31 (NaOH, Zn Acetate); 32 (N... 4 Deg C); 33 (Other); 34 (Zn Acetate); sp (Special);

FedEx Tracking #

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-210535-1

Login Number: 210535
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	False	Check done at department level as required.

Appendix E
Current and Historical Groundwater Extraction System Operational Data

Appendix E

Extraction Well Operational Data, May 1997 through December 2023

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well Number	Month-Year	Days On-line	Pumping Rate (gpm)	Volume Extracted (gallons)	Average Discharge* (gpd)	Average Discharge** (gpm)	Cumulative Volume Extracted (gallons)
MW-10	Oct-97	0.45	51	33,260	1,073	51	33,260
MW-10	Nov-97	9	24	305,760	10,192	7	339,020
MW-10	Dec-97	30	51	2,203,200	71,071	49	2,542,220
MW-10	Jan-98	31	21	936,714	30,217	21	3,478,934
MW-10	Feb-98	26	21	786,240	28,080	20	4,265,174
MW-10	Mar-98	14	33	673,920	21,739	15	4,939,094
MW-10	Apr-98	30	49	2,130,472	71,016	49	7,069,566
MW-10	May-98	31	50	2,230,750	71,960	50	9,300,316
MW-10	Jun-98	30	48	2,079,000	69,300	48	11,379,316
MW-10	Jul-98	18	51	1,314,869	42,415	29	12,694,185
MW-10	Aug-98	31	51	2,268,000	73,161	51	14,962,185
MW-10	Sep-98	30	55	2,389,000	79,633	55	17,351,185
MW-10	Oct-98	31	60	2,662,000	85,871	60	20,013,185
MW-10	Nov-98	30	50	2,174,000	72,467	50	22,187,185
MW-10	Dec-98	17	52	1,273,000	41,065	29	23,460,185
MW-10	Jan-99	18	56	1,459,000	47,065	33	24,919,185
MW-10	Feb-99	28	54	2,174,000	77,643	54	27,093,185
MW-10	Mar-99	27	55	2,123,000	68,484	48	29,216,185
MW-10	Apr-99	29	55	2,276,000	75,867	53	31,492,185
MW-10	May-99	31	53	2,383,000	76,871	53	33,875,185
MW-10	Jun-99	30	54	2,319,000	77,300	54	36,194,185
MW-10	Jul-99	31	52	2,335,000	75,323	52	38,529,185
MW-10	Aug-99	31	52	2,336,000	75,355	52	40,865,185
MW-10	Sep-99	30	52	2,241,000	74,700	52	43,106,185
MW-10	Oct-99	18	52	1,341,000	43,258	30	44,447,185
MW-10	Nov-99	8	54	617,700	20,590	14	45,064,885
MW-10	Dec-99	13	48	901,800	29,090	20	45,966,685
MW-10	Jan-00	24	41	1,419,200	45,781	32	47,385,885
MW-10	Feb-00	29	45	1,894,600	67,664	47	49,280,485
MW-10	Mar-00	31	50	2,238,070	72,196	50	51,518,555
MW-10	Apr-00	12	49	846,730	28,224	20	52,365,285
MW-10	May-00	31	50	2,235,400	72,110	50	54,600,685
MW-10	Jun-00	30	50	2,139,320	71,311	50	56,740,005
MW-10	Jul-00	31	48	2,124,260	68,525	48	58,864,265
MW-10	Aug-00	31	48	2,136,240	68,911	48	61,000,505
MW-10	Sep-00	30	49	2,118,260	70,609	49	63,118,765
MW-10	Oct-00	31	44	1,952,664	62,989	44	65,071,429

Appendix E

Extraction Well Operational Data, May 1997 through December 2023

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well Number	Month-Year	Days On-line	Pumping Rate (gpm)	Volume Extracted (gallons)	Average Discharge* (gpd)	Average Discharge** (gpm)	Cumulative Volume Extracted (gallons)
MW-10	Nov-00	30	45	1,950,056	65,002	45	67,021,485
MW-10	Dec-00	31	44	1,941,840	62,640	44	68,963,325
MW-10	Jan-01	7.5	57	612,695	19,764	14	69,576,020
MW-10	Feb-01	28	54	2,179,397	77,836	54	71,755,417
MW-10	Mar-01	31	52	2,327,637	75,085	52	74,083,054
MW-10	Apr-01	30	51	2,214,931	73,831	51	76,297,985
MW-10	May-01	31	51	2,277,712	73,475	51	78,575,697
MW-10	Jun-01	30	50	2,152,148	71,738	50	80,727,845
MW-10	Jul-01	31	49	2,188,930	70,611	49	82,916,775
MW-10	Aug-01	31	47	2,109,835	68,059	47	85,026,610
MW-10	Sep-01	30	48	2,067,325	68,911	48	87,093,935
MW-10	Oct-01	31	47	2,098,280	67,686	47	89,192,215
MW-10	Nov-01	30	46	1,980,620	66,021	46	91,172,835
MW-10	Dec-01	31	44	1,948,184	62,845	44	93,121,019
MW-10	Jan-02	31	46	2,040,446	65,821	46	95,161,465
MW-10	Feb-02	28	43	1,720,662	61,452	43	96,882,127
MW-10	Mar-02	31	44	1,953,528	63,017	44	98,835,655
MW-10	Apr-02	30	42	1,821,640	60,721	42	100,657,295
MW-10	May-02	31	40	1,785,599	57,600	40	102,442,894
MW-10	Jun-02	30	37	1,618,461	53,949	37	104,061,355
MW-10	Jul-02	22	46	1,447,593	46,697	32	105,508,948
MW-10	Aug-02	31	50	2,214,593	71,438	50	107,723,541
MW-10	Sep-02	15	46	1,006,858	33,562	23	108,730,399
MW-10	Oct-02	31	48	2,157,270	69,589	48	110,887,669
MW-10	Nov-02	30	48	2,089,314	69,644	48	112,976,983
MW-10	Dec-02	31	50	2,216,263	71,492	50	115,193,246
MW-10	Jan-03	31	46	2,069,863	66,770	46	117,263,109
MW-10	Feb-03	28	48	1,925,369	68,763	48	119,188,478
MW-10	Mar-03	31	48	2,131,921	68,772	48	121,320,399
MW-10	Apr-03	30	51	2,187,475	72,916	51	123,507,874
MW-10	May-03	31	48	2,146,034	69,227	48	125,653,908
MW-10	Jun-03	30	50	2,152,168	71,739	50	127,806,076
MW-10	Jul-03	29	48	1,983,098	63,971	44	129,789,174
MW-10	Aug-03	24	48	1,655,126	53,391	37	131,444,300
MW-10	Sep-03	17	50	1,227,150	40,905	28	132,671,450
MW-10	Oct-03	22	49	1,523,929	49,159	34	134,195,379
MW-10	Nov-03	30	51	2,184,411	72,814	51	136,379,790

Appendix E

Extraction Well Operational Data, May 1997 through December 2023

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well Number	Month-Year	Days On-line	Pumping Rate (gpm)	Volume Extracted (gallons)	Average Discharge* (gpd)	Average Discharge** (gpm)	Cumulative Volume Extracted (gallons)
MW-10	Dec-03	31	50	2,210,451	71,305	50	138,590,241
MW-10	Jan-04	31	49	2,206,451	71,176	49	140,796,692
MW-10	Feb-04	29	49	2,059,804	71,028	49	142,856,496
MW-10	Mar-04	31	49	2,202,588	71,051	49	145,059,084
MW-10	Apr-04	30	49	2,095,477	69,849	49	147,154,561
MW-10	May-04	31	50	2,217,344	71,527	50	149,371,905
MW-10	Jun-04	30	51	2,202,588	73,420	51	151,574,493
MW-10	Jul-04	31	49	2,171,893	70,061	49	153,746,386
MW-10	Aug-04	31	41	1,826,220	58,910	41	155,572,606
MW-10	Sep-04	30	56	2,440,439	81,348	56	158,013,045
MW-10	Oct-04	26	27	993,851	32,060	22	159,006,896
MW-10	Nov-04	24	43	1,474,900	47,577	33	160,481,796
MW-10	Dec-04	31	41	1,820,003	58,710	41	162,301,799
MW-10	Jan-05	31	41	1,830,240	59,040	41	164,132,039
MW-10	Feb-05	28	41	1,653,120	53,326	37	165,785,159
MW-10	Mar-05	31	40	1,785,600	57,600	40	167,570,759
MW-10	Apr-05	30	38	1,641,600	52,955	37	169,212,359
MW-10	May-05	31	39	1,727,400	55,723	39	170,939,759
MW-10	Jun-05	30	38	1,647,857	53,157	37	172,587,616
MW-10	Jul-05	16	17	397,988	12,838	9	172,985,604
MW-10	Aug-05	6	63	547,200	17,652	12	173,532,804
MW-10	Sep-05	30	61	2,641,000	85,194	59	176,173,804
MW-10	Oct-05	31	61	2,731,596	88,116	61	178,905,400
MW-10	Nov-05	30	60	2,582,130	83,295	58	181,487,530
MW-10	Dec-05	31	61	2,736,585	88,277	61	184,224,115
MW-10	Jan-06	31	61	2,733,092	88,164	61	186,957,207
MW-10	Feb-06	28	62	2,481,220	88,615	62	189,438,427
MW-10	Mar-06	31	60	2,668,066	86,067	60	192,106,493
MW-10	Apr-06	30	60	2,570,721	85,691	60	194,677,214
MW-10	May-06	31	59	2,632,755	84,928	59	197,309,969
MW-10	Jun-06	30	59	2,529,600	84,320	59	199,839,569
MW-10	Jul-06	31	58	2,602,321	83,946	58	202,441,890
MW-10	Aug-06	31	59	2,611,900	84,255	59	205,053,790
MW-10	Sep-06	30	58	2,514,300	83,810	58	207,568,090
MW-10	Oct-06	31	59	2,623,792	84,638	59	210,191,882
MW-10	Nov-06	30	51	2,194,625	73,154	51	212,386,507
MW-10	Dec-06	31	59	2,619,252	84,492	59	215,005,759

Appendix E

Extraction Well Operational Data, May 1997 through December 2023

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well Number	Month-Year	Days On-line	Pumping Rate (gpm)	Volume Extracted (gallons)	Average Discharge* (gpd)	Average Discharge** (gpm)	Cumulative Volume Extracted (gallons)
MW-10	Jan-07	31	58	2,609,952	84,192	58	217,615,711
MW-10	Feb-07	28	58	2,338,560	75,437	52	219,954,271
MW-10	Mar-07	31	42	1,875,841	60,511	42	221,830,112
MW-10	Apr-07	30	39	1,697,730	54,765	38	223,527,842
MW-10	May-07	31	40	1,779,000	57,387	40	225,306,842
MW-10	Jun-07	30	40	1,728,000	55,742	39	227,034,842
MW-10	Jul-07	31	43	1,919,520	61,920	43	228,954,362
MW-10	Aug-07	31	41	1,829,000	59,000	41	230,783,362
MW-10	Sep-07	30	46	1,992,240	64,266	45	232,775,602
MW-10	Oct-07	31	46	2,066,832	66,672	46	234,842,434
MW-10	Nov-07	30	48	2,067,810	66,704	46	236,910,244
MW-10	Dec-07	31	47	2,090,237	67,427	47	239,000,481
MW-10	Jan-08	31	46	2,041,536	65,856	46	241,042,017
MW-10	Feb-08	29	46	1,939,491	62,564	43	242,981,508
MW-10	Mar-08	31	45	2,017,263	65,073	45	244,998,771
MW-10	Apr-08	30	46	1,976,820	63,768	44	246,975,591
MW-10	May-08	31	48	2,130,227	68,717	48	249,105,818
MW-10	Jun-08	30	48	2,092,770	67,509	47	251,198,588
MW-10	Jul-08	31	47	2,086,052	67,292	47	253,284,640
MW-10	Aug-08	31	51	2,272,300	73,300	51	255,556,940
MW-10	Sep-08	30	47	2,035,230	65,653	46	257,592,170
MW-10	Oct-08	31	48	2,133,079	68,809	48	259,725,249
MW-10	Nov-08	30	48	2,067,960	66,708	46	261,793,209
MW-10	Dec-08	31	48	2,136,923	68,933	48	263,930,132
MW-10	Jan-09	31	47	2,091,043	67,453	47	266,021,175
MW-10	Feb-09	28	47	1,879,976	60,644	42	267,901,151
MW-10	Mar-09	31	47	2,094,360	67,560	47	269,995,511
MW-10	Apr-09	30	47	2,020,320	65,172	45	272,015,831
MW-10	May-09	31	42	1,858,264	59,944	42	273,874,095
MW-10	Jun-09	30	47	2,047,920	66,062	46	275,922,015
MW-10	Jul-09	31	47	2,085,897	67,287	47	278,007,912
MW-10	Aug-09	31	46	2,069,048	66,743	46	280,076,960
MW-10	Sep-09	30	47	2,010,150	64,844	45	282,087,110
MW-10	Oct-09	31	47	2,105,458	67,918	47	284,192,568
MW-10	Nov-09	30	48	2,054,850	66,285	46	286,247,418
MW-10	Dec-09	30	53	2,302,649	74,279	52	288,550,067
MW-10	Jan-10	31	48	2,136,272	68,912	48	290,686,339

Appendix E

Extraction Well Operational Data, May 1997 through December 2023

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well Number	Month-Year	Days On-line	Pumping Rate (gpm)	Volume Extracted (gallons)	Average Discharge* (gpd)	Average Discharge** (gpm)	Cumulative Volume Extracted (gallons)
MW-10	Feb-10	28	48	1,917,216	61,846	43	292,603,555
MW-10	Mar-10	31	48	2,136,303	68,913	48	294,739,858
MW-10	Apr-10	30	47	2,025,540	65,340	45	296,765,398
MW-10	May-10	31	47	2,091,756	67,476	47	298,857,154
MW-10	Jun-10	30	46	1,971,750	63,605	44	300,828,904
MW-10	Jul-10	31	47	2,077,186	67,006	47	302,906,090
MW-10	Aug-10	31	45	2,017,852	65,092	45	304,923,942
MW-10	Sep-10	30	43	1,861,950	60,063	42	306,785,892
MW-10	Oct-10	31	44	1,972,034	63,614	44	308,757,926
MW-10	Nov-10	30	45	1,928,730	62,217	43	310,686,656
MW-10	Dec-10	31	41	1,821,777	58,767	41	312,508,433
MW-10	Jan-11	31	42	1,887,001	60,871	42	314,395,434
MW-10	Feb-11	23	47	1,556,640	50,214	35	315,952,074
MW-10	Mar-11	31	45	2,007,157	64,747	45	317,959,231
MW-10	Apr-11	30	46	1,966,680	63,441	44	319,925,911
MW-10	May-11	31	45	1,991,378	64,238	45	321,917,289
MW-10	Jun-11	19	46	1,258,750	40,605	28	323,176,039
MW-10	Jul-11	31	45	2,030,888	65,513	45	325,206,927
MW-10	Aug-11	31	45	2,008,800	64,800	45	327,215,727
MW-10	Sep-11	30	41	1,784,400	57,561	40	329,000,127
MW-10	Oct-11	31	50	2,234,480	72,080	50	331,234,607
MW-10	Nov-11	30	16	700,615	22,600	16	331,935,222
MW-10	Dec-11	13	8	159,000	5,129	4	332,094,222
MW-10	Jan-12	21	55	1,663,486	53,661	37	333,757,708
MW-10	Feb-12	29	57	2,397,965	77,354	54	336,155,673
MW-10	Mar-12	31	57	2,555,592	82,438	57	338,711,265
MW-10	Apr-12	30	57	2,452,400	79,110	55	341,163,665
MW-10	May-12	31	56	2,521,850	81,350	56	343,685,515
MW-10	Jun-12	30	56	2,431,300	78,429	54	346,116,815
MW-10	Jul-12	31	56	2,487,363	80,238	56	348,604,178
MW-10	Aug-12	31	56	2,484,805	80,155	56	351,088,983
MW-10	Sep-12	30	55	2,389,200	77,071	54	353,478,183
MW-10	Oct-12	16	17	390,827	12,607	9	353,869,010
MW-10	Nov-12	0	0	0	0	0	353,869,010
MW-10	Dec-12	0	0	0	0	0	353,869,010
MW-10	Jan-13	3	38	164,376	5,302	4	354,033,386
MW-10	Feb-13	13	37	700,900	22,610	16	354,734,286

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MW-10	Mar-13	31	37	1,651,659	53,279	37	356,385,945
MW-10	Apr-13	30	39	1,663,452	53,660	37	358,049,397
MW-10	May-13	31	37	1,638,931	52,869	37	359,688,328
MW-10	Jun-13	30	37	1,587,000	51,194	36	361,275,328
MW-10	Jul-13	31	37	1,640,727	52,927	37	362,916,055
MW-10	Aug-13	31	36	1,625,900	52,448	36	364,541,955
MW-10	Sep-13	30	36	1,561,452	50,369	35	366,103,407
MW-10	Oct-13	31	36	1,613,305	52,042	36	367,716,712
MW-10	Nov-13	30	36	1,538,217	49,620	34	369,254,929
MW-10	Dec-13	31	36	1,605,000	51,774	36	370,859,929
MW-10	Jan-14	31	36	1,594,659	51,441	36	372,454,588
MW-10	Feb-14	28	36	1,437,046	46,356	32	373,891,634
MW-10	Mar-14	31	37	1,668,441	53,821	37	375,560,075
MW-10	Apr-14	30	35	1,524,778	49,186	34	377,084,853
MW-10	May-14	31	34	1,520,148	49,037	34	378,605,001
MW-10	Jun-14	30	33	1,415,100	45,648	32	380,020,101
MW-10	Jul-14	31	33	1,452,749	46,863	33	381,472,850
MW-10	Aug-14	31	34	1,522,875	49,125	34	382,995,725
MW-10	Sep-14	30	34	1,462,759	47,186	33	384,458,484
MW-10	Oct-14	31	36	1,592,648	51,376	36	386,051,132
MW-10	Nov-14	30	31	1,330,500	42,919	30	387,381,632
MW-10	Dec-14	31	32	1,410,230	45,491	32	388,791,862
MW-10	Jan-15	31	28	1,250,768	40,347	28	390,042,630
MW-10	Feb-15	28	25	1,009,527	32,565	23	391,052,157
MW-10	Mar-15	31	23	1,044,183	33,683	23	392,096,340
MW-10	Apr-15	25	18	639,412	20,626	14	392,735,752
MW-10	May-15	31	30	1,329,014	42,871	30	394,064,766
MW-10	Jun-15	30	34	1,458,000	47,032	33	395,522,766
MW-10	Jul-15	31	27	1,223,614	39,471	27	396,746,380
MW-10	Aug-15	31	15	671,232	21,653	15	397,417,612
MW-10	Sep-15	30	33	1,417,941	45,740	32	398,835,553
MW-10	Oct-15	31	32	1,431,828	46,188	32	400,267,381
MW-10	Nov-15	30	31	1,355,538	43,727	30	401,622,919
MW-10	Dec-15	31	30	1,345,400	43,400	30	402,968,319
MW-10	Jan-16	31	33	1,468,071	47,357	33	404,436,390
MW-10	Feb-16	29	32	1,331,487	42,951	30	405,767,877
MW-10	Mar-16	31	32	1,421,469	45,854	32	407,189,346

