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March 31, 2023

Mr. David Christiana
Phoenix Active Management Area
Arizona Department of Water Resources
1110 West Washington Street, Suite 310
Phoenix, AZ 85007

Subject: **Annual Report for 2022 Poor Quality Groundwater Withdrawal Permit No. 59-570144.0002**

Dear Mr. Christiana:

In accordance with requirements of the Poor Quality Groundwater Withdrawal Permit Number (No.) 59-570144.0002, issued June 11, 2009, this report has been prepared for extraction wells EW-1 (55-570189), EW-2 (55-570190), and MW-10 (55-556637).

This report is for the period from January 1, 2022, through December 31, 2022.

If you have any questions or concerns, please contact me at 602-327-3807.

Sincerely,

Jacobs Engineering Group Inc.

Baine Foehr
Project Manager

C: Jennifer Widlowski, Arizona Department of Environmental Quality
Tao Wu, Honeywell International Inc.

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

Annual Groundwater Monitoring Report for 2022

March 2023

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

Honeywell International Inc.

EXPIRES: 12/31/2023

Executive Summary

This *Annual Groundwater Monitoring Report for 2022* 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 1.43 foot since the previous annual monitoring event, in 2021. 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 2022 water quality samples showed that 5 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 exceeded the AAWQS for 1,1-DCE but was below the AAWQS for other constituents.
- Concentrations of 1,1-DCE and 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 well MW-4.
- When using the data available over the previous 5 years for trend analysis evaluation, three wells presented an upward trend for TCE concentrations (MW-3, MW-4, and MW-12). Wells MW-4 and MW-12 presented an upward trend for 1,1-DCE concentrations. An upward trend was also observed for chloroform concentrations at well MW-7. 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	No trend	No trend	No trend
	120–1500	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
	86–270	7.8–77	0.6–1.4	0.2–5	0.5–**9**	0.8–4.3	**6.8–49**

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-3	Probably increasing	Stable	Stable	No trend	Stable	Stable	Increasing
	2.2–**20**	0.5–0.5	0.5–0.5	0.3–2	0.5–0.5	0.5–0.5	1.4–**26**
MW-4	Increasing	Stable	Stable	Stable	Stable	Stable	Increasing
	1.4–**16**	0.5–0.5	0.5–0.5	0.5–2	0.5–0.5	0.5–0.5	0.8–4.4
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
	1.7–**11**	0.1–1	0.5–1	0.3–1	0.5–1	0.5–1	1–**10**
MW-8	No trend	Stable	Stable	Probably increasing	Stable	Stable	Probably increasing
	0.2–0.5	0.5–0.5	0.5–0.5	0.2–0.5	0.5–0.5	0.5–0.5	0.1–0.5
MW-9	Stable	Stable	Stable	No trend	Stable	Stable	Probably decreasing
	0.81–0.27	0.5–0.5	0.5–0.5	0.3–0.5	0.5–0.5	0.5–0.5	0.5–1.3
MW-10	Stable	Stable	Probably increasing	No trend	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	No trend	No trend	No trend	Increasing
	0.5–3.5	0.5–1	0.5–1	3.8–4.9	0.5–1	0.5–1	0.2–1.6
MW-13	No trend	No trend	No trend	No trend	No trend	No trend	No trend
	0.5–1	0.5–1	0.5–1	0.5–1.5	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	Stable	Stable	Stable	Stable	No trend	Stable	Stable
	41–110	3.2–9.9	0.5–1	0.95–2.2	0.5–1	0.5–1	**12–23**

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)
EW-2	No trend	No trend	Stable	Probably increasing	Stable	Stable	No trend
	20–25	0.3–0.5	0.5–0.5	0.2–0.5	0.5–0.5	0.5–0.5	**17–33**

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 two wells presented an upward trend for TCE concentrations (MW-4 and EW-2). Three wells presented an upward trend for 1,1-DCE concentrations (MW-4, MW-12, and EW-2). 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	Probably deceasing	Decreasing	Decreasing	Decreasing	Decreasing
	120–2700	6.9–180	0.9–25	1.8–50	0.7–26	1.2–25	**35–310**
MW-2	Stable	Decreasing	Probably decreasing	Decreasing	Decreasing	Probably decreasing	Probably decreasing
	82–1600	7.8–290	0.6–19	0.2–39	0.5–35	0.8–22	**6.8–320**
MW-3	No trend	Probably decreasing	Stable	Stable	Stable	Stable	No trend
	0.5–**30**	0.5–1.3	0.5–0.5	0.1–2	0.5–0.5	0.5–0.5	1.2–**26**
MW-4	Increasing	Stable	Stable	No trend	Stable	Stable	Increasing
	0.5–**16**	0.5–0.5	0.5–0.5	0.5–2	0.5–0.5	0.5–0.5	0.5–4.4
MW-5	Decreasing	Decreasing	Stable	Stable	Stable	Stable	No trend

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)
	6.2–**38**	0.3–2.2	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
MW-7	No trend	Stable	Stable	Stable	Stable	Stable	No trend
	0.5–**18**	0.1–0.71	0.5–0.5	0.3–0.59	0.5–0.5	0.5–0.5	0.5–**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	No trend	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	Stable	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	Stable	Stable	No trend	Stable	Stable	Probably increasing
	0.3–3.5	0.5–0.5	0.5–0.5	1.8–4.9	0.5–0.5	0.5–0.5	0.2–1.6
MW-13	Stable	Stable	Stable	No trend	Stable	Stable	Stable
	0.5–0.5	0.5–0.5	0.5–0.5	0.5–1.3	0.5–0.5	0.5–0.5	0.5–0.5
MW-14	Stable	No trend	Stable	Stable	Stable	Stable	No trend
	0.5–2.7	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	0.5–1.4	0.95–3.7	0.5–2.1	0.5–1.1	**12–33**
EW-2	Increasing	Probably decreasing	Stable	Stable	Stable	Stable	Increasing
	10–25	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	Yes	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 met. No action required. • Notify ADEQ within 7 days of identifying a shutdown of pump operations greater than 72 hours. - Metric met. No action required. • Take steps to resume extraction flow rates. - Metric met. No action required. • Evaluate capture at achieved flow rates if target flow rates are not resumed. - Metric met. No action required. • Evaluate potential mitigation actions to resume the target flow rate, including pump replacement, well rehabilitation, or other appropriate actions. - 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 MW-10 will be stable during the 3-year period of 2021 to 2023.	NA	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate actions to be taken to change mass removal rates, as needed. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate mass removal metric and update to reflect current conditions, as needed. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period.
Mass removal trends at extraction well EW-1 will be stable during the 3-year period of 2021 to 2023.	NA	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate actions to be taken to change mass removal rates, as needed. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate mass removal metric and update to reflect current conditions, as needed. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period.

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 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.
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.	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.

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 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

NA = metric applies during the 3-year reporting period and is not applicable during the annual reporting period

The following recommendations are based on the 2022 annual groundwater monitoring results:

- Continue to operate extraction wells EW-1 and MW-10 to maintain hydraulic control of the VOC plume.
- Increase sampling frequency at MW-4 from annual to semiannual.
- Decrease sampling frequency at MW-7, MW-12, 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-12, MW-13, and MW-14 since the wells were installed in 2017, 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 2023, respectively, in accordance with the field sampling instructions (CH2M 2012) and *Quality Assurance Project Plan* (CH2M 2007) for the site.
- Evaluate 2023 site conditions against approved metrics for the site and apply the appropriate contingency actions, if needed.
- Submit 2023 Annual Groundwater Monitoring Report by March 31, 2024.
- Submit 2021-2023 Periodic Site Review Report by March 31, 2024.

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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 2022 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).

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 for EW-1 and No. 1710-5383 and 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 2022 are included in Appendix A.

1.2 Extraction Well Operation and Maintenance

Extraction well MW-10 pump operations were observed to be off during a site visit on June 2, 2022, due to a faulty electrical component. The component was replaced and pump operations resumed on June 13, 2022. Extraction well MW-10 pump operations were also observed to be off during a site visit on October 24, 2022, due to a faulty electrical component. The component was replaced and pump operations resumed on November 10, 2022. Extraction well MW-10 operated without interruption for the remainder of 2022.

Extraction well EW-1 operated without interruption during 2022.

2. Summary of Groundwater Monitoring Activities

The semiannual groundwater monitoring event for the site was performed in May 2022. 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 October 2022. 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 wells EW-1 and MW-10 using dedicated submersible pumps. These activities are further discussed in the following subsections.

Groundwater levels were measured in four monitoring wells at the site on May 12, 2022, and in all site wells on October 12, 2022. 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 October 2022 groundwater level measurements. Water level measurements collected in May 2022 and October 2022 are included in Appendix B.

2.1 Groundwater Sample Collection Using Dedicated Pumps

Groundwater samples were collected from operating extraction wells EW-1 and MW-10 on October 12, 2022. Because the wells were 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 2022 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 2022 semiannual and annual groundwater monitoring events with emphasis on the annual event.

3.1 Hydrologic Conditions

Groundwater elevations in monitoring wells ranged from 970.70 feet above mean sea level (amsl) (MW-14) to 990.72 feet amsl (MW-8) in October 2022. Depth-to-groundwater measurements, calculated groundwater elevations, and changes in groundwater levels since the October 2021 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 October 2022 were similar to those collected during the previous annual groundwater monitoring event in October 2021 (increased by an average of 1.43 foot). Current and historical groundwater elevations for the site are presented in Appendix B.

A groundwater elevation contour map was developed from the depth-to-water data collected at the site in October 2022, 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 2022 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 2022 semiannual and annual sampling events. Appendix B presents a table of current and historical groundwater monitoring well analytical data. Appendix C 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, and MW-10 in 2022 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-12, 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 1.6 µg/L (MW-9) to 1,300 µg/L (MW-1a), and detectable concentrations of TCE ranged from 1.0 µg/L (MW-7) to 160 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 decreased slightly from 2021 to 2022, 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 2022, as shown on Figure 3-4.

1,1-DCE concentrations in well EW-2 remained stable from 2021 to 2022. TCE concentrations in well EW-2 decreased slightly from 2021 to 2022. Data from monitoring well MW-5, located downgradient of well EW-2, indicate that concentrations of 1,1-DCE and TCE increased from 2021 to 2022, as shown on Figure 3-5. The 1,1-DCE and TCE concentrations at MW-5 are both above the AAWQSs.

TCE (1.6 to 1.0 µg/L) and 1,1-DCE (2.2 to 1.7 µg/L) concentrations at MW-7 decreased from 2021 to 2022. 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 wells MW-13 and MW-14.

COC concentrations at monitoring well MW-4 have traditionally been below AAWQS. However, 1,1-DCE (17 µg/L) concentrations at MW-4 were observed above the AAWQS for the second consecutive year in the sample collected in October 2022. TCE (4.5 µg/L) was detected below the AAWQS in MW-4. ADEQ was notified of the exceedance within 15 days of receiving laboratory data.

3.2.2 Extraction Well Results

Active extraction wells EW-1 and MW-10 were sampled on October 12, 2022. Concentrations of 1,1-DCE (61 µg/L) and TCE (15 µg/L) at EW-1 were above the AAWQSs. At MW-10, the concentration of 1,1-DCE (18 µg/L) was above the AAWQS, and of TCE (4.5 µg/L) was below the AAWQS.

Groundwater sampling results for extraction wells EW-1 and MW-10 are summarized in Table 3-1. Analytical laboratory reports, including CoC documentation and QC conformance summaries, are presented in Appendix C. The volumes of groundwater extracted from active wells EW-1 and MW-10 during 2022 are provided in Table 3-2. A table of current and historical groundwater extraction system operational data is provided in Appendix D.

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 E and Appendix F 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. Two wells were not analyzed because insufficient data were available to perform a trend analysis (MW-13 and MW-14). The results of the Mann-Kendall trend analyses are presented in Table E-1 of Appendix E.

When using the data available during this period, three wells presented an upward trend for TCE (MW-3, MW-4, and MW-12). Wells 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 second consecutive year. An upward trend was also observed for chloroform at well MW-7, 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 F-1 of Appendix F.

When using all data collected over the previous 15 years for trend analysis evaluation, two wells presented an upward trend for TCE (MW-4 and EW-2). Three wells presented an upward trend for 1,1-DCE (MW-4, MW-12, and EW-2). 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%.
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 data quality objectives 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. No action is required.

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 and is not applicable during this annual reporting period.

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 and is not applicable during this annual reporting period.

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*.

The site metric was met. No action is required.

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 (17 µg/L) at trigger monitoring well MW-4 exceeded the AAWQS during October 2022; this represents the second exceedance of 1,1-DCE at well MW-4. The first exceedance at MW-4 occurred during October 2021 (9.5 µg/L).

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 will be 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 4-1. 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 2022 annual groundwater monitoring results:

- Continue to operate extraction wells EW-1 and MW-10 to maintain hydraulic control of the VOC plume.
- Increase sampling at MW-4 from annual to semiannual to provide additional data for concentration tracking.
- Decrease sampling frequency at MW-7, MW-12, 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-12, MW-13, and MW-14 since the wells were installed in 2017, 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 2023, respectively, in accordance with the field sampling instructions (CH2M 2012) and *Quality Assurance Project Plan* (CH2M 2007) for the site.
- Evaluate 2023 site conditions against approved metrics for the site and apply the appropriate contingency actions, if needed.
- Submit 2023 Annual Groundwater Monitoring Report by March 31, 2024.
- Submit 2021-2023 Periodic Site Review Report by March 31, 2024.

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

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/October 2022 Depth-to-Water (feet)	April/October 2021 Groundwater Elevation (feet amsl)	May/October 2022 Groundwater Elevation (feet amsl)	Water Level Change 2021 to 2022 (feet)
EW-1	10/12/2022	1250.22	299.82	954.07	950.40	-3.67
EW-2	10/13/2022	1257.33	276.45	979.40	980.88	1.48
MW-1a	10/12/2022	1253.84	265.58	986.46	988.26	1.80
MW-3	10/12/2022	1254.96	270.33	983.31	984.63	1.32
MW-4	10/12/2022	1254.73	268.71	985.00	986.02	1.02
MW-5	10/12/2022	1265.78	288.02	976.25	977.76	1.51
MW-6	10/12/2022	1265.60	285.92	978.26	979.68	1.42
MW-7	5/12/2022	1255.04	273.04	981.46	982.00	0.54
MW-7	10/12/2022	1255.04	272.44	981.50	982.60	1.10
MW-8	10/12/2022	1245.73	255.01	989.51	990.72	1.21
MW-9	10/12/2022	1250.71	263.46	986.15	987.25	1.10
MW-10	10/12/2022	1263.60	301.49	959.58	962.11	2.53
MW-12	5/12/2022	1260.45	280.40	979.29	980.05	0.76
MW-12	10/12/2022	1260.45	279.88	979.35	980.57	1.22
MW-13	5/12/2022	1265.26	291.02	973.48	974.24	0.76
MW-13	10/12/2022	1265.26	289.91	973.47	975.35	1.88
MW-14	5/12/2022	1273.81	303.77	969.05	970.04	0.99
MW-14	10/12/2022	1273.81	303.11	968.59	970.70	2.11

Notes:

amsl = above mean sea level

NA = not available

NC = not calculated

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	10/12/2022	0.51	**61**	<0.5	**15**
EW-2	360	10/12/2022	<0.5	**25**	<0.5	**28**
MW-1A	435	10/12/2022	**9.6/9.6**	**1300/1200**	**11/11**	**160/150**
MW-3	355	10/12/2022	<0.5	**20**	<0.5	**26**
MW-4	355	10/12/2022	<0.5/<0.5	**16/17**	<0.5/<0.5	**4.4/4.5**
MW-5	310	10/12/2022	<0.5	**13**	<0.5	**8.2**
MW-6	355	10/12/2022	<0.5	<0.5	<0.5	<0.5
MW-7	285	5/12/2022	<1.0	2.1	<1.0	1.4
MW-7	285	10/12/2022	<0.5	1.7	<0.5	1.0
MW-8	355	10/12/2022	<0.5	<0.5	<0.5	<0.5
MW-9	355	10/12/2022	<0.5	1.6	<0.5	<0.5
MW-10	NA	10/12/2022	<0.5	**18**	<0.5	4.3
MW-12	410	5/12/2022	<1.0	2.9	<1.0	1.3
MW-12	410	10/12/2022	<0.5	3.5	<0.5	1.6
MW-13	355	5/12/2022	<1.0	<1.0	<1.0	<1.0
MW-13	355	10/12/2022	<0.5	<0.5	<0.5	<0.5
MW-14	350	5/12/2022	<1.0	3.2	<1.0	<1.0
MW-14	350	10/12/2022	<0.5	<0.5	<0.5	<0.5
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

Table 3-2. Summary of Annual Groundwater Withdrawal

Honeywell Peoria Avenue Site, Phoenix, Arizona

Well	Totalizer Reading								Volume Extracted	
	Start of Year		Before Replacement		After Replacement		End of Year			
Number	Read Date	Value (gallons)	Read Date	Value (gallons)	Read Date	Value (gallons)	Read Date	Value (gallons)	(gallons)	(acre-feet)
EW-1	12/22/2021	24,370,541	N/A	N/A	N/A	N/A	12/20/2022	46,877,607	22,507,066	69.1
MW-10	12/22/2021	32,925,300	8/8/2022	43,542,836	8/8/2022	17,010,614	12/20/2022	22,051,805	15,658,727	48.1

Notes:

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

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	Yes	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 met. No action required. • Notify ADEQ within 7 days of identifying a shutdown of pump operations greater than 72 hours. - Metric met. No action required. • Take steps to resume extraction flow rates. - Metric met. No action required. • Evaluate capture at achieved flow rates if target flow rates are not resumed. - Metric met. No action required. • Evaluate potential mitigation actions to resume the target flow rate, including pump replacement, well rehabilitation, or other appropriate actions. - Metric met. No action required.
Mass removal trends at extraction well MW-10 will be stable during the 3-year period of 2021 to 2023.	NA	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate actions to be taken to change mass removal rates, as needed. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate mass removal metric and update to reflect current conditions, as needed. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period.

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.	NA	If the metric is not met, the associated contingency actions include: • Notify ADEQ within 30 days. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate factors contributing to changes in mass removal and explain overall impacts to remediation. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate actions to be taken to change mass removal rates, as needed. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period. • Evaluate mass removal metric and update to reflect current conditions, as needed. - The metric applies during the 3-year period of 2021 to 2023 and is not applicable during this annual reporting period.
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.	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 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

NA = metric applies during the 3-year reporting period and is not applicable during the annual reporting period

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

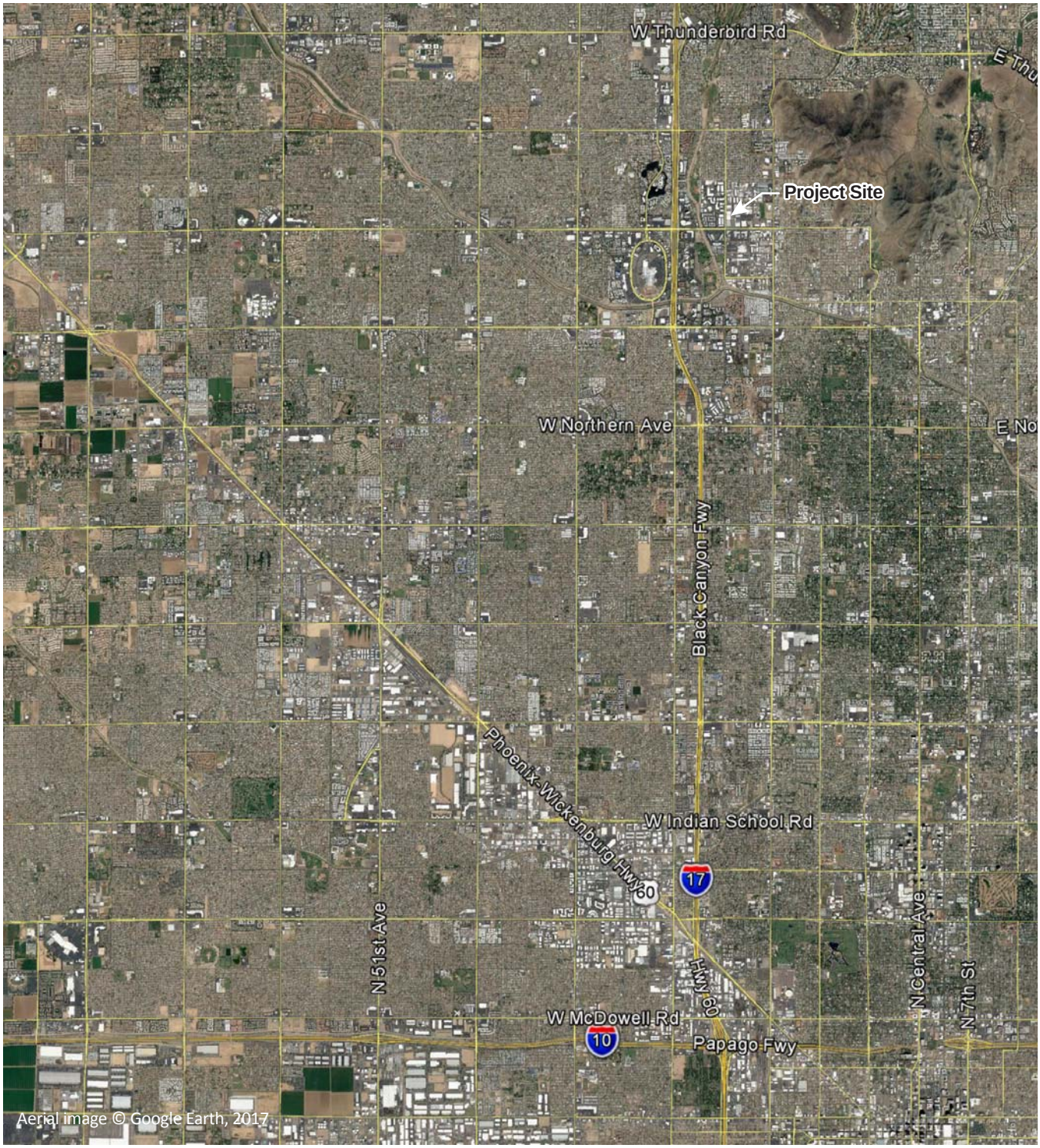


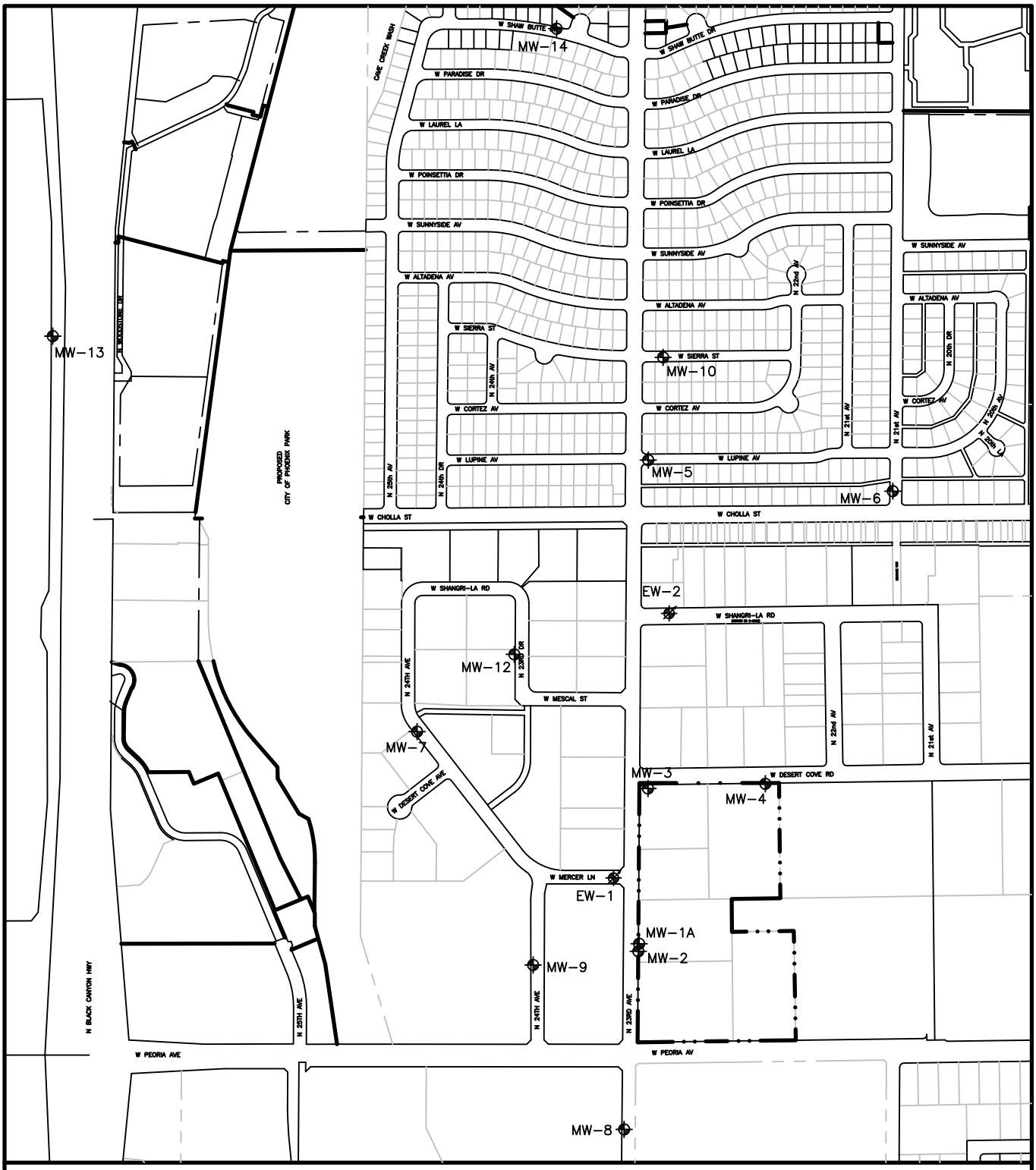
Figure 1-1
Site Location Map
Honeywell Peoria Avenue Site
Phoenix, Arizona

North

0 1.5 2.5
Approximate scale in miles

JACOBS

PR0405171149PHX Figure1-1_SiteLocMap_01 (AS 06052017)



LEGEND

Extraction Well

Monitoring Well

Peoria Avenue Site Boundary

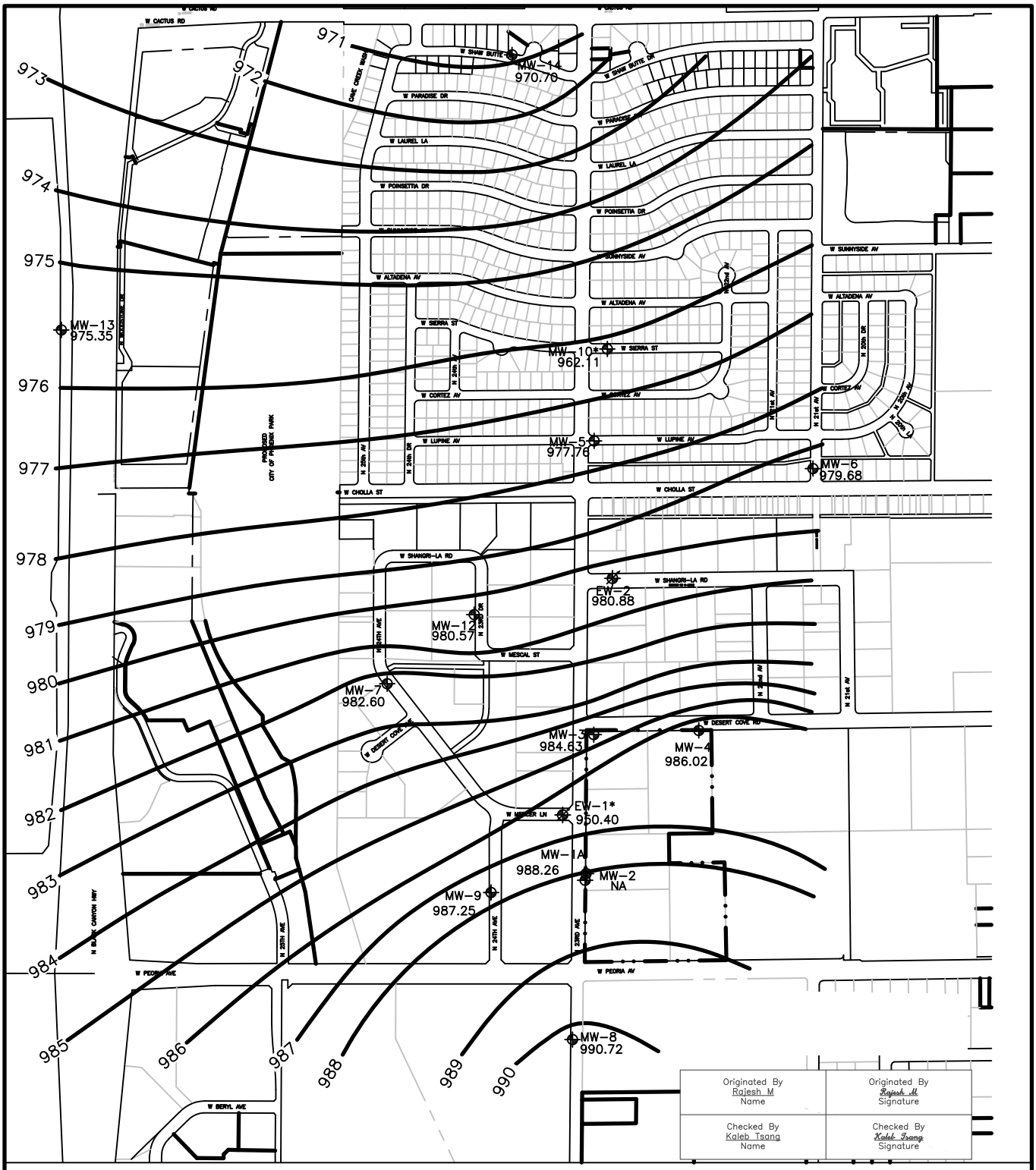
N

0 500

FEET

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

JACOBS



Originated By Rajesh M Name	Originated By Signature
Checked By Kaleb Tsang Name	Checked By Signature

LEGEND

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

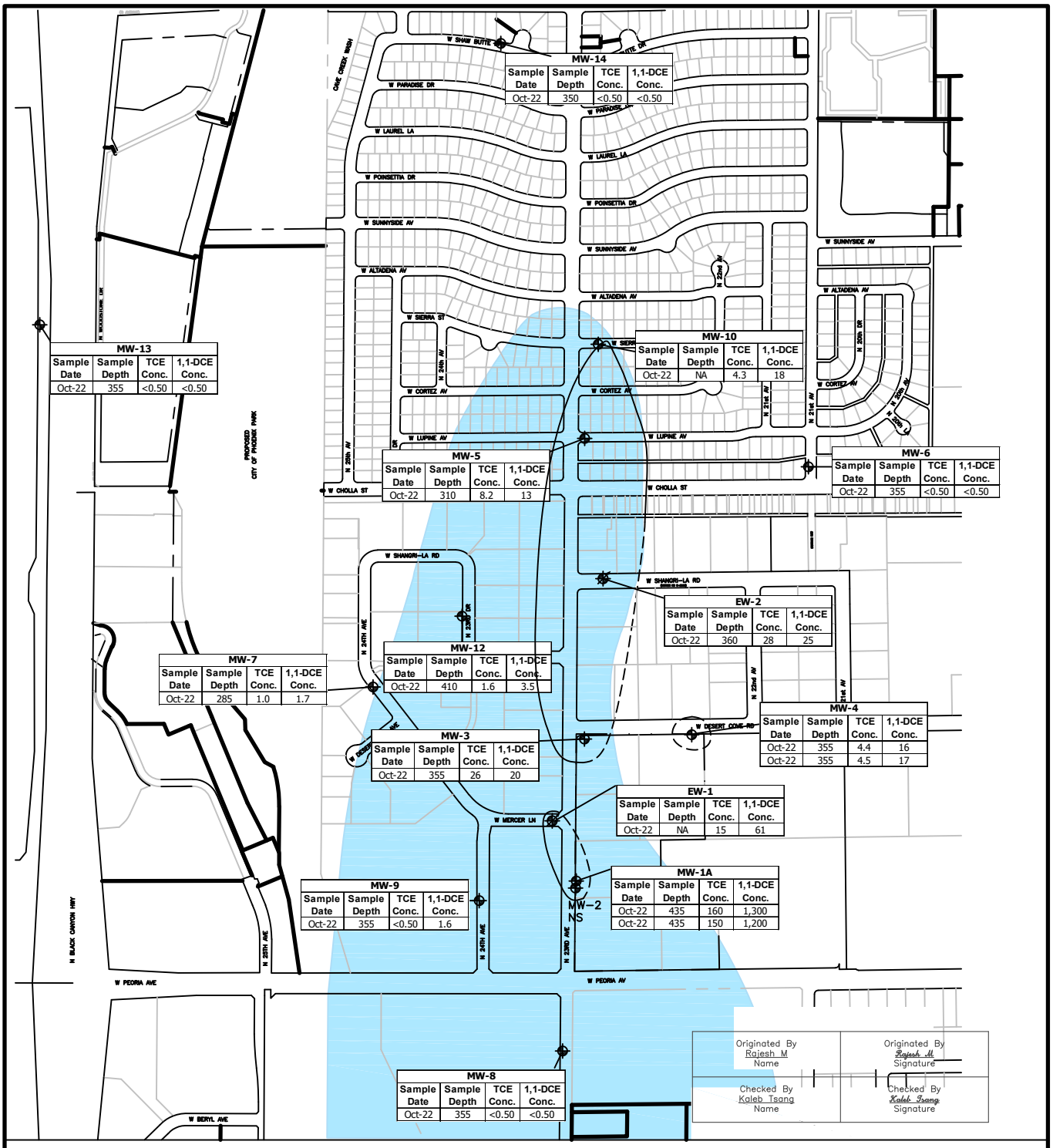
N

0 500

FEET

Figure 3-1
2022 Groundwater Elevations
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS



LEGEND

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

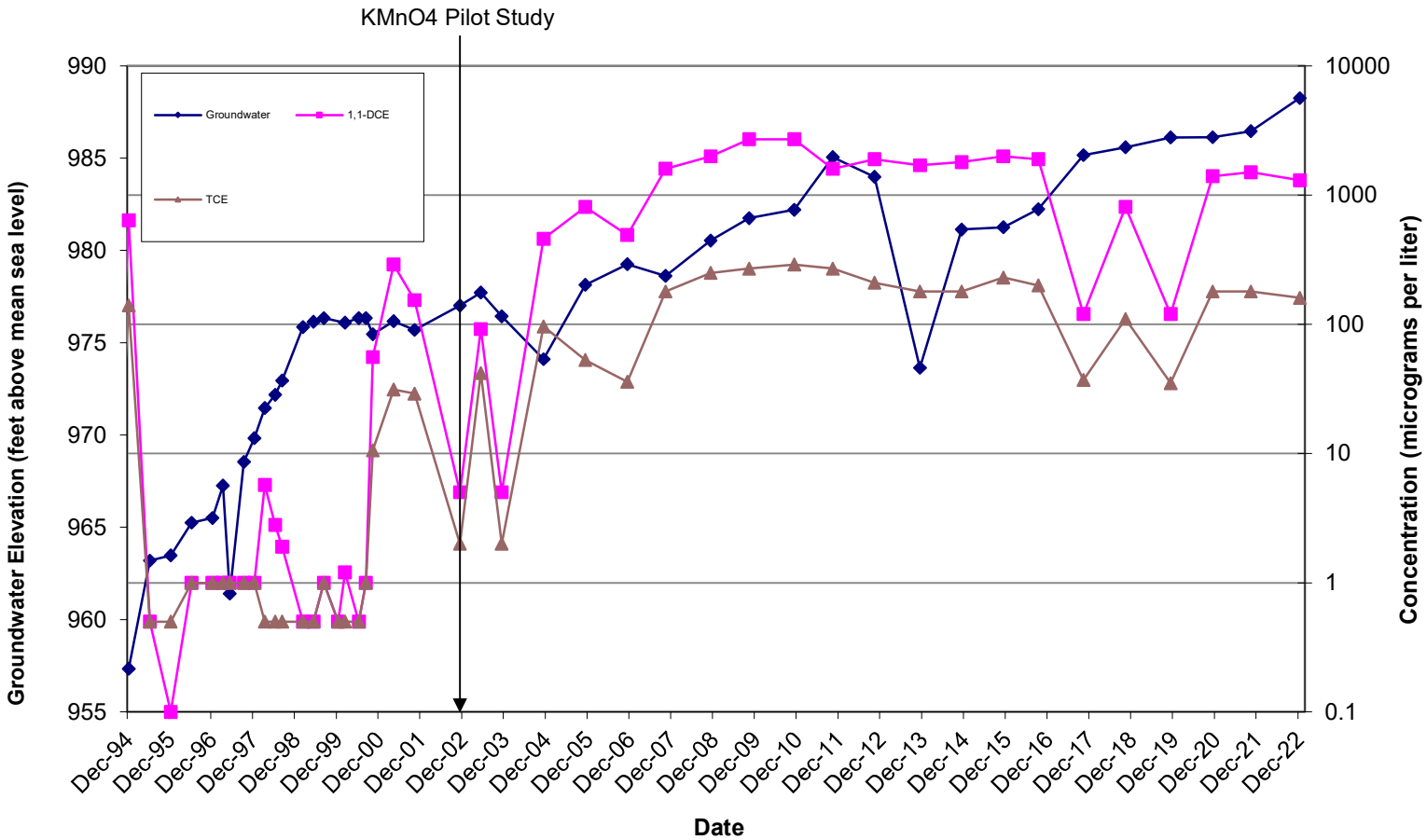
N

0 500

FEET

Figure 3-2
2022 TCE and 1,1-DCE Concentrations
Honeywell Peoria Avenue Site
Phoenix, Arizona

JACOBS

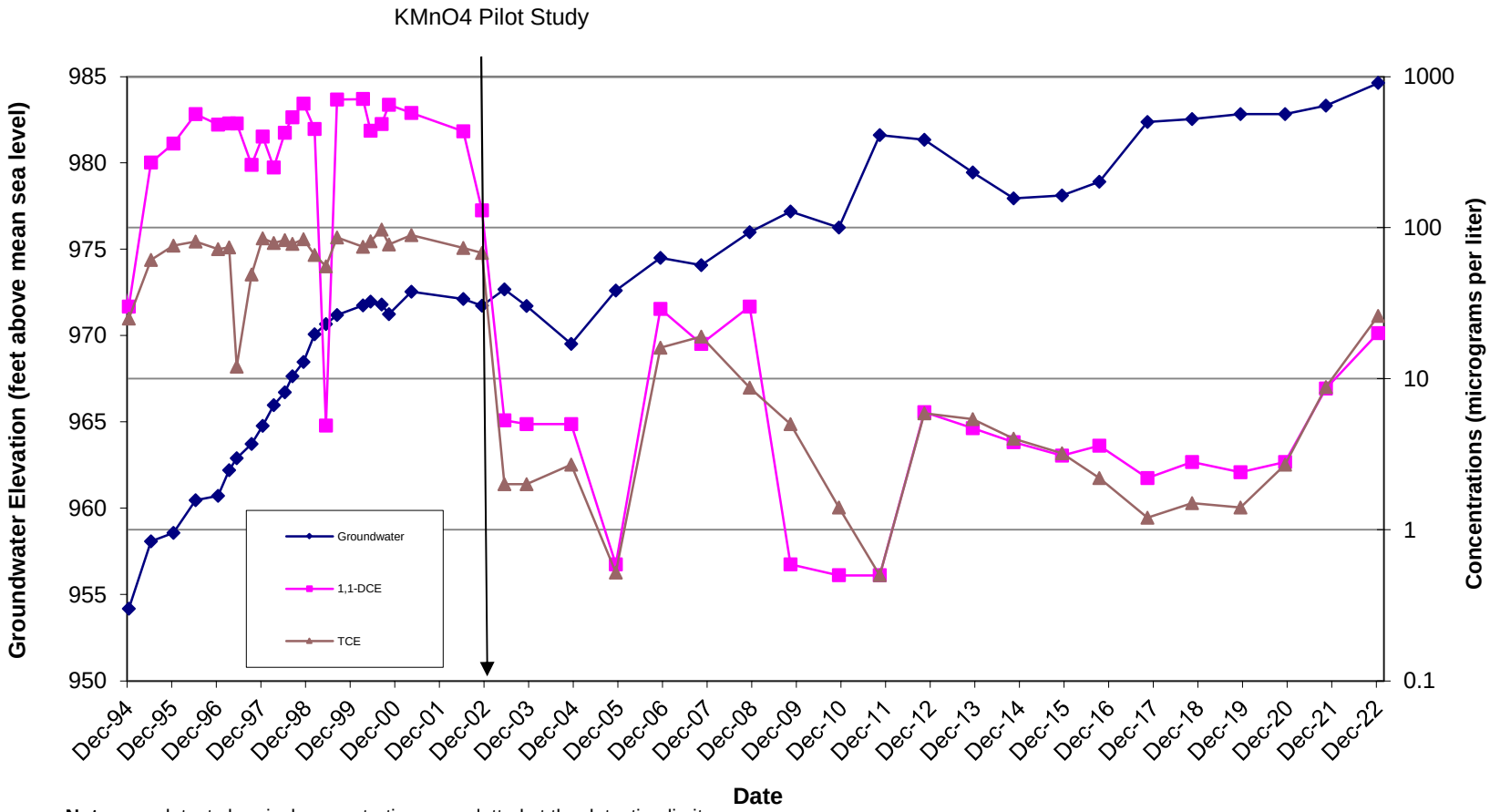


Notes: Non-detect chemical concentrations are plotted at the detection limit.
Sampling method was changed from submersible pump to passive diffusion bag in November 2005.

Originator: **Aruna C**	*Aruna C* (Signature)
Checked by: **Baine Foehr**	*Baine Foehr* (Signature)

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

JACOBS

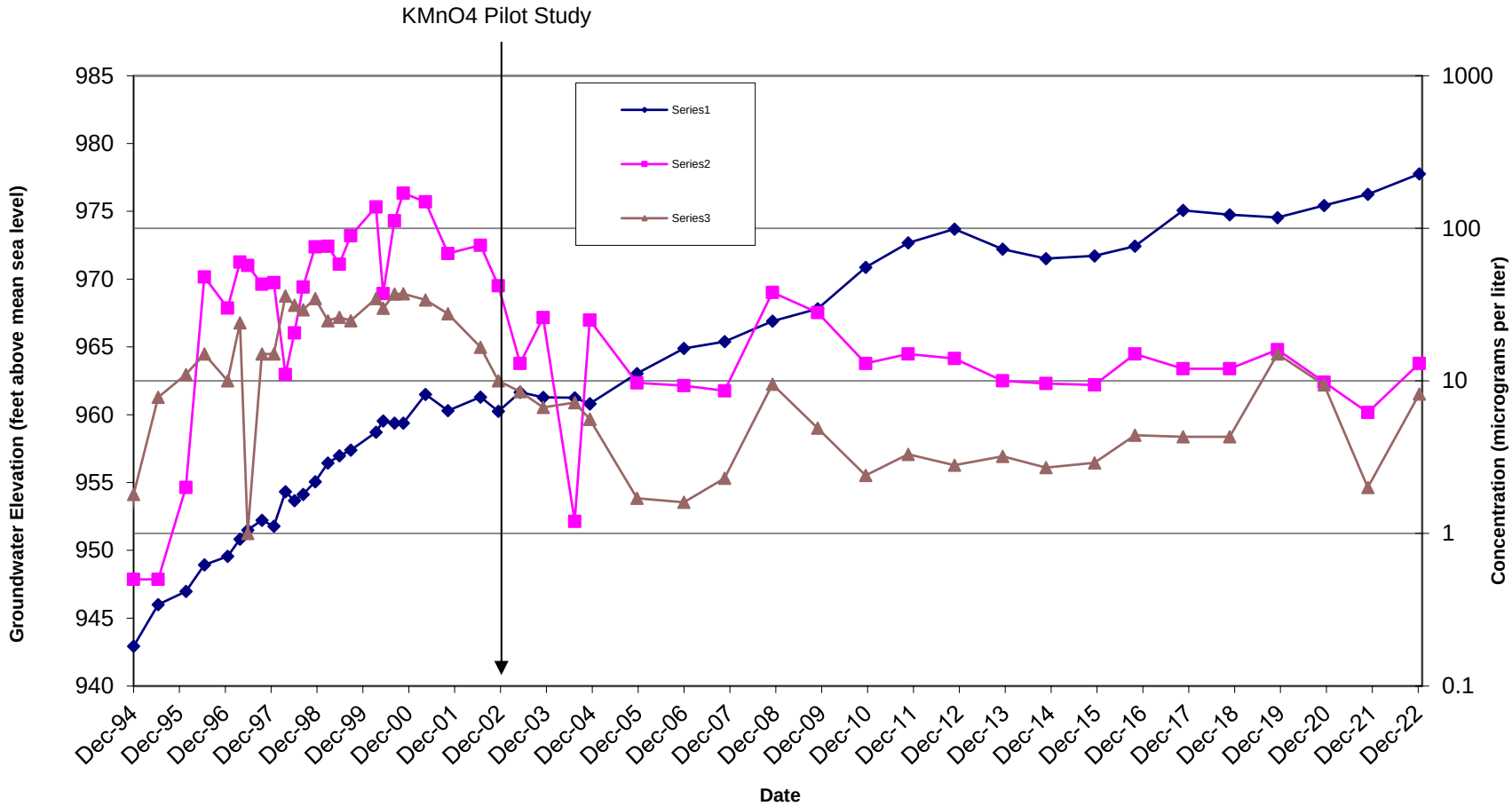


Note: non-detect chemical concentrations are plotted at the detection limit.

Originator: **Aruna C**	*Aruna C* (Signature)
Checked by: **Baine Foehr**	*Baine Foehr* (Signature)

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

JACOBS

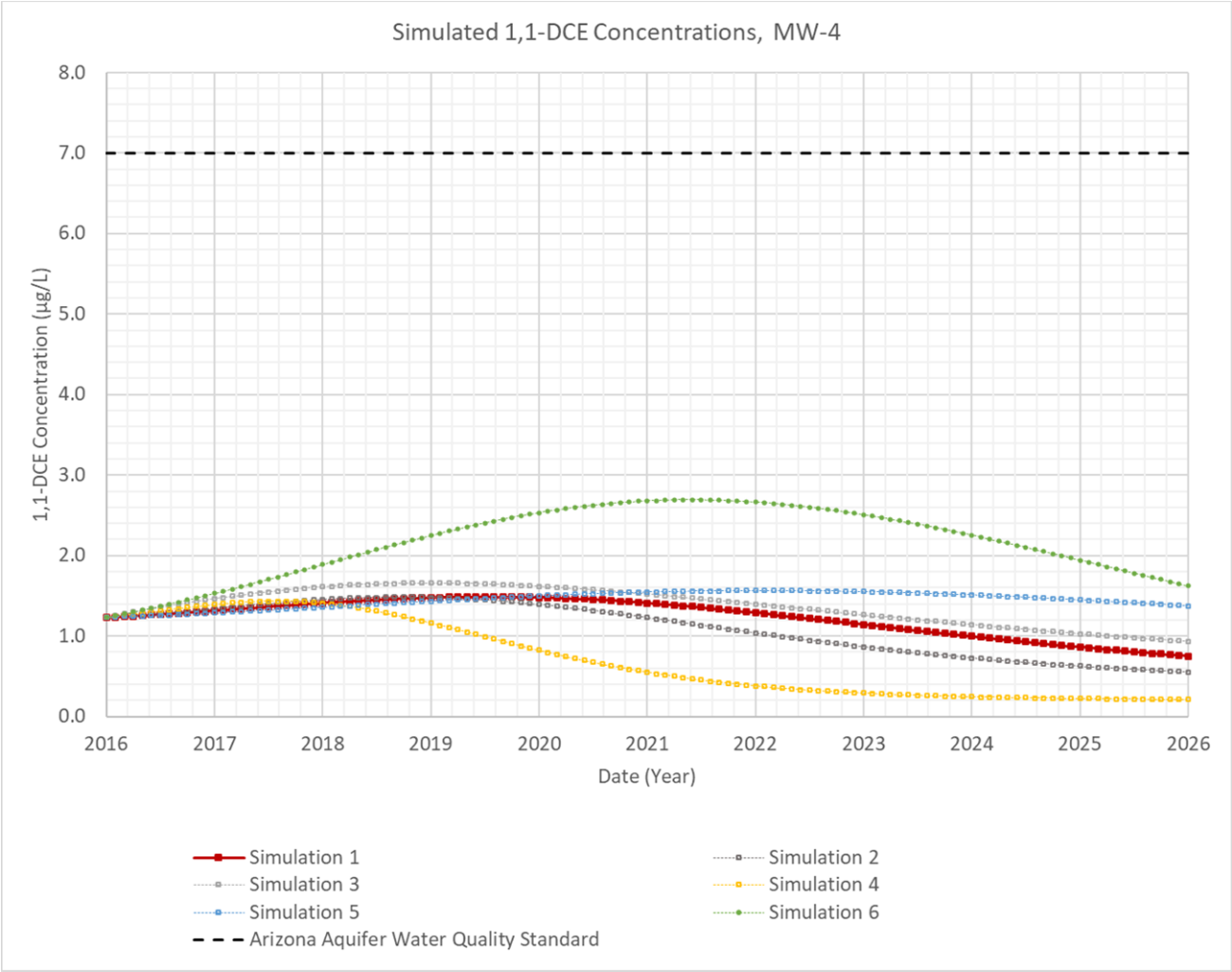


Notes: Non-detect chemical concentrations are plotted at the detection limit.
Sampling method was changed from submersible pump to passive diffusion bag in November 2005.

Originator: **Aruna C**	*Aruna C* (Signature)
Checked by: **Baine Foehr**	*Baine Foehr* (Signature)

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

JACOBS



Notes:

1,1-DCE = 1,1-dichloroethene

µg/L = micrograms per liter

Figure 4

Simulated 1,1-DCE Concentrations at MW-4

Honeywell Peoria Avenue Site

Phoenix, Arizona

Jacobs

Appendix A
City of Phoenix Monthly Discharge Reports

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Tempe, Arizona 85282
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www.jacobs.com

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

February 25, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – January 2022**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Ms. Hall,

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 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, January 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,588,438	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 July 25, 2018, 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, 2022 through March 31, 2022 will be collected in February 2022.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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. 1806-5436

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Michael Heitmann, 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, 2022 Through January 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 83,498	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 83,931	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,588,438	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 2/25/2021

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 Point Cleaned
Last	12/22/2021	24,370,541				☐	☒
1.	1/6/2022	25,629,501	83,931			☐	☒
2.	1/27/2022	27,376,480	83,189			☐	☐
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	**83,498**
Maximum Flow	**83,931**
Total Gallons	**2,588,438**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 1/6/22 Field Technician(s) T. Kearsey

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1150	ON	33674793	-2	34.6	303.01	84435.9
Depart		ON					

Electrical Meter Readings

Power(kwh)	1780
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____ 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 Kearsey

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

308.11
5.1
303.01

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

Date: 1/6/22 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	1216	ON	25629501		.7	57.2	295.06	21878.7
Depart		ON						

Electrical Meter Readings

Power(kwh)	36036
Power Rate(KwMax)	8.76

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

297.98
2.92
295.06

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

Date: 1/27/22 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	1205	ON	27376480		-7	56.4	296.0	22382.7
Depart		ON						

Electrical Meter Readings

Power(kwh)	40447
Power Rate(KwMax)	8.80

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

298.92
2.92
296.00

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

Date 1/27/22 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	1145	ON	34711903	~2	34.7	299.25	84939.8
Depart		ON					

Electrical Meter Readings

Power(kwh)	4347
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

304.85
5.1
299.25

1501 W. Fountainhead Pkwy,
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www.jacobs.com

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

February 25, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – January 2022**
Industrial Wastewater Discharge Permit Number 1710-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Ms. Hall,

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 (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the January 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, January 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	1710-5383	1,538,468	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 October 30, 2017, 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, 2022, through March 31, 2022, will be collected in February 2022.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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. 1710-5383

Attachment B – Operation and Maintenance Data Collection Forms

Copies to: Mr. Mike Heitmann, Honeywell International Inc.
File

Attachment A
Significant Industrial User
Self-Monitoring Report Form for MW-10
Industrial Wastewater Discharge
Permit No. 1710-5383

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Permit №: ***1710-5383***

Compliance Sampling Point: ***5383.01***

Report Period: January 1, 2022 Through January 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 49,628	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 49,966	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,538,468	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 2/25/2022

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 Point Cleaned
Last	12/22/2021	32,925,300				☐	☒
1.	1/6/2022	33,674,793	49,966			☐	☒
2.	1/27/2022	34,711,903	49,386			☐	☐
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	**49,628**
Maximum Flow	**49,966**
Total Gallons	**1,538,468**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 1/6/22 Field Technician(s) T. Kearsey

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1150	ON	33674793	-2	34.6	303.01	84435.9
Depart		ON					

Electrical Meter Readings

Power(kwh)	1780
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____ 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 Kearsey

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

308.11
5.1
303.01

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

Date 1/27/22 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	1145	ON	34711903	~2	34.7	299.25	84939.8
Depart		ON					

Electrical Meter Readings

Power(kwh)	4347
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

304.85
5.1
299.25

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

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

March 25, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – February 2022**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Ms. Hall,

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 February 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, February 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,297,3722	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 July 25, 2018, 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, 2022, through March 31, 2022, are included in this monthly report. Jacobs personnel performed compliance sampling for all required analytes on February 03, 2022. 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: February 1, 2022 Through February 28, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 82,049	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 82,364	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,297,372	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] SMR Page 1 – Flow Page with Signed and Dated Certification
- [x] SMR Page 2 – Sampling Detail Page
- [x] SMR Page 3 – Laboratory Results Reporting Table
- [ ] Attachment B - Zero Discharge Certification (Only if Applicable)
- [x] pH Calibration & Analysis Log with Method QC Data
- [x] Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- [x] ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- [x] 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 25, 2022

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

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

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

Phoenix, Arizona 85029

Dates/Times Samples Collected: **02/03/2022 at 09:57 (grab), 09:55 (composite), 09:36 (pH)**

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

Compliance Sampling Point № **5436.01** Lab Project or Reference ID № **550-178413-1**

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: February 1, 2022 to February 28, 2022

Compliance Point №: ***5436.01***

Lab Project or Reference ID № ***550-178413-1***

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

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 2/3/2022	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**	5.3	EPA 624.1								
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	52	EPA 624.1								
Arsenic	**mg/L**	**0.13**	**1 per 6 Months**	**FPC**	NA	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**	1.3	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**	NA	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**	NA	EPA 245.1								
Molybdenum	**mg/L**	**N/A**	**1 per 6 Months**	**FPC**	NA	EPA 200.7 Rev 4.4								
pH	**S.U.**	**5.0-10.5**	**1 per Quarter**	**Grab**	7.18	SM 4500-H+B								
Selenium	**mg/L**	**0.10**	**1 per 6 Months**	**FPC**	NA	EPA 200.7 Rev 4.4								
Silver	**mg/L**	**1.2**	**1 per 6 Months**	**FPC**	NA	EPA 200.7 Rev 4.4								
Trichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	17	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 № 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	1/27/2022	27,376,480				☐	☐
1.	2/3/2022	27,947,360	81,554			☐	☐
2.	2/14/2022	28,853,360	82,364			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
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28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow	**82,049**
Maximum Flow	**82,364**
Total Gallons	**2,297,372**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 2/3/22 Field Technician(s) T. Keasby / J.S.

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0930	ON	27947360		7	56.9	290.55	22548.6
Depart		ON						

Electrical Meter Readings

Power(kwh)	41918
Power Rate(KwMax)	8.77

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: 0933

Time pH Sample Analyzed: 0936
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 0957

Composite Sample Log

Start Time: 0935 End Time: 0955 Flow Rate: 500 mL/min

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

Notes

Ph 7.18 @ 24.3°C

Signature: [signature]

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

293.47
-2.92
290.55

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

Date: 2/14/22 Field Technician(s) Juan Paez

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	856	ON	28853360		8	56.84	296.1	22811.8
Depart		ON						

Electrical Meter Readings

Power(kwh)	44213
Power Rate(KwMax)	8.79

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: _____

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

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter №

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# 1GA843 Jan/23	2/3/22	TK	0748	4.00	20.9	99.6	
pH Buffer 7/Lot# 1GD1221 Apr/23			07:46	7.00	21.4	102.4	
pH Buffer 10/Lot# 1GC500 Mar/23			07:51	10.00	20.7	100.0	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# GHL8500-2 Jul/23			07:53	7.03	20.7	Pass or Fail	
Compliance pH result 5436.01 (EW-1)	2/3/22	TK	0936	7.18	24.3	N/A	
Compliance pH result 5383.01 (MW-10)	2/3/22	TK	08:50	7.15	23.3	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)	2/3/22	TK	Orig Reading:	7.15	Dup Reading:	7.17	
Once/Month Verification Check/Buffer 7	2/3/22	TK	11:20	7.02	22.0	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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 550-178413-1
Laboratory Sample Delivery Group: Quarterly
Client Project/Site: IAC, Peoria

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
2/14/2022 5:08:53 PM
Emily Petrunia, Project Manager I
(602)659-7629
emily.petrunia@eurofinset.com

Designee for

Rachel Sester, Project Manager I
(602)659-7615
Rachel.Sester@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QC Sample Results 10
QC Association Summary 17
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Certification Summary 20
Method Summary 21
Chain of Custody 22
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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Qualifiers

GC/MS VOA

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

Metals

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

General Chemistry

Qualifier	Qualifier Description
K5	The dilution water D.O. depletion was > 0.2 mg/L.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
R8	Sample RPD exceeded the method acceptance limit.

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: 550-178413-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-178413-1

Comments
No additional comments.

Receipt
The samples were received on 2/3/2022 11:46 AM. 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 0.4º 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
Methods SM 4500 CN E, SM 4500 CN G: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 550-265687 and analytical batch 550-265825 were outside control limits for Cyanide. Sample matrix interference was suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 5210B: The method blank (MB) result associated with batch 550-265552 was higher than the method-required limit of 0.2 mg/L for Biochemical Oxygen Demand (BOD). As such, the results have been reported and qualified with K5 flags.

Method SM 5210B: The sample duplicate (DU) precision for analytical batch 550-265552 was outside control limits for BOD. Sample non-homogeneity was suspected.

No additional analytical or quality issues were noted, other than those described above or 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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-178413-1	MW-10-22Q1	Water	02/03/22 09:10	02/03/22 11:46
550-178413-2	MW-10-22Q1-comp	Water	02/03/22 09:08	02/03/22 11:46
550-178413-3	EW-1-22Q1	Water	02/03/22 09:57	02/03/22 11:46
550-178413-4	EW-1-22Q1-comp	Water	02/03/22 09:55	02/03/22 11:46
550-178413-5	TB-22Q1	Water	02/03/22 08:00	02/03/22 11:46

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1 — Lab Sample ID: 550-178413-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.64		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	16	R6	0.50		ug/L	1		624.1	Total/NA
Trichloroethene	6.2		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-22Q1-comp — Lab Sample ID: 550-178413-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Copper	0.14		0.010		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: EW-1-22Q1 — Lab Sample ID: 550-178413-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.3		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	52	R6	0.50		ug/L	1		624.1	Total/NA
Chloroform	1.3	R6	0.50		ug/L	1		624.1	Total/NA
Trichloroethene	17		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q1-comp — Lab Sample ID: 550-178413-4

No Detections.

Client Sample ID: TB-22Q1 — Lab Sample ID: 550-178413-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1

Lab Sample ID: 550-178413-1

Date Collected: 02/03/22 09:10
Date Received: 02/03/22 11:46

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.64**		0.50		ug/L			02/04/22 17:38	1
1,1-Dichloroethene	**16**	**R6**	0.50		ug/L			02/04/22 17:38	1
Benzene	ND		0.50		ug/L			02/04/22 17:38	1
Chloroform	ND	R6	0.50		ug/L			02/04/22 17:38	1
Trichloroethene	**6.2**		0.50		ug/L			02/04/22 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*02/04/22 17:38*	*1*
Toluene-d8 (Surr)	*119*		*60 - 140*		*02/04/22 17:38*	*1*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*		*02/04/22 17:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		02/07/22 14:15	02/07/22 15:30	1

Client Sample ID: MW-10-22Q1-comp

Lab Sample ID: 550-178413-2

Date Collected: 02/03/22 09:08
Date Received: 02/03/22 11:46

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		02/03/22 20:00	02/04/22 18:12	1
Cadmium	ND		0.0010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Lead	ND		0.015		mg/L		02/03/22 20:00	02/04/22 18:12	1
Selenium	ND		0.10		mg/L		02/03/22 20:00	02/04/22 18:12	1
Silver	ND		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Copper	**0.14**		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Molybdenum	ND		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Zinc	ND		0.050		mg/L		02/03/22 20:00	02/04/22 18:12	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/07/22 16:02	02/07/22 21:19	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			02/08/22 14:15	1
Biochemical Oxygen Demand	ND	K5	5.0		mg/L			02/04/22 14:00	1

Client Sample ID: EW-1-22Q1

Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57
Date Received: 02/03/22 11:46

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**5.3**		0.50		ug/L			02/04/22 18:05	1
1,1-Dichloroethene	**52**	**R6**	0.50		ug/L			02/04/22 18:05	1
Benzene	ND		0.50		ug/L			02/04/22 18:05	1
Chloroform	**1.3**	**R6**	0.50		ug/L			02/04/22 18:05	1
Trichloroethene	**17**		0.50		ug/L			02/04/22 18:05	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: EW-1-22Q1

Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57
Matrix: Water
Date Received: 02/03/22 11:46

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*60 - 140*		*02/04/22 18:05*	*1*
Toluene-d8 (Surr)	*97*		*60 - 140*		*02/04/22 18:05*	*1*
4-Bromofluorobenzene (Surr)	*106*		*60 - 140*		*02/04/22 18:05*	*1*

Client Sample ID: EW-1-22Q1-comp

Lab Sample ID: 550-178413-4

Date Collected: 02/03/22 09:55
Matrix: Water
Date Received: 02/03/22 11:46

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	mg/L		02/07/22 08:44	02/08/22 17:39	1
Lead	ND		0.015	mg/L		02/07/22 08:44	02/08/22 17:39	1
Copper	ND		0.010	mg/L		02/07/22 08:44	02/08/22 17:39	1
Zinc	ND		0.050	mg/L		02/07/22 08:44	02/08/22 17:39	1

Client Sample ID: TB-22Q1

Lab Sample ID: 550-178413-5

Date Collected: 02/03/22 08:00
Matrix: Water
Date Received: 02/03/22 11:46

Method: 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			02/04/22 13:43	1
1,1-Dichloroethene	ND	R6	0.50	ug/L			02/04/22 13:43	1
Benzene	ND		0.50	ug/L			02/04/22 13:43	1
Chloroform	ND	R6	0.50	ug/L			02/04/22 13:43	1
Trichloroethene	ND		0.50	ug/L			02/04/22 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*02/04/22 13:43*	*1*
Toluene-d8 (Surr)	*77*		*60 - 140*		*02/04/22 13:43*	*1*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*02/04/22 13:43*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DBFM	TOL	BFB					
Lab Sample ID	**Client Sample ID**	**(60-140)**	**(60-140)**	**(60-140)**					
550-178413-1	MW-10-22Q1	95	119	105					
550-178413-3	EW-1-22Q1	111	97	106					
550-178413-5	TB-22Q1	98	77	96					
550-178429-A-2 MS	Matrix Spike	114	96	114					
550-178429-A-2 MSD	Matrix Spike Duplicate	107	104	95					
LCS 550-265486/1002	Lab Control Sample	105	81	76					
LCSD 550-265486/4	Lab Control Sample Dup	93	95	113					
MB 550-265486/5	Method Blank	97	80	114					

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Lab Sample ID: MB 550-265486/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			02/04/22 12:03	1
1,1-Dichloroethene	ND		0.50		ug/L			02/04/22 12:03	1
Benzene	ND		0.50		ug/L			02/04/22 12:03	1
Chloroform	ND		0.50		ug/L			02/04/22 12:03	1
Trichloroethene	ND		0.50		ug/L			02/04/22 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*02/04/22 12:03*	*1*
Toluene-d8 (Surr)	*80*		*60 - 140*		*02/04/22 12:03*	*1*
4-Bromofluorobenzene (Surr)	*114*		*60 - 140*		*02/04/22 12:03*	*1*

Lab Sample ID: LCS 550-265486/1002 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			50.0	55.5		ug/L		111	70 - 150		
1,1-Dichloroethene			50.0	68.4		ug/L		137	50 - 140		
Benzene			50.0	44.0		ug/L		88	65 - 135		
Chloroform			50.0	56.7		ug/L		113	70 - 135		
Trichloroethene			50.0	51.5		ug/L		103	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*81*		*60 - 140*
4-Bromofluorobenzene (Surr)	*76*		*60 - 140*

Lab Sample ID: LCSD 550-265486/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			50.0	52.7		ug/L		105	70 - 150	5	20
1,1-Dichloroethene			50.0	50.1	R6	ug/L		100	50 - 140	31	20
Benzene			50.0	47.0		ug/L		94	65 - 135	7	20
Chloroform			50.0	46.1	R6	ug/L		92	70 - 135	21	20
Trichloroethene			50.0	57.0		ug/L		114	65 - 135	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*95*		*60 - 140*
4-Bromofluorobenzene (Surr)	*113*		*60 - 140*

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

Lab Sample ID: 550-178429-A-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		50.0	62.7		ug/L		125	59 - 155
1,1-Dichloroethene	ND		50.0	64.2		ug/L		128	10 - 234
Benzene	ND		50.0	48.4		ug/L		97	35 - 151
Chloroform	0.56		50.0	58.3		ug/L		116	51 - 138
Trichloroethene	ND		50.0	58.2		ug/L		116	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*114*		*60 - 140*
Toluene-d8 (Surr)	*96*		*60 - 140*
4-Bromofluorobenzene (Surr)	*114*		*60 - 140*

Lab Sample ID: 550-178429-A-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

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	54.4		ug/L		109	59 - 155	14	40
1,1-Dichloroethene	ND		50.0	54.9		ug/L		110	10 - 234	15	32
Benzene	ND		50.0	53.5		ug/L		107	35 - 151	10	61
Chloroform	0.56		50.0	55.4		ug/L		110	51 - 138	5	54
Trichloroethene	ND		50.0	52.6		ug/L		105	70 - 157	10	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*104*		*60 - 140*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-265472/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		02/03/22 20:00	02/04/22 17:36	1
Cadmium	ND		0.0010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Lead	ND		0.015	mg/L		02/03/22 20:00	02/04/22 17:36	1
Selenium	ND		0.10	mg/L		02/03/22 20:00	02/04/22 17:36	1
Silver	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Copper	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Molybdenum	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Zinc	ND		0.050	mg/L		02/03/22 20:00	02/04/22 17:36	1

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

Lab Sample ID: LCS 550-265472/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.959		mg/L		96	85 - 115
Cadmium	1.00	0.963		mg/L		96	85 - 115
Lead	1.00	1.00		mg/L		100	85 - 115
Selenium	1.00	0.971		mg/L		97	85 - 115
Silver	0.0750	0.0732		mg/L		98	85 - 115
Copper	1.00	0.937		mg/L		94	85 - 115
Molybdenum	1.00	0.980		mg/L		98	85 - 115
Zinc	1.00	1.03		mg/L		103	85 - 115

Lab Sample ID: LCSD 550-265472/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.00	0.953		mg/L		95	85 - 115	1	20
Cadmium	1.00	0.962		mg/L		96	85 - 115	0	20
Lead	1.00	1.00		mg/L		100	85 - 115	0	20
Selenium	1.00	0.969		mg/L		97	85 - 115	0	20
Silver	0.0750	0.0721		mg/L		96	85 - 115	2	20
Copper	1.00	0.934		mg/L		93	85 - 115	0	20
Molybdenum	1.00	0.979		mg/L		98	85 - 115	0	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-178460-C-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		1.00	1.03		mg/L		101	70 - 130
Cadmium	0.043		1.00	1.04		mg/L		99	70 - 130
Lead	ND		1.00	0.805		mg/L		80	70 - 130
Selenium	ND		1.00	1.02		mg/L		101	70 - 130
Silver	ND		0.0750	0.0735		mg/L		98	70 - 130
Copper	ND		1.00	0.976		mg/L		98	70 - 130
Molybdenum	0.20		1.00	1.18		mg/L		98	70 - 130
Zinc	ND		1.00	1.07		mg/L		107	70 - 130

Lab Sample ID: 550-178460-C-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.03		mg/L		101	70 - 130	0	20
Cadmium	0.043		1.00	1.05		mg/L		101	70 - 130	1	20
Lead	ND		1.00	0.801		mg/L		80	70 - 130	0	20
Selenium	ND		1.00	1.01		mg/L		99	70 - 130	1	20
Silver	ND		0.0750	0.0728		mg/L		97	70 - 130	1	20
Copper	ND		1.00	0.981		mg/L		98	70 - 130	1	20
Molybdenum	0.20		1.00	1.18		mg/L		98	70 - 130	0	20

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

Lab Sample ID: 550-178460-C-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

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	0	20

Lab Sample ID: MB 550-265649/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		02/07/22 08:44	02/08/22 16:49	1
Lead	ND		0.015		mg/L		02/07/22 08:44	02/08/22 16:49	1
Copper	ND		0.010		mg/L		02/07/22 08:44	02/08/22 16:49	1
Zinc	ND		0.050		mg/L		02/07/22 08:44	02/08/22 16:49	1

Lab Sample ID: LCS 550-265649/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	1.00	0.945		mg/L		95	85 - 115
Lead	1.00	0.983		mg/L		98	85 - 115
Copper	1.00	0.910		mg/L		91	85 - 115
Zinc	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: LCSD 550-265649/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	1.00	0.943		mg/L		94	85 - 115	0	20
Lead	1.00	0.983		mg/L		98	85 - 115	0	20
Copper	1.00	0.900		mg/L		90	85 - 115	1	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-178525-E-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		1.00	0.946		mg/L		95	70 - 130
Lead	ND		1.00	0.970		mg/L		97	70 - 130
Copper	0.64	M2	1.00	1.12	M2	mg/L		48	70 - 130
Zinc	ND		1.00	1.02		mg/L		102	70 - 130

Lab Sample ID: 550-178525-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		1.00	0.939		mg/L		94	70 - 130	1	20
Lead	ND		1.00	0.974		mg/L		97	70 - 130	0	20
Copper	0.64	M2	1.00	1.16	M2	mg/L		52	70 - 130	3	20

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

Lab Sample ID: 550-178525-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	ND		1.00	1.01		mg/L		101	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-265697/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/07/22 16:02	02/07/22 20:43	1

Lab Sample ID: LCS 550-265697/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00500	0.00498		mg/L		100	85 - 115		

Lab Sample ID: LCSD 550-265697/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.00500	0.00515		mg/L		103	85 - 115	3	20

Lab Sample ID: 550-178117-E-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.00500	0.00363		mg/L		73	70 - 130		

Lab Sample ID: 550-178117-E-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00381		mg/L		76	70 - 130	5	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-265789/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			02/08/22 14:15	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 550-265789/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			200	179		mg/L		90	90 - 110		

Lab Sample ID: LCSD 550-265789/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids			200	186		mg/L		93	90 - 110	4	10

Lab Sample ID: 550-178395-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	25			24.0		mg/L				4	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-265687/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		02/07/22 14:15	02/07/22 15:30	1

Lab Sample ID: LCS 550-265687/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.0978		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-265687/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0967		mg/L		97	90 - 110	1	20

Lab Sample ID: 550-178166-E-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND	M2	0.100	0.0581	M2	mg/L		58	80 - 120		

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

Lab Sample ID: 550-178166-E-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

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	0.0692	M2	mg/L		69	80 - 120	17	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-265552/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND	K5	5.0		mg/L			02/04/22 14:00	1

Lab Sample ID: LCS 550-265552/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	220	K5	mg/L		111	84.6 - 115.4		

Lab Sample ID: 550-178444-B-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	37	R8 K5		30.0	K5 R8	mg/L				21	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

GC/MS VOA

Analysis Batch: 265486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	624.1	
550-178413-3	EW-1-22Q1	Total/NA	Water	624.1	
550-178413-5	TB-22Q1	Total/NA	Water	624.1	
MB 550-265486/5	Method Blank	Total/NA	Water	624.1	
LCS 550-265486/1002	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-265486/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-178429-A-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-178429-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 265472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	200.7	
MB 550-265472/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-265472/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-265472/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-178460-C-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-178460-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 265649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-4	EW-1-22Q1-comp	Total/NA	Water	200.7	
MB 550-265649/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-265649/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-265649/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-178525-E-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-178525-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 265651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	200.7 Rev 4.4	265472
MB 550-265472/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	265472
LCS 550-265472/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	265472
LCSD 550-265472/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	265472
550-178460-C-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	265472
550-178460-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	265472

Prep Batch: 265697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	245.1	
MB 550-265697/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-265697/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-265697/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-178117-E-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-178117-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 265715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	245.1	265697
MB 550-265697/1-A	Method Blank	Total/NA	Water	245.1	265697

Metals (Continued)

Analysis Batch: 265715 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 550-265697/2-A	Lab Control Sample	Total/NA	Water	245.1	265697
LCSD 550-265697/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	265697
550-178117-E-1-B MS	Matrix Spike	Total/NA	Water	245.1	265697
550-178117-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	265697

Analysis Batch: 265853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-4	EW-1-22Q1-comp	Total/NA	Water	200.7 Rev 4.4	265649
MB 550-265649/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	265649
LCS 550-265649/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	265649
LCSD 550-265649/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	265649
550-178525-E-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	265649
550-178525-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	265649

General Chemistry

Analysis Batch: 265552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	SM 5210B	
MB 550-265552/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-265552/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-178444-B-2 DU	Duplicate	Total/NA	Water	SM 5210B	

Prep Batch: 265687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	SM 4500 CN C	
MB 550-265687/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-265687/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-265687/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-178166-E-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-178166-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 265789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	SM 2540D	
MB 550-265789/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-265789/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-265789/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-178395-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 265825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	SM 4500 CN E	265687
MB 550-265687/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	265687
LCS 550-265687/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	265687
LCSD 550-265687/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	265687
550-178166-E-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	265687
550-178166-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	265687

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1 — Lab Sample ID: 550-178413-1

Date Collected: 02/03/22 09:10 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 17:38	R1K	TAL PHX
Total/NA	Prep	SM 4500 CN C			265687	02/07/22 14:15	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	265825	02/07/22 15:30	SRG	TAL PHX

Client Sample ID: MW-10-22Q1-comp — Lab Sample ID: 550-178413-2

Date Collected: 02/03/22 09:08 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			265472	02/03/22 20:00	CXK	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	265651	02/04/22 18:12	MGM	TAL PHX
Total/NA	Prep	245.1			265697	02/07/22 16:02	SRR	TAL PHX
Total/NA	Analysis	245.1		1	265715	02/07/22 21:19	SRR	TAL PHX
Total/NA	Analysis	SM 2540D		1	265789		CHS	TAL PHX
					(Start)	02/08/22 14:15		
					(End)	02/09/22 11:30		
Total/NA	Analysis	SM 5210B		1	265552		CRK	TAL PHX
					(Start)	02/04/22 14:00		
					(End)	02/09/22 16:55		

Client Sample ID: EW-1-22Q1 — Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 18:05	R1K	TAL PHX

Client Sample ID: EW-1-22Q1-comp — Lab Sample ID: 550-178413-4

Date Collected: 02/03/22 09:55 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			265649	02/07/22 08:44	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	265853	02/08/22 17:39	MGM	TAL PHX

Client Sample ID: TB-22Q1 — Lab Sample ID: 550-178413-5

Date Collected: 02/03/22 08:00 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 13:43	R1K	TAL PHX

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Method Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL PHX
245.1	Mercury (CVAA)	EPA	TAL PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PHX
SM 4500 CN E	Cyanide, Total	SM	TAL PHX
SM 5210B	BOD, 5-Day	SM	TAL PHX
200.7	Preparation, Total Metals	EPA	TAL PHX
245.1	Preparation, Mercury	EPA	TAL PHX
SM 4500 CN C	Cyanide, Distillation	SM	TAL 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:

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

178413

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

Chain Of Custody / Analysis Request

AESI Ref: 44594.47414
COC#: 35008_020322
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Text & Excel File Drive | Excel & Text File Order

Privileged & Confidential

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

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley/ J. Perez
PO #: A000651433
Analysis Turnaround Time (TAT): 10
Consultant:
Laboratory Contact: Rachel Sester
Report Tier Level: 2
Full Report TAT: 10
HTS
Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd CH2m,
Invoice To: Mike Heitmann, Honeywell/Copy Berney Kidd

Preservative																													
														8	10	15	10	0	0	10									

	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)							Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units																		
1	MW-10	----	----	MW-10-22Q1	2/3/2022	0910	GW-GWS	WATER	REG	4	grab	N	X		X									-01					
2	MW-10	----	----	MW-10-22Q1-comp	2/3/2022	0908	GW-GWS	WATER	REG	3	comp	N		X		X	X	X						-02					
3	EW-1	----	----	EW-1-22Q1	2/3/2022	0957	GW-GWS	WATER	REG	3	grab	N	X											-03					
4	EW-1	----	----	EW-1-22Q1-comp	2/3/2022	0955	GW-GWS	WATER	REG	1	comp	N							X					-04					
5	TRIPBLANK	----	----	TB-22Q1	2/3/2022	8:00	BLKWATER	WATER	TB	1	grab	N	X											-05					
6																													
7																													
8																													
9																													
10																													
11																													
12																													

550-178413 Chain of Custody

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Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
~~Thomas Kearsley~~ Jan Perez	CH2M	FedEx	Date/Time	Cooler Temp.	
2/3/21 1146					
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Date/Time		Nicole Drewel EGA PM 2/3/22 1146	Date/Time	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)

0.4°C IR6 LOO

2/14/2022

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-178413-1
SDG Number: Quarterly

Login Number: 178413
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

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

March 25, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – February 2022**
Industrial Wastewater Discharge Permit Number 1710-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Ms. Hall,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Engineering Group, Inc. (Jacobs) (formerly CH2M HILL Engineers, Inc.) 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 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, February 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	1710-5383	1,366,680	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 October 30, 2017, 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, 2022, through March 31, 2022, was collected on February 03, 2022. 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. 1710-5383

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. 1710-5383

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Permit №: ***1710-5383***

Compliance Sampling Point: ***5383.01***

Report Period: February 1, 2022 Through February 28, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 48,810	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 49,107	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,366,680	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: Baine Foehr

Certifying Official Name: Baine Foehr

Certifying Official Title: Project Manager

Date: March 25, 2022

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Dates/Times Samples Collected: **02/03/2022 at 09:10 (grab),09:08 (composite), 08:50 (pH)**

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

Compliance Sampling Point № **5383.01** Lab Project or Reference ID № **550-178413-1**

Device Type: **½" Sampling tap**

Location Description: **Inside vault under the street in West 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
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/MW-10***

Permit №: ***1710-5383***

Report Period: February 1, 2022 to February 28, 2022

Compliance Point №: ***5383.01***

Lab Project or Reference ID № ***550-178413-1***

½" sampling tap inside vault

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 2/3/2022	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method
1,1-Dichloroethane	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	0.64	EPA 624.1						
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	16	EPA 624.1						
Arsenic	**mg/L**	**0.13**	**1 per 6 Months**	**FPC**	<0.10	EPA 200.7 Rev 4.4						
Benzene	**µg/L**	**35**	**1 per Quarter**	**Grab**	<0.5	EPA 624.1						
BOD	**mg/L**	**N/A**	**1 per Quarter**	**FPC**	<5.0	SM5210B						
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**	<0.5	EPA 624.1						
Copper	**mg/L**	**1.5**	**1 per Quarter**	**FPC**	0.14	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**	<0.010	EPA 200.7 Rev 4.4						
pH	**S.U.**	**5.0-10.5**	**1 per Quarter**	**Grab**	7.15	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**	6.2	EPA 624.1						
TSS	**mg/L**	**N/A**	**1 per Quarter**	**FPC**	<10	SM2540D						
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.

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 Point Cleaned
Last	1/27/2022	34,711,903				☐	☐
1.	2/3/2022	35,050,308	48,344			☐	☐
2.	2/14/2022	35,590,487	49,107			☐	☐
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 **48,810**

Maximum Flow **49,107**

Total Gallons **1,366,680**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 2/3/22 Field Technician(s) T. Rearsley / J. A

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0845	ON	35050308	-2	34.0	303.3	~~5667~~ 851048
Depart		ON					

Electrical Meter Readings

Power(kwh)	5187
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: 08:47

Time pH Sample Analyzed: 08:50
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 09:10

Composite Sample Log

Start Time: 08:48 End Time: 09:08 Flow Rate: 500 mL/min

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

Notes

pH 7.15 23.3°C

Signature: [signature]

MW-10 Well Information
Total Depth = 430 feet bgs

Screen Interval = 200-425 feet bgs

Pump Intake Depth = 338 feet bgs

304.4
- 5.1
303.3

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

Date 2/14/22 Field Technician(s) Juan Poez

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0833	ON	35590467	2	34.1	291.1	85368.6
Depart		ON					

Electrical Meter Readings

Power(kwh)	6530
Power Rate(KwMax)	5.1

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:_____ 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: Juan Poez

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

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter №

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# 1GA843 Jan/23	2/3/22	TK	0748	4.00	20.9	99.6	
pH Buffer 7/Lot# 1GD1221 Apr/23			07:46	7.00	21.4	102.4	
pH Buffer 10/Lot# 1GC500 Mar/23			07:51	10.00	20.7	100.0	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# GHL8500-2 Jul/23			07:53	7.03	20.7	Pass or Fail	
Compliance pH result 5436.01 (EW-1)	2/3/22	TK	0936	7.18	24.3	N/A	
Compliance pH result 5383.01 (MW-10)	2/3/22	TK	08:50	7.15	23.3	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)	2/3/22	TK	Orig Reading:	7.15	Dup Reading:	7.17	
Once/Month Verification Check/Buffer 7	2/3/22	TK	11:20	7.02	22.0	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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 550-178413-1
Laboratory Sample Delivery Group: Quarterly
Client Project/Site: IAC, Peoria

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
2/14/2022 5:08:53 PM
Emily Petrunia, Project Manager I
(602)659-7629
emily.petrunia@eurofinset.com

Designee for

Rachel Sester, Project Manager I
(602)659-7615
Rachel.Sester@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Qualifiers

GC/MS VOA

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

Metals

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

General Chemistry

Qualifier	Qualifier Description
K5	The dilution water D.O. depletion was > 0.2 mg/L.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
R8	Sample RPD exceeded the method acceptance limit.

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: 550-178413-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-178413-1

Comments
No additional comments.

Receipt
The samples were received on 2/3/2022 11:46 AM. 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 0.4º 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
Methods SM 4500 CN E, SM 4500 CN G: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 550-265687 and analytical batch 550-265825 were outside control limits for Cyanide. Sample matrix interference was suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 5210B: The method blank (MB) result associated with batch 550-265552 was higher than the method-required limit of 0.2 mg/L for Biochemical Oxygen Demand (BOD). As such, the results have been reported and qualified with K5 flags.

Method SM 5210B: The sample duplicate (DU) precision for analytical batch 550-265552 was outside control limits for BOD. Sample non-homogeneity was suspected.

No additional analytical or quality issues were noted, other than those described above or 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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-178413-1	MW-10-22Q1	Water	02/03/22 09:10	02/03/22 11:46
550-178413-2	MW-10-22Q1-comp	Water	02/03/22 09:08	02/03/22 11:46
550-178413-3	EW-1-22Q1	Water	02/03/22 09:57	02/03/22 11:46
550-178413-4	EW-1-22Q1-comp	Water	02/03/22 09:55	02/03/22 11:46
550-178413-5	TB-22Q1	Water	02/03/22 08:00	02/03/22 11:46

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1 — Lab Sample ID: 550-178413-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.64		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	16	R6	0.50		ug/L	1		624.1	Total/NA
Trichloroethene	6.2		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-22Q1-comp — Lab Sample ID: 550-178413-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Copper	0.14		0.010		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: EW-1-22Q1 — Lab Sample ID: 550-178413-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.3		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	52	R6	0.50		ug/L	1		624.1	Total/NA
Chloroform	1.3	R6	0.50		ug/L	1		624.1	Total/NA
Trichloroethene	17		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q1-comp — Lab Sample ID: 550-178413-4

No Detections.

Client Sample ID: TB-22Q1 — Lab Sample ID: 550-178413-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1

Lab Sample ID: 550-178413-1

Date Collected: 02/03/22 09:10
Date Received: 02/03/22 11:46

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.64**		0.50		ug/L			02/04/22 17:38	1
1,1-Dichloroethene	**16**	**R6**	0.50		ug/L			02/04/22 17:38	1
Benzene	ND		0.50		ug/L			02/04/22 17:38	1
Chloroform	ND	R6	0.50		ug/L			02/04/22 17:38	1
Trichloroethene	**6.2**		0.50		ug/L			02/04/22 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*02/04/22 17:38*	*1*
Toluene-d8 (Surr)	*119*		*60 - 140*		*02/04/22 17:38*	*1*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*		*02/04/22 17:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		02/07/22 14:15	02/07/22 15:30	1

Client Sample ID: MW-10-22Q1-comp

Lab Sample ID: 550-178413-2

Date Collected: 02/03/22 09:08
Date Received: 02/03/22 11:46

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		02/03/22 20:00	02/04/22 18:12	1
Cadmium	ND		0.0010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Lead	ND		0.015		mg/L		02/03/22 20:00	02/04/22 18:12	1
Selenium	ND		0.10		mg/L		02/03/22 20:00	02/04/22 18:12	1
Silver	ND		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Copper	**0.14**		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Molybdenum	ND		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Zinc	ND		0.050		mg/L		02/03/22 20:00	02/04/22 18:12	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/07/22 16:02	02/07/22 21:19	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			02/08/22 14:15	1
Biochemical Oxygen Demand	ND	K5	5.0		mg/L			02/04/22 14:00	1

Client Sample ID: EW-1-22Q1

Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57
Date Received: 02/03/22 11:46

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**5.3**		0.50		ug/L			02/04/22 18:05	1
1,1-Dichloroethene	**52**	**R6**	0.50		ug/L			02/04/22 18:05	1
Benzene	ND		0.50		ug/L			02/04/22 18:05	1
Chloroform	**1.3**	**R6**	0.50		ug/L			02/04/22 18:05	1
Trichloroethene	**17**		0.50		ug/L			02/04/22 18:05	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: EW-1-22Q1

Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57
Matrix: Water
Date Received: 02/03/22 11:46

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*60 - 140*		*02/04/22 18:05*	*1*
Toluene-d8 (Surr)	*97*		*60 - 140*		*02/04/22 18:05*	*1*
4-Bromofluorobenzene (Surr)	*106*		*60 - 140*		*02/04/22 18:05*	*1*

Client Sample ID: EW-1-22Q1-comp

Lab Sample ID: 550-178413-4

Date Collected: 02/03/22 09:55
Matrix: Water
Date Received: 02/03/22 11:46

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	mg/L		02/07/22 08:44	02/08/22 17:39	1
Lead	ND		0.015	mg/L		02/07/22 08:44	02/08/22 17:39	1
Copper	ND		0.010	mg/L		02/07/22 08:44	02/08/22 17:39	1
Zinc	ND		0.050	mg/L		02/07/22 08:44	02/08/22 17:39	1

Client Sample ID: TB-22Q1

Lab Sample ID: 550-178413-5

Date Collected: 02/03/22 08:00
Matrix: Water
Date Received: 02/03/22 11:46

Method: 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			02/04/22 13:43	1
1,1-Dichloroethene	ND	R6	0.50	ug/L			02/04/22 13:43	1
Benzene	ND		0.50	ug/L			02/04/22 13:43	1
Chloroform	ND	R6	0.50	ug/L			02/04/22 13:43	1
Trichloroethene	ND		0.50	ug/L			02/04/22 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*02/04/22 13:43*	*1*
Toluene-d8 (Surr)	*77*		*60 - 140*		*02/04/22 13:43*	*1*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*02/04/22 13:43*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DBFM	TOL	BFB					
Lab Sample ID	**Client Sample ID**	**(60-140)**	**(60-140)**	**(60-140)**					
550-178413-1	MW-10-22Q1	95	119	105					
550-178413-3	EW-1-22Q1	111	97	106					
550-178413-5	TB-22Q1	98	77	96					
550-178429-A-2 MS	Matrix Spike	114	96	114					
550-178429-A-2 MSD	Matrix Spike Duplicate	107	104	95					
LCS 550-265486/1002	Lab Control Sample	105	81	76					
LCSD 550-265486/4	Lab Control Sample Dup	93	95	113					
MB 550-265486/5	Method Blank	97	80	114					

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Lab Sample ID: MB 550-265486/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			02/04/22 12:03	1
1,1-Dichloroethene	ND		0.50		ug/L			02/04/22 12:03	1
Benzene	ND		0.50		ug/L			02/04/22 12:03	1
Chloroform	ND		0.50		ug/L			02/04/22 12:03	1
Trichloroethene	ND		0.50		ug/L			02/04/22 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*02/04/22 12:03*	*1*
Toluene-d8 (Surr)	*80*		*60 - 140*		*02/04/22 12:03*	*1*
4-Bromofluorobenzene (Surr)	*114*		*60 - 140*		*02/04/22 12:03*	*1*

Lab Sample ID: LCS 550-265486/1002 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			50.0	55.5		ug/L		111	70 - 150		
1,1-Dichloroethene			50.0	68.4		ug/L		137	50 - 140		
Benzene			50.0	44.0		ug/L		88	65 - 135		
Chloroform			50.0	56.7		ug/L		113	70 - 135		
Trichloroethene			50.0	51.5		ug/L		103	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*81*		*60 - 140*
4-Bromofluorobenzene (Surr)	*76*		*60 - 140*

Lab Sample ID: LCSD 550-265486/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			50.0	52.7		ug/L		105	70 - 150	5	20
1,1-Dichloroethene			50.0	50.1	R6	ug/L		100	50 - 140	31	20
Benzene			50.0	47.0		ug/L		94	65 - 135	7	20
Chloroform			50.0	46.1	R6	ug/L		92	70 - 135	21	20
Trichloroethene			50.0	57.0		ug/L		114	65 - 135	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*95*		*60 - 140*
4-Bromofluorobenzene (Surr)	*113*		*60 - 140*

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

Lab Sample ID: 550-178429-A-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		50.0	62.7		ug/L		125	59 - 155
1,1-Dichloroethene	ND		50.0	64.2		ug/L		128	10 - 234
Benzene	ND		50.0	48.4		ug/L		97	35 - 151
Chloroform	0.56		50.0	58.3		ug/L		116	51 - 138
Trichloroethene	ND		50.0	58.2		ug/L		116	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*114*		*60 - 140*
Toluene-d8 (Surr)	*96*		*60 - 140*
4-Bromofluorobenzene (Surr)	*114*		*60 - 140*

Lab Sample ID: 550-178429-A-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

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	54.4		ug/L		109	59 - 155	14	40
1,1-Dichloroethene	ND		50.0	54.9		ug/L		110	10 - 234	15	32
Benzene	ND		50.0	53.5		ug/L		107	35 - 151	10	61
Chloroform	0.56		50.0	55.4		ug/L		110	51 - 138	5	54
Trichloroethene	ND		50.0	52.6		ug/L		105	70 - 157	10	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*104*		*60 - 140*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-265472/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		02/03/22 20:00	02/04/22 17:36	1
Cadmium	ND		0.0010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Lead	ND		0.015	mg/L		02/03/22 20:00	02/04/22 17:36	1
Selenium	ND		0.10	mg/L		02/03/22 20:00	02/04/22 17:36	1
Silver	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Copper	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Molybdenum	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Zinc	ND		0.050	mg/L		02/03/22 20:00	02/04/22 17:36	1

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

Lab Sample ID: LCS 550-265472/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.959		mg/L		96	85 - 115
Cadmium	1.00	0.963		mg/L		96	85 - 115
Lead	1.00	1.00		mg/L		100	85 - 115
Selenium	1.00	0.971		mg/L		97	85 - 115
Silver	0.0750	0.0732		mg/L		98	85 - 115
Copper	1.00	0.937		mg/L		94	85 - 115
Molybdenum	1.00	0.980		mg/L		98	85 - 115
Zinc	1.00	1.03		mg/L		103	85 - 115

Lab Sample ID: LCSD 550-265472/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.00	0.953		mg/L		95	85 - 115	1	20
Cadmium	1.00	0.962		mg/L		96	85 - 115	0	20
Lead	1.00	1.00		mg/L		100	85 - 115	0	20
Selenium	1.00	0.969		mg/L		97	85 - 115	0	20
Silver	0.0750	0.0721		mg/L		96	85 - 115	2	20
Copper	1.00	0.934		mg/L		93	85 - 115	0	20
Molybdenum	1.00	0.979		mg/L		98	85 - 115	0	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-178460-C-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		1.00	1.03		mg/L		101	70 - 130
Cadmium	0.043		1.00	1.04		mg/L		99	70 - 130
Lead	ND		1.00	0.805		mg/L		80	70 - 130
Selenium	ND		1.00	1.02		mg/L		101	70 - 130
Silver	ND		0.0750	0.0735		mg/L		98	70 - 130
Copper	ND		1.00	0.976		mg/L		98	70 - 130
Molybdenum	0.20		1.00	1.18		mg/L		98	70 - 130
Zinc	ND		1.00	1.07		mg/L		107	70 - 130

Lab Sample ID: 550-178460-C-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.03		mg/L		101	70 - 130	0	20
Cadmium	0.043		1.00	1.05		mg/L		101	70 - 130	1	20
Lead	ND		1.00	0.801		mg/L		80	70 - 130	0	20
Selenium	ND		1.00	1.01		mg/L		99	70 - 130	1	20
Silver	ND		0.0750	0.0728		mg/L		97	70 - 130	1	20
Copper	ND		1.00	0.981		mg/L		98	70 - 130	1	20
Molybdenum	0.20		1.00	1.18		mg/L		98	70 - 130	0	20

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

Lab Sample ID: 550-178460-C-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

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	0	20

Lab Sample ID: MB 550-265649/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		02/07/22 08:44	02/08/22 16:49	1
Lead	ND		0.015		mg/L		02/07/22 08:44	02/08/22 16:49	1
Copper	ND		0.010		mg/L		02/07/22 08:44	02/08/22 16:49	1
Zinc	ND		0.050		mg/L		02/07/22 08:44	02/08/22 16:49	1

Lab Sample ID: LCS 550-265649/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	1.00	0.945		mg/L		95	85 - 115
Lead	1.00	0.983		mg/L		98	85 - 115
Copper	1.00	0.910		mg/L		91	85 - 115
Zinc	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: LCSD 550-265649/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	1.00	0.943		mg/L		94	85 - 115	0	20
Lead	1.00	0.983		mg/L		98	85 - 115	0	20
Copper	1.00	0.900		mg/L		90	85 - 115	1	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-178525-E-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		1.00	0.946		mg/L		95	70 - 130
Lead	ND		1.00	0.970		mg/L		97	70 - 130
Copper	0.64	M2	1.00	1.12	M2	mg/L		48	70 - 130
Zinc	ND		1.00	1.02		mg/L		102	70 - 130

Lab Sample ID: 550-178525-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		1.00	0.939		mg/L		94	70 - 130	1	20
Lead	ND		1.00	0.974		mg/L		97	70 - 130	0	20
Copper	0.64	M2	1.00	1.16	M2	mg/L		52	70 - 130	3	20

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

Lab Sample ID: 550-178525-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	ND		1.00	1.01		mg/L		101	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-265697/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/07/22 16:02	02/07/22 20:43	1

Lab Sample ID: LCS 550-265697/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00500	0.00498		mg/L		100	85 - 115		

Lab Sample ID: LCSD 550-265697/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.00500	0.00515		mg/L		103	85 - 115	3	20

Lab Sample ID: 550-178117-E-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.00500	0.00363		mg/L		73	70 - 130		

Lab Sample ID: 550-178117-E-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00381		mg/L		76	70 - 130	5	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-265789/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			02/08/22 14:15	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 550-265789/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			200	179		mg/L		90	90 - 110		

Lab Sample ID: LCSD 550-265789/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids			200	186		mg/L		93	90 - 110	4	10

Lab Sample ID: 550-178395-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	25			24.0		mg/L				4	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-265687/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		02/07/22 14:15	02/07/22 15:30	1

Lab Sample ID: LCS 550-265687/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.0978		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-265687/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0967		mg/L		97	90 - 110	1	20

Lab Sample ID: 550-178166-E-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND	M2	0.100	0.0581	M2	mg/L		58	80 - 120		

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

Lab Sample ID: 550-178166-E-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

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	0.0692	M2	mg/L		69	80 - 120	17	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-265552/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND	K5	5.0		mg/L			02/04/22 14:00	1

Lab Sample ID: LCS 550-265552/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	220	K5	mg/L		111	84.6 - 115.4		

Lab Sample ID: 550-178444-B-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	37	R8 K5		30.0	K5 R8	mg/L				21	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

GC/MS VOA

Analysis Batch: 265486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	624.1	
550-178413-3	EW-1-22Q1	Total/NA	Water	624.1	
550-178413-5	TB-22Q1	Total/NA	Water	624.1	
MB 550-265486/5	Method Blank	Total/NA	Water	624.1	
LCS 550-265486/1002	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-265486/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-178429-A-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-178429-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 265472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	200.7	
MB 550-265472/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-265472/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-265472/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-178460-C-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-178460-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 265649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-4	EW-1-22Q1-comp	Total/NA	Water	200.7	
MB 550-265649/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-265649/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-265649/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-178525-E-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-178525-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 265651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	200.7 Rev 4.4	265472
MB 550-265472/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	265472
LCS 550-265472/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	265472
LCSD 550-265472/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	265472
550-178460-C-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	265472
550-178460-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	265472

Prep Batch: 265697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	245.1	
MB 550-265697/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-265697/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-265697/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-178117-E-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-178117-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 265715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	245.1	265697
MB 550-265697/1-A	Method Blank	Total/NA	Water	245.1	265697

Metals (Continued)

Analysis Batch: 265715 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 550-265697/2-A	Lab Control Sample	Total/NA	Water	245.1	265697
LCSD 550-265697/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	265697
550-178117-E-1-B MS	Matrix Spike	Total/NA	Water	245.1	265697
550-178117-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	265697

Analysis Batch: 265853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-4	EW-1-22Q1-comp	Total/NA	Water	200.7 Rev 4.4	265649
MB 550-265649/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	265649
LCS 550-265649/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	265649
LCSD 550-265649/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	265649
550-178525-E-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	265649
550-178525-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	265649

General Chemistry

Analysis Batch: 265552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	SM 5210B	
MB 550-265552/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-265552/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-178444-B-2 DU	Duplicate	Total/NA	Water	SM 5210B	

Prep Batch: 265687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	SM 4500 CN C	
MB 550-265687/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-265687/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-265687/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-178166-E-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-178166-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 265789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	SM 2540D	
MB 550-265789/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-265789/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-265789/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-178395-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 265825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	SM 4500 CN E	265687
MB 550-265687/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	265687
LCS 550-265687/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	265687
LCSD 550-265687/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	265687
550-178166-E-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	265687
550-178166-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	265687

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1 — Lab Sample ID: 550-178413-1

Date Collected: 02/03/22 09:10 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 17:38	R1K	TAL PHX
Total/NA	Prep	SM 4500 CN C			265687	02/07/22 14:15	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	265825	02/07/22 15:30	SRG	TAL PHX

Client Sample ID: MW-10-22Q1-comp — Lab Sample ID: 550-178413-2

Date Collected: 02/03/22 09:08 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			265472	02/03/22 20:00	CXK	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	265651	02/04/22 18:12	MGM	TAL PHX
Total/NA	Prep	245.1			265697	02/07/22 16:02	SRR	TAL PHX
Total/NA	Analysis	245.1		1	265715	02/07/22 21:19	SRR	TAL PHX
Total/NA	Analysis	SM 2540D		1	265789		CHS	TAL PHX
					(Start)	02/08/22 14:15		
					(End)	02/09/22 11:30		
Total/NA	Analysis	SM 5210B		1	265552		CRK	TAL PHX
					(Start)	02/04/22 14:00		
					(End)	02/09/22 16:55		

Client Sample ID: EW-1-22Q1 — Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 18:05	R1K	TAL PHX

Client Sample ID: EW-1-22Q1-comp — Lab Sample ID: 550-178413-4

Date Collected: 02/03/22 09:55 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			265649	02/07/22 08:44	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	265853	02/08/22 17:39	MGM	TAL PHX

Client Sample ID: TB-22Q1 — Lab Sample ID: 550-178413-5

Date Collected: 02/03/22 08:00 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 13:43	R1K	TAL PHX

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Method Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL PHX
245.1	Mercury (CVAA)	EPA	TAL PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PHX
SM 4500 CN E	Cyanide, Total	SM	TAL PHX
SM 5210B	BOD, 5-Day	SM	TAL PHX
200.7	Preparation, Total Metals	EPA	TAL PHX
245.1	Preparation, Mercury	EPA	TAL PHX
SM 4500 CN C	Cyanide, Distillation	SM	TAL 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:

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

178413

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

Chain Of Custody / Analysis Request

AESI Ref: 44594.47414
COC#: 35008_020322
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Text & Excel File Drive | Excel & Text File Order

Privileged & Confidential

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

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley/ J. Perez
PO #: A000651433
Analysis Turnaround Time (TAT): 10
Consultant:
Laboratory Contact: Rachel Sester
Report Tier Level: 2
Full Report TAT: 10
HTS
Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd CH2m,
Invoice To: Mike Heitmann, Honeywell/Copy Berney Kidd

Preservative																													
														8	10	15	10	0	0	10									

	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)							Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units																		
1	MW-10	----	----	MW-10-22Q1	2/3/2022	0910	GW-GWS	WATER	REG	4	grab	N	X		X									-01					
2	MW-10	----	----	MW-10-22Q1-comp	2/3/2022	0908	GW-GWS	WATER	REG	3	comp	N		X		X	X	X						-02					
3	EW-1	----	----	EW-1-22Q1	2/3/2022	0957	GW-GWS	WATER	REG	3	grab	N	X											-03					
4	EW-1	----	----	EW-1-22Q1-comp	2/3/2022	0955	GW-GWS	WATER	REG	1	comp	N							X					-04					
5	TRIPBLANK	----	----	TB-22Q1	2/3/2022	8:00	BLKWATER	WATER	TB	1	grab	N	X											-05					
6																													
7																													
8																													
9																													
10																													
11																													
12																													

550-178413 Chain of Custody

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Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
~~Thomas Kearsley~~ Jan Perez	CH2M	FedEx	Date/Time	Cooler Temp.	
2/3/21 1146					
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Date/Time		Nicole Drewel EGA PM 2/3/22 1146	Date/Time	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)

0.4°C IR6 LOO

2/14/2022

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-178413-1
SDG Number: Quarterly

Login Number: 178413
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
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www.jacobs.com

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

April 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – March 2022**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Ms. Hall,

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 March 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, March 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,539,210	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 April 1, 2022, through June 30, 2022, will be collected in April 2022.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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. 1806-5436

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. 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: March 1, 2022 Through March 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 81,910	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 82,244	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,539,210	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 4/26/2022

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 Point Cleaned
Last	2/14/2022	28,853,360				☐	☐
1.	3/2/2022	30,169,261	82,244			☐	☒
2.	3/23/2022	31,884,044	81,656			☐	☐
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	**81,910**
Maximum Flow	**82,244**
Total Gallons	**2,539,210**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 3/2/22

Field Technician(s) J. Paez

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	919	ON	30169261		8	57.66	295.98	23196.0
Depart		ON						

Electrical Meter Readings

Power(kwh)	47563
Power Rate(KwMax)	8.82

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

Maintenance Items

- [x] Inspect Totalizer Paddle Wheel
- [x] Clean Vault
- [x] 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

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

Date: 3/23/22 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	0815	ON	31884044		-7	56.6	~~302.7~~	23699.0
Depart							298.88	

Electrical Meter Readings

Power(kwh)	~~23699~~ 51996
Power Rate(KwMax)	8.83

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: [signature]

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

301.80 ~~307.8~~
2.92 ~~5.1~~
298.88 ~~302.7~~

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

April 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – March 2022**
Industrial Wastewater Discharge Permit Number 1710-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Ms. Hall,

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 (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the March 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, March 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	1710-5383	1,534,686	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 April 1, 2022, through June 30, 2022, will be collected in April 2022.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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. 1710-5383

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 MW-10
Industrial Wastewater Discharge
Permit No. 1710-5383

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Permit №: ***1710-5383***

Compliance Sampling Point: ***5383.01***

Report Period: March 1, 2022 Through March 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 49,506	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 49,684	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,534,686	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 4/26/2022

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 Point Cleaned
Last	2/14/2022	35,590,487				☐	☐
1.	3/2/2022	36,378,331	49,240			☐	☐
2.	3/26/2022	37,570,745	49.684			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
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27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow	**49,506**
Maximum Flow	**49,684**
Total Gallons	**1,534,686**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 3/2/22 Field Technician(s) J. Paez

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	856	ON	36378331	2	33.81	303.4	85753.0
Depart		ON					

Electrical Meter Readings

Power(kwh)	~~5.11~~ 8487
Power Rate(KwMax)	~~8487~~ 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: [signature]

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

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

Date 3/26/22 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	10:19	ON	37570745	-2	34.5	303.1	86390.3
Depart							

Electrical Meter Readings

Power(kwh)	11429
Power Rate(KwMax)	5.11

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

Maintenance Items

- [x] Inspect Totalizer Paddle Wheel
- [x] Clean Vault
- [x] Flex Valves

Quarterly Compliance Sampling

Quarterly Compliance Sample Collected? Yes ____ No X

Laboratory Analyses and Method

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

3/23/22 0800 Car parked on Vault
3/24/22 0950 different Car parked on Vault
3/25/22 0745 Car parked on Vault, Knocked on doors & left Note on windshield.

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

308.2
-5.1
303.1

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

May 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – April 2022**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Ms. Hall,

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 April 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, April 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,480,190	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, 2022, through June 30, 2022, will be collected in May 2022.

If you should require any additional information, please contact me at (602) 295-3925.

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. 1806-5436

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. 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: April 1, 2022 Through April 30, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 82,673	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 83,451	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,480,190	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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: Baine Foehr

Certifying Official Name: Baine Foehr

Certifying Official Title: Project Manager

Date: 5/26/2022

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	3/23/2022	31,884,044				☐	☐
1.	4/5/2022	32,945,567	81,656			☐	☐
2.	4/22/2022	34,364,241	83,451			☐	☐
3.						☐	☐
4.						☐	☐
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28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow	**82,673**
Maximum Flow	**83,451**
Total Gallons	**2,480,190**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 4/5/22 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	0916	ON	329 45567		7	56.2	295.98	24012.6
Depart		ON						

Electrical Meter Readings

Power(kwh)	54671
Power Rate(KwMax)	8.79

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

Signature: [signature]

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

295.98
− 2.92

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

Date: 4/22/22 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	0922	ON	3436 4241		-7	57.4	295.98	24420.0
Depart		ON						

Electrical Meter Readings

Power(kwh)	58233
Power Rate(KwMax)	8.82

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

298.90
-2.92
295.98

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

May 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – April 2022**
Industrial Wastewater Discharge Permit Number 1710-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Ms. Hall,

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 (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the April 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, April 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	1710-5383	1,483,350	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, 2022, through June 30, 2022, will be collected in May 2022.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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. 1710-5383

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 MW-10
Industrial Wastewater Discharge
Permit No. 1710-5383

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Permit №: ***1710-5383***

Compliance Sampling Point: ***5383.01***

Report Period: April 1, 2022 Through April 30, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 49,445	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 49,457	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,483,350	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 5/26/2022

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

Compliance Sampling Point Nº 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 Point Cleaned
Last	3/26/2022	37,570,745				☐	☐
1.	4/5/2022	38,064,991	49,425			☐	☐
2.	4/22/2022	38,905,764	49,457			☐	☒
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
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27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow	**49,445**
Maximum Flow	**49,457**
Total Gallons	**1,483,350**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 4/5/22 Field Technician(s) T. Kassly

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0854	ON	28064991	-2	34.6	302.62	82569.0
Depart		ON					

Electrical Meter Readings

Power(kwh)	12643
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
[—] 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 Kassly

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

307.72
- 5.1
302.62

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

Date 4/22/22 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	0903	ON	38905764	-2	34.1	302.90	86977.1
Depart		ON					

Electrical Meter Readings

Power(kwh)	14720
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
[—] 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: [signature]

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

309.00
5.1
302.90

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

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

June 24, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – May 2022**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Ms. Hall,

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 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, May 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,559,608	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 July 25, 2018, 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, 2022, through June 30, 2022, are included in this monthly report. Jacobs personnel performed compliance sampling for all required analytes on May 12, 2022. 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: May 1, 2022 Through May 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 82,568	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 83,134	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,559,608	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] SMR Page 1 – Flow Page with Signed and Dated Certification
- [x] SMR Page 2 – Sampling Detail Page
- [x] SMR Page 3 – Laboratory Results Reporting Table
- [ ] Attachment B - Zero Discharge Certification (Only if Applicable)
- [x] pH Calibration & Analysis Log with Method QC Data
- [x] Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- [x] ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- [x] 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 June 24, 2022

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

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

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

Phoenix, Arizona 85029

Dates/Times Samples Collected: **05/12/2022 at 10:55 (grab), 10:53 (composite), 10:32 (pH)**

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

Compliance Sampling Point № **5436.01** Lab Project or Reference ID № **550-184011-1**

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, 2022 to May 31, 2022

Compliance Point №: ***5436.01***

Lab Project or Reference ID № ***550-184011-1***

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

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 05/12/2022	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**	5.0	EPA 624.1								
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	63	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 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**	<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**	7.58	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**	18	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 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	4/22/2022	34,364,241				☐	☐
1.	5/3/2022	35,278,715	83,134			☐	☒
2.	5/12/2022	36,015,598	81,876			☐	☐
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	**82,568**
Maximum Flow	**83,134**
Total Gallons	**2,559,608**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 5/3/22 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	10:20	ON	35278715		-7	56.3	296.08	24685.1
Depart		ON						

Electrical Meter Readings

Power(kwh)	60543
Power Rate(KwMax)	8.84

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

Annual COP well inspection by J. Gentry

Signature: T Kearsley

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

299.00
2.92
296.08

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

Date: 5/12/22 Field Technician(s) T. Kersley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:31	ON	36015598		7	55.2	296.08	24906.7
Depart		ON						

Electrical Meter Readings

Power(kwh)	62421
Power Rate(KwMax)	8.77

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: 10:32

Time pH Sample Analyzed: 10:34
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 10:55

Composite Sample Log

Start Time: 1033 End Time: 1053 Flow Rate: 500 mL/min

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

Notes

ph @ 7.58 @ 29.4°C

Signature: [signature]

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

299.00
− 2.92
296.08

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № OYSTER-10 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# 1GA 843 Jan/23	5/12/21	TK	08:19	4.00	23.9	96.8	
pH Buffer 7/Lot# 1GD 360 Apr/23			08:13	7.00	23.5	96.9	
pH Buffer 10/Lot# 1GC 500 Mar/23			0816	10.00	23.8	97.3	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# LKLB5007 7/23			08:21	7.02	23.7	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	5/12/21	TK	1034	7.58	29.4	N/A	
Compliance pH result 5383.01 (MW-10)	5/12/21	TK	1120	7.43	30.2	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)	5/12/21	TK	Orig Reading:	7.43	Dup Reading:	7.45	
Once/Month Verification Check/Buffer 7	5/12/21	TK	13:00	7.04	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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 550-184011-1
Client Project/Site: IAC, Peoria
Revision: 1

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
6/6/2022 10:55:16 AM

Rachel Sester, Project Manager I
(602)659-7615
Rachel.Sester@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Qualifiers

Metals

Qualifier	Qualifier Description
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

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: 550-184011-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-184011-1

Revision
This report was revised on 6/6/22 to report a limited list of 624.1 parameters for samples 550-184011-1 and 550-184011-3. This final report replaces the report that was generated on 6/2/22 at 1:06 PM.

Comments
No additional comments.

Receipt
The samples were received on 5/12/2022 2:00 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 1.0º 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 continuing calibration verification (CCV) associated with batch 550-274624 recovered above the upper control limit for Cadmium, Molybdenum, Lead, Selenium, and Zinc. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry
Methods SM 4500 CN E, SM 4500 CN G: The matrix spike (MS) recovery and the matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 550-274208 and analytical batch 550-274268 were outside control limits for cyanide. Sample matrix interference and/or non-homogeneity were suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) recoveries and precision were within control limits.

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

Job ID: 550-184011-2

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-184011-2

Comments
No additional comments.

Job ID: 550-184011-3

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-184011-3

Comments

Job ID: 550-184011-3 (Continued)

Laboratory: Eurofins Phoenix (Continued)

No additional comments.

Sample Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-184011-1	MW-10-22Q2	Water	05/12/22 11:43	05/12/22 14:00
550-184011-2	MW-10-22Q2-comp	Water	05/12/22 11:40	05/12/22 14:00
550-184011-3	EW-1-22Q2	Water	05/12/22 10:55	05/12/22 14:00
550-184011-4	EW-1-22Q2-comp	Water	05/12/22 10:53	05/12/22 14:00
550-184011-5	MW-7-285-051222	Water	05/12/22 09:49	05/12/22 14:00
550-184011-6	MW-12-410-051222	Water	05/12/22 10:19	05/12/22 14:00
550-184011-7	MW-13-355-051222	Water	05/12/22 09:01	05/12/22 14:00
550-184011-8	MW-14-350-051222	Water	05/12/22 12:13	05/12/22 14:00
550-184011-9	TB-051222	Water	05/12/22 08:00	05/12/22 14:00

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2 — Lab Sample ID: 550-184011-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	19		1.0	ug/L	1		624.1	Total/NA
Trichloroethene	5.5		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-22Q2-comp — Lab Sample ID: 550-184011-2

No Detections.

Client Sample ID: EW-1-22Q2 — Lab Sample ID: 550-184011-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.0		1.0	ug/L	1		624.1	Total/NA
1,1-Dichloroethene	63		1.0	ug/L	1		624.1	Total/NA
Chloroform	1.1		1.0	ug/L	1		624.1	Total/NA
Trichloroethene	18		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q2-comp — Lab Sample ID: 550-184011-4

No Detections.

Client Sample ID: MW-7-285-051222 — Lab Sample ID: 550-184011-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.1		1.0	ug/L	1		624.1	Total/NA
Trichloroethene	1.4		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: MW-12-410-051222 — Lab Sample ID: 550-184011-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.9		1.0	ug/L	1		624.1	Total/NA
Chloroform	4.8		1.0	ug/L	1		624.1	Total/NA
Dichlorobromomethane	1.1		1.0	ug/L	1		624.1	Total/NA
Trichloroethene	1.3		1.0	ug/L	1		624.1	Total/NA
Trihalomethanes, Total	5.9		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: MW-13-355-051222 — Lab Sample ID: 550-184011-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.5		1.0	ug/L	1		624.1	Total/NA
Trihalomethanes, Total	1.5		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: MW-14-350-051222 — Lab Sample ID: 550-184011-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.2		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: TB-051222 — Lab Sample ID: 550-184011-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2

Lab Sample ID: 550-184011-1
Date Collected: 05/12/22 11:43
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		1.0	ug/L			05/26/22 01:14	1
1,1-Dichloroethene	**19**		1.0	ug/L			05/26/22 01:14	1
Benzene	ND		1.0	ug/L			05/26/22 01:14	1
Chloroform	ND		1.0	ug/L			05/26/22 01:14	1
Trichloroethene	**5.5**		1.0	ug/L			05/26/22 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 01:14*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/26/22 01:14*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050	mg/L		05/15/22 15:45	05/15/22 16:29	1

Client Sample ID: MW-10-22Q2-comp

Lab Sample ID: 550-184011-2
Date Collected: 05/12/22 11:40
Matrix: Water
Date Received: 05/12/22 14:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/17/22 10:01	05/18/22 22:05	1
Cadmium	ND	V1	0.0010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Copper	ND		0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Lead	ND	V1	0.015	mg/L		05/17/22 10:01	05/18/22 22:05	1
Molybdenum	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Selenium	ND	V1	0.10	mg/L		05/17/22 10:01	05/18/22 22:05	1
Silver	ND		0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Zinc	ND	V1	0.050	mg/L		05/17/22 10:01	05/18/22 22:05	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		05/13/22 15:40	05/13/22 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			05/17/22 11:16	1
Biochemical Oxygen Demand	ND		5.0	mg/L			05/14/22 10:30	1

Client Sample ID: EW-1-22Q2

Lab Sample ID: 550-184011-3
Date Collected: 05/12/22 10:55
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**5.0**		1.0	ug/L			05/26/22 01:34	1
1,1-Dichloroethene	**63**		1.0	ug/L			05/26/22 01:34	1
Chloroform	**1.1**		1.0	ug/L			05/26/22 01:34	1
Trichloroethene	**18**		1.0	ug/L			05/26/22 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*		*05/26/22 01:34*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/26/22 01:34*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: EW-1-22Q2

Lab Sample ID: 550-184011-3
Date Collected: 05/12/22 10:55
Matrix: Water
Date Received: 05/12/22 14:00

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/15/22 15:45	05/15/22 16:29	1

Client Sample ID: EW-1-22Q2-comp

Lab Sample ID: 550-184011-4
Date Collected: 05/12/22 10:53
Matrix: Water
Date Received: 05/12/22 14:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/17/22 10:01	05/18/22 22:08	1
Cadmium	ND	V1	0.0010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Copper	ND		0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Lead	ND	V1	0.015		mg/L		05/17/22 10:01	05/18/22 22:08	1
Molybdenum	ND	V1	0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Selenium	ND	V1	0.10		mg/L		05/17/22 10:01	05/18/22 22:08	1
Silver	ND		0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Zinc	ND	V1	0.050		mg/L		05/17/22 10:01	05/18/22 22:08	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/25/22 16:20	05/25/22 19:58	1

Client Sample ID: MW-7-285-051222

Lab Sample ID: 550-184011-5
Date Collected: 05/12/22 09:49
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1-Dichloroethene	**2.1**		1.0		ug/L			05/26/22 01:55	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 01:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 01:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 01:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 01:55	1
2-Hexanone	ND		5.0		ug/L			05/26/22 01:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 01:55	1
Acetone	ND		20		ug/L			05/26/22 01:55	1
Benzene	ND		1.0		ug/L			05/26/22 01:55	1
Bromoform	ND		2.0		ug/L			05/26/22 01:55	1
Bromomethane	ND		2.0		ug/L			05/26/22 01:55	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 01:55	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 01:55	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 01:55	1

Client Sample ID: MW-7-285-051222

Lab Sample ID: 550-184011-5

Date Collected: 05/12/22 09:49

Matrix: Water

Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		4.0		ug/L			05/26/22 01:55	1
Chloroform	ND		1.0		ug/L			05/26/22 01:55	1
Chloromethane	ND		2.0		ug/L			05/26/22 01:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:55	1
Dibromomethane	ND		1.0		ug/L			05/26/22 01:55	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 01:55	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 01:55	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 01:55	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 01:55	1
Iodomethane	ND		2.0		ug/L			05/26/22 01:55	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 01:55	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 01:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 01:55	1
Naphthalene	ND		1.0		ug/L			05/26/22 01:55	1
o-Xylene	ND		1.0		ug/L			05/26/22 01:55	1
Styrene	ND		1.0		ug/L			05/26/22 01:55	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 01:55	1
Toluene	ND		1.0		ug/L			05/26/22 01:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:55	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:55	1
Trichloroethene	**1.4**		1.0		ug/L			05/26/22 01:55	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 01:55	1
Trihalomethanes, Total	ND		1.0		ug/L			05/26/22 01:55	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 01:55	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 01:55	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/26/22 01:55*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/26/22 01:55*	*1*

Client Sample ID: MW-12-410-051222

Lab Sample ID: 550-184011-6

Date Collected: 05/12/22 10:19

Matrix: Water

Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1-Dichloroethene	**2.9**		1.0		ug/L			05/26/22 02:15	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:15	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-12-410-051222

Date Collected: 05/12/22 10:19
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-6

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:15	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:15	1
Acetone	ND		20		ug/L			05/26/22 02:15	1
Benzene	ND		1.0		ug/L			05/26/22 02:15	1
Bromoform	ND		2.0		ug/L			05/26/22 02:15	1
Bromomethane	ND		2.0		ug/L			05/26/22 02:15	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:15	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:15	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:15	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:15	1
Chloroform	**4.8**		1.0		ug/L			05/26/22 02:15	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:15	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:15	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:15	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:15	1
Dichlorobromomethane	**1.1**		1.0		ug/L			05/26/22 02:15	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:15	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:15	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:15	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:15	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:15	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:15	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:15	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:15	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:15	1
Styrene	ND		1.0		ug/L			05/26/22 02:15	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:15	1
Toluene	ND		1.0		ug/L			05/26/22 02:15	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:15	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:15	1
Trichloroethene	**1.3**		1.0		ug/L			05/26/22 02:15	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:15	1
Trihalomethanes, Total	**5.9**		1.0		ug/L			05/26/22 02:15	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:15	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 02:15	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 02:15*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/26/22 02:15*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-13-355-051222

Date Collected: 05/12/22 09:01
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-7

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:36	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:36	1
Acetone	ND		20		ug/L			05/26/22 02:36	1
Benzene	ND		1.0		ug/L			05/26/22 02:36	1
Bromoform	ND		2.0		ug/L			05/26/22 02:36	1
Bromomethane	ND		2.0		ug/L			05/26/22 02:36	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:36	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:36	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:36	1
Chloroform	**1.5**		1.0		ug/L			05/26/22 02:36	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:36	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:36	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:36	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:36	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:36	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:36	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:36	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:36	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:36	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:36	1
Styrene	ND		1.0		ug/L			05/26/22 02:36	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:36	1
Toluene	ND		1.0		ug/L			05/26/22 02:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:36	1
Trichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:36	1
Trihalomethanes, Total	**1.5**		1.0		ug/L			05/26/22 02:36	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:36	1

Client Sample ID: MW-13-355-051222

Lab Sample ID: 550-184011-7
Matrix: Water

Date Collected: 05/12/22 09:01
Date Received: 05/12/22 14:00

Method: 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			05/26/22 02:36	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/26/22 02:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/26/22 02:36*	*1*

Client Sample ID: MW-14-350-051222

Lab Sample ID: 550-184011-8
Matrix: Water

Date Collected: 05/12/22 12:13
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1-Dichloroethene	**3.2**		1.0		ug/L			05/26/22 02:56	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:56	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:56	1
Acetone	ND		20		ug/L			05/26/22 02:56	1
Benzene	ND		1.0		ug/L			05/26/22 02:56	1
Bromoform	ND		2.0		ug/L			05/26/22 02:56	1
Bromomethane	ND		2.0		ug/L			05/26/22 02:56	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:56	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:56	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:56	1
Chloroform	ND		1.0		ug/L			05/26/22 02:56	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:56	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:56	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:56	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:56	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:56	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:56	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:56	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-14-350-051222

Lab Sample ID: 550-184011-8
Date Collected: 05/12/22 12:13
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:56	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:56	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:56	1
Styrene	ND		1.0		ug/L			05/26/22 02:56	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:56	1
Toluene	ND		1.0		ug/L			05/26/22 02:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:56	1
Trichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:56	1
Trihalomethanes, Total	ND		1.0		ug/L			05/26/22 02:56	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:56	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 02:56	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 02:56*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/26/22 02:56*	*1*

Client Sample ID: TB-051222

Lab Sample ID: 550-184011-9
Date Collected: 05/12/22 08:00
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1-Dichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/25/22 21:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/25/22 21:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
1,2-Dichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,2-Dichloropropane	ND		1.0		ug/L			05/25/22 21:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
2-Butanone (MEK)	ND		20		ug/L			05/25/22 21:07	1
2-Hexanone	ND		5.0		ug/L			05/25/22 21:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/25/22 21:07	1
Acetone	ND		20		ug/L			05/25/22 21:07	1
Benzene	ND		1.0		ug/L			05/25/22 21:07	1
Bromoform	ND		2.0		ug/L			05/25/22 21:07	1
Bromomethane	ND		2.0		ug/L			05/25/22 21:07	1
Carbon disulfide	ND		2.0		ug/L			05/25/22 21:07	1
Carbon tetrachloride	ND		1.0		ug/L			05/25/22 21:07	1
Chlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
Chlorodibromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Chloroethane	ND		4.0		ug/L			05/25/22 21:07	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: TB-051222

Date Collected: 05/12/22 08:00
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-9

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0		ug/L			05/25/22 21:07	1
Chloromethane	ND		2.0		ug/L			05/25/22 21:07	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 21:07	1
Dibromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Dichlorobromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/25/22 21:07	1
Ethylbenzene	ND		1.0		ug/L			05/25/22 21:07	1
Ethylene Dibromide	ND		5.0		ug/L			05/25/22 21:07	1
Iodomethane	ND		2.0		ug/L			05/25/22 21:07	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/25/22 21:07	1
Methylene Chloride	ND		5.0		ug/L			05/25/22 21:07	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/25/22 21:07	1
Naphthalene	ND		1.0		ug/L			05/25/22 21:07	1
o-Xylene	ND		1.0		ug/L			05/25/22 21:07	1
Styrene	ND		1.0		ug/L			05/25/22 21:07	1
Tetrachloroethene	ND		1.0		ug/L			05/25/22 21:07	1
Toluene	ND		1.0		ug/L			05/25/22 21:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 21:07	1
Trichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
Trichlorofluoromethane	ND		2.0		ug/L			05/25/22 21:07	1
Trihalomethanes, Total	ND		1.0		ug/L			05/25/22 21:07	1
Vinyl acetate	ND		3.0		ug/L			05/25/22 21:07	1
Vinyl chloride	ND		1.0		ug/L			05/25/22 21:07	1
Xylenes, Total	ND		2.0		ug/L			05/25/22 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/25/22 21:07*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/25/22 21:07*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB	TOL
Lab Sample ID	**Client Sample ID**	**(79-119)**	**(80-120)**
550-184011-1	MW-10-22Q2	102	102
550-184011-3	EW-1-22Q2	99	100
550-184011-5	MW-7-285-051222	101	102
550-184011-6	MW-12-410-051222	102	101
550-184011-7	MW-13-355-051222	101	101
550-184011-8	MW-14-350-051222	102	103
550-184011-9	TB-051222	101	100
LCS 280-576204/4	Lab Control Sample	100	100
LCSD 280-576204/5	Lab Control Sample Dup	101	104
MB 280-576204/9	Method Blank	100	102