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MW-10	Apr-16	30	36	1,548,429	49,949	35	408,737,775
MW-10	May-16	31	35	1,578,377	50,915	35	410,316,152
MW-10	Jun-16	30	33	1,425,900	45,997	32	411,742,052
MW-10	Jul-16	31	33	1,476,264	47,621	33	413,218,316
MW-10	Aug-16	31	33	1,453,457	46,886	33	414,671,773
MW-10	Sep-16	30	32	1,367,357	44,108	31	416,039,130
MW-10	Oct-16	31	29	1,299,933	41,933	29	417,339,063
MW-10	Nov-16	30	26	1,105,364	35,657	25	418,444,427
MW-10	Dec-16	31	21	950,667	30,667	21	419,395,093
MW-10	Jan-17	31	32	1,426,775	46,025	32	420,821,868
MW-10	Feb-17	28	31	1,259,491	44,982	31	422,081,359
MW-10	Mar-17	31	27	1,227,036	39,582	27	423,308,396
MW-10	Apr-17	30	29	1,268,174	42,272	29	424,576,569
MW-10	May-17	31	30	1,325,422	42,756	30	425,901,991
MW-10	Jun-17	30	28	1,215,975	40,533	28	427,117,966
MW-10	Jul-17	31	27	1,222,436	39,433	27	428,340,402
MW-10	Aug-17	31	27	1,196,177	38,586	27	429,536,579
MW-10	Sep-17	30	24	1,045,371	34,846	24	430,581,950
MW-10	Oct-17	31	24	1,087,759	35,089	24	431,669,709
MW-10	Nov-17	30	27	1,160,352	37,431	26	432,830,061
MW-10	Dec-17	31	28	1,255,601	40,503	28	434,085,662
MW-10	Jan-18	31	25	1,104,981	35,645	25	435,190,644
MW-10	Feb-18	28	23	940,247	30,331	21	436,130,891
MW-10	Mar-18	31	24	1,083,136	34,940	24	437,214,027
MW-10	Apr-18	30	11	462,000	14,903	10	437,676,027
MW-10	May-18	31	10	429,921	13,868	10	438,105,948
MW-10	Jun-18	24	31	1,072,950	34,611	24	439,178,898
MW-10	Jul-18	31	29	1,311,980	42,322	29	440,490,878
MW-10	Aug-18	31	35	1,559,817	50,317	35	442,050,695
MW-10	Sep-18	30	34	1,487,010	47,968	33	443,537,705
MW-10	Oct-18	31	33	1,451,482	46,822	33	444,989,187
MW-10	Nov-18	30	34	1,470,000	47,419	33	446,459,187
MW-10	Dec-18	31	34	1,521,573	49,083	34	447,980,760
MW-10	Jan-19	31	34	1,499,780	48,380	34	449,480,540
MW-10	Feb-19	28	33	1,328,068	42,841	30	450,808,608
MW-10	Mar-19	31	32	1,440,849	46,479	32	452,249,457
MW-10	Apr-19	30	32	1,368,690	44,151	31	453,618,147

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MW-10	May-19	31	31	1,387,374	44,754	31	455,005,521
MW-10	Jun-19	30	30	1,275,690	41,151	29	456,281,211
MW-10	Jul-19	30	29	1,235,009	39,839	28	457,516,220
MW-10	Aug-19	31	27	1,210,209	39,039	27	458,726,429
MW-10	Sep-19	30	23	994,350	32,076	22	459,720,779
MW-10	Oct-19	31	25	1,109,738	35,798	25	460,830,517
MW-10	Nov-19	30	25	1,080,000	34,839	24	461,910,517
MW-10	Dec-19	31	21	945,252	30,492	21	462,855,769
MW-10	Jan-20	31	19	829,281	26,751	19	463,685,050
MW-10	Feb-20	29	15	632,539	20,404	14	464,317,589
MW-10	Mar-20	31	14	641,297	20,687	14	464,958,886
MW-10	Apr-20	30	30	1,285,110	41,455	29	466,243,996
MW-10	May-20	31	32	1,439,857	46,447	32	467,683,853
MW-10	Jun-20	30	32	1,383,930	44,643	31	469,067,783
MW-10	Jul-20	31	34	1,509,483	48,693	34	470,577,266
MW-10	Aug-20	31	33	1,471,570	47,470	33	472,048,836
MW-10	Sep-20	30	32	1,380,270	44,525	31	473,429,106
MW-10	Oct-20	31	32	1,417,320	45,720	32	474,846,426
MW-10	Nov-20	30	33	1,441,590	46,503	32	476,288,016
MW-10	Dec-20	31	35	1,541,103	49,713	35	477,829,119
MW-10	Jan-21	31	34	1,535,213	49,523	34	479,364,332
MW-10	Feb-21	28	35	1,393,952	44,966	31	480,758,284
MW-10	Mar-21	31	35	1,551,612	50,052	35	482,309,896
MW-10	Apr-21	30	35	1,502,190	48,458	34	483,812,086
MW-10	May-21	31	35	1,568,879	50,609	35	485,380,965
MW-10	Jun-21	30	35	1,520,070	49,035	34	486,901,035
MW-10	Jul-21	31	35	1,574,025	50,775	35	488,475,060
MW-10	Aug-21	31	35	1,563,051	50,421	35	490,038,111
MW-10	Sep-21	30	20	871,740	28,121	20	490,909,851
MW-10	Oct-21	31	35	1,565,407	50,497	35	492,475,258
MW-10	Nov-21	30	35	1,512,960	48,805	34	493,988,218
MW-10	Dec-21	31	35	1,551,550	50,050	35	495,539,768
MW-10	Jan-22	31	34	1,538,468	49,628	34	497,078,236
MW-10	Feb-22	28	34	1,366,680	44,086	31	498,444,916
MW-10	Mar-22	31	34	1,534,686	49,506	34	499,979,602
MW-10	Apr-22	30	34	1,483,350	47,850	33	501,462,952
MW-10	May-22	31	35	1,542,374	49,754	35	503,005,326

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MW-10	Jun-22	30	31	1,353,780	43,670	30	504,359,106
MW-10	Jul-22	31	33	1,492,557	48,147	33	505,851,663
MW-10	Aug-22	31	34	1,539,894	49,674	34	507,391,557
MW-10	Sep-22	30	34	1,464,600	47,245	33	508,856,157
MW-10	Oct-22	17	27	664,037	21,421	15	509,520,194
MW-10	Nov-22	21	29	890,421	28,723	20	510,410,615
MW-10	Dec-22	31	33	1,489,736	48,056	33	511,900,351
MW-10	Jan-23	31	33	1,453,311	46,881	33	513,353,662
MW-10	Feb-23	28	33	1,323,280	42,686	30	514,676,942
MW-10	Mar-23	31	33	1,478,700	47,700	33	516,155,642
MW-10	Apr-23	30	33	1,441,320	46,494	32	517,596,962
MW-10	May-23	31	33	1,492,960	48,160	33	519,089,922
MW-10	Jun-23	30	33	1,445,460	46,628	32	520,535,382
MW-10	Jul-23	31	33	1,491,193	48,103	33	522,026,575
MW-10	Aug-23	25	30	1,077,575	34,760	24	523,104,150
MW-10	Sep-23	0	0	0	0	0	523,104,150
MW-10	Oct-23	0	0	0	0	0	523,104,150
MW-10	Nov-23	0	0	0	0	0	523,104,150
MW-10	Dec-23	0	0	0	0	0	523,104,150
EW-01	Oct-99	3	15	64,800	2,090	1	64,800
EW-01	Nov-99	7	8	75,600	2,520	2	140,400
EW-01	Dec-99	31	7	308,650	9,956	7	449,050
EW-01	Jan-00	31	15	656,700	21,184	15	1,105,750
EW-01	Feb-00	29	20	835,050	29,823	21	1,940,800
EW-01	Mar-00	31	23	1,038,900	33,513	23	2,979,700
EW-01	Apr-00	30	24	1,021,350	34,045	24	4,001,050
EW-01	May-00	31	25	1,102,390	35,561	25	5,103,440
EW-01	Jun-00	30	26	1,112,280	37,076	26	6,215,720
EW-01	Jul-00	31	25	1,104,300	35,623	25	7,320,020
EW-01	Aug-00	31	26	1,167,315	37,655	26	8,487,335
EW-01	Sep-00	30	25	1,070,215	35,674	25	9,557,550
EW-01	Oct-00	31	24	1,089,786	35,154	24	10,647,336
EW-01	Nov-00	30	26	1,121,633	37,388	26	11,768,969
EW-01	Dec-00	15	20	423,479	13,661	9	12,192,448
EW-01	Jan-01	31	20	886,521	28,597	20	13,078,969
EW-01	Feb-01	28	18	743,746	26,562	18	13,822,715
EW-01	Mar-01	31	23	1,016,014	32,775	23	14,838,729

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EW-01	Apr-01	24	25	869,065	28,969	20	15,707,794
EW-01	May-01	31	26	1,149,563	37,083	26	16,857,357
EW-01	Jun-01	30	27	1,150,512	38,350	27	18,007,869
EW-01	Jul-01	4	31	179,700	5,797	4	18,187,569
EW-01	Aug-01	0	0	0	0	0	18,187,569
EW-01	Sep-01	18	24	626,100	20,870	14	18,813,669
EW-01	Oct-01	31	27	1,212,000	39,097	27	20,025,669
EW-01	Nov-01	30	30	1,309,930	43,664	30	21,335,599
EW-01	Dec-01	31	28	1,242,508	40,081	28	22,578,107
EW-01	Jan-02	31	30	1,327,362	42,818	30	23,905,469
EW-01	Feb-02	28	28	1,143,035	40,823	28	25,048,504
EW-01	Mar-02	31	28	1,248,574	40,277	28	26,297,078
EW-01	Apr-02	30	27	1,169,591	38,986	27	27,466,669
EW-01	May-02	20	27	764,756	24,670	17	28,231,425
EW-01	Jun-02	22	21	654,162	21,805	15	28,885,587
EW-01	Jul-02	23	24	785,092	25,326	18	29,670,679
EW-01	Aug-02	20	25	726,490	23,435	16	30,397,169
EW-01	Sep-02	0	0	0	0	0	30,397,169
EW-01	Oct-02	0	0	0	0	0	30,397,169
EW-01	Nov-02	2	25	72,775	2,426	2	30,469,944
EW-01	Dec-02	0	0	0	0	0	30,469,944
EW-01	Jan-03	0	0	0	0	0	30,469,944
EW-01	Feb-03	0.1	16	2,340	84	0.1	30,472,284
EW-01	Mar-03	0	0	0	0	0	30,472,284
EW-01	Apr-03	0	0	0	0	0	30,472,284
EW-01	May-03	14	26	517,772	16,702	12	30,990,056
EW-01	Jun-03	0	0	0	0	0	30,990,056
EW-01	Jul-03	0	0	0	0	0	30,990,056
EW-01	Aug-03	0	19	3,483	112	0.1	30,993,539
EW-01	Sep-03	18	15	397,163	13,239	9	31,390,702
EW-01	Oct-03	3	24	103,712	3,346	2	31,494,414
EW-01	Nov-03	24	28	958,456	31,949	22	32,452,870
EW-01	Dec-03	31	27	1,226,998	39,581	27	33,679,868
EW-01	Jan-04	31	27	1,212,292	39,106	27	34,892,160
EW-01	Feb-04	29	27	1,132,774	39,061	27	36,024,934
EW-01	Mar-04	31	27	1,216,160	39,231	27	37,241,094
EW-01	Apr-04	12	24	404,234	13,474	9	37,645,328

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EW-01	May-04	19	25	660,992	22,033	15	38,306,320
EW-01	Jun-04	30	24	1,037,098	34,570	24	39,343,418
EW-01	Jul-04	31	20	912,686	29,441	20	40,256,104
EW-01	Aug-04	31	21	941,492	30,371	21	41,197,596
EW-01	Sep-04	30	22	968,465	32,282	22	42,166,061
EW-01	Oct-04	31	19	860,136	27,746	19	43,026,197
EW-01	Nov-04	30	21	921,191	30,706	21	43,947,388
EW-01	Dec-04	31	21	922,165	30,739	21	44,869,553
EW-01	Jan-05	31	14	630,666	21,022	15	45,500,219
EW-01	Feb-05	28	22	887,040	29,568	21	46,387,259
EW-01	Mar-05	31	22	959,760	31,992	22	47,347,019
EW-01	Apr-05	30	20	876,096	29,203	20	48,223,115
EW-01	May-05	31	11	500,445	16,682	12	48,723,560
EW-01	Jun-05	30	18	784,710	26,157	18	49,508,270
EW-01	Jul-05	23	21	710,035	23,668	16	50,218,305
EW-01	Aug-05	31	16	734,979	24,499	17	50,953,284
EW-01	Sep-05	0	0	0	0	0	50,953,284
EW-01	Oct-05	20	23	671,905	22,397	16	51,625,189
EW-01	Nov-05	1	23	1,508	50	23	51,626,697
EW-01	Dec-05	0	0	0	0	0	51,626,697
EW-01	Jan-06	11	25	395,285	35,935	25	52,021,982
EW-01	Feb-06	28	25	1,013,600	36,200	25	53,035,582
EW-01	Mar-06	31	24	1,061,781	34,251	24	54,097,363
EW-01	Apr-06	30	19	821,791	27,393	19	54,919,154
EW-01	May-06	31	20	873,983	28,193	20	55,793,137
EW-01	Jun-06	30	21	893,022	29,767	21	56,686,159
EW-01	Jul-06	31	20	900,421	29,046	20	57,586,580
EW-01	Aug-06	31	19	864,000	27,871	19	58,450,580
EW-01	Sep-06	10	19	266,400	8,880	6	58,716,980
EW-01	Oct-06	31	17	738,992	23,838	17	59,455,972
EW-01	Nov-06	30	14	612,630	20,421	14	60,068,602
EW-01	Dec-06	31	13	598,610	19,310	13	60,667,212
EW-01	Jan-07	31	7	303,955	9,805	7	60,971,167
EW-01	Feb-07	28	11	462,896	14,932	10	61,434,063
EW-01	Mar-07	31	9	399,528	12,888	9	61,833,591
EW-01	Apr-07	4	4	21,560	695	0	61,855,151
EW-01	May-07	0	0	0	0	0	61,855,151

Appendix E

Extraction Well Operational Data, May 1997 through December 2023

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well Number	Month-Year	Days On-line	Pumping Rate (gpm)	Volume Extracted (gallons)	Average Discharge* (gpd)	Average Discharge** (gpm)	Cumulative Volume Extracted (gallons)
EW-01	Jun-07	0	0	0	0	0	61,855,151
EW-01	Jul-07	16	23	535,216	17,265	12	62,390,367
EW-01	Aug-07	31	25	1,134,259	36,589	25	63,524,626
EW-01	Sep-07	30	25	1,085,490	35,016	24	64,610,116
EW-01	Oct-07	31	26	1,155,122	37,262	26	65,765,238
EW-01	Nov-07	30	21	907,200	29,265	20	66,672,438
EW-01	Dec-07	27	18	706,833	22,801	16	67,379,271
EW-01	Jan-08	31	26	1,147,403	37,013	26	68,526,674
EW-01	Feb-08	29	25	1,052,410	33,949	24	69,579,084
EW-01	Mar-08	31	25	1,110,699	35,829	25	70,689,783
EW-01	Apr-08	30	25	1,060,170	34,199	24	71,749,953
EW-01	May-08	18	22	559,728	18,056	13	72,309,681
EW-01	Jun-08	13	24	449,280	14,493	10	72,758,961
EW-01	Jul-08	31	23	1,028,425	33,175	23	73,787,386
EW-01	Aug-08	31	23	1,046,467	33,757	23	74,833,853
EW-01	Sep-08	30	23	991,440	31,982	22	75,825,293
EW-01	Oct-08	31	23	1,019,714	32,894	23	76,845,007
EW-01	Nov-08	30	23	982,740	31,701	22	77,827,747
EW-01	Dec-08	31	21	922,248	29,750	21	78,749,995
EW-01	Jan-09	31	22	998,417	32,207	22	79,748,412
EW-01	Feb-09	28	21	853,776	27,541	19	80,602,188
EW-01	Mar-09	31	20	906,440	29,240	20	81,508,628
EW-01	Apr-09	30	15	642,420	20,723	14	82,151,048
EW-01	May-09	31	13	587,078	18,938	13	82,738,126
EW-01	Jun-09	30	12	513,330	16,559	11	83,251,456
EW-01	Jul-09	31	10	431,830	13,930	10	83,683,286
EW-01	Aug-09	28	4	145,152	4,682	3	83,828,438
EW-01	Sep-09	5	25	177,500	5,726	4	84,005,938
EW-01	Oct-09	31	25	1,131,655	36,505	25	85,137,593
EW-01	Nov-09	30	25	1,071,810	34,575	24	86,209,403
EW-01	Dec-09	31	27	1,204,939	38,869	27	87,414,342
EW-01	Jan-10	31	25	1,110,885	35,835	25	88,525,227
EW-01	Feb-10	28	24	978,432	31,562	22	89,503,659
EW-01	Mar-10	31	25	1,109,025	35,775	25	90,612,684
EW-01	Apr-10	30	24	1,035,000	33,387	23	91,647,684
EW-01	May-10	31	26	1,138,320	36,720	26	92,786,004
EW-01	Jun-10	30	26	1,101,600	35,535	25	93,887,604