Surrogate Legend

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

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

Lab Sample ID: MB 280-576204/9
Matrix: Water
Analysis Batch: 576204

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		1.0		ug/L			05/25/22 20:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1-Dichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/25/22 20:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/25/22 20:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
1,2-Dichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,2-Dichloropropane	ND		1.0		ug/L			05/25/22 20:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
2-Butanone (MEK)	ND		20		ug/L			05/25/22 20:05	1
2-Hexanone	ND		5.0		ug/L			05/25/22 20:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/25/22 20:05	1
Acetone	ND		20		ug/L			05/25/22 20:05	1
Benzene	ND		1.0		ug/L			05/25/22 20:05	1
Bromoform	ND		2.0		ug/L			05/25/22 20:05	1
Bromomethane	ND		2.0		ug/L			05/25/22 20:05	1
Carbon disulfide	ND		2.0		ug/L			05/25/22 20:05	1
Carbon tetrachloride	ND		1.0		ug/L			05/25/22 20:05	1
Chlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
Chlorodibromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Chloroethane	ND		4.0		ug/L			05/25/22 20:05	1
Chloroform	ND		1.0		ug/L			05/25/22 20:05	1
Chloromethane	ND		2.0		ug/L			05/25/22 20:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 20:05	1
Dibromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Dichlorobromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/25/22 20:05	1
Ethylbenzene	ND		1.0		ug/L			05/25/22 20:05	1
Ethylene Dibromide	ND		5.0		ug/L			05/25/22 20:05	1
Iodomethane	ND		2.0		ug/L			05/25/22 20:05	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/25/22 20:05	1
Methylene Chloride	ND		5.0		ug/L			05/25/22 20:05	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/25/22 20:05	1
Naphthalene	ND		1.0		ug/L			05/25/22 20:05	1
o-Xylene	ND		1.0		ug/L			05/25/22 20:05	1
Styrene	ND		1.0		ug/L			05/25/22 20:05	1
Tetrachloroethene	ND		1.0		ug/L			05/25/22 20:05	1
Toluene	ND		1.0		ug/L			05/25/22 20:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 20:05	1
Trichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
Trichlorofluoromethane	ND		2.0		ug/L			05/25/22 20:05	1
Trihalomethanes, Total	ND		1.0		ug/L			05/25/22 20:05	1

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

Lab Sample ID: MB 280-576204/9
Matrix: Water
Analysis Batch: 576204

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		3.0	ug/L			05/25/22 20:05	1
Vinyl chloride	ND		1.0	ug/L			05/25/22 20:05	1
Xylenes, Total	ND		2.0	ug/L			05/25/22 20:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*79 - 119*		*05/25/22 20:05*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/25/22 20:05*	*1*

Lab Sample ID: LCS 280-576204/4
Matrix: Water
Analysis Batch: 576204

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	25.0	25.5		ug/L		102	71 - 126
1,1,1-Trichloroethane	25.0	24.9		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.3		ug/L		105	60 - 140
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	70 - 130
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 130
1,1-Dichloroethene	25.0	24.4		ug/L		97	50 - 150
1,2,3-Trichloropropane	25.0	25.8		ug/L		103	64 - 136
1,2-Dibromo-3-Chloropropane	25.0	25.2		ug/L		101	53 - 132
1,2-Dichlorobenzene	25.0	27.6		ug/L		110	65 - 135
1,2-Dichloroethane	25.0	23.4		ug/L		94	70 - 130
1,2-Dichloropropane	25.0	24.7		ug/L		99	35 - 165
1,3-Dichlorobenzene	25.0	27.6		ug/L		110	70 - 130
1,4-Dichlorobenzene	25.0	26.4		ug/L		106	65 - 135
2-Butanone (MEK)	100	86.1		ug/L		86	49 - 153
2-Hexanone	100	94.7		ug/L		95	50 - 154
4-Methyl-2-pentanone (MIBK)	100	97.3		ug/L		97	48 - 157
Acetone	100	83.2		ug/L		83	44 - 168
Benzene	25.0	24.4		ug/L		98	65 - 135
Bromoform	25.0	23.3		ug/L		93	70 - 130
Bromomethane	25.0	14.8		ug/L		59	15 - 185
Carbon disulfide	25.0	23.4		ug/L		94	61 - 138
Carbon tetrachloride	25.0	25.3		ug/L		101	70 - 130
Chlorobenzene	25.0	24.6		ug/L		98	65 - 135
Chlorodibromomethane	25.0	25.1		ug/L		100	70 - 135
Chloroethane	25.0	23.5		ug/L		94	40 - 160
Chloroform	25.0	24.1		ug/L		96	70 - 135
Chloromethane	25.0	20.7		ug/L		83	10 - 205
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	76 - 128
cis-1,3-Dichloropropene	25.0	23.6		ug/L		94	25 - 175
Dibromomethane	25.0	22.8		ug/L		91	73 - 127
Dichlorobromomethane	25.0	24.8		ug/L		99	65 - 135
Dichlorodifluoromethane	25.0	23.9		ug/L		96	32 - 152
Ethylbenzene	25.0	25.2		ug/L		101	60 - 140
Ethylene Dibromide	25.0	23.5		ug/L		94	77 - 126
Iodomethane	25.0	17.8		ug/L		71	69 - 131

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

Lab Sample ID: LCS 280-576204/4
Matrix: Water
Analysis Batch: 576204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl tert-butyl ether	25.0	24.0		ug/L		96	74 - 128
Methylene Chloride	25.0	23.0		ug/L		92	60 - 140
m-Xylene & p-Xylene	25.0	25.5		ug/L		102	78 - 128
Naphthalene	25.0	25.0		ug/L		100	68 - 129
o-Xylene	25.0	25.3		ug/L		101	80 - 127
Styrene	25.0	25.5		ug/L		102	76 - 130
Tetrachloroethene	25.0	25.5		ug/L		102	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	50 - 150
Trichloroethene	25.0	24.9		ug/L		100	65 - 135
Trichlorofluoromethane	25.0	23.9		ug/L		96	50 - 150
Vinyl acetate	50.0	48.2		ug/L		96	59 - 143
Vinyl chloride	25.0	22.6		ug/L		90	10 - 195

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*79 - 119*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 280-576204/5
Matrix: Water
Analysis Batch: 576204

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	25.0	26.7		ug/L		107	71 - 126	4	30
1,1,1-Trichloroethane	25.0	24.6		ug/L		98	70 - 130	1	30
1,1,2,2-Tetrachloroethane	25.0	26.4		ug/L		106	60 - 140	0	30
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	70 - 130	6	30
1,1-Dichloroethane	25.0	24.5		ug/L		98	70 - 130	1	30
1,1-Dichloroethene	25.0	24.2		ug/L		97	50 - 150	1	30
1,2,3-Trichloropropane	25.0	25.9		ug/L		104	64 - 136	0	30
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	53 - 132	2	30
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	65 - 135	3	30
1,2-Dichloroethane	25.0	23.3		ug/L		93	70 - 130	0	30
1,2-Dichloropropane	25.0	24.7		ug/L		99	35 - 165	0	30
1,3-Dichlorobenzene	25.0	27.5		ug/L		110	70 - 130	0	30
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	65 - 135	2	30
2-Butanone (MEK)	100	86.0		ug/L		86	49 - 153	0	32
2-Hexanone	100	98.5		ug/L		99	50 - 154	4	30
4-Methyl-2-pentanone (MIBK)	100	96.4		ug/L		96	48 - 157	1	30
Acetone	100	82.3		ug/L		82	44 - 168	1	30
Benzene	25.0	24.1		ug/L		97	65 - 135	1	30
Bromoform	25.0	25.8		ug/L		103	70 - 130	10	30
Bromomethane	25.0	14.7		ug/L		59	15 - 185	1	30
Carbon disulfide	25.0	23.4		ug/L		94	61 - 138	0	30
Carbon tetrachloride	25.0	25.9		ug/L		104	70 - 130	2	30
Chlorobenzene	25.0	25.0		ug/L		100	65 - 135	2	30
Chlorodibromomethane	25.0	26.8		ug/L		107	70 - 135	6	30

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

Lab Sample ID: LCSD 280-576204/5
Matrix: Water
Analysis Batch: 576204

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
Chloroethane	25.0	22.5		ug/L		90	40 - 160	4	30
Chloroform	25.0	24.2		ug/L		97	70 - 135	0	30
Chloromethane	25.0	20.1		ug/L		80	10 - 205	3	30
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	76 - 128	1	30
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	25 - 175	8	30
Dibromomethane	25.0	23.8		ug/L		95	73 - 127	4	30
Dichlorobromomethane	25.0	25.6		ug/L		102	65 - 135	3	30
Dichlorodifluoromethane	25.0	23.6		ug/L		95	32 - 152	1	30
Ethylbenzene	25.0	25.5		ug/L		102	60 - 140	1	30
Ethylene Dibromide	25.0	24.7		ug/L		99	77 - 126	5	30
Iodomethane	25.0	18.0		ug/L		72	69 - 131	1	30
Methyl tert-butyl ether	25.0	24.0		ug/L		96	74 - 128	0	30
Methylene Chloride	25.0	23.0		ug/L		92	60 - 140	0	30
m-Xylene & p-Xylene	25.0	25.9		ug/L		104	78 - 128	2	30
Naphthalene	25.0	23.3		ug/L		93	68 - 129	7	30
o-Xylene	25.0	24.8		ug/L		99	80 - 127	2	30
Styrene	25.0	26.3		ug/L		105	76 - 130	3	30
Tetrachloroethene	25.0	25.8		ug/L		103	70 - 130	1	30
Toluene	25.0	24.5		ug/L		98	70 - 130	2	30
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	70 - 130	2	30
trans-1,3-Dichloropropene	25.0	24.7		ug/L		99	50 - 150	3	30
Trichloroethene	25.0	25.2		ug/L		101	65 - 135	1	30
Trichlorofluoromethane	25.0	23.5		ug/L		94	50 - 150	2	30
Vinyl acetate	50.0	50.5		ug/L		101	59 - 143	4	30
Vinyl chloride	25.0	22.1		ug/L		88	10 - 195	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-274364/1-A
Matrix: Water
Analysis Batch: 274624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274364

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/17/22 10:01	05/18/22 21:16	1
Cadmium	ND		0.0010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Copper	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Lead	ND	V1	0.015	mg/L		05/17/22 10:01	05/18/22 21:16	1
Molybdenum	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Selenium	ND	V1	0.10	mg/L		05/17/22 10:01	05/18/22 21:16	1
Silver	ND		0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Zinc	ND	V1	0.050	mg/L		05/17/22 10:01	05/18/22 21:16	1

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

Lab Sample ID: LCS 550-274364/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

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	0.988		mg/L		99	85 - 115
Copper	1.00	0.978	V1	mg/L		98	85 - 115
Lead	1.00	1.02	V1	mg/L		102	85 - 115
Molybdenum	1.00	1.03	V1	mg/L		103	85 - 115
Selenium	1.00	1.03	V1	mg/L		103	85 - 115
Silver	0.0750	0.0703		mg/L		94	85 - 115
Zinc	1.00	1.02	V1	mg/L		102	85 - 115

Lab Sample ID: LCSD 550-274364/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	0.985		mg/L		98	85 - 115	2	20
Cadmium	1.00	0.982		mg/L		98	85 - 115	1	20
Copper	1.00	0.974	V1	mg/L		97	85 - 115	0	20
Lead	1.00	1.01	V1	mg/L		101	85 - 115	2	20
Molybdenum	1.00	1.02	V1	mg/L		102	85 - 115	1	20
Selenium	1.00	1.01	V1	mg/L		101	85 - 115	2	20
Silver	0.0750	0.0692		mg/L		92	85 - 115	2	20
Zinc	1.00	1.00	V1	mg/L		100	85 - 115	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-274131/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		05/13/22 15:40	05/13/22 20:01	1

Lab Sample ID: LCS 550-274131/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00460		mg/L		92	85 - 115

Lab Sample ID: LCSD 550-274131/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00500	0.00472		mg/L		94	85 - 115	2	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: MB 550-275188/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/25/22 16:20	05/25/22 19:48	1

Lab Sample ID: LCS 550-275188/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

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 550-275188/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00443		mg/L		89	85 - 115	1	20

Lab Sample ID: 550-184011-4 MS — **Client Sample ID: EW-1-22Q2-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00487		mg/L		97	70 - 130		

Lab Sample ID: 550-184011-4 MSD — **Client Sample ID: EW-1-22Q2-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00502		mg/L		100	70 - 130	3	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-274379/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			05/17/22 11:16	1

Lab Sample ID: LCS 550-274379/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	187		mg/L		94	90 - 110		

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCSD 550-274379/3
Matrix: Water
Analysis Batch: 274379

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			200	196		mg/L		98	90 - 110	5	10

Lab Sample ID: 550-184011-2 DU
Matrix: Water
Analysis Batch: 274379

Client Sample ID: MW-10-22Q2-comp
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-274208/1-A
Matrix: Water
Analysis Batch: 274268

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274208

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/15/22 15:45	05/15/22 16:29	1

Lab Sample ID: LCS 550-274208/2-A
Matrix: Water
Analysis Batch: 274268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274208

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0957		mg/L		96	90 - 110		

Lab Sample ID: LCSD 550-274208/3-A
Matrix: Water
Analysis Batch: 274268

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274208

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0966		mg/L		97	90 - 110	1	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-274180/1
Matrix: Water
Analysis Batch: 274180

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		5.0		mg/L			05/14/22 10:30	1

Lab Sample ID: LCS 550-274180/2
Matrix: Water
Analysis Batch: 274180

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	198		mg/L		100	84.6 - 115.4		

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

GC/MS VOA

Analysis Batch: 576204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	624.1	
550-184011-3	EW-1-22Q2	Total/NA	Water	624.1	
550-184011-5	MW-7-285-051222	Total/NA	Water	624.1	
550-184011-6	MW-12-410-051222	Total/NA	Water	624.1	
550-184011-7	MW-13-355-051222	Total/NA	Water	624.1	
550-184011-8	MW-14-350-051222	Total/NA	Water	624.1	
550-184011-9	TB-051222	Total/NA	Water	624.1	
MB 280-576204/9	Method Blank	Total/NA	Water	624.1	
LCS 280-576204/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-576204/5	Lab Control Sample Dup	Total/NA	Water	624.1	

Metals

Prep Batch: 274131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	245.1	
MB 550-274131/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-274131/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-274131/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	

Analysis Batch: 274164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	245.1	274131
MB 550-274131/1-A	Method Blank	Total/NA	Water	245.1	274131
LCS 550-274131/2-A	Lab Control Sample	Total/NA	Water	245.1	274131
LCSD 550-274131/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	274131

Prep Batch: 274364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	200.7	
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	200.7	
MB 550-274364/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-274364/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-274364/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	

Analysis Batch: 274624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	200.7 Rev 4.4	274364
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	200.7 Rev 4.4	274364
MB 550-274364/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	274364
LCS 550-274364/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	274364
LCSD 550-274364/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	274364

Prep Batch: 275188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	245.1	
MB 550-275188/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-275188/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-275188/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-184011-4 MS	EW-1-22Q2-comp	Total/NA	Water	245.1	
550-184011-4 MSD	EW-1-22Q2-comp	Total/NA	Water	245.1	

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Metals

Analysis Batch: 275211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	245.1	275188
MB 550-275188/1-A	Method Blank	Total/NA	Water	245.1	275188
LCS 550-275188/2-A	Lab Control Sample	Total/NA	Water	245.1	275188
LCSD 550-275188/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	275188
550-184011-4 MS	EW-1-22Q2-comp	Total/NA	Water	245.1	275188
550-184011-4 MSD	EW-1-22Q2-comp	Total/NA	Water	245.1	275188

General Chemistry

Analysis Batch: 274180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	SM 5210B	
MB 550-274180/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-274180/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Prep Batch: 274208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	SM 4500 CN C	
550-184011-3	EW-1-22Q2	Total/NA	Water	SM 4500 CN C	
MB 550-274208/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-274208/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-274208/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 274268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	SM 4500 CN E	274208
550-184011-3	EW-1-22Q2	Total/NA	Water	SM 4500 CN E	274208
MB 550-274208/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	274208
LCS 550-274208/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	274208
LCSD 550-274208/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	274208

Analysis Batch: 274379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	SM 2540D	
MB 550-274379/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-274379/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-274379/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-184011-2 DU	MW-10-22Q2-comp	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2 — Lab Sample ID: 550-184011-1

Date Collected: 05/12/22 11:43 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:14	AJP	TAL DEN
Total/NA	Prep	SM 4500 CN C			274208	05/15/22 15:45	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	274268	05/15/22 16:29	SRG	TAL PHX

Client Sample ID: MW-10-22Q2-comp — Lab Sample ID: 550-184011-2

Date Collected: 05/12/22 11:40 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			274364	05/17/22 10:01	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	274624	05/18/22 22:05	MGM	TAL PHX
Total/NA	Prep	245.1			274131	05/13/22 15:40	SRR	TAL PHX
Total/NA	Analysis	245.1		1	274164	05/13/22 20:37	SRR	TAL PHX
Total/NA	Analysis	SM 2540D		1	274379		CHS	TAL PHX
					(Start)	05/17/22 11:16		
					(End)	05/17/22 15:20		
Total/NA	Analysis	SM 5210B		1	274180		SH1	TAL PHX
					(Start)	05/14/22 10:30		
					(End)	05/19/22 10:45		

Client Sample ID: EW-1-22Q2 — Lab Sample ID: 550-184011-3

Date Collected: 05/12/22 10:55 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:34	AJP	TAL DEN
Total/NA	Prep	SM 4500 CN C			274208	05/15/22 15:45	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	274268	05/15/22 16:29	SRG	TAL PHX

Client Sample ID: EW-1-22Q2-comp — Lab Sample ID: 550-184011-4

Date Collected: 05/12/22 10:53 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			274364	05/17/22 10:01	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	274624	05/18/22 22:08	MGM	TAL PHX
Total/NA	Prep	245.1			275188	05/25/22 16:20	SRR	TAL PHX
Total/NA	Analysis	245.1		1	275211	05/25/22 19:58	SRR	TAL PHX

Client Sample ID: MW-7-285-051222 — Lab Sample ID: 550-184011-5

Date Collected: 05/12/22 09:49 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:55	AJP	TAL DEN

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-12-410-051222 — Lab Sample ID: 550-184011-6

Date Collected: 05/12/22 10:19
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:15	AJP	TAL DEN

Client Sample ID: MW-13-355-051222 — Lab Sample ID: 550-184011-7

Date Collected: 05/12/22 09:01
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:36	AJP	TAL DEN

Client Sample ID: MW-14-350-051222 — Lab Sample ID: 550-184011-8

Date Collected: 05/12/22 12:13
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:56	AJP	TAL DEN

Client Sample ID: TB-051222 — Lab Sample ID: 550-184011-9

Date Collected: 05/12/22 08:00
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/25/22 21:07	AJP	TAL DEN

Laboratory References:

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

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Laboratory: Eurofins Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-23
Arizona	State	AZ0713	12-20-22
Arkansas DEQ	State	19-047-0	06-01-22
California	State	2513	01-09-23
Connecticut	State	PH-0686	09-30-22
Florida	NELAP	E87667-57	06-30-22
Georgia	State	4025-011	01-08-23
Illinois	NELAP	2000172019-1	04-30-23
Iowa	State	IA#370	12-02-22
Kansas	NELAP	E-10166	05-31-22
Kentucky (WW)	State	KY98047	12-31-22
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-22
Minnesota	NELAP	1788752	12-31-22
Nevada	State	CO000262020-1	07-31-22
New Hampshire	NELAP	205319	04-28-20 *
New Jersey	NELAP	190002	06-30-22
New York	NELAP	59923	04-01-23
North Carolina (WW/SW)	State	358	12-31-22
North Dakota	State	R-034	01-08-23
Oklahoma	NELAP	8614	08-31-22
Oregon	NELAP	4025-011	01-09-23
Pennsylvania	NELAP	013	07-31-22
South Carolina	State	72002001	01-08-23
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	10-01-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-20-00065	03-06-23
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-22
Virginia	NELAP	10490	06-14-22
Washington	State	C583-19	08-03-22
West Virginia DEP	State	354	11-30-22
Wisconsin	State	999615430	08-31-22
Wyoming (UST)	A2LA	2907.01	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL PHX
245.1	Mercury (CVAA)	EPA	TAL PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PHX
SM 4500 CN E	Cyanide, Total	SM	TAL PHX
SM 5210B	BOD, 5-Day	SM	TAL PHX
200.7	Preparation, Total Metals	EPA	TAL PHX
245.1	Preparation, Mercury	EPA	TAL PHX
SM 4500 CN C	Cyanide, Distillation	SM	TAL 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:

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

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

Chain Of Custody / Analysis Request

AESI Ref:	44699.45271
COC#	35008_051222
Lab Proj # (SDG):	
Lab ID	TAL-PHX
Site ID	
Lab Job #	
Authorized User:	Honeywell

Privileged & Confidential

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

Sampling Co.:	Jacobs	EDD To:	Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)		Sampler:	T. Kearsley
Jacobs		PO #	A000651433
1501 W. Fountainhead Parkway (suite 401)		Analysis Turnaround Time (TAT):	10
Tempe, AZ 85282		Consultant	
Preliminary Data To	Berney Kidd Jacobs,,Lakshmi Devi HTS,	Laboratory Contact	Ken Baker
Sample Receipt Acknowledgement	Sample Distribution List	Report Tier Level	2
Hard Copy To	Berney Kidd CH2m,	Full Report TAT:	10
Invoice To:	Mike Heitmann, Honeywell/Copy Berney Kidd		HTS

Text & Excel File Drive | Excel & Text File Order

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Unauthorized use strictly prohibited.

	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																
1	MW-10	----	----	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X												
2	MW-10	----	----	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X									
3	EW-1	----	----	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X					X							
4	EW-1	----	----	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X		X											
5	MW-7	285.0	----	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	X														
6	MW-12	410.0	----	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	X														
7	MW-13	355.0	----	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	X														
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	X														
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X														
10																											
11																											
12																											

Relinquished by	Company	CH2M	Received by	Company		Condition		Custody Seals Intact	
Thomas Kearsley	Date/Time		FedEx	Date/Time		Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		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)

184011

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

Chain Of Custody / Analysis Request

AESI Ref:	44693.53553
COC#	35008_051222
Lab Proj # (SDG):	
Lab ID	TAL-PHX
Site ID	
Lab Job #	
Authorized User:	Honeywell

Text & Excel File Drive | Excel & Text File Order

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Privileged & Confidential		Site Name:	IAC, Peoria
		Location of Site:	Phoenix, AZ
Phase:		Sampling Program	Quarterly
Sampling Co.:	Jacobs	EDD To:	Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)		Sampler:	T. Kearsley
Jacobs		PO #	A000651433
1501 W. Fountainhead Parkway (suite 401)		Analysis Turnaround Time (TAT):	10
Tempe, AZ 85282		Consultant	
Preliminary Data To	Berney Kidd, Jacobs, Lakshmi Devi HT	Laboratory Contact	Ken Baker
Sample Receipt Acknowledgement To	Sample Distribution List	Report Tier Level	2
Hard Copy To	Berney Kidd CH2m	Full Report TAT:	10
Invoice To:	Mike Heitmann, Honeywell/Copy Berney Kidd		HTS

	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		Preservative	8	10	15	10	0	0	10	8					
1	MW-10	----	----	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X								-01			
2	MW-10	----	----	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X					-02			
3	EW-1	----	----	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X						X		-03			
4	EW-1	----	----	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X									-04			
5	MW-7	285.0	----	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	X										-05			
6	MW-12	410.0	----	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	X										-06			
7	MW-13	355.0	----	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	X										-07			
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	X										-08			
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X										-09			
10																										
11																										
12																										

550-184011 Chain of Custody

Relinquished by	Company	CH2M	Received by	Company		Condition	OK
Thomas Kearsley	Date/Time 5/12/22 14:00		FedEx ETA-9HR	Date/Time 5/12/22 14:00		Cooler Temp.	1.0°C
Custody Seals Intact							
Relinquished by	Company		Received by	Company		Condition	
	Date/Time			Date/Time		Cooler Temp.	
Custody Seals Intact							

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)

CDO

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

Chain Of Custody / Analysis Request

Privileged & Confidential	
Sampling Co.:	Jacobs
Client Contact: (name, co., address)	Jacobs 1501 W. Fountainhead Parkway (suite 401) Tempe, AZ 85282
Preliminary Data To	Berney Kidd Jacobs, Lakshmi Devi HTS
Sample Receipt Acknowledgement To	Sample Distribution List
Hard Copy To	Berney Kidd CH2m
Invoice To:	Mike Heitmann, Honeywell/Copy Berney Kidd
EDD To:	Bernice Kidd, Jacobs HTS
Sampler:	T. Kearsley
PO #	A000651433
Analysis Turnaround Time (TAT):	10
Consultant	
Laboratory Contact	Ken Baker
Report Tier Level	2
Full Report TAT:	10
	HTS
Site Name:	IAC, Peoria
Location of Site:	Phoenix, AZ
Phase:	
Sampling Program	Quarterly

AESI Ref:	44693.53553
COC#	35008_0512
Lab Proj # (SDG):	
Lab ID	TAL-PHX
Site ID	
Lab Job #	
Authorized User:	Honeywel
Text & Excel File Drive	Excel & Text F Order

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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 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)	E624 Full list						Sampling Method (code)	Lab Sample Numbers
											Units																		
Preservative													8	10	15	10	0	0	10	8									
1	MW-10	---	---	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X														
2	MW-10	---	---	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X											
3	EW-1	---	---	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X					X									
4	EW-1	---	---	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X															
5	MW-7	285.0	---	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	~~X~~ LB								X								
6	MW-12	410.0	---	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	~~X~~ LB								X								
7	MW-13	355.0	---	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	~~X~~ LB								X								
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	~~X~~ LB								X								
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X																
10																													
11																													
12																													

Relinquished by	Company	CH2M	Received by	Company		Condition	OK
Thomas Kearsley	Date/Time 5/12/22 14:00		~~FedEx~~ ETA-9HR	Date/Time 5/12/22 14:00		Cooler Temp.	1.0°C
Relinquished by	Company		Received by	Company		Condition	
	Date/Time			Date/Time		Cooler Temp.	

Custody Seals Intact: Custody Seals Intact:

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)

Jacobs CPO

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

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sester, Rachel E	Carrier Tracking No(s):	COC No: 550-34019.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachel.Sester@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona		Job #: 550-184011-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/25/2022			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: IAC, Peoria	Project #: 55014762			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.1/624_Prep 624 List Chloroform, TCE, 1,1-DCE, 1,1-D	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-10-22Q2 (550-184011-1)	5/12/22	11:43 Arizona		Water			X	3	
EW-1-22Q2 (550-184011-3)	5/12/22	10:55 Arizona		Water			X	3	
MW-7-285-051222 (550-184011-5)	5/12/22	09:49 Arizona		Water			X	3	
MW-12-410-051222 (550-184011-6)	5/12/22	10:19 Arizona		Water			X	3	
MW-13-355-051222 (550-184011-7)	5/12/22	09:01 Arizona		Water			X	3	
MW-14-350-051222 (550-184011-8)	5/12/22	12:13 Arizona		Water			X	3	
TB-051222 (550-184011-9)	5/12/22	08:00 Arizona		Water			X	1	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible] FedEx	5-19-22 16:00	EESW	FedEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[illegible]	5/20/22 1000	FedEx
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.3 IR2 CFX21

Rev: 06/08/2021

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-184011-1

Login Number: 184011
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.

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-184011-1

Login Number: 184011
List Number: 2
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/21/22 10:36 AM

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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Sester, Rachel E.

From: Kidd, Bernice/RDD <Bernice.Kidd@jacobs.com>
Sent: Thursday, June 2, 2022 12:33 PM
To: Rene Surgi; Sester, Rachel E.
Cc: Bowles, Steven L
Subject: RE: Peoria VOA Samples - Urgent

EXTERNAL EMAIL*

Hi Rachel and Rene,

We have decided to move forward without reporting these analytes:

1,1,2-Trichloro-1,2,2-trifluoroethane
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
1,3-Dichloropropane
2,2-Dichloropropane
2-Chlorotoluene
4-Chlorotoluene
4-Isopropyltoluene
Bromobenzene
Chlorobromomethane
Dibromofluoromethane (Surr)
Ethanol
Hexachlorobutadiene
Isopropylbenzene
n-Butylbenzene
N-Propylbenzene
sec-Butylbenzene
tert-Butylbenzene

Rachel – can you please make sure to note what happened in the narrative?

Rene – decision was made based on the fact that these are not COCs, and only 1,2,4-TCB has a AWQS standard at 70 ug/L and we do not anticipate a detection of this analyte.

We'll return to the full list at Phoenix for the next round at these wells.

Thank you,
Berney

From: Rene Surgi <renesurgi@aesi.us>
Sent: Thursday, June 2, 2022 11:29 AM
To: Kidd, Bernice/RDD <Bernice.Kidd@jacobs.com>
Cc: Bowles, Steven L <Steven.Bowles@Honeywell.com>; Sester, Rachel E. <Rachel.Sester@Eurofinset.com>
Subject: [EXTERNAL] Peoria VOA Samples - Urgent

Hi Berney
I brought up EW-1 Hg (which is completed at the lab) and the following VOA E624 samples
MW-7, -12, -13, -14.

As it turns out these went to Denver in anticipation of the original short list. When you requested the longer list, Denver ran their longer list but is not the "long list" at Phoenix. All the analytes at Denver are in 1x HT. However we would like you to compare the list needed vs what Denver actually reported. If Denver's list will suffice, we are done. However if you have compounds on your long list (Phoenix) not analyzed in Denver, you can get these done with a "J" (within 2x HT) at Phoenix. I asked that Rachel get these returned from Denver today (where they are now) to Phoenix (overnight repackaged on ice) in case you need these added compounds run at Phoenix.

Just let us know.
Thanks
Rene

Rene Surgi, Ph.D.
AESI
908 Shinnecock Hills Dr.
Georgetown TX 78628
847-835-0983
847-254-0934
ReneSurgi@aesi.us

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www.jacobs.com

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

June 24, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – May 2022**
Industrial Wastewater Discharge Permit Number 1710-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Ms. Hall,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Engineering Group, Inc. (Jacobs) (formerly CH2M HILL Engineers, Inc.) 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 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, May 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	1710-5383	1,542,374	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 October 30, 2017, 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, 2022, through June 30, 2022, was collected on May 12, 2022. 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. 1710-5383

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. 1710-5383

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Permit №: ***1710-5383***

Compliance Sampling Point: ***5383.01***

Report Period: May 1, 2022 Through May 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 49,754	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 49,809	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,542,374	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: Baine Foehr

Certifying Official Name: Baine Foehr

Certifying Official Title: Project Manager

Date: June 24, 2022

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Dates/Times Samples Collected: **05/12/2022 at 11:43 (grab), 11:40 (composite), 11:20 (pH)**

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

Compliance Sampling Point № **5383.01** Lab Project or Reference ID № **550-184011-1**

Device Type: **½" Sampling tap**

Location Description: **Inside vault under the street in West 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
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/MW-10***

Permit №: ***1710-5383***

Report Period: May 1, 2022 to May 31, 2022

Compliance Point №: ***5383.01***

Lab Project or Reference ID № ***550-184011-1***

½" sampling tap inside vault

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 5/12/2022	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method
1,1-Dichloroethane	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	<1.0	EPA 624.1						
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	19	EPA 624.1						
Arsenic	**mg/L**	**0.13**	**1 per 6 Months**	**FPC**	<0.10	EPA 200.7 Rev 4.4						
Benzene	**µg/L**	**35**	**1 per Quarter**	**Grab**	<1.0	EPA 624.1						
BOD	**mg/L**	**N/A**	**1 per Quarter**	**FPC**	<5.0	SM5210B						
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**	<1.0	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**	<0.010	EPA 200.7 Rev 4.4						
pH	**S.U.**	**5.0-10.5**	**1 per Quarter**	**Grab**	7.43	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**	5.5	EPA 624.1						
TSS	**mg/L**	**N/A**	**1 per Quarter**	**FPC**	<10	SM2540D						
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.

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 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 Point Cleaned
Last	4/22/2022	38,905,764				☐	☒
1.	5/3/2022	39,452,574	49,710			☐	☒
2.	5/12/2022	39,900,853	49,809			☐	☐
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 **49,754**

Maximum Flow **49,809**

Total Gallons **1,542,374**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 5/3/22 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	10:00	ON	39452574	-2	39.5	303.08	87242.5
Depart		ON					

Electrical Meter Readings

Power(kwh)	16072
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

Annual COP well inspection by J. Gentry

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

308.18
5.1
303.08

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

Date 5/12/22 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	1115	ON	39900853	–	34.1	302.69	87459.3
Depart							

Electrical Meter Readings

Power(kwh)	17176
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 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: 1118

Time pH Sample Analyzed: 1120
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 1143

Composite Sample Log

Start Time: 1120 End Time: 1140 Flow Rate: 500 mL/min

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

Notes pH 7.43 @ 30.2°C

Signature: [signature]

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

307.79
– 5.1
302.69

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № OYSTER-10 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# 1GA 843 Jan/23	5/12/21	TK	08:19	4.00	23.9	96.8	
pH Buffer 7/Lot# 1GD 360 Apr/23			08:13	7.00	23.5	96.9	
pH Buffer 10/Lot# 1GC 500 Mar/23			0816	10.00	23.8	97.3	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# LKLB5007 7/23			08:21	7.02	23.7	(Pass) or Fail	
Compliance pH result 5436.01 (EW-1)	5/12/21	TK	1034	7.58	29.4	N/A	
Compliance pH result 5383.01 (MW-10)	5/12/21	TK	1120	7.43	30.2	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)	5/12/21	TK	Orig Reading:	7.43	Dup Reading:	7.45	
Once/Month Verification Check/Buffer 7	5/12/21	TK	13:00	7.04	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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 550-184011-1
Client Project/Site: IAC, Peoria
Revision: 1

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
6/6/2022 10:55:16 AM

Rachel Sester, Project Manager I
(602)659-7615
Rachel.Sester@et.eurofinsus.com

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Qualifiers

Metals

Qualifier	Qualifier Description
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

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: 550-184011-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-184011-1

Revision
This report was revised on 6/6/22 to report a limited list of 624.1 parameters for samples 550-184011-1 and 550-184011-3. This final report replaces the report that was generated on 6/2/22 at 1:06 PM.

Comments
No additional comments.

Receipt
The samples were received on 5/12/2022 2:00 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 1.0º 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 continuing calibration verification (CCV) associated with batch 550-274624 recovered above the upper control limit for Cadmium, Molybdenum, Lead, Selenium, and Zinc. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry
Methods SM 4500 CN E, SM 4500 CN G: The matrix spike (MS) recovery and the matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 550-274208 and analytical batch 550-274268 were outside control limits for cyanide. Sample matrix interference and/or non-homogeneity were suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) recoveries and precision were within control limits.

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

Job ID: 550-184011-2

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-184011-2

Comments
No additional comments.

Job ID: 550-184011-3

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-184011-3

Comments

Job ID: 550-184011-3 (Continued)

Laboratory: Eurofins Phoenix (Continued)

No additional comments.

Sample Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-184011-1	MW-10-22Q2	Water	05/12/22 11:43	05/12/22 14:00
550-184011-2	MW-10-22Q2-comp	Water	05/12/22 11:40	05/12/22 14:00
550-184011-3	EW-1-22Q2	Water	05/12/22 10:55	05/12/22 14:00
550-184011-4	EW-1-22Q2-comp	Water	05/12/22 10:53	05/12/22 14:00
550-184011-5	MW-7-285-051222	Water	05/12/22 09:49	05/12/22 14:00
550-184011-6	MW-12-410-051222	Water	05/12/22 10:19	05/12/22 14:00
550-184011-7	MW-13-355-051222	Water	05/12/22 09:01	05/12/22 14:00
550-184011-8	MW-14-350-051222	Water	05/12/22 12:13	05/12/22 14:00
550-184011-9	TB-051222	Water	05/12/22 08:00	05/12/22 14:00

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2 — Lab Sample ID: 550-184011-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	19		1.0	ug/L	1		624.1	Total/NA
Trichloroethene	5.5		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-22Q2-comp — Lab Sample ID: 550-184011-2

No Detections.

Client Sample ID: EW-1-22Q2 — Lab Sample ID: 550-184011-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.0		1.0	ug/L	1		624.1	Total/NA
1,1-Dichloroethene	63		1.0	ug/L	1		624.1	Total/NA
Chloroform	1.1		1.0	ug/L	1		624.1	Total/NA
Trichloroethene	18		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q2-comp — Lab Sample ID: 550-184011-4

No Detections.

Client Sample ID: MW-7-285-051222 — Lab Sample ID: 550-184011-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.1		1.0	ug/L	1		624.1	Total/NA
Trichloroethene	1.4		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: MW-12-410-051222 — Lab Sample ID: 550-184011-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.9		1.0	ug/L	1		624.1	Total/NA
Chloroform	4.8		1.0	ug/L	1		624.1	Total/NA
Dichlorobromomethane	1.1		1.0	ug/L	1		624.1	Total/NA
Trichloroethene	1.3		1.0	ug/L	1		624.1	Total/NA
Trihalomethanes, Total	5.9		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: MW-13-355-051222 — Lab Sample ID: 550-184011-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.5		1.0	ug/L	1		624.1	Total/NA
Trihalomethanes, Total	1.5		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: MW-14-350-051222 — Lab Sample ID: 550-184011-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.2		1.0	ug/L	1		624.1	Total/NA

Client Sample ID: TB-051222 — Lab Sample ID: 550-184011-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2

Lab Sample ID: 550-184011-1
Date Collected: 05/12/22 11:43
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		1.0	ug/L			05/26/22 01:14	1
1,1-Dichloroethene	**19**		1.0	ug/L			05/26/22 01:14	1
Benzene	ND		1.0	ug/L			05/26/22 01:14	1
Chloroform	ND		1.0	ug/L			05/26/22 01:14	1
Trichloroethene	**5.5**		1.0	ug/L			05/26/22 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 01:14*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/26/22 01:14*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050	mg/L		05/15/22 15:45	05/15/22 16:29	1

Client Sample ID: MW-10-22Q2-comp

Lab Sample ID: 550-184011-2
Date Collected: 05/12/22 11:40
Matrix: Water
Date Received: 05/12/22 14:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/17/22 10:01	05/18/22 22:05	1
Cadmium	ND	V1	0.0010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Copper	ND		0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Lead	ND	V1	0.015	mg/L		05/17/22 10:01	05/18/22 22:05	1
Molybdenum	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Selenium	ND	V1	0.10	mg/L		05/17/22 10:01	05/18/22 22:05	1
Silver	ND		0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Zinc	ND	V1	0.050	mg/L		05/17/22 10:01	05/18/22 22:05	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		05/13/22 15:40	05/13/22 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			05/17/22 11:16	1
Biochemical Oxygen Demand	ND		5.0	mg/L			05/14/22 10:30	1

Client Sample ID: EW-1-22Q2

Lab Sample ID: 550-184011-3
Date Collected: 05/12/22 10:55
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**5.0**		1.0	ug/L			05/26/22 01:34	1
1,1-Dichloroethene	**63**		1.0	ug/L			05/26/22 01:34	1
Chloroform	**1.1**		1.0	ug/L			05/26/22 01:34	1
Trichloroethene	**18**		1.0	ug/L			05/26/22 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*		*05/26/22 01:34*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/26/22 01:34*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: EW-1-22Q2

Lab Sample ID: 550-184011-3
Date Collected: 05/12/22 10:55
Matrix: Water
Date Received: 05/12/22 14:00

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/15/22 15:45	05/15/22 16:29	1

Client Sample ID: EW-1-22Q2-comp

Lab Sample ID: 550-184011-4
Date Collected: 05/12/22 10:53
Matrix: Water
Date Received: 05/12/22 14:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/17/22 10:01	05/18/22 22:08	1
Cadmium	ND	V1	0.0010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Copper	ND		0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Lead	ND	V1	0.015		mg/L		05/17/22 10:01	05/18/22 22:08	1
Molybdenum	ND	V1	0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Selenium	ND	V1	0.10		mg/L		05/17/22 10:01	05/18/22 22:08	1
Silver	ND		0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Zinc	ND	V1	0.050		mg/L		05/17/22 10:01	05/18/22 22:08	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/25/22 16:20	05/25/22 19:58	1

Client Sample ID: MW-7-285-051222

Lab Sample ID: 550-184011-5
Date Collected: 05/12/22 09:49
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1-Dichloroethene	**2.1**		1.0		ug/L			05/26/22 01:55	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 01:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 01:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 01:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 01:55	1
2-Hexanone	ND		5.0		ug/L			05/26/22 01:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 01:55	1
Acetone	ND		20		ug/L			05/26/22 01:55	1
Benzene	ND		1.0		ug/L			05/26/22 01:55	1
Bromoform	ND		2.0		ug/L			05/26/22 01:55	1
Bromomethane	ND		2.0		ug/L			05/26/22 01:55	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 01:55	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 01:55	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 01:55	1

Client Sample ID: MW-7-285-051222

Lab Sample ID: 550-184011-5

Date Collected: 05/12/22 09:49
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		4.0		ug/L			05/26/22 01:55	1
Chloroform	ND		1.0		ug/L			05/26/22 01:55	1
Chloromethane	ND		2.0		ug/L			05/26/22 01:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:55	1
Dibromomethane	ND		1.0		ug/L			05/26/22 01:55	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 01:55	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 01:55	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 01:55	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 01:55	1
Iodomethane	ND		2.0		ug/L			05/26/22 01:55	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 01:55	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 01:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 01:55	1
Naphthalene	ND		1.0		ug/L			05/26/22 01:55	1
o-Xylene	ND		1.0		ug/L			05/26/22 01:55	1
Styrene	ND		1.0		ug/L			05/26/22 01:55	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 01:55	1
Toluene	ND		1.0		ug/L			05/26/22 01:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:55	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:55	1
Trichloroethene	**1.4**		1.0		ug/L			05/26/22 01:55	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 01:55	1
Trihalomethanes, Total	ND		1.0		ug/L			05/26/22 01:55	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 01:55	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 01:55	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/26/22 01:55*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/26/22 01:55*	*1*

Client Sample ID: MW-12-410-051222

Lab Sample ID: 550-184011-6

Date Collected: 05/12/22 10:19
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1-Dichloroethene	**2.9**		1.0		ug/L			05/26/22 02:15	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:15	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-12-410-051222

Date Collected: 05/12/22 10:19
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-6

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:15	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:15	1
Acetone	ND		20		ug/L			05/26/22 02:15	1
Benzene	ND		1.0		ug/L			05/26/22 02:15	1
Bromoform	ND		2.0		ug/L			05/26/22 02:15	1
Bromomethane	ND		2.0		ug/L			05/26/22 02:15	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:15	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:15	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:15	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:15	1
Chloroform	**4.8**		1.0		ug/L			05/26/22 02:15	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:15	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:15	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:15	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:15	1
Dichlorobromomethane	**1.1**		1.0		ug/L			05/26/22 02:15	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:15	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:15	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:15	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:15	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:15	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:15	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:15	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:15	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:15	1
Styrene	ND		1.0		ug/L			05/26/22 02:15	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:15	1
Toluene	ND		1.0		ug/L			05/26/22 02:15	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:15	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:15	1
Trichloroethene	**1.3**		1.0		ug/L			05/26/22 02:15	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:15	1
Trihalomethanes, Total	**5.9**		1.0		ug/L			05/26/22 02:15	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:15	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 02:15	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 02:15*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/26/22 02:15*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-13-355-051222

Lab Sample ID: 550-184011-7

Date Collected: 05/12/22 09:01
Date Received: 05/12/22 14:00

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:36	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:36	1
Acetone	ND		20		ug/L			05/26/22 02:36	1
Benzene	ND		1.0		ug/L			05/26/22 02:36	1
Bromoform	ND		2.0		ug/L			05/26/22 02:36	1
Bromomethane	ND		2.0		ug/L			05/26/22 02:36	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:36	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:36	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:36	1
Chloroform	**1.5**		1.0		ug/L			05/26/22 02:36	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:36	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:36	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:36	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:36	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:36	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:36	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:36	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:36	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:36	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:36	1
Styrene	ND		1.0		ug/L			05/26/22 02:36	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:36	1
Toluene	ND		1.0		ug/L			05/26/22 02:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:36	1
Trichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:36	1
Trihalomethanes, Total	**1.5**		1.0		ug/L			05/26/22 02:36	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:36	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-13-355-051222

Lab Sample ID: 550-184011-7
Date Collected: 05/12/22 09:01
Matrix: Water
Date Received: 05/12/22 14:00

Method: 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			05/26/22 02:36	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/26/22 02:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/26/22 02:36*	*1*

Client Sample ID: MW-14-350-051222

Lab Sample ID: 550-184011-8
Date Collected: 05/12/22 12:13
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1-Dichloroethene	**3.2**		1.0		ug/L			05/26/22 02:56	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:56	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:56	1
Acetone	ND		20		ug/L			05/26/22 02:56	1
Benzene	ND		1.0		ug/L			05/26/22 02:56	1
Bromoform	ND		2.0		ug/L			05/26/22 02:56	1
Bromomethane	ND		2.0		ug/L			05/26/22 02:56	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:56	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:56	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:56	1
Chloroform	ND		1.0		ug/L			05/26/22 02:56	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:56	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:56	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:56	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:56	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:56	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:56	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:56	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-14-350-051222

Lab Sample ID: 550-184011-8
Date Collected: 05/12/22 12:13
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:56	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:56	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:56	1
Styrene	ND		1.0		ug/L			05/26/22 02:56	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:56	1
Toluene	ND		1.0		ug/L			05/26/22 02:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:56	1
Trichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:56	1
Trihalomethanes, Total	ND		1.0		ug/L			05/26/22 02:56	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:56	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 02:56	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 02:56*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/26/22 02:56*	*1*

Client Sample ID: TB-051222

Lab Sample ID: 550-184011-9
Date Collected: 05/12/22 08:00
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1-Dichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/25/22 21:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/25/22 21:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
1,2-Dichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,2-Dichloropropane	ND		1.0		ug/L			05/25/22 21:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
2-Butanone (MEK)	ND		20		ug/L			05/25/22 21:07	1
2-Hexanone	ND		5.0		ug/L			05/25/22 21:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/25/22 21:07	1
Acetone	ND		20		ug/L			05/25/22 21:07	1
Benzene	ND		1.0		ug/L			05/25/22 21:07	1
Bromoform	ND		2.0		ug/L			05/25/22 21:07	1
Bromomethane	ND		2.0		ug/L			05/25/22 21:07	1
Carbon disulfide	ND		2.0		ug/L			05/25/22 21:07	1
Carbon tetrachloride	ND		1.0		ug/L			05/25/22 21:07	1
Chlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
Chlorodibromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Chloroethane	ND		4.0		ug/L			05/25/22 21:07	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: TB-051222

Date Collected: 05/12/22 08:00
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-9

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0		ug/L			05/25/22 21:07	1
Chloromethane	ND		2.0		ug/L			05/25/22 21:07	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 21:07	1
Dibromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Dichlorobromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/25/22 21:07	1
Ethylbenzene	ND		1.0		ug/L			05/25/22 21:07	1
Ethylene Dibromide	ND		5.0		ug/L			05/25/22 21:07	1
Iodomethane	ND		2.0		ug/L			05/25/22 21:07	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/25/22 21:07	1
Methylene Chloride	ND		5.0		ug/L			05/25/22 21:07	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/25/22 21:07	1
Naphthalene	ND		1.0		ug/L			05/25/22 21:07	1
o-Xylene	ND		1.0		ug/L			05/25/22 21:07	1
Styrene	ND		1.0		ug/L			05/25/22 21:07	1
Tetrachloroethene	ND		1.0		ug/L			05/25/22 21:07	1
Toluene	ND		1.0		ug/L			05/25/22 21:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 21:07	1
Trichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
Trichlorofluoromethane	ND		2.0		ug/L			05/25/22 21:07	1
Trihalomethanes, Total	ND		1.0		ug/L			05/25/22 21:07	1
Vinyl acetate	ND		3.0		ug/L			05/25/22 21:07	1
Vinyl chloride	ND		1.0		ug/L			05/25/22 21:07	1
Xylenes, Total	ND		2.0		ug/L			05/25/22 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/25/22 21:07*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/25/22 21:07*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB	TOL
Lab Sample ID	**Client Sample ID**	**(79-119)**	**(80-120)**
550-184011-1	MW-10-22Q2	102	102
550-184011-3	EW-1-22Q2	99	100
550-184011-5	MW-7-285-051222	101	102
550-184011-6	MW-12-410-051222	102	101
550-184011-7	MW-13-355-051222	101	101
550-184011-8	MW-14-350-051222	102	103
550-184011-9	TB-051222	101	100
LCS 280-576204/4	Lab Control Sample	100	100
LCSD 280-576204/5	Lab Control Sample Dup	101	104
MB 280-576204/9	Method Blank	100	102

Surrogate Legend

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

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

Lab Sample ID: MB 280-576204/9
Matrix: Water
Analysis Batch: 576204

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		1.0		ug/L			05/25/22 20:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1-Dichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/25/22 20:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/25/22 20:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
1,2-Dichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,2-Dichloropropane	ND		1.0		ug/L			05/25/22 20:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
2-Butanone (MEK)	ND		20		ug/L			05/25/22 20:05	1
2-Hexanone	ND		5.0		ug/L			05/25/22 20:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/25/22 20:05	1
Acetone	ND		20		ug/L			05/25/22 20:05	1
Benzene	ND		1.0		ug/L			05/25/22 20:05	1
Bromoform	ND		2.0		ug/L			05/25/22 20:05	1
Bromomethane	ND		2.0		ug/L			05/25/22 20:05	1
Carbon disulfide	ND		2.0		ug/L			05/25/22 20:05	1
Carbon tetrachloride	ND		1.0		ug/L			05/25/22 20:05	1
Chlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
Chlorodibromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Chloroethane	ND		4.0		ug/L			05/25/22 20:05	1
Chloroform	ND		1.0		ug/L			05/25/22 20:05	1
Chloromethane	ND		2.0		ug/L			05/25/22 20:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 20:05	1
Dibromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Dichlorobromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/25/22 20:05	1
Ethylbenzene	ND		1.0		ug/L			05/25/22 20:05	1
Ethylene Dibromide	ND		5.0		ug/L			05/25/22 20:05	1
Iodomethane	ND		2.0		ug/L			05/25/22 20:05	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/25/22 20:05	1
Methylene Chloride	ND		5.0		ug/L			05/25/22 20:05	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/25/22 20:05	1
Naphthalene	ND		1.0		ug/L			05/25/22 20:05	1
o-Xylene	ND		1.0		ug/L			05/25/22 20:05	1
Styrene	ND		1.0		ug/L			05/25/22 20:05	1
Tetrachloroethene	ND		1.0		ug/L			05/25/22 20:05	1
Toluene	ND		1.0		ug/L			05/25/22 20:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 20:05	1
Trichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
Trichlorofluoromethane	ND		2.0		ug/L			05/25/22 20:05	1
Trihalomethanes, Total	ND		1.0		ug/L			05/25/22 20:05	1

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

Lab Sample ID: MB 280-576204/9
Matrix: Water
Analysis Batch: 576204

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		3.0	ug/L			05/25/22 20:05	1
Vinyl chloride	ND		1.0	ug/L			05/25/22 20:05	1
Xylenes, Total	ND		2.0	ug/L			05/25/22 20:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*79 - 119*		*05/25/22 20:05*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/25/22 20:05*	*1*

Lab Sample ID: LCS 280-576204/4
Matrix: Water
Analysis Batch: 576204

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	25.0	25.5		ug/L		102	71 - 126
1,1,1-Trichloroethane	25.0	24.9		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.3		ug/L		105	60 - 140
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	70 - 130
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 130
1,1-Dichloroethene	25.0	24.4		ug/L		97	50 - 150
1,2,3-Trichloropropane	25.0	25.8		ug/L		103	64 - 136
1,2-Dibromo-3-Chloropropane	25.0	25.2		ug/L		101	53 - 132
1,2-Dichlorobenzene	25.0	27.6		ug/L		110	65 - 135
1,2-Dichloroethane	25.0	23.4		ug/L		94	70 - 130
1,2-Dichloropropane	25.0	24.7		ug/L		99	35 - 165
1,3-Dichlorobenzene	25.0	27.6		ug/L		110	70 - 130
1,4-Dichlorobenzene	25.0	26.4		ug/L		106	65 - 135
2-Butanone (MEK)	100	86.1		ug/L		86	49 - 153
2-Hexanone	100	94.7		ug/L		95	50 - 154
4-Methyl-2-pentanone (MIBK)	100	97.3		ug/L		97	48 - 157
Acetone	100	83.2		ug/L		83	44 - 168
Benzene	25.0	24.4		ug/L		98	65 - 135
Bromoform	25.0	23.3		ug/L		93	70 - 130
Bromomethane	25.0	14.8		ug/L		59	15 - 185
Carbon disulfide	25.0	23.4		ug/L		94	61 - 138
Carbon tetrachloride	25.0	25.3		ug/L		101	70 - 130
Chlorobenzene	25.0	24.6		ug/L		98	65 - 135
Chlorodibromomethane	25.0	25.1		ug/L		100	70 - 135
Chloroethane	25.0	23.5		ug/L		94	40 - 160
Chloroform	25.0	24.1		ug/L		96	70 - 135
Chloromethane	25.0	20.7		ug/L		83	10 - 205
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	76 - 128
cis-1,3-Dichloropropene	25.0	23.6		ug/L		94	25 - 175
Dibromomethane	25.0	22.8		ug/L		91	73 - 127
Dichlorobromomethane	25.0	24.8		ug/L		99	65 - 135
Dichlorodifluoromethane	25.0	23.9		ug/L		96	32 - 152
Ethylbenzene	25.0	25.2		ug/L		101	60 - 140
Ethylene Dibromide	25.0	23.5		ug/L		94	77 - 126
Iodomethane	25.0	17.8		ug/L		71	69 - 131

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

Lab Sample ID: LCS 280-576204/4
Matrix: Water
Analysis Batch: 576204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl tert-butyl ether	25.0	24.0		ug/L		96	74 - 128
Methylene Chloride	25.0	23.0		ug/L		92	60 - 140
m-Xylene & p-Xylene	25.0	25.5		ug/L		102	78 - 128
Naphthalene	25.0	25.0		ug/L		100	68 - 129
o-Xylene	25.0	25.3		ug/L		101	80 - 127
Styrene	25.0	25.5		ug/L		102	76 - 130
Tetrachloroethene	25.0	25.5		ug/L		102	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	50 - 150
Trichloroethene	25.0	24.9		ug/L		100	65 - 135
Trichlorofluoromethane	25.0	23.9		ug/L		96	50 - 150
Vinyl acetate	50.0	48.2		ug/L		96	59 - 143
Vinyl chloride	25.0	22.6		ug/L		90	10 - 195

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*79 - 119*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 280-576204/5
Matrix: Water
Analysis Batch: 576204

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	25.0	26.7		ug/L		107	71 - 126	4	30
1,1,1-Trichloroethane	25.0	24.6		ug/L		98	70 - 130	1	30
1,1,2,2-Tetrachloroethane	25.0	26.4		ug/L		106	60 - 140	0	30
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	70 - 130	6	30
1,1-Dichloroethane	25.0	24.5		ug/L		98	70 - 130	1	30
1,1-Dichloroethene	25.0	24.2		ug/L		97	50 - 150	1	30
1,2,3-Trichloropropane	25.0	25.9		ug/L		104	64 - 136	0	30
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	53 - 132	2	30
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	65 - 135	3	30
1,2-Dichloroethane	25.0	23.3		ug/L		93	70 - 130	0	30
1,2-Dichloropropane	25.0	24.7		ug/L		99	35 - 165	0	30
1,3-Dichlorobenzene	25.0	27.5		ug/L		110	70 - 130	0	30
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	65 - 135	2	30
2-Butanone (MEK)	100	86.0		ug/L		86	49 - 153	0	32
2-Hexanone	100	98.5		ug/L		99	50 - 154	4	30
4-Methyl-2-pentanone (MIBK)	100	96.4		ug/L		96	48 - 157	1	30
Acetone	100	82.3		ug/L		82	44 - 168	1	30
Benzene	25.0	24.1		ug/L		97	65 - 135	1	30
Bromoform	25.0	25.8		ug/L		103	70 - 130	10	30
Bromomethane	25.0	14.7		ug/L		59	15 - 185	1	30
Carbon disulfide	25.0	23.4		ug/L		94	61 - 138	0	30
Carbon tetrachloride	25.0	25.9		ug/L		104	70 - 130	2	30
Chlorobenzene	25.0	25.0		ug/L		100	65 - 135	2	30
Chlorodibromomethane	25.0	26.8		ug/L		107	70 - 135	6	30

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

Lab Sample ID: LCSD 280-576204/5
Matrix: Water
Analysis Batch: 576204

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
Chloroethane	25.0	22.5		ug/L		90	40 - 160	4	30
Chloroform	25.0	24.2		ug/L		97	70 - 135	0	30
Chloromethane	25.0	20.1		ug/L		80	10 - 205	3	30
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	76 - 128	1	30
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	25 - 175	8	30
Dibromomethane	25.0	23.8		ug/L		95	73 - 127	4	30
Dichlorobromomethane	25.0	25.6		ug/L		102	65 - 135	3	30
Dichlorodifluoromethane	25.0	23.6		ug/L		95	32 - 152	1	30
Ethylbenzene	25.0	25.5		ug/L		102	60 - 140	1	30
Ethylene Dibromide	25.0	24.7		ug/L		99	77 - 126	5	30
Iodomethane	25.0	18.0		ug/L		72	69 - 131	1	30
Methyl tert-butyl ether	25.0	24.0		ug/L		96	74 - 128	0	30
Methylene Chloride	25.0	23.0		ug/L		92	60 - 140	0	30
m-Xylene & p-Xylene	25.0	25.9		ug/L		104	78 - 128	2	30
Naphthalene	25.0	23.3		ug/L		93	68 - 129	7	30
o-Xylene	25.0	24.8		ug/L		99	80 - 127	2	30
Styrene	25.0	26.3		ug/L		105	76 - 130	3	30
Tetrachloroethene	25.0	25.8		ug/L		103	70 - 130	1	30
Toluene	25.0	24.5		ug/L		98	70 - 130	2	30
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	70 - 130	2	30
trans-1,3-Dichloropropene	25.0	24.7		ug/L		99	50 - 150	3	30
Trichloroethene	25.0	25.2		ug/L		101	65 - 135	1	30
Trichlorofluoromethane	25.0	23.5		ug/L		94	50 - 150	2	30
Vinyl acetate	50.0	50.5		ug/L		101	59 - 143	4	30
Vinyl chloride	25.0	22.1		ug/L		88	10 - 195	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-274364/1-A
Matrix: Water
Analysis Batch: 274624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274364

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/17/22 10:01	05/18/22 21:16	1
Cadmium	ND		0.0010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Copper	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Lead	ND	V1	0.015	mg/L		05/17/22 10:01	05/18/22 21:16	1
Molybdenum	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Selenium	ND	V1	0.10	mg/L		05/17/22 10:01	05/18/22 21:16	1
Silver	ND		0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Zinc	ND	V1	0.050	mg/L		05/17/22 10:01	05/18/22 21:16	1

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

Lab Sample ID: LCS 550-274364/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

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	0.988		mg/L		99	85 - 115
Copper	1.00	0.978	V1	mg/L		98	85 - 115
Lead	1.00	1.02	V1	mg/L		102	85 - 115
Molybdenum	1.00	1.03	V1	mg/L		103	85 - 115
Selenium	1.00	1.03	V1	mg/L		103	85 - 115
Silver	0.0750	0.0703		mg/L		94	85 - 115
Zinc	1.00	1.02	V1	mg/L		102	85 - 115

Lab Sample ID: LCSD 550-274364/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	0.985		mg/L		98	85 - 115	2	20
Cadmium	1.00	0.982		mg/L		98	85 - 115	1	20
Copper	1.00	0.974	V1	mg/L		97	85 - 115	0	20
Lead	1.00	1.01	V1	mg/L		101	85 - 115	2	20
Molybdenum	1.00	1.02	V1	mg/L		102	85 - 115	1	20
Selenium	1.00	1.01	V1	mg/L		101	85 - 115	2	20
Silver	0.0750	0.0692		mg/L		92	85 - 115	2	20
Zinc	1.00	1.00	V1	mg/L		100	85 - 115	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-274131/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		05/13/22 15:40	05/13/22 20:01	1

Lab Sample ID: LCS 550-274131/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00460		mg/L		92	85 - 115

Lab Sample ID: LCSD 550-274131/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00500	0.00472		mg/L		94	85 - 115	2	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: MB 550-275188/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/25/22 16:20	05/25/22 19:48	1

Lab Sample ID: LCS 550-275188/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

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 550-275188/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00443		mg/L		89	85 - 115	1	20

Lab Sample ID: 550-184011-4 MS — **Client Sample ID: EW-1-22Q2-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00487		mg/L		97	70 - 130		

Lab Sample ID: 550-184011-4 MSD — **Client Sample ID: EW-1-22Q2-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00502		mg/L		100	70 - 130	3	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-274379/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			05/17/22 11:16	1

Lab Sample ID: LCS 550-274379/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	187		mg/L		94	90 - 110		

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCSD 550-274379/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			200	196		mg/L		98	90 - 110	5	10

Lab Sample ID: 550-184011-2 DU — **Client Sample ID: MW-10-22Q2-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-274208/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274268 — **Prep Batch: 274208**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/15/22 15:45	05/15/22 16:29	1

Lab Sample ID: LCS 550-274208/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274268 — **Prep Batch: 274208**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0957		mg/L		96	90 - 110		

Lab Sample ID: LCSD 550-274208/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274268 — **Prep Batch: 274208**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0966		mg/L		97	90 - 110	1	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-274180/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274180

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		5.0		mg/L			05/14/22 10:30	1

Lab Sample ID: LCS 550-274180/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274180

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	198		mg/L		100	84.6 - 115.4		

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

GC/MS VOA

Analysis Batch: 576204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	624.1	
550-184011-3	EW-1-22Q2	Total/NA	Water	624.1	
550-184011-5	MW-7-285-051222	Total/NA	Water	624.1	
550-184011-6	MW-12-410-051222	Total/NA	Water	624.1	
550-184011-7	MW-13-355-051222	Total/NA	Water	624.1	
550-184011-8	MW-14-350-051222	Total/NA	Water	624.1	
550-184011-9	TB-051222	Total/NA	Water	624.1	
MB 280-576204/9	Method Blank	Total/NA	Water	624.1	
LCS 280-576204/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-576204/5	Lab Control Sample Dup	Total/NA	Water	624.1	

Metals

Prep Batch: 274131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	245.1	
MB 550-274131/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-274131/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-274131/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	

Analysis Batch: 274164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	245.1	274131
MB 550-274131/1-A	Method Blank	Total/NA	Water	245.1	274131
LCS 550-274131/2-A	Lab Control Sample	Total/NA	Water	245.1	274131
LCSD 550-274131/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	274131

Prep Batch: 274364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	200.7	
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	200.7	
MB 550-274364/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-274364/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-274364/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	

Analysis Batch: 274624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	200.7 Rev 4.4	274364
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	200.7 Rev 4.4	274364
MB 550-274364/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	274364
LCS 550-274364/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	274364
LCSD 550-274364/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	274364

Prep Batch: 275188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	245.1	
MB 550-275188/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-275188/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-275188/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-184011-4 MS	EW-1-22Q2-comp	Total/NA	Water	245.1	
550-184011-4 MSD	EW-1-22Q2-comp	Total/NA	Water	245.1	

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Metals

Analysis Batch: 275211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	245.1	275188
MB 550-275188/1-A	Method Blank	Total/NA	Water	245.1	275188
LCS 550-275188/2-A	Lab Control Sample	Total/NA	Water	245.1	275188
LCSD 550-275188/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	275188
550-184011-4 MS	EW-1-22Q2-comp	Total/NA	Water	245.1	275188
550-184011-4 MSD	EW-1-22Q2-comp	Total/NA	Water	245.1	275188

General Chemistry

Analysis Batch: 274180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	SM 5210B	
MB 550-274180/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-274180/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Prep Batch: 274208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	SM 4500 CN C	
550-184011-3	EW-1-22Q2	Total/NA	Water	SM 4500 CN C	
MB 550-274208/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-274208/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-274208/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 274268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	SM 4500 CN E	274208
550-184011-3	EW-1-22Q2	Total/NA	Water	SM 4500 CN E	274208
MB 550-274208/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	274208
LCS 550-274208/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	274208
LCSD 550-274208/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	274208