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EW-01	Jul-10	31	22	988,528	31,888	22	94,876,132
EW-01	Aug-10	31	21	937,750	30,250	21	95,813,882
EW-01	Sep-10	30	23	979,410	31,594	22	96,793,292
EW-01	Oct-10	31	21	938,308	30,268	21	97,731,600
EW-01	Nov-10	30	22	953,820	30,768	21	98,685,420
EW-01	Dec-10	31	21	948,786	30,606	21	99,634,206
EW-01	Jan-11	31	21	922,467	29,757	21	100,556,673
EW-01	Feb-11	28	22	868,504	28,016	19	101,425,177
EW-01	Mar-11	31	21	956,071	30,841	21	102,381,248
EW-01	Apr-11	30	21	920,670	29,699	21	103,301,918
EW-01	May-11	31	21	937,812	30,252	21	104,239,730
EW-01	Jun-11	30	21	909,300	29,332	20	105,149,030
EW-01	Jul-11	31	21	930,775	30,025	21	106,079,805
EW-01	Aug-11	19	21	574,011	18,516	13	106,653,816
EW-01	Sep-11	14	21	427,280	13,783	10	107,081,096
EW-01	Oct-11	22	21	653,033	21,066	15	107,734,129
EW-01	Nov-11	30	21	897,462	28,950	20	108,631,591
EW-01	Dec-11	31	20	904,723	29,185	20	109,536,314
EW-01	Jan-12	31	20	913,900	29,481	20	110,450,214
EW-01	Feb-12	29	20	849,588	27,406	19	111,299,802
EW-01	Mar-12	31	20	904,008	29,162	20	112,203,810
EW-01	Apr-12	30	20	861,600	27,794	19	113,065,410
EW-01	May-12	31	20	871,823	28,123	20	113,937,233
EW-01	Jun-12	30	20	853,400	27,529	19	114,790,633
EW-01	Jul-12	31	19	833,125	26,875	19	115,623,758
EW-01	Aug-12	24	18	631,015	20,355	14	116,254,773
EW-01	Sep-12	30	16	689,600	22,245	15	116,944,373
EW-01	Oct-12	31	18	807,550	26,050	18	117,751,923
EW-01	Nov-12	30	18	772,333	24,914	17	118,524,256
EW-01	Dec-12	31	18	800,627	25,827	18	119,324,883
EW-01	Jan-13	31	18	787,297	25,397	18	120,112,180
EW-01	Feb-13	28	18	715,141	23,069	16	120,827,321
EW-01	Mar-13	31	18	781,948	25,224	18	121,609,269
EW-01	Apr-13	30	18	757,548	24,437	17	122,366,817
EW-01	May-13	31	17	764,150	24,650	17	123,130,967
EW-01	Jun-13	30	17	749,500	24,177	17	123,880,467
EW-01	Jul-13	31	17	774,380	24,980	17	124,654,847

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EW-01	Aug-13	31	18	787,000	25,387	18	125,441,847
EW-01	Sep-13	30	18	756,484	24,403	17	126,198,331
EW-01	Oct-13	31	17	760,642	24,537	17	126,958,973
EW-01	Nov-13	30	16	698,609	22,536	16	127,657,582
EW-01	Dec-13	31	16	736,200	23,748	16	128,393,782
EW-01	Jan-14	31	11	488,638	15,763	11	128,882,420
EW-01	Feb-14	28	17	667,908	21,545	15	129,550,328
EW-01	Mar-14	31	15	663,934	21,417	15	130,214,262
EW-01	Apr-14	30	13	558,222	18,007	13	130,772,484
EW-01	May-14	31	16	703,241	22,685	16	131,475,725
EW-01	Jun-14	17	16	387,919	12,514	9	131,863,644
EW-01	Jul-14	0	0	0	0	0	131,863,644
EW-01	Aug-14	12	24	416,800	13,445	9	132,280,444
EW-01	Sep-14	30	23	999,724	32,249	22	133,280,168
EW-01	Oct-14	31	24	1,061,971	34,257	24	134,342,139
EW-01	Nov-14	30	23	1,010,571	32,599	23	135,352,710
EW-01	Dec-14	31	23	1,042,678	33,635	23	136,395,388
EW-01	Jan-15	31	23	1,015,168	32,747	23	137,410,556
EW-01	Feb-15	28	23	924,255	29,815	21	138,334,811
EW-01	Mar-15	31	23	1,033,333	33,333	23	139,368,144
EW-01	Apr-15	30	23	979,333	31,591	22	140,347,477
EW-01	May-15	31	22	991,557	31,986	22	141,339,034
EW-01	Jun-15	30	22	949,059	30,615	21	142,288,093
EW-01	Jul-15	31	22	1,004,162	32,392	22	143,292,255
EW-01	Aug-15	31	22	991,674	31,989	22	144,283,929
EW-01	Sep-15	30	22	956,118	30,843	21	145,240,047
EW-01	Oct-15	31	22	983,692	31,732	22	146,223,739
EW-01	Nov-15	30	22	950,769	30,670	21	147,174,508
EW-01	Dec-15	31	22	959,808	30,962	22	148,134,316
EW-01	Jan-16	31	22	964,986	31,129	22	149,099,302
EW-01	Feb-16	29	24	985,289	31,784	22	150,084,591
EW-01	Mar-16	31	24	1,062,871	34,286	24	151,147,462
EW-01	Apr-16	30	24	1,025,936	33,095	23	152,173,398
EW-01	May-16	31	24	1,064,833	34,349	24	153,238,231
EW-01	Jun-16	30	23	998,490	32,209	22	154,236,721
EW-01	Jul-16	31	23	1,037,185	33,458	23	155,273,906
EW-01	Aug-16	31	23	1,037,703	33,474	23	156,311,609

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EW-01	Sep-16	30	23	986,861	31,834	22	157,298,470
EW-01	Oct-16	31	22	997,172	32,167	22	158,295,642
EW-01	Nov-16	30	22	956,089	30,842	21	159,251,731
EW-01	Dec-16	31	22	976,998	31,516	22	160,228,729
EW-01	Jan-17	31	23	1,048,867	33,834	23	161,277,596
EW-01	Feb-17	28	22	892,034	28,775	20	162,169,630
EW-01	Mar-17	31	22	995,523	32,114	22	163,165,153
EW-01	Apr-17	30	20	846,818	27,317	19	164,011,971
EW-01	May-17	13	15	282,218	9,104	6	164,294,189
EW-01	Jun-17	0	0	0	0	0	164,294,189
EW-01	Jul-17	0	0	0	0	0	164,294,189
EW-01	Aug-17	0	0	0	0	0	164,294,189
EW-01	Sep-17	0	0	0	0	0	164,294,189
EW-01	Oct-17	0	0	0	0	0	164,294,189
EW-01	Nov-17	0	0	0	0	0	164,294,189
EW-01	Dec-17	0	0	0	0	0	164,294,189
EW-01	Jan-18	0	0	0	0	0	164,294,189
EW-01	Feb-18	0	0	0	0	0	164,294,189
EW-01	Mar-18	0	0	0	0	0	164,294,189
EW-01	Apr-18	0	0	0	0	0	164,294,189
EW-01	May-18	0	0	0	0	0	164,294,189
EW-01	Jun-18	0	0	0	0	0	164,294,189
EW-01	Jul-18	15	87	1,883,500	60,758	42	166,177,689
EW-01	Aug-18	31	88	3,922,957	126,547	88	170,100,646
EW-01	Sep-18	30	87	3,762,000	121,355	84	173,862,646
EW-01	Oct-18	9	86	1,120,824	36,156	25	174,983,470
EW-01	Nov-18	30	86	3,718,920	119,965	83	178,702,390
EW-01	Dec-18	31	82	3,646,833	117,640	82	182,349,223
EW-01	Jan-19	31	89	3,957,894	127,674	89	186,307,117
EW-01	Feb-19	28	89	3,572,520	115,243	80	189,879,637
EW-01	Mar-19	31	0	0	0	0	189,879,637
EW-01	Apr-19	30	10	441,750	14,250	10	190,321,387
EW-01	May-19	31	48	2,160,452	69,692	48	192,481,839
EW-01	Jun-19	30	42	1,809,630	58,375	41	194,291,469
EW-01	Jul-19	31	48	2,163,676	69,796	48	196,455,145
EW-01	Aug-19	31	48	2,123,562	68,502	48	198,578,707
EW-01	Sep-19	1	0	320	10	0	198,579,027

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EW-01	Oct-19	1	0	202	7	0	198,579,229
EW-01	Nov-19	0	0	0	0	0	198,579,229
EW-01	Dec-19	0	0	0	0	0	198,579,229
EW-01	Jan-20	0	0	0	0	0	198,579,229
EW-01	Feb-20	0	0	0	0	0	198,579,229
EW-01	Mar-20	0	0	0	0	0	198,579,229
EW-01	Apr-20	0	0	0	0	0	198,579,229
EW-01	May-20	0	0	0	0	0	198,579,229
EW-01	Jun-20	19	56	1,528,873	49,318	34	200,108,102
EW-01	Jul-20	31	54	2,398,687	77,377	54	202,506,789
EW-01	Aug-20	31	56	2,517,727	81,217	56	205,024,516
EW-01	Sep-20	30	56	2,420,700	78,087	54	207,445,216
EW-01	Oct-20	31	56	2,484,433	80,143	56	209,929,649
EW-01	Nov-20	30	56	2,411,280	77,783	54	212,340,929
EW-01	Dec-20	31	56	2,484,154	80,134	56	214,825,083
EW-01	Jan-21	31	56	2,488,122	80,262	56	217,313,205
EW-01	Feb-21	28	55	2,216,872	71,512	50	219,530,077
EW-01	Mar-21	31	55	2,457,370	79,270	55	221,987,447
EW-01	Apr-21	30	55	2,372,220	76,523	53	224,359,667
EW-01	May-21	31	60	2,685,561	86,631	60	227,045,228
EW-01	Jun-21	30	63	2,714,640	87,569	61	229,759,868
EW-01	Jul-21	31	57	2,534,250	81,750	57	232,294,118
EW-01	Aug-21	31	60	2,660,544	85,824	60	234,954,662
EW-01	Sep-21	30	41	1,780,200	57,426	40	236,734,862
EW-01	Oct-21	31	57	2,531,863	81,673	57	239,266,725
EW-01	Nov-21	30	58	2,496,630	80,536	56	241,763,355
EW-01	Dec-21	31	58	2,585,276	83,396	58	244,348,631
EW-01	Jan-22	31	58	2,588,438	83,498	58	246,937,069
EW-01	Feb-22	28	57	2,297,372	74,109	51	249,234,441
EW-01	Mar-22	31	57	2,539,210	81,910	57	251,773,651
EW-01	Apr-22	30	57	2,480,190	80,006	56	254,253,841
EW-01	May-22	31	57	2,559,608	82,568	57	256,813,449
EW-01	Jun-22	30	54	2,325,480	75,015	52	259,138,929
EW-01	Jul-22	31	60	2,679,826	86,446	60	261,818,755
EW-01	Aug-22	31	55	2,475,598	79,858	55	264,294,353
EW-01	Sep-22	30	63	2,713,860	87,544	61	267,008,213
EW-01	Oct-22	31	58	2,587,012	83,452	58	269,595,225

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EW-01	Nov-22	30	55	2,396,640	77,311	54	271,991,865
EW-01	Dec-22	31	61	2,731,627	88,117	61	274,723,492
EW-01	Jan-23	31	55	2,459,602	79,342	55	277,183,094
EW-01	Feb-23	28	57	2,279,536	73,533	51	279,462,630
EW-01	Mar-23	31	58	2,572,349	82,979	58	282,034,979
EW-01	Apr-23	30	56	2,428,980	78,354	54	284,463,959
EW-01	May-23	31	56	2,509,884	80,964	56	286,973,843
EW-01	Jun-23	30	63	2,733,780	88,186	61	289,707,623
EW-01	Jul-23	31	58	2,583,044	83,324	58	292,290,667
EW-01	Aug-23	31	56	2,511,837	81,027	56	294,802,504
EW-01	Sep-23	30	58	2,502,030	80,711	56	297,304,534
EW-01	Oct-23	31	49	2,172,666	70,086	49	299,477,200
EW-01	Nov-23	30	57	2,482,590	80,084	56	301,959,790
EW-01	Dec-23	31	57	2,529,445	81,595	57	304,489,235
EW-02	Oct-99	10	23	336,200	10,845	8	336,200
EW-02	Nov-99	31	28	1,268,300	42,277	29	1,604,500
EW-02	Dec-99	31	26	1,151,500	37,145	26	2,756,000
EW-02	Jan-00	31	27	1,209,340	40,311	28	3,965,340
EW-02	Feb-00	29	32	1,324,560	44,152	31	5,289,900
EW-02	Mar-00	31	33	1,470,800	49,027	34	6,760,700
EW-02	Apr-00	30	33	1,405,200	46,840	33	8,165,900
EW-02	May-00	31	33	1,454,475	48,483	34	9,620,375
EW-02	Jun-00	30	33	1,416,285	47,210	33	11,036,660
EW-02	Jul-00	30	33	1,404,520	46,817	33	12,441,180
EW-02	Aug-00	24	32	1,098,725	36,624	25	13,539,905
EW-02	Sep-00	30	34	1,448,230	48,274	34	14,988,135
EW-02	Oct-00	31	33	1,470,750	49,025	34	16,458,885
EW-02	Nov-00	30	34	1,482,572	49,419	34	17,941,457
EW-02	Dec-00	31	35	1,541,915	51,397	36	19,483,372
EW-02	Jan-01	31	34	1,517,290	50,576	35	21,000,662
EW-02	Feb-01	28	33	1,348,610	44,954	31	22,349,272
EW-02	Mar-01	31	33	1,476,922	49,231	34	23,826,194
EW-02	Apr-01	21	33	1,002,008	33,400	23	24,828,202
EW-02	May-01	31	33	1,467,968	48,932	34	26,296,170
EW-02	Jun-01	30	33	1,412,987	47,100	33	27,709,157
EW-02	Jul-01	31	32	1,447,200	48,240	34	29,156,357
EW-02	Aug-01	31	32	1,432,890	47,763	33	30,589,247

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Well Number	Month-Year	Days On-line	Pumping Rate (gpm)	Volume Extracted (gallons)	Average Discharge* (gpd)	Average Discharge** (gpm)	Cumulative Volume Extracted (gallons)
EW-02	Sep-01	30	25	1,062,855	35,429	25	31,652,102
EW-02	Oct-01	31	33	1,472,850	49,095	34	33,124,952
EW-02	Nov-01	30	31	1,348,750	44,958	31	34,473,702
EW-02	Dec-01	31	29	1,282,852	42,762	30	35,756,554
EW-02	Jan-02	31	31	1,377,642	45,921	32	37,134,196
EW-02	Feb-02	28	30	1,205,099	40,170	28	38,339,295
EW-02	Mar-02	13.5	33	637,461	21,249	15	38,976,756
EW-02	Apr-02	23	23	753,925	25,131	17	39,730,681
EW-02	May-02	31	29	1,279,680	42,656	30	41,010,361
EW-02	Jun-02	30	27	1,147,277	38,243	27	42,157,638
EW-02	Jul-02	13	30	548,130	18,271	13	42,705,768
EW-02	Aug-02	27	29	1,132,198	37,740	26	43,837,966
EW-02	Sep-02	30	29	1,258,934	41,964	29	45,096,900
EW-02	Oct-02	23	28	930,144	31,005	22	46,027,044
EW-02	Nov-02	30	29	1,263,159	42,105	29	47,290,203
EW-02	Dec-02	31	29	1,291,632	43,054	30	48,581,835
EW-02	Jan-03	31	29	1,275,233	42,508	30	49,857,068
EW-02	Feb-03	28	28	1,113,957	37,132	26	50,971,025
EW-02	Mar-03	31	24	1,068,525	35,618	25	52,039,550
EW-02	Apr-03	30	25	1,074,968	35,832	25	53,114,518
EW-02	May-03	16	22	500,341	16,678	12	53,614,859
EW-02	Jun-03	30	14	621,217	20,707	14	54,236,076
EW-02	Jul-03	20	13	376,187	12,540	9	54,612,263
EW-02	Aug-03	15	14	296,495	9,883	7	54,908,758
EW-02	Sep-03	2	13	37,122	1,237	1	54,945,880
EW-02	Oct-03	0	0	0	0	0	54,945,880
EW-02	Nov-03	0	0	0	0	0	54,945,880
EW-02	12/1/2003***	0	0	0	0	0	54,945,880
						Total: MW-10, EW-1, EW-2	**882,539,265**

Notes:

* Average discharge per day is the total volume pumped during each month divided by the number of calendar days in the month

** Average discharge per minute is the total volume pumped during each month divided by the number of minutes in the month

*** Extraction Well EW-2 has not operated since September 2003

gpd - gallons per day

gpm - gallons per minute

Appendix F
Trend Analysis - 5 Years

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-1A
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-1A CONCENTRATION (ug/L)						
1	7-Nov-19	120	7	1.3	2.1	0.7	3.2	35
2	11-Nov-20	1400	72	11	18	10	10	180
3	26-Oct-21	1500	60	9.4	17	8.1	9.9	180
4	12-Oct-22	1300	81	12	20	9.6	11	160
5	14-Nov-23	1800	67	10	17	7.7	10	170
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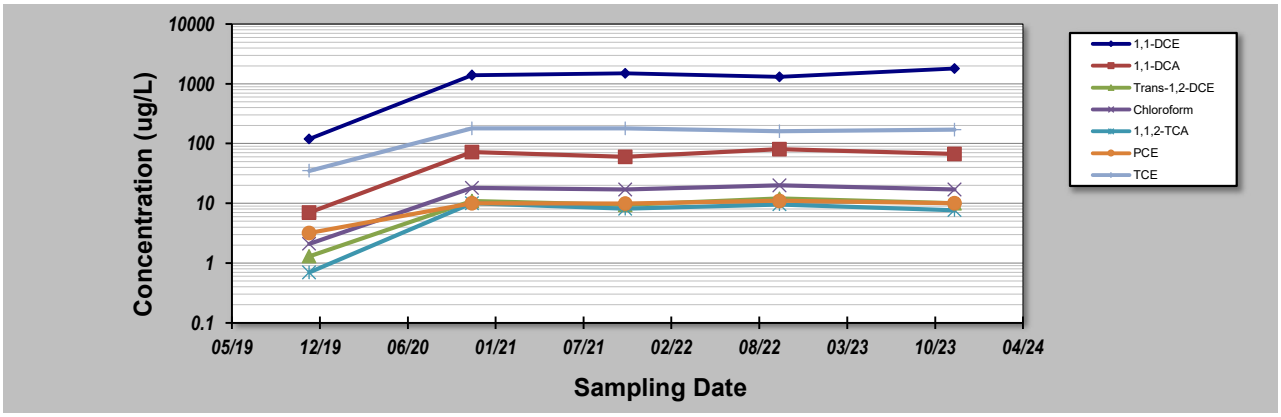
Coefficient of Variation:		0.53	0.51	0.49	0.49	0.52	0.36	0.43
Mann-Kendall Statistic (S):		6	4	4	3	0	5	1
Confidence Factor:		88.3%	75.8%	75.8%	67.5%	40.8%	82.1%	50.0%
Concentration Trend:		No Trend	No Trend	No Trend	No Trend	Stable	No Trend	No Trend



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-3
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-3 CONCENTRATION (ug/L)						
1	7-Nov-19	2.4	0.5	0.5	2	0.5	0.5	1.4
2	11-Nov-20	2.8	0.5	0.5	0.5	0.5	0.5	2.7
3	26-Oct-21	8.6	0.5	0.5	0.5	0.5	0.5	8.8
4	12-Oct-22	20	0.5	0.5	0.5	0.5	0.5	26
5	14-Nov-23	54	0.5	0.5	0.5	0.5	0.5	61
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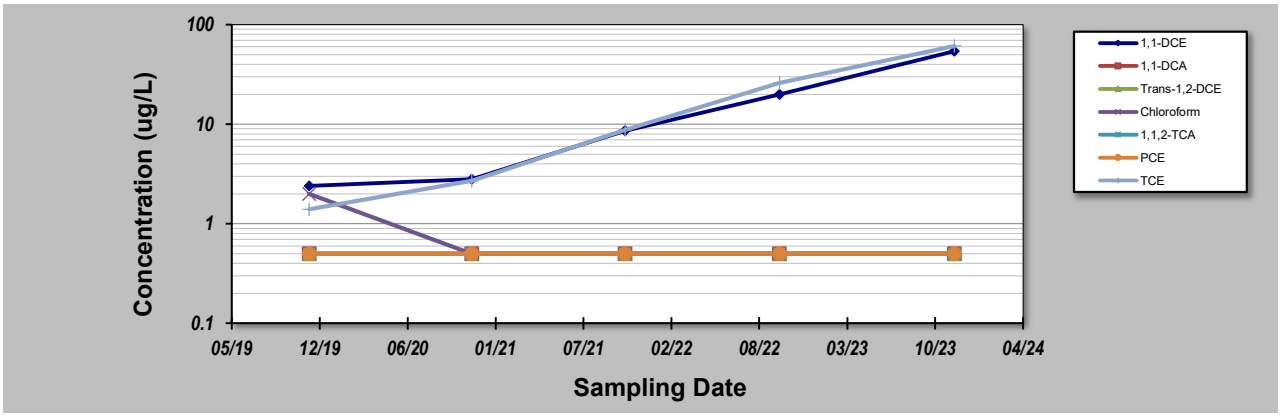
Coefficient of Variation:		1.23	0.00	0.00	0.84	0.00	0.00	1.25
Mann-Kendall Statistic (S):		10	0	0	-4	0	0	10
Confidence Factor:		99.2%	40.8%	40.8%	75.8%	40.8%	40.8%	99.2%
Concentration Trend:		Increasing	Stable	Stable	Stable	Stable	Stable	Increasing



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-4
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-4 CONCENTRATION (ug/L)						
1	7-Nov-19	4.8	0.5	0.5	2	0.5	0.5	2.9
2	11-Nov-20	6	0.5	0.5	0.5	0.5	0.5	3.6
3	29-Dec-21	11	0.5	0.5	0.5	0.5	0.5	3.5
4	12-Oct-22	16	0.5	0.5	0.5	0.5	0.5	4.4
5	17-May-23	18	0.5	0.5	0.5	0.5	0.5	4.5
6	14-Nov-23	18	0.5	0.5	0.5	0.5	0.5	3.2
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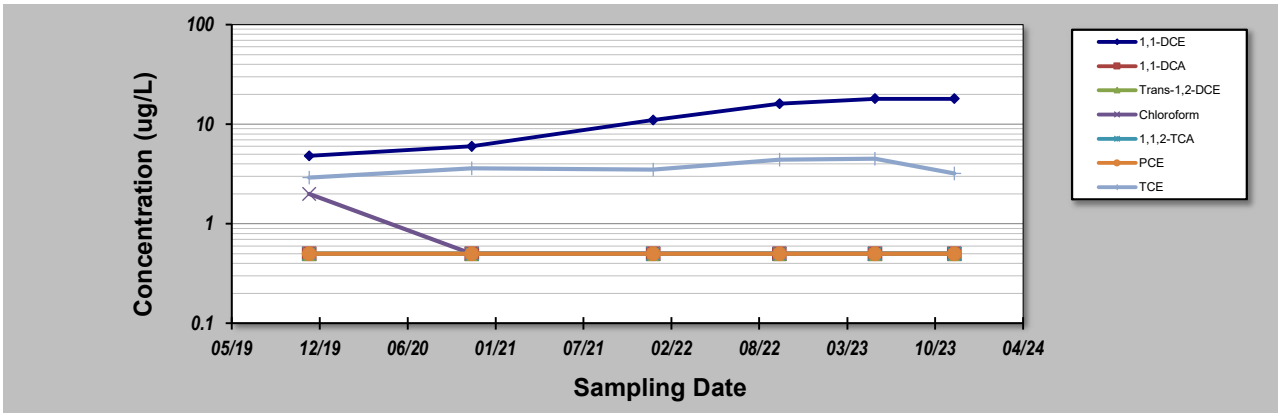
Coefficient of Variation:		0.48	0.00	0.00	0.82	0.00	0.00	0.17
Mann-Kendall Statistic (S):		14	0	0	-5	0	0	5
Confidence Factor:		99.6%	39.3%	39.3%	76.5%	39.3%	39.3%	76.5%
Concentration Trend:		Increasing	Stable	Stable	Stable	Stable	Stable	No Trend



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-5
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-5 CONCENTRATION (ug/L)						
1	7-Nov-19	16	0.3	0.5	2	0.5	0.5	15
2	12-Nov-20	9.8	0.5	0.5	0.5	0.5	0.5	9.4
3	26-Oct-21	6.2	0.5	0.5	0.5	0.5	0.5	2
4	12-Oct-22	13	0.5	0.5	0.5	0.5	0.5	8.2
5	14-Nov-23	7.4	0.5	0.5	0.5	0.5	0.5	2.6
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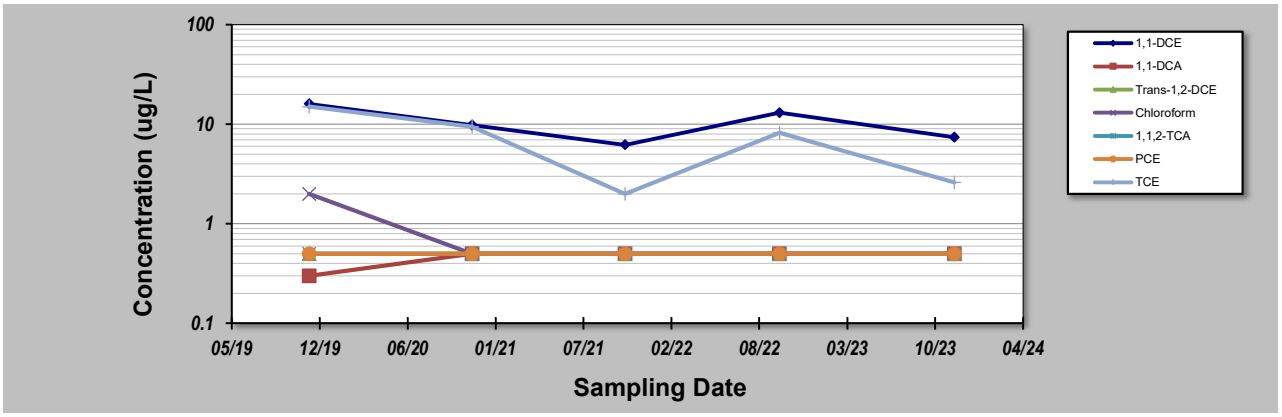
Coefficient of Variation:		0.38	0.19	0.00	0.84	0.00	0.00	0.72
Mann-Kendall Statistic (S):		-4	4	0	-4	0	0	-6
Confidence Factor:		75.8%	75.8%	40.8%	75.8%	40.8%	40.8%	88.3%
Concentration Trend:		Stable	No Trend	Stable	Stable	Stable	Stable	Stable



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-6
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-6 CONCENTRATION (ug/L)						
1	7-Nov-19	0.5	0.5	0.5	2	0.5	0.5	0.5
2	11-Nov-20	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3	26-Oct-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	12-Oct-22	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	14-Nov-23	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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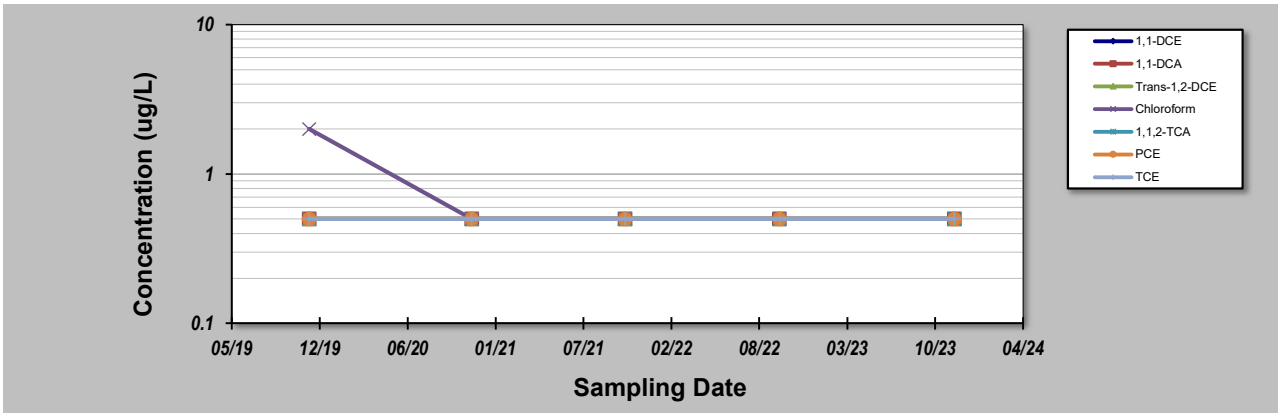
Coefficient of Variation:		0.00	0.00	0.00	0.84	0.00	0.00	0.00
Mann-Kendall Statistic (S):		0	0	0	-4	0	0	0
Confidence Factor:		40.8%	40.8%	40.8%	75.8%	40.8%	40.8%	40.8%
Concentration Trend:		Stable	Stable	Stable	Stable	Stable	Stable	Stable



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-7
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-7 CONCENTRATION (ug/L)						
1	19-Nov-19	5	0.5	0.5	0.4	0.5	0.5	4.5
2	21-Apr-20	4.3	0.5	0.5	0.5	0.5	0.5	4
3	11-Nov-20	3.9	0.5	0.5	0.5	0.5	0.5	3.5
4	26-Apr-21	4	0.5	0.5	0.5	0.5	0.5	3
5	26-Oct-21	2.2	0.5	0.5	0.5	0.5	0.5	1.6
6	12-May-22	2.1	1	1	1	1	1	1.4
7	12-Oct-22	1.7	0.5	0.5	0.59	0.5	0.5	1
8	17-May-23	1.2	0.5	0.5	0.8	0.5	0.5	0.82
9	14-Nov-23	1	0.5	0.5	0.73	0.5	0.5	0.56
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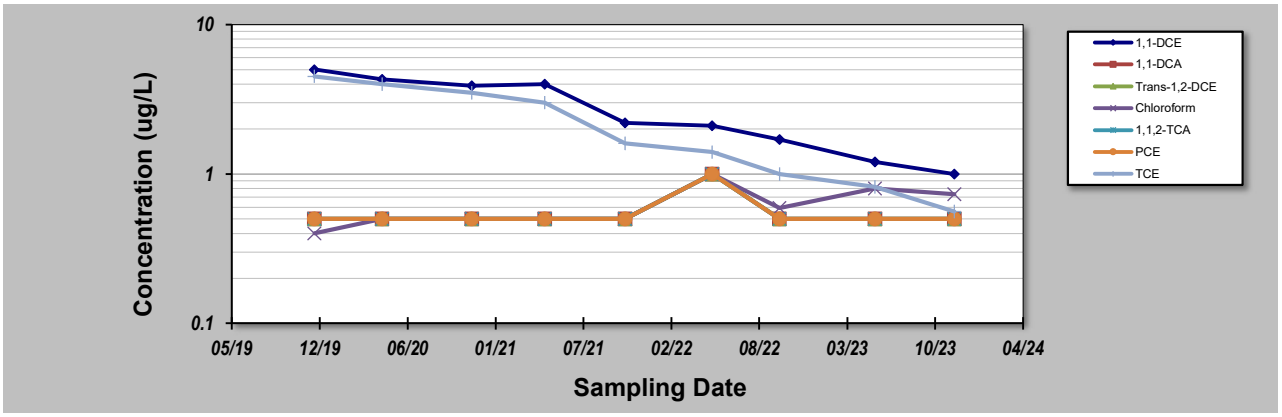
Coefficient of Variation:		0.53	0.30	0.30	0.31	0.30	0.30	0.66
Mann-Kendall Statistic (S):		-34	2	2	22	2	2	-36
Confidence Factor:		>99.9%	54.0%	54.0%	98.8%	54.0%	54.0%	>99.9%
Concentration Trend:		Decreasing	No Trend	No Trend	Increasing	No Trend	No Trend	Decreasing



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-8
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-8 CONCENTRATION (ug/L)						
1	7-Nov-19	0.2	0.5	0.5	0.4	0.5	0.5	0.2
2	11-Nov-20	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3	26-Oct-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	12-Oct-22	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	14-Nov-23	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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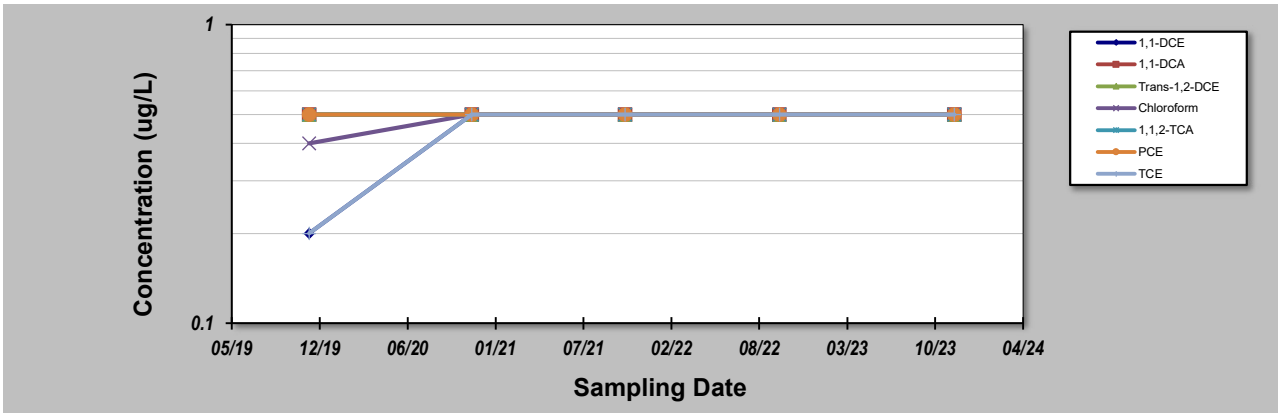
Coefficient of Variation:		0.30	0.00	0.00	0.09	0.00	0.00	0.30
Mann-Kendall Statistic (S):		4	0	0	4	0	0	4
Confidence Factor:		75.8%	40.8%	40.8%	75.8%	40.8%	40.8%	75.8%
Concentration Trend:		No Trend	Stable	Stable	No Trend	Stable	Stable	No Trend