Analysis Batch: 274379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	SM 2540D	
MB 550-274379/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-274379/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-274379/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-184011-2 DU	MW-10-22Q2-comp	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2 — Lab Sample ID: 550-184011-1

Date Collected: 05/12/22 11:43
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:14	AJP	TAL DEN
Total/NA	Prep	SM 4500 CN C			274208	05/15/22 15:45	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	274268	05/15/22 16:29	SRG	TAL PHX

Client Sample ID: MW-10-22Q2-comp — Lab Sample ID: 550-184011-2

Date Collected: 05/12/22 11:40
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			274364	05/17/22 10:01	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	274624	05/18/22 22:05	MGM	TAL PHX
Total/NA	Prep	245.1			274131	05/13/22 15:40	SRR	TAL PHX
Total/NA	Analysis	245.1		1	274164	05/13/22 20:37	SRR	TAL PHX
Total/NA	Analysis	SM 2540D		1	274379		CHS	TAL PHX
					(Start)	05/17/22 11:16		
					(End)	05/17/22 15:20		
Total/NA	Analysis	SM 5210B		1	274180		SH1	TAL PHX
					(Start)	05/14/22 10:30		
					(End)	05/19/22 10:45		

Client Sample ID: EW-1-22Q2 — Lab Sample ID: 550-184011-3

Date Collected: 05/12/22 10:55
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:34	AJP	TAL DEN
Total/NA	Prep	SM 4500 CN C			274208	05/15/22 15:45	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	274268	05/15/22 16:29	SRG	TAL PHX

Client Sample ID: EW-1-22Q2-comp — Lab Sample ID: 550-184011-4

Date Collected: 05/12/22 10:53
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			274364	05/17/22 10:01	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	274624	05/18/22 22:08	MGM	TAL PHX
Total/NA	Prep	245.1			275188	05/25/22 16:20	SRR	TAL PHX
Total/NA	Analysis	245.1		1	275211	05/25/22 19:58	SRR	TAL PHX

Client Sample ID: MW-7-285-051222 — Lab Sample ID: 550-184011-5

Date Collected: 05/12/22 09:49
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:55	AJP	TAL DEN

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-12-410-051222 — Lab Sample ID: 550-184011-6

Date Collected: 05/12/22 10:19
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:15	AJP	TAL DEN

Client Sample ID: MW-13-355-051222 — Lab Sample ID: 550-184011-7

Date Collected: 05/12/22 09:01
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:36	AJP	TAL DEN

Client Sample ID: MW-14-350-051222 — Lab Sample ID: 550-184011-8

Date Collected: 05/12/22 12:13
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:56	AJP	TAL DEN

Client Sample ID: TB-051222 — Lab Sample ID: 550-184011-9

Date Collected: 05/12/22 08:00
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/25/22 21:07	AJP	TAL DEN

Laboratory References:

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

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Laboratory: Eurofins Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-23
Arizona	State	AZ0713	12-20-22
Arkansas DEQ	State	19-047-0	06-01-22
California	State	2513	01-09-23
Connecticut	State	PH-0686	09-30-22
Florida	NELAP	E87667-57	06-30-22
Georgia	State	4025-011	01-08-23
Illinois	NELAP	2000172019-1	04-30-23
Iowa	State	IA#370	12-02-22
Kansas	NELAP	E-10166	05-31-22
Kentucky (WW)	State	KY98047	12-31-22
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-22
Minnesota	NELAP	1788752	12-31-22
Nevada	State	CO000262020-1	07-31-22
New Hampshire	NELAP	205319	04-28-20 *
New Jersey	NELAP	190002	06-30-22
New York	NELAP	59923	04-01-23
North Carolina (WW/SW)	State	358	12-31-22
North Dakota	State	R-034	01-08-23
Oklahoma	NELAP	8614	08-31-22
Oregon	NELAP	4025-011	01-09-23
Pennsylvania	NELAP	013	07-31-22
South Carolina	State	72002001	01-08-23
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	10-01-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-20-00065	03-06-23
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-22
Virginia	NELAP	10490	06-14-22
Washington	State	C583-19	08-03-22
West Virginia DEP	State	354	11-30-22
Wisconsin	State	999615430	08-31-22
Wyoming (UST)	A2LA	2907.01	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL PHX
245.1	Mercury (CVAA)	EPA	TAL PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PHX
SM 4500 CN E	Cyanide, Total	SM	TAL PHX
SM 5210B	BOD, 5-Day	SM	TAL PHX
200.7	Preparation, Total Metals	EPA	TAL PHX
245.1	Preparation, Mercury	EPA	TAL PHX
SM 4500 CN C	Cyanide, Distillation	SM	TAL 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:

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

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

Chain Of Custody / Analysis Request

AESI Ref:	44699.45271
COC#	35008_051222
Lab Proj # (SDG):	
Lab ID	TAL-PHX
Site ID	
Lab Job #	
Authorized User:	Honeywell

Privileged & Confidential

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

Sampling Co.:	Jacobs	EDD To:	Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)		Sampler:	T. Kearsley
Jacobs		PO #	A000651433
1501 W. Fountainhead Parkway (suite 401)		Analysis Turnaround Time (TAT):	10
Tempe, AZ 85282		Consultant	
Preliminary Data To	Berney Kidd Jacobs,,Lakshmi Devi HTS,	Laboratory Contact	Ken Baker
Sample Receipt Acknowledgement	Sample Distribution List	Report Tier Level	2
Hard Copy To	Berney Kidd CH2m,	Full Report TAT:	10
Invoice To:	Mike Heitmann, Honeywell/Copy Berney Kidd		HTS

Text & Excel File Drive | Excel & Text File Order

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	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																
1	MW-10	----	----	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X												
2	MW-10	----	----	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X									
3	EW-1	----	----	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X					X							
4	EW-1	----	----	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X		X											
5	MW-7	285.0	----	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	X														
6	MW-12	410.0	----	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	X														
7	MW-13	355.0	----	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	X														
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	X														
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X														
10																											
11																											
12																											

Relinquished by	Company	CH2M	Received by	Company		Condition		Custody Seals Intact	
Thomas Kearsley	Date/Time		FedEx	Date/Time		Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		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)

184011

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

Chain Of Custody / Analysis Request

AESI Ref:	44693.53553
COC#	35008_051222
Lab Proj # (SDG):	
Lab ID	TAL-PHX
Site ID	
Lab Job #	
Authorized User:	Honeywell

Text & Excel File Drive | Excel & Text File Order

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Privileged & Confidential		Site Name:	IAC, Peoria
		Location of Site:	Phoenix, AZ
Phase:		Sampling Program	Quarterly
Sampling Co.:	Jacobs	EDD To:	Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)		Sampler:	T. Kearsley
Jacobs		PO #	A000651433
1501 W. Fountainhead Parkway (suite 401)		Analysis Turnaround Time (TAT):	10
Tempe, AZ 85282		Consultant	
Preliminary Data To	Berney Kidd, Jacobs, Lakshmi Devi HT	Laboratory Contact	Ken Baker
Sample Receipt Acknowledgement To	Sample Distribution List	Report Tier Level	2
Hard Copy To	Berney Kidd CH2m	Full Report TAT:	10
Invoice To:	Mike Heitmann, Honeywell/Copy Berney Kidd		HTS

	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		Preservative	8	10	15	10	0	0	10	8					
1	MW-10	----	----	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X								-01			
2	MW-10	----	----	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X					-02			
3	EW-1	----	----	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X						X		-03			
4	EW-1	----	----	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X									-04			
5	MW-7	285.0	----	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	X										-05			
6	MW-12	410.0	----	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	X										-06			
7	MW-13	355.0	----	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	X										-07			
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	X										-08			
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X										-09			
10																										
11																										
12																										

550-184011 Chain of Custody

Relinquished by	Company	CH2M	Received by	Company		Condition	OK
Thomas Kearsley	Date/Time 5/12/22 14:00		FedEx ETA-9HR	Date/Time 5/12/22 14:00		Cooler Temp.	1.0°C
Custody Seals Intact							
Relinquished by	Company		Received by	Company		Condition	
	Date/Time			Date/Time		Cooler Temp.	
Custody Seals Intact							

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)

CDO

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

Chain Of Custody / Analysis Request

Sampling Co.:	Jacobs
Client Contact: (name, co., address)	Jacobs 1501 W. Fountainhead Parkway (suite 401) Tempe, AZ 85282
Preliminary Data To	Berney Kidd Jacobs, Lakshmi Devi HTS
Sample Receipt Acknowledgement To	Sample Distribution List
Hard Copy To	Berney Kidd CH2m
Invoice To:	Mike Heitmann, Honeywell/Copy Berney Kidd

Privileged & Confidential	
EDD To:	Bernice Kidd, Jacobs HTS
Sampler:	T. Kearsley
PO #	A000651433
Analysis Turnaround Time (TAT): Consultant	10
Laboratory Contact	Ken Baker
Report Tier Level	2
Full Report TAT:	10
	HTS

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

AESI Ref:	44693.53553
COC#	35008_0512
Lab Proj # (SDG):	
Lab ID	TAL-PHX
Site ID	
Lab Job #	
Authorized User:	Honeywel
Text & Excel File Deliv	Excel & Text F Order

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	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)	E624 Full list					Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units																
													Preservative	8	10	15	10	0	0	10	8						
1	MW-10	---	---	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X												
2	MW-10	---	---	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X									
3	EW-1	---	---	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X					X							
4	EW-1	---	---	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X													
5	MW-7	285.0	---	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	~~X~~								X						
6	MW-12	410.0	---	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	~~X~~								X						
7	MW-13	355.0	---	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	~~X~~								X						
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	~~X~~								X						
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X														
10																											
11																											
12																											

Relinquished by	Company	CH2M	Received by	Company		Condition	OK
Thomas Kearsley	Date/Time 5/12/22 14:00		~~FedEx~~ ETA-9HR	Date/Time 5/12/22 14:00		Cooler Temp.	1.0°C
Relinquished by	Company		Received by	Company		Condition	
	Date/Time			Date/Time		Cooler Temp.	

Custody Seals Intact: Custody Seals Intact:

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)

Jacobs CPO

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

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sester, Rachel E	Carrier Tracking No(s):	COC No: 550-34019.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachel.Sester@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona		Job #: 550-184011-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/25/2022			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: IAC, Peoria	Project #: 55014762			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.1/624_Prep 624 List Chloroform, TCE, 1,1-DCE, 1,1-D	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-10-22Q2 (550-184011-1)	5/12/22	11:43 Arizona		Water			X	3	
EW-1-22Q2 (550-184011-3)	5/12/22	10:55 Arizona		Water			X	3	
MW-7-285-051222 (550-184011-5)	5/12/22	09:49 Arizona		Water			X	3	
MW-12-410-051222 (550-184011-6)	5/12/22	10:19 Arizona		Water			X	3	
MW-13-355-051222 (550-184011-7)	5/12/22	09:01 Arizona		Water			X	3	
MW-14-350-051222 (550-184011-8)	5/12/22	12:13 Arizona		Water			X	3	
TB-051222 (550-184011-9)	5/12/22	08:00 Arizona		Water			X	1	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible] FedEx	5-19-22 16:00	EESW	FedEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[illegible]	5/20/22 1000	FedEx
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.3 IR2 CFX21

Rev: 06/08/2021

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-184011-1

Login Number: 184011
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.

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-184011-1

Login Number: 184011
List Number: 2
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/21/22 10:36 AM

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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Sester, Rachel E.

From: Kidd, Bernice/RDD <Bernice.Kidd@jacobs.com>
Sent: Thursday, June 2, 2022 12:33 PM
To: Rene Surgi; Sester, Rachel E.
Cc: Bowles, Steven L
Subject: RE: Peoria VOA Samples - Urgent

EXTERNAL EMAIL*

Hi Rachel and Rene,

We have decided to move forward without reporting these analytes:

1,1,2-Trichloro-1,2,2-trifluoroethane
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
1,3-Dichloropropane
2,2-Dichloropropane
2-Chlorotoluene
4-Chlorotoluene
4-Isopropyltoluene
Bromobenzene
Chlorobromomethane
Dibromofluoromethane (Surr)
Ethanol
Hexachlorobutadiene
Isopropylbenzene
n-Butylbenzene
N-Propylbenzene
sec-Butylbenzene
tert-Butylbenzene

Rachel – can you please make sure to note what happened in the narrative?

Rene – decision was made based on the fact that these are not COCs, and only 1,2,4-TCB has a AWQS standard at 70 ug/L and we do not anticipate a detection of this analyte.

We'll return to the full list at Phoenix for the next round at these wells.

Thank you,
Berney

From: Rene Surgi <renesurgi@aesi.us>
Sent: Thursday, June 2, 2022 11:29 AM
To: Kidd, Bernice/RDD <Bernice.Kidd@jacobs.com>
Cc: Bowles, Steven L <Steven.Bowles@Honeywell.com>; Sester, Rachel E. <Rachel.Sester@Eurofinset.com>
Subject: [EXTERNAL] Peoria VOA Samples - Urgent

Hi Berney
I brought up EW-1 Hg (which is completed at the lab) and the following VOA E624 samples
MW-7, -12, -13, -14.

As it turns out these went to Denver in anticipation of the original short list. When you requested the longer list, Denver ran their longer list but is not the "long list" at Phoenix. All the analytes at Denver are in 1x HT. However we would like you to compare the list needed vs what Denver actually reported. If Denver's list will suffice, we are done. However if you have compounds on your long list (Phoenix) not analyzed in Denver, you can get these done with a "J" (within 2x HT) at Phoenix. I asked that Rachel get these returned from Denver today (where they are now) to Phoenix (overnight repackaged on ice) in case you need these added compounds run at Phoenix.

Just let us know.
Thanks
Rene

Rene Surgi, Ph.D.
AESI
908 Shinnecock Hills Dr.
Georgetown TX 78628
847-835-0983
847-254-0934
ReneSurgi@aesi.us

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

July 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – June 2022**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Ms. Gentry,

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 June 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, June 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,325,480	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, 2022, through June 30, 2022 was collected on May 12, 2022. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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. 1806-5436

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. 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: June 1, 2022 Through June 30, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 77,516	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 77,715	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,325,480	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 7/26/2022

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 Point Cleaned
Last	5/12/2022	36,015,598				☐	☐
1.	6/2/2022	37,639,874	77,346			☐	☐
2.	6/20/2022	39,038,739	77,715			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
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25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow	**77,516**
Maximum Flow	**77,715**
Total Gallons	**2,325,480**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 6/2/22 (FK) 5/2/22

Field Technician(s) T. Kasky

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	37639874		-9	52.2	295.77	25404.9
* ~~Depart~~ Depart	10:10	ON	Adjusted Flow			55.2		

Electrical Meter Readings

Power(kwh)	66745
Power Rate(KwMax)	3.69

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 55.2 GPM

Signature: TKasky

EW-1 Well Information
Total Depth = 425 feet bgs

Screen Interval = 265-415 feet bgs

Pump Intake Depth = 363 feet bgs

298.69
2.92
295.77

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

Date: 6/20/22 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	0830	*ON	3038739		7	47.3	298.69	25835.5
~~Depart~~		ON	Adjust flow			59.2		

Depart 08:40

Electrical Meter Readings

Power(kwh)	70434
Power Rate(KwMax)	8.61

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: —

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 59.2 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

361.61
+2.92
298.69

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

July 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – June 2022**
Industrial Wastewater Discharge Permit Number 1710-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Ms. Gentry,

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 (MW-10) at the Honeywell Peoria Avenue Site in Phoenix, Arizona.

A summary of the June 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, June 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	1710-5383	1,353,780	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 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, 2022, through June 30, 2022, was collected on May 12, 2022. Sampling results indicate that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

Pump operations at well MW-10 was observed to be offline during a site inspection conducted on June 2, 2022. Based on the operational data well MW-10 was offline starting June 1, 2022. Following maintenance, pump operations were resumed on June 13, 2022. Pump operations at

JACOBS

well MW-10 were confirmed on June 15, 2022. Pump operations were observed to be offline again on June 20, 2022. Following additional maintenance pump operations were resumed on June 21, 2022.

If you should require any additional information, please contact me at (602) 295-3925.

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. 1710-5383

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 MW-10
Industrial Wastewater Discharge
Permit No. 1710-5383

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Permit №: ***1710-5383***

Compliance Sampling Point: ***5383.01***

Report Period: June 1, 2022 Through June 30, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 45,126	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 49,087	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,353,780	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 7/26/2022

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 Point Cleaned
Last	5/12/2022	39,900,853				☐	☐
1.	6/2/2022[1]	40,931,674	49,087			☐	☐
2.	6/15/2022	41,028,859	48,593			☐	☐
3.	6/20/2022[3]	41,164,374	27,103			☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
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18.						☐	☐
19.						☐	☐
20.						☐	☐
21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		**45,126**				
	Maximum Flow		**49,087**				
	Total Gallons		**1,353,780**				

[1] Well operations observed to be offline

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 6/2/22 (TK) ~~5/2/22~~ 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	0925	OFF*	40931674	Ø	Ø	–	–
Depart		OFF*					

Electrical Meter Readings

Power(kwh)	–
Power Rate(KwMax)	–

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

* Could not restart, will recheck Elec tomorrow

Signature: TK

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 6/15/22 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	1240	* ON	41028859	2	34.2	303.01	88004.5
Depart		ON					

Electrical Meter Readings

Power(kwh)	19954
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

* Restarted well on 6/13/22 @ 13:15 hrs after electronics work

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

308.11
− 5.1
303.01

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

Date 6/20/22 Field Technician(s) T. Keatsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0812	* OFF	41164374	—	0	—	88069.4
Depart		OFF					

Electrical Meter Readings

Power(kwh)	—
Power Rate(KwMax)	—

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

* New Motor Saver was delivered this weekend, will install tomorrow

Signature: T Keatsley

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

1501 W. Fountainhead Pkwy
Tempe, Arizona 85282
United States
T +1.480.966.8188

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

August 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – July 2022**
Industrial Wastewater Discharge Permit Number 1806-5436
Honeywell International Inc. Former Peoria Avenue Facility/EW-1
Phoenix, Arizona

Dear Ms. Gentry,

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 July 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, July 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,679,826	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 July 1, 2022, through September 30, 2022, are included in this monthly report. Jacobs personnel performed compliance sampling for all required analytes on July 26, 2022. 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: July 1, 2022 Through July 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 86,446	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 87,296	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,679,826	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] SMR Page 1 – Flow Page with Signed and Dated Certification
- [x] SMR Page 2 – Sampling Detail Page
- [x] SMR Page 3 – Laboratory Results Reporting Table
- [ ] Attachment B - Zero Discharge Certification (Only if Applicable)
- [x] pH Calibration & Analysis Log with Method QC Data
- [x] Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- [x] ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- [x] 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 August 26, 2022

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

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

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

Phoenix, Arizona 85029

Dates/Times Samples Collected: **07/26/2022 at 10:20 (grab), 10:18 (composite), 10:00 (pH)**

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

Compliance Sampling Point № **5436.01** Lab Project or Reference ID № **550-187803-1**

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: July 1, 2022 to July 31, 2022

Compliance Point №: ***5436.01***

Lab Project or Reference ID № ***550-187803-1***

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

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 07/26/2022	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**	5.7	EPA 624.1								
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	65	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**	1.3	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**	7.55	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**	21	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 № 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	6/20/2022	39,038,739				☐	☐
1.	7/7/2022	40,522,778	87,296			☐	☐
2.	7/26/2022	42,150,788	85,685			☐	☐
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	**86,446**
Maximum Flow	**87,296**
Total Gallons	**2,679,826**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 7/7/22 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		ON	40522778		7	58.9	296.06	26243.0
Depart		ON						

Electrical Meter Readings

Power(kwh)	74049
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 ____ 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

298.98
2.92
296.06

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

Date: 7/26/22 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	0953	ON	42150788		7	58.7	298.10	26700.9
Depart		ON						

Electrical Meter Readings

Power(kwh)	78085
Power Rate(KwMax)	888

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: 0957

Time pH Sample Analyzed: 1000
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 1020

Composite Sample Log

Start Time: 0958 End Time: 1018 Flow Rate: 500 mL/min

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

Notes

pH 7.55 @ 32.3°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

29
300.02
2.92
298.10

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter №

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# 16A943 Jan/23	7/26/22	TK	07:30	4.00	26.8	96.9	
pH Buffer 7/Lot# CHLB5007-T 8/23			07:28	7.00	26.5	97.5	
pH Buffer 10/Lot# 16C500 mar/23			07:32	10.00	26.8	96.7	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# 16D360 Apr 23			07:34	7.02	26.2	Pass or Fail	
Compliance pH result 5436.01 (EW-1)	7/26/22	TK	10:00	7.55	32.3	N/A	
Compliance pH result 5383.01 (MW-10)	7/26/22	TK	0915	7.51	32.4	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)	7/26/22	TK	Orig Reading:	7.55	Dup Reading:	7.57	
Once/Month Verification Check/Buffer 7	7/26/22	TK	11:13	7.04	27.0	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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 550-187803-1
Client Project/Site: IAC, Peoria
Revision: 1

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
8/5/2022 10:41:17 AM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Qualifiers

General Chemistry

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

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: 550-187803-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-187803-1

Comments
The report being provided is a revision of the original report sent on 8//052022. The report (revision 1) is being revised due to: Revised site location

No additional comments.

Receipt
The samples were received on 7/26/2022 12:49 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 0.8º 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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-187803-1	MW-10-22Q3	Water	07/26/22 09:40	07/26/22 12:49
550-187803-2	MW-1022Q3-comp	Water	07/26/22 09:34	07/26/22 12:49
550-187803-3	EW-1-22Q3	Water	07/26/22 10:20	07/26/22 12:49
550-187803-4	EW-1-22Q3-comp	Water	07/26/22 10:18	07/26/22 12:49
550-187803-5	TB-22Q3	Water	07/26/22 08:00	07/26/22 12:49

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3 — Lab Sample ID: 550-187803-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.72		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	15		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-1022Q3-comp — Lab Sample ID: 550-187803-2

No Detections.

Client Sample ID: EW-1-22Q3 — Lab Sample ID: 550-187803-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.7		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	65		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.3		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	21		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q3-comp — Lab Sample ID: 550-187803-4

No Detections.

Client Sample ID: TB-22Q3 — Lab Sample ID: 550-187803-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3

Lab Sample ID: 550-187803-1
Date Collected: 07/26/22 09:40
Matrix: Water
Date Received: 07/26/22 12:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.72		0.50	ug/L			07/27/22 16:28	1
1,1-Dichloroethene	15		0.50	ug/L			07/27/22 16:28	1
Benzene	ND		0.50	ug/L			07/27/22 16:28	1
Chloroform	ND		0.50	ug/L			07/27/22 16:28	1
Trichloroethene	4.9		0.50	ug/L			07/27/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*07/27/22 16:28*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*07/27/22 16:28*	*1*
Toluene-d8 (Surr)	*100*		*60 - 140*		*07/27/22 16:28*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050	mg/L		07/30/22 20:50	07/30/22 22:01	1

Client Sample ID: MW-1022Q3-comp

Lab Sample ID: 550-187803-2
Date Collected: 07/26/22 09:34
Matrix: Water
Date Received: 07/26/22 12:49

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:49	1
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:49	1
Molybdenum	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Selenium	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:49	1
Silver	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:49	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		08/02/22 16:05	08/02/22 19:43	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			07/29/22 12:37	1
Biochemical Oxygen Demand	ND		5.0	mg/L			07/27/22 19:18	1

Client Sample ID: EW-1-22Q3

Lab Sample ID: 550-187803-3
Date Collected: 07/26/22 10:20
Matrix: Water
Date Received: 07/26/22 12:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	5.7		0.50	ug/L			07/27/22 16:50	1
1,1-Dichloroethene	65		0.50	ug/L			07/27/22 16:50	1
Chloroform	1.3		0.50	ug/L			07/27/22 16:50	1
Trichloroethene	21		0.50	ug/L			07/27/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*07/27/22 16:50*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: EW-1-22Q3

Lab Sample ID: 550-187803-3
Date Collected: 07/26/22 10:20
Matrix: Water
Date Received: 07/26/22 12:49

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*60 - 140*		*07/27/22 16:50*	*1*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*07/27/22 16:50*	*1*

Client Sample ID: EW-1-22Q3-comp

Lab Sample ID: 550-187803-4
Date Collected: 07/26/22 10:18
Matrix: Water
Date Received: 07/26/22 12:49

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:52	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:52	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:52	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:52	1

Client Sample ID: TB-22Q3

Lab Sample ID: 550-187803-5
Date Collected: 07/26/22 08:00
Matrix: Water
Date Received: 07/26/22 12:49

Method: 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			07/27/22 14:16	1
1,1-Dichloroethene	ND		0.50	ug/L			07/27/22 14:16	1
Benzene	ND		0.50	ug/L			07/27/22 14:16	1
Chloroform	ND		0.50	ug/L			07/27/22 14:16	1
Trichloroethene	ND		0.50	ug/L			07/27/22 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*07/27/22 14:16*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*		*07/27/22 14:16*	*1*
Toluene-d8 (Surr)	*102*		*60 - 140*		*07/27/22 14:16*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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)**
550-187803-1	MW-10-22Q3	94	106	100
550-187803-1 MS	MW-10-22Q3	92	91	88
550-187803-1 MSD	MW-10-22Q3	93	88	87
550-187803-3	EW-1-22Q3	93	106	101
550-187803-5	TB-22Q3	96	104	102
LCS 550-280155/3	Lab Control Sample	93	88	90
LCSD 550-280155/4	Lab Control Sample Dup	94	91	91
MB 550-280155/6	Method Blank	97	101	98

Surrogate Legend

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

QC Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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

Lab Sample ID: MB 550-280155/6
Matrix: Water
Analysis Batch: 280155

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			07/27/22 10:33	1
Benzene	ND		0.50		ug/L			07/27/22 10:33	1
1,1-Dichloroethene	ND		0.50		ug/L			07/27/22 10:33	1
Chloroform	ND		0.50		ug/L			07/27/22 10:33	1
Trichloroethene	ND		0.50		ug/L			07/27/22 10:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*07/27/22 10:33*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*07/27/22 10:33*	*1*
Toluene-d8 (Surr)	*98*		*60 - 140*		*07/27/22 10:33*	*1*

Lab Sample ID: LCS 550-280155/3
Matrix: Water
Analysis Batch: 280155

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	51.0		ug/L		102	70 - 150		
Benzene			50.0	48.2		ug/L		96	65 - 135		
1,1-Dichloroethene			50.0	49.0		ug/L		98	50 - 140		
Chloroform			50.0	48.8		ug/L		98	70 - 135		
Trichloroethene			50.0	48.6		ug/L		97	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*
Dibromofluoromethane (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*90*		*60 - 140*

Lab Sample ID: LCSD 550-280155/4
Matrix: Water
Analysis Batch: 280155

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	51.6		ug/L		103	70 - 150	1	20
Benzene			50.0	48.5		ug/L		97	65 - 135	1	20
1,1-Dichloroethene			50.0	49.6		ug/L		99	50 - 140	1	20
Chloroform			50.0	49.6		ug/L		99	70 - 135	2	20
Trichloroethene			50.0	48.6		ug/L		97	65 - 135	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*
Dibromofluoromethane (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*91*		*60 - 140*

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

Lab Sample ID: 550-187803-1 MS
Matrix: Water
Analysis Batch: 280155

Client Sample ID: MW-10-22Q3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.72		50.0	52.8		ug/L		104	59 - 155
Benzene	ND		50.0	48.9		ug/L		98	35 - 151
1,1-Dichloroethene	15		50.0	61.8		ug/L		94	10 - 234
Chloroform	ND		50.0	50.2		ug/L		100	51 - 138
Trichloroethene	4.9		50.0	51.3		ug/L		93	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*
Dibromofluoromethane (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*88*		*60 - 140*

Lab Sample ID: 550-187803-1 MSD
Matrix: Water
Analysis Batch: 280155

Client Sample ID: MW-10-22Q3
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	0.72		50.0	50.9		ug/L		100	59 - 155	4	40
Benzene	ND		50.0	47.4		ug/L		95	35 - 151	3	61
1,1-Dichloroethene	15		50.0	58.8		ug/L		88	10 - 234	5	32
Chloroform	ND		50.0	49.2		ug/L		98	51 - 138	2	54
Trichloroethene	4.9		50.0	50.7		ug/L		91	70 - 157	1	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*
Dibromofluoromethane (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*87*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-280149/1-A
Matrix: Water
Analysis Batch: 280380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280149

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:36	1
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:36	1
Molybdenum	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Selenium	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:36	1
Silver	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:36	1

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

Lab Sample ID: LCS 550-280149/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

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	1.01		mg/L		101	85 - 115
Copper	1.00	0.964		mg/L		96	85 - 115
Lead	1.00	1.02		mg/L		102	85 - 115
Molybdenum	1.00	0.997		mg/L		100	85 - 115
Selenium	1.00	0.997		mg/L		100	85 - 115
Silver	0.0750	0.0756		mg/L		101	85 - 115
Zinc	1.00	1.00		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-280149/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

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	0.978		mg/L		98	85 - 115	3	20
Copper	1.00	0.965		mg/L		97	85 - 115	0	20
Lead	1.00	1.02		mg/L		102	85 - 115	0	20
Molybdenum	1.00	1.00		mg/L		100	85 - 115	0	20
Selenium	1.00	1.01		mg/L		101	85 - 115	1	20
Silver	0.0750	0.0760		mg/L		101	85 - 115	1	20
Zinc	1.00	1.00		mg/L		100	85 - 115	0	20

Lab Sample ID: 550-187803-2 MS — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.06		mg/L		105	70 - 130
Cadmium	ND		1.00	1.01		mg/L		101	70 - 130
Copper	ND		1.00	0.968		mg/L		97	70 - 130
Lead	ND		1.00	0.989		mg/L		99	70 - 130
Molybdenum	ND		1.00	0.998		mg/L		100	70 - 130
Selenium	ND		1.00	1.00		mg/L		100	70 - 130
Silver	ND		0.0750	0.0758		mg/L		101	70 - 130
Zinc	ND		1.00	0.972		mg/L		97	70 - 130

Lab Sample ID: 550-187803-2 MSD — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.06		mg/L		105	70 - 130	0	20
Cadmium	ND		1.00	0.990		mg/L		99	70 - 130	2	20
Copper	ND		1.00	0.970		mg/L		97	70 - 130	0	20
Lead	ND		1.00	0.987		mg/L		99	70 - 130	0	20
Molybdenum	ND		1.00	0.998		mg/L		100	70 - 130	0	20
Selenium	ND		1.00	0.999		mg/L		100	70 - 130	0	20
Silver	ND		0.0750	0.0759		mg/L		101	70 - 130	0	20

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

Lab Sample ID: 550-187803-2 MSD — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	0.976		mg/L		97	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-280668/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/02/22 16:05	08/02/22 19:25	1

Lab Sample ID: LCS 550-280668/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00443		mg/L		89	85 - 115		

Lab Sample ID: LCSD 550-280668/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00448		mg/L		90	85 - 115	1	20

Lab Sample ID: 380-12503-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00490		mg/L		98	70 - 130		

Lab Sample ID: 380-12503-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00471		mg/L		94	70 - 130	4	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-280420/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			07/29/22 12:37	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 550-280420/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	203		mg/L		102	90 - 110		

Lab Sample ID: LCSD 550-280420/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			200	197		mg/L		99	90 - 110	3	10

Lab Sample ID: 550-187803-2 DU — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-280496/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		07/30/22 20:50	07/30/22 22:01	1

Lab Sample ID: LCS 550-280496/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0996		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-280496/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0995		mg/L		100	90 - 110	0	20

Lab Sample ID: 550-187861-G-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND		0.100	0.111		mg/L		111	80 - 120		

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

Lab Sample ID: 550-187861-G-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		0.100	0.117		mg/L		117	80 - 120	6	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-280249/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		5.0		mg/L			07/27/22 19:18	1

Lab Sample ID: LCS 550-280249/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	198		mg/L		100	84.6 - 115.4		

Lab Sample ID: 550-187813-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	200	D2		191	D2	mg/L				4	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

GC/MS VOA

Analysis Batch: 280155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	624.1	
550-187803-3	EW-1-22Q3	Total/NA	Water	624.1	
550-187803-5	TB-22Q3	Total/NA	Water	624.1	
MB 550-280155/6	Method Blank	Total/NA	Water	624.1	
LCS 550-280155/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-280155/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-187803-1 MS	MW-10-22Q3	Total/NA	Water	624.1	
550-187803-1 MSD	MW-10-22Q3	Total/NA	Water	624.1	

Metals

Prep Batch: 280149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	200.7	
550-187803-4	EW-1-22Q3-comp	Total/NA	Water	200.7	
MB 550-280149/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-280149/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-280149/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-187803-2 MS	MW-1022Q3-comp	Total/NA	Water	200.7	
550-187803-2 MSD	MW-1022Q3-comp	Total/NA	Water	200.7	

Analysis Batch: 280380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-4	EW-1-22Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
MB 550-280149/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	280149
LCS 550-280149/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	280149
LCSD 550-280149/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-2 MS	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-2 MSD	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149

Prep Batch: 280668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	245.1	
MB 550-280668/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-280668/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-280668/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
380-12503-A-1-A MS	Matrix Spike	Total/NA	Water	245.1	
380-12503-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 280684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	245.1	280668
MB 550-280668/1-A	Method Blank	Total/NA	Water	245.1	280668
LCS 550-280668/2-A	Lab Control Sample	Total/NA	Water	245.1	280668
LCSD 550-280668/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	280668
380-12503-A-1-A MS	Matrix Spike	Total/NA	Water	245.1	280668
380-12503-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	280668

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

General Chemistry

Analysis Batch: 280249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	SM 5210B	
MB 550-280249/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-280249/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-187813-A-1 DU	Duplicate	Total/NA	Water	SM 5210B	

Analysis Batch: 280420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	SM 2540D	
MB 550-280420/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-280420/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-280420/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-187803-2 DU	MW-1022Q3-comp	Total/NA	Water	SM 2540D	

Prep Batch: 280496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	SM 4500 CN C	
MB 550-280496/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-280496/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-280496/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-187861-G-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-187861-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 280613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	SM 4500 CN E	280496
MB 550-280496/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	280496
LCS 550-280496/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	280496
LCSD 550-280496/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	280496
550-187861-G-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	280496
550-187861-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	280496

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3 — Lab Sample ID: 550-187803-1

Date Collected: 07/26/22 09:40 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 16:28	R1K	EETSW PH.
Total/NA	Prep	SM 4500 CN C			280496	07/30/22 20:50	CXK	EETSW PH.
Total/NA	Analysis	SM 4500 CN E		1	280613	07/30/22 22:01	CXK	EETSW PH.

Client Sample ID: MW-1022Q3-comp — Lab Sample ID: 550-187803-2

Date Collected: 07/26/22 09:34 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			280149	07/27/22 07:30	SGO	EETSW PH.
Total/NA	Analysis	200.7 Rev 4.4		1	280380	07/28/22 19:49	CHS	EETSW PH.
Total/NA	Prep	245.1			280668	08/02/22 16:05	SRR	EETSW PH.
Total/NA	Analysis	245.1		1	280684	08/02/22 19:43	SRR	EETSW PH.
Total/NA	Analysis	SM 2540D		1	280420		VOS	EETSW PH.
					(Start)	07/29/22 12:37		
					(End)	08/01/22 10:00		
Total/NA	Analysis	SM 5210B		1	280249		SH1	EETSW PH.
					(Start)	07/27/22 19:18		
					(End)	08/01/22 13:20		

Client Sample ID: EW-1-22Q3 — Lab Sample ID: 550-187803-3

Date Collected: 07/26/22 10:20 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 16:50	R1K	EETSW PH.

Client Sample ID: EW-1-22Q3-comp — Lab Sample ID: 550-187803-4

Date Collected: 07/26/22 10:18 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			280149	07/27/22 07:30	SGO	EETSW PH.
Total/NA	Analysis	200.7 Rev 4.4		1	280380	07/28/22 19:52	CHS	EETSW PH.

Client Sample ID: TB-22Q3 — Lab Sample ID: 550-187803-5

Date Collected: 07/26/22 08:00 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 14:16	R1K	EETSW PH.

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	EETSW PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EETSW PHX
245.1	Mercury (CVAA)	EPA	EETSW PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	EETSW PHX
SM 4500 CN E	Cyanide, Total	SM	EETSW PHX
SM 5210B	BOD, 5-Day	SM	EETSW PHX
200.7	Preparation, Total Metals	EPA	EETSW PHX
245.1	Preparation, Mercury	EPA	EETSW PHX
SM 4500 CN C	Cyanide, Distillation	SM	EETSW 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:

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

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

187803

Chain Of Custody / Analysis Request

AESI Ref: 44766.41475
COC# 35008

Privileged & Confidential

Site Name: IAC, Peoria
Location of Site: Phoenix, AZ
Phase: Sampling Program: Quarterly
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley
PO # A000651433
Analysis Turnaround Time (TAT): 10
Consultant
Laboratory Contact: Danielle Roberts
Report Tier Level: 2
Full Report TAT: 10
HTS
Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd Jacobs,
Invoice To: Mike Heitmann, Honeywell/Copy Berney Kidd

Text & Excel File Drive | Excel & Text File Order

Copyright AESI: Version 10.0 (11-26-06) Unauthorized use strictly prohibited.

	Sample Identification: 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)						Sampling Method (code)	Lab Sample Numbers
											Units		Preservative: 8	10	15	10	0	0	10								
1	MW-10	----	----	MW-10-22Q3	7/26/22	0940	GW-GWS	WATER	REG	4	grab	N	X		X								-01				
2	MW-10	----	----	MW-10-22Q3-comp	7/26/22	0934	GW-GWS	WATER	REG	3	comp	N		X		X	X	X					-02				
3	EW-1	----	----	EW-1-22Q3	7/26/22	1020	GW-GWS	WATER	REG	3	grab	N								X			-03				
4	EW-1	----	----	EW-1-22Q3-comp	7/26/22	1018	GW-GWS	WATER	REG	1	comp	N							X				-04				
5	TRIPBLANK	----	----	TB-22Q3	7/26/22	8:00	BLKWATER	WATER	TB	1	grab	N	X										-05				
6																											
7																											
8																											
9																											
10																											
11																											
12																											

550-187803 Chain of Custody

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Thomas Kearsley	CH2M	FedEx			
Date/Time: 7/26/22 1347		Date/Time		Cooler Temp.	
Relinquished by	Company	Received by	Eeta Pnf	Condition	Custody Seals Intact
Date/Time		Date/Time	7-26-22 1349	Cooler Temp. 0.8°C	IVE COS

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)

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-187803-1

Login Number: 187803
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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Julie Gentry
Senior Water Quality Inspector
City of Phoenix Industrial Pretreatment Program
Environmental Services Division
2474 South 22nd Avenue, Bldg. 31
Phoenix, Arizona 85009-6918

August 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – July 2022**
Industrial Wastewater Discharge Permit Number 1710-5383
Honeywell International Inc. Former Peoria Avenue Facility/MW-10
Phoenix, Arizona

Dear Ms. Gentry,

On behalf of Honeywell International Inc. (Honeywell), Jacobs Engineering Group, Inc. (Jacobs) (formerly CH2M HILL Engineers, Inc.) 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 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, July 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	1710-5383	1,492,557	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 July 1, 2022, through September 30, 2022, was collected on July 26, 2022. 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. 1710-5383

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. 1710-5383

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Permit №: ***1710-5383***

Compliance Sampling Point: ***5383.01***

Report Period: July 1, 2022 Through July 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 48,147	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 49,649	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,492,557	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: Baine Foehr

Certifying Official Name: Baine Foehr

Certifying Official Title: Project Manager

Date: August 26, 2022

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

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

Address: ***2251 W. Sierra Street***

Phoenix, Arizona 85029

Dates/Times Samples Collected: **07/26/2022 at 09:40 (grab), 09:34 (composite), 09:15 (pH)**

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

Compliance Sampling Point № **5383.01** Lab Project or Reference ID № **550-187803-1**

Device Type: **½" Sampling tap**

Location Description: **Inside vault under the street in West 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
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/MW-10***

Permit №: ***1710-5383***

Report Period: July 1, 2022 to July 31, 2022

Compliance Point №: ***5383.01***

Lab Project or Reference ID № ***550-187803-1***

½" sampling tap inside vault

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 7/26/2022	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method	**Date:**	Analysis Method
1,1-Dichloroethane	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	0.72	EPA 624.1						
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	15	EPA 624.1						
Arsenic	**mg/L**	**0.13**	**1 per 6 Months**	**FPC**	<0.10	EPA 200.7 Rev 4.4						
Benzene	**µg/L**	**35**	**1 per Quarter**	**Grab**	<0.50	EPA 624.1						
BOD	**mg/L**	**N/A**	**1 per Quarter**	**FPC**	<5.0	SM5210B						
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 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**	<0.010	EPA 200.7 Rev 4.4						
pH	**S.U.**	**5.0-10.5**	**1 per Quarter**	**Grab**	7.51	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**	4.9	EPA 624.1						
TSS	**mg/L**	**N/A**	**1 per Quarter**	**FPC**	<10	SM2540D						
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.

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 Point Cleaned
Last	6/20/2022	41,164,374				☐	☐
1.	7/7/2022	41,954,329	46,468			☐	☐
2.	7/26/2022	42,897,661	49,649			☐	☐
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 **48,147**

Maximum Flow **49,649**

Total Gallons **1,492,557**

Attachment B
Operation and Maintenance Data Collection Forms

4

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

Date 7/7/22 Field Technician(s) T. Kearslay

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0745	ON	41954329	-2	34.4	302.91	88453.3
Depart		ON					

Electrical Meter Readings

Power(kwh)	22241
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	—	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: [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

308.01
-5.1
302.91

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

Date 7/26/22 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	0911	ON	42897 661	-2	34.3	302.80	88910.7
Depart		ON					

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

Electrical Meter Readings

Power(kwh)	24567
Power Rate(KwMax)	5.11

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: 0913

Time pH Sample Analyzed: 0915
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 0940

Composite Sample Log

Start Time: 0914 End Time: 0934 Flow Rate: 500 mL/min

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

Notes

City sample crew just left
0915 pH 7.51 @ 32.4°C

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

307.91
-5.1
302.80

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter №

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# 16A943 Jan/23	7/26/22	TK	07:30	4.00	26.8	96.9	
pH Buffer 7/Lot# CHLB5007-T 8/23			07:28	7.00	26.5	97.5	
pH Buffer 10/Lot# 16C500 mar/23			07:32	10.00	26.8	96.7	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# 16D360 Apr 23			07:34	7.02	26.2	Pass or Fail	
Compliance pH result 5436.01 (EW-1)	7/26/22	TK	10:00	7.55	32.3	N/A	
Compliance pH result 5383.01 (MW-10)	7/26/22	TK	0915	7.51	32.4	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)	7/26/22	TK	Orig Reading:	7.55	Dup Reading:	7.57	
Once/Month Verification Check/Buffer 7	7/26/22	TK	11:13	7.04	27.0	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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 550-187803-1
Client Project/Site: IAC, Peoria
Revision: 1

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
8/5/2022 10:41:17 AM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Qualifiers

General Chemistry

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

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: 550-187803-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-187803-1

Comments
The report being provided is a revision of the original report sent on 8//052022. The report (revision 1) is being revised due to: Revised site location

No additional comments.

Receipt
The samples were received on 7/26/2022 12:49 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 0.8º 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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-187803-1	MW-10-22Q3	Water	07/26/22 09:40	07/26/22 12:49
550-187803-2	MW-1022Q3-comp	Water	07/26/22 09:34	07/26/22 12:49
550-187803-3	EW-1-22Q3	Water	07/26/22 10:20	07/26/22 12:49
550-187803-4	EW-1-22Q3-comp	Water	07/26/22 10:18	07/26/22 12:49
550-187803-5	TB-22Q3	Water	07/26/22 08:00	07/26/22 12:49

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3 — Lab Sample ID: 550-187803-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.72		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	15		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-1022Q3-comp — Lab Sample ID: 550-187803-2

No Detections.

Client Sample ID: EW-1-22Q3 — Lab Sample ID: 550-187803-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.7		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	65		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.3		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	21		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q3-comp — Lab Sample ID: 550-187803-4

No Detections.

Client Sample ID: TB-22Q3 — Lab Sample ID: 550-187803-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3

Lab Sample ID: 550-187803-1
Date Collected: 07/26/22 09:40
Matrix: Water
Date Received: 07/26/22 12:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.72		0.50	ug/L			07/27/22 16:28	1
1,1-Dichloroethene	15		0.50	ug/L			07/27/22 16:28	1
Benzene	ND		0.50	ug/L			07/27/22 16:28	1
Chloroform	ND		0.50	ug/L			07/27/22 16:28	1
Trichloroethene	4.9		0.50	ug/L			07/27/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*07/27/22 16:28*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*07/27/22 16:28*	*1*
Toluene-d8 (Surr)	*100*		*60 - 140*		*07/27/22 16:28*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050	mg/L		07/30/22 20:50	07/30/22 22:01	1

Client Sample ID: MW-1022Q3-comp

Lab Sample ID: 550-187803-2
Date Collected: 07/26/22 09:34
Matrix: Water
Date Received: 07/26/22 12:49

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:49	1
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:49	1
Molybdenum	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Selenium	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:49	1
Silver	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:49	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		08/02/22 16:05	08/02/22 19:43	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			07/29/22 12:37	1
Biochemical Oxygen Demand	ND		5.0	mg/L			07/27/22 19:18	1

Client Sample ID: EW-1-22Q3

Lab Sample ID: 550-187803-3
Date Collected: 07/26/22 10:20
Matrix: Water
Date Received: 07/26/22 12:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	5.7		0.50	ug/L			07/27/22 16:50	1
1,1-Dichloroethene	65		0.50	ug/L			07/27/22 16:50	1
Chloroform	1.3		0.50	ug/L			07/27/22 16:50	1
Trichloroethene	21		0.50	ug/L			07/27/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*07/27/22 16:50*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: EW-1-22Q3

Lab Sample ID: 550-187803-3
Date Collected: 07/26/22 10:20
Matrix: Water
Date Received: 07/26/22 12:49

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*60 - 140*		*07/27/22 16:50*	*1*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*07/27/22 16:50*	*1*

Client Sample ID: EW-1-22Q3-comp

Lab Sample ID: 550-187803-4
Date Collected: 07/26/22 10:18
Matrix: Water
Date Received: 07/26/22 12:49

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:52	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:52	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:52	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:52	1

Client Sample ID: TB-22Q3

Lab Sample ID: 550-187803-5
Date Collected: 07/26/22 08:00
Matrix: Water
Date Received: 07/26/22 12:49

Method: 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			07/27/22 14:16	1
1,1-Dichloroethene	ND		0.50	ug/L			07/27/22 14:16	1
Benzene	ND		0.50	ug/L			07/27/22 14:16	1
Chloroform	ND		0.50	ug/L			07/27/22 14:16	1
Trichloroethene	ND		0.50	ug/L			07/27/22 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*07/27/22 14:16*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*		*07/27/22 14:16*	*1*
Toluene-d8 (Surr)	*102*		*60 - 140*		*07/27/22 14:16*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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)**
550-187803-1	MW-10-22Q3	94	106	100
550-187803-1 MS	MW-10-22Q3	92	91	88
550-187803-1 MSD	MW-10-22Q3	93	88	87
550-187803-3	EW-1-22Q3	93	106	101
550-187803-5	TB-22Q3	96	104	102
LCS 550-280155/3	Lab Control Sample	93	88	90
LCSD 550-280155/4	Lab Control Sample Dup	94	91	91
MB 550-280155/6	Method Blank	97	101	98

Surrogate Legend

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

QC Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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

Lab Sample ID: MB 550-280155/6
Matrix: Water
Analysis Batch: 280155

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			07/27/22 10:33	1
Benzene	ND		0.50		ug/L			07/27/22 10:33	1
1,1-Dichloroethene	ND		0.50		ug/L			07/27/22 10:33	1
Chloroform	ND		0.50		ug/L			07/27/22 10:33	1
Trichloroethene	ND		0.50		ug/L			07/27/22 10:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*07/27/22 10:33*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*07/27/22 10:33*	*1*
Toluene-d8 (Surr)	*98*		*60 - 140*		*07/27/22 10:33*	*1*

Lab Sample ID: LCS 550-280155/3
Matrix: Water
Analysis Batch: 280155

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	51.0		ug/L		102	70 - 150		
Benzene			50.0	48.2		ug/L		96	65 - 135		
1,1-Dichloroethene			50.0	49.0		ug/L		98	50 - 140		
Chloroform			50.0	48.8		ug/L		98	70 - 135		
Trichloroethene			50.0	48.6		ug/L		97	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*
Dibromofluoromethane (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*90*		*60 - 140*

Lab Sample ID: LCSD 550-280155/4
Matrix: Water
Analysis Batch: 280155

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	51.6		ug/L		103	70 - 150	1	20
Benzene			50.0	48.5		ug/L		97	65 - 135	1	20
1,1-Dichloroethene			50.0	49.6		ug/L		99	50 - 140	1	20
Chloroform			50.0	49.6		ug/L		99	70 - 135	2	20
Trichloroethene			50.0	48.6		ug/L		97	65 - 135	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*
Dibromofluoromethane (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*91*		*60 - 140*

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

Lab Sample ID: 550-187803-1 MS
Matrix: Water
Analysis Batch: 280155

Client Sample ID: MW-10-22Q3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.72		50.0	52.8		ug/L		104	59 - 155
Benzene	ND		50.0	48.9		ug/L		98	35 - 151
1,1-Dichloroethene	15		50.0	61.8		ug/L		94	10 - 234
Chloroform	ND		50.0	50.2		ug/L		100	51 - 138
Trichloroethene	4.9		50.0	51.3		ug/L		93	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*
Dibromofluoromethane (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*88*		*60 - 140*

Lab Sample ID: 550-187803-1 MSD
Matrix: Water
Analysis Batch: 280155

Client Sample ID: MW-10-22Q3
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	0.72		50.0	50.9		ug/L		100	59 - 155	4	40
Benzene	ND		50.0	47.4		ug/L		95	35 - 151	3	61
1,1-Dichloroethene	15		50.0	58.8		ug/L		88	10 - 234	5	32
Chloroform	ND		50.0	49.2		ug/L		98	51 - 138	2	54
Trichloroethene	4.9		50.0	50.7		ug/L		91	70 - 157	1	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*
Dibromofluoromethane (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*87*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-280149/1-A
Matrix: Water
Analysis Batch: 280380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280149

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:36	1
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:36	1
Molybdenum	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Selenium	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:36	1
Silver	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:36	1

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

Lab Sample ID: LCS 550-280149/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

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	1.01		mg/L		101	85 - 115
Copper	1.00	0.964		mg/L		96	85 - 115
Lead	1.00	1.02		mg/L		102	85 - 115
Molybdenum	1.00	0.997		mg/L		100	85 - 115
Selenium	1.00	0.997		mg/L		100	85 - 115
Silver	0.0750	0.0756		mg/L		101	85 - 115
Zinc	1.00	1.00		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-280149/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

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	0.978		mg/L		98	85 - 115	3	20
Copper	1.00	0.965		mg/L		97	85 - 115	0	20
Lead	1.00	1.02		mg/L		102	85 - 115	0	20
Molybdenum	1.00	1.00		mg/L		100	85 - 115	0	20
Selenium	1.00	1.01		mg/L		101	85 - 115	1	20
Silver	0.0750	0.0760		mg/L		101	85 - 115	1	20
Zinc	1.00	1.00		mg/L		100	85 - 115	0	20

Lab Sample ID: 550-187803-2 MS — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.06		mg/L		105	70 - 130
Cadmium	ND		1.00	1.01		mg/L		101	70 - 130
Copper	ND		1.00	0.968		mg/L		97	70 - 130
Lead	ND		1.00	0.989		mg/L		99	70 - 130
Molybdenum	ND		1.00	0.998		mg/L		100	70 - 130
Selenium	ND		1.00	1.00		mg/L		100	70 - 130
Silver	ND		0.0750	0.0758		mg/L		101	70 - 130
Zinc	ND		1.00	0.972		mg/L		97	70 - 130

Lab Sample ID: 550-187803-2 MSD — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.06		mg/L		105	70 - 130	0	20
Cadmium	ND		1.00	0.990		mg/L		99	70 - 130	2	20
Copper	ND		1.00	0.970		mg/L		97	70 - 130	0	20
Lead	ND		1.00	0.987		mg/L		99	70 - 130	0	20
Molybdenum	ND		1.00	0.998		mg/L		100	70 - 130	0	20
Selenium	ND		1.00	0.999		mg/L		100	70 - 130	0	20
Silver	ND		0.0750	0.0759		mg/L		101	70 - 130	0	20

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

Lab Sample ID: 550-187803-2 MSD — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	0.976		mg/L		97	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-280668/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/02/22 16:05	08/02/22 19:25	1

Lab Sample ID: LCS 550-280668/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00443		mg/L		89	85 - 115		

Lab Sample ID: LCSD 550-280668/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00448		mg/L		90	85 - 115	1	20

Lab Sample ID: 380-12503-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00490		mg/L		98	70 - 130		

Lab Sample ID: 380-12503-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00471		mg/L		94	70 - 130	4	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-280420/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			07/29/22 12:37	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 550-280420/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	203		mg/L		102	90 - 110		

Lab Sample ID: LCSD 550-280420/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			200	197		mg/L		99	90 - 110	3	10

Lab Sample ID: 550-187803-2 DU — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-280496/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		07/30/22 20:50	07/30/22 22:01	1

Lab Sample ID: LCS 550-280496/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0996		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-280496/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0995		mg/L		100	90 - 110	0	20

Lab Sample ID: 550-187861-G-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND		0.100	0.111		mg/L		111	80 - 120		

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

Lab Sample ID: 550-187861-G-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		0.100	0.117		mg/L		117	80 - 120	6	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-280249/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		5.0		mg/L			07/27/22 19:18	1

Lab Sample ID: LCS 550-280249/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	198		mg/L		100	84.6 - 115.4		

Lab Sample ID: 550-187813-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	200	D2		191	D2	mg/L				4	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

GC/MS VOA

Analysis Batch: 280155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	624.1	
550-187803-3	EW-1-22Q3	Total/NA	Water	624.1	
550-187803-5	TB-22Q3	Total/NA	Water	624.1	
MB 550-280155/6	Method Blank	Total/NA	Water	624.1	
LCS 550-280155/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-280155/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-187803-1 MS	MW-10-22Q3	Total/NA	Water	624.1	
550-187803-1 MSD	MW-10-22Q3	Total/NA	Water	624.1	

Metals

Prep Batch: 280149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	200.7	
550-187803-4	EW-1-22Q3-comp	Total/NA	Water	200.7	
MB 550-280149/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-280149/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-280149/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-187803-2 MS	MW-1022Q3-comp	Total/NA	Water	200.7	
550-187803-2 MSD	MW-1022Q3-comp	Total/NA	Water	200.7	

Analysis Batch: 280380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-4	EW-1-22Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
MB 550-280149/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	280149
LCS 550-280149/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	280149
LCSD 550-280149/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-2 MS	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-2 MSD	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149

Prep Batch: 280668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	245.1	
MB 550-280668/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-280668/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-280668/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
380-12503-A-1-A MS	Matrix Spike	Total/NA	Water	245.1	
380-12503-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 280684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	245.1	280668
MB 550-280668/1-A	Method Blank	Total/NA	Water	245.1	280668
LCS 550-280668/2-A	Lab Control Sample	Total/NA	Water	245.1	280668
LCSD 550-280668/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	280668
380-12503-A-1-A MS	Matrix Spike	Total/NA	Water	245.1	280668
380-12503-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	280668

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

General Chemistry

Analysis Batch: 280249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	SM 5210B	
MB 550-280249/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-280249/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-187813-A-1 DU	Duplicate	Total/NA	Water	SM 5210B	

Analysis Batch: 280420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	SM 2540D	
MB 550-280420/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-280420/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-280420/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-187803-2 DU	MW-1022Q3-comp	Total/NA	Water	SM 2540D	

Prep Batch: 280496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	SM 4500 CN C	
MB 550-280496/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-280496/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-280496/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-187861-G-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-187861-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 280613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	SM 4500 CN E	280496
MB 550-280496/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	280496
LCS 550-280496/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	280496
LCSD 550-280496/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	280496
550-187861-G-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	280496
550-187861-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	280496

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3 — Lab Sample ID: 550-187803-1

Date Collected: 07/26/22 09:40 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 16:28	R1K	EETSW PH.
Total/NA	Prep	SM 4500 CN C			280496	07/30/22 20:50	CXK	EETSW PH.
Total/NA	Analysis	SM 4500 CN E		1	280613	07/30/22 22:01	CXK	EETSW PH.

Client Sample ID: MW-1022Q3-comp — Lab Sample ID: 550-187803-2

Date Collected: 07/26/22 09:34 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			280149	07/27/22 07:30	SGO	EETSW PH.
Total/NA	Analysis	200.7 Rev 4.4		1	280380	07/28/22 19:49	CHS	EETSW PH.
Total/NA	Prep	245.1			280668	08/02/22 16:05	SRR	EETSW PH.
Total/NA	Analysis	245.1		1	280684	08/02/22 19:43	SRR	EETSW PH.
Total/NA	Analysis	SM 2540D		1	280420		VOS	EETSW PH.
					(Start)	07/29/22 12:37		
					(End)	08/01/22 10:00		
Total/NA	Analysis	SM 5210B		1	280249		SH1	EETSW PH.
					(Start)	07/27/22 19:18		
					(End)	08/01/22 13:20		

Client Sample ID: EW-1-22Q3 — Lab Sample ID: 550-187803-3

Date Collected: 07/26/22 10:20 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 16:50	R1K	EETSW PH.

Client Sample ID: EW-1-22Q3-comp — Lab Sample ID: 550-187803-4

Date Collected: 07/26/22 10:18 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			280149	07/27/22 07:30	SGO	EETSW PH.
Total/NA	Analysis	200.7 Rev 4.4		1	280380	07/28/22 19:52	CHS	EETSW PH.

Client Sample ID: TB-22Q3 — Lab Sample ID: 550-187803-5

Date Collected: 07/26/22 08:00 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 14:16	R1K	EETSW PH.

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	EETSW PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EETSW PHX
245.1	Mercury (CVAA)	EPA	EETSW PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	EETSW PHX
SM 4500 CN E	Cyanide, Total	SM	EETSW PHX
SM 5210B	BOD, 5-Day	SM	EETSW PHX
200.7	Preparation, Total Metals	EPA	EETSW PHX
245.1	Preparation, Mercury	EPA	EETSW PHX
SM 4500 CN C	Cyanide, Distillation	SM	EETSW 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:

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

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

187803

Chain Of Custody / Analysis Request

AESI Ref: 44766.41475
COC# 35008

Privileged & Confidential

Site Name: IAC, Peoria
Location of Site: Phoenix, AZ
Phase: Sampling Program: Quarterly
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley
PO # A000651433
Analysis Turnaround Time (TAT): 10
Consultant
Laboratory Contact: Danielle Roberts
Report Tier Level: 2
Full Report TAT: 10
HTS
Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd Jacobs,
Invoice To: Mike Heitmann, Honeywell/Copy Berney Kidd

Text & Excel File Drive | Excel & Text File Order

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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 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
											Units		Preservative: 8	10	15	10	0	0	10								
1	MW-10	----	----	MW-10-22Q3	7/26/22	0940	GW-GWS	WATER	REG	4	grab	N	X		X								-01				
2	MW-10	----	----	MW-10-22Q3-comp	7/26/22	0934	GW-GWS	WATER	REG	3	comp	N		X		X	X	X					-02				
3	EW-1	----	----	EW-1-22Q3	7/26/22	1020	GW-GWS	WATER	REG	3	grab	N								X			-03				
4	EW-1	----	----	EW-1-22Q3-comp	7/26/22	1018	GW-GWS	WATER	REG	1	comp	N							X				-04				
5	TRIPBLANK	----	----	TB-22Q3	7/26/22	8:00	BLKWATER	WATER	TB	1	grab	N	X										-05				
6																											
7																											
8																											
9																											
10																											
11																											
12																											

550-187803 Chain of Custody

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Thomas Kearsley	CH2M	FedEx			
Date/Time: 7/26/22 1347		Date/Time		Cooler Temp.	
Relinquished by	Company	Received by	Eeta Pnf	Condition	Custody Seals Intact
Date/Time		Date/Time	7-26-22 1349	Cooler Temp. 0.8°C	IVE COS

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)

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-187803-1

Login Number: 187803
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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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

September 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – August 2022**
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 August 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, August 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,475,598	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 July 1, 2022, through September 30, 2022, was collected on July 26, 2022. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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

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: August 1, 2022 Through August 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 79,858	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 86,072	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,475,598	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 September 26, 2022

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 Point Cleaned
Last	7/26/2022	42,150,788				☐	☐
1.	8/4/2022	42,925,440	86,072			☐	☐
2.	8/8/2022	43,208,201	70,690			☐	☒
3.	8/23/2022	44,386,819	78,575			☐	☐
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	**79,858**
Maximum Flow	**86,072**
Total Gallons	**2,475,598**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 8-4-22 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	1435	ON	4292544D		-7	51.1		26921.5
Depart		ON						

Electrical Meter Readings

Power(kwh)	80014
Power Rate(KwMax)	8.84

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: [signature]

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

298.21
- 2.92

Created with Scanner Pro

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

Date: 8/8/22 Field Technician(s) ~~8/8/22~~ TK T. Kearsley

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1023	ON	43208201		7	52.1 *	—	—
Depart	1026	ON			7	56.5	—	—

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 [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

* Raised flow to 56.5

Signature: [signature]

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

Created with Scanner Pro

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

Date: 8/23/22 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	1403	ON	44386819		-7	53.4*	296.19	27377.2
Depart	1420	ON				61.9		

Electrical Meter Readings

Power(kwh)	84039
Power Rate(KwMax)	8.94

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

Signature: T Kearsley

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

299.19
2.92
296.19

Created with Scanner Pro

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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

September 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – August 2022**
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 Engineering Group, Inc. (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 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, August 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,539,894	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 July 1, 2022, through September 30, 2022, was collected on July 26, 2022. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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

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: August 1, 2022 Through August 31, 2022

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 49,674	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 50,651	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,539,894	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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	Baine Foehr
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	September 26, 2022
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	7/26/2022	42,897,661				☐	☐
1.	8/4/2022	43,353,522	50,651			☐	☐
2.	8/8/2022	43,542,836 17,010,614	47,329			☒	☒
3.	8/23/2022	17,756,299	49,712			☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
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26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		49,674				
	Maximum Flow		50,651				
	Total Gallons		1,539,894				

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 8-4-22 Field Technician(s) T. Kelsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1419	ON	43353522	-2	34.2		89137.8
Depart							

Electrical Meter Readings

Power(kwh)	25694
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 Kelsley

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

307.45
5.1
302.35

Created with Scanner Pro

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

Date 8/8/22 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 05	ON/OFF	43542836	-2	33.8	—	89223.5
Depart		OFF/ON	17010614 *	-2	34.1	—	

Electrical Meter Readings

Power(kwh)	26162
Power Rate(KwMax)	5.12

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

Maintenance Items

YES 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

* Installed factory Calibrated flowmeter

Signature: TKeg

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

Created with Scanner Pro

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

Date 8/23/22 Field Technician(s) T. Kessler

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1350	ON	17756299	-2	34.4	302.82	8958.5
Depart		ON					

Electrical Meter Readings

Power(kwh)	28012
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: NA

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

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

307.92
5.1
302.82

Created with Scanner Pro

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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

October 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – September 2022**
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 Project Management Co. (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 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, September 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,713,860	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 July 1, 2022, through September 30, 2022, was collected on July 26, 2022. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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

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: September 1, 2022 Through September 30, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 90,462	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 90,722	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,713,860	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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 October 26, 2022

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 Point Cleaned
Last	8/23/2022	44,386,819				☐	☐
1.	9/14/2022	46,382,700	90,722			☐	☐
2.	9/22/2022	47,100,669	89,746			☐	☐
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	**90,462**
Maximum Flow	**90,722**
Total Gallons	**2,713,860**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 9/14/22 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	1115	ON	46382700		7	66.6*	297.06	27102.3
Depart								

Electrical Meter Readings

Power(kwh)	30000
Power Rate(KwMax)	ER - 1

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 59.2

Signature: T Kearsley

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

Created with Scanner Pro

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

Date: 9/22/22 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	1048	ON	47100669		-7	61.71	299.60	28093.8
Depart		ON						

Electrical Meter Readings

Power(kwh)	30000
Power Rate(KwMax)	0001

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: [signature]

EW-1 Well Information
Total Depth = 425 feet bgs

Screen Interval = 265-415 feet bgs

Pump Intake Depth = 363 feet bgs

302.52
-2.92
299.60

Created with Scanner Pro

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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

October 26, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – September 2022**
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 September 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, September 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,464,600	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 July 1, 2022, through September 30, 2022, was collected on July 26, 2022. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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

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, 2022 Through September 30, 2022

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 48,820	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 48,977	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,464,600	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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	Baine Foehr
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	October 26, 2022
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	8/23/2022	17,756,299				☐	☐
1.	9/14/2022	18,829,083	48,763			☐	☐
2.	9/22/2022	19,220,895	48,977			☐	☐
3.						☐	☐
4.						☐	☐
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26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		48,820				
	Maximum Flow		48,977				
	Total Gallons		1,464,600				

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 9/14/22 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	1105	ON	18829093	2	34.2	302.11	90111.8
Depart		ON					

Electrical Meter Readings

Power(kwh)	30697
Power Rate(KwMax)	5.15

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

307.21
-5.1

Created with Scanner Pro

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

Date 9/22/22 Field Technician(s) T. Karsky

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1030	ON	19220895	-2	34.0	301.65	90303.3
Depart		ON					

Electrical Meter Readings

Power(kwh)	31678
Power Rate(KwMax)	5.15

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 Karsky

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

306.75

Created with Scanner Pro

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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

November 23, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – October 2022**
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 October 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, October 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,587,012	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 October 1, 2022, through December 31, 2022, are included in this monthly report. Jacobs personnel performed compliance sampling for all required analytes on October 24, 2022. 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: October 1, 2022 Through October 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 83,452	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 84,327	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,587,012	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] SMR Page 1 – Flow Page with Signed and Dated Certification
- [x] SMR Page 2 – Sampling Detail Page
- [x] SMR Page 3 – Laboratory Results Reporting Table
- [ ] Attachment B - Zero Discharge Certification (Only if Applicable)
- [x] pH Calibration & Analysis Log with Method QC Data
- [x] Daily Flows, Device Calibration, & Device Maintenance Log or Manual Flow Log
- [x] ADHS Certified Laboratory Analysis with QA/QC and Notes or Tags
- [x] 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 November 23, 2022

CITY OF PHOENIX
SIGNIFICANT INDUSTRIAL USER
SELF-MONITORING REPORT FORM

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

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

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

Phoenix, Arizona 85029

Dates/Times Samples Collected: **10/24/2022 at 12:25 (grab), 12:22 (composite), 12:01 (pH)**

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

Compliance Sampling Point № **5436.01** Lab Project or Reference ID № **550-192541-1**

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, 2022 to October 31, 2022

Compliance Point №: ***5436.01***

Lab Project or Reference ID № ***550-192541-1***

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

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type	**Date:** 10/24/2022	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**	5.8	EPA 624.1								
1,1-Dichloroethylene	**µg/L**	**N/A**	**1 per Quarter**	**Grab**	79	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 Quarter**	**FPC**	<0.001	EPA 200.7 Rev 4.4								
Chloroform	**µg/L**	**2000**	**1 per Quarter**	**Grab**	1.4	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**	7.31	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**	21	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 № 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	9/22/2022	47,100,669				☐	☐
1.	10/8/2022	48,449,897	84,327			☐	☐
2.	10/24/2022	49,771,126	82,577			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
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27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow	**83,452**
Maximum Flow	**84,327**
Total Gallons	**2,587,012**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 10/8/22 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	10:00	ON	48449897		-7	57.2	299.05	28477.0
Depart		ON						

Electrical Meter Readings

Power(kwh)	30000
Power Rate(KwMax)	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 ____ 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

301.97
-2.92
299.05

Created with Scanner Pro

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

Date: 10/24/22 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	11:58	ON	49771126		-7	58.6	298.20	28861.4
Depart		ON						

Electrical Meter Readings

Power(kwh)	30000
Power Rate(KwMax)	6000001

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: 1201

Time pH Sample Analyzed: 1203
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 1225

Composite Sample Log

Start Time: 1202 End Time: 1222 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 14000 mL total volume

Notes

pH 7.31 @ 28.4°C

Signature: T Keasley

EW-1 Well Information
Total Depth = 425 feet bgs

Screen Interval = 265-415 feet bgs

Pump Intake Depth = 363 feet bgs

301.12
-2.92
298.20

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CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter №

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# 16A843 Jan/23	10/24/22	TK	10:12	4.00	24.2	95.3	
pH Buffer 7/Lot# CHLB5007-T 9/23			10:09	7.00	24.1	99.5	
pH Buffer 10/Lot# 18C500 MAR/23			10:11	10.00	24.4	96.1	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# E10224 5/6/24			10:13	6.99	24.1	Pass or Fail	
Compliance pH result 5436.01 (EW-1)	10/24/22	TK	~~12:55~~ 1203	7.31	28.4	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	
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)	10/24/22	TK	Orig Reading:	7.31	Dup Reading:	7.35	
Once/Month Verification Check/Buffer 7	10/24/22	TK	1255	7.01	24.4	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.***

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Attachment C
Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 550-192541-1
Laboratory Sample Delivery Group: Phoenix, AZ
Client Project/Site: IAC, Peoria

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

Attn: Baine Foehr

Authorized for release by:
10/31/2022 2:47:27 PM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
N1	See case narrative.

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: 550-192541-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-192541-1

Comments
No additional comments.

Receipt
The samples were received on 10/24/2022 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 2.7º C.

GC/MS VOA
Method 624.1: The following sample(TB) was re-analyzed to confirm hits above the reporting limit (RL) . The re-analysis result confirms the hits in the trip blank. The data will be reported with an N1 qualifier, see analytical batch 550-287200.

TB-22Q4 (550-192541-3)

No additional analytical or quality issues were noted, other than those described above or 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: 550-192541-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-192541-1	EW-1-22Q4	Water	10/24/22 12:25	10/24/22 14:03
550-192541-2	EW-1-22Q4-comp	Water	10/24/22 12:22	10/24/22 14:03
550-192541-3	TB-22Q4	Water	10/24/22 08:00	10/24/22 14:03

Detection Summary

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-22Q4 — Lab Sample ID: 550-192541-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.8		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	79		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.4		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	21		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q4-comp — Lab Sample ID: 550-192541-2

No Detections.

Client Sample ID: TB-22Q4 — Lab Sample ID: 550-192541-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.2	N1	0.50		ug/L	1		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-22Q4

Lab Sample ID: 550-192541-1
Date Collected: 10/24/22 12:25
Matrix: Water
Date Received: 10/24/22 14:03

Method: 40CFR136A 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**5.8**		0.50	ug/L			10/25/22 15:03	1
1,1-Dichloroethene	**79**		0.50	ug/L			10/25/22 15:03	1
Chloroform	**1.4**		0.50	ug/L			10/25/22 15:03	1
Trichloroethene	**21**		0.50	ug/L			10/25/22 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*60 - 140*		*10/25/22 15:03*	*1*
Toluene-d8 (Surr)	*96*		*60 - 140*		*10/25/22 15:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*10/25/22 15:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050	mg/L		10/26/22 14:50	10/26/22 16:07	1

Client Sample ID: EW-1-22Q4-comp

Lab Sample ID: 550-192541-2
Date Collected: 10/24/22 12:22
Matrix: Water
Date Received: 10/24/22 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		10/27/22 05:33	10/28/22 18:15	1
Cadmium	ND		0.0010	mg/L		10/27/22 05:33	10/28/22 18:15	1
Copper	ND		0.010	mg/L		10/27/22 05:33	10/28/22 18:15	1
Lead	ND		0.015	mg/L		10/27/22 05:33	10/28/22 18:15	1
Molybdenum	ND		0.010	mg/L		10/27/22 05:33	10/28/22 18:15	1
Selenium	ND		0.10	mg/L		10/27/22 05:33	10/28/22 18:15	1
Silver	ND		0.010	mg/L		10/27/22 05:33	10/28/22 18:15	1
Zinc	ND		0.050	mg/L		10/27/22 05:33	10/28/22 18:15	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		10/26/22 15:40	10/26/22 19:42	1

Client Sample ID: TB-22Q4

Lab Sample ID: 550-192541-3
Date Collected: 10/24/22 08:00
Matrix: Water
Date Received: 10/24/22 14:03

Method: 40CFR136A 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			10/25/22 12:30	1
1,1-Dichloroethene	ND		0.50	ug/L			10/25/22 12:30	1
Chloroform	**1.2**	**N1**	0.50	ug/L			10/26/22 21:29	1
Trichloroethene	ND		0.50	ug/L			10/25/22 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*10/25/22 12:30*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*10/26/22 21:29*	*1*
Toluene-d8 (Surr)	*92*		*60 - 140*		*10/25/22 12:30*	*1*
Toluene-d8 (Surr)	*83*		*60 - 140*		*10/26/22 21:29*	*1*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*10/25/22 12:30*	*1*
4-Bromofluorobenzene (Surr)	*85*		*60 - 140*		*10/26/22 21:29*	*1*

Surrogate Summary

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	**Client Sample ID**	**(60-140)**	**(60-140)**	**(60-140)**
550-192433-B-2 MS	Matrix Spike	121	118	113
550-192433-B-2 MSD	Matrix Spike Duplicate	118	113	111
550-192494-A-1 MS	Matrix Spike	106	99	103
550-192494-A-1 MSD	Matrix Spike Duplicate	96	88	92
550-192541-1	EW-1-22Q4	100	96	97
550-192541-3	TB-22Q4	97	92	95
550-192541-3	TB-22Q4	93	83	85
LCS 550-287040/3	Lab Control Sample	106	104	105
LCS 550-287200/4	Lab Control Sample	119	112	109
LCSD 550-287040/4	Lab Control Sample Dup	101	99	101
LCSD 550-287200/5	Lab Control Sample Dup	117	111	108
MB 550-287040/6	Method Blank	97	92	95
MB 550-287200/7	Method Blank	93	84	84

Surrogate Legend

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

QC Sample Results

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

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

Lab Sample ID: MB 550-287040/6
Matrix: Water
Analysis Batch: 287040

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			10/25/22 11:47	1
1,1-Dichloroethene	ND		0.50		ug/L			10/25/22 11:47	1
Chloroform	ND		0.50		ug/L			10/25/22 11:47	1
Trichloroethene	ND		0.50		ug/L			10/25/22 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*10/25/22 11:47*	*1*
Toluene-d8 (Surr)	*92*		*60 - 140*		*10/25/22 11:47*	*1*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*10/25/22 11:47*	*1*

Lab Sample ID: LCS 550-287040/3
Matrix: Water
Analysis Batch: 287040

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	59.8		ug/L		120	70 - 130		
1,1-Dichloroethene			50.0	71.9		ug/L		144	50 - 150		
Chloroform			50.0	57.4		ug/L		115	70 - 135		
Trichloroethene			50.0	57.3		ug/L		115	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*60 - 140*
Toluene-d8 (Surr)	*104*		*60 - 140*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*

Lab Sample ID: LCSD 550-287040/4
Matrix: Water
Analysis Batch: 287040

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	55.8		ug/L		112	70 - 130	7	20
1,1-Dichloroethene			50.0	67.3		ug/L		135	50 - 150	7	20
Chloroform			50.0	53.8		ug/L		108	70 - 135	6	20
Trichloroethene			50.0	54.8		ug/L		110	65 - 135	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*

Lab Sample ID: 550-192494-A-1 MS
Matrix: Water
Analysis Batch: 287040

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	58.3		ug/L		117	59 - 155		
1,1-Dichloroethene	ND		50.0	69.4		ug/L		139	10 - 234		
Chloroform	6.2		50.0	61.8		ug/L		111	51 - 138		

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

Lab Sample ID: 550-192494-A-1 MS
Matrix: Water
Analysis Batch: 287040

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
Trichloroethene	ND		50.0	53.6		ug/L		107	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*

Lab Sample ID: 550-192494-A-1 MSD
Matrix: Water
Analysis Batch: 287040

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	51.9		ug/L		104	59 - 155	12	40
1,1-Dichloroethene	ND		50.0	61.0		ug/L		122	10 - 234	13	32
Chloroform	6.2		50.0	57.5		ug/L		103	51 - 138	7	54
Trichloroethene	ND		50.0	47.8		ug/L		96	70 - 157	11	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*88*		*60 - 140*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*

Lab Sample ID: MB 550-287200/7
Matrix: Water
Analysis Batch: 287200

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.50		ug/L			10/26/22 21:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*10/26/22 21:08*	*1*
Toluene-d8 (Surr)	*84*		*60 - 140*		*10/26/22 21:08*	*1*
4-Bromofluorobenzene (Surr)	*84*		*60 - 140*		*10/26/22 21:08*	*1*

Lab Sample ID: LCS 550-287200/4
Matrix: Water
Analysis Batch: 287200

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform			50.0	50.5		ug/L		101	70 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*119*		*60 - 140*
Toluene-d8 (Surr)	*112*		*60 - 140*
4-Bromofluorobenzene (Surr)	*109*		*60 - 140*

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

Lab Sample ID: LCSD 550-287200/5
Matrix: Water
Analysis Batch: 287200

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
Chloroform			50.0	50.2		ug/L		100	70 - 135	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*117*		*60 - 140*
Toluene-d8 (Surr)	*111*		*60 - 140*
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*

Lab Sample ID: 550-192433-B-2 MS
Matrix: Water
Analysis Batch: 287200

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		
Chloroform	ND		5000	5250		ug/L		104	51 - 138		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*121*		*60 - 140*
Toluene-d8 (Surr)	*118*		*60 - 140*
4-Bromofluorobenzene (Surr)	*113*		*60 - 140*

Lab Sample ID: 550-192433-B-2 MSD
Matrix: Water
Analysis Batch: 287200

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
Chloroform	ND		5000	4890		ug/L		97	51 - 138	7	54

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*118*		*60 - 140*
Toluene-d8 (Surr)	*113*		*60 - 140*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-287208/1-A
Matrix: Water
Analysis Batch: 287477

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 287208

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		10/27/22 05:33	10/28/22 17:58	1
Cadmium	ND		0.0010		mg/L		10/27/22 05:33	10/28/22 17:58	1
Copper	ND		0.010		mg/L		10/27/22 05:33	10/28/22 17:58	1
Lead	ND		0.015		mg/L		10/27/22 05:33	10/28/22 17:58	1
Molybdenum	ND		0.010		mg/L		10/27/22 05:33	10/28/22 17:58	1
Selenium	ND		0.10		mg/L		10/27/22 05:33	10/28/22 17:58	1
Silver	ND		0.010		mg/L		10/27/22 05:33	10/28/22 17:58	1
Zinc	ND		0.050		mg/L		10/27/22 05:33	10/28/22 17:58	1

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

Lab Sample ID: LCS 550-287208/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	0.986		mg/L		99	85 - 115
Cadmium	1.00	0.972		mg/L		97	85 - 115
Copper	1.00	1.01		mg/L		101	85 - 115
Lead	1.00	1.00		mg/L		100	85 - 115
Molybdenum	1.00	0.987		mg/L		99	85 - 115
Selenium	1.00	0.988		mg/L		99	85 - 115
Silver	0.0750	0.0704		mg/L		94	85 - 115
Zinc	1.00	0.999		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-287208/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	0.982		mg/L		98	85 - 115	0	20
Cadmium	1.00	0.974		mg/L		97	85 - 115	0	20
Copper	1.00	1.00		mg/L		100	85 - 115	1	20
Lead	1.00	1.01		mg/L		101	85 - 115	0	20
Molybdenum	1.00	0.993		mg/L		99	85 - 115	1	20
Selenium	1.00	1.00		mg/L		100	85 - 115	1	20
Silver	0.0750	0.0708		mg/L		94	85 - 115	1	20
Zinc	1.00	1.01		mg/L		101	85 - 115	1	20

Lab Sample ID: 550-192652-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.11		mg/L		107	70 - 130
Cadmium	ND		1.00	1.06		mg/L		106	70 - 130
Copper	ND		1.00	1.09		mg/L		109	70 - 130
Lead	ND		1.00	0.970		mg/L		97	70 - 130
Molybdenum	1.9		1.00	2.69		mg/L		83	70 - 130
Selenium	ND		1.00	0.924		mg/L		92	70 - 130
Silver	ND		0.0750	0.0745		mg/L		99	70 - 130
Zinc	ND		1.00	1.05		mg/L		105	70 - 130

Lab Sample ID: 550-192652-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.12		mg/L		108	70 - 130	0	20
Cadmium	ND		1.00	1.06		mg/L		106	70 - 130	0	20
Copper	ND		1.00	1.09		mg/L		109	70 - 130	0	20
Lead	ND		1.00	0.970		mg/L		97	70 - 130	0	20
Molybdenum	1.9		1.00	2.73		mg/L		87	70 - 130	1	20
Selenium	ND		1.00	0.961		mg/L		96	70 - 130	4	20
Silver	ND		0.0750	0.0747		mg/L		100	70 - 130	0	20

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

Lab Sample ID: 550-192652-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	1.05		mg/L		105	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-287167/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		10/26/22 15:40	10/26/22 18:52	1

Lab Sample ID: LCS 550-287167/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00470		mg/L		94	85 - 115		

Lab Sample ID: LCSD 550-287167/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00456		mg/L		91	85 - 115	3	20

Lab Sample ID: 550-192265-D-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00447		mg/L		89	70 - 130		

Lab Sample ID: 550-192265-D-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00441		mg/L		88	70 - 130	2	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-287162/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		10/26/22 14:50	10/26/22 16:07	1

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

Lab Sample ID: LCS 550-287162/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0984		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-287162/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0967		mg/L		97	90 - 110	2	20

Lab Sample ID: 550-192329-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND		0.100	0.0965		mg/L		88	80 - 120		

Lab Sample ID: 550-192329-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		0.100	0.0955		mg/L		87	80 - 120	1	20

QC Association Summary

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

GC/MS VOA

Analysis Batch: 287040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-1	EW-1-22Q4	Total/NA	Water	624.1	
550-192541-3	TB-22Q4	Total/NA	Water	624.1	
MB 550-287040/6	Method Blank	Total/NA	Water	624.1	
LCS 550-287040/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-287040/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-192494-A-1 MS	Matrix Spike	Total/NA	Water	624.1	
550-192494-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Analysis Batch: 287200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-3	TB-22Q4	Total/NA	Water	624.1	
MB 550-287200/7	Method Blank	Total/NA	Water	624.1	
LCS 550-287200/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-287200/5	Lab Control Sample Dup	Total/NA	Water	624.1	
550-192433-B-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-192433-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 287167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-2	EW-1-22Q4-comp	Total/NA	Water	245.1	
MB 550-287167/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-287167/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-287167/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-192265-D-1-C MS	Matrix Spike	Total/NA	Water	245.1	
550-192265-D-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 287201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-2	EW-1-22Q4-comp	Total/NA	Water	245.1	287167
MB 550-287167/1-A	Method Blank	Total/NA	Water	245.1	287167
LCS 550-287167/2-A	Lab Control Sample	Total/NA	Water	245.1	287167
LCSD 550-287167/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	287167
550-192265-D-1-C MS	Matrix Spike	Total/NA	Water	245.1	287167
550-192265-D-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	287167

Prep Batch: 287208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-2	EW-1-22Q4-comp	Total/NA	Water	200.7	
MB 550-287208/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-287208/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-287208/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-192652-A-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-192652-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 287477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-2	EW-1-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	287208
MB 550-287208/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	287208
LCS 550-287208/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	287208

Metals (Continued)

Analysis Batch: 287477 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-287208/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	287208
550-192652-A-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	287208
550-192652-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	287208

General Chemistry

Prep Batch: 287162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-1	EW-1-22Q4	Total/NA	Water	SM 4500 CN C	
MB 550-287162/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-287162/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-287162/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-192329-A-2-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-192329-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 287163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-1	EW-1-22Q4	Total/NA	Water	SM 4500 CN E	287162
MB 550-287162/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	287162
LCS 550-287162/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	287162
LCSD 550-287162/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	287162
550-192329-A-2-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	287162
550-192329-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	287162

Lab Chronicle

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-22Q4

Lab Sample ID: 550-192541-1
Date Collected: 10/24/22 12:25
Matrix: Water
Date Received: 10/24/22 14:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	287040	R1K	EET PHX	10/25/22 15:03
Total/NA	Prep	SM 4500 CN C			287162	CXK	EET PHX	10/26/22 14:50
Total/NA	Analysis	SM 4500 CN E		1	287163	CXK	EET PHX	10/26/22 16:07

Client Sample ID: EW-1-22Q4-comp

Lab Sample ID: 550-192541-2
Date Collected: 10/24/22 12:22
Matrix: Water
Date Received: 10/24/22 14:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			287208	SGO	EET PHX	10/27/22 05:33
Total/NA	Analysis	200.7 Rev 4.4		1	287477	CHS	EET PHX	10/28/22 18:15
Total/NA	Prep	245.1			287167	SRR	EET PHX	10/26/22 15:40
Total/NA	Analysis	245.1		1	287201	SRR	EET PHX	10/26/22 19:42

Client Sample ID: TB-22Q4

Lab Sample ID: 550-192541-3
Date Collected: 10/24/22 08:00
Matrix: Water
Date Received: 10/24/22 14:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	287200	JHU	EET PHX	10/26/22 21:29
Total/NA	Analysis	624.1		1	287040	R1K	EET PHX	10/25/22 12:30

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: 550-192541-1
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: 550-192541-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	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

192541

10/31/2022

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

Chain Of Custody / Analysis Request

AESI Ref: 44858.54286
COC#: 35008_102422

Privileged & Confidential

Site Name: IAC, Peoria
Location of Site: Phoenix, AZ
Phase: Sampling Program: Quarterly
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley
PO #: A000651433
Analysis Turnaround Time (TAT): 5
Consultant:
Laboratory Contact: Danielle Roberts
Report Tier Level: 2
Full Report TAT: 10
HTS

Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd Jacobs,
Invoice To: Tao Wu, Honeywell/Copy Berney Kidd

Text & Excel File Drive | Excel & Text File Order

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	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) (Dr-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											
												Preservative	8	10	15	10	0	0	10	8		
1	EW-1	----	----	EW-1-22Q4	10/24/2022	12:25	GW-GWS	WATER	REG	4	grab	N			X					X		-1
2	EW-1	----	----	EW-1-22Q4-comp	10/24/2022	12:22	GW-GWS	WATER	REG	1	comp	N		X		X						-2
3	TRIPBLANK	----	----	TB-22Q4	10/24/2022	8:00	BLKWATER	WATER	TB	1	grab	N								X		-3
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

RUSH

550-192541 Chain of Custody

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Thomas Kearsley	CH2M	FedEx		Cooler Temp.	
	Date/Time 2/24/22 1403		Date/Time		
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time 10/24/22 14:03	Cooler Temp. 2.7°	

ETA-PHX

Preservatives: (Other; Specify):

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)

CDO

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-192541-1
SDG Number: Phoenix, AZ

Login Number: 192541
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.

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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

November 23, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – October 2022**
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 October 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, October 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	664,037	17

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.

Well MW-10 was found off during a site visit on October 24, 2022. Well MW-10 remained off for the remainder of October. Well MW-10 is estimated to have operated from October 1, 2022, to October 17, 2022. Operations of well MW-10 were resumed on November 10, 2022.

Quarterly compliance data and sampling chain of custody for the reporting period October 1, 2022, through December 31, 2022, will be collected in November 2022.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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

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, 2022 Through October 31, 2022

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 39,061	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 39,113	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 664,037	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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	Baine Foehr
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	November 23, 2022
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	9/22/2022	19,220,895				☐	☐
1.	10/8/2022	19,845,411	39,032			☐	☐
2.	10/24/2022	20,197,431	39,113			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
10.						☐	☐
11.						☐	☐
12.						☐	☐
13.						☐	☐
14.						☐	☐
15.						☐	☐
16.						☐	☐
17.						☐	☐
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21.						☐	☐
22.						☐	☐
23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		39,061				
	Maximum Flow		39,113				
	Total Gallons		664,037				

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 10/8/22 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	10:30	ON	19845411	~2	34.08	301.55	90687.2
Depart		ON					

Electrical Meter Readings

Power(kwh)	33634
Power Rate(KwMax)	5.10

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

Maintenance Items

- [ ] Inspect Totalizer Paddle Wheel
- [x] 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
- [x] 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

306.65
-5.1
301.55

Created with Scanner Pro

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

Date 10/24/22 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	1130	OFF	20197431	—	Ø	296.57	91070.9
Depart		OFF					

Electrical Meter Readings

Power(kwh)	35519
Power Rate(KwMax)	4.80

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: ~~500~~ TR mL/min

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

Notes Found well off, checked electric & working.

Signature: TKey

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

301.67
5.1
296.57

Created with Scanner Pro

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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

December 23, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – November 2022**
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 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 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, November 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,396,640	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 October 1, 2022, through December 31, 2022, was collected on October 24, 2022. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

JACOBS

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

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: November 1, 2022 Through November 30, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 79,888	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 85,255	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,396,640	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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: Baine Foehr

Certifying Official Name: Baine Foehr

Certifying Official Title: Project Manager

Date: December 23, 2022

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 Point Cleaned
Last	10/24/2022	49,771,126				☐	☐
1.	11/10/2022	51,220,467 43,542,917	85,255			☒	☐
2.	11/22/2022	44,410,334	72,285			☐	☐
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	**79,888**
Maximum Flow	**85,255**
Total Gallons	**2,396,640**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 11/10/22 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	1356	ON/OFF	51220467		~7	57.21	302.01	29271.4
Depart	1406 *	OFF/ON *	43542917		~7	57.47	–	

Electrical Meter Readings

Power(kwh)	30000
Power Rate(KwMax)	000

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

Maintenance Items

YES * 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 flowmeter with factory calibrated meter

Signature: [signature]

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

Created with Scanner Pro

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

Date: 11/22/22 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	1419	ON	74410334		-7	559	302.41	29535.8
Depart		ON						

Electrical Meter Readings

Power(kwh)	1075
Power Rate(KwMax)	9.04

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 Keasley

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

Created with Scanner Pro

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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

December 23, 2022

Subject: **Monthly Industrial Wastewater Discharge Report – November 2022**
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 November 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, November 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	890,421	21

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.

Well MW-10 was found off during a site visit on October 24, 2022. Well MW-10 remained off for the remainder of October and the first nine days of November. Operations of well MW-10 were resumed on November 10, 2022. Follow up visits to confirm well operations were completed on November 14, 2022, and November 22, 2022.

Quarterly compliance data and sampling chain of custody for the reporting period October 1, 2022, through December 31, 2022, was collected on November 14, 2022. 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

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, 2022 Through November 30, 2022

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 42,401	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 44,851	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 890,421	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	Baine Foehr
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	December 23, 2022
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: **11/14/2022 at 11:25 (grab), 11:21 (composite), 11:00 (pH)**

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

Compliance Sampling Point № **5383.01**

Lab Project or Reference ID № **550-193616-1**

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: November 1, 2022 to November 30, 2022

Compliance Point №: ***5383.01***

Lab Project or Reference ID № ***550-193616-1***

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

Parameter	Units	Daily Limit	Sampling Frequency	Sample Type	**Date:** 11/14/2022	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**	0.58	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**	7.44	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**	5.4	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	10/24/2022	20,197,431				☐	☐
1.	11/10/2022	20,197,431	0			☐	☐
2.	11/14/2022	20,376,833	44,851			☐	☐
3.	11/22/2022	20,706,245	41,177			☐	☐
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		42,401				
	Maximum Flow		44,851				
	Total Gallons		890,421				

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 11/10/22 Field Technician(s) T. Keatsley

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	1250	OFF	20197431	—	Ø	296.60	91480.0
Depart	1340	ON *	20197431	-2	32.1	—	—

Electrical Meter Readings

Power(kwh)	37556
Power Rate(KwMax)	5.04

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

Maintenance Items

YES 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

* Found Electrical issue, well back on

Signature: T Key

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

299.52
- 2.92
296.60

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

Date 11/4/22 Field Technician(s) T. Keats

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	10:57	ON	20376833	-2	32.0	301.01	91573.9
Depart	—	ON	—	—	—	—	—

Electrical Meter Readings

Power(kwh)	38033
Power Rate(KwMax)	5.08

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

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

Time pH Sample Collected: 11:00

Time pH Sample Analyzed: 11:02
(Must be within 15 minutes of collection)

Sample Time (Grab Sample): 11:25

Composite Sample Log

Start Time: 11:01 End Time: 11:21 Flow Rate: 500 mL/min

Aliquot Volume: 500 mL x 20 aliquots = 10000 mL total volume

Notes

pH 7.44 @ 26.6°C

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

306.21
5.1
301.01

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

Date 11/22/22 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	1405	ON	20706245	.2	32.2	295.86	91744.8
Depart		ON					

Electrical Meter Readings

Power(kwh)	38898
Power Rate(KwMax)	5.07

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

Created with Scanner Pro

CITY OF PHOENIX
SIGNIFICANT INDUSTRI

Meter № 030548 Oyster

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# 1GA 843 Jan/23	11/14/22	TK	10:26	4.00	22.1	97.4	
pH Buffer 7/Lot# CHLE5007-T 9/23			10:22	7.00	21.9	99.3	
pH Buffer 10/Lot# 16C500 mar/23			10:24	10.00	22.0	96.5	
2nd Buffer pH 7 (6.9 - 7.1)/Lot# E1022A5k/24						Pass or Fail	
Compliance pH result 5436.01 (EW-1)	—	—	—	—	—	N/A	
Compliance pH result 5383.01 (MW-10)	11/14/22	TK	11:02	7.44	26.6	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)			Orig Reading:		Dup Reading:		
Once/Month Verification Check/Buffer 7	11/14/22	TK	11:55	7.03	23.4	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.***

February 28, 2019

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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 12/12/2022 9:20:05 AM Revision 1

JOB DESCRIPTION

IAC, Peoria

JOB NUMBER

550-193616-1

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

See page two for job notes and contact information.

my EOL

Eurofins Phoenix

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

Generated
12/12/2022 9:20:05 AM
Revision 1

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

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Definitions/Glossary

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

Job ID: 550-193616-1

Qualifiers

General Chemistry

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

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: 550-193616-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-193616-1

Comments
The report being provided is a revision of the original report sent on 11/27/2022. The report (revision 1) is being revised due to: Revised analyte list for 624.

No additional comments.

Receipt
The samples were received on 11/14/2022 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 8.4º C.

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: MW-10-22Q4 (550-193616-1), MW-10-22Q4-comp (550-193616-2) and TB-22Q4 (550-193616-3). The sample(s) is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

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: 550-193616-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-193616-1	MW-10-22Q4	Water	11/14/22 11:25	11/14/22 12:54
550-193616-2	MW-10-22Q4-comp	Water	11/14/22 11:21	11/14/22 12:54
550-193616-3	TB-22Q4	Water	11/14/22 08:00	11/14/22 12:54

Detection Summary

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

Job ID: 550-193616-1

Client Sample ID: MW-10-22Q4 — Lab Sample ID: 550-193616-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.58		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	17		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	5.4		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-22Q4-comp — Lab Sample ID: 550-193616-2

No Detections.

Client Sample ID: TB-22Q4 — Lab Sample ID: 550-193616-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 550-193616-1

Client Sample ID: MW-10-22Q4

Lab Sample ID: 550-193616-1
Date Collected: 11/14/22 11:25
Matrix: Water
Date Received: 11/14/22 12:54

Method: 40CFR136A 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.58**		0.50	ug/L			11/22/22 17:17	1
1,1-Dichloroethene	**17**		0.50	ug/L			11/22/22 17:17	1
Benzene	ND		0.50	ug/L			11/22/22 17:17	1
Chloroform	ND		0.50	ug/L			11/22/22 17:17	1
Trichloroethene	**5.4**		0.50	ug/L			11/22/22 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*60 - 140*		*11/22/22 17:17*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*		*11/22/22 17:17*	*1*
Toluene-d8 (Surr)	*88*		*60 - 140*		*11/22/22 17:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050	mg/L		11/18/22 15:40	11/18/22 20:05	1

Client Sample ID: MW-10-22Q4-comp

Lab Sample ID: 550-193616-2
Date Collected: 11/14/22 11:21
Matrix: Water
Date Received: 11/14/22 12:54

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		11/15/22 06:26	11/16/22 22:45	1
Cadmium	ND		0.0010	mg/L		11/15/22 06:26	11/16/22 22:45	1
Copper	ND		0.010	mg/L		11/15/22 06:26	11/17/22 18:31	1
Lead	ND		0.015	mg/L		11/15/22 06:26	11/17/22 18:31	1
Molybdenum	ND		0.010	mg/L		11/15/22 06:26	11/17/22 18:31	1
Selenium	ND		0.10	mg/L		11/15/22 06:26	11/17/22 18:31	1
Silver	ND		0.010	mg/L		11/15/22 06:26	11/16/22 22:45	1
Zinc	ND		0.050	mg/L		11/15/22 06:26	11/17/22 18:31	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		11/15/22 15:34	11/15/22 21:03	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		10	mg/L			11/17/22 11:22	1
Biochemical Oxygen Demand (SM 5210B)	ND		5.0	mg/L			11/15/22 12:46	1

Client Sample ID: TB-22Q4

Lab Sample ID: 550-193616-3
Date Collected: 11/14/22 08:00
Matrix: Water
Date Received: 11/14/22 12:54

Method: 40CFR136A 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			11/22/22 14:01	1
1,1-Dichloroethene	ND		0.50	ug/L			11/22/22 14:01	1
Benzene	ND		0.50	ug/L			11/22/22 14:01	1
Chloroform	ND		0.50	ug/L			11/22/22 14:01	1
Trichloroethene	ND		0.50	ug/L			11/22/22 14:01	1

Client Sample Results

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

Job ID: 550-193616-1

Client Sample ID: TB-22Q4

Date Collected: 11/14/22 08:00
Date Received: 11/14/22 12:54

Lab Sample ID: 550-193616-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		60 - 140		11/22/22 14:01	1
Dibromofluoromethane (Surr)	91		60 - 140		11/22/22 14:01	1
Toluene-d8 (Surr)	89		60 - 140		11/22/22 14:01	1

Surrogate Summary

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

Job ID: 550-193616-1

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)**
550-193555-A-2 MS	Matrix Spike	100	100	98
550-193555-A-2 MSD	Matrix Spike Duplicate	102	102	102
550-193616-1	MW-10-22Q4	76	92	88
550-193616-3	TB-22Q4	78	91	89
LCS 550-289242/3	Lab Control Sample	101	102	101
LCSD 550-289242/4	Lab Control Sample Dup	111	107	103
MB 550-289242/6	Method Blank	77	90	90

Surrogate Legend

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

QC Sample Results

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

Job ID: 550-193616-1

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

Lab Sample ID: MB 550-289242/6
Matrix: Water
Analysis Batch: 289242

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			11/22/22 13:17	1
1,1-Dichloroethene	ND		0.50		ug/L			11/22/22 13:17	1
Benzene	ND		0.50		ug/L			11/22/22 13:17	1
Chloroform	ND		0.50		ug/L			11/22/22 13:17	1
Trichloroethene	ND		0.50		ug/L			11/22/22 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*60 - 140*		*11/22/22 13:17*	*1*
Dibromofluoromethane (Surr)	*90*		*60 - 140*		*11/22/22 13:17*	*1*
Toluene-d8 (Surr)	*90*		*60 - 140*		*11/22/22 13:17*	*1*

Lab Sample ID: LCS 550-289242/3
Matrix: Water
Analysis Batch: 289242

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	45.6		ug/L		91	70 - 130		
1,1-Dichloroethene			50.0	52.5		ug/L		105	50 - 150		
Benzene			50.0	43.5		ug/L		87	65 - 135		
Chloroform			50.0	45.5		ug/L		91	70 - 135		
Trichloroethene			50.0	45.3		ug/L		91	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*
Dibromofluoromethane (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*101*		*60 - 140*

Lab Sample ID: LCSD 550-289242/4
Matrix: Water
Analysis Batch: 289242

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	46.7		ug/L		93	70 - 130	2	20
1,1-Dichloroethene			50.0	53.9		ug/L		108	50 - 150	3	20
Benzene			50.0	43.0		ug/L		86	65 - 135	1	20
Chloroform			50.0	46.1		ug/L		92	70 - 135	1	20
Trichloroethene			50.0	46.2		ug/L		92	65 - 135	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*
Dibromofluoromethane (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*103*		*60 - 140*

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

Lab Sample ID: 550-193555-A-2 MS
Matrix: Water
Analysis Batch: 289242

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	44.3		ug/L		89	59 - 155
1,1-Dichloroethene	ND		50.0	49.2		ug/L		98	10 - 234
Benzene	ND		50.0	43.3		ug/L		87	35 - 151
Chloroform	ND		50.0	44.3		ug/L		89	51 - 138
Trichloroethene	ND		50.0	45.7		ug/L		91	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*98*		*60 - 140*

Lab Sample ID: 550-193555-A-2 MSD
Matrix: Water
Analysis Batch: 289242

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	46.9		ug/L		94	59 - 155	6	40
1,1-Dichloroethene	ND		50.0	55.1		ug/L		110	10 - 234	11	32
Benzene	ND		50.0	46.9		ug/L		94	35 - 151	8	61
Chloroform	ND		50.0	46.4		ug/L		93	51 - 138	5	54
Trichloroethene	ND		50.0	48.5		ug/L		97	70 - 157	6	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*
Dibromofluoromethane (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*102*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-288634/1-A
Matrix: Water
Analysis Batch: 288902

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288634

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		11/15/22 06:26	11/16/22 22:31	1
Cadmium	ND		0.0010	mg/L		11/15/22 06:26	11/16/22 22:31	1
Silver	ND		0.010	mg/L		11/15/22 06:26	11/16/22 22:31	1

Lab Sample ID: MB 550-288634/1-A
Matrix: Water
Analysis Batch: 288986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288634

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010	mg/L		11/15/22 06:26	11/17/22 18:16	1
Lead	ND		0.015	mg/L		11/15/22 06:26	11/17/22 18:16	1
Molybdenum	ND		0.010	mg/L		11/15/22 06:26	11/17/22 18:16	1
Selenium	ND		0.10	mg/L		11/15/22 06:26	11/17/22 18:16	1
Zinc	ND		0.050	mg/L		11/15/22 06:26	11/17/22 18:16	1

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

Lab Sample ID: LCS 550-288634/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288902 — **Prep Batch: 288634**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	1.03		mg/L		103	85 - 115
Cadmium	1.00	1.00		mg/L		100	85 - 115
Silver	0.0750	0.0725		mg/L		97	85 - 115

Lab Sample ID: LCS 550-288634/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	1.00	1.01		mg/L		101	85 - 115
Lead	1.00	1.00		mg/L		100	85 - 115
Molybdenum	1.00	1.02		mg/L		102	85 - 115
Selenium	1.00	1.03		mg/L		103	85 - 115
Zinc	1.00	0.997		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-288634/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288902 — **Prep Batch: 288634**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	1.03		mg/L		103	85 - 115	0	20
Cadmium	1.00	1.02		mg/L		102	85 - 115	2	20
Silver	0.0750	0.0731		mg/L		98	85 - 115	1	20

Lab Sample ID: LCSD 550-288634/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	1.00	1.02		mg/L		102	85 - 115	2	20
Lead	1.00	1.02		mg/L		102	85 - 115	1	20
Molybdenum	1.00	1.04		mg/L		104	85 - 115	1	20
Selenium	1.00	1.04		mg/L		104	85 - 115	1	20
Zinc	1.00	1.01		mg/L		101	85 - 115	1	20

Lab Sample ID: 550-193616-2 MS — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288902 — **Prep Batch: 288634**

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	1.04		mg/L		104	70 - 130
Silver	ND		0.0750	0.0752		mg/L		100	70 - 130

Lab Sample ID: 550-193616-2 MS — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	ND		1.00	1.05		mg/L		105	70 - 130

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

Lab Sample ID: 550-193616-2 MS — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1.00	0.992		mg/L		99	70 - 130
Molybdenum	ND		1.00	1.05		mg/L		105	70 - 130
Selenium	ND		1.00	1.06		mg/L		106	70 - 130
Zinc	ND		1.00	0.993		mg/L		99	70 - 130

Lab Sample ID: 550-193616-2 MSD — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288902 — **Prep Batch: 288634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.06		mg/L		106	70 - 130	2	20
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130	2	20
Silver	ND		0.0750	0.0732		mg/L		98	70 - 130	3	20

Lab Sample ID: 550-193616-2 MSD — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	ND		1.00	1.01		mg/L		101	70 - 130	3	20
Lead	ND		1.00	0.973		mg/L		97	70 - 130	2	20
Molybdenum	ND		1.00	1.03		mg/L		103	70 - 130	2	20
Selenium	ND		1.00	1.04		mg/L		104	70 - 130	2	20
Zinc	ND		1.00	0.976		mg/L		97	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-288719/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/15/22 15:34	11/15/22 20:25	1

Lab Sample ID: LCS 550-288719/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.00500	0.00508		mg/L		102	85 - 115

Lab Sample ID: LCSD 550-288719/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00485		mg/L		97	85 - 115	5	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-192621-E-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00493		mg/L		99	70 - 130

Lab Sample ID: 550-192621-E-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00482		mg/L		96	70 - 130	2	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-288886/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288886

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			11/17/22 11:22	1

Lab Sample ID: LCS 550-288886/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288886

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids			207	187		mg/L		90	90 - 110

Lab Sample ID: LCSD 550-288886/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288886

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			207	187		mg/L		90	90 - 110	0	10

Lab Sample ID: 550-193480-A-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288886

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	29			30.0		mg/L				3	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-289070/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		11/18/22 15:40	11/18/22 20:05	1

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

Lab Sample ID: LCS 550-289070/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.108		mg/L		108	90 - 110		

Lab Sample ID: LCSD 550-289070/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.108		mg/L		108	90 - 110	0	20

Lab Sample ID: 550-193450-P-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND		0.100	0.122		mg/L		111	80 - 120		

Lab Sample ID: 550-193450-P-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		0.100	0.116		mg/L		104	80 - 120	6	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-288695/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288695

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		5.0		mg/L			11/15/22 12:46	1

Lab Sample ID: LCS 550-288695/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288695

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	212		mg/L		107	84.6 - 115.4		

Lab Sample ID: 550-193653-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288695

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	99	D2		111	D2	mg/L				12	20

QC Association Summary

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

Job ID: 550-193616-1

GC/MS VOA

Analysis Batch: 289242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-1	MW-10-22Q4	Total/NA	Water	624.1	
550-193616-3	TB-22Q4	Total/NA	Water	624.1	
MB 550-289242/6	Method Blank	Total/NA	Water	624.1	
LCS 550-289242/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-289242/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-193555-A-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-193555-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 288634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	200.7	
MB 550-288634/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-288634/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-288634/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-193616-2 MS	MW-10-22Q4-comp	Total/NA	Water	200.7	
550-193616-2 MSD	MW-10-22Q4-comp	Total/NA	Water	200.7	

Prep Batch: 288719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	245.1	
MB 550-288719/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-288719/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-288719/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-192621-E-1-C MS	Matrix Spike	Total/NA	Water	245.1	
550-192621-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 288748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	245.1	288719
MB 550-288719/1-A	Method Blank	Total/NA	Water	245.1	288719
LCS 550-288719/2-A	Lab Control Sample	Total/NA	Water	245.1	288719
LCSD 550-288719/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	288719
550-192621-E-1-C MS	Matrix Spike	Total/NA	Water	245.1	288719
550-192621-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	288719

Analysis Batch: 288902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634
MB 550-288634/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	288634
LCS 550-288634/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	288634
LCSD 550-288634/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	288634
550-193616-2 MS	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634
550-193616-2 MSD	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634

Analysis Batch: 288986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634
MB 550-288634/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	288634
LCS 550-288634/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	288634

Metals (Continued)

Analysis Batch: 288986 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-288634/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	288634
550-193616-2 MS	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634
550-193616-2 MSD	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634

General Chemistry

Analysis Batch: 288695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	SM 5210B	
MB 550-288695/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-288695/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-193653-A-1 DU	Duplicate	Total/NA	Water	SM 5210B	

Analysis Batch: 288886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	SM 2540D	
MB 550-288886/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-288886/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-288886/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-193480-A-2 DU	Duplicate	Total/NA	Water	SM 2540D	

Prep Batch: 289070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-1	MW-10-22Q4	Total/NA	Water	SM 4500 CN C	
MB 550-289070/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-289070/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-289070/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-193450-P-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-193450-P-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 289100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-1	MW-10-22Q4	Total/NA	Water	SM 4500 CN E	289070
MB 550-289070/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	289070
LCS 550-289070/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	289070
LCSD 550-289070/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	289070
550-193450-P-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	289070
550-193450-P-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	289070

Lab Chronicle

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

Job ID: 550-193616-1

Client Sample ID: MW-10-22Q4

Lab Sample ID: 550-193616-1
Matrix: Water
Date Collected: 11/14/22 11:25
Date Received: 11/14/22 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	289242	R1K	EET PHX	11/22/22 17:17
Total/NA	Prep	SM 4500 CN C			289070	CXK	EET PHX	11/18/22 15:40
Total/NA	Analysis	SM 4500 CN E		1	289100	CXK	EET PHX	11/18/22 20:05

Client Sample ID: MW-10-22Q4-comp

Lab Sample ID: 550-193616-2
Matrix: Water
Date Collected: 11/14/22 11:21
Date Received: 11/14/22 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			288634	SGO	EET PHX	11/15/22 06:26
Total/NA	Analysis	200.7 Rev 4.4		1	288902	CHS	EET PHX	11/16/22 22:45
Total/NA	Prep	200.7			288634	SGO	EET PHX	11/15/22 06:26
Total/NA	Analysis	200.7 Rev 4.4		1	288986	CHS	EET PHX	11/17/22 18:31
Total/NA	Prep	245.1			288719	SRR	EET PHX	11/15/22 15:34
Total/NA	Analysis	245.1		1	288748	SRR	EET PHX	11/15/22 21:03
Total/NA	Analysis	SM 2540D		1	288886	JDC	EET PHX	11/17/22 11:22 - 11/19/22 15:00 [1]
Total/NA	Analysis	SM 5210B		1	288695	SH1	EET PHX	11/15/22 12:46 - 11/21/22 14:40 [1]

Client Sample ID: TB-22Q4

Lab Sample ID: 550-193616-3
Matrix: Water
Date Collected: 11/14/22 08:00
Date Received: 11/14/22 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	289242	R1K	EET PHX	11/22/22 14:01

[1] Completion dates and times are reported or not reported per method requirements or individual lab discretion.

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: 550-193616-1

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: 550-193616-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	EET PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
SM 5210B	BOD, 5-Day	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

193616

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

Chain Of Custody / Analysis Request

AESI Ref: 44879.50287
COC#: 35008_111422
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Text & Excel File Drive | Excel & Text File Order

Privileged & Confidential

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

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley
PO #: A000651433
Analysis Turnaround Time (TAT): 5
Consultant:
Laboratory Contact: Danielle Roberts
Report Tier Level: 2
Full Report TAT: 10
HTS

Preliminary Data To: Berney Kidd Jacobs, Lakshmi[redacted]vi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd Jacobs,
Invoice To: Tao Wu, Honeywell/Copy Berney Kidd

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
										Preservative		8	10	15	10	0	0	10								
										Units																
1	MW-10	----	----	MW-10-22Q4	11/14/2022	11:25	GW-GWS	WATER	REG	4	grab	N	X		X								-01			
2	MW-10	----	----	MW-10-22Q4-comp	11/14/2022	11:21	GW-GWS	WATER	REG	3	comp	N		X		X	X	X					-02			
3																										
4	TRIPBLANK	----	----	TB-22Q4-1	11/14/2022	8:00	BLKWATER	WATER	TB	1	grab	N	X										-03			
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

550-193616 Chain of Custody

Relinquished by: T. Kearsley	Company: CH2M	Received by:	Company:		Condition:		Custody Seals Intact:
Thomas Kearsley	Date/Time: 11/14/22 1254	FedEx	Date/Time:		Cooler Temp.		
Relinquished by	Company	Received by: EETA-PHX	Company		Condition		Custody Seals Intact
	Date/Time		Date/Time: 11/14/22 12:54		Cooler Temp. 8.4	on Ice	

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)

CDO

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Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-193616-1

Login Number: 193616
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	Received same day of collection; chilling process has begun.
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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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

January 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – December 2022**
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 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 2022 discharge data for extraction well EW-1 is provided in Table 1.

Table 1. Wastewater Discharge Summary, December 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
EW-1	1806-5436	2,731,627	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 October 1, 2022, through December 31, 2022, was collected on October 24, 2022. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for EW-1.

JACOBS

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

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: December 1, 2022 Through December 31, 2022

Flow is Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 88,117	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 92,765	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 2,731,627	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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: Baine Foehr

Certifying Official Name: Baine Foehr

Certifying Official Title: Project Manager

Date: January 26, 2023

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 Point Cleaned
Last	11/22/2022	44,410,334				☐	☐
1.	12/08/2022	45,894,577	92,765			☐	☐
2.	12/20/2022	46,877,607	81,919			☐	☐
3.						☐	☐
4.						☐	☐
5.						☐	☐
6.						☐	☐
7.						☐	☐
8.						☐	☐
9.						☐	☐
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23.						☐	☐
24.						☐	☐
25.						☐	☐
26.						☐	☐
27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐

Average Flow	**88,117**
Maximum Flow	**92,765**
Total Gallons	**2,731,627**

Attachment B
Operation and Maintenance Data Collection Forms

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

Date: 12/8/22 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	10:05	ON	45894577		-7	54.3*	296.00	2999.5
Depart		ON				57.2		

Electrical Meter Readings

Power(kwh)	4684
Power Rate(KwMax)	9.00

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 above 55 GPM

Signature: [signature]

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

298.98
-2.92
296.06

Created with Scanner Pro

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

Date: 12/20/22 Field Technician(s) T. Keasby

Standard O&M Measurements

EW-1	Time	System Status	Totalizer		Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0959	ON	46877607		7	56.6	301.0	30226.6
Depart		ON						

Electrical Meter Readings

Power(kwh)	7291
Power Rate(KwMax)	9.09

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: [signature]

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
301.0

Created with Scanner Pro

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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

January 26, 2023

Subject: **Monthly Industrial Wastewater Discharge Report – December 2022**
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 December 2022 discharge data for extraction well MW-10 is provided in Table 1.

Table 1. Wastewater Discharge Summary, December 2022

Well ID	Industrial Wastewater Discharge Permit Number	Total Discharge (gallons)	Days Operational
MW-10	2208-5383	1,489,736	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 October 1, 2022, through December 31, 2022, was collected on November 14, 2022. Sampling results indicated that no water quality parameters exceeded the daily limits set forth in the permit for MW-10.

JACOBS

If you should require any additional information, please contact me at (602) 295-3925.

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

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, 2022 Through December 31, 2022

Flow is either Measured or Estimated – Not Both

Average Daily Flow through Compliance Sampling Point:	GPD Measured: 48,056	GPD Estimated:
Maximum Daily Flow through Compliance Sampling Point:	GPD Measured: 49,005	GPD Estimated:
Total Monthly Flow through Compliance Sampling Point:	Gallons Measured: 1,489,736	Gallons Estimated:

Include the following for EACH Compliance Sampling Point Report:

- [x] 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
- [x] 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	Baine Foehr
Certifying Official Name	Baine Foehr
Certifying Official Title	Project Manager
Date	January 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	11/22/2022	20,706,245				☐	☐
1.	12/08/2022	21,490,325	49,005			☐	☐
2.	12/20/2022	22,051,805	46,790			☐	☐
3.						☐	☐
4.						☐	☐
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27.						☐	☐
28.						☐	☐
29.						☐	☐
30.						☐	☐
31.						☐	☐
	Average Flow		48,056				
	Maximum Flow		49,005				
	Total Gallons		1,489,736				

Attachment B
Operation and Maintenance Data Collection Forms

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

Date 12/8/22 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	0943	ON	21490325	2	32.6	300.79	92148.6
Depart		ON					

Electrical Meter Readings

Power(kwh)	40943
Power Rate(KwMax)	5.07

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: [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

305.89
- 5.1
300.79

Created with Scanner Pro

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

Date 12/20/22 Field Technician(s) T. Kgaisby

Standard O&M Measurements

MW-10	Time	System Status	Totalizer	Back Pres. (psi)	Flow Rate (gpm)	Depth to Water (ft)	Hours
Arrive	0941	ON	22051805	2	32.5	300.24	92436.6
Depart							

Electrical Meter Readings

Power(kwh)	42703
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____ 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: [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

305.34
- 5.1
300.24

Created with Scanner Pro

Appendix B
Historical Groundwater Elevations and Analytical Results

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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	27-Jun-94	958.10	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	2-Dec-94	957.34	**640**	275	NA	88	**36**	**25**	<0.5	**140**
	16-Jun-95	963.20	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	12-Dec-95	963.49	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5
	17-Jun-96	965.26	<1	<1	<1	<1	<1	<1	<1	<1
	18-Dec-96	965.51	<1	<1	<1	<1	<1	<1	<1	<1
	27-Mar-97	967.26	<1	<1	<1	<1	<1	<1	<1	<1
	28-May-97	961.41	<1	<1	<1	<1	<1	<1	<1	<1
	19-Sep-97	968.55	<1	<1	<1	<1	<1	<1	<1	<1
	23-Dec-97	969.83	<1	<1	<1	<1	<1	<1	<1	<1
	27-Mar-98	971.47	5.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	5-Jun-98	972.19	2.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12-Aug-98	972.95	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	17-Nov-98	979.49	NA	NA	NA	NA	NA	NA	NA	NA
	26-Feb-99	975.85	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	28-May-99	976.14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	27-Aug-99	976.34	<1	<1	<2	<1	<1	<1	<1	<1
	1-Dec-99	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	4-Feb-00	976.08	1.2	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	29-Jun-00	976.34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8-Aug-00	976.34	<1	<1	<2	<1	<1	<1	<1	<1
	16-Oct-00	975.46	**55.8**	10.6	0.6	1.8	1.1	<0.5	<0.5	**10.6**
	13-Apr-01	976.16	**290**	26.3	5	2.5	2	1.6	<0.5	**31.2**
	9-Oct-01	975.70	**154**	18.4	3.6	1.2	1.4	1.4	<1.0	**29.1**
	24-Jun-02	978.67	NA	NA	NA	NA	NA	NA	NA	NA
	14-Nov-02	977.01	<5.0	120	<2.0	40	**28**	4.6	<2	<2.0
	6-May-03	977.71	**92**	130	<2.0	44	**22**	**10**	<2.0	**42**
	6-Nov-03	976.44	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	10-Nov-04	974.11	**460**	88	<2.0	20	**13**	**5.7**	<2.0	**96**
	1-Nov-05	978.14	**810**	15	2.7	3.4	<2.0	4.9	<1.0	**53**
	29-Nov-06	979.13	**490**	33	2.0	6.0	1.8	4.4	<0.50	**36**

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	19-Oct-07	978.51	**1600**	110	11.0	44	**24**	**13**	<0.50	**170**
	3-Nov-08	980.54	**2000/2000**	120/120	1.1	1/50	**22/22**	**18/18**	<12/<12	**240/250**
	29-Oct-09	981.63	**2700**	150	24	49	**26**	**17**	<0.5	**270**
	17-Oct-10	983.68	NS	NS	NS	NS	NS	NS	NS	NS
	15-Nov-10	NM	**2700**	160	20	42	**26**	**22**	**5**	**310**
	27-Dec-10	NM	**2700**	180	24	45	**24**	**17**	<5.0	**290**
	19-Oct-11	985.05	**1800**	91	13	25	**14**	**13**	**10**	**270**
	22-Oct-12	983.99	**1900**	120	16	36	**16**	**15**	<10	**210**
	10-Nov-13	973.64	**1600/1700**	100/110	<20/<25	28/33	<20/<25	<20/<25	<20/<25	**170/180**
	5-Nov-14	981.14	**1800**	100	17	30	**16**	**11**	<0.50	**180**
	11-Nov-15	981.26	**2000**	110	<20	35	<20	**<20**	<20	**230**
	28-Sep-16	982.23	**1900**	89	18	26	**10 J**	**12 J**	<17	**200**
	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**
	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**
	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**
	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**
	11-Nov-20	986.14	**1400**	72	11	18	**10**	**10**	<5.0	**180**
	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**
	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-2	27-Jun-94	959.75	**3700**	350	87	47	**50**	**34**	<1	**430**
	2-Dec-94	959.23	**6800**	490	NA	<100	<100	<100	<100	**760**
	3-Aug-95	964.01	**6500**	540	78	46	**54.0**	**47**	<2	**580**
	12-Dec-95	964.33	**3300**	470	40	44	**50**	**34**	<1	**530**
	26-Jul-96	966.19	**4800**	490	38	41	**46**	**31**	<5	**540**
	19-Dec-96	966.43	**4000**	380	31	40	**43**	**34**	<5	**440**
	26-Mar-97	967.76	**4500**	460	<50	<50	<50	<50	<50	**540**
	27-May-97	968.48	**2200**	<500	<500	<500	<500	<500	<500	<500
	18-Sep-97	969.34	**2900**	290	29	24	**20**	**26**	<1	**330**
	23-Dec-97	970.16	**6400**	350.0	77	40.0	**38**	**22**	<5	**380**
	24-Mar-98	971.74	**2940**	344.0	29.7	36.1	**33.2**	**38.7**	<2	**468**
	5-Jun-98	972.58	**3330**	357.0	55.9	35.2	**37.6**	**34.2**	0.7	**479**

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	12-Aug-98	973.68	**3380**	332.0	32.2	33.0	**34.6**	**33.6**	<2	**470**
	17-Nov-98	974.58	NA	NA	NA	NA	NA	NA	NA	NA
	26-Feb-99	976.14	NA	NA	NA	NA	NA	NA	NA	NA
	28-May-99	976.81	NA	NA	NA	NA	NA	NA	NA	NA
	27-Sep-99	978.28	**2890**	320	57.2	33.5	**31.5**	**33.3**	<2	**439**
	1-Dec-99	NM	NA	NA	NA	NA	NA	NA	NA	NA
	14-Mar-00	977.61	**2871**	247	47.1	25.5	**26.6**	**26.2**	<0.5	**438**
	11-May-00	978.41	**1810**	247	48.8	27.6	**27.4**	**26.8**	<0.5	**342**
	17-Oct-00	978.13	**1870**	261	48.4	28.2	**27.5**	**25.3**	<1	**434**
	13-Apr-01	978.51	**870**	301	39.6	22.3	**22.4**	**27.8**	<0.5	**238**
	9-Oct-01	977.78	NA	NA	NA	NA	NA	NA	NA	NA
	24-Jun-02	978.42	NA	NA	NA	NA	NA	NA	NA	NA
	13-Nov-02	976.84	<5.0	6.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	6-May-03	977.58	<5.0	10	<2.0	4.3	<2.0	<2.0	<2.0	<2.0
	5-Nov-03	975.94	NA	NA	NA	NA	NA	NA	NA	NA
	9-Nov-04	NM	NA	NA	NA	NA	NA	NA	NA	NA
	1-Nov-05	976.08	**160**	190	<2.0	18	**17**	4.9	<1.0	**45**
	29-Nov-06	978.92	2.0	130	<0.50	17	**19**	0.72	<0.50	1.2
	19-Oct-07	978.22	**48**	180	<0.50	18	**19**	2.8	<0.50	**19**
	3-Nov-08	980.50	**82**	180	<2.5	20	**17**	3	<2.5	**29**
	29-Oct-09	981.47	**590**	200	3.6	20	**23**	**7.7**	<1.0	**120**
	17-Oct-10	983.59	NS	NS	NS	NS	NS	NS	NS	NS
	15-Nov-10	NM	**600**	230	5	15	**26**	**11**	5	**270**
	27-Dec-10	NM	**770**	290	7.0	22	**35**	**5.9**	<2.5	**320**
	19-Oct-11	985.1	**160**	13	1.1	2.5	1.4	1.4	<1.0	**75**
	22-Oct-12	983.96	**1600**	180	19	39	**20**	**22**	<10	**260**
	10-Nov-13	982.53	**940**	70	<13	17	<13	<13	<13	**170**
	20-Oct-14	980.96	**280**	150	1.8	17	**20**	**5.6**	<1.0	**52**
	11-Nov-15	981.21	**270**	77	1.3	5.0	**9.0**	**4.2**	<0.50	**36**
	28-Sep-16	982.25	**86**	12	0.6	0.2 J	0.5	1.1	0.6	**6.8**
	16-Oct-17	985.41	**93**	7.8	0.7	1.6	0.7	0.8	<0.5	**37**

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	22-Oct-18	985.32	**150**	12	1.4	3.1	1.4	4.3	<0.5	**49**
	7-Nov-19	986.23	NS	NS	NS	NS	NS	NS	NS	NS
	11-Nov-20	NM	NM	NS	NS	NS	NS	NS	NS	NS
	26-Oct-21	NM	NM	NS	NS	NS	NS	NS	NS	NS
	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**
	2-Dec-94	954.18	**30**	7	NA	<0.5	1.2	0.72	<0.5	**25**
	15-Jun-95	958.08	**270**	19	NA	<2	2.2	1.7	<0.5	**61**
	11-Dec-95	958.56	**360**	24	4.0	4.0	<0.5	2.0	<0.5	**76**
	17-Jun-96	960.45	**564**	27	5	6	<1	2	<1	**81**
	18-Dec-96	960.71	**480**	29	8	<1	4	4	<1	**72**
	26-Mar-97	962.19	**490**	24	<24	<24	<24	<24	<24	**74**
	27-May-97	962.89	**490**	60	<12	<12	<12	<12	<12	<12
	18-Sep-97	963.71	**260**	17	5	6	2	2	<1	**49**
	22-Dec-97	964.77	**400**	38	12	15	**7.5**	**5.6**	<1	**85**
	24-Mar-98	965.96	**250**	21	10.2	8.7	4.7	3.2	<0.5	**79**
	4-Jun-98	966.71	**425**	34.7	12.3	9.7	**5.5**	3.8	<0.5	**82.7**
	11-Aug-98	967.63	**537**	35.5	12.7	8.5	**5.1**	3.6	<0.5	**78**
	16-Nov-98	968.46	**663**	36	12.4	9.7	**5.8**	4.4	<0.5	**83.6**
	25-Feb-99	970.07	**450**	25.7	7.4	5.2	2.8	<1	<1	**66**
	27-May-99	970.66	4.9	27.2	6	5.5	3.2	1.8	<1	**55.5**
	26-Aug-99	971.19	**705**	37.8	10.9	8.9	**5.3**	3.8	<1	**85.9**
	1-Dec-99	NM	NA	NA	NA	NA	NA	NA	NA	NA
	14-Mar-00	971.75	**710**	36.5	12.5	10.4	**6.3**	4.2	<0.5	**74.7**
	11-May-00	971.97	**437**	35.8	11.6	10.7	**6.1**	4.1	<0.5	**81.2**
	8-Aug-00	971.80	**485**	48.2	13.9	9	**5**	3.7	<1	**96.8**
	17-Oct-00	971.23	**650**	39.3	10.1	9.8	4.5	3.6	<1	**77.4**
	13-Apr-01	972.53	**574**	38.1	13.7	11.1	**5.8**	**5.0**	<0.5	**89.1**
	8-Oct-01	971.97	NA	NA	NA	NA	NA	NA	NA	NA
	24-Jun-02	972.12	**434**	33.1	6.9	5.7	2.5	2.7	<1.0	**73.2**
	13-Nov-02	971.73	**130**	29	2.7	6.0	3.3	3.0	<2.0	**68**