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-9
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-9 CONCENTRATION (ug/L)						
1	7-Nov-19	2.2	0.5	0.5	0.5	0.5	0.5	1
2	12-Nov-20	1.1	0.5	0.5	0.5	0.5	0.5	0.5
3	26-Oct-21	0.81	0.5	0.5	0.5	0.5	0.5	0.5
4	12-Oct-22	1.6	0.5	0.5	0.5	0.5	0.5	0.5
5	14-Nov-23	0.87	0.5	0.5	0.5	0.5	0.5	0.5
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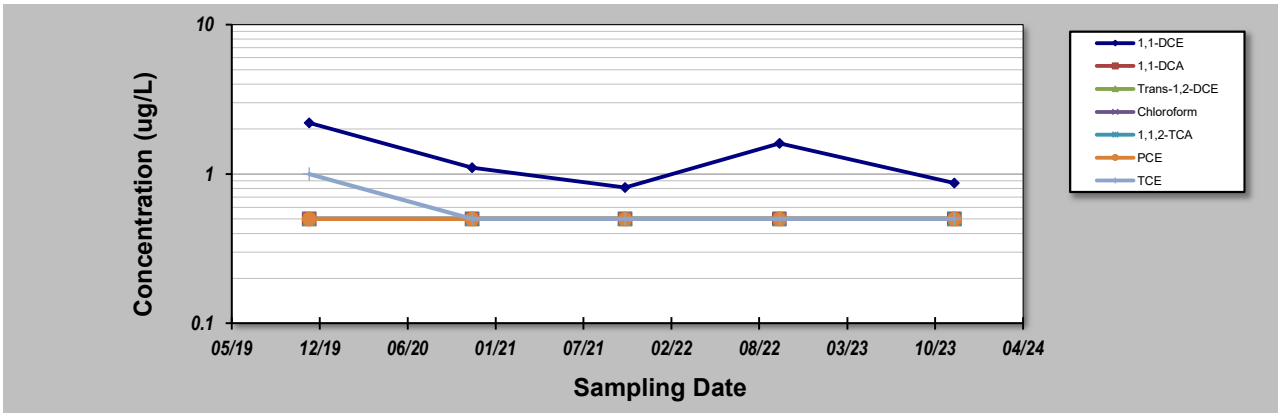
Coefficient of Variation:		0.44	0.00	0.00	0.00	0.00	0.00	0.37
Mann-Kendall Statistic (S):		-4	0	0	0	0	0	-4
Confidence Factor:		75.8%	40.8%	40.8%	40.8%	40.8%	40.8%	75.8%
Concentration Trend:		Stable	Stable	Stable	Stable	Stable	Stable	Stable



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-10
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-10 CONCENTRATION (ug/L)						
1	7-Nov-19	26	1.1	0.2	0.7	0.5	0.5	6.4
2	12-Nov-20	17	0.64	0.5	0.5	0.5	0.5	4.6
3	26-Apr-21	16	0.71	0.5	0.5	0.5	0.5	4.6
4	26-Oct-21	11	0.51	0.5	0.5	0.5	0.5	3.5
5	12-May-22	19	1	1	1	1	1	5.5
6	12-Oct-22	18	0.61	0.5	0.5	0.5	0.5	4.3
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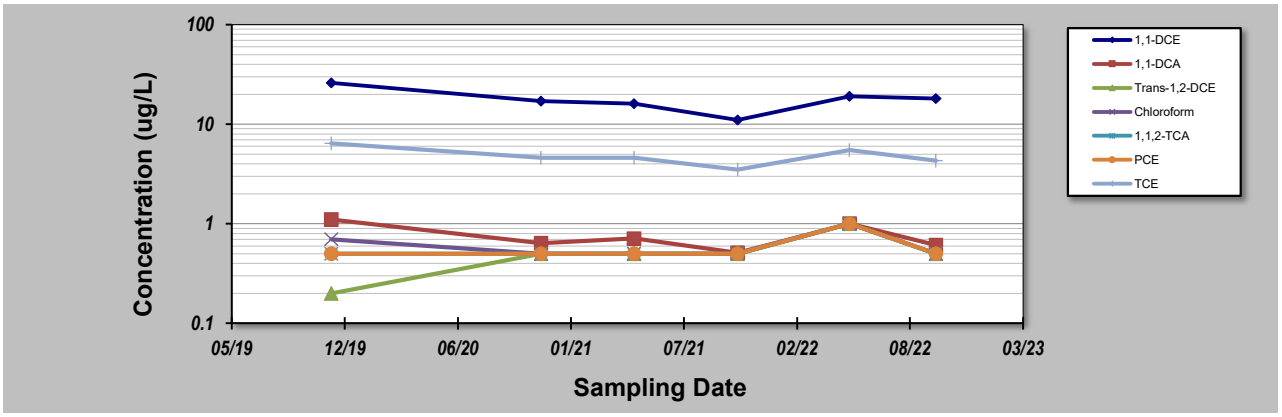
Coefficient of Variation:		0.27	0.31	0.48	0.33	0.35	0.35	0.21
Mann-Kendall Statistic (S):		-3	-5	7	-1	3	3	-6
Confidence Factor:		64.0%	76.5%	86.4%	50.0%	64.0%	64.0%	81.5%
Concentration Trend:		Stable	Stable	No Trend	Stable	No Trend	No Trend	Stable



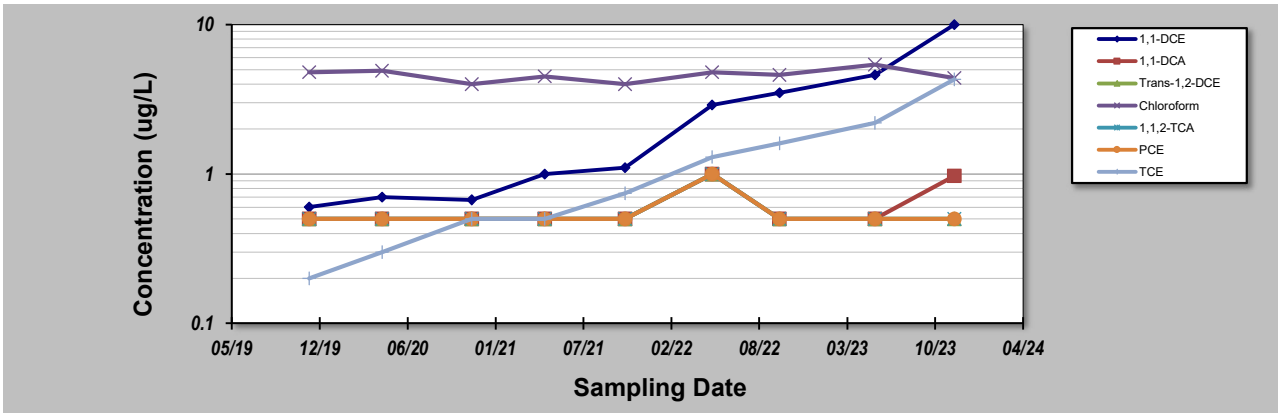
Notes:

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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-12
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-12 CONCENTRATION (ug/L)						
1	7-Nov-19	0.6	0.5	0.5	4.8	0.5	0.5	0.2
2	21-Apr-20	0.7	0.5	0.5	4.9	0.5	0.5	0.3
3	11-Nov-20	0.67	0.5	0.5	4	0.5	0.5	0.5
4	26-Apr-21	1	0.5	0.5	4.5	0.5	0.5	0.5
5	26-Oct-21	1.1	0.5	0.5	4	0.5	0.5	0.74
6	12-May-22	2.9	1	1	4.8	1	1	1.3
7	12-Oct-22	3.5	0.5	0.5	4.6	0.5	0.5	1.6
8	17-May-23	4.6	0.5	0.5	5.4	0.5	0.5	2.2
9	14-Nov-23	10	0.97	0.5	4.4	0.5	0.5	4.3
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		1.10	0.35	0.30	0.10	0.30	0.30	1.01
Mann-Kendall Statistic (S):		34	9	2	0	2	2	35
Confidence Factor:		>99.9%	79.2%	54.0%	46.0%	54.0%	54.0%	>99.9%
Concentration Trend:		Increasing	No Trend	No Trend	Stable	No Trend	No Trend	Increasing



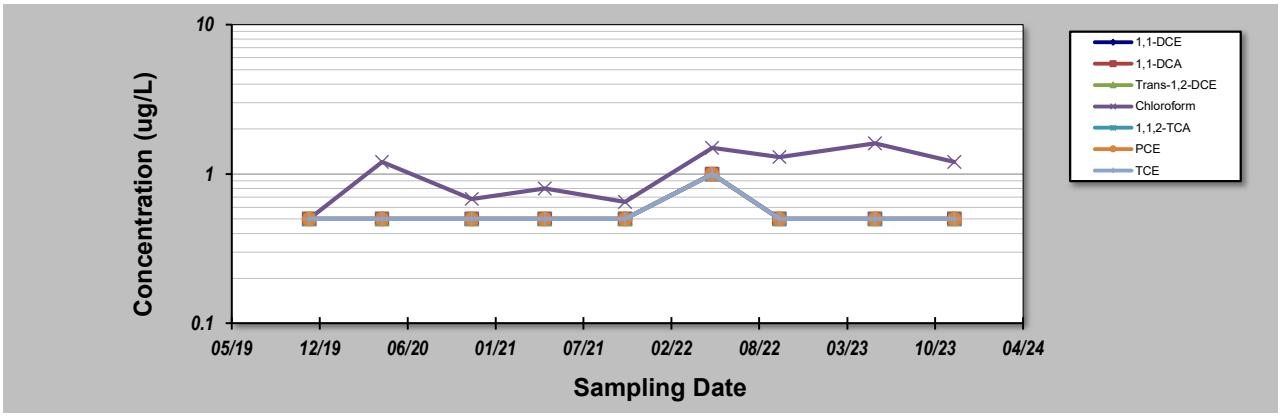
Notes:

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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-13
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-13 CONCENTRATION (ug/L)						
1	7-Nov-19	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	21-Apr-20	0.5	0.5	0.5	1.2	0.5	0.5	0.5
3	11-Nov-20	0.5	0.5	0.5	0.68	0.5	0.5	0.5
4	26-Apr-21	0.5	0.5	0.5	0.8	0.5	0.5	0.5
5	26-Oct-21	0.5	0.5	0.5	0.65	0.5	0.5	0.5
6	12-May-22	1	1	1	1.5	1	1	1
7	12-Oct-22	0.5	0.5	0.5	1.3	0.5	0.5	0.5
8	17-May-23	0.5	0.5	0.5	1.6	0.5	0.5	0.5
9	14-Nov-23	0.5	0.5	0.5	1.2	0.5	0.5	0.5
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.30	0.30	0.30	0.38	0.30	0.30	0.30
Mann-Kendall Statistic (S):		2	2	2	17	2	2	2
Confidence Factor:		54.0%	54.0%	54.0%	95.1%	54.0%	54.0%	54.0%
Concentration Trend:		No Trend	No Trend	No Trend	Increasing	No Trend	No Trend	No Trend



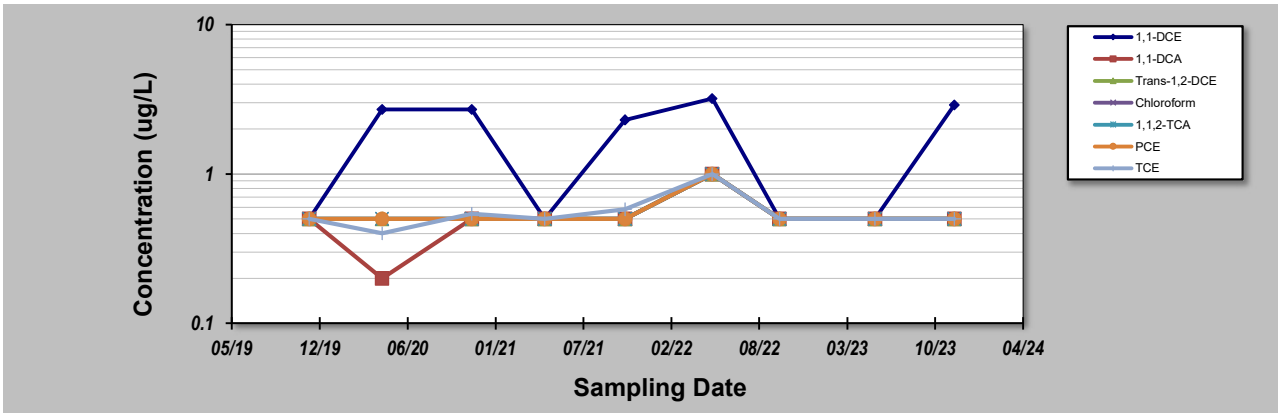
Notes:

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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	MW-14
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-14 CONCENTRATION (ug/L)						
1	7-Nov-19	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	21-Apr-20	2.7	0.2	0.5	0.5	0.5	0.5	0.4
3	11-Nov-20	2.7	0.5	0.5	0.5	0.5	0.5	0.54
4	26-Apr-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	26-Oct-21	2.3	0.5	0.5	0.5	0.5	0.5	0.58
6	12-May-22	3.2	1	1	1	1	1	1
7	12-Oct-22	0.5	0.5	0.5	0.5	0.5	0.5	0.5
8	17-May-23	0.5	0.5	0.5	0.5	0.5	0.5	0.5
9	14-Nov-23	2.9	0.5	0.5	0.5	0.5	0.5	0.5
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.69	0.39	0.30	0.30	0.30	0.30	0.31
Mann-Kendall Statistic (S):		3	7	2	2	2	2	4
Confidence Factor:		58.0%	72.8%	54.0%	54.0%	54.0%	54.0%	61.9%
Concentration Trend:		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend



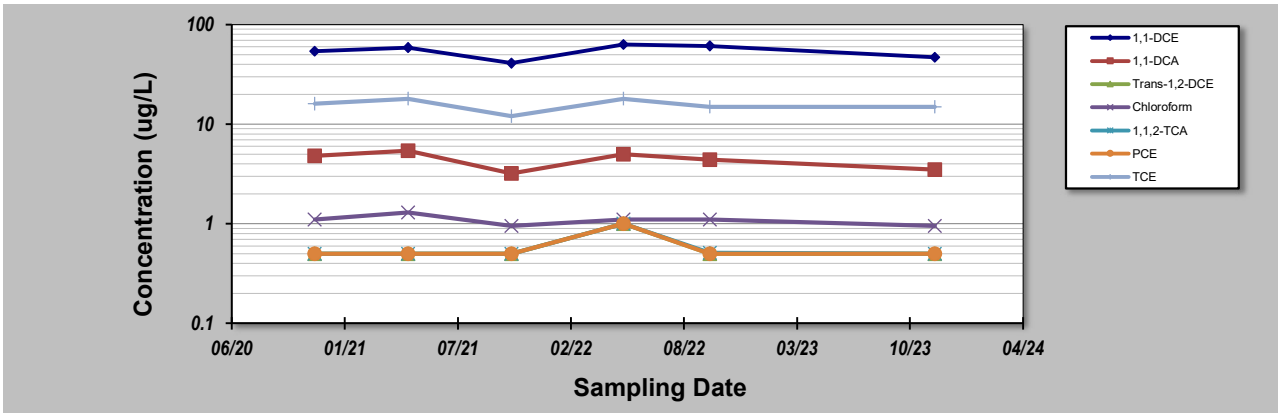
Notes:

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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	EW-1
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	EW-1 CONCENTRATION (ug/L)						
1	12-Nov-20	54	4.8	0.5	1.1	0.5	0.5	16
2	26-Apr-21	59	5.4	0.5	1.3	0.5	0.5	18
3	26-Oct-21	41	3.2	0.5	0.95	0.5	0.5	12
4	12-May-22	63	5	1	1.1	1	1	18
5	12-Oct-22	61	4.4	0.5	1.1	0.51	0.5	15
6	14-Nov-23	47	3.5	0.5	0.95	0.5	0.5	15
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.16	0.20	0.35	0.12	0.35	0.35	0.14
Mann-Kendall Statistic (S):		1	-5	1	-5	3	1	-3
Confidence Factor:		50.0%	76.5%	50.0%	76.5%	64.0%	50.0%	64.0%
Concentration Trend:		No Trend	Stable	No Trend	Stable	No Trend	No Trend	Stable



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:	13-Jan-24	Job ID:	
Facility Name:	Deer Valley	Constituent:	EW-2
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	EW-2 CONCENTRATION (ug/L)						
1	19-Nov-19	24	0.3	0.5	0.3	0.5	0.5	25
2	11-Nov-20	20	0.5	0.5	0.5	0.5	0.5	30
3	2-Nov-21	25	0.5	0.5	0.5	0.5	0.5	33
4	12-Oct-22	25	0.5	0.5	0.5	0.5	0.5	28
5	14-Nov-23	0.5	0.5	0.5	0.5	0.5	0.5	17
6								
7								
8								
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12								
13								
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18								
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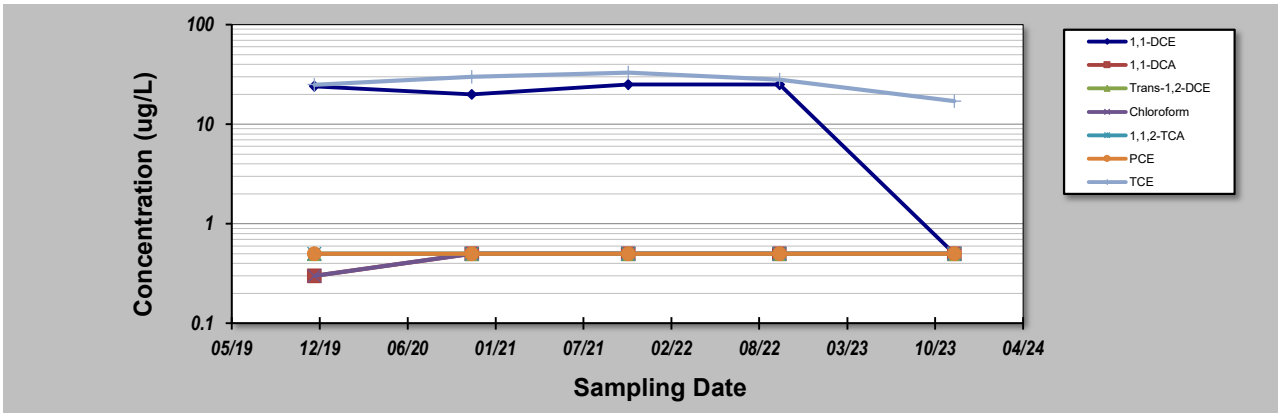
20								
Coefficient of Variation:		0.56	0.19	0.00	0.19	0.00	0.00	0.23
Mann-Kendall Statistic (S):		-1	4	0	4	0	0	-2
Confidence Factor:		50.0%	75.8%	40.8%	75.8%	40.8%	40.8%	59.2%
Concentration Trend:		Stable	No Trend	Stable	No Trend	Stable	Stable	Stable



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.
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Table F-1. Summary of Mann-Kendall Trend Statistical Analysis - 5 Year

2023 Annual Groundwater Monitoring Report

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE		1,1-DCA		Trans-1,2-DCE		Chloroform		1,1,2-TCA		PCE		TCE	
	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range
MW-1a	No Trend	120 - 1800 ug/L	No Trend	7 - 81 ug/L	No Trend	1.3 - 12 ug/L	No Trend	2.1 - 20 ug/L	Stable	0.7 - 10 ug/L	No Trend	3.2 - 11 ug/L	No Trend	35 - 180 ug/L
MW-2	Stable	86 - 270 ug/L	No Trend	7.8 - 77 ug/L	No Trend	0.6 - 1.4 ug/L	Stable	0.2 - 5 ug/L	No Trend	0.5 - 9 ug/L	Stable	0.8 - 4.3 ug/L	No Trend	6.8 - 49 ug/L
MW-3	Increasing	2.4 - 54 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Increasing	1.4 - 61 ug/L
MW-4	Increasing	4.8 - 18 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	2.9 - 4.5 ug/L
MW-5	Stable	6.2 - 16 ug/L	No Trend	0.3 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	2 - 15 ug/L
MW-6	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L
MW-7	Decreasing	1 - 5 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Increasing	0.4 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Decreasing	0.56 - 4.5 ug/L
MW-8	No Trend	0.2 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.4 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.2 - 0.5 ug/L
MW-9	Stable	0.81 - 2.2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 1 ug/L
MW-10	Stable	11 - 26 ug/L	Stable	0.51 - 1.1 ug/L	No Trend	0.2 - 1 ug/L	Stable	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Stable	3.5 - 6.4 ug/L
MW-12	Increasing	0.6 - 10 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Stable	4 - 5.4 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Increasing	0.2 - 4.3 ug/L
MW-13	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Increasing	0.5 - 1.6 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L
MW-14	No Trend	0.5 - 3.2 ug/L	No Trend	0.2 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.4 - 1 ug/L
EW-1	No Trend	41 - 63 ug/L	Stable	3.2 - 5.4 ug/L	No Trend	0.5 - 1 ug/L	Stable	0.95 - 1.3 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Stable	12 - 18 ug/L
EW-2	Stable	0.5 - 25 ug/L	No Trend	0.3 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.3 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	17 - 33 ug/L

Notes:

Non-detect concentrations were used at their detection level for purposes of the evaluation.

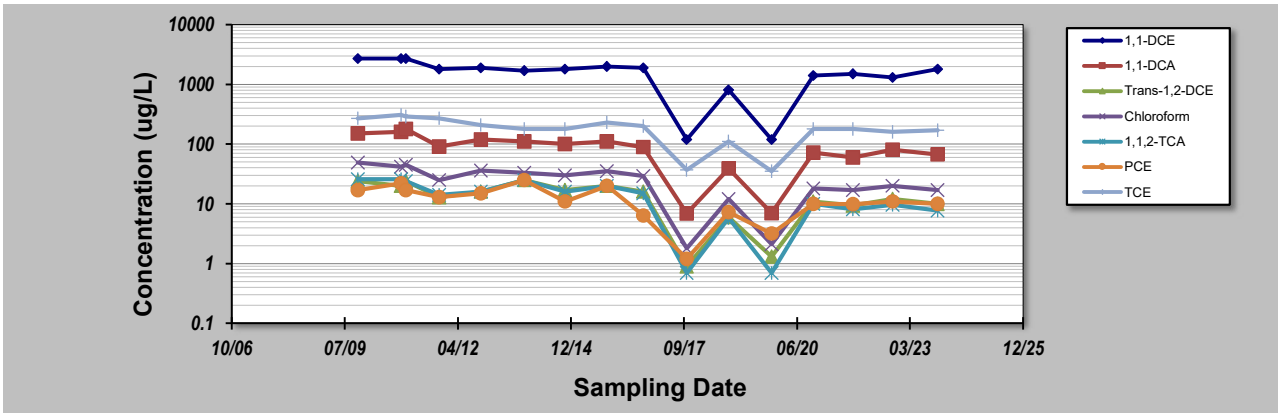
NA = Not Available

Appendix G
Trend Analysis - 15 Years

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-1A
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-1A CONCENTRATION (ug/L)						
1	29-Oct-09	2700	150	24	49	26	17	270
2	15-Nov-10	2700	160	20	42	26	22	310
3	27-Dec-10	2700	180	24	45	24	17	290
4	19-Oct-11	1800	91	13	25	14	13	270
5	22-Oct-12	1900	120	16	36	16	15	210
6	10-Nov-13	1700	110	25	33	25	25	180
7	5-Nov-14	1800	100	17	30	16	11	180
8	11-Nov-15	2000	110	20	35	20	20	230
9	28-Sep-16	1900	89	16	29	15	6.4	200
10	16-Oct-17	120	6.9	0.9	1.8	0.7	1.2	37
11	22-Oct-18	810	39	6	12	5.8	7.2	110
12	7-Nov-19	120	7	1.3	2.1	0.7	3.2	35
13	11-Nov-20	1400	72	11	18	10	10	180
14	26-Oct-21	1500	60	9.4	17	8.1	9.9	180
15	12-Oct-22	1300	81	12	20	9.6	11	160
16	14-Nov-23	1800	67	10	17	7.7	10	170
17								
18								
19								
20								
Coefficient of Variation:		0.48	0.55	0.54	0.55	0.61	0.53	0.42
Mann-Kendall Statistic (S):		-58	-69	-57	-71	-71	-49	-71
Confidence Factor:		99.6%	99.9%	99.5%	100.0%	100.0%	98.6%	100.0%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing



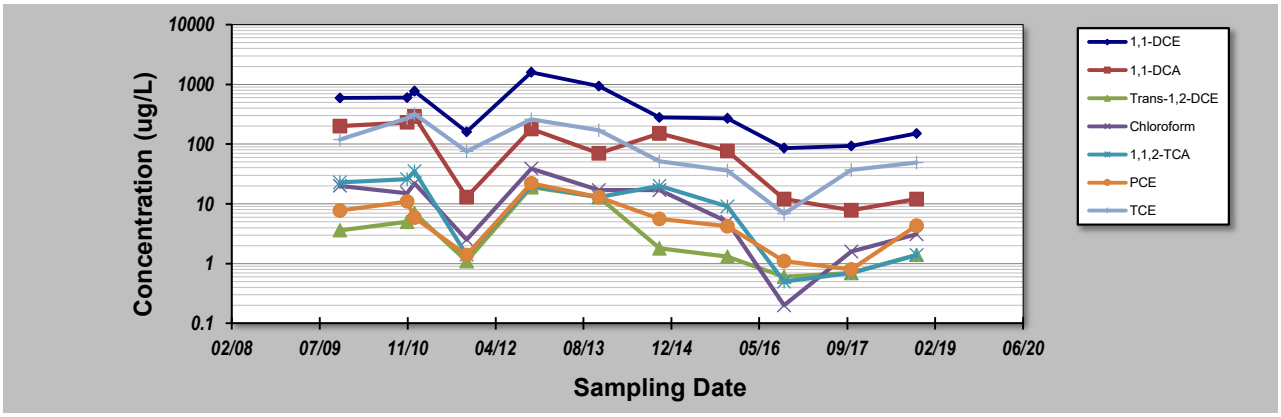
Notes:

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:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-2
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-2 CONCENTRATION (ug/L)						
1	29-Oct-09	590	200	3.6	20	23	7.7	120
2	15-Nov-10	600	230	5	15	26	11	270
3	27-Dec-10	770	290	7	22	35	5.9	320
4	19-Oct-11	160	13	1.1	2.5	1.4	1.4	75
5	22-Oct-12	1600	180	19	39	20	22	260
6	10-Nov-13	940	70	13	17	13	13	170
7	20-Oct-14	280	150	1.8	17	20	5.6	52
8	11-Nov-15	270	77	1.3	5	9	4.2	36
9	28-Sep-16	86	12	0.6	0.2	0.5	1.1	6.8
10	16-Oct-17	93	7.8	0.7	1.6	0.7	0.8	37
11	22-Oct-18	150	12	1.4	3.1	1.4	4.3	49
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.93	0.90	1.20	0.92	0.88	0.90	0.87
Mann-Kendall Statistic (S):		-23	-34	-19	-24	-31	-25	-31
Confidence Factor:		95.7%	99.6%	91.8%	96.4%	99.2%	97.0%	99.2%
Concentration Trend:		Decreasing	Decreasing	Prob. Decreasing	Decreasing	Decreasing	Decreasing	Decreasing



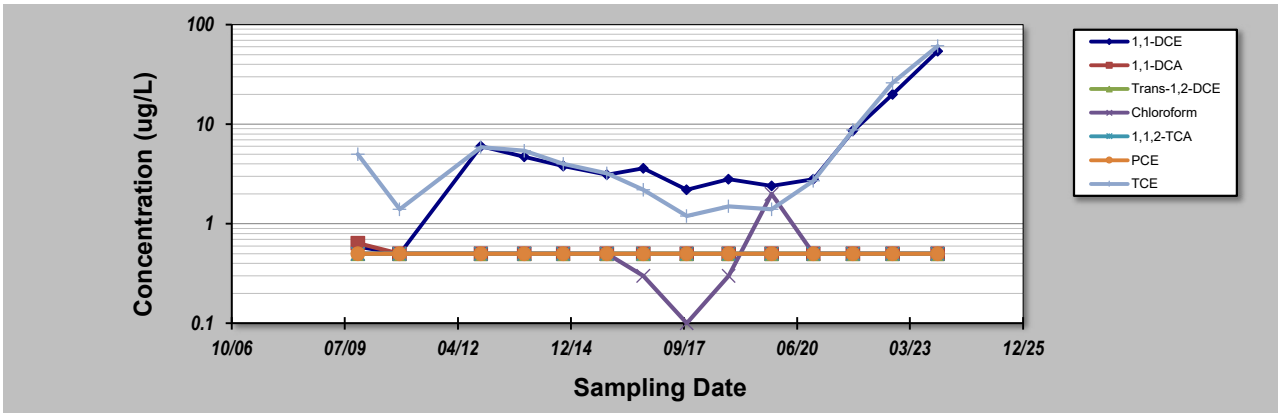
Notes:

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:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-3
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-3 CONCENTRATION (ug/L)						
1	29-Oct-09	0.59	0.64	0.5	0.5	0.5	0.5	5
2	3-Nov-10	0.5	0.5	0.5	0.5	0.5	0.5	1.4
3	22-Oct-12	6	0.5	0.5	0.5	0.5	0.5	5.9
4	10-Nov-13	4.7	0.5	0.5	0.5	0.5	0.5	5.4
5	20-Oct-14	3.8	0.5	0.5	0.5	0.5	0.5	4
6	11-Nov-15	3.1	0.5	0.5	0.5	0.5	0.5	3.2
7	28-Sep-16	3.6	0.5	0.5	0.3	0.5	0.5	2.2
8	16-Oct-17	2.2	0.5	0.5	0.1	0.5	0.5	1.2
9	22-Oct-18	2.8	0.5	0.5	0.3	0.5	0.5	1.5
10	7-Nov-19	2.4	0.5	0.5	2	0.5	0.5	1.4
11	11-Nov-20	2.8	0.5	0.5	0.5	0.5	0.5	2.7
12	26-Oct-21	8.6	0.5	0.5	0.5	0.5	0.5	8.8
13	12-Oct-22	20	0.5	0.5	0.5	0.5	0.5	26
14	14-Nov-23	54	0.5	0.5	0.5	0.5	0.5	61
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		1.71	0.07	0.00	0.79	0.00	0.00	1.75
Mann-Kendall Statistic (S):		28	-13	0	-1	0	0	12
Confidence Factor:		92.9%	74.1%	47.8%	50.0%	47.8%	47.8%	72.3%
Concentration Trend:		Prob. Increasing	Stable	Stable	Stable	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.*
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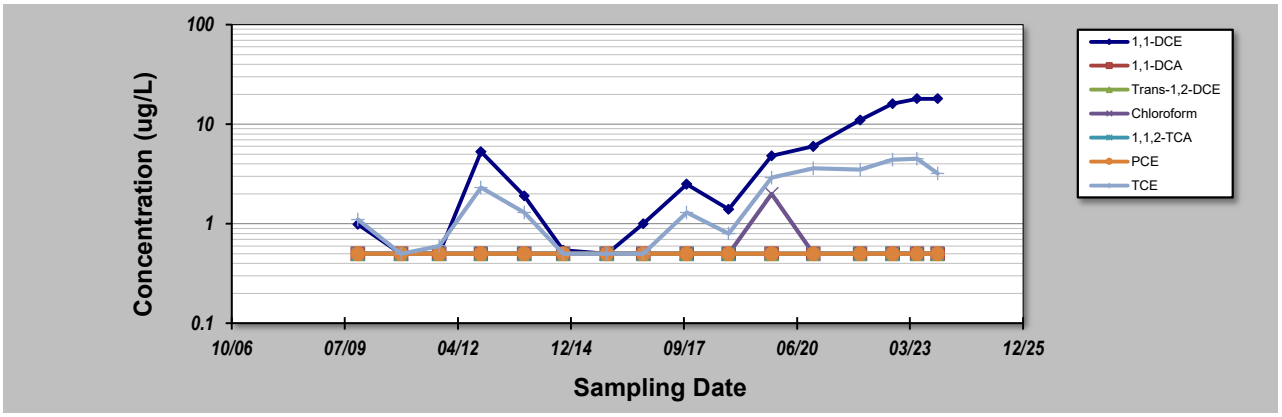
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-4
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-4 CONCENTRATION (ug/L)						
1	30-Oct-09	0.99	0.5	0.5	0.5	0.5	0.5	1.1
2	15-Nov-10	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3	19-Oct-11	0.5	0.5	0.5	0.5	0.5	0.5	0.6
4	22-Oct-12	5.3	0.5	0.5	0.5	0.5	0.5	2.3
5	10-Nov-13	1.9	0.5	0.5	0.5	0.5	0.5	1.3
6	20-Oct-14	0.54	0.5	0.5	0.5	0.5	0.5	0.5
7	11-Nov-15	0.5	0.5	0.5	0.5	0.5	0.5	0.5
8	28-Sep-16	1	0.5	0.5	0.5	0.5	0.5	0.5
9	16-Oct-17	2.5	0.5	0.5	0.5	0.5	0.5	1.3
10	22-Oct-18	1.4	0.5	0.5	0.5	0.5	0.5	0.8
11	7-Nov-19	4.8	0.5	0.5	2	0.5	0.5	2.9
12	11-Nov-20	6	0.5	0.5	0.5	0.5	0.5	3.6
13	29-Dec-21	11	0.5	0.5	0.5	0.5	0.5	3.5
14	12-Oct-22	16	0.5	0.5	0.5	0.5	0.5	4.4
15	17-May-23	18	0.5	0.5	0.5	0.5	0.5	4.5
16	14-Nov-23	18	0.5	0.5	0.5	0.5	0.5	3.2
17								
18								
19								
20								
Coefficient of Variation:		1.17	0.00	0.00	0.63	0.00	0.00	0.76
Mann-Kendall Statistic (S):		82	0	0	5	0	0	63
Confidence Factor:		>99.9%	48.2%	48.2%	57.1%	48.2%	48.2%	99.8%
Concentration Trend:		Increasing	Stable	Stable	No Trend	Stable	Stable	Increasing



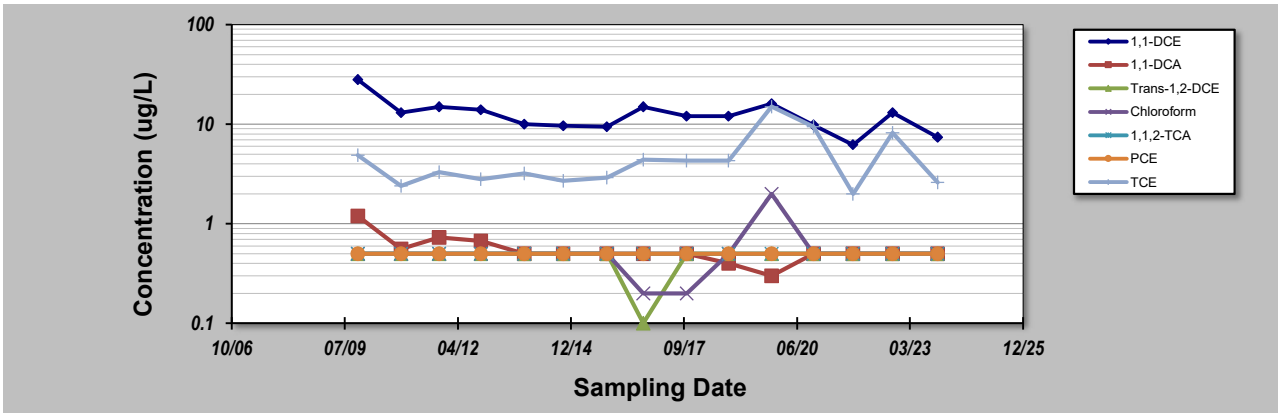
Notes:

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:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-5
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-5 CONCENTRATION (ug/L)						
1	29-Oct-09	28	1.2	0.5	0.5	0.5	0.5	4.9
2	15-Nov-10	13	0.56	0.5	0.5	0.5	0.5	2.4
3	19-Oct-11	15	0.73	0.5	0.5	0.5	0.5	3.3
4	22-Oct-12	14	0.67	0.5	0.5	0.5	0.5	2.8
5	10-Nov-13	10	0.5	0.5	0.5	0.5	0.5	3.2
6	20-Oct-14	9.6	0.5	0.5	0.5	0.5	0.5	2.7
7	11-Nov-15	9.4	0.5	0.5	0.5	0.5	0.5	2.9
8	28-Sep-16	15	0.5	0.1	0.2	0.5	0.5	4.4
9	16-Oct-17	12	0.5	0.5	0.2	0.5	0.5	4.3
10	22-Oct-18	12	0.4	0.5	0.5	0.5	0.5	4.3
11	7-Nov-19	16	0.3	0.5	2	0.5	0.5	15
12	12-Nov-20	9.8	0.5	0.5	0.5	0.5	0.5	9.4
13	26-Oct-21	6.2	0.5	0.5	0.5	0.5	0.5	2
14	12-Oct-22	13	0.5	0.5	0.5	0.5	0.5	8.2
15	14-Nov-23	7.4	0.5	0.5	0.5	0.5	0.5	2.6
16								
17								
18								
19								
20								
Coefficient of Variation:		0.40	0.36	0.22	0.74	0.00	0.00	0.73
Mann-Kendall Statistic (S):		-38	-49	0	2	0	0	14
Confidence Factor:		96.7%	99.2%	48.0%	52.0%	48.0%	48.0%	73.7%
Concentration Trend:		Decreasing	Decreasing	Stable	No Trend	Stable	Stable	No Trend



Notes:

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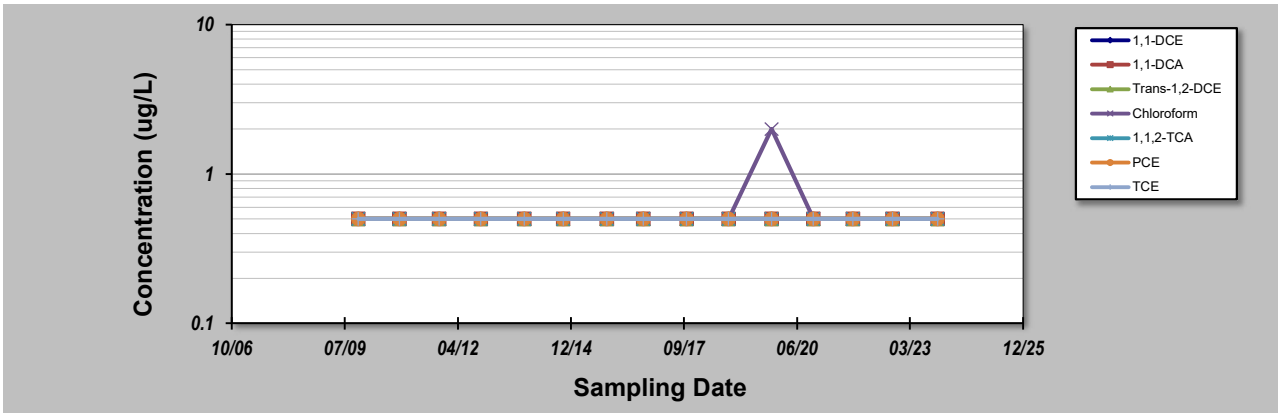
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-6
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-6 CONCENTRATION (ug/L)						
1	2-Nov-09	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	3-Nov-10	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3	19-Oct-11	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	22-Oct-12	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	10-Nov-13	0.5	0.5	0.5	0.5	0.5	0.5	0.5
6	20-Oct-14	0.5	0.5	0.5	0.5	0.5	0.5	0.5
7	11-Nov-15	0.5	0.5	0.5	0.5	0.5	0.5	0.5
8	28-Sep-16	0.5	0.5	0.5	0.5	0.5	0.5	0.5
9	16-Oct-17	0.5	0.5	0.5	0.5	0.5	0.5	0.5
10	22-Oct-18	0.5	0.5	0.5	0.5	0.5	0.5	0.5
11	7-Nov-19	0.5	0.5	0.5	2	0.5	0.5	0.5
12	11-Nov-20	0.5	0.5	0.5	0.5	0.5	0.5	0.5
13	26-Oct-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
14	12-Oct-22	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	14-Nov-23	0.5	0.5	0.5	0.5	0.5	0.5	0.5
16								
17								
18								
19								
20								
Coefficient of Variation:		0.00	0.00	0.00	0.65	0.00	0.00	0.00
Mann-Kendall Statistic (S):		0	0	0	6	0	0	0
Confidence Factor:		48.0%	48.0%	48.0%	59.6%	48.0%	48.0%	48.0%
Concentration Trend:		Stable	Stable	Stable	No Trend	Stable	Stable	Stable



Notes:

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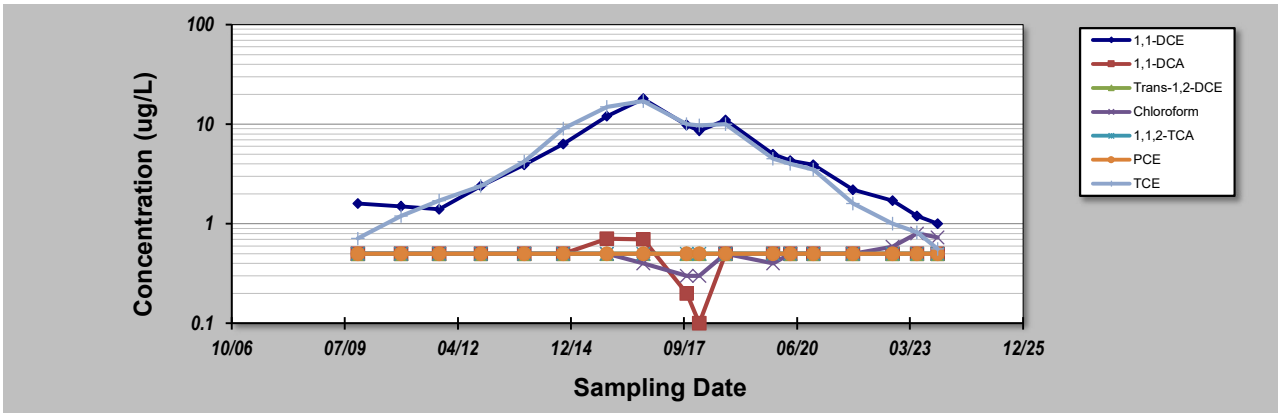
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-7
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-7 CONCENTRATION (ug/L)						
1	29-Oct-09	1.6	0.5	0.5	0.5	0.5	0.5	0.71
2	15-Nov-10	1.5	0.5	0.5	0.5	0.5	0.5	1.2
3	19-Oct-11	1.4	0.5	0.5	0.5	0.5	0.5	1.7
4	22-Oct-12	2.4	0.5	0.5	0.5	0.5	0.5	2.4
5	10-Nov-13	3.9	0.5	0.5	0.5	0.5	0.5	4.2
6	20-Oct-14	6.3	0.5	0.5	0.5	0.5	0.5	9
7	11-Nov-15	12	0.71	0.5	0.5	0.5	0.5	15
8	28-Sep-16	18	0.7	0.5	0.4	0.5	0.5	17
9	16-Oct-17	9.8	0.2	0.5	0.3	0.5	0.5	10
10	6-Feb-18	8.6	0.1	0.5	0.3	0.5	0.5	9.7
11	26-Sep-18	11	0.5	0.5	0.5	0.5	0.5	10
12	19-Nov-19	5	0.5	0.5	0.4	0.5	0.5	4.5
13	21-Apr-20	4.3	0.5	0.5	0.5	0.5	0.5	4
14	11-Nov-20	3.9	0.5	0.5	0.5	0.5	0.5	3.5
15	26-Oct-21	2.2	0.5	0.5	0.5	0.5	0.5	1.6
16	12-Oct-22	1.7	0.5	0.5	0.59	0.5	0.5	1
17	17-May-23	1.2	0.5	0.5	0.8	0.5	0.5	0.82
18	14-Nov-23	1	0.5	0.5	0.73	0.5	0.5	0.56
19								
20								
Coefficient of Variation:		0.89	0.29	0.00	0.24	0.00	0.00	0.95
Mann-Kendall Statistic (S):		-22	-6	0	32	0	0	-24
Confidence Factor:		78.4%	57.4%	48.5%	87.8%	48.5%	48.5%	80.6%
Concentration Trend:		Stable	Stable	Stable	No Trend	Stable	Stable	Stable



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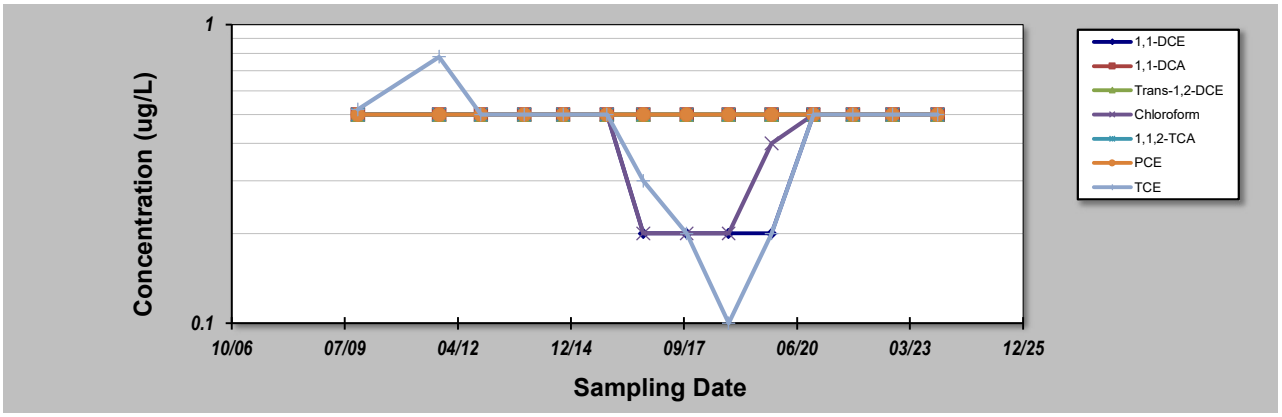
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-8
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-8 CONCENTRATION (ug/L)						
1	30-Oct-09	0.5	0.5	0.5	0.5	0.5	0.5	0.52
2	19-Oct-11	0.5	0.5	0.5	0.5	0.5	0.5	0.78
3	22-Oct-12	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	10-Nov-13	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	20-Oct-14	0.5	0.5	0.5	0.5	0.5	0.5	0.5
6	11-Nov-15	0.5	0.5	0.5	0.5	0.5	0.5	0.5
7	28-Sep-16	0.2	0.5	0.5	0.2	0.5	0.5	0.3
8	16-Oct-17	0.2	0.5	0.5	0.2	0.5	0.5	0.2
9	22-Oct-18	0.2	0.5	0.5	0.2	0.5	0.5	0.1
10	7-Nov-19	0.2	0.5	0.5	0.4	0.5	0.5	0.2
11	11-Nov-20	0.5	0.5	0.5	0.5	0.5	0.5	0.5
12	26-Oct-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
13	12-Oct-22	0.5	0.5	0.5	0.5	0.5	0.5	0.5
14	14-Nov-23	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.34	0.00	0.00	0.30	0.00	0.00	0.40
Mann-Kendall Statistic (S):		-8	0	0	-5	0	0	-26
Confidence Factor:		64.6%	47.8%	47.8%	58.5%	47.8%	47.8%	91.3%
Concentration Trend:		Stable	Stable	Stable	Stable	Stable	Stable	Prob. Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
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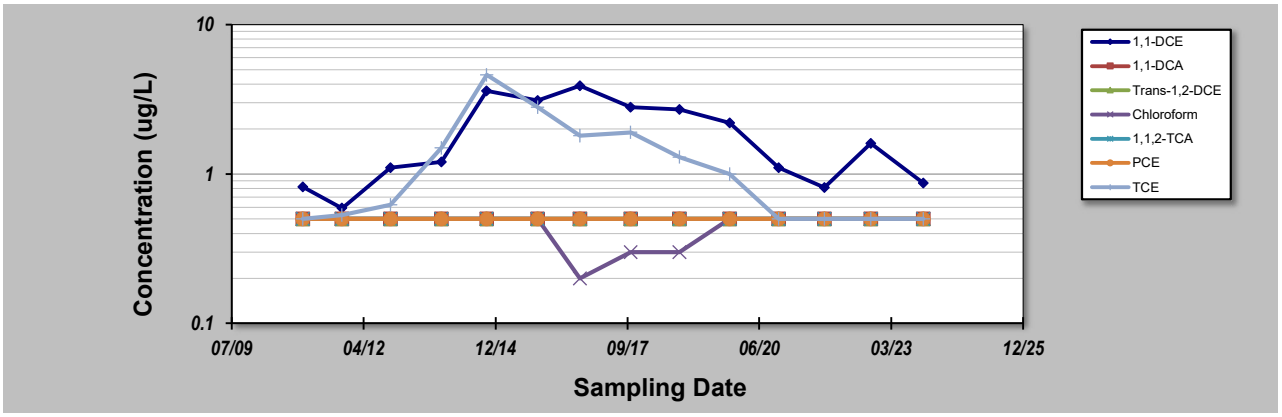
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-9
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-9 CONCENTRATION (ug/L)						
1	27-Dec-10	0.82	0.5	0.5	0.5	0.5	0.5	0.5
2	19-Oct-11	0.59	0.5	0.5	0.5	0.5	0.5	0.53
3	22-Oct-12	1.1	0.5	0.5	0.5	0.5	0.5	0.62
4	10-Nov-13	1.2	0.5	0.5	0.5	0.5	0.5	1.5
5	20-Oct-14	3.6	0.5	0.5	0.5	0.5	0.5	4.6
6	11-Nov-15	3.1	0.5	0.5	0.5	0.5	0.5	2.8
7	28-Sep-16	3.9	0.5	0.5	0.2	0.5	0.5	1.8
8	16-Oct-17	2.8	0.5	0.5	0.3	0.5	0.5	1.9
9	22-Oct-18	2.7	0.5	0.5	0.3	0.5	0.5	1.3
10	7-Nov-19	2.2	0.5	0.5	0.5	0.5	0.5	1
11	12-Nov-20	1.1	0.5	0.5	0.5	0.5	0.5	0.5
12	26-Oct-21	0.81	0.5	0.5	0.5	0.5	0.5	0.5
13	12-Oct-22	1.6	0.5	0.5	0.5	0.5	0.5	0.5
14	14-Nov-23	0.87	0.5	0.5	0.5	0.5	0.5	0.5
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.60	0.00	0.00	0.23	0.00	0.00	0.89
Mann-Kendall Statistic (S):		-4	0	0	-1	0	0	-23
Confidence Factor:		56.4%	47.8%	47.8%	50.0%	47.8%	47.8%	88.3%
Concentration Trend:		Stable	Stable	Stable	Stable	Stable	Stable	Stable



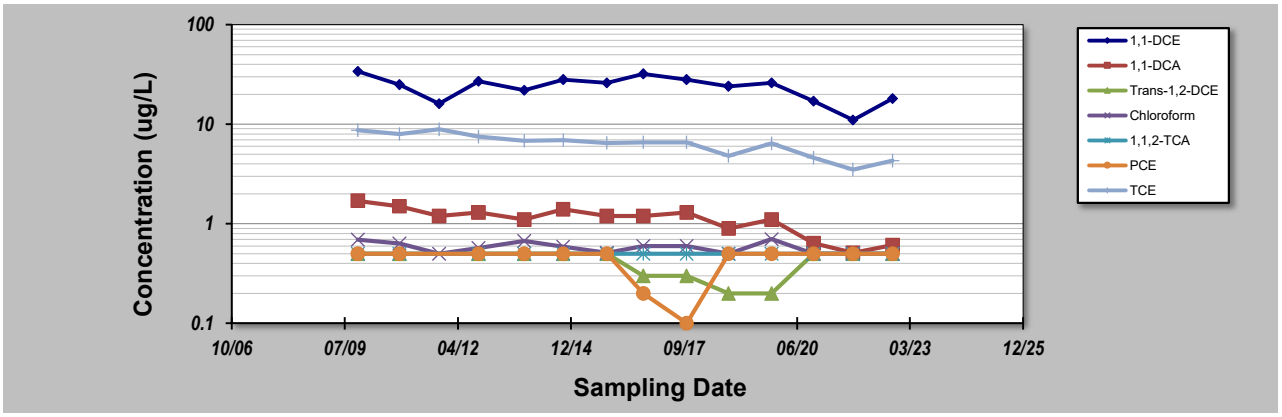
Notes:

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:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-10
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-10 CONCENTRATION (ug/L)						
1	29-Oct-09	34	1.7	0.5	0.69	0.5	0.5	8.7
2	3-Nov-10	25	1.5	0.5	0.63	0.5	0.5	8
3	19-Oct-11	16	1.2		0.5			8.9
4	1-Oct-12	27	1.3	0.5	0.57	0.5	0.5	7.5
5	10-Nov-13	22	1.1	0.5	0.67	0.5	0.5	6.8
6	20-Oct-14	28	1.4	0.5	0.59	0.5	0.5	6.9
7	11-Nov-15	26	1.2	0.5	0.51	0.5	0.5	6.5
8	28-Sep-16	32	1.2	0.3	0.6	0.5	0.2	6.6
9	16-Oct-17	28	1.3	0.3	0.6	0.5	0.1	6.6
10	23-Oct-18	24	0.9	0.2	0.5	0.5	0.5	4.8
11	7-Nov-19	26	1.1	0.2	0.7	0.5	0.5	6.4
12	12-Nov-20	17	0.64	0.5	0.5	0.5	0.5	4.6
13	26-Oct-21	11	0.51	0.5	0.5	0.5	0.5	3.5
14	12-Oct-22	18	0.61	0.5	0.5	0.5	0.5	4.3
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.27	0.31	0.29	0.13	0.00	0.30	0.25
Mann-Kendall Statistic (S):		-27	-62	-16	-30	0	-3	-76
Confidence Factor:		92.1%	>99.9%	81.6%	94.4%	47.6%	54.8%	>99.9%
Concentration Trend:		Prob. Decreasing	Decreasing	Stable	Prob. Decreasing	Stable	Stable	Decreasing