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	6-May-03	972.67	5.3	41	<2.0	9.5	**5.2**	<2.0	<2.0	<2.0
	6-Nov-03	971.71	<5.0	41	<2.0	9.7	**5.9**	<2.0	<2.0	<2.0
	10-Nov-04	969.51	<5.0	17	<2.0	4.2	2.3	<2.0	<2.0	2.7
	2-Nov-05	972.60	<0.50	42	<0.50	8.6	0.3	<0.50	<0.50	<0.50
	29-Nov-06	974.50	**29**	4.2	<0.50	1.6	0.64	<0.50	<0.50	**16.0**
	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**
	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**
	29-Oct-09	977.18	0.59 J	0.64J	<0.50	<0.50	<0.50	<0.50	<0.50	**5.0 J**
	3-Nov-10	NM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4
	6-Dec-10	980.16	NS	NS	NS	NS	NS	NS	NS	NS
	19-Oct-11	981.60	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	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**
	10-Nov-13	979.44	4.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.4**
	20-Oct-14	977.94	3.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.0
	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
	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
	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
	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
	7-Nov-19	982.83	2.4	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	1.4
	11-Nov-20	982.82	2.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.7
	26-Oct-21	983.31	**8.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.8**
	12-Oct-22	984.63	**20**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**26**
MW-4	27-Jun-94	954.57	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	1-Dec-94	954.29	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	15-Jun-95	957.87	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	11-Dec-95	958.36	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	17-Jun-96	960.37	<1	<1	<1	<1	<1	<1	<1	<1
	18-Dec-96	960.42	<1	<1	<1	<1	<1	<1	<1	<1
	26-Mar-97	962.02	<1	<1	<1	<1	<1	<1	<1	<1
	27-May-97	962.64	<1	<1	<1	<1	<1	<1	<1	<1
	18-Sep-97	963.42	<1	<1	<1	<1	<1	<1	<1	<1

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	22-Dec-97	964.58	<1	<1	<1	<1	<1	<1	<1	<1
	24-Mar-98	965.78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	4-Jun-98	966.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11-Aug-98	967.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	16-Nov-98	968.26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-Feb-99	969.96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	27-May-99	970.61	<1	<1	<1	<1	<1	<1	<1	<1
	26-Aug-99	971.39	<1	<1	<2	<1	<1	<1	<1	<1
	1-Dec-99	NM	NA	NA	NA	NA	NA	NA	NA	NA
	14-Mar-00	971.29	<1	<1	<2	<1	<1	<1	<1	<1
	10-May-00	972.60	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	8-Aug-00	972.22	<1	<1	<2	<1	<1	<1	<1	<1
	16-Oct-00	971.78	<1	<1	<2	<1	<1	<1	<1	<1
	12-Apr-01	973.03	<1	<1	<2	<1	<1	<1	<1	<1
	8-Oct-01	972.23	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
	24-Jun-02	972.93	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
	14-Nov-02	971.42	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	6-May-03	972.63	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	6-Nov-03	971.28	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	10-Nov-04	969.10	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	21-Dec-05	973.44	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0
	29-Nov-06	974.85	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	19-Oct-07	974.82	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3
	3-Nov-08	976.86	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6
	30-Oct-09	978.02	0.99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1
	17-Oct-10	980.77	NS	NS	NS	NS	NS	NS	NS	NS
	15-Nov-10	NM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	19-Oct-11	982.62	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.6
	22-Oct-12	982.02	5.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.3
	10-Nov-13	980.37	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3
	20-Oct-14	978.87	0.54	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	11-Nov-15	979.05	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	28-Sep-16	979.98	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5 J
	16-Oct-17	983.27	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.3
	22-Oct-18	983.29	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8
	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
	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
	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
	29-Dec-21	NM	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.5
	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-5	12-Aug-94	942.09	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	1-Dec-94	942.93	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	1.8
	15-Jun-95	946.00	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	**7.8**
	22-Jan-96	946.97	2	<1	<1	<1	<1	<1	<1	**11**
	17-Jun-96	948.93	**48**	2	1	<1	<1	<1	<1	**15**
	19-Dec-96	949.56	**30**	2	<1	<1	<1	<1	<1	**10**
	27-Mar-97	950.83	**60**	2	<1	<1	<1	<1	<1	**24**
	28-May-97	951.50	**57**	5	3	4	1	<1	<1	<1
	18-Sep-97	952.22	**43**	2	<1	1	<1	<1	<1	**15**
	22-Dec-97	951.78	**44**	2.3	<1	1.0	<1	<1	<1	**15**
	24-Mar-98	954.32	**11**	4.8	3.33	2.9	1.1	<0.5	<0.5	**36**
	4-Jun-98	953.66	**20.6**	3.5	2.1	1.9	0.8	<0.5	<0.5	**31.3**
	12-Aug-98	954.13	**41.2**	3.4	2.3	1.8	0.8	<0.5	<0.5	**29.2**
	16-Nov-98	955.06	**75.6**	3.8	1.5	1.4	<0.5	<0.5	<0.5	**34.6**
	25-Feb-99	956.44	**76.2**	2	<1	<1	<1	<1	<1	**24.8**
	27-May-99	956.97	**58.2**	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	**26.1**
	26-Aug-99	957.39	**89.3**	3.4	<1	<0.5	<0.5	<0.5	<0.5	**24.8**
	1-Dec-99	957.96	NA	NA	NA	NA	NA	NA	NA	NA
	14-Mar-00	958.71	**138**	6.6	1	2.9	<1	<1	<1	**34.6**
	10-May-00	959.54	**37**	6.2	1.4	1.4	0.7	<0.5	<0.5	**29.9**
	8-Aug-00	959.38	**112**	9.6	1.5	1.8	<1	<1	<1	**37.1**
	17-Oct-00	959.38	**170**	7.6	<2	1.4	<1	<1	<1	**37.2**

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	12-Apr-01	961.50	**149**	6.3	<2	1.6	<1	<1	<1	**33.9**
	8-Oct-01	960.30	**68**	5.6	1.3	1.7	<1.0	<1.0	<1.0	**27.5**
	24-Jun-02	961.30	**77.4**	2.2	<2.0	<1.0	<1.0	<1.0	<1.0	**16.6**
	13-Nov-02	960.25	**42**	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**10.0**
	5-May-03	961.66	**13**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**8.5**
	5-Nov-03	961.28	**26**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**6.7**
	13-Jul-04	961.25	1.2	1.5	<0.15	0.6	<0.14	<0.14	<0.14	**7.2**
	10-Nov-04	960.81	**25**	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	**5.6**
	21-Nov-05	963.55	**9.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7
	29-Nov-06	964.89	**9.3**	0.52	<0.50	<0.50	<0.50	<0.50	<0.50	1.6
	19-Oct-07	965.39	**8.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3
	3-Nov-08	966.90	**38**	2.2	<0.50	0.81	<0.50	<0.50	<0.50	**9.5**
	29-Oct-09	967.81	**28**	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	4.9
	17-Oct-10	970.87	NS	NS	NS	NS	NS	NS	NS	NS
	15-Nov-10	NM	**13**	0.56	<0.50	<0.50	<0.50	<0.50	<0.50	2.4
	19-Oct-11	972.67	**15**	0.73	<0.50	<0.50	<0.50	<0.50	<0.50	3.3
	22-Oct-12	973.69	**14**	0.67	<0.5	<0.5	<0.5	<0.5	<0.5	2.8
	10-Nov-13	972.21	**10**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2
	20-Oct-14	971.51	**9.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7
	11-Nov-15	971.71	**9.4**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.9
	28-Sep-16	972.43	**13**	0.5 J	<0.5	0.2 J	<0.5	<0.5	<0.5	3.5
	28-Sep-16	972.43	**15**	0.5	0.1 J	0.2 J	<0.5	<0.5	<0.5	4.4
	28-Sep-16	972.43	**13**	0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	3.9
	28-Sep-16	972.43	**12**	0.5 J	<0.5	0.2 J	<0.5	<0.5	<0.5	3.7
	16-Oct-17	975.07	**12**	0.5 J	<0.5	0.2 J	<0.5	<0.5	<0.5	4.3
	22-Oct-18	974.75	**12**	0.4 J	<0.5	<0.5	<0.5	<0.5	<0.5	4.3
	7-Nov-19	974.54	**16**	0.3 J	<0.5	<2.0	<0.5	<0.5	<0.5	**15**
	12-Nov-20	975.43	**9.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**9.4**
	26-Oct-21	976.25	6.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.0
	12-Oct-22	977.76	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.2**
MW-6	28-Jun-94	941.87	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	1-Dec-94	942.33	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	3-Aug-95	945.39	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	11-Dec-95	945.53	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	17-Jun-96	947.93	<1	<1	<1	<1	<1	<1	<1	<1
	19-Dec-96	948.22	<1	<1	<1	<1	<1	<1	<1	<1
	26-Mar-97	949.90	<1	<1	<1	<1	<1	<1	<1	<1
	27-May-97	950.61	<1	<1	<1	<1	<1	<1	<1	<1
	18-Sep-97	950.84	<1	<1	<1	<1	<1	<1	<1	<1
	22-Dec-97	951.68	<1	<1	<1	<1	<1	<1	<1	<1
	24-Mar-98	953.36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	4-Jun-98	952.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12-Aug-98	954.76	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	17-Nov-98	955.44	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-Feb-99	957.32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	27-May-99	958.04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	27-Aug-99	958.23	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	1-Dec-99	958.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3-Feb-00	959.20	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	10-May-00	960.80	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	17-Oct-00	959.65	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
	12-Apr-01	961.81	<1	<1	<2	<1	<1	<1	<1	<1
	8-Oct-01	960.71	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
	24-Jun-02	961.90	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
	13-Nov-02	960.34	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	5-May-03	962.72	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	5-Nov-03	960.88	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	9-Nov-04	960.27	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	1-Nov-05	963.04	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	29-Nov-06	965.06	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	22-Oct-07	966.11	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	4-Nov-08	967.85	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	2-Nov-09	968.56	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	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
	19-Oct-11	974.96	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	22-Oct-12	974.75	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	10-Nov-13	973.44	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	20-Oct-14	972.59	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11-Nov-15	973.17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	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
	16-Oct-17	977.09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	22-Oct-18	976.20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	7-Nov-19	976.09	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	0.2 J	<0.5
	11-Nov-20	977.39	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	26-Oct-21	978.26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12-Oct-22	979.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	27-Jun-94	951.01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	25-Jan-95	951.77	<2	<2	<2	<8	<2	<2	<2	<2
	15-Jun-95	955.19	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	11-Dec-95	955.95	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	17-Jun-96	957.83	<1	<1	<1	<1	<1	<1	<1	<1
	19-Dec-96	959.10	<1	<1	<1	<1	<1	<1	<1	<1
	26-Mar-97	960.04	<1	<1	<1	<1	<1	<1	<1	<1
	27-May-97	960.80	<1	<1	<1	<1	<1	<1	<1	<1
	18-Sep-97	961.62	<1	<1	<1	<1	<1	<1	<1	<1
	22-Dec-97	962.86	<1	<1	<1	<1	<1	<1	<1	<1
	24-Mar-98	963.86	<0.5	<0.5	<0.5	0.57	<0.5	<0.5	<0.5	<0.5
	4-Jun-98	964.43	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5
	11-Aug-98	965.72	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5
	16-Nov-98	966.38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-Feb-99	967.86	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	27-May-99	968.32	<1	<1	<1	<1	<1	<1	<1	<1
	26-Aug-99	969.41	<1	<1	<2	<1	<1	<1	<1	<1

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	1-Dec-99	969.74	<1	<1	<1	<1	<1	<1	<1	<1
	3-Feb-00	970.01	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	10-May-00	970.94	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	8-Aug-00	970.84	<1	<1	<2	<1	<1	<1	<1	<1
	12-Apr-01	971.14	<1	<1	<2	<1	<1	<1	<1	<1
	8-Oct-01	970.92	<0.5	<0.5	<1.0	0.5	<0.5	<0.5	<0.5	<0.5
	24-Jun-02	971.35	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12-Nov-02	970.50	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	5-May-03	970.96	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	5-Nov-03	970.25	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	9-Nov-04	968.78	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	1-Nov-05	970.48	<0.50	<0.50	<0.50	0.72	<0.50	<0.50	<0.50	<0.50
	29-Nov-06	971.84	NA	NA	NA	NA	NA	NA	NA	NA
	15-Nov-07	971.81	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3-Nov-08	973.28	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	29-Oct-09	974.24	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.71
	17-Oct-10	976.44	NS	NS	NS	NS	NS	NS	NS	NS
	15-Nov-10	NM	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2
	19-Oct-11	978.03	1.4	0.5	0.5	0.5	0.5	0.5	0.5	1.7
	22-Oct-12	978.21	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.4
	10-Nov-13	977.41	3.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.2
	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**
	11-Nov-15	976.16	**12**	0.71	<0.50	<0.50	<0.50	<0.50	<0.50	**15**
	28-Sep-16	976.81	**18**	0.7	<0.5	0.4 J	<0.5	<0.5	<0.5	**17**
	28-Sep-16	976.81	**13**	0.5 J	<0.5	0.4 J	<0.5	<0.5	<0.5	**14**
	28-Sep-16	976.81	**12**	0.5	<0.5	0.4 J	<0.5	<0.5	<0.5	**13**
	28-Sep-16	976.81	**12**	0.4 J	<0.5	0.4 J	<0.5	<0.5	<0.5	**13**
	16-Oct-17	979.61	**9.8**	0.2 J	<0.5	0.3 J	<0.5	<0.5	<0.5	**10**
	6-Feb-18	NM	**8.6**	0.1 J	<0.5	0.3 J	<0.5	<0.5	<0.5	**9.7**
	26-Sep-18	979.93	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**10**
	19-Nov-19	980.40	5	<0.5	<0.5	0.4 J	<0.5	<0.5	<0.5	4.5

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	21-Apr-20	980.96	4.3	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	4.0
	11-Nov-20	981.18	3.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.5
	26-Apr-21	NM	4.0	<0.5	NA	<0.5	NA	NA	NA	3.0
	26-Oct-21	981.50	2.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.6
	12-May-22	982.00	2.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4
	12-Oct-22	982.60	1.7	<0.5	<0.5	0.59	<0.5	<0.5	<0.5	1.0
MW-8	29-Jun-94	963.51	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	1-Dec-94	962.69	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	15-Jun-95	962.69	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	11-Dec-95	969.15	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	17-Jun-96	968.99	<1	<1	<1	<1	<1	<1	<1	<1
	18-Dec-96	970.67	<1	<1	<1	<1	<1	<1	<1	<1
	26-Mar-97	971.12	<1	<1	<1	<1	<1	<1	<1	<1
	27-May-97	972.51	<1	<1	<1	<1	<1	<1	<1	<1
	18-Sep-97	973.36	<1	<1	<1	<1	<1	<1	<1	<1
	22-Dec-97	974.41	<1	<1	<1	<1	<1	<1	<1	<1
	24-Mar-98	975.91	NA	NA	NA	NA	NA	NA	NA	NA
	4-Jun-98	976.97	NA	NA	NA	NA	NA	NA	NA	NA
	11-Aug-98	977.95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6
	16-Nov-98	978.80	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-Feb-99	988.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	28-May-99	981.04	NA	NA	NA	NA	NA	NA	NA	NA
	27-Aug-99	982.19	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	1-Dec-99	982.27	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3-Feb-00	982.74	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	0.7
	10-May-00	982.74	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	0.7
	8-Aug-00	983.33	<1	<1	<2	<1	<1	<1	<1	<1
	17-Oct-00	983.33	<1	<1	<2	<1	<1	<1	<1	<1
	12-Apr-01	982.77	<1	<1	<2	<1	<1	<1	<1	<1
	8-Oct-01	982.11	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	2.4
	24-Jun-02	981.96	0.9	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.9

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	12-Nov-02	980.24	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	5-May-03	980.86	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	5-Nov-03	978.46	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	9-Nov-04	975.66	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	1-Nov-05	978.52	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.92
	29-Nov-06	981.27	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.61
	22-Oct-07	980.82	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.55
	3-Nov-08	983.02	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	30-Oct-09	984.15	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.52
	30-Oct-10	986.44	NS	NS	NS	NS	NS	NS	NS	NS
	19-Oct-11	987.77	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.78
	22-Oct-12	987.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	10-Nov-13	986.64	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	20-Oct-14	981.74	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11-Nov-15	982.61	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	28-Sep-16	983.57	0.2 J	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	0.3 J
	16-Oct-17	988.02	0.2 J	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	0.2 J
	22-Oct-18	987.84	0.2 J	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	0.1 J
	7-Nov-19	988.55	0.2 J	<0.5	<0.5	0.4 J	<0.5	<0.5	<0.5	0.2 J
	11-Nov-20	988.91	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	26-Oct-21	989.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12-Oct-22	990.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	27-Jun-94	958.04	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	1-Dec-94	957.30	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	3-Aug-95	964.14	<0.5	<0.5	NA	<2	<0.5	<0.5	<0.5	<0.5
	11-Dec-95	964.39	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5
	17-Jun-96	965.94	<1	<1	<1	<1	<1	<1	<1	<1
	19-Dec-96	966.71	<1	<1	<1	<1	<1	<1	<1	<1
	26-Mar-97	967.77	<1	<1	<1	<1	<1	<1	<1	<1
	27-May-97	968.71	<1	<1	<1	<1	<1	<1	<1	<1
	18-Sep-97	969.76	<1	<1	<1	<1	<1	<1	<1	<1

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	22-Dec-97	970.83	<1	<1	<1	<1	<1	<1	<1	<1
	24-Mar-98	971.99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	4-Jun-98	972.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11-Aug-98	973.99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	16-Nov-98	974.97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-Feb-99	976.67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	27-May-99	977.33	<1	<1	<1	<1	<1	<1	<1	<1
	26-Aug-99	978.50	<1	<1	<2	<1	<1	<1	<1	<1
	1-Dec-99	978.78	<1	<1	<1	<1	<1	<1	<1	<1
	3-Feb-00	979.25	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	10-May-00	978.78	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	8-Aug-00	979.36	<1	<1	<2	<1	<1	<1	<1	<1
	12-Apr-01	978.98	<1	<1	<2	<1	<1	<1	<1	<1
	8-Oct-01	975.38	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
	24-Jun-02	978.51	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
	14-Nov-02	977.20	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	5-May-03	977.43	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	6-Nov-03	976.31	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	9-Nov-04	973.55	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	1-Nov-05	975.53	0.83	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	29-Nov-06	977.78	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	22-Oct-07	977.73	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.9
	3-Nov-08	979.59	0.85	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4
	29-Oct-09	980.60	NS	NS	NS	NS	NS	NS	NS	NS
	23-Nov-10	982.64	NS	NS	NS	NS	NS	NS	NS	NS
	27-Dec-10	NM	0.82	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	19-Oct-11	983.83	0.59	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.53
	22-Oct-12	982.88	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.62
	10-Nov-13	981.47	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5
	20-Oct-14	979.97	3.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.6
	11-Nov-15	980.02	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.8

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	28-Sep-16	980.89	3.9	<0.5	<0.5	0.2 J	<0.5	<0.5	<0.5	1.8
	16-Oct-17	984.09	2.8	<0.5	<0.5	0.3 J	<0.5	<0.5	<0.5	1.9
	22-Oct-18	984.53	2.7	<0.5	<0.5	0.3 J	<0.5	<0.5	<0.5	1.3
	7-Nov-19	985.10	2.2	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	1
	12-Nov-20	985.89	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	26-Oct-21	986.15	0.81	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12-Oct-22	987.25	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	30-May-97	948.39	**17**	2.9	<1	<1	<1	<1	<1	**6.7**
	23-Dec-97	934.11	**16**	<1	<1	<1	<1	<1	<1	4.8
	1-Apr-98	951.30	**22.6**	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	**7.8**
	5-Jun-98	936.39	**21.3**	1.4	<0.5	0.7	<0.5	<0.5	<0.5	**8.2**
	13-Aug-98	932.83	**33.5**	2	0.6	0.8	<0.5	<0.5	<0.5	**10.6**
	17-Nov-98	938.15	**48.4**	2	<0.5	<0.5	<0.5	<0.5	<0.5	**12.8**
	25-Feb-99	938.57	**41.4**	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	**10.2**
	28-May-99	939.58	**48**	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	**12.9**
	27-Aug-99	941.04	**56**	2.4	<1	<0.5	<0.5	<0.5	<0.5	**13.9**
	1-Dec-99	NM	**46.6**	3.1	<0.5	0.5	<0.5	<0.5	<0.5	**16.4**
	4-Feb-00	944.45	**62.3**	2.6	<1	<0.5	<0.5	<0.5	<0.5	**14.6**
	10-May-00	944.14	**45.7**	2.5	<1	<0.5	<0.5	<0.5	<0.5	**15.1**
	8-Aug-00	944.50	**51.3**	3.3	<1	<0.5	<0.5	<0.5	<0.5	**13.1**
	16-Oct-00	944.15	**60.6**	1.7	<2	<1	<1	<1	<1	**14.1**
	12-Apr-01	940.48	**37.3**	2.0	<1	<0.5	<0.5	<0.5	<0.5	**11.9**
	9-Oct-01	941.82	**32.2**	2.0	<2.0	<1.0	<1.0	<1.0	<1.0	**12.2**
	24-Jun-02	947.00	**50.5**	1.2	<2.0	<1.0	<1.0	<1.0	<1.0	**11.8**
	12-Nov-02	940.34	**30**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**8.7**
	5-May-03	940.73	**31**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**8.6**
	5-Nov-03	941.52	**29**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**6.4**
	10-Nov-04	NM	**23**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**6.8**
	5-Oct-05	939.20	**26**	1.0	<0.50	<0.50	<0.50	<0.50	**6.8**	<0.50
	3-Oct-06	946.01	NA	NA	NA	3	NA	NA	NA	NA
	22-Oct-07	943.00	**27**	1.6	0.55	0.72	<0.50	<0.50	<0.50	**8**

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	3-Nov-08	NM	**23**	1.2	<0.50	0.55	<0.50	<0.50	<0.50	**7**
	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**
	3-Nov-10	947.57	**25**	1.5	<0.50	<0.63	<0.50	<0.50	<0.50	**8.0**
	19-Oct-11	NM	**16**	1.2	NM	<0.50	NM	NM	NM	**8.9**
	1-Oct-12	939.1	**27**	1.3	<0.50	0.57	<0.50	<0.50	<0.50	**7.5**
	10-Nov-13	956.30	**22**	1.1	<0.50	0.67	<0.50	<0.50	<0.50	**6.8**
	20-Oct-14	955.70	**28J**	1.4J	<0.50J	0.59J	<0.50J	<0.50J	<0.50J	**6.9J**
	11-Nov-15	956.2	**26**	1.2	<0.50	0.51	<0.50	<0.50	<0.50	**6.5**
	28-Sep-16	956.33	**32**	1.2	0.3 J	0.6	<0.5 J	0.2 J	<0.5 J	**6.6**
	16-Oct-17	965.07	**28**	1.3	0.3 J	0.6	<0.5	0.1 J	<0.5	**6.6**
	23-Oct-18	964.85	**24**	0.9	0.2 J	<0.5	<0.5	<0.5	<0.5	4.8
	7-Nov-19	958.49	**26**	1.1	0.2 J	0.7	<0.5	<0.5	<0.5	**6.4**
	12-Nov-20	959.27	**17**	0.64	<0.5	<0.5	<0.5	<0.5	<0.5	4.6
	26-Oct-21	959.58	**11**	0.51	<0.5	<0.5	<0.5	<0.5	<0.5	3.5
	12-Oct-22	962.11	**18**	0.61	<0.5	<0.5	<0.5	<0.5	<0.5	4.3
MW-12	26-Dec-17	978.34	0.3 J	<0.5	<0.5	<1.8	<0.5	<0.5	<0.5	<0.5
	22-Oct-18	978.12	0.5	<0.5	<0.5	3.8	<0.5	<0.5	<0.5	<0.5
	7-Nov-19	978.23	0.6	<0.5	<0.5	4.8	<0.5	<0.5	<0.5	0.2 J
	21-Apr-20	979.42	0.7	<0.5	<0.5	4.9	<0.5	<0.5	<0.5	0.3 J
	11-Nov-20	978.67	0.67	<0.5	<0.5	4	<0.5	<0.5	<0.5	<0.5
	26-Apr-21	NM	1.0	<0.5	NA	4.5	NA	NA	NA	0.50
	26-Oct-21	979.35	1.1	<0.5	<0.5	4	<0.5	<0.5	<0.5	0.74
	12-May-22	980.05	2.9	<1.0	<1.0	4.8	<1.0	<1.0	<1.0	1.3
	12-Oct-22	980.57	3.5	<0.5	<0.5	4.6	<0.5	<0.5	<0.5	1.6
MW-13	7-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12-Feb-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	0.59	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	18-Apr-19	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	30-Sep-19	NM	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5
	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
	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
	11-Nov-20	972.81	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	26-Apr-21	NM	<0.5	<0.5	NA	0.80	NA	NA	NA	<0.5
	26-Oct-21	973.47	<0.5	<0.5	<0.5	0.65	<0.5	<0.5	<0.5	<0.5
	12-May-22	974.24	<1.0	<1.0	<1.0	1.50	<1.0	<1.0	<1.0	<1.0
	12-Oct-22	975.35	<0.5	<0.5	<0.5	1.3	<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
	23-Oct-18	NM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	23-Oct-18	NM	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	23-Oct-18	NM	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	23-Oct-18	NM	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	23-Oct-18	NM	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	23-Oct-18	NM	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	23-Oct-18	NM	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	23-Oct-18	NM	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	23-Oct-18	NM	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2 J
	4-Feb-19	NM	1.2	<0.5	<0.5	0.4 J	<0.5	<0.5	<0.5	0.2 J
	23-Apr-19	NM	1.1	<0.5	<0.5	0.3 J	<0.5	<0.5	<0.5	0.2 J
	30-Sep-19	NM	2.1	0.1 J	<0.5	<0.5	<0.5	<0.5	<0.5	0.4 J
	7-Nov-19	966.33	<0.5	<0.5	<0.5	<0.8	<0.5	<0.5	<0.5	<0.5
	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

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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-14 (Cont)	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
	26-Apr-21	NM	<0.5	<0.5	NA	<0.50	NA	NA	NA	<0.5
	26-Oct-21	968.59	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.58
	12-May-22	970.04	3.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12-Oct-22	970.70	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EW-1	29-Nov-99	953.55	**35.9**	2.6	<1	<1	<1	<1	<1	**13.8**
	3-Feb-00	880.51	**162**	14	3.2	2.6	<1	0.7	<1	**32.8**
	10-May-00	875.50	**144**	13.9	3.2	2.6	1.7	0.6	<0.5	**30.6**
	8-Aug-00	893.17	**164**	19.9	5.2	2.9	1.7	1	<0.5	**35.1**
	16-Oct-00	900.12	**223**	14.2	3	2.7	1.4	0.6	<0.5	**34.1**
	12-Apr-01	908.88	**152**	15.5	4.6	3.6	1.9	0.6	<0.5	**36.5**
	9-Oct-01	900.21	**133**	15.2	4.6	3.2	1.9	1.1	<1.0	**44.1**
	24-Jun-02	975.57[a]	**66**	6.7	<2.0	<1.0	<1.0	<1.0	<1.0	**15.8**
	14-Nov-02	973.84[a]	**83.0**	<20	<20	<20	<20	<20	<20	**21**
	6-May-03	974.83[a]	**160.0**	11.0	<20	2.9	<20	<20	<20	**23**
	13-Nov-03	975.84[a]	<5.0	16.0	<2.0	3.6	<2.0	<2.0	<2.0	**9.0**
	10-Nov-04	929.08	<5.0	8.1	<2.0	<2.0	<2.0	<2.0	<2.0	**9.0**
	10-Oct-05	NM	**31.0**	15.0	<0.50	3.6	1.9	0.67	<0.50	**23**
	3-Oct-06	945.58	NA	NA	NA	0.57	NA	NA	NA	NA
	22-Oct-07	946.38	**140.0**	17.0	1.5	5	2.5	0.89	<0.50	**33.0**
	3-Nov-08	943.43	**120**	12	1.4	3.7	1.7	1	<0.50	**31**
	29-Oct-09	956.38	**170**	14	1.3	3.4	2.1	0.98	<0.50	**33**
	3-Nov-10	958.04	**110**	13	1.3	<3.2	1.8	0.95	<0.50	**30**
	17-Oct-11	961.58	**92**	11	NM	2.4	NM	NM	NM	**32**
	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**
	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**
	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**
	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**
	28-Sep-16	952.95	**83**	7.1	0.8 J	1.6	1.0	0.7 J	<0.8	**21**
	23-Oct-18	985.79	**110**	9.9	1.0 J	<2.2	1.0 J	0.7 J	<1.0	**23**
	12-Nov-19	983.42	NS	NS	NS	NS	NS	NS	NS	NS

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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 (Cont)	12-Nov-20	954.45	**54**	4.8	<0.5	<0.5	<0.5	<0.5	<0.5	**16**
	26-Oct-21	954.07	**41**	3.2	<0.5	0.95	<0.5	<0.5	<0.5	**12**
	12-Oct-22	950.4	**61**	4.4	<0.5	1.1	0.51	<0.5	<0.5	**15**
EW-2	1-Dec-99	903.95	**8.2**	<1	<1	<1	<1	<1	<1	3.9
	4-Feb-00	897.94	**24.3**	0.5	<1	<0.5	<0.5	<0.5	<0.5	**7.7**
	11-May-00	901.35	**7.0**	0.5	<1	<0.5	<0.5	<0.5	<0.5	1.2
	8-Aug-00	917.95	**149**	8.3	3	<0.5	<0.5	<0.5	<0.5	**37**
	16-Oct-00	910.05	**71.5**	1.5	<1	<0.5	<0.5	<0.5	<0.5	**16.4**
	12-Apr-01	913.20	**47.3**	2.2	<1	0.7	<0.5	<0.5	<0.5	**19**
	9-Oct-01	914.24	**34.6**	2.5	<2.0	<1.0	<1.0	<1.0	<1.0	**19.8**
	24-Jun-02	918.31	**70.8**	1.8	<2.0	<1.0	<1.0	<1.0	<1.0	**20.9**
	13-Nov-02	921.60	**63**	3	<2.0	<2.0	<2.0	<2.0	<2.0	**18**
	5-May-03	931.36	**67**	3.1	<2.0	<2.0	<2.0	<2.0	<2.0	**18**
	5-Nov-03	965.61[a]	NA	NA	NA	NA	NA	NA	NA	NA
	9-Nov-03	964.58	NA	NA	NA	NA	NA	NA	NA	NA
	5-Oct-05	966.95[a]	NA	NA	NA	NA	NA	NA	NA	NA
	16-Oct-06	968.45[a]	NA	NA	NA	NA	NA	NA	NA	NA
	22-Oct-07	969.09[a]	NA	NA	NA	NA	NA	NA	NA	NA
	3-Nov-08	970.82[a]	NA	NA	NA	NA	NA	NA	NA	NA
	29-Oct-09	971.75[a]	NA	NA	NA	NA	NA	NA	NA	NA
	3-Nov-10	NM	NA	NA	NA	NA	NA	NA	NA	NA
	19-Oct-11	975.95	**20**	0.75	<0.5	<0.5	<0.5	<0.5	<0.5	4.4
	22-Oct-12	976.54	**16**	0.63	<0.5	<0.5	<0.5	<0.5	<0.5	4.3
	10-Nov-13	976.35	**17**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.4**
	20-Oct-14	974.45	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.2**
	11-Nov-15	974.55	**10**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5.7**
	18-Oct-16	975.17	**19**	0.4 J	<0.5	0.2 J	<0.5	<0.5	<0.5	**11**
	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**
	22-Oct-18	978.14	**24**	0.3 J	<0.5	0.2 J	<0.5	<0.5	<0.5	**17**
	19-Nov-19	978.48	**24**	0.3 J	<0.5	0.3 J	<0.5	<0.5	<0.5	**25**
	11-Nov-20	978.90	**20**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**30**

Appendix B. Historical Groundwater Elevations and Analytical Results

Honeywell Peoria Avenue Site, Phoenix, Arizona

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)	2-Nov-21	979.40	**25**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**33**
	13-Oct-22	980.88	NM	NM	NM	NM	NM	NM	NM	NM
	12-Oct-22	NM	**25**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**28**

[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 C
Laboratory Analytical Results for Monitoring Wells—2022

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 550-178413-1
Laboratory Sample Delivery Group: Quarterly
Client Project/Site: IAC, Peoria

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
2/14/2022 5:08:53 PM
Emily Petrunia, Project Manager I
(602)659-7629
emily.petrunia@eurofinset.com

Designee for

Rachel Sester, Project Manager I
(602)659-7615
Rachel.Sester@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Qualifiers

GC/MS VOA

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

Metals

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

General Chemistry

Qualifier	Qualifier Description
K5	The dilution water D.O. depletion was > 0.2 mg/L.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
R8	Sample RPD exceeded the method acceptance limit.

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: 550-178413-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-178413-1

Comments
No additional comments.

Receipt
The samples were received on 2/3/2022 11:46 AM. 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 0.4º 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
Methods SM 4500 CN E, SM 4500 CN G: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 550-265687 and analytical batch 550-265825 were outside control limits for Cyanide. Sample matrix interference was suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 5210B: The method blank (MB) result associated with batch 550-265552 was higher than the method-required limit of 0.2 mg/L for Biochemical Oxygen Demand (BOD). As such, the results have been reported and qualified with K5 flags.

Method SM 5210B: The sample duplicate (DU) precision for analytical batch 550-265552 was outside control limits for BOD. Sample non-homogeneity was suspected.

No additional analytical or quality issues were noted, other than those described above or 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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-178413-1	MW-10-22Q1	Water	02/03/22 09:10	02/03/22 11:46
550-178413-2	MW-10-22Q1-comp	Water	02/03/22 09:08	02/03/22 11:46
550-178413-3	EW-1-22Q1	Water	02/03/22 09:57	02/03/22 11:46
550-178413-4	EW-1-22Q1-comp	Water	02/03/22 09:55	02/03/22 11:46
550-178413-5	TB-22Q1	Water	02/03/22 08:00	02/03/22 11:46

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1 — Lab Sample ID: 550-178413-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.64		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	16	R6	0.50		ug/L	1		624.1	Total/NA
Trichloroethene	6.2		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-22Q1-comp — Lab Sample ID: 550-178413-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Copper	0.14		0.010		mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: EW-1-22Q1 — Lab Sample ID: 550-178413-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.3		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	52	R6	0.50		ug/L	1		624.1	Total/NA
Chloroform	1.3	R6	0.50		ug/L	1		624.1	Total/NA
Trichloroethene	17		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q1-comp — Lab Sample ID: 550-178413-4

No Detections.

Client Sample ID: TB-22Q1 — Lab Sample ID: 550-178413-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1

Lab Sample ID: 550-178413-1

Date Collected: 02/03/22 09:10
Date Received: 02/03/22 11:46

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.64**		0.50		ug/L			02/04/22 17:38	1
1,1-Dichloroethene	**16**	**R6**	0.50		ug/L			02/04/22 17:38	1
Benzene	ND		0.50		ug/L			02/04/22 17:38	1
Chloroform	ND	R6	0.50		ug/L			02/04/22 17:38	1
Trichloroethene	**6.2**		0.50		ug/L			02/04/22 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*60 - 140*		*02/04/22 17:38*	*1*
Toluene-d8 (Surr)	*119*		*60 - 140*		*02/04/22 17:38*	*1*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*		*02/04/22 17:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		02/07/22 14:15	02/07/22 15:30	1

Client Sample ID: MW-10-22Q1-comp

Lab Sample ID: 550-178413-2

Date Collected: 02/03/22 09:08
Date Received: 02/03/22 11:46

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		02/03/22 20:00	02/04/22 18:12	1
Cadmium	ND		0.0010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Lead	ND		0.015		mg/L		02/03/22 20:00	02/04/22 18:12	1
Selenium	ND		0.10		mg/L		02/03/22 20:00	02/04/22 18:12	1
Silver	ND		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Copper	**0.14**		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Molybdenum	ND		0.010		mg/L		02/03/22 20:00	02/04/22 18:12	1
Zinc	ND		0.050		mg/L		02/03/22 20:00	02/04/22 18:12	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/07/22 16:02	02/07/22 21:19	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			02/08/22 14:15	1
Biochemical Oxygen Demand	ND	K5	5.0		mg/L			02/04/22 14:00	1

Client Sample ID: EW-1-22Q1

Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57
Date Received: 02/03/22 11:46

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**5.3**		0.50		ug/L			02/04/22 18:05	1
1,1-Dichloroethene	**52**	**R6**	0.50		ug/L			02/04/22 18:05	1
Benzene	ND		0.50		ug/L			02/04/22 18:05	1
Chloroform	**1.3**	**R6**	0.50		ug/L			02/04/22 18:05	1
Trichloroethene	**17**		0.50		ug/L			02/04/22 18:05	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: EW-1-22Q1

Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57
Matrix: Water
Date Received: 02/03/22 11:46

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*60 - 140*		*02/04/22 18:05*	*1*
Toluene-d8 (Surr)	*97*		*60 - 140*		*02/04/22 18:05*	*1*
4-Bromofluorobenzene (Surr)	*106*		*60 - 140*		*02/04/22 18:05*	*1*

Client Sample ID: EW-1-22Q1-comp

Lab Sample ID: 550-178413-4

Date Collected: 02/03/22 09:55
Matrix: Water
Date Received: 02/03/22 11:46

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	mg/L		02/07/22 08:44	02/08/22 17:39	1
Lead	ND		0.015	mg/L		02/07/22 08:44	02/08/22 17:39	1
Copper	ND		0.010	mg/L		02/07/22 08:44	02/08/22 17:39	1
Zinc	ND		0.050	mg/L		02/07/22 08:44	02/08/22 17:39	1

Client Sample ID: TB-22Q1

Lab Sample ID: 550-178413-5

Date Collected: 02/03/22 08:00
Matrix: Water
Date Received: 02/03/22 11:46

Method: 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			02/04/22 13:43	1
1,1-Dichloroethene	ND	R6	0.50	ug/L			02/04/22 13:43	1
Benzene	ND		0.50	ug/L			02/04/22 13:43	1
Chloroform	ND	R6	0.50	ug/L			02/04/22 13:43	1
Trichloroethene	ND		0.50	ug/L			02/04/22 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*02/04/22 13:43*	*1*
Toluene-d8 (Surr)	*77*		*60 - 140*		*02/04/22 13:43*	*1*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*02/04/22 13:43*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DBFM	TOL	BFB					
Lab Sample ID	**Client Sample ID**	**(60-140)**	**(60-140)**	**(60-140)**					
550-178413-1	MW-10-22Q1	95	119	105					
550-178413-3	EW-1-22Q1	111	97	106					
550-178413-5	TB-22Q1	98	77	96					
550-178429-A-2 MS	Matrix Spike	114	96	114					
550-178429-A-2 MSD	Matrix Spike Duplicate	107	104	95					
LCS 550-265486/1002	Lab Control Sample	105	81	76					
LCSD 550-265486/4	Lab Control Sample Dup	93	95	113					
MB 550-265486/5	Method Blank	97	80	114					

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Lab Sample ID: MB 550-265486/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.50		ug/L			02/04/22 12:03	1
1,1-Dichloroethene	ND		0.50		ug/L			02/04/22 12:03	1
Benzene	ND		0.50		ug/L			02/04/22 12:03	1
Chloroform	ND		0.50		ug/L			02/04/22 12:03	1
Trichloroethene	ND		0.50		ug/L			02/04/22 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*02/04/22 12:03*	*1*
Toluene-d8 (Surr)	*80*		*60 - 140*		*02/04/22 12:03*	*1*
4-Bromofluorobenzene (Surr)	*114*		*60 - 140*		*02/04/22 12:03*	*1*

Lab Sample ID: LCS 550-265486/1002 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethane			50.0	55.5		ug/L		111	70 - 150		
1,1-Dichloroethene			50.0	68.4		ug/L		137	50 - 140		
Benzene			50.0	44.0		ug/L		88	65 - 135		
Chloroform			50.0	56.7		ug/L		113	70 - 135		
Trichloroethene			50.0	51.5		ug/L		103	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*81*		*60 - 140*
4-Bromofluorobenzene (Surr)	*76*		*60 - 140*

Lab Sample ID: LCSD 550-265486/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane			50.0	52.7		ug/L		105	70 - 150	5	20
1,1-Dichloroethene			50.0	50.1	R6	ug/L		100	50 - 140	31	20
Benzene			50.0	47.0		ug/L		94	65 - 135	7	20
Chloroform			50.0	46.1	R6	ug/L		92	70 - 135	21	20
Trichloroethene			50.0	57.0		ug/L		114	65 - 135	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*95*		*60 - 140*
4-Bromofluorobenzene (Surr)	*113*		*60 - 140*

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

Lab Sample ID: 550-178429-A-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		50.0	62.7		ug/L		125	59 - 155
1,1-Dichloroethene	ND		50.0	64.2		ug/L		128	10 - 234
Benzene	ND		50.0	48.4		ug/L		97	35 - 151
Chloroform	0.56		50.0	58.3		ug/L		116	51 - 138
Trichloroethene	ND		50.0	58.2		ug/L		116	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*114*		*60 - 140*
Toluene-d8 (Surr)	*96*		*60 - 140*
4-Bromofluorobenzene (Surr)	*114*		*60 - 140*

Lab Sample ID: 550-178429-A-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265486

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	54.4		ug/L		109	59 - 155	14	40
1,1-Dichloroethene	ND		50.0	54.9		ug/L		110	10 - 234	15	32
Benzene	ND		50.0	53.5		ug/L		107	35 - 151	10	61
Chloroform	0.56		50.0	55.4		ug/L		110	51 - 138	5	54
Trichloroethene	ND		50.0	52.6		ug/L		105	70 - 157	10	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*104*		*60 - 140*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-265472/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		02/03/22 20:00	02/04/22 17:36	1
Cadmium	ND		0.0010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Lead	ND		0.015	mg/L		02/03/22 20:00	02/04/22 17:36	1
Selenium	ND		0.10	mg/L		02/03/22 20:00	02/04/22 17:36	1
Silver	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Copper	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Molybdenum	ND		0.010	mg/L		02/03/22 20:00	02/04/22 17:36	1
Zinc	ND		0.050	mg/L		02/03/22 20:00	02/04/22 17:36	1

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

Lab Sample ID: LCS 550-265472/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.959		mg/L		96	85 - 115
Cadmium	1.00	0.963		mg/L		96	85 - 115
Lead	1.00	1.00		mg/L		100	85 - 115
Selenium	1.00	0.971		mg/L		97	85 - 115
Silver	0.0750	0.0732		mg/L		98	85 - 115
Copper	1.00	0.937		mg/L		94	85 - 115
Molybdenum	1.00	0.980		mg/L		98	85 - 115
Zinc	1.00	1.03		mg/L		103	85 - 115

Lab Sample ID: LCSD 550-265472/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.00	0.953		mg/L		95	85 - 115	1	20
Cadmium	1.00	0.962		mg/L		96	85 - 115	0	20
Lead	1.00	1.00		mg/L		100	85 - 115	0	20
Selenium	1.00	0.969		mg/L		97	85 - 115	0	20
Silver	0.0750	0.0721		mg/L		96	85 - 115	2	20
Copper	1.00	0.934		mg/L		93	85 - 115	0	20
Molybdenum	1.00	0.979		mg/L		98	85 - 115	0	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-178460-C-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		1.00	1.03		mg/L		101	70 - 130
Cadmium	0.043		1.00	1.04		mg/L		99	70 - 130
Lead	ND		1.00	0.805		mg/L		80	70 - 130
Selenium	ND		1.00	1.02		mg/L		101	70 - 130
Silver	ND		0.0750	0.0735		mg/L		98	70 - 130
Copper	ND		1.00	0.976		mg/L		98	70 - 130
Molybdenum	0.20		1.00	1.18		mg/L		98	70 - 130
Zinc	ND		1.00	1.07		mg/L		107	70 - 130

Lab Sample ID: 550-178460-C-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.03		mg/L		101	70 - 130	0	20
Cadmium	0.043		1.00	1.05		mg/L		101	70 - 130	1	20
Lead	ND		1.00	0.801		mg/L		80	70 - 130	0	20
Selenium	ND		1.00	1.01		mg/L		99	70 - 130	1	20
Silver	ND		0.0750	0.0728		mg/L		97	70 - 130	1	20
Copper	ND		1.00	0.981		mg/L		98	70 - 130	1	20
Molybdenum	0.20		1.00	1.18		mg/L		98	70 - 130	0	20

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

Lab Sample ID: 550-178460-C-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265651 — **Prep Batch: 265472**

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	0	20

Lab Sample ID: MB 550-265649/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		02/07/22 08:44	02/08/22 16:49	1
Lead	ND		0.015		mg/L		02/07/22 08:44	02/08/22 16:49	1
Copper	ND		0.010		mg/L		02/07/22 08:44	02/08/22 16:49	1
Zinc	ND		0.050		mg/L		02/07/22 08:44	02/08/22 16:49	1

Lab Sample ID: LCS 550-265649/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	1.00	0.945		mg/L		95	85 - 115
Lead	1.00	0.983		mg/L		98	85 - 115
Copper	1.00	0.910		mg/L		91	85 - 115
Zinc	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: LCSD 550-265649/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	1.00	0.943		mg/L		94	85 - 115	0	20
Lead	1.00	0.983		mg/L		98	85 - 115	0	20
Copper	1.00	0.900		mg/L		90	85 - 115	1	20
Zinc	1.00	1.02		mg/L		102	85 - 115	1	20

Lab Sample ID: 550-178525-E-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		1.00	0.946		mg/L		95	70 - 130
Lead	ND		1.00	0.970		mg/L		97	70 - 130
Copper	0.64	M2	1.00	1.12	M2	mg/L		48	70 - 130
Zinc	ND		1.00	1.02		mg/L		102	70 - 130

Lab Sample ID: 550-178525-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		1.00	0.939		mg/L		94	70 - 130	1	20
Lead	ND		1.00	0.974		mg/L		97	70 - 130	0	20
Copper	0.64	M2	1.00	1.16	M2	mg/L		52	70 - 130	3	20

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

Lab Sample ID: 550-178525-E-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265853 — **Prep Batch: 265649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	ND		1.00	1.01		mg/L		101	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-265697/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/07/22 16:02	02/07/22 20:43	1

Lab Sample ID: LCS 550-265697/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00500	0.00498		mg/L		100	85 - 115		

Lab Sample ID: LCSD 550-265697/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.00500	0.00515		mg/L		103	85 - 115	3	20

Lab Sample ID: 550-178117-E-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.00500	0.00363		mg/L		73	70 - 130		

Lab Sample ID: 550-178117-E-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265715 — **Prep Batch: 265697**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00381		mg/L		76	70 - 130	5	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-265789/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			02/08/22 14:15	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 550-265789/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			200	179		mg/L		90	90 - 110		

Lab Sample ID: LCSD 550-265789/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids			200	186		mg/L		93	90 - 110	4	10

Lab Sample ID: 550-178395-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265789

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	25			24.0		mg/L				4	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-265687/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		02/07/22 14:15	02/07/22 15:30	1

Lab Sample ID: LCS 550-265687/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.0978		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-265687/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0967		mg/L		97	90 - 110	1	20

Lab Sample ID: 550-178166-E-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND	M2	0.100	0.0581	M2	mg/L		58	80 - 120		

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

Lab Sample ID: 550-178166-E-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265825 — **Prep Batch: 265687**

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	0.0692	M2	mg/L		69	80 - 120	17	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-265552/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND	K5	5.0		mg/L			02/04/22 14:00	1

Lab Sample ID: LCS 550-265552/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	220	K5	mg/L		111	84.6 - 115.4		

Lab Sample ID: 550-178444-B-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 265552

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	37	R8 K5		30.0	K5 R8	mg/L				21	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

GC/MS VOA

Analysis Batch: 265486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	624.1	
550-178413-3	EW-1-22Q1	Total/NA	Water	624.1	
550-178413-5	TB-22Q1	Total/NA	Water	624.1	
MB 550-265486/5	Method Blank	Total/NA	Water	624.1	
LCS 550-265486/1002	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-265486/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-178429-A-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-178429-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 265472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	200.7	
MB 550-265472/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-265472/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-265472/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-178460-C-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-178460-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Prep Batch: 265649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-4	EW-1-22Q1-comp	Total/NA	Water	200.7	
MB 550-265649/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-265649/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-265649/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-178525-E-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-178525-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 265651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	200.7 Rev 4.4	265472
MB 550-265472/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	265472
LCS 550-265472/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	265472
LCSD 550-265472/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	265472
550-178460-C-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	265472
550-178460-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	265472

Prep Batch: 265697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	245.1	
MB 550-265697/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-265697/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-265697/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-178117-E-1-B MS	Matrix Spike	Total/NA	Water	245.1	
550-178117-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 265715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	245.1	265697
MB 550-265697/1-A	Method Blank	Total/NA	Water	245.1	265697

Metals (Continued)

Analysis Batch: 265715 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 550-265697/2-A	Lab Control Sample	Total/NA	Water	245.1	265697
LCSD 550-265697/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	265697
550-178117-E-1-B MS	Matrix Spike	Total/NA	Water	245.1	265697
550-178117-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	265697

Analysis Batch: 265853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-4	EW-1-22Q1-comp	Total/NA	Water	200.7 Rev 4.4	265649
MB 550-265649/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	265649
LCS 550-265649/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	265649
LCSD 550-265649/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	265649
550-178525-E-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	265649
550-178525-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	265649

General Chemistry

Analysis Batch: 265552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	SM 5210B	
MB 550-265552/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-265552/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-178444-B-2 DU	Duplicate	Total/NA	Water	SM 5210B	

Prep Batch: 265687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	SM 4500 CN C	
MB 550-265687/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-265687/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-265687/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-178166-E-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-178166-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 265789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-2	MW-10-22Q1-comp	Total/NA	Water	SM 2540D	
MB 550-265789/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-265789/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-265789/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-178395-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 265825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-178413-1	MW-10-22Q1	Total/NA	Water	SM 4500 CN E	265687
MB 550-265687/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	265687
LCS 550-265687/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	265687
LCSD 550-265687/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	265687
550-178166-E-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	265687
550-178166-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	265687

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Client Sample ID: MW-10-22Q1 — Lab Sample ID: 550-178413-1

Date Collected: 02/03/22 09:10 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 17:38	R1K	TAL PHX
Total/NA	Prep	SM 4500 CN C			265687	02/07/22 14:15	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	265825	02/07/22 15:30	SRG	TAL PHX

Client Sample ID: MW-10-22Q1-comp — Lab Sample ID: 550-178413-2

Date Collected: 02/03/22 09:08 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			265472	02/03/22 20:00	CXK	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	265651	02/04/22 18:12	MGM	TAL PHX
Total/NA	Prep	245.1			265697	02/07/22 16:02	SRR	TAL PHX
Total/NA	Analysis	245.1		1	265715	02/07/22 21:19	SRR	TAL PHX
Total/NA	Analysis	SM 2540D		1	265789		CHS	TAL PHX
					(Start)	02/08/22 14:15		
					(End)	02/09/22 11:30		
Total/NA	Analysis	SM 5210B		1	265552		CRK	TAL PHX
					(Start)	02/04/22 14:00		
					(End)	02/09/22 16:55		

Client Sample ID: EW-1-22Q1 — Lab Sample ID: 550-178413-3

Date Collected: 02/03/22 09:57 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 18:05	R1K	TAL PHX

Client Sample ID: EW-1-22Q1-comp — Lab Sample ID: 550-178413-4

Date Collected: 02/03/22 09:55 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			265649	02/07/22 08:44	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	265853	02/08/22 17:39	MGM	TAL PHX

Client Sample ID: TB-22Q1 — Lab Sample ID: 550-178413-5

Date Collected: 02/03/22 08:00 — **Matrix: Water**
Date Received: 02/03/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	265486	02/04/22 13:43	R1K	TAL PHX

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Method Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-178413-1
SDG: Quarterly

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL PHX
245.1	Mercury (CVAA)	EPA	TAL PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PHX
SM 4500 CN E	Cyanide, Total	SM	TAL PHX
SM 5210B	BOD, 5-Day	SM	TAL PHX
200.7	Preparation, Total Metals	EPA	TAL PHX
245.1	Preparation, Mercury	EPA	TAL PHX
SM 4500 CN C	Cyanide, Distillation	SM	TAL 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:

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

178413

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

Chain Of Custody / Analysis Request

AESI Ref: 44594.47414
COC#: 35008_020322
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Text & Excel File Drive | Excel & Text File Order

Privileged & Confidential

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

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley/ J. Perez
PO #: A000651433
Analysis Turnaround Time (TAT): 10
Consultant:
Laboratory Contact: Rachel Sester
Report Tier Level: 2
Full Report TAT: 10
HTS
Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd CH2m,
Invoice To: Mike Heitmann, Honeywell/Copy Berney Kidd

Preservative																													
														8	10	15	10	0	0	10									

	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)							Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units																		
1	MW-10	----	----	MW-10-22Q1	2/3/2022	0910	GW-GWS	WATER	REG	4	grab	N	X		X									-01					
2	MW-10	----	----	MW-10-22Q1-comp	2/3/2022	0908	GW-GWS	WATER	REG	3	comp	N		X		X	X	X						-02					
3	EW-1	----	----	EW-1-22Q1	2/3/2022	0957	GW-GWS	WATER	REG	3	grab	N	X											-03					
4	EW-1	----	----	EW-1-22Q1-comp	2/3/2022	0955	GW-GWS	WATER	REG	1	comp	N							X					-04					
5	TRIPBLANK	----	----	TB-22Q1	2/3/2022	8:00	BLKWATER	WATER	TB	1	grab	N	X											-05					
6																													
7																													
8																													
9																													
10																													
11																													
12																													

550-178413 Chain of Custody

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Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
~~Thomas Kearsley~~ Jan Perez	CH2M	FedEx	Date/Time	Cooler Temp.	
2/3/21 1146					
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Date/Time		Nicole Drewel EGA PM 2/3/22 1146	Date/Time	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)

0.4°C IR6 LOO

2/14/2022

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-178413-1
SDG Number: Quarterly

Login Number: 178413
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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 550-184011-1
Client Project/Site: IAC, Peoria

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
6/2/2022 1:06:14 PM

Rachel Sester, Project Manager I
(602)659-7615
Rachel.Sester@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Qualifiers

Metals

Qualifier	Qualifier Description
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Chemistry

Qualifier	Qualifier Description
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
R13	MS/MSD RPD exceeded the method acceptance limit. Matrix spike recovery was outside acceptance criteria. Batch precision and accuracy were demonstrated.

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: 550-184011-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-184011-1

Comments
No additional comments.

Receipt
The samples were received on 5/12/2022 2:00 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 1.0º 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 continuing calibration verification (CCV) associated with batch 550-274624 recovered above the upper control limit for Cadmium, Molybdenum, Lead, Selenium, and Zinc. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry
Methods SM 4500 CN E, SM 4500 CN G: The matrix spike (MS) recovery and the matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 550-274208 and analytical batch 550-274268 were outside control limits for cyanide. Sample matrix interference and/or non-homogeneity were suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) recoveries and precision were within control limits.

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

Sample Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-184011-1	MW-10-22Q2	Water	05/12/22 11:43	05/12/22 14:00
550-184011-2	MW-10-22Q2-comp	Water	05/12/22 11:40	05/12/22 14:00
550-184011-3	EW-1-22Q2	Water	05/12/22 10:55	05/12/22 14:00
550-184011-4	EW-1-22Q2-comp	Water	05/12/22 10:53	05/12/22 14:00
550-184011-5	MW-7-285-051222	Water	05/12/22 09:49	05/12/22 14:00
550-184011-6	MW-12-410-051222	Water	05/12/22 10:19	05/12/22 14:00
550-184011-7	MW-13-355-051222	Water	05/12/22 09:01	05/12/22 14:00
550-184011-8	MW-14-350-051222	Water	05/12/22 12:13	05/12/22 14:00
550-184011-9	TB-051222	Water	05/12/22 08:00	05/12/22 14:00

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2 — Lab Sample ID: 550-184011-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	19		1.0		ug/L	1		624.1	Total/NA
Trichloroethene	5.5		1.0		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-22Q2-comp — Lab Sample ID: 550-184011-2

No Detections.

Client Sample ID: EW-1-22Q2 — Lab Sample ID: 550-184011-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.0		1.0		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	63		1.0		ug/L	1		624.1	Total/NA
Chloroform	1.1		1.0		ug/L	1		624.1	Total/NA
Trichloroethene	18		1.0		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	1.1		1.0		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q2-comp — Lab Sample ID: 550-184011-4

No Detections.

Client Sample ID: MW-7-285-051222 — Lab Sample ID: 550-184011-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.1		1.0		ug/L	1		624.1	Total/NA
Trichloroethene	1.4		1.0		ug/L	1		624.1	Total/NA

Client Sample ID: MW-12-410-051222 — Lab Sample ID: 550-184011-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.9		1.0		ug/L	1		624.1	Total/NA
Chloroform	4.8		1.0		ug/L	1		624.1	Total/NA
Dichlorobromomethane	1.1		1.0		ug/L	1		624.1	Total/NA
Trichloroethene	1.3		1.0		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	5.9		1.0		ug/L	1		624.1	Total/NA

Client Sample ID: MW-13-355-051222 — Lab Sample ID: 550-184011-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.5		1.0		ug/L	1		624.1	Total/NA
Trihalomethanes, Total	1.5		1.0		ug/L	1		624.1	Total/NA

Client Sample ID: MW-14-350-051222 — Lab Sample ID: 550-184011-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.2		1.0		ug/L	1		624.1	Total/NA

Client Sample ID: TB-051222 — Lab Sample ID: 550-184011-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2

Date Collected: 05/12/22 11:43
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 01:14	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 01:14	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 01:14	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 01:14	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 01:14	1
1,1-Dichloroethene	**19**		1.0		ug/L			05/26/22 01:14	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 01:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 01:14	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:14	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 01:14	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 01:14	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:14	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:14	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 01:14	1
2-Hexanone	ND		5.0		ug/L			05/26/22 01:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 01:14	1
Acetone	ND		20		ug/L			05/26/22 01:14	1
Benzene	ND		1.0		ug/L			05/26/22 01:14	1
Bromoform	ND		2.0		ug/L			05/26/22 01:14	1
Bromomethane	ND		2.0		ug/L			05/26/22 01:14	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 01:14	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 01:14	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 01:14	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 01:14	1
Chloroethane	ND		4.0		ug/L			05/26/22 01:14	1
Chloroform	ND		1.0		ug/L			05/26/22 01:14	1
Chloromethane	ND		2.0		ug/L			05/26/22 01:14	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:14	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:14	1
Dibromomethane	ND		1.0		ug/L			05/26/22 01:14	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 01:14	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 01:14	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 01:14	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 01:14	1
Iodomethane	ND		2.0		ug/L			05/26/22 01:14	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 01:14	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 01:14	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 01:14	1
Naphthalene	ND		1.0		ug/L			05/26/22 01:14	1
o-Xylene	ND		1.0		ug/L			05/26/22 01:14	1
Styrene	ND		1.0		ug/L			05/26/22 01:14	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 01:14	1
Toluene	ND		1.0		ug/L			05/26/22 01:14	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:14	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:14	1
Trichloroethene	**5.5**		1.0		ug/L			05/26/22 01:14	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 01:14	1
Trihalomethanes, Total	ND		1.0		ug/L			05/26/22 01:14	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 01:14	1

Client Sample ID: MW-10-22Q2

Lab Sample ID: 550-184011-1
Date Collected: 05/12/22 11:43
Matrix: Water
Date Received: 05/12/22 14:00

Method: 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			05/26/22 01:14	1
Xylenes, Total	ND		2.0	ug/L			05/26/22 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 01:14*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/26/22 01:14*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050	mg/L		05/15/22 15:45	05/15/22 16:29	1

Client Sample ID: MW-10-22Q2-comp

Lab Sample ID: 550-184011-2
Date Collected: 05/12/22 11:40
Matrix: Water
Date Received: 05/12/22 14:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/17/22 10:01	05/18/22 22:05	1
Cadmium	ND	V1	0.0010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Copper	ND		0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Lead	ND	V1	0.015	mg/L		05/17/22 10:01	05/18/22 22:05	1
Molybdenum	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Selenium	ND	V1	0.10	mg/L		05/17/22 10:01	05/18/22 22:05	1
Silver	ND		0.010	mg/L		05/17/22 10:01	05/18/22 22:05	1
Zinc	ND	V1	0.050	mg/L		05/17/22 10:01	05/18/22 22:05	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		05/13/22 15:40	05/13/22 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			05/17/22 11:16	1
Biochemical Oxygen Demand	ND		5.0	mg/L			05/14/22 10:30	1

Client Sample ID: EW-1-22Q2

Lab Sample ID: 550-184011-3
Date Collected: 05/12/22 10:55
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			05/26/22 01:34	1
1,1,1-Trichloroethane	ND		1.0	ug/L			05/26/22 01:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			05/26/22 01:34	1
1,1,2-Trichloroethane	ND		1.0	ug/L			05/26/22 01:34	1
1,1-Dichloroethane	**5.0**		1.0	ug/L			05/26/22 01:34	1
1,1-Dichloroethene	**63**		1.0	ug/L			05/26/22 01:34	1
1,2,3-Trichloropropane	ND		3.0	ug/L			05/26/22 01:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			05/26/22 01:34	1
1,2-Dichlorobenzene	ND		1.0	ug/L			05/26/22 01:34	1
1,2-Dichloroethane	ND		1.0	ug/L			05/26/22 01:34	1

Client Sample ID: EW-1-22Q2

Date Collected: 05/12/22 10:55
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-3

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 01:34	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:34	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 01:34	1
2-Hexanone	ND		5.0		ug/L			05/26/22 01:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 01:34	1
Acetone	ND		20		ug/L			05/26/22 01:34	1
Benzene	ND		1.0		ug/L			05/26/22 01:34	1
Bromoform	ND		2.0		ug/L			05/26/22 01:34	1
Bromomethane	ND		2.0		ug/L			05/26/22 01:34	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 01:34	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 01:34	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 01:34	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 01:34	1
Chloroethane	ND		4.0		ug/L			05/26/22 01:34	1
Chloroform	**1.1**		1.0		ug/L			05/26/22 01:34	1
Chloromethane	ND		2.0		ug/L			05/26/22 01:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:34	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:34	1
Dibromomethane	ND		1.0		ug/L			05/26/22 01:34	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 01:34	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 01:34	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 01:34	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 01:34	1
Iodomethane	ND		2.0		ug/L			05/26/22 01:34	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 01:34	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 01:34	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 01:34	1
Naphthalene	ND		1.0		ug/L			05/26/22 01:34	1
o-Xylene	ND		1.0		ug/L			05/26/22 01:34	1
Styrene	ND		1.0		ug/L			05/26/22 01:34	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 01:34	1
Toluene	ND		1.0		ug/L			05/26/22 01:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:34	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:34	1
Trichloroethene	**18**		1.0		ug/L			05/26/22 01:34	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 01:34	1
Trihalomethanes, Total	**1.1**		1.0		ug/L			05/26/22 01:34	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 01:34	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 01:34	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*		*05/26/22 01:34*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/26/22 01:34*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/15/22 15:45	05/15/22 16:29	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: EW-1-22Q2-comp

Lab Sample ID: 550-184011-4

Date Collected: 05/12/22 10:53
Date Received: 05/12/22 14:00

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		05/17/22 10:01	05/18/22 22:08	1
Cadmium	ND	V1	0.0010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Copper	ND		0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Lead	ND	V1	0.015		mg/L		05/17/22 10:01	05/18/22 22:08	1
Molybdenum	ND	V1	0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Selenium	ND	V1	0.10		mg/L		05/17/22 10:01	05/18/22 22:08	1
Silver	ND		0.010		mg/L		05/17/22 10:01	05/18/22 22:08	1
Zinc	ND	V1	0.050		mg/L		05/17/22 10:01	05/18/22 22:08	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/25/22 16:20	05/25/22 19:58	1

Client Sample ID: MW-7-285-051222

Lab Sample ID: 550-184011-5

Date Collected: 05/12/22 09:49
Date Received: 05/12/22 14:00

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,1-Dichloroethene	**2.1**		1.0		ug/L			05/26/22 01:55	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 01:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 01:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 01:55	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 01:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 01:55	1
2-Hexanone	ND		5.0		ug/L			05/26/22 01:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 01:55	1
Acetone	ND		20		ug/L			05/26/22 01:55	1
Benzene	ND		1.0		ug/L			05/26/22 01:55	1
Bromoform	ND		2.0		ug/L			05/26/22 01:55	1
Bromomethane	ND		2.0		ug/L			05/26/22 01:55	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 01:55	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 01:55	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 01:55	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 01:55	1
Chloroethane	ND		4.0		ug/L			05/26/22 01:55	1
Chloroform	ND		1.0		ug/L			05/26/22 01:55	1
Chloromethane	ND		2.0		ug/L			05/26/22 01:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:55	1
Dibromomethane	ND		1.0		ug/L			05/26/22 01:55	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 01:55	1

Client Sample ID: MW-7-285-051222

Lab Sample ID: 550-184011-5

Date Collected: 05/12/22 09:49

Matrix: Water

Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 01:55	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 01:55	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 01:55	1
Iodomethane	ND		2.0		ug/L			05/26/22 01:55	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 01:55	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 01:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 01:55	1
Naphthalene	ND		1.0		ug/L			05/26/22 01:55	1
o-Xylene	ND		1.0		ug/L			05/26/22 01:55	1
Styrene	ND		1.0		ug/L			05/26/22 01:55	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 01:55	1
Toluene	ND		1.0		ug/L			05/26/22 01:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 01:55	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 01:55	1
Trichloroethene	**1.4**		1.0		ug/L			05/26/22 01:55	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 01:55	1
Trihalomethanes, Total	ND		1.0		ug/L			05/26/22 01:55	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 01:55	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 01:55	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/26/22 01:55*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/26/22 01:55*	*1*

Client Sample ID: MW-12-410-051222

Lab Sample ID: 550-184011-6

Date Collected: 05/12/22 10:19

Matrix: Water

Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,1-Dichloroethene	**2.9**		1.0		ug/L			05/26/22 02:15	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:15	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:15	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:15	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:15	1
Acetone	ND		20		ug/L			05/26/22 02:15	1
Benzene	ND		1.0		ug/L			05/26/22 02:15	1
Bromoform	ND		2.0		ug/L			05/26/22 02:15	1

Client Sample ID: MW-12-410-051222

Lab Sample ID: 550-184011-6

Date Collected: 05/12/22 10:19

Matrix: Water

Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		2.0		ug/L			05/26/22 02:15	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:15	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:15	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:15	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:15	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:15	1
Chloroform	**4.8**		1.0		ug/L			05/26/22 02:15	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:15	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:15	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:15	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:15	1
Dichlorobromomethane	**1.1**		1.0		ug/L			05/26/22 02:15	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:15	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:15	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:15	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:15	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:15	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:15	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:15	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:15	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:15	1
Styrene	ND		1.0		ug/L			05/26/22 02:15	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:15	1
Toluene	ND		1.0		ug/L			05/26/22 02:15	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:15	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:15	1
Trichloroethene	**1.3**		1.0		ug/L			05/26/22 02:15	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:15	1
Trihalomethanes, Total	**5.9**		1.0		ug/L			05/26/22 02:15	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:15	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 02:15	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 02:15*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/26/22 02:15*	*1*

Client Sample ID: MW-13-355-051222

Lab Sample ID: 550-184011-7

Date Collected: 05/12/22 09:01

Matrix: Water

Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,1-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:36	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-13-355-051222

Date Collected: 05/12/22 09:01
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-7

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:36	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:36	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:36	1
Acetone	ND		20		ug/L			05/26/22 02:36	1
Benzene	ND		1.0		ug/L			05/26/22 02:36	1
Bromoform	ND		2.0		ug/L			05/26/22 02:36	1
Bromomethane	ND		2.0		ug/L			05/26/22 02:36	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:36	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:36	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:36	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:36	1
Chloroform	**1.5**		1.0		ug/L			05/26/22 02:36	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:36	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 02:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:36	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:36	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:36	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:36	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:36	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:36	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:36	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:36	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:36	1
Styrene	ND		1.0		ug/L			05/26/22 02:36	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:36	1
Toluene	ND		1.0		ug/L			05/26/22 02:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:36	1
Trichloroethene	ND		1.0		ug/L			05/26/22 02:36	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:36	1
Trihalomethanes, Total	**1.5**		1.0		ug/L			05/26/22 02:36	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:36	1
Vinyl chloride	ND		1.0		ug/L			05/26/22 02:36	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/26/22 02:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/26/22 02:36*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-14-350-051222

Lab Sample ID: 550-184011-8

Date Collected: 05/12/22 12:13
Date Received: 05/12/22 14:00

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1-Dichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,1-Dichloroethene	**3.2**		1.0		ug/L			05/26/22 02:56	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/26/22 02:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/26/22 02:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
1,2-Dichloroethane	ND		1.0		ug/L			05/26/22 02:56	1
1,2-Dichloropropane	ND		1.0		ug/L			05/26/22 02:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
2-Butanone (MEK)	ND		20		ug/L			05/26/22 02:56	1
2-Hexanone	ND		5.0		ug/L			05/26/22 02:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/26/22 02:56	1
Acetone	ND		20		ug/L			05/26/22 02:56	1
Benzene	ND		1.0		ug/L			05/26/22 02:56	1
Bromoform	ND		2.0		ug/L			05/26/22 02:56	1
Bromomethane	ND		2.0		ug/L			05/26/22 02:56	1
Carbon disulfide	ND		2.0		ug/L			05/26/22 02:56	1
Carbon tetrachloride	ND		1.0		ug/L			05/26/22 02:56	1
Chlorobenzene	ND		1.0		ug/L			05/26/22 02:56	1
Chlorodibromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Chloroethane	ND		4.0		ug/L			05/26/22 02:56	1
Chloroform	ND		1.0		ug/L			05/26/22 02:56	1
Chloromethane	ND		2.0		ug/L			05/26/22 02:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:56	1
Dibromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Dichlorobromomethane	ND		1.0		ug/L			05/26/22 02:56	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/26/22 02:56	1
Ethylbenzene	ND		1.0		ug/L			05/26/22 02:56	1
Ethylene Dibromide	ND		5.0		ug/L			05/26/22 02:56	1
Iodomethane	ND		2.0		ug/L			05/26/22 02:56	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/26/22 02:56	1
Methylene Chloride	ND		5.0		ug/L			05/26/22 02:56	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/26/22 02:56	1
Naphthalene	ND		1.0		ug/L			05/26/22 02:56	1
o-Xylene	ND		1.0		ug/L			05/26/22 02:56	1
Styrene	ND		1.0		ug/L			05/26/22 02:56	1
Tetrachloroethene	ND		1.0		ug/L			05/26/22 02:56	1
Toluene	ND		1.0		ug/L			05/26/22 02:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/26/22 02:56	1
Trichloroethene	ND		1.0		ug/L			05/26/22 02:56	1
Trichlorofluoromethane	ND		2.0		ug/L			05/26/22 02:56	1
Trihalomethanes, Total	ND		1.0		ug/L			05/26/22 02:56	1
Vinyl acetate	ND		3.0		ug/L			05/26/22 02:56	1

Client Sample ID: MW-14-350-051222

Lab Sample ID: 550-184011-8
Date Collected: 05/12/22 12:13
Matrix: Water
Date Received: 05/12/22 14:00

Method: 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			05/26/22 02:56	1
Xylenes, Total	ND		2.0		ug/L			05/26/22 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*		*05/26/22 02:56*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/26/22 02:56*	*1*

Client Sample ID: TB-051222

Lab Sample ID: 550-184011-9
Date Collected: 05/12/22 08:00
Matrix: Water
Date Received: 05/12/22 14:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1-Dichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,1-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/25/22 21:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/25/22 21:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
1,2-Dichloroethane	ND		1.0		ug/L			05/25/22 21:07	1
1,2-Dichloropropane	ND		1.0		ug/L			05/25/22 21:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
2-Butanone (MEK)	ND		20		ug/L			05/25/22 21:07	1
2-Hexanone	ND		5.0		ug/L			05/25/22 21:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/25/22 21:07	1
Acetone	ND		20		ug/L			05/25/22 21:07	1
Benzene	ND		1.0		ug/L			05/25/22 21:07	1
Bromoform	ND		2.0		ug/L			05/25/22 21:07	1
Bromomethane	ND		2.0		ug/L			05/25/22 21:07	1
Carbon disulfide	ND		2.0		ug/L			05/25/22 21:07	1
Carbon tetrachloride	ND		1.0		ug/L			05/25/22 21:07	1
Chlorobenzene	ND		1.0		ug/L			05/25/22 21:07	1
Chlorodibromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Chloroethane	ND		4.0		ug/L			05/25/22 21:07	1
Chloroform	ND		1.0		ug/L			05/25/22 21:07	1
Chloromethane	ND		2.0		ug/L			05/25/22 21:07	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 21:07	1
Dibromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Dichlorobromomethane	ND		1.0		ug/L			05/25/22 21:07	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/25/22 21:07	1
Ethylbenzene	ND		1.0		ug/L			05/25/22 21:07	1
Ethylene Dibromide	ND		5.0		ug/L			05/25/22 21:07	1
Iodomethane	ND		2.0		ug/L			05/25/22 21:07	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/25/22 21:07	1
Methylene Chloride	ND		5.0		ug/L			05/25/22 21:07	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: TB-051222

Date Collected: 05/12/22 08:00
Date Received: 05/12/22 14:00

Lab Sample ID: 550-184011-9

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0		ug/L			05/25/22 21:07	1
Naphthalene	ND		1.0		ug/L			05/25/22 21:07	1
o-Xylene	ND		1.0		ug/L			05/25/22 21:07	1
Styrene	ND		1.0		ug/L			05/25/22 21:07	1
Tetrachloroethene	ND		1.0		ug/L			05/25/22 21:07	1
Toluene	ND		1.0		ug/L			05/25/22 21:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 21:07	1
Trichloroethene	ND		1.0		ug/L			05/25/22 21:07	1
Trichlorofluoromethane	ND		2.0		ug/L			05/25/22 21:07	1
Trihalomethanes, Total	ND		1.0		ug/L			05/25/22 21:07	1
Vinyl acetate	ND		3.0		ug/L			05/25/22 21:07	1
Vinyl chloride	ND		1.0		ug/L			05/25/22 21:07	1
Xylenes, Total	ND		2.0		ug/L			05/25/22 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*		*05/25/22 21:07*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/25/22 21:07*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB	TOL
Lab Sample ID	**Client Sample ID**	**(79-119)**	**(80-120)**
550-184011-1	MW-10-22Q2	102	102
550-184011-3	EW-1-22Q2	99	100
550-184011-5	MW-7-285-051222	101	102
550-184011-6	MW-12-410-051222	102	101
550-184011-7	MW-13-355-051222	101	101
550-184011-8	MW-14-350-051222	102	103
550-184011-9	TB-051222	101	100
LCS 280-576204/4	Lab Control Sample	100	100
LCSD 280-576204/5	Lab Control Sample Dup	101	104
MB 280-576204/9	Method Blank	100	102

Surrogate Legend

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

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

Lab Sample ID: MB 280-576204/9
Matrix: Water
Analysis Batch: 576204

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		1.0		ug/L			05/25/22 20:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1-Dichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,1-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
1,2,3-Trichloropropane	ND		3.0		ug/L			05/25/22 20:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/25/22 20:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
1,2-Dichloroethane	ND		1.0		ug/L			05/25/22 20:05	1
1,2-Dichloropropane	ND		1.0		ug/L			05/25/22 20:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
2-Butanone (MEK)	ND		20		ug/L			05/25/22 20:05	1
2-Hexanone	ND		5.0		ug/L			05/25/22 20:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/25/22 20:05	1
Acetone	ND		20		ug/L			05/25/22 20:05	1
Benzene	ND		1.0		ug/L			05/25/22 20:05	1
Bromoform	ND		2.0		ug/L			05/25/22 20:05	1
Bromomethane	ND		2.0		ug/L			05/25/22 20:05	1
Carbon disulfide	ND		2.0		ug/L			05/25/22 20:05	1
Carbon tetrachloride	ND		1.0		ug/L			05/25/22 20:05	1
Chlorobenzene	ND		1.0		ug/L			05/25/22 20:05	1
Chlorodibromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Chloroethane	ND		4.0		ug/L			05/25/22 20:05	1
Chloroform	ND		1.0		ug/L			05/25/22 20:05	1
Chloromethane	ND		2.0		ug/L			05/25/22 20:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 20:05	1
Dibromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Dichlorobromomethane	ND		1.0		ug/L			05/25/22 20:05	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/25/22 20:05	1
Ethylbenzene	ND		1.0		ug/L			05/25/22 20:05	1
Ethylene Dibromide	ND		5.0		ug/L			05/25/22 20:05	1
Iodomethane	ND		2.0		ug/L			05/25/22 20:05	1
Methyl tert-butyl ether	ND		5.0		ug/L			05/25/22 20:05	1
Methylene Chloride	ND		5.0		ug/L			05/25/22 20:05	1
m-Xylene & p-Xylene	ND		2.0		ug/L			05/25/22 20:05	1
Naphthalene	ND		1.0		ug/L			05/25/22 20:05	1
o-Xylene	ND		1.0		ug/L			05/25/22 20:05	1
Styrene	ND		1.0		ug/L			05/25/22 20:05	1
Tetrachloroethene	ND		1.0		ug/L			05/25/22 20:05	1
Toluene	ND		1.0		ug/L			05/25/22 20:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			05/25/22 20:05	1
Trichloroethene	ND		1.0		ug/L			05/25/22 20:05	1
Trichlorofluoromethane	ND		2.0		ug/L			05/25/22 20:05	1
Trihalomethanes, Total	ND		1.0		ug/L			05/25/22 20:05	1

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

Lab Sample ID: MB 280-576204/9
Matrix: Water
Analysis Batch: 576204

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		3.0	ug/L			05/25/22 20:05	1
Vinyl chloride	ND		1.0	ug/L			05/25/22 20:05	1
Xylenes, Total	ND		2.0	ug/L			05/25/22 20:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*79 - 119*		*05/25/22 20:05*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/25/22 20:05*	*1*

Lab Sample ID: LCS 280-576204/4
Matrix: Water
Analysis Batch: 576204

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	25.0	25.5		ug/L		102	71 - 126
1,1,1-Trichloroethane	25.0	24.9		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.3		ug/L		105	60 - 140
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	70 - 130
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 130
1,1-Dichloroethene	25.0	24.4		ug/L		97	50 - 150
1,2,3-Trichloropropane	25.0	25.8		ug/L		103	64 - 136
1,2-Dibromo-3-Chloropropane	25.0	25.2		ug/L		101	53 - 132
1,2-Dichlorobenzene	25.0	27.6		ug/L		110	65 - 135
1,2-Dichloroethane	25.0	23.4		ug/L		94	70 - 130
1,2-Dichloropropane	25.0	24.7		ug/L		99	35 - 165
1,3-Dichlorobenzene	25.0	27.6		ug/L		110	70 - 130
1,4-Dichlorobenzene	25.0	26.4		ug/L		106	65 - 135
2-Butanone (MEK)	100	86.1		ug/L		86	49 - 153
2-Hexanone	100	94.7		ug/L		95	50 - 154
4-Methyl-2-pentanone (MIBK)	100	97.3		ug/L		97	48 - 157
Acetone	100	83.2		ug/L		83	44 - 168
Benzene	25.0	24.4		ug/L		98	65 - 135
Bromoform	25.0	23.3		ug/L		93	70 - 130
Bromomethane	25.0	14.8		ug/L		59	15 - 185
Carbon disulfide	25.0	23.4		ug/L		94	61 - 138
Carbon tetrachloride	25.0	25.3		ug/L		101	70 - 130
Chlorobenzene	25.0	24.6		ug/L		98	65 - 135
Chlorodibromomethane	25.0	25.1		ug/L		100	70 - 135
Chloroethane	25.0	23.5		ug/L		94	40 - 160
Chloroform	25.0	24.1		ug/L		96	70 - 135
Chloromethane	25.0	20.7		ug/L		83	10 - 205
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	76 - 128
cis-1,3-Dichloropropene	25.0	23.6		ug/L		94	25 - 175
Dibromomethane	25.0	22.8		ug/L		91	73 - 127
Dichlorobromomethane	25.0	24.8		ug/L		99	65 - 135
Dichlorodifluoromethane	25.0	23.9		ug/L		96	32 - 152
Ethylbenzene	25.0	25.2		ug/L		101	60 - 140
Ethylene Dibromide	25.0	23.5		ug/L		94	77 - 126
Iodomethane	25.0	17.8		ug/L		71	69 - 131

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

Lab Sample ID: LCS 280-576204/4
Matrix: Water
Analysis Batch: 576204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl tert-butyl ether	25.0	24.0		ug/L		96	74 - 128
Methylene Chloride	25.0	23.0		ug/L		92	60 - 140
m-Xylene & p-Xylene	25.0	25.5		ug/L		102	78 - 128
Naphthalene	25.0	25.0		ug/L		100	68 - 129
o-Xylene	25.0	25.3		ug/L		101	80 - 127
Styrene	25.0	25.5		ug/L		102	76 - 130
Tetrachloroethene	25.0	25.5		ug/L		102	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	50 - 150
Trichloroethene	25.0	24.9		ug/L		100	65 - 135
Trichlorofluoromethane	25.0	23.9		ug/L		96	50 - 150
Vinyl acetate	50.0	48.2		ug/L		96	59 - 143
Vinyl chloride	25.0	22.6		ug/L		90	10 - 195

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*79 - 119*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 280-576204/5
Matrix: Water
Analysis Batch: 576204

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	25.0	26.7		ug/L		107	71 - 126	4	30
1,1,1-Trichloroethane	25.0	24.6		ug/L		98	70 - 130	1	30
1,1,2,2-Tetrachloroethane	25.0	26.4		ug/L		106	60 - 140	0	30
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	70 - 130	6	30
1,1-Dichloroethane	25.0	24.5		ug/L		98	70 - 130	1	30
1,1-Dichloroethene	25.0	24.2		ug/L		97	50 - 150	1	30
1,2,3-Trichloropropane	25.0	25.9		ug/L		104	64 - 136	0	30
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	53 - 132	2	30
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	65 - 135	3	30
1,2-Dichloroethane	25.0	23.3		ug/L		93	70 - 130	0	30
1,2-Dichloropropane	25.0	24.7		ug/L		99	35 - 165	0	30
1,3-Dichlorobenzene	25.0	27.5		ug/L		110	70 - 130	0	30
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	65 - 135	2	30
2-Butanone (MEK)	100	86.0		ug/L		86	49 - 153	0	32
2-Hexanone	100	98.5		ug/L		99	50 - 154	4	30
4-Methyl-2-pentanone (MIBK)	100	96.4		ug/L		96	48 - 157	1	30
Acetone	100	82.3		ug/L		82	44 - 168	1	30
Benzene	25.0	24.1		ug/L		97	65 - 135	1	30
Bromoform	25.0	25.8		ug/L		103	70 - 130	10	30
Bromomethane	25.0	14.7		ug/L		59	15 - 185	1	30
Carbon disulfide	25.0	23.4		ug/L		94	61 - 138	0	30
Carbon tetrachloride	25.0	25.9		ug/L		104	70 - 130	2	30
Chlorobenzene	25.0	25.0		ug/L		100	65 - 135	2	30
Chlorodibromomethane	25.0	26.8		ug/L		107	70 - 135	6	30

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

Lab Sample ID: LCSD 280-576204/5
Matrix: Water
Analysis Batch: 576204

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
Chloroethane	25.0	22.5		ug/L		90	40 - 160	4	30
Chloroform	25.0	24.2		ug/L		97	70 - 135	0	30
Chloromethane	25.0	20.1		ug/L		80	10 - 205	3	30
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	76 - 128	1	30
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	25 - 175	8	30
Dibromomethane	25.0	23.8		ug/L		95	73 - 127	4	30
Dichlorobromomethane	25.0	25.6		ug/L		102	65 - 135	3	30
Dichlorodifluoromethane	25.0	23.6		ug/L		95	32 - 152	1	30
Ethylbenzene	25.0	25.5		ug/L		102	60 - 140	1	30
Ethylene Dibromide	25.0	24.7		ug/L		99	77 - 126	5	30
Iodomethane	25.0	18.0		ug/L		72	69 - 131	1	30
Methyl tert-butyl ether	25.0	24.0		ug/L		96	74 - 128	0	30
Methylene Chloride	25.0	23.0		ug/L		92	60 - 140	0	30
m-Xylene & p-Xylene	25.0	25.9		ug/L		104	78 - 128	2	30
Naphthalene	25.0	23.3		ug/L		93	68 - 129	7	30
o-Xylene	25.0	24.8		ug/L		99	80 - 127	2	30
Styrene	25.0	26.3		ug/L		105	76 - 130	3	30
Tetrachloroethene	25.0	25.8		ug/L		103	70 - 130	1	30
Toluene	25.0	24.5		ug/L		98	70 - 130	2	30
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	70 - 130	2	30
trans-1,3-Dichloropropene	25.0	24.7		ug/L		99	50 - 150	3	30
Trichloroethene	25.0	25.2		ug/L		101	65 - 135	1	30
Trichlorofluoromethane	25.0	23.5		ug/L		94	50 - 150	2	30
Vinyl acetate	50.0	50.5		ug/L		101	59 - 143	4	30
Vinyl chloride	25.0	22.1		ug/L		88	10 - 195	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*79 - 119*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-274364/1-A
Matrix: Water
Analysis Batch: 274624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274364

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		05/17/22 10:01	05/18/22 21:16	1
Cadmium	ND		0.0010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Copper	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Lead	ND	V1	0.015	mg/L		05/17/22 10:01	05/18/22 21:16	1
Molybdenum	ND	V1	0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Selenium	ND	V1	0.10	mg/L		05/17/22 10:01	05/18/22 21:16	1
Silver	ND		0.010	mg/L		05/17/22 10:01	05/18/22 21:16	1
Zinc	ND	V1	0.050	mg/L		05/17/22 10:01	05/18/22 21:16	1

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

Lab Sample ID: LCS 550-274364/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

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	0.988		mg/L		99	85 - 115
Copper	1.00	0.978	V1	mg/L		98	85 - 115
Lead	1.00	1.02	V1	mg/L		102	85 - 115
Molybdenum	1.00	1.03	V1	mg/L		103	85 - 115
Selenium	1.00	1.03	V1	mg/L		103	85 - 115
Silver	0.0750	0.0703		mg/L		94	85 - 115
Zinc	1.00	1.02	V1	mg/L		102	85 - 115

Lab Sample ID: LCSD 550-274364/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	0.985		mg/L		98	85 - 115	2	20
Cadmium	1.00	0.982		mg/L		98	85 - 115	1	20
Copper	1.00	0.974	V1	mg/L		97	85 - 115	0	20
Lead	1.00	1.01	V1	mg/L		101	85 - 115	2	20
Molybdenum	1.00	1.02	V1	mg/L		102	85 - 115	1	20
Selenium	1.00	1.01	V1	mg/L		101	85 - 115	2	20
Silver	0.0750	0.0692		mg/L		92	85 - 115	2	20
Zinc	1.00	1.00	V1	mg/L		100	85 - 115	2	20

Lab Sample ID: 550-183904-J-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.02		mg/L		101	70 - 130
Cadmium	ND		1.00	0.994		mg/L		99	70 - 130
Copper	ND	V1	1.00	0.987	V1	mg/L		98	70 - 130
Lead	ND	V1	1.00	0.986	V1	mg/L		99	70 - 130
Molybdenum	0.010	V1	1.00	1.03	V1	mg/L		102	70 - 130
Selenium	ND	V1	1.00	1.01	V1	mg/L		101	70 - 130
Silver	ND		0.0750	0.0701		mg/L		93	70 - 130
Zinc	ND	V1	1.00	0.994	V1	mg/L		98	70 - 130

Lab Sample ID: 550-183904-J-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.03		mg/L		103	70 - 130	1	20
Cadmium	ND		1.00	1.00		mg/L		100	70 - 130	1	20
Copper	ND	V1	1.00	1.00	V1	mg/L		100	70 - 130	2	20
Lead	ND	V1	1.00	0.988	V1	mg/L		99	70 - 130	0	20
Molybdenum	0.010	V1	1.00	1.04	V1	mg/L		103	70 - 130	1	20
Selenium	ND	V1	1.00	1.01	V1	mg/L		101	70 - 130	0	20
Silver	ND		0.0750	0.0697		mg/L		93	70 - 130	1	20

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

Lab Sample ID: 550-183904-J-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274624 — **Prep Batch: 274364**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND	V1	1.00	0.996	V1	mg/L		98	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-274131/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/13/22 15:40	05/13/22 20:01	1

Lab Sample ID: LCS 550-274131/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00460		mg/L		92	85 - 115		

Lab Sample ID: LCSD 550-274131/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00472		mg/L		94	85 - 115	2	20

Lab Sample ID: 550-184071-Y-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00471		mg/L		94	70 - 130		

Lab Sample ID: 550-184071-Y-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274164 — **Prep Batch: 274131**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00477		mg/L		95	70 - 130	1	20

Lab Sample ID: MB 550-275188/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/25/22 16:20	05/25/22 19:48	1

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 550-275188/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

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 550-275188/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00443		mg/L		89	85 - 115	1	20

Lab Sample ID: 550-184011-4 MS — **Client Sample ID: EW-1-22Q2-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00487		mg/L		97	70 - 130		

Lab Sample ID: 550-184011-4 MSD — **Client Sample ID: EW-1-22Q2-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 275211 — **Prep Batch: 275188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00502		mg/L		100	70 - 130	3	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-274379/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			05/17/22 11:16	1

Lab Sample ID: LCS 550-274379/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	187		mg/L		94	90 - 110		

Lab Sample ID: LCSD 550-274379/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			200	196		mg/L		98	90 - 110	5	10

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 550-184011-2 DU — **Client Sample ID: MW-10-22Q2-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274379

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-274208/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274268 — **Prep Batch: 274208**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		05/15/22 15:45	05/15/22 16:29	1

Lab Sample ID: LCS 550-274208/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274268 — **Prep Batch: 274208**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0957		mg/L		96	90 - 110		

Lab Sample ID: LCSD 550-274208/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274268 — **Prep Batch: 274208**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0966		mg/L		97	90 - 110	1	20

Lab Sample ID: 550-183832-C-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274268 — **Prep Batch: 274208**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND	M2 R13	0.100	0.0657	M2 R13	mg/L		57	80 - 120		

Lab Sample ID: 550-183832-C-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274268 — **Prep Batch: 274208**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	M2 R13	0.100	0.0932	R13	mg/L		85	80 - 120	35	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-274180/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 274180

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		5.0		mg/L			05/14/22 10:30	1

Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: LCS 550-274180/2
Matrix: Water
Analysis Batch: 274180

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	198		mg/L		100	84.6 - 115.4		

Lab Sample ID: 550-184093-F-1 DU
Matrix: Water
Analysis Batch: 274180

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	23			22.7		mg/L				2	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

GC/MS VOA

Analysis Batch: 576204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	624.1	
550-184011-3	EW-1-22Q2	Total/NA	Water	624.1	
550-184011-5	MW-7-285-051222	Total/NA	Water	624.1	
550-184011-6	MW-12-410-051222	Total/NA	Water	624.1	
550-184011-7	MW-13-355-051222	Total/NA	Water	624.1	
550-184011-8	MW-14-350-051222	Total/NA	Water	624.1	
550-184011-9	TB-051222	Total/NA	Water	624.1	
MB 280-576204/9	Method Blank	Total/NA	Water	624.1	
LCS 280-576204/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-576204/5	Lab Control Sample Dup	Total/NA	Water	624.1	

Metals

Prep Batch: 274131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	245.1	
MB 550-274131/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-274131/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-274131/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-184071-Y-1-A MS	Matrix Spike	Total/NA	Water	245.1	
550-184071-Y-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 274164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	245.1	274131
MB 550-274131/1-A	Method Blank	Total/NA	Water	245.1	274131
LCS 550-274131/2-A	Lab Control Sample	Total/NA	Water	245.1	274131
LCSD 550-274131/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	274131
550-184071-Y-1-A MS	Matrix Spike	Total/NA	Water	245.1	274131
550-184071-Y-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	274131

Prep Batch: 274364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	200.7	
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	200.7	
MB 550-274364/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-274364/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-274364/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-183904-J-1-B MS	Matrix Spike	Total/NA	Water	200.7	
550-183904-J-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 274624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	200.7 Rev 4.4	274364
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	200.7 Rev 4.4	274364
MB 550-274364/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	274364
LCS 550-274364/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	274364
LCSD 550-274364/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	274364
550-183904-J-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	274364
550-183904-J-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	274364

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Metals

Prep Batch: 275188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	245.1	
MB 550-275188/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-275188/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-275188/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-184011-4 MS	EW-1-22Q2-comp	Total/NA	Water	245.1	
550-184011-4 MSD	EW-1-22Q2-comp	Total/NA	Water	245.1	

Analysis Batch: 275211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-4	EW-1-22Q2-comp	Total/NA	Water	245.1	275188
MB 550-275188/1-A	Method Blank	Total/NA	Water	245.1	275188
LCS 550-275188/2-A	Lab Control Sample	Total/NA	Water	245.1	275188
LCSD 550-275188/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	275188
550-184011-4 MS	EW-1-22Q2-comp	Total/NA	Water	245.1	275188
550-184011-4 MSD	EW-1-22Q2-comp	Total/NA	Water	245.1	275188

General Chemistry

Analysis Batch: 274180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	SM 5210B	
MB 550-274180/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-274180/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-184093-F-1 DU	Duplicate	Total/NA	Water	SM 5210B	

Prep Batch: 274208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	SM 4500 CN C	
550-184011-3	EW-1-22Q2	Total/NA	Water	SM 4500 CN C	
MB 550-274208/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-274208/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-274208/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-183832-C-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-183832-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 274268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-1	MW-10-22Q2	Total/NA	Water	SM 4500 CN E	274208
550-184011-3	EW-1-22Q2	Total/NA	Water	SM 4500 CN E	274208
MB 550-274208/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	274208
LCS 550-274208/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	274208
LCSD 550-274208/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	274208
550-183832-C-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	274208
550-183832-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	274208

Analysis Batch: 274379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2	MW-10-22Q2-comp	Total/NA	Water	SM 2540D	
MB 550-274379/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-274379/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-274379/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

General Chemistry (Continued)

Analysis Batch: 274379 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-184011-2 DU	MW-10-22Q2-comp	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-10-22Q2 — Lab Sample ID: 550-184011-1

Date Collected: 05/12/22 11:43 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:14	AJP	TAL DEN
Total/NA	Prep	SM 4500 CN C			274208	05/15/22 15:45	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	274268	05/15/22 16:29	SRG	TAL PHX

Client Sample ID: MW-10-22Q2-comp — Lab Sample ID: 550-184011-2

Date Collected: 05/12/22 11:40 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			274364	05/17/22 10:01	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	274624	05/18/22 22:05	MGM	TAL PHX
Total/NA	Prep	245.1			274131	05/13/22 15:40	SRR	TAL PHX
Total/NA	Analysis	245.1		1	274164	05/13/22 20:37	SRR	TAL PHX
Total/NA	Analysis	SM 2540D		1	274379		CHS	TAL PHX
					(Start)	05/17/22 11:16		
					(End)	05/17/22 15:20		
Total/NA	Analysis	SM 5210B		1	274180		SH1	TAL PHX
					(Start)	05/14/22 10:30		
					(End)	05/19/22 10:45		

Client Sample ID: EW-1-22Q2 — Lab Sample ID: 550-184011-3

Date Collected: 05/12/22 10:55 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:34	AJP	TAL DEN
Total/NA	Prep	SM 4500 CN C			274208	05/15/22 15:45	SRG	TAL PHX
Total/NA	Analysis	SM 4500 CN E		1	274268	05/15/22 16:29	SRG	TAL PHX

Client Sample ID: EW-1-22Q2-comp — Lab Sample ID: 550-184011-4

Date Collected: 05/12/22 10:53 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			274364	05/17/22 10:01	SGO	TAL PHX
Total/NA	Analysis	200.7 Rev 4.4		1	274624	05/18/22 22:08	MGM	TAL PHX
Total/NA	Prep	245.1			275188	05/25/22 16:20	SRR	TAL PHX
Total/NA	Analysis	245.1		1	275211	05/25/22 19:58	SRR	TAL PHX

Client Sample ID: MW-7-285-051222 — Lab Sample ID: 550-184011-5

Date Collected: 05/12/22 09:49 — **Matrix: Water**
Date Received: 05/12/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 01:55	AJP	TAL DEN

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Client Sample ID: MW-12-410-051222 — Lab Sample ID: 550-184011-6

Date Collected: 05/12/22 10:19
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:15	AJP	TAL DEN

Client Sample ID: MW-13-355-051222 — Lab Sample ID: 550-184011-7

Date Collected: 05/12/22 09:01
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:36	AJP	TAL DEN

Client Sample ID: MW-14-350-051222 — Lab Sample ID: 550-184011-8

Date Collected: 05/12/22 12:13
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/26/22 02:56	AJP	TAL DEN

Client Sample ID: TB-051222 — Lab Sample ID: 550-184011-9

Date Collected: 05/12/22 08:00
Date Received: 05/12/22 14:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	576204	05/25/22 21:07	AJP	TAL DEN

Laboratory References:

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

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Laboratory: Eurofins Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-23
Arizona	State	AZ0713	12-20-22
Arkansas DEQ	State	19-047-0	06-01-22
California	State	2513	01-09-23
Connecticut	State	PH-0686	09-30-22
Florida	NELAP	E87667-57	06-30-22
Georgia	State	4025-011	01-08-23
Illinois	NELAP	2000172019-1	04-30-23
Iowa	State	IA#370	12-02-22
Kansas	NELAP	E-10166	05-31-22
Kentucky (WW)	State	KY98047	12-31-22
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-22
Minnesota	NELAP	1788752	12-31-22
Nevada	State	CO000262020-1	07-31-22
New Hampshire	NELAP	205319	04-28-20 *
New Jersey	NELAP	190002	06-30-22
New York	NELAP	59923	04-01-23
North Carolina (WW/SW)	State	358	12-31-22
North Dakota	State	R-034	01-08-23
Oklahoma	NELAP	8614	08-31-22
Oregon	NELAP	4025-011	01-09-23
Pennsylvania	NELAP	013	07-31-22
South Carolina	State	72002001	01-08-23
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	10-01-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-20-00065	03-06-23
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-22
Virginia	NELAP	10490	06-14-22
Washington	State	C583-19	08-03-22
West Virginia DEP	State	354	11-30-22
Wisconsin	State	999615430	08-31-22
Wyoming (UST)	A2LA	2907.01	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-184011-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL DEN
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL PHX
245.1	Mercury (CVAA)	EPA	TAL PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PHX
SM 4500 CN E	Cyanide, Total	SM	TAL PHX
SM 5210B	BOD, 5-Day	SM	TAL PHX
200.7	Preparation, Total Metals	EPA	TAL PHX
245.1	Preparation, Mercury	EPA	TAL PHX
SM 4500 CN C	Cyanide, Distillation	SM	TAL 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:

TAL DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

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

Chain Of Custody / Analysis Request

AESI Ref:	44699.45271
COC#	35008_051222
Lab Proj # (SDG):	
Lab ID	TAL-PHX
Site ID	
Lab Job #	
Authorized User:	Honeywell

Privileged & Confidential

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

Sampling Co.:	Jacobs	EDD To:	Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)		Sampler:	T. Kearsley
Jacobs		PO #	A000651433
1501 W. Fountainhead Parkway (suite 401)		Analysis Turnaround Time (TAT):	10
Tempe, AZ 85282		Consultant	
Preliminary Data To	Berney Kidd Jacobs,,Lakshmi Devi HTS,	Laboratory Contact	Ken Baker
Sample Receipt Acknowledgement	Sample Distribution List	Report Tier Level	2
Hard Copy To	Berney Kidd CH2m,	Full Report TAT:	10
Invoice To:	Mike Heitmann, Honeywell/Copy Berney Kidd		HTS

Text & Excel File Drive	Excel & Text File Order

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Unauthorized use strictly prohibited.

	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																
1	MW-10	----	----	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X												
2	MW-10	----	----	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X									
3	EW-1	----	----	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X					X							
4	EW-1	----	----	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X		X											
5	MW-7	285.0	----	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	X														
6	MW-12	410.0	----	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	X														
7	MW-13	355.0	----	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	X														
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	X														
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X														
10																											
11																											
12																											

Relinquished by	Company	CH2M	Received by	Company		Condition		Custody Seals Intact	
Thomas Kearsley	Date/Time		FedEx	Date/Time		Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		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)

184011

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

Chain Of Custody / Analysis Request

AESI Ref:	44693.53553
COC#	35008_051222
Lab Proj # (SDG):	
Lab ID	TAL-PHX
Site ID	
Lab Job #	
Authorized User:	Honeywell

Text & Excel File Drive | Excel & Text File Order

Privileged & Confidential

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

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS

Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282

Sampler: T. Kearsley
PO #: A000651433
Analysis Turnaround Time (TAT): 10
Consultant:
Laboratory Contact: Ken Baker
Report Tier Level: 2
Full Report TAT: 10
HTS

Preliminary Data To: Berney Kidd, Jacobs, Lakshmi Devi HT
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd CH2m
Invoice To: Mike Heitmann, Honeywell/Copy Berney Kidd

	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																
Preservative													8	10	15	10	0	0	10	8							
1	MW-10	----	----	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X							-01					
2	MW-10	----	----	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X				-02					
3	EW-1	----	----	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X					X		-03					
4	EW-1	----	----	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X								-04					
5	MW-7	285.0	----	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	X									-05					
6	MW-12	410.0	----	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	X									-06					
7	MW-13	355.0	----	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	X									-07					
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	X									-08					
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X									-09					
10																											
11																											
12																											

550-184011 Chain of Custody

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Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Thomas Kearsley	CH2M			OK	
Date/Time 5/12/22 14:00		FedEx ETA-9HR	Date/Time 5/12/22 14:00	Cooler Temp. 1.0°C	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	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)

6/2/2022

Jacobs

CDO

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

Chain Of Custody / Analysis Request

AESI Ref: 44693.53553
COC#: 35008_0512

Privileged & Confidential

Sampling Co.: Jacobs
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282

Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd CH2m
Invoice To: Mike Heitmann, Honeywell/Copy Berney Kidd

EDD To: Bernice Kidd, Jacobs HTS
Sampler: T. Kearsley
PO #: A000651433
Analysis Turnaround Time (TAT): 10
Consultant:
Laboratory Contact: Ken Baker
Report Tier Level: 2
Full Report TAT: 10
HTS

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

Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywel
Text & Excel File Drive: Excel & Text F Order

Copyright AESI: Version 10.0 (11-25-08) Unauthorized use strictly prohibited.

	Sample Identification: 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)	E624 Full list	Sampling Method (code)	Lab Sample Numbers
											Units		Preservative	8	10	15	10	0	0	10	8		
1	MW-10	---	---	MW-10-22Q2	5/12/2022	11:43	GW-GWS	WATER	REG	4	grab	N	X		X								
2	MW-10	---	---	MW-10-22Q2-comp	5/12/2022	11:40	GW-GWS	WATER	REG	2	comp	N		X		X	X	X					
3	EW-1	---	---	EW-1-22Q2	5/12/2022	10:55	GW-GWS	WATER	REG	4	grab	N			X					X			
4	EW-1	---	---	EW-1-22Q2-comp	5/12/2022	10:53	GW-GWS	WATER	REG	1	comp	N		X									
5	MW-7	285.0	---	MW-7-285-051222	5/12/2022	9:49	GW-GWS	WATER	REG	3	grab	N	~~X~~ LB								X		
6	MW-12	410.0	---	MW-12-410-051222	5/12/2022	10:19	GW-GWS	WATER	REG	3	grab	N	~~X~~ LB								X		
7	MW-13	355.0	---	MW-13-355-051222	5/12/2022	9:01	GW-GWS	WATER	REG	3	grab	N	~~X~~ TL								X		
8	MW-14	350.0		MW-14-350-051222	5/12/2022	12:13	GW-GWS	WATER	REG	3	grab	N	~~X~~ TL								X		
9	Trip Blank			TB-051222	5/12/2022	8:00	BLKWATER	WATER	TB	3	grab	N	X										
10																							
11																							
12																							

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Thomas Kearsley	CH2M	~~FedEx~~ LETA-9HR		OK	
	Date/Time 5/12/22 14:00		Date/Time 5/12/22 14:00	Cooler Temp. 1.0°C	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	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)

Jacobs CPO

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

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sester, Rachel E	Carrier Tracking No(s):	COC No: 550-34019.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachel.Sester@et.eurofinsus.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Arizona		Job #: 550-184011-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/25/2022			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: IAC, Peoria	Project #: 55014762			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.1/624_Prep 624 List Chloroform, TCE, 1,1-DCE, 1,1-D	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-10-22Q2 (550-184011-1)	5/12/22	11:43 Arizona		Water			X	3	
EW-1-22Q2 (550-184011-3)	5/12/22	10:55 Arizona		Water			X	3	
MW-7-285-051222 (550-184011-5)	5/12/22	09:49 Arizona		Water			X	3	
MW-12-410-051222 (550-184011-6)	5/12/22	10:19 Arizona		Water			X	3	
MW-13-355-051222 (550-184011-7)	5/12/22	09:01 Arizona		Water			X	3	
MW-14-350-051222 (550-184011-8)	5/12/22	12:13 Arizona		Water			X	3	
TB-051222 (550-184011-9)	5/12/22	08:00 Arizona		Water			X	1	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible] FedEx	5-19-22 16:00	EESW	FedEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[illegible]	5/20/22 1000	FedEx
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.3 IR2 CF4C1

Rev: 06/08/2021

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-184011-1

Login Number: 184011
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.

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-184011-1

Login Number: 184011
List Number: 2
Creator: Rystrom, Joshua R

List Source: Eurofins Denver
List Creation: 05/21/22 10:36 AM

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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Sester, Rachel E.

From: Kidd, Bernice/RDD <Bernice.Kidd@jacobs.com>
Sent: Thursday, June 2, 2022 12:33 PM
To: Rene Surgi; Sester, Rachel E.
Cc: Bowles, Steven L
Subject: RE: Peoria VOA Samples - Urgent

EXTERNAL EMAIL*

Hi Rachel and Rene,

We have decided to move forward without reporting these analytes:

1,1,2-Trichloro-1,2,2-trifluoroethane
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
1,3-Dichloropropane
2,2-Dichloropropane
2-Chlorotoluene
4-Chlorotoluene
4-Isopropyltoluene
Bromobenzene
Chlorobromomethane
Dibromofluoromethane (Surr)
Ethanol
Hexachlorobutadiene
Isopropylbenzene
n-Butylbenzene
N-Propylbenzene
sec-Butylbenzene
tert-Butylbenzene

Rachel – can you please make sure to note what happened in the narrative?

Rene – decision was made based on the fact that these are not COCs, and only 1,2,4-TCB has a AWQS standard at 70 ug/L and we do not anticipate a detection of this analyte.

We'll return to the full list at Phoenix for the next round at these wells.

Thank you,
Berney

From: Rene Surgi <renesurgi@aesi.us>
Sent: Thursday, June 2, 2022 11:29 AM
To: Kidd, Bernice/RDD <Bernice.Kidd@jacobs.com>
Cc: Bowles, Steven L <Steven.Bowles@Honeywell.com>; Sester, Rachel E. <Rachel.Sester@Eurofinset.com>
Subject: [EXTERNAL] Peoria VOA Samples - Urgent

Hi Berney
I brought up EW-1 Hg (which is completed at the lab) and the following VOA E624 samples
MW-7, -12, -13, -14.

As it turns out these went to Denver in anticipation of the original short list. When you requested the longer list, Denver ran their longer list but is not the "long list" at Phoenix. All the analytes at Denver are in 1x HT. However we would like you to compare the list needed vs what Denver actually reported. If Denver's list will suffice, we are done. However if you have compounds on your long list (Phoenix) not analyzed in Denver, you can get these done with a "J" (within 2x HT) at Phoenix. I asked that Rachel get these returned from Denver today (where they are now) to Phoenix (overnight repackaged on ice) in case you need these added compounds run at Phoenix.

Just let us know.
Thanks
Rene

Rene Surgi, Ph.D.
AESI
908 Shinnecock Hills Dr.
Georgetown TX 78628
847-835-0983
847-254-0934
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ANALYTICAL REPORT

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Laboratory Job ID: 550-187803-1
Client Project/Site: IAC, Peoria
Revision: 1

For:
Honeywell International Inc
1944 E. Sky Harbor Circle MS 2101-2C
Phoenix, Arizona 85034

Attn: Tao Wu

Authorized for release by:
8/5/2022 10:41:17 AM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Qualifiers

General Chemistry

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

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: 550-187803-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-187803-1

Comments
The report being provided is a revision of the original report sent on 8//052022. The report (revision 1) is being revised due to: Revised site location

No additional comments.

Receipt
The samples were received on 7/26/2022 12:49 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 0.8º 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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-187803-1	MW-10-22Q3	Water	07/26/22 09:40	07/26/22 12:49
550-187803-2	MW-1022Q3-comp	Water	07/26/22 09:34	07/26/22 12:49
550-187803-3	EW-1-22Q3	Water	07/26/22 10:20	07/26/22 12:49
550-187803-4	EW-1-22Q3-comp	Water	07/26/22 10:18	07/26/22 12:49
550-187803-5	TB-22Q3	Water	07/26/22 08:00	07/26/22 12:49

Detection Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3 — Lab Sample ID: 550-187803-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.72		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	15		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-1022Q3-comp — Lab Sample ID: 550-187803-2

No Detections.

Client Sample ID: EW-1-22Q3 — Lab Sample ID: 550-187803-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.7		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	65		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.3		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	21		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q3-comp — Lab Sample ID: 550-187803-4

No Detections.

Client Sample ID: TB-22Q3 — Lab Sample ID: 550-187803-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3

Lab Sample ID: 550-187803-1
Date Collected: 07/26/22 09:40
Matrix: Water
Date Received: 07/26/22 12:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.72		0.50	ug/L			07/27/22 16:28	1
1,1-Dichloroethene	15		0.50	ug/L			07/27/22 16:28	1
Benzene	ND		0.50	ug/L			07/27/22 16:28	1
Chloroform	ND		0.50	ug/L			07/27/22 16:28	1
Trichloroethene	4.9		0.50	ug/L			07/27/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*07/27/22 16:28*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*07/27/22 16:28*	*1*
Toluene-d8 (Surr)	*100*		*60 - 140*		*07/27/22 16:28*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050	mg/L		07/30/22 20:50	07/30/22 22:01	1

Client Sample ID: MW-1022Q3-comp

Lab Sample ID: 550-187803-2
Date Collected: 07/26/22 09:34
Matrix: Water
Date Received: 07/26/22 12:49

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:49	1
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:49	1
Molybdenum	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Selenium	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:49	1
Silver	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:49	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:49	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		08/02/22 16:05	08/02/22 19:43	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			07/29/22 12:37	1
Biochemical Oxygen Demand	ND		5.0	mg/L			07/27/22 19:18	1

Client Sample ID: EW-1-22Q3

Lab Sample ID: 550-187803-3
Date Collected: 07/26/22 10:20
Matrix: Water
Date Received: 07/26/22 12:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	5.7		0.50	ug/L			07/27/22 16:50	1
1,1-Dichloroethene	65		0.50	ug/L			07/27/22 16:50	1
Chloroform	1.3		0.50	ug/L			07/27/22 16:50	1
Trichloroethene	21		0.50	ug/L			07/27/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*07/27/22 16:50*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: EW-1-22Q3

Lab Sample ID: 550-187803-3
Date Collected: 07/26/22 10:20
Matrix: Water
Date Received: 07/26/22 12:49

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*60 - 140*		*07/27/22 16:50*	*1*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*07/27/22 16:50*	*1*

Client Sample ID: EW-1-22Q3-comp

Lab Sample ID: 550-187803-4
Date Collected: 07/26/22 10:18
Matrix: Water
Date Received: 07/26/22 12:49

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:52	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:52	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:52	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:52	1

Client Sample ID: TB-22Q3

Lab Sample ID: 550-187803-5
Date Collected: 07/26/22 08:00
Matrix: Water
Date Received: 07/26/22 12:49

Method: 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			07/27/22 14:16	1
1,1-Dichloroethene	ND		0.50	ug/L			07/27/22 14:16	1
Benzene	ND		0.50	ug/L			07/27/22 14:16	1
Chloroform	ND		0.50	ug/L			07/27/22 14:16	1
Trichloroethene	ND		0.50	ug/L			07/27/22 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*07/27/22 14:16*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*		*07/27/22 14:16*	*1*
Toluene-d8 (Surr)	*102*		*60 - 140*		*07/27/22 14:16*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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)**
550-187803-1	MW-10-22Q3	94	106	100
550-187803-1 MS	MW-10-22Q3	92	91	88
550-187803-1 MSD	MW-10-22Q3	93	88	87
550-187803-3	EW-1-22Q3	93	106	101
550-187803-5	TB-22Q3	96	104	102
LCS 550-280155/3	Lab Control Sample	93	88	90
LCSD 550-280155/4	Lab Control Sample Dup	94	91	91
MB 550-280155/6	Method Blank	97	101	98

Surrogate Legend

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

QC Sample Results

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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

Lab Sample ID: MB 550-280155/6
Matrix: Water
Analysis Batch: 280155

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			07/27/22 10:33	1
Benzene	ND		0.50		ug/L			07/27/22 10:33	1
1,1-Dichloroethene	ND		0.50		ug/L			07/27/22 10:33	1
Chloroform	ND		0.50		ug/L			07/27/22 10:33	1
Trichloroethene	ND		0.50		ug/L			07/27/22 10:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*07/27/22 10:33*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*07/27/22 10:33*	*1*
Toluene-d8 (Surr)	*98*		*60 - 140*		*07/27/22 10:33*	*1*

Lab Sample ID: LCS 550-280155/3
Matrix: Water
Analysis Batch: 280155

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	51.0		ug/L		102	70 - 150		
Benzene			50.0	48.2		ug/L		96	65 - 135		
1,1-Dichloroethene			50.0	49.0		ug/L		98	50 - 140		
Chloroform			50.0	48.8		ug/L		98	70 - 135		
Trichloroethene			50.0	48.6		ug/L		97	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*
Dibromofluoromethane (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*90*		*60 - 140*

Lab Sample ID: LCSD 550-280155/4
Matrix: Water
Analysis Batch: 280155

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	51.6		ug/L		103	70 - 150	1	20
Benzene			50.0	48.5		ug/L		97	65 - 135	1	20
1,1-Dichloroethene			50.0	49.6		ug/L		99	50 - 140	1	20
Chloroform			50.0	49.6		ug/L		99	70 - 135	2	20
Trichloroethene			50.0	48.6		ug/L		97	65 - 135	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*
Dibromofluoromethane (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*91*		*60 - 140*

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

Lab Sample ID: 550-187803-1 MS
Matrix: Water
Analysis Batch: 280155

Client Sample ID: MW-10-22Q3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.72		50.0	52.8		ug/L		104	59 - 155
Benzene	ND		50.0	48.9		ug/L		98	35 - 151
1,1-Dichloroethene	15		50.0	61.8		ug/L		94	10 - 234
Chloroform	ND		50.0	50.2		ug/L		100	51 - 138
Trichloroethene	4.9		50.0	51.3		ug/L		93	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*
Dibromofluoromethane (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*88*		*60 - 140*

Lab Sample ID: 550-187803-1 MSD
Matrix: Water
Analysis Batch: 280155

Client Sample ID: MW-10-22Q3
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	0.72		50.0	50.9		ug/L		100	59 - 155	4	40
Benzene	ND		50.0	47.4		ug/L		95	35 - 151	3	61
1,1-Dichloroethene	15		50.0	58.8		ug/L		88	10 - 234	5	32
Chloroform	ND		50.0	49.2		ug/L		98	51 - 138	2	54
Trichloroethene	4.9		50.0	50.7		ug/L		91	70 - 157	1	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*
Dibromofluoromethane (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*87*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-280149/1-A
Matrix: Water
Analysis Batch: 280380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280149

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:36	1
Cadmium	ND		0.0010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Copper	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Lead	ND		0.015	mg/L		07/27/22 07:30	07/28/22 19:36	1
Molybdenum	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Selenium	ND		0.10	mg/L		07/27/22 07:30	07/28/22 19:36	1
Silver	ND		0.010	mg/L		07/27/22 07:30	07/28/22 19:36	1
Zinc	ND		0.050	mg/L		07/27/22 07:30	07/28/22 19:36	1

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

Lab Sample ID: LCS 550-280149/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

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	1.01		mg/L		101	85 - 115
Copper	1.00	0.964		mg/L		96	85 - 115
Lead	1.00	1.02		mg/L		102	85 - 115
Molybdenum	1.00	0.997		mg/L		100	85 - 115
Selenium	1.00	0.997		mg/L		100	85 - 115
Silver	0.0750	0.0756		mg/L		101	85 - 115
Zinc	1.00	1.00		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-280149/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

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	0.978		mg/L		98	85 - 115	3	20
Copper	1.00	0.965		mg/L		97	85 - 115	0	20
Lead	1.00	1.02		mg/L		102	85 - 115	0	20
Molybdenum	1.00	1.00		mg/L		100	85 - 115	0	20
Selenium	1.00	1.01		mg/L		101	85 - 115	1	20
Silver	0.0750	0.0760		mg/L		101	85 - 115	1	20
Zinc	1.00	1.00		mg/L		100	85 - 115	0	20

Lab Sample ID: 550-187803-2 MS — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.06		mg/L		105	70 - 130
Cadmium	ND		1.00	1.01		mg/L		101	70 - 130
Copper	ND		1.00	0.968		mg/L		97	70 - 130
Lead	ND		1.00	0.989		mg/L		99	70 - 130
Molybdenum	ND		1.00	0.998		mg/L		100	70 - 130
Selenium	ND		1.00	1.00		mg/L		100	70 - 130
Silver	ND		0.0750	0.0758		mg/L		101	70 - 130
Zinc	ND		1.00	0.972		mg/L		97	70 - 130

Lab Sample ID: 550-187803-2 MSD — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.06		mg/L		105	70 - 130	0	20
Cadmium	ND		1.00	0.990		mg/L		99	70 - 130	2	20
Copper	ND		1.00	0.970		mg/L		97	70 - 130	0	20
Lead	ND		1.00	0.987		mg/L		99	70 - 130	0	20
Molybdenum	ND		1.00	0.998		mg/L		100	70 - 130	0	20
Selenium	ND		1.00	0.999		mg/L		100	70 - 130	0	20
Silver	ND		0.0750	0.0759		mg/L		101	70 - 130	0	20

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

Lab Sample ID: 550-187803-2 MSD — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280380 — **Prep Batch: 280149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	0.976		mg/L		97	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-280668/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/02/22 16:05	08/02/22 19:25	1

Lab Sample ID: LCS 550-280668/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00443		mg/L		89	85 - 115		

Lab Sample ID: LCSD 550-280668/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00448		mg/L		90	85 - 115	1	20

Lab Sample ID: 380-12503-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00490		mg/L		98	70 - 130		

Lab Sample ID: 380-12503-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280684 — **Prep Batch: 280668**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00471		mg/L		94	70 - 130	4	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-280420/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			07/29/22 12:37	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 550-280420/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			200	203		mg/L		102	90 - 110		

Lab Sample ID: LCSD 550-280420/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			200	197		mg/L		99	90 - 110	3	10

Lab Sample ID: 550-187803-2 DU — **Client Sample ID: MW-1022Q3-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280420

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-280496/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		07/30/22 20:50	07/30/22 22:01	1

Lab Sample ID: LCS 550-280496/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0996		mg/L		100	90 - 110		

Lab Sample ID: LCSD 550-280496/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0995		mg/L		100	90 - 110	0	20

Lab Sample ID: 550-187861-G-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND		0.100	0.111		mg/L		111	80 - 120		

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

Lab Sample ID: 550-187861-G-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280613 — **Prep Batch: 280496**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		0.100	0.117		mg/L		117	80 - 120	6	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-280249/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		5.0		mg/L			07/27/22 19:18	1

Lab Sample ID: LCS 550-280249/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	198		mg/L		100	84.6 - 115.4		

Lab Sample ID: 550-187813-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280249

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	200	D2		191	D2	mg/L				4	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

GC/MS VOA

Analysis Batch: 280155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	624.1	
550-187803-3	EW-1-22Q3	Total/NA	Water	624.1	
550-187803-5	TB-22Q3	Total/NA	Water	624.1	
MB 550-280155/6	Method Blank	Total/NA	Water	624.1	
LCS 550-280155/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-280155/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-187803-1 MS	MW-10-22Q3	Total/NA	Water	624.1	
550-187803-1 MSD	MW-10-22Q3	Total/NA	Water	624.1	

Metals

Prep Batch: 280149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	200.7	
550-187803-4	EW-1-22Q3-comp	Total/NA	Water	200.7	
MB 550-280149/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-280149/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-280149/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-187803-2 MS	MW-1022Q3-comp	Total/NA	Water	200.7	
550-187803-2 MSD	MW-1022Q3-comp	Total/NA	Water	200.7	

Analysis Batch: 280380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-4	EW-1-22Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
MB 550-280149/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	280149
LCS 550-280149/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	280149
LCSD 550-280149/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-2 MS	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149
550-187803-2 MSD	MW-1022Q3-comp	Total/NA	Water	200.7 Rev 4.4	280149

Prep Batch: 280668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	245.1	
MB 550-280668/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-280668/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-280668/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
380-12503-A-1-A MS	Matrix Spike	Total/NA	Water	245.1	
380-12503-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 280684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	245.1	280668
MB 550-280668/1-A	Method Blank	Total/NA	Water	245.1	280668
LCS 550-280668/2-A	Lab Control Sample	Total/NA	Water	245.1	280668
LCSD 550-280668/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	280668
380-12503-A-1-A MS	Matrix Spike	Total/NA	Water	245.1	280668
380-12503-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	280668

QC Association Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

General Chemistry

Analysis Batch: 280249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	SM 5210B	
MB 550-280249/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-280249/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-187813-A-1 DU	Duplicate	Total/NA	Water	SM 5210B	

Analysis Batch: 280420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-2	MW-1022Q3-comp	Total/NA	Water	SM 2540D	
MB 550-280420/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-280420/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-280420/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-187803-2 DU	MW-1022Q3-comp	Total/NA	Water	SM 2540D	

Prep Batch: 280496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	SM 4500 CN C	
MB 550-280496/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-280496/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-280496/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-187861-G-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-187861-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 280613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-187803-1	MW-10-22Q3	Total/NA	Water	SM 4500 CN E	280496
MB 550-280496/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	280496
LCS 550-280496/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	280496
LCSD 550-280496/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	280496
550-187861-G-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	280496
550-187861-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	280496

Lab Chronicle

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Client Sample ID: MW-10-22Q3 — Lab Sample ID: 550-187803-1

Date Collected: 07/26/22 09:40 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 16:28	R1K	EETSW PH.
Total/NA	Prep	SM 4500 CN C			280496	07/30/22 20:50	CXK	EETSW PH.
Total/NA	Analysis	SM 4500 CN E		1	280613	07/30/22 22:01	CXK	EETSW PH.

Client Sample ID: MW-1022Q3-comp — Lab Sample ID: 550-187803-2

Date Collected: 07/26/22 09:34 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			280149	07/27/22 07:30	SGO	EETSW PH.
Total/NA	Analysis	200.7 Rev 4.4		1	280380	07/28/22 19:49	CHS	EETSW PH.
Total/NA	Prep	245.1			280668	08/02/22 16:05	SRR	EETSW PH.
Total/NA	Analysis	245.1		1	280684	08/02/22 19:43	SRR	EETSW PH.
Total/NA	Analysis	SM 2540D		1	280420		VOS	EETSW PH.
					(Start)	07/29/22 12:37		
					(End)	08/01/22 10:00		
Total/NA	Analysis	SM 5210B		1	280249		SH1	EETSW PH.
					(Start)	07/27/22 19:18		
					(End)	08/01/22 13:20		

Client Sample ID: EW-1-22Q3 — Lab Sample ID: 550-187803-3

Date Collected: 07/26/22 10:20 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 16:50	R1K	EETSW PH.

Client Sample ID: EW-1-22Q3-comp — Lab Sample ID: 550-187803-4

Date Collected: 07/26/22 10:18 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			280149	07/27/22 07:30	SGO	EETSW PH.
Total/NA	Analysis	200.7 Rev 4.4		1	280380	07/28/22 19:52	CHS	EETSW PH.

Client Sample ID: TB-22Q3 — Lab Sample ID: 550-187803-5

Date Collected: 07/26/22 08:00 — **Matrix: Water**
Date Received: 07/26/22 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	280155	07/27/22 14:16	R1K	EETSW PH.

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

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: Honeywell International Inc
Project/Site: IAC, Peoria

Job ID: 550-187803-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	EETSW PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EETSW PHX
245.1	Mercury (CVAA)	EPA	EETSW PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	EETSW PHX
SM 4500 CN E	Cyanide, Total	SM	EETSW PHX
SM 5210B	BOD, 5-Day	SM	EETSW PHX
200.7	Preparation, Total Metals	EPA	EETSW PHX
245.1	Preparation, Mercury	EPA	EETSW PHX
SM 4500 CN C	Cyanide, Distillation	SM	EETSW 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:

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

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

187803

Chain Of Custody / Analysis Request

AESI Ref: 44766.41475
COC# 35008

Privileged & Confidential

Site Name: IAC, Peoria
Location of Site: Phoenix, AZ
Phase: Sampling Program: Quarterly
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley
PO # A000651433
Analysis Turnaround Time (TAT): 10
Consultant
Laboratory Contact: Danielle Roberts
Report Tier Level: 2
Full Report TAT: 10
HTS
Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd Jacobs,
Invoice To: Mike Heitmann, Honeywell/Copy Berney Kidd

Text & Excel File Drive | Excel & Text File Order

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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 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
											Units		Preservative: 8	10	15	10	0	0	10								
1	MW-10	----	----	MW-10-22Q3	7/26/22	0940	GW-GWS	WATER	REG	4	grab	N	X		X								-01				
2	MW-10	----	----	MW-10-22Q3-comp	7/26/22	0934	GW-GWS	WATER	REG	3	comp	N		X		X	X	X					-02				
3	EW-1	----	----	EW-1-22Q3	7/26/22	1020	GW-GWS	WATER	REG	3	grab	N								X			-03				
4	EW-1	----	----	EW-1-22Q3-comp	7/26/22	1018	GW-GWS	WATER	REG	1	comp	N							X				-04				
5	TRIPBLANK	----	----	TB-22Q3	7/26/22	8:00	BLKWATER	WATER	TB	1	grab	N	X										-05				
6																											
7																											
8																											
9																											
10																											
11																											
12																											

550-187803 Chain of Custody

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Thomas Kearsley	CH2M	FedEx			
Date/Time: 7/26/22 1347		Date/Time		Cooler Temp.	
Relinquished by	Company	Received by	Eeta Pnf	Condition	Custody Seals Intact
Date/Time		Date/Time	7-26-22 1349	Cooler Temp. 0.8°C	IVE COS

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)

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 550-187803-1

Login Number: 187803
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

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

Laboratory Job ID: 550-192541-1
Laboratory Sample Delivery Group: Phoenix, AZ
Client Project/Site: IAC, Peoria

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

Attn: Baine Foehr

Authorized for release by:
10/31/2022 2:47:27 PM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
N1	See case narrative.