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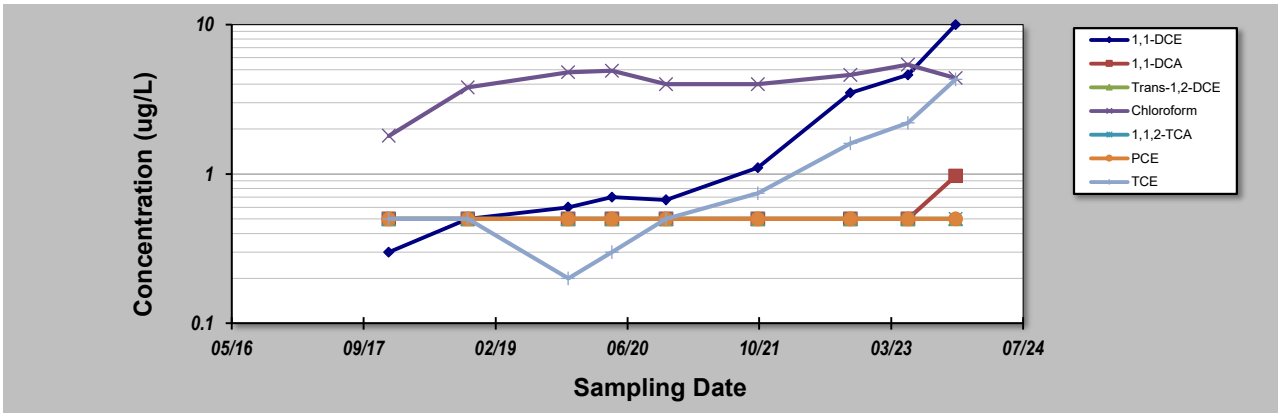
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-12
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-12 CONCENTRATION (ug/L)						
1	26-Dec-17	0.3	0.5	0.5	1.8	0.5	0.5	0.5
2	22-Oct-18	0.5	0.5	0.5	3.8	0.5	0.5	0.5
3	7-Nov-19	0.6	0.5	0.5	4.8	0.5	0.5	0.2
4	21-Apr-20	0.7	0.5	0.5	4.9	0.5	0.5	0.3
5	11-Nov-20	0.67	0.5	0.5	4	0.5	0.5	0.5
6	26-Oct-21	1.1	0.5	0.5	4	0.5	0.5	0.74
7	12-Oct-22	3.5	0.5	0.5	4.6	0.5	0.5	1.6
8	17-May-23	4.6	0.5	0.5	5.4	0.5	0.5	2.2
9	14-Nov-23	10	0.97	0.5	4.4	0.5	0.5	4.3
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		1.32	0.28	0.00	0.25	0.00	0.00	1.11
Mann-Kendall Statistic (S):		34	8	0	15	0	0	25
Confidence Factor:		>99.9%	76.2%	46.0%	92.5%	46.0%	46.0%	99.6%
Concentration Trend:		Increasing	No Trend	Stable	Prob. Increasing	Stable	Stable	Increasing



Notes:

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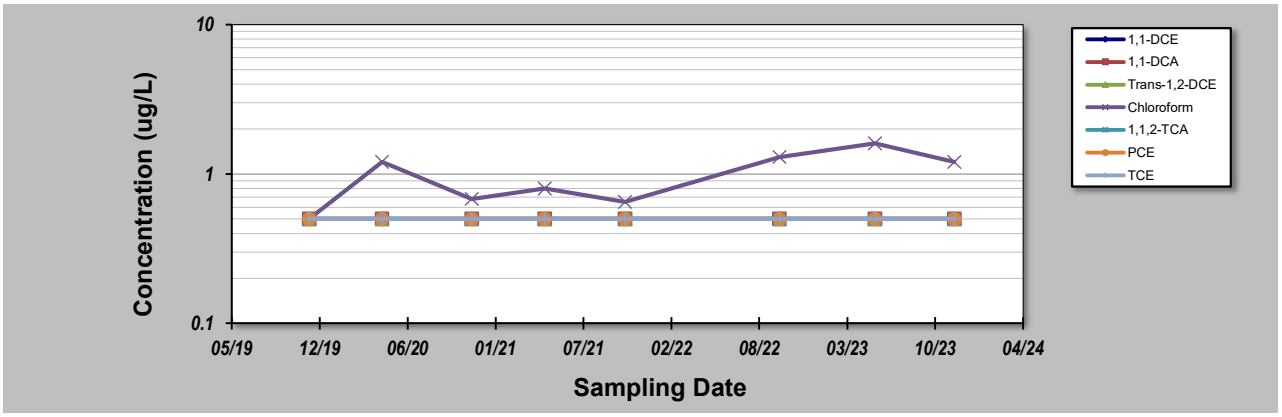
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-13
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-13 CONCENTRATION (ug/L)						
1	7-Nov-19	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	21-Apr-20	0.5	0.5	0.5	1.2	0.5	0.5	0.5
3	11-Nov-20	0.5	0.5	0.5	0.68	0.5	0.5	0.5
4	26-Apr-21	0.5	0.5	0.5	0.8	0.5	0.5	0.5
5	26-Oct-21	0.5	0.5	0.5	0.65	0.5	0.5	0.5
6	12-Oct-22	0.5	0.5	0.5	1.3	0.5	0.5	0.5
7	17-May-23	0.5	0.5	0.5	1.6	0.5	0.5	0.5
8	14-Nov-23	0.5	0.5	0.5	1.2	0.5	0.5	0.5
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.00	0.00	0.00	0.39	0.00	0.00	0.00
Mann-Kendall Statistic (S):		0	0	0	13	0	0	0
Confidence Factor:		45.2%	45.2%	45.2%	92.9%	45.2%	45.2%	45.2%
Concentration Trend:		Stable	Stable	Stable	Prob. Increasing	Stable	Stable	Stable



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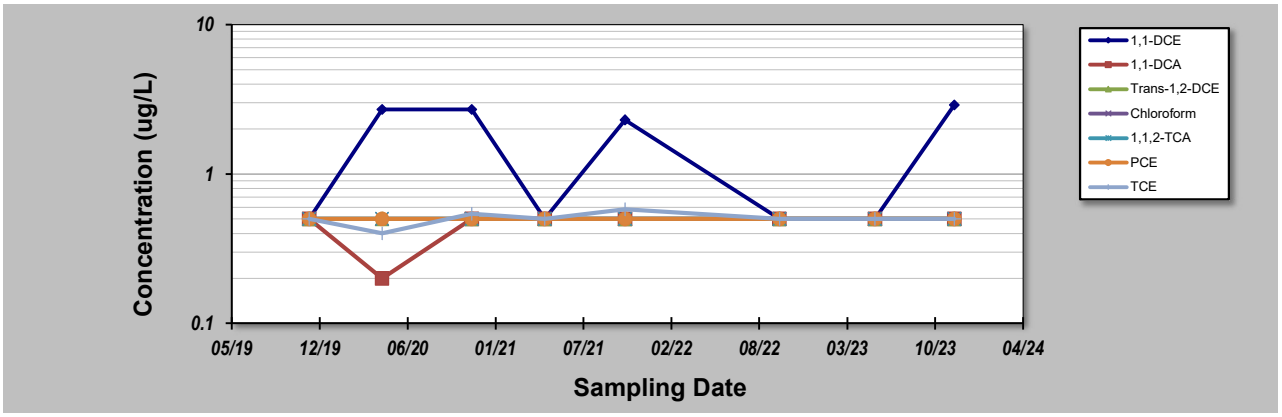
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	MW-14
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	MW-14 CONCENTRATION (ug/L)						
1	7-Nov-19	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	21-Apr-20	2.7	0.2	0.5	0.5	0.5	0.5	0.4
3	11-Nov-20	2.7	0.5	0.5	0.5	0.5	0.5	0.54
4	26-Apr-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	26-Oct-21	2.3	0.5	0.5	0.5	0.5	0.5	0.58
6	12-Oct-22	0.5	0.5	0.5	0.5	0.5	0.5	0.5
7	17-May-23	0.5	0.5	0.5	0.5	0.5	0.5	0.5
8	14-Nov-23	2.9	0.5	0.5	0.5	0.5	0.5	0.5
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.74	0.23	0.00	0.00	0.00	0.00	0.10
Mann-Kendall Statistic (S):		1	5	0	0	0	0	2
Confidence Factor:		50.0%	68.3%	45.2%	45.2%	45.2%	45.2%	54.8%
Concentration Trend:		No Trend	No Trend	Stable	Stable	Stable	Stable	No Trend



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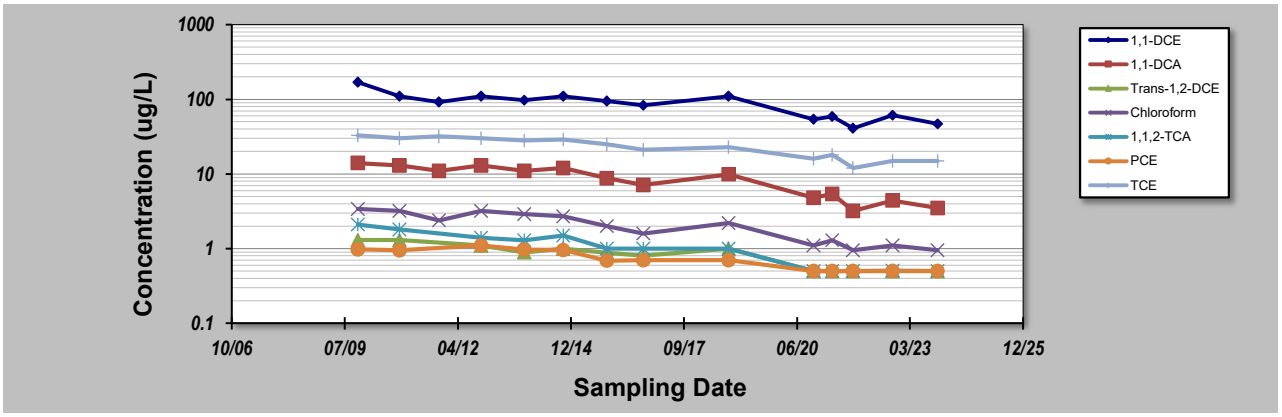
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	EW-1
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	EW-1 CONCENTRATION (ug/L)						
1	29-Oct-09	170	14	1.3	3.4	2.1	0.98	33
2	3-Nov-10	110	13	1.3	3.2	1.8	0.95	30
3	17-Oct-11	92	11		2.4			32
4	23-Oct-12	110	13	1.1	3.2	1.4	1.1	30
5	10-Nov-13	98	11	0.89	2.9	1.3	0.97	28
6	20-Oct-14	110	12	1	2.7	1.5	0.96	29
7	11-Nov-15	95	8.8	0.88	2	1	0.69	25
8	28-Sep-16	83	7.1	0.8	1.6	1	0.7	21
9	23-Oct-18	110	9.9	1	2.2	1	0.7	23
10	12-Nov-20	54	4.8	0.5	1.1	0.5	0.5	16
11	26-Apr-21	59	5.4	0.5	1.3	0.5	0.5	18
12	26-Oct-21	41	3.2	0.5	0.95	0.5	0.5	12
13	12-Oct-22	61	4.4	0.5	1.1	0.51	0.5	15
14	14-Nov-23	47	3.5	0.5	0.95	0.5	0.5	15
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.39	0.44	0.37	0.44	0.52	0.31	0.31
Mann-Kendall Statistic (S):		-57	-73	-58	-74	-59	-55	-77
Confidence Factor:		99.9%	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing



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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	13-Jan-24	Job ID:	
Facility Name:	Peoria	Constituent:	EW-2
Conducted By:	Victor Gamez Grijalva	Concentration Units:	ug/L

Sampling Point ID:	1,1-DCE	1,1-DCA	Trans-1,2-DCE	Chloroform	1,1,2-TCA	PCE	TCE
Sampling Event	Sampling Date	EW-2 CONCENTRATION (ug/L)						
1	19-Oct-11	20	0.75	0.5	0.5	0.5	0.5	4.4
2	22-Oct-12	16	0.63	0.5	0.5	0.5	0.5	4.3
3	10-Nov-13	17	0.5	0.5	0.5	0.5	0.5	5.4
4	20-Oct-14	11	0.5	0.5	0.5	0.5	0.5	5.2
5	11-Nov-15	10	0.5	0.5	0.5	0.5	0.5	5.7
6	18-Oct-16	19	0.4	0.5	0.2	0.5	0.5	11
7	27-Nov-17	17	0.4	0.5	0.5	0.5	0.5	13
8	22-Oct-18	24	0.3	0.5	0.2	0.5	0.5	17
9	19-Nov-19	24	0.3	0.5	0.3	0.5	0.5	25
10	11-Nov-20	20	0.5	0.5	0.5	0.5	0.5	30
11	2-Nov-21	25	0.5	0.5	0.5	0.5	0.5	33
12	12-Oct-22	25	0.5	0.5	0.5	0.5	0.5	28
13	14-Nov-23	0.5	0.5	0.5	0.5	0.5	0.5	17
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.40	0.25	0.00	0.27	0.00	0.00	0.69
Mann-Kendall Statistic (S):		22	-23	0	-2	0	0	61
Confidence Factor:		89.8%	90.8%	47.6%	52.4%	47.6%	47.6%	>99.9%
Concentration Trend:		No Trend	Prob. Decreasing	Stable	Stable	Stable	Stable	Increasing

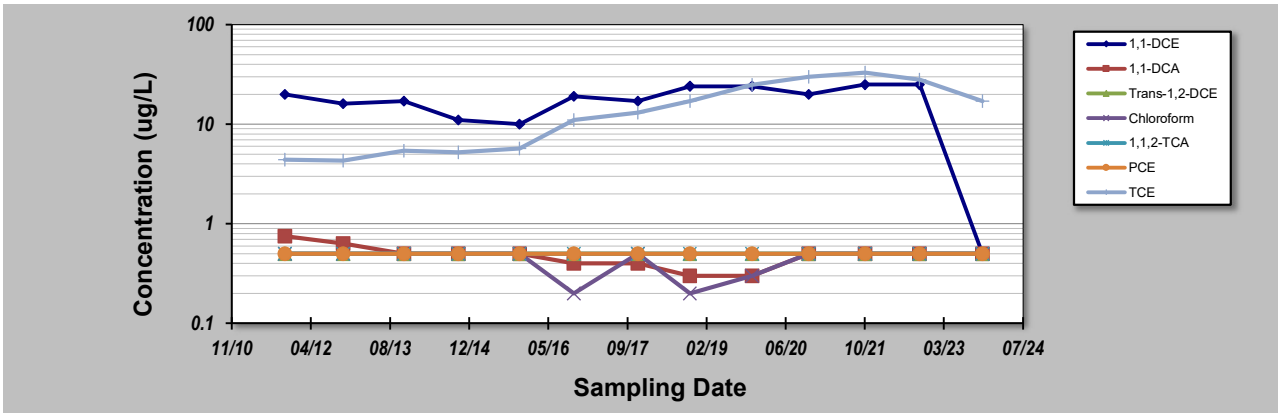

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Table G-1. Summary of Mann-Kendall Trend Statistical Analysis - 15 Year

2023 Annual Groundwater Monitoring Report

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	1,1-DCE		1,1-DCA		Trans-1,2-DCE		Chloroform		1,1,2-TCA		PCE		TCE	
	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range	Trend	Concentration Range
MW-1a	Decreasing	120 - 2700 ug/L	Decreasing	6.9 - 180 ug/L	Decreasing	0.9 - 25 ug/L	Decreasing	1.8 - 49 ug/L	Decreasing	0.7 - 26 ug/L	Decreasing	1.2 - 25 ug/L	Decreasing	35 - 310 ug/L
MW-2	Decreasing	86 - 1600 ug/L	Decreasing	7.8 - 290 ug/L	Prob. Decreasing	0.6 - 19 ug/L	Decreasing	0.2 - 39 ug/L	Decreasing	0.5 - 35 ug/L	Decreasing	0.8 - 22 ug/L	Decreasing	6.8 - 320 ug/L
MW-3	Prob. Increasing	0.5 - 54 ug/L	Stable	0.5 - 0.64 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.1 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	1.2 - 61 ug/L
MW-4	Increasing	0.5 - 18 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.5 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Increasing	0.5 - 4.5 ug/L
MW-5	Decreasing	6.2 - 28 ug/L	Decreasing	0.3 - 1.2 ug/L	Stable	0.1 - 0.5 ug/L	No Trend	0.2 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	2 - 15 ug/L
MW-6	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.5 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L
MW-7	Stable	1 - 18 ug/L	Stable	0.1 - 0.71 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.3 - 0.8 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.56 - 17 ug/L
MW-8	Stable	0.2 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.2 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Prob. Decreasing	0.1 - 0.78 ug/L
MW-9	Stable	0.59 - 3.9 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.2 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 4.6 ug/L
MW-10	Prob. Decreasing	11 - 34 ug/L	Decreasing	0.51 - 1.7 ug/L	Stable	0.2 - 0.5 ug/L	Prob. Decreasing	0.5 - 0.7 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.1 - 0.5 ug/L	Decreasing	3.5 - 8.9 ug/L
MW-12	Increasing	0.3 - 10 ug/L	No Trend	0.5 - 0.97 ug/L	Stable	0.5 - 0.5 ug/L	Prob. Increasing	1.8 - 5.4 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Increasing	0.2 - 4.3 ug/L
MW-13	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Prob. Increasing	0.5 - 1.6 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L
MW-14	No Trend	0.5 - 2.9 ug/L	No Trend	0.2 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.4 - 0.58 ug/L
EW-1	Decreasing	41 - 170 ug/L	Decreasing	3.2 - 14 ug/L	Decreasing	0.5 - 1.3 ug/L	Decreasing	0.95 - 3.4 ug/L	Decreasing	0.5 - 2.1 ug/L	Decreasing	0.5 - 1.1 ug/L	Decreasing	12 - 33 ug/L
EW-2	No Trend	0.5 - 25 ug/L	Prob. Decreasing	0.3 - 0.75 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.2 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Increasing	4.3 - 33 ug/L

Notes:

Non-detect concentrations were used at their detection level for purposes of the evaluation.

NA = Not Available