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: 550-192541-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-192541-1

Comments
No additional comments.

Receipt
The samples were received on 10/24/2022 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 2.7º C.

GC/MS VOA
Method 624.1: The following sample(TB) was re-analyzed to confirm hits above the reporting limit (RL) . The re-analysis result confirms the hits in the trip blank. The data will be reported with an N1 qualifier, see analytical batch 550-287200.

TB-22Q4 (550-192541-3)

No additional analytical or quality issues were noted, other than those described above or 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: 550-192541-1
SDG: Phoenix, AZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-192541-1	EW-1-22Q4	Water	10/24/22 12:25	10/24/22 14:03
550-192541-2	EW-1-22Q4-comp	Water	10/24/22 12:22	10/24/22 14:03
550-192541-3	TB-22Q4	Water	10/24/22 08:00	10/24/22 14:03

Detection Summary

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-22Q4 — Lab Sample ID: 550-192541-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.8		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	79		0.50		ug/L	1		624.1	Total/NA
Chloroform	1.4		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	21		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: EW-1-22Q4-comp — Lab Sample ID: 550-192541-2

No Detections.

Client Sample ID: TB-22Q4 — Lab Sample ID: 550-192541-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.2	N1	0.50		ug/L	1		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-22Q4

Lab Sample ID: 550-192541-1
Date Collected: 10/24/22 12:25
Matrix: Water
Date Received: 10/24/22 14:03

Method: 40CFR136A 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**5.8**		0.50	ug/L			10/25/22 15:03	1
1,1-Dichloroethene	**79**		0.50	ug/L			10/25/22 15:03	1
Chloroform	**1.4**		0.50	ug/L			10/25/22 15:03	1
Trichloroethene	**21**		0.50	ug/L			10/25/22 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*60 - 140*		*10/25/22 15:03*	*1*
Toluene-d8 (Surr)	*96*		*60 - 140*		*10/25/22 15:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*10/25/22 15:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050	mg/L		10/26/22 14:50	10/26/22 16:07	1

Client Sample ID: EW-1-22Q4-comp

Lab Sample ID: 550-192541-2
Date Collected: 10/24/22 12:22
Matrix: Water
Date Received: 10/24/22 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		10/27/22 05:33	10/28/22 18:15	1
Cadmium	ND		0.0010	mg/L		10/27/22 05:33	10/28/22 18:15	1
Copper	ND		0.010	mg/L		10/27/22 05:33	10/28/22 18:15	1
Lead	ND		0.015	mg/L		10/27/22 05:33	10/28/22 18:15	1
Molybdenum	ND		0.010	mg/L		10/27/22 05:33	10/28/22 18:15	1
Selenium	ND		0.10	mg/L		10/27/22 05:33	10/28/22 18:15	1
Silver	ND		0.010	mg/L		10/27/22 05:33	10/28/22 18:15	1
Zinc	ND		0.050	mg/L		10/27/22 05:33	10/28/22 18:15	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		10/26/22 15:40	10/26/22 19:42	1

Client Sample ID: TB-22Q4

Lab Sample ID: 550-192541-3
Date Collected: 10/24/22 08:00
Matrix: Water
Date Received: 10/24/22 14:03

Method: 40CFR136A 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			10/25/22 12:30	1
1,1-Dichloroethene	ND		0.50	ug/L			10/25/22 12:30	1
Chloroform	**1.2**	**N1**	0.50	ug/L			10/26/22 21:29	1
Trichloroethene	ND		0.50	ug/L			10/25/22 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*10/25/22 12:30*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*10/26/22 21:29*	*1*
Toluene-d8 (Surr)	*92*		*60 - 140*		*10/25/22 12:30*	*1*
Toluene-d8 (Surr)	*83*		*60 - 140*		*10/26/22 21:29*	*1*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*10/25/22 12:30*	*1*
4-Bromofluorobenzene (Surr)	*85*		*60 - 140*		*10/26/22 21:29*	*1*

Surrogate Summary

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	**Client Sample ID**	**(60-140)**	**(60-140)**	**(60-140)**
550-192433-B-2 MS	Matrix Spike	121	118	113
550-192433-B-2 MSD	Matrix Spike Duplicate	118	113	111
550-192494-A-1 MS	Matrix Spike	106	99	103
550-192494-A-1 MSD	Matrix Spike Duplicate	96	88	92
550-192541-1	EW-1-22Q4	100	96	97
550-192541-3	TB-22Q4	97	92	95
550-192541-3	TB-22Q4	93	83	85
LCS 550-287040/3	Lab Control Sample	106	104	105
LCS 550-287200/4	Lab Control Sample	119	112	109
LCSD 550-287040/4	Lab Control Sample Dup	101	99	101
LCSD 550-287200/5	Lab Control Sample Dup	117	111	108
MB 550-287040/6	Method Blank	97	92	95
MB 550-287200/7	Method Blank	93	84	84

Surrogate Legend

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

QC Sample Results

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

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

Lab Sample ID: MB 550-287040/6
Matrix: Water
Analysis Batch: 287040

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			10/25/22 11:47	1
1,1-Dichloroethene	ND		0.50		ug/L			10/25/22 11:47	1
Chloroform	ND		0.50		ug/L			10/25/22 11:47	1
Trichloroethene	ND		0.50		ug/L			10/25/22 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*10/25/22 11:47*	*1*
Toluene-d8 (Surr)	*92*		*60 - 140*		*10/25/22 11:47*	*1*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*10/25/22 11:47*	*1*

Lab Sample ID: LCS 550-287040/3
Matrix: Water
Analysis Batch: 287040

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	59.8		ug/L		120	70 - 130		
1,1-Dichloroethene			50.0	71.9		ug/L		144	50 - 150		
Chloroform			50.0	57.4		ug/L		115	70 - 135		
Trichloroethene			50.0	57.3		ug/L		115	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*60 - 140*
Toluene-d8 (Surr)	*104*		*60 - 140*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*

Lab Sample ID: LCSD 550-287040/4
Matrix: Water
Analysis Batch: 287040

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	55.8		ug/L		112	70 - 130	7	20
1,1-Dichloroethene			50.0	67.3		ug/L		135	50 - 150	7	20
Chloroform			50.0	53.8		ug/L		108	70 - 135	6	20
Trichloroethene			50.0	54.8		ug/L		110	65 - 135	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*

Lab Sample ID: 550-192494-A-1 MS
Matrix: Water
Analysis Batch: 287040

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	58.3		ug/L		117	59 - 155		
1,1-Dichloroethene	ND		50.0	69.4		ug/L		139	10 - 234		
Chloroform	6.2		50.0	61.8		ug/L		111	51 - 138		

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

Lab Sample ID: 550-192494-A-1 MS
Matrix: Water
Analysis Batch: 287040

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
Trichloroethene	ND		50.0	53.6		ug/L		107	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*60 - 140*
Toluene-d8 (Surr)	*99*		*60 - 140*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*

Lab Sample ID: 550-192494-A-1 MSD
Matrix: Water
Analysis Batch: 287040

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	51.9		ug/L		104	59 - 155	12	40
1,1-Dichloroethene	ND		50.0	61.0		ug/L		122	10 - 234	13	32
Chloroform	6.2		50.0	57.5		ug/L		103	51 - 138	7	54
Trichloroethene	ND		50.0	47.8		ug/L		96	70 - 157	11	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*88*		*60 - 140*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*

Lab Sample ID: MB 550-287200/7
Matrix: Water
Analysis Batch: 287200

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.50		ug/L			10/26/22 21:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*60 - 140*		*10/26/22 21:08*	*1*
Toluene-d8 (Surr)	*84*		*60 - 140*		*10/26/22 21:08*	*1*
4-Bromofluorobenzene (Surr)	*84*		*60 - 140*		*10/26/22 21:08*	*1*

Lab Sample ID: LCS 550-287200/4
Matrix: Water
Analysis Batch: 287200

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform			50.0	50.5		ug/L		101	70 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*119*		*60 - 140*
Toluene-d8 (Surr)	*112*		*60 - 140*
4-Bromofluorobenzene (Surr)	*109*		*60 - 140*

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

Lab Sample ID: LCSD 550-287200/5
Matrix: Water
Analysis Batch: 287200

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
Chloroform			50.0	50.2		ug/L		100	70 - 135	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*117*		*60 - 140*
Toluene-d8 (Surr)	*111*		*60 - 140*
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*

Lab Sample ID: 550-192433-B-2 MS
Matrix: Water
Analysis Batch: 287200

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		
Chloroform	ND		5000	5250		ug/L		104	51 - 138		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*121*		*60 - 140*
Toluene-d8 (Surr)	*118*		*60 - 140*
4-Bromofluorobenzene (Surr)	*113*		*60 - 140*

Lab Sample ID: 550-192433-B-2 MSD
Matrix: Water
Analysis Batch: 287200

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
Chloroform	ND		5000	4890		ug/L		97	51 - 138	7	54

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*118*		*60 - 140*
Toluene-d8 (Surr)	*113*		*60 - 140*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-287208/1-A
Matrix: Water
Analysis Batch: 287477

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 287208

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/L		10/27/22 05:33	10/28/22 17:58	1
Cadmium	ND		0.0010		mg/L		10/27/22 05:33	10/28/22 17:58	1
Copper	ND		0.010		mg/L		10/27/22 05:33	10/28/22 17:58	1
Lead	ND		0.015		mg/L		10/27/22 05:33	10/28/22 17:58	1
Molybdenum	ND		0.010		mg/L		10/27/22 05:33	10/28/22 17:58	1
Selenium	ND		0.10		mg/L		10/27/22 05:33	10/28/22 17:58	1
Silver	ND		0.010		mg/L		10/27/22 05:33	10/28/22 17:58	1
Zinc	ND		0.050		mg/L		10/27/22 05:33	10/28/22 17:58	1

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

Lab Sample ID: LCS 550-287208/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	0.986		mg/L		99	85 - 115
Cadmium	1.00	0.972		mg/L		97	85 - 115
Copper	1.00	1.01		mg/L		101	85 - 115
Lead	1.00	1.00		mg/L		100	85 - 115
Molybdenum	1.00	0.987		mg/L		99	85 - 115
Selenium	1.00	0.988		mg/L		99	85 - 115
Silver	0.0750	0.0704		mg/L		94	85 - 115
Zinc	1.00	0.999		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-287208/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	0.982		mg/L		98	85 - 115	0	20
Cadmium	1.00	0.974		mg/L		97	85 - 115	0	20
Copper	1.00	1.00		mg/L		100	85 - 115	1	20
Lead	1.00	1.01		mg/L		101	85 - 115	0	20
Molybdenum	1.00	0.993		mg/L		99	85 - 115	1	20
Selenium	1.00	1.00		mg/L		100	85 - 115	1	20
Silver	0.0750	0.0708		mg/L		94	85 - 115	1	20
Zinc	1.00	1.01		mg/L		101	85 - 115	1	20

Lab Sample ID: 550-192652-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		1.00	1.11		mg/L		107	70 - 130
Cadmium	ND		1.00	1.06		mg/L		106	70 - 130
Copper	ND		1.00	1.09		mg/L		109	70 - 130
Lead	ND		1.00	0.970		mg/L		97	70 - 130
Molybdenum	1.9		1.00	2.69		mg/L		83	70 - 130
Selenium	ND		1.00	0.924		mg/L		92	70 - 130
Silver	ND		0.0750	0.0745		mg/L		99	70 - 130
Zinc	ND		1.00	1.05		mg/L		105	70 - 130

Lab Sample ID: 550-192652-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.12		mg/L		108	70 - 130	0	20
Cadmium	ND		1.00	1.06		mg/L		106	70 - 130	0	20
Copper	ND		1.00	1.09		mg/L		109	70 - 130	0	20
Lead	ND		1.00	0.970		mg/L		97	70 - 130	0	20
Molybdenum	1.9		1.00	2.73		mg/L		87	70 - 130	1	20
Selenium	ND		1.00	0.961		mg/L		96	70 - 130	4	20
Silver	ND		0.0750	0.0747		mg/L		100	70 - 130	0	20

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

Lab Sample ID: 550-192652-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287477 — **Prep Batch: 287208**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	1.05		mg/L		105	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-287167/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		10/26/22 15:40	10/26/22 18:52	1

Lab Sample ID: LCS 550-287167/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00470		mg/L		94	85 - 115		

Lab Sample ID: LCSD 550-287167/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00456		mg/L		91	85 - 115	3	20

Lab Sample ID: 550-192265-D-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00500	0.00447		mg/L		89	70 - 130		

Lab Sample ID: 550-192265-D-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287201 — **Prep Batch: 287167**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00441		mg/L		88	70 - 130	2	20

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-287162/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		10/26/22 14:50	10/26/22 16:07	1

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

Lab Sample ID: LCS 550-287162/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.0984		mg/L		98	90 - 110		

Lab Sample ID: LCSD 550-287162/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.0967		mg/L		97	90 - 110	2	20

Lab Sample ID: 550-192329-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND		0.100	0.0965		mg/L		88	80 - 120		

Lab Sample ID: 550-192329-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287163 — **Prep Batch: 287162**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		0.100	0.0955		mg/L		87	80 - 120	1	20

QC Association Summary

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

GC/MS VOA

Analysis Batch: 287040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-1	EW-1-22Q4	Total/NA	Water	624.1	
550-192541-3	TB-22Q4	Total/NA	Water	624.1	
MB 550-287040/6	Method Blank	Total/NA	Water	624.1	
LCS 550-287040/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-287040/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-192494-A-1 MS	Matrix Spike	Total/NA	Water	624.1	
550-192494-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Analysis Batch: 287200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-3	TB-22Q4	Total/NA	Water	624.1	
MB 550-287200/7	Method Blank	Total/NA	Water	624.1	
LCS 550-287200/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-287200/5	Lab Control Sample Dup	Total/NA	Water	624.1	
550-192433-B-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-192433-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 287167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-2	EW-1-22Q4-comp	Total/NA	Water	245.1	
MB 550-287167/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-287167/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-287167/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-192265-D-1-C MS	Matrix Spike	Total/NA	Water	245.1	
550-192265-D-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 287201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-2	EW-1-22Q4-comp	Total/NA	Water	245.1	287167
MB 550-287167/1-A	Method Blank	Total/NA	Water	245.1	287167
LCS 550-287167/2-A	Lab Control Sample	Total/NA	Water	245.1	287167
LCSD 550-287167/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	287167
550-192265-D-1-C MS	Matrix Spike	Total/NA	Water	245.1	287167
550-192265-D-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	287167

Prep Batch: 287208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-2	EW-1-22Q4-comp	Total/NA	Water	200.7	
MB 550-287208/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-287208/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-287208/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-192652-A-1-A MS	Matrix Spike	Total/NA	Water	200.7	
550-192652-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	

Analysis Batch: 287477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-2	EW-1-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	287208
MB 550-287208/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	287208
LCS 550-287208/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	287208

Metals (Continued)

Analysis Batch: 287477 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-287208/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	287208
550-192652-A-1-A MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	287208
550-192652-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	287208

General Chemistry

Prep Batch: 287162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-1	EW-1-22Q4	Total/NA	Water	SM 4500 CN C	
MB 550-287162/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-287162/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-287162/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-192329-A-2-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-192329-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 287163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-192541-1	EW-1-22Q4	Total/NA	Water	SM 4500 CN E	287162
MB 550-287162/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	287162
LCS 550-287162/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	287162
LCSD 550-287162/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	287162
550-192329-A-2-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	287162
550-192329-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	287162

Lab Chronicle

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

Job ID: 550-192541-1
SDG: Phoenix, AZ

Client Sample ID: EW-1-22Q4

Lab Sample ID: 550-192541-1
Date Collected: 10/24/22 12:25
Matrix: Water
Date Received: 10/24/22 14:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	287040	R1K	EET PHX	10/25/22 15:03
Total/NA	Prep	SM 4500 CN C			287162	CXK	EET PHX	10/26/22 14:50
Total/NA	Analysis	SM 4500 CN E		1	287163	CXK	EET PHX	10/26/22 16:07

Client Sample ID: EW-1-22Q4-comp

Lab Sample ID: 550-192541-2
Date Collected: 10/24/22 12:22
Matrix: Water
Date Received: 10/24/22 14:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			287208	SGO	EET PHX	10/27/22 05:33
Total/NA	Analysis	200.7 Rev 4.4		1	287477	CHS	EET PHX	10/28/22 18:15
Total/NA	Prep	245.1			287167	SRR	EET PHX	10/26/22 15:40
Total/NA	Analysis	245.1		1	287201	SRR	EET PHX	10/26/22 19:42

Client Sample ID: TB-22Q4

Lab Sample ID: 550-192541-3
Date Collected: 10/24/22 08:00
Matrix: Water
Date Received: 10/24/22 14:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	287200	JHU	EET PHX	10/26/22 21:29
Total/NA	Analysis	624.1		1	287040	R1K	EET PHX	10/25/22 12:30

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: 550-192541-1
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: 550-192541-1
SDG: Phoenix, AZ

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	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

192541

10/31/2022

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

Chain Of Custody / Analysis Request

AESI Ref: 44858.54286
COC#: 35008_102422

Privileged & Confidential

Site Name: IAC, Peoria
Location of Site: Phoenix, AZ
Phase: Sampling Program: Quarterly
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley
PO #: A000651433
Analysis Turnaround Time (TAT): 5
Consultant:
Laboratory Contact: Danielle Roberts
Report Tier Level: 2
Full Report TAT: 10
HTS

Preliminary Data To: Berney Kidd Jacobs, Lakshmi Devi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd Jacobs,
Invoice To: Tao Wu, Honeywell/Copy Berney Kidd

Text & Excel File Drive | Excel & Text File Order

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	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) (Dr-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											
												Preservative	8	10	15	10	0	0	10	8		
1	EW-1	----	----	EW-1-22Q4	10/24/2022	12:25	GW-GWS	WATER	REG	4	grab	N			X					X		-1
2	EW-1	----	----	EW-1-22Q4-comp	10/24/2022	12:22	GW-GWS	WATER	REG	1	comp	N		X		X						-2
3	TRIPBLANK	----	----	TB-22Q4	10/24/2022	8:00	BLKWATER	WATER	TB	1	grab	N								X		-3
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

RUSH

550-192541 Chain of Custody

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Thomas Kearsley	CH2M	FedEx		Cooler Temp.	
	Date/Time 2/24/22 1403		Date/Time		
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time 10/24/22 14:03	Cooler Temp. 2.7°	

ETA-PHX

Preservatives: (Other; Specify):

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)

CDO

Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-192541-1
SDG Number: Phoenix, AZ

Login Number: 192541
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: Baine Foehr
Jacobs Engineering Group, Inc.
1501 W Fountainhead Parkway
Suite 401
Tempe, Arizona 85282

Generated 12/12/2022 9:20:05 AM Revision 1

JOB DESCRIPTION

IAC, Peoria

JOB NUMBER

550-193616-1

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

See page two for job notes and contact information.

my EOL

Eurofins Phoenix

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

Generated
12/12/2022 9:20:05 AM
Revision 1

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

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Definitions/Glossary

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

Job ID: 550-193616-1

Qualifiers

General Chemistry

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

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: 550-193616-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-193616-1

Comments
The report being provided is a revision of the original report sent on 11/27/2022. The report (revision 1) is being revised due to: Revised analyte list for 624.

No additional comments.

Receipt
The samples were received on 11/14/2022 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 8.4º C.

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: MW-10-22Q4 (550-193616-1), MW-10-22Q4-comp (550-193616-2) and TB-22Q4 (550-193616-3). The sample(s) is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

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: 550-193616-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-193616-1	MW-10-22Q4	Water	11/14/22 11:25	11/14/22 12:54
550-193616-2	MW-10-22Q4-comp	Water	11/14/22 11:21	11/14/22 12:54
550-193616-3	TB-22Q4	Water	11/14/22 08:00	11/14/22 12:54

Detection Summary

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

Job ID: 550-193616-1

Client Sample ID: MW-10-22Q4 — Lab Sample ID: 550-193616-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.58		0.50		ug/L	1		624.1	Total/NA
1,1-Dichloroethene	17		0.50		ug/L	1		624.1	Total/NA
Trichloroethene	5.4		0.50		ug/L	1		624.1	Total/NA

Client Sample ID: MW-10-22Q4-comp — Lab Sample ID: 550-193616-2

No Detections.

Client Sample ID: TB-22Q4 — Lab Sample ID: 550-193616-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 550-193616-1

Client Sample ID: MW-10-22Q4

Lab Sample ID: 550-193616-1
Date Collected: 11/14/22 11:25
Matrix: Water
Date Received: 11/14/22 12:54

Method: 40CFR136A 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.58**		0.50	ug/L			11/22/22 17:17	1
1,1-Dichloroethene	**17**		0.50	ug/L			11/22/22 17:17	1
Benzene	ND		0.50	ug/L			11/22/22 17:17	1
Chloroform	ND		0.50	ug/L			11/22/22 17:17	1
Trichloroethene	**5.4**		0.50	ug/L			11/22/22 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*60 - 140*		*11/22/22 17:17*	*1*
Dibromofluoromethane (Surr)	*92*		*60 - 140*		*11/22/22 17:17*	*1*
Toluene-d8 (Surr)	*88*		*60 - 140*		*11/22/22 17:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.050	mg/L		11/18/22 15:40	11/18/22 20:05	1

Client Sample ID: MW-10-22Q4-comp

Lab Sample ID: 550-193616-2
Date Collected: 11/14/22 11:21
Matrix: Water
Date Received: 11/14/22 12:54

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		11/15/22 06:26	11/16/22 22:45	1
Cadmium	ND		0.0010	mg/L		11/15/22 06:26	11/16/22 22:45	1
Copper	ND		0.010	mg/L		11/15/22 06:26	11/17/22 18:31	1
Lead	ND		0.015	mg/L		11/15/22 06:26	11/17/22 18:31	1
Molybdenum	ND		0.010	mg/L		11/15/22 06:26	11/17/22 18:31	1
Selenium	ND		0.10	mg/L		11/15/22 06:26	11/17/22 18:31	1
Silver	ND		0.010	mg/L		11/15/22 06:26	11/16/22 22:45	1
Zinc	ND		0.050	mg/L		11/15/22 06:26	11/17/22 18:31	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		11/15/22 15:34	11/15/22 21:03	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		10	mg/L			11/17/22 11:22	1
Biochemical Oxygen Demand (SM 5210B)	ND		5.0	mg/L			11/15/22 12:46	1

Client Sample ID: TB-22Q4

Lab Sample ID: 550-193616-3
Date Collected: 11/14/22 08:00
Matrix: Water
Date Received: 11/14/22 12:54

Method: 40CFR136A 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			11/22/22 14:01	1
1,1-Dichloroethene	ND		0.50	ug/L			11/22/22 14:01	1
Benzene	ND		0.50	ug/L			11/22/22 14:01	1
Chloroform	ND		0.50	ug/L			11/22/22 14:01	1
Trichloroethene	ND		0.50	ug/L			11/22/22 14:01	1

Client Sample Results

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

Job ID: 550-193616-1

Client Sample ID: TB-22Q4

Date Collected: 11/14/22 08:00
Date Received: 11/14/22 12:54

Lab Sample ID: 550-193616-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		60 - 140		11/22/22 14:01	1
Dibromofluoromethane (Surr)	91		60 - 140		11/22/22 14:01	1
Toluene-d8 (Surr)	89		60 - 140		11/22/22 14:01	1

Surrogate Summary

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

Job ID: 550-193616-1

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)**
550-193555-A-2 MS	Matrix Spike	100	100	98
550-193555-A-2 MSD	Matrix Spike Duplicate	102	102	102
550-193616-1	MW-10-22Q4	76	92	88
550-193616-3	TB-22Q4	78	91	89
LCS 550-289242/3	Lab Control Sample	101	102	101
LCSD 550-289242/4	Lab Control Sample Dup	111	107	103
MB 550-289242/6	Method Blank	77	90	90

Surrogate Legend

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

QC Sample Results

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

Job ID: 550-193616-1

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

Lab Sample ID: MB 550-289242/6
Matrix: Water
Analysis Batch: 289242

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			11/22/22 13:17	1
1,1-Dichloroethene	ND		0.50		ug/L			11/22/22 13:17	1
Benzene	ND		0.50		ug/L			11/22/22 13:17	1
Chloroform	ND		0.50		ug/L			11/22/22 13:17	1
Trichloroethene	ND		0.50		ug/L			11/22/22 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*60 - 140*		*11/22/22 13:17*	*1*
Dibromofluoromethane (Surr)	*90*		*60 - 140*		*11/22/22 13:17*	*1*
Toluene-d8 (Surr)	*90*		*60 - 140*		*11/22/22 13:17*	*1*

Lab Sample ID: LCS 550-289242/3
Matrix: Water
Analysis Batch: 289242

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	45.6		ug/L		91	70 - 130		
1,1-Dichloroethene			50.0	52.5		ug/L		105	50 - 150		
Benzene			50.0	43.5		ug/L		87	65 - 135		
Chloroform			50.0	45.5		ug/L		91	70 - 135		
Trichloroethene			50.0	45.3		ug/L		91	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*
Dibromofluoromethane (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*101*		*60 - 140*

Lab Sample ID: LCSD 550-289242/4
Matrix: Water
Analysis Batch: 289242

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	46.7		ug/L		93	70 - 130	2	20
1,1-Dichloroethene			50.0	53.9		ug/L		108	50 - 150	3	20
Benzene			50.0	43.0		ug/L		86	65 - 135	1	20
Chloroform			50.0	46.1		ug/L		92	70 - 135	1	20
Trichloroethene			50.0	46.2		ug/L		92	65 - 135	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*
Dibromofluoromethane (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*103*		*60 - 140*

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

Lab Sample ID: 550-193555-A-2 MS
Matrix: Water
Analysis Batch: 289242

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	44.3		ug/L		89	59 - 155
1,1-Dichloroethene	ND		50.0	49.2		ug/L		98	10 - 234
Benzene	ND		50.0	43.3		ug/L		87	35 - 151
Chloroform	ND		50.0	44.3		ug/L		89	51 - 138
Trichloroethene	ND		50.0	45.7		ug/L		91	70 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*98*		*60 - 140*

Lab Sample ID: 550-193555-A-2 MSD
Matrix: Water
Analysis Batch: 289242

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	46.9		ug/L		94	59 - 155	6	40
1,1-Dichloroethene	ND		50.0	55.1		ug/L		110	10 - 234	11	32
Benzene	ND		50.0	46.9		ug/L		94	35 - 151	8	61
Chloroform	ND		50.0	46.4		ug/L		93	51 - 138	5	54
Trichloroethene	ND		50.0	48.5		ug/L		97	70 - 157	6	48

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*
Dibromofluoromethane (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*102*		*60 - 140*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 550-288634/1-A
Matrix: Water
Analysis Batch: 288902

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288634

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10	mg/L		11/15/22 06:26	11/16/22 22:31	1
Cadmium	ND		0.0010	mg/L		11/15/22 06:26	11/16/22 22:31	1
Silver	ND		0.010	mg/L		11/15/22 06:26	11/16/22 22:31	1

Lab Sample ID: MB 550-288634/1-A
Matrix: Water
Analysis Batch: 288986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288634

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010	mg/L		11/15/22 06:26	11/17/22 18:16	1
Lead	ND		0.015	mg/L		11/15/22 06:26	11/17/22 18:16	1
Molybdenum	ND		0.010	mg/L		11/15/22 06:26	11/17/22 18:16	1
Selenium	ND		0.10	mg/L		11/15/22 06:26	11/17/22 18:16	1
Zinc	ND		0.050	mg/L		11/15/22 06:26	11/17/22 18:16	1

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

Lab Sample ID: LCS 550-288634/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288902 — **Prep Batch: 288634**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	1.03		mg/L		103	85 - 115
Cadmium	1.00	1.00		mg/L		100	85 - 115
Silver	0.0750	0.0725		mg/L		97	85 - 115

Lab Sample ID: LCS 550-288634/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	1.00	1.01		mg/L		101	85 - 115
Lead	1.00	1.00		mg/L		100	85 - 115
Molybdenum	1.00	1.02		mg/L		102	85 - 115
Selenium	1.00	1.03		mg/L		103	85 - 115
Zinc	1.00	0.997		mg/L		100	85 - 115

Lab Sample ID: LCSD 550-288634/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288902 — **Prep Batch: 288634**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	1.03		mg/L		103	85 - 115	0	20
Cadmium	1.00	1.02		mg/L		102	85 - 115	2	20
Silver	0.0750	0.0731		mg/L		98	85 - 115	1	20

Lab Sample ID: LCSD 550-288634/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	1.00	1.02		mg/L		102	85 - 115	2	20
Lead	1.00	1.02		mg/L		102	85 - 115	1	20
Molybdenum	1.00	1.04		mg/L		104	85 - 115	1	20
Selenium	1.00	1.04		mg/L		104	85 - 115	1	20
Zinc	1.00	1.01		mg/L		101	85 - 115	1	20

Lab Sample ID: 550-193616-2 MS — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288902 — **Prep Batch: 288634**

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	1.04		mg/L		104	70 - 130
Silver	ND		0.0750	0.0752		mg/L		100	70 - 130

Lab Sample ID: 550-193616-2 MS — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	ND		1.00	1.05		mg/L		105	70 - 130

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

Lab Sample ID: 550-193616-2 MS — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1.00	0.992		mg/L		99	70 - 130
Molybdenum	ND		1.00	1.05		mg/L		105	70 - 130
Selenium	ND		1.00	1.06		mg/L		106	70 - 130
Zinc	ND		1.00	0.993		mg/L		99	70 - 130

Lab Sample ID: 550-193616-2 MSD — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288902 — **Prep Batch: 288634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.06		mg/L		106	70 - 130	2	20
Cadmium	ND		1.00	1.02		mg/L		102	70 - 130	2	20
Silver	ND		0.0750	0.0732		mg/L		98	70 - 130	3	20

Lab Sample ID: 550-193616-2 MSD — **Client Sample ID: MW-10-22Q4-comp**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288986 — **Prep Batch: 288634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	ND		1.00	1.01		mg/L		101	70 - 130	3	20
Lead	ND		1.00	0.973		mg/L		97	70 - 130	2	20
Molybdenum	ND		1.00	1.03		mg/L		103	70 - 130	2	20
Selenium	ND		1.00	1.04		mg/L		104	70 - 130	2	20
Zinc	ND		1.00	0.976		mg/L		97	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 550-288719/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/15/22 15:34	11/15/22 20:25	1

Lab Sample ID: LCS 550-288719/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.00500	0.00508		mg/L		102	85 - 115

Lab Sample ID: LCSD 550-288719/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.00485		mg/L		97	85 - 115	5	20

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 550-192621-E-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.00493		mg/L		99	70 - 130

Lab Sample ID: 550-192621-E-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288748 — **Prep Batch: 288719**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00482		mg/L		96	70 - 130	2	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 550-288886/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288886

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			11/17/22 11:22	1

Lab Sample ID: LCS 550-288886/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288886

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids			207	187		mg/L		90	90 - 110

Lab Sample ID: LCSD 550-288886/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288886

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			207	187		mg/L		90	90 - 110	0	10

Lab Sample ID: 550-193480-A-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288886

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	29			30.0		mg/L				3	10

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 550-289070/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		11/18/22 15:40	11/18/22 20:05	1

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

Lab Sample ID: LCS 550-289070/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.100	0.108		mg/L		108	90 - 110		

Lab Sample ID: LCSD 550-289070/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.100	0.108		mg/L		108	90 - 110	0	20

Lab Sample ID: 550-193450-P-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	ND		0.100	0.122		mg/L		111	80 - 120		

Lab Sample ID: 550-193450-P-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 289100 — **Prep Batch: 289070**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		0.100	0.116		mg/L		104	80 - 120	6	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: MB 550-288695/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288695

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		5.0		mg/L			11/15/22 12:46	1

Lab Sample ID: LCS 550-288695/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288695

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	212		mg/L		107	84.6 - 115.4		

Lab Sample ID: 550-193653-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 288695

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	99	D2		111	D2	mg/L				12	20

QC Association Summary

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

Job ID: 550-193616-1

GC/MS VOA

Analysis Batch: 289242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-1	MW-10-22Q4	Total/NA	Water	624.1	
550-193616-3	TB-22Q4	Total/NA	Water	624.1	
MB 550-289242/6	Method Blank	Total/NA	Water	624.1	
LCS 550-289242/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 550-289242/4	Lab Control Sample Dup	Total/NA	Water	624.1	
550-193555-A-2 MS	Matrix Spike	Total/NA	Water	624.1	
550-193555-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	624.1	

Metals

Prep Batch: 288634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	200.7	
MB 550-288634/1-A	Method Blank	Total/NA	Water	200.7	
LCS 550-288634/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 550-288634/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
550-193616-2 MS	MW-10-22Q4-comp	Total/NA	Water	200.7	
550-193616-2 MSD	MW-10-22Q4-comp	Total/NA	Water	200.7	

Prep Batch: 288719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	245.1	
MB 550-288719/1-A	Method Blank	Total/NA	Water	245.1	
LCS 550-288719/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 550-288719/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	
550-192621-E-1-C MS	Matrix Spike	Total/NA	Water	245.1	
550-192621-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 288748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	245.1	288719
MB 550-288719/1-A	Method Blank	Total/NA	Water	245.1	288719
LCS 550-288719/2-A	Lab Control Sample	Total/NA	Water	245.1	288719
LCSD 550-288719/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	288719
550-192621-E-1-C MS	Matrix Spike	Total/NA	Water	245.1	288719
550-192621-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	288719

Analysis Batch: 288902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634
MB 550-288634/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	288634
LCS 550-288634/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	288634
LCSD 550-288634/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	288634
550-193616-2 MS	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634
550-193616-2 MSD	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634

Analysis Batch: 288986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634
MB 550-288634/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	288634
LCS 550-288634/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	288634

Metals (Continued)

Analysis Batch: 288986 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 550-288634/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	288634
550-193616-2 MS	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634
550-193616-2 MSD	MW-10-22Q4-comp	Total/NA	Water	200.7 Rev 4.4	288634

General Chemistry

Analysis Batch: 288695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	SM 5210B	
MB 550-288695/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 550-288695/2	Lab Control Sample	Total/NA	Water	SM 5210B	
550-193653-A-1 DU	Duplicate	Total/NA	Water	SM 5210B	

Analysis Batch: 288886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-2	MW-10-22Q4-comp	Total/NA	Water	SM 2540D	
MB 550-288886/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 550-288886/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 550-288886/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
550-193480-A-2 DU	Duplicate	Total/NA	Water	SM 2540D	

Prep Batch: 289070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-1	MW-10-22Q4	Total/NA	Water	SM 4500 CN C	
MB 550-289070/1-A	Method Blank	Total/NA	Water	SM 4500 CN C	
LCS 550-289070/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCSD 550-289070/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN C	
550-193450-P-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN C	
550-193450-P-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 289100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-193616-1	MW-10-22Q4	Total/NA	Water	SM 4500 CN E	289070
MB 550-289070/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	289070
LCS 550-289070/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	289070
LCSD 550-289070/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	289070
550-193450-P-1-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	289070
550-193450-P-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	289070

Lab Chronicle

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

Job ID: 550-193616-1

Client Sample ID: MW-10-22Q4

Lab Sample ID: 550-193616-1
Matrix: Water
Date Collected: 11/14/22 11:25
Date Received: 11/14/22 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	289242	R1K	EET PHX	11/22/22 17:17
Total/NA	Prep	SM 4500 CN C			289070	CXK	EET PHX	11/18/22 15:40
Total/NA	Analysis	SM 4500 CN E		1	289100	CXK	EET PHX	11/18/22 20:05

Client Sample ID: MW-10-22Q4-comp

Lab Sample ID: 550-193616-2
Matrix: Water
Date Collected: 11/14/22 11:21
Date Received: 11/14/22 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			288634	SGO	EET PHX	11/15/22 06:26
Total/NA	Analysis	200.7 Rev 4.4		1	288902	CHS	EET PHX	11/16/22 22:45
Total/NA	Prep	200.7			288634	SGO	EET PHX	11/15/22 06:26
Total/NA	Analysis	200.7 Rev 4.4		1	288986	CHS	EET PHX	11/17/22 18:31
Total/NA	Prep	245.1			288719	SRR	EET PHX	11/15/22 15:34
Total/NA	Analysis	245.1		1	288748	SRR	EET PHX	11/15/22 21:03
Total/NA	Analysis	SM 2540D		1	288886	JDC	EET PHX	11/17/22 11:22 - 11/19/22 15:00 [1]
Total/NA	Analysis	SM 5210B		1	288695	SH1	EET PHX	11/15/22 12:46 - 11/21/22 14:40 [1]

Client Sample ID: TB-22Q4

Lab Sample ID: 550-193616-3
Matrix: Water
Date Collected: 11/14/22 08:00
Date Received: 11/14/22 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	289242	R1K	EET PHX	11/22/22 14:01

[1] Completion dates and times are reported or not reported per method requirements or individual lab discretion.

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: 550-193616-1

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: 550-193616-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	EET PHX
200.7 Rev 4.4	Metals (ICP)	40CFR136A	EET PHX
245.1	Mercury (CVAA)	EPA	EET PHX
SM 2540D	Solids, Total Suspended (TSS)	SM	EET PHX
SM 4500 CN E	Cyanide, Total	SM	EET PHX
SM 5210B	BOD, 5-Day	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

193616

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

Chain Of Custody / Analysis Request

AESI Ref: 44879.50287
COC#: 35008_111422
Lab Proj # (SDG):
Lab ID: TAL-PHX
Site ID:
Lab Job #:
Authorized User: Honeywell

Text & Excel File Drive | Excel & Text File Order

Privileged & Confidential

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

Sampling Co.: Jacobs
EDD To: Bernice Kidd, Jacobs HTS
Client Contact: (name, co., address)
Jacobs
1501 W. Fountainhead Parkway (suite 401)
Tempe, AZ 85282
Sampler: T. Kearsley
PO #: A000651433
Analysis Turnaround Time (TAT): 5
Consultant:
Laboratory Contact: Danielle Roberts
Report Tier Level: 2
Full Report TAT: 10
HTS

Preliminary Data To: Berney Kidd Jacobs, Lakshmi[redacted]vi HTS,
Sample Receipt Acknowledgement To: Sample Distribution List
Hard Copy To: Berney Kidd Jacobs,
Invoice To: Tao Wu, Honeywell/Copy Berney Kidd

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
										Preservative		8	10	15	10	0	0	10								
										Units																
1	MW-10	----	----	MW-10-22Q4	11/14/2022	11:25	GW-GWS	WATER	REG	4	grab	N	X		X								-01			
2	MW-10	----	----	MW-10-22Q4-comp	11/14/2022	11:21	GW-GWS	WATER	REG	3	comp	N		X		X	X	X					-02			
3																										
4	TRIPBLANK	----	----	TB-22Q4-1	11/14/2022	8:00	BLKWATER	WATER	TB	1	grab	N	X										-03			
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

550-193616 Chain of Custody

Relinquished by: T. Kearsley	Company: CH2M	Received by:	Company:		Condition:		Custody Seals Intact:
Thomas Kearsley	Date/Time: 11/14/22 1254	FedEx	Date/Time:		Cooler Temp.		
Relinquished by	Company	Received by: EETA-PHX	Company		Condition		Custody Seals Intact
	Date/Time		Date/Time: 11/14/22 12:54		Cooler Temp. 8.4	on Ice	

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)

CDO

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Login Sample Receipt Checklist

Client: Jacobs Engineering Group, Inc.

Job Number: 550-193616-1

Login Number: 193616
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	Received same day of collection; chilling process has begun.
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 D
Current and Historical Groundwater Extraction System Operational Data

Appendix D

Extraction Well Operational Data, May 1997 through December 2022

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

Appendix D

Extraction Well Operational Data, May 1997 through December 2022

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	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
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

Appendix D

Extraction Well Operational Data, May 1997 through December 2022

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	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
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

Appendix D

Extraction Well Operational Data, May 1997 through December 2022

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	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
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

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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
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

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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
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

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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
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

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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
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

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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
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
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

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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
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

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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
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

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Extraction Well Operational Data, May 1997 through December 2022

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	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
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

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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
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

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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
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

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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
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

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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
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

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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-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
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

Appendix D

Extraction Well Operational Data, May 1997 through December 2022

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-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	**580,133,130**

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 E
Trend Analysis—5 Years

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	810	39	6	12	5.8	7.2	110
2	7-Nov-19	120	7	1.3	2.1	0.7	3.2	35
3	11-Nov-20	1400	72	11	18	10	10	180
4	26-Oct-21	1500	60	9.4	17	8.1	9.9	180
5	12-Oct-22	1300	81	12	20	9.6	11	160
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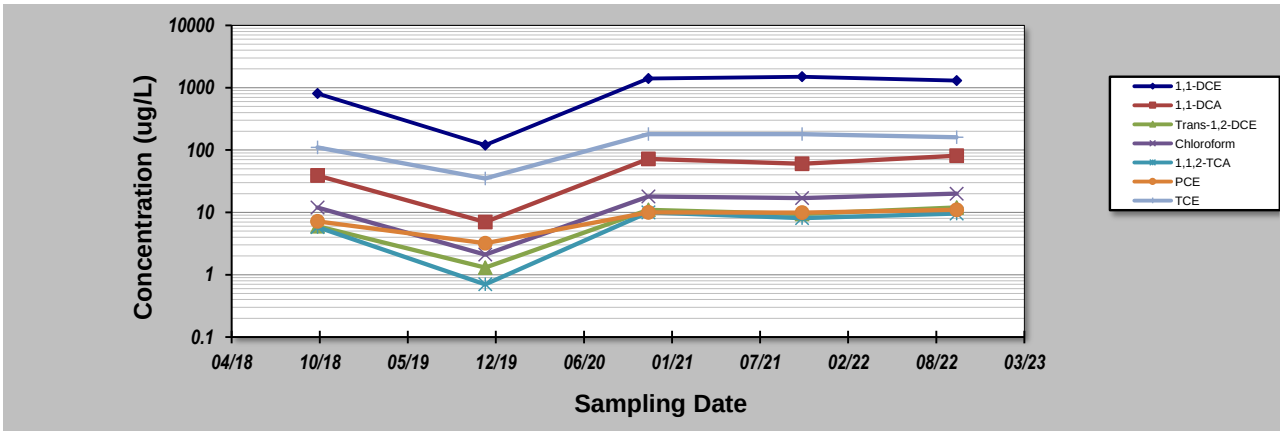
Coefficient of Variation:		0.56	0.57	0.55	0.52	0.56	0.38	0.46
Mann-Kendall Statistic (S):		4	6	6	6	4	6	3
Confidence Factor:		75.8%	88.3%	88.3%	88.3%	75.8%	88.3%	67.5%
Concentration Trend:		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend



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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	Job ID:	
Facility Name:	Deer Valley	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	11-Nov-15	270	77	1.3	5	9	4.2	36
2	28-Sep-16	86	12	0.6	0.2	0.5	1.1	6.8
3	16-Oct-17	93	7.8	0.7	1.6	0.7	0.8	37
4	22-Oct-18	150	12	1.4	3.1	1.4	4.3	49
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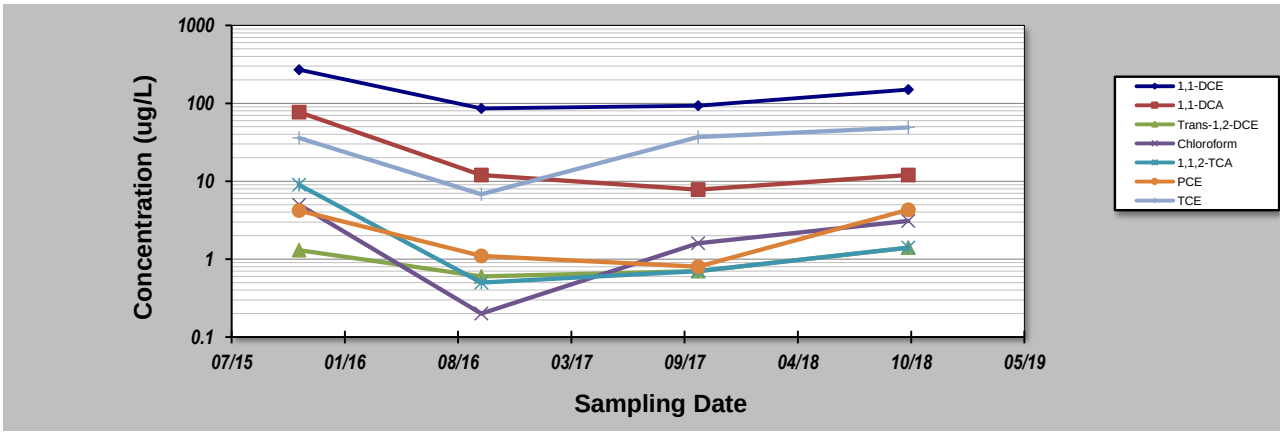
Coefficient of Variation:		0.57	1.22	0.41	0.83	1.41	0.73	0.56
Mann-Kendall Statistic (S):		0	-3	2	0	0	0	4
Confidence Factor:		37.5%	72.9%	62.5%	37.5%	37.5%	37.5%	83.3%
Concentration Trend:		Stable	No Trend	No Trend	Stable	No Trend	Stable	No Trend



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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	2.8	0.5	0.5	0.3	0.5	0.5	1.5
2	7-Nov-19	2.4	0.5	0.5	2	0.5	0.5	1.4
3	11-Nov-20	2.8	0.5	0.5	0.5	0.5	0.5	2.7
4	26-Oct-21	8.6	0.5	0.5	0.5	0.5	0.5	8.8
5	12-Oct-22	20	0.5	0.5	0.5	0.5	0.5	26
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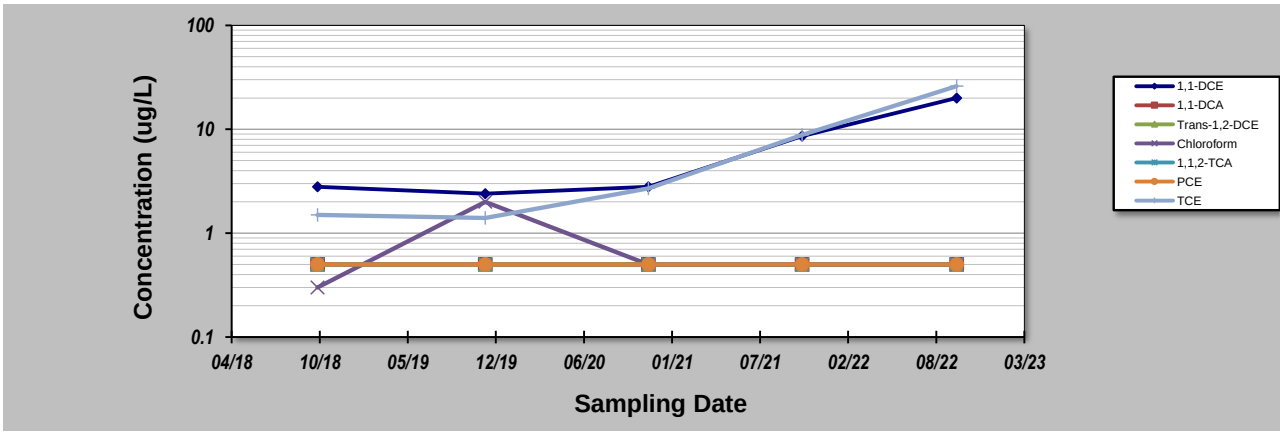
Coefficient of Variation:		1.03	0.00	0.00	0.92	0.00	0.00	1.30
Mann-Kendall Statistic (S):		7	0	0	1	0	0	8
Confidence Factor:		92.1%	40.8%	40.8%	50.0%	40.8%	40.8%	95.8%
Concentration Trend:		Prob. Increasing	Stable	Stable	No Trend	Stable	Stable	Increasing



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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	1.4	0.5	0.5	0.5	0.5	0.5	0.8
2	7-Nov-19	4.8	0.5	0.5	2	0.5	0.5	2.9
3	11-Nov-20	6	0.5	0.5	0.5	0.5	0.5	3.6
4	29-Dec-21	11	0.5	0.5	0.5	0.5	0.5	3.5
5	12-Oct-22	16	0.5	0.5	0.5	0.5	0.5	4.4
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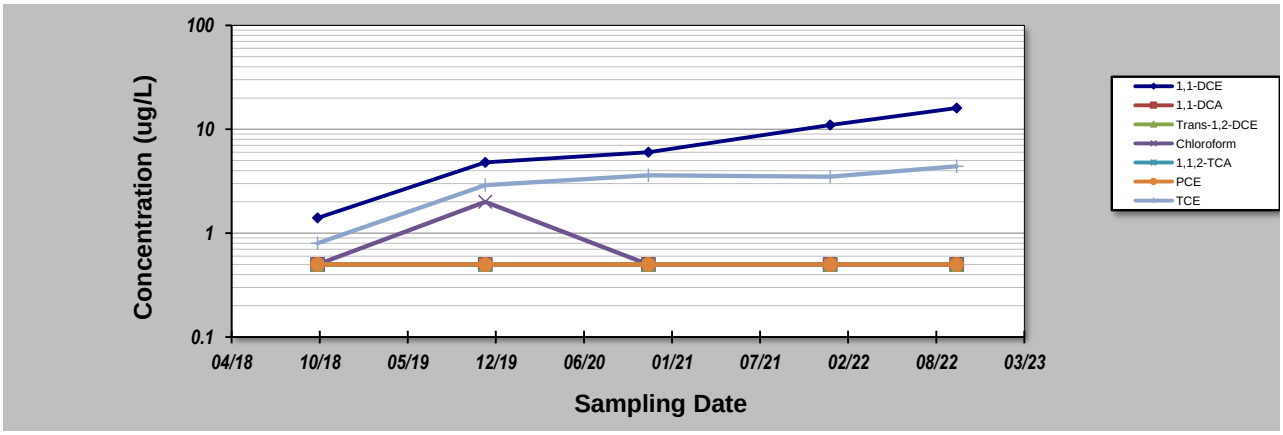
Coefficient of Variation:		0.73	0.00	0.00	0.84	0.00	0.00	0.45
Mann-Kendall Statistic (S):		10	0	0	-2	0	0	8
Confidence Factor:		99.2%	40.8%	40.8%	59.2%	40.8%	40.8%	95.8%
Concentration Trend:		Increasing	Stable	Stable	Stable	Stable	Stable	Increasing



Notes:

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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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	12	0.4	0.5	0.5	0.5	0.5	4.3
2	7-Nov-19	16	0.3	0.5	2	0.5	0.5	15
3	12-Nov-20	9.8	0.5	0.5	0.5	0.5	0.5	9.4
4	26-Oct-21	6.2	0.5	0.5	0.5	0.5	0.5	2
5	12-Oct-22	13	0.5	0.5	0.5	0.5	0.5	8.2
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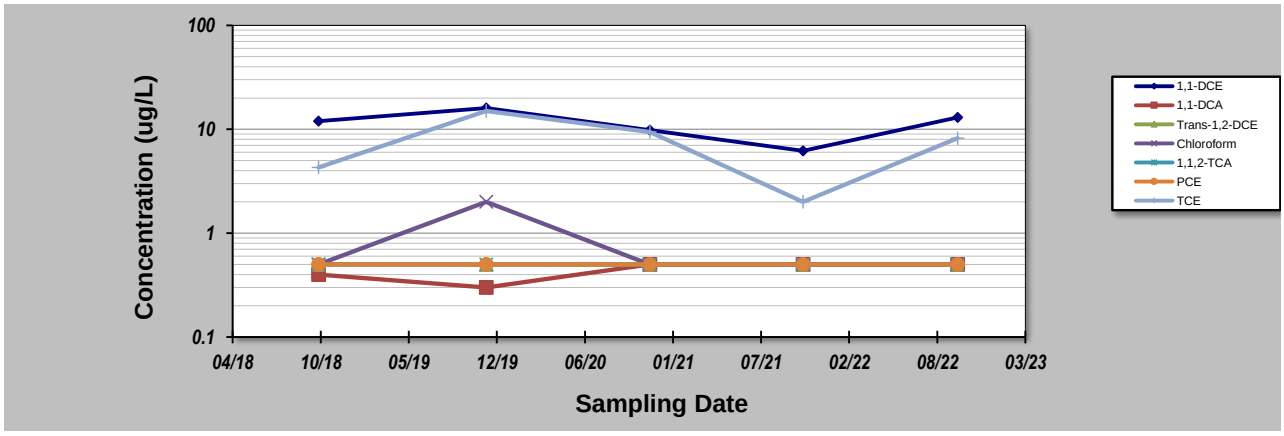
Coefficient of Variation:		0.32	0.20	0.00	0.84	0.00	0.00	0.64
Mann-Kendall Statistic (S):		-2	5	0	-2	0	0	-2
Confidence Factor:		59.2%	82.1%	40.8%	59.2%	40.8%	40.8%	59.2%
Concentration Trend:		Stable	No Trend	Stable	Stable	Stable	Stable	Stable



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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	7-Nov-19	0.5	0.5	0.5	2	0.5	0.5	0.5
3	11-Nov-20	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	26-Oct-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	12-Oct-22	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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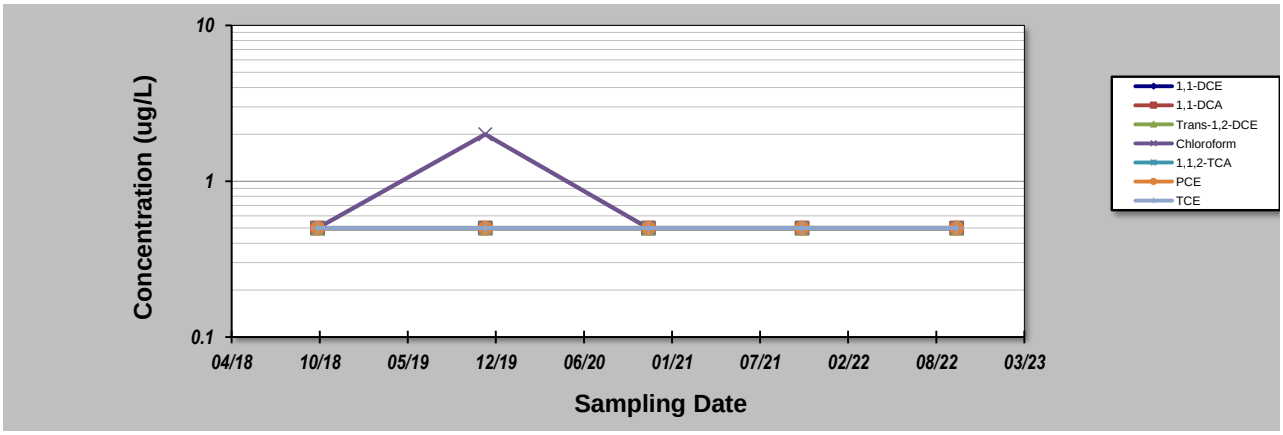
Coefficient of Variation:		0.00	0.00	0.00	0.84	0.00	0.00	0.00
Mann-Kendall Statistic (S):		0	0	0	-2	0	0	0
Confidence Factor:		40.8%	40.8%	40.8%	59.2%	40.8%	40.8%	40.8%
Concentration Trend:		Stable	Stable	Stable	Stable	Stable	Stable	Stable



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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	6-Feb-18	8.6	0.1	0.5	0.3	0.5	0.5	9.7
2	26-Sep-18	11	0.5	0.5	0.5	0.5	0.5	10
3	19-Nov-19	5	0.5	0.5	0.4	0.5	0.5	4.5
4	21-Apr-20	4.3	0.5	0.5	0.5	0.5	0.5	4
5	11-Nov-20	3.9	0.5	0.5	0.5	0.5	0.5	3.5
6	26-Apr-21	4	0.5	0.5	0.5	0.5	0.5	3
7	26-Oct-21	2.2	0.5	0.5	0.5	0.5	0.5	1.6
8	12-May-22	2.1	1	1	1	1	1	1.4
9	12-Oct-22	1.7	0.5	0.5	0.59	0.5	0.5	1
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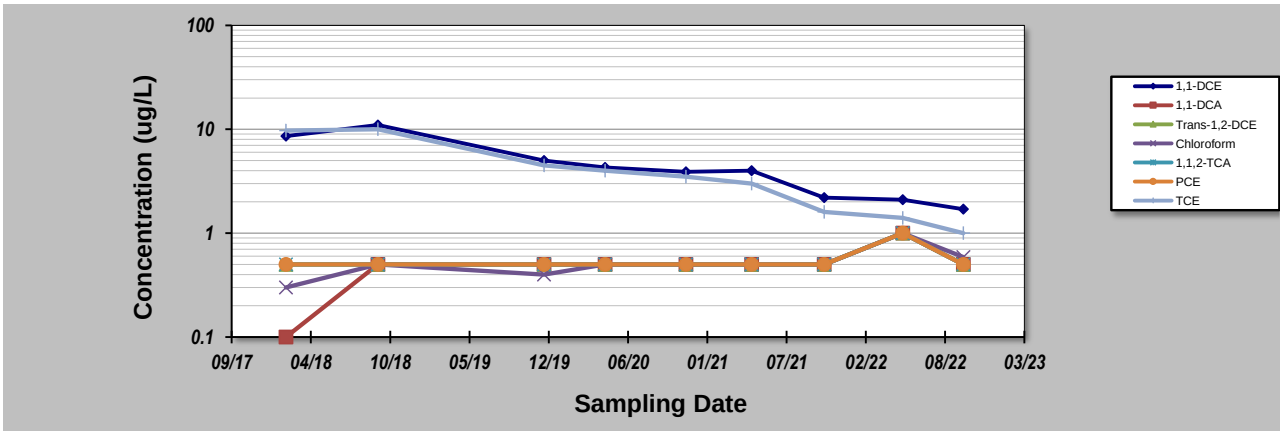
Coefficient of Variation:		0.66	0.44	0.30	0.36	0.30	0.30	0.78
Mann-Kendall Statistic (S):		-32	13	6	22	6	6	-34
Confidence Factor:		>99.9%	89.0%	69.4%	98.8%	69.4%	69.4%	>99.9%
Concentration Trend:		Decreasing	No Trend	No Trend	Increasing	No Trend	No Trend	Decreasing



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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	0.2	0.5	0.5	0.2	0.5	0.5	0.1
2	7-Nov-19	0.2	0.5	0.5	0.4	0.5	0.5	0.2
3	11-Nov-20	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	26-Oct-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	12-Oct-22	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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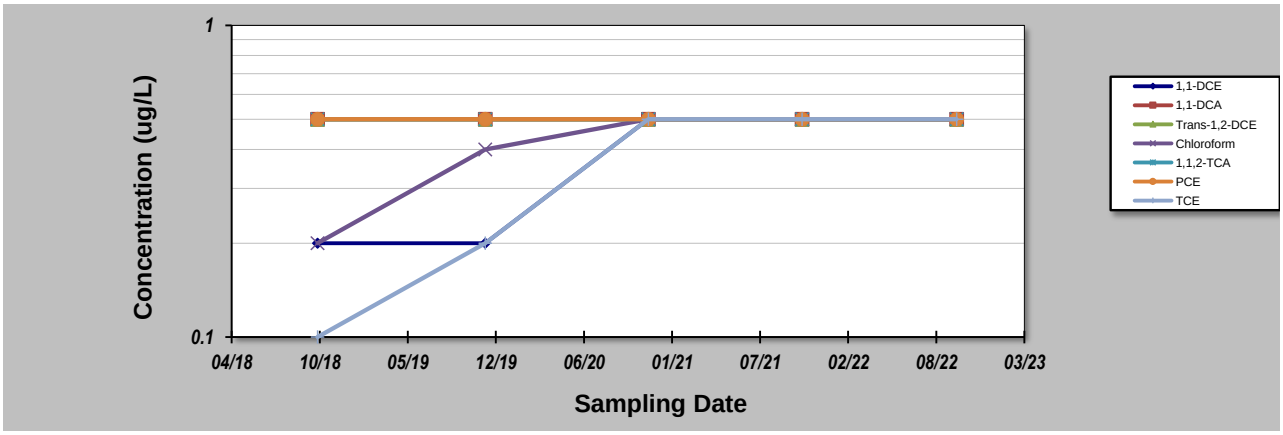
Coefficient of Variation:		0.43	0.00	0.00	0.31	0.00	0.00	0.54
Mann-Kendall Statistic (S):		6	0	0	7	0	0	7
Confidence Factor:		88.3%	40.8%	40.8%	92.1%	40.8%	40.8%	92.1%
Concentration Trend:		No Trend	Stable	Stable	Prob. Increasing	Stable	Stable	Prob. Increasing



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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	2.7	0.5	0.5	0.3	0.5	0.5	1.3
2	7-Nov-19	2.2	0.5	0.5	0.5	0.5	0.5	1
3	12-Nov-20	1.1	0.5	0.5	0.5	0.5	0.5	0.5
4	26-Oct-21	0.81	0.5	0.5	0.5	0.5	0.5	0.5
5	12-Oct-22	1.6	0.5	0.5	0.5	0.5	0.5	0.5
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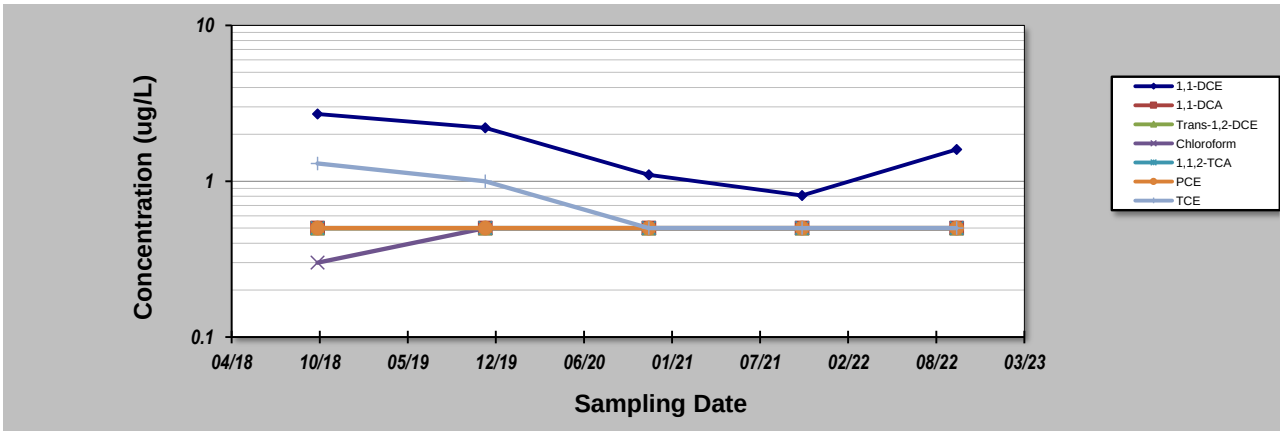
Coefficient of Variation:		0.46	0.00	0.00	0.19	0.00	0.00	0.49
Mann-Kendall Statistic (S):		-6	0	0	4	0	0	-7
Confidence Factor:		88.3%	40.8%	40.8%	75.8%	40.8%	40.8%	92.1%
Concentration Trend:		Stable	Stable	Stable	No Trend	Stable	Stable	Prob. Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	23-Oct-18	24	0.9	0.2	0.5	0.5	0.5	4.8
2	7-Nov-19	26	1.1	0.2	0.7	0.5	0.5	6.4
3	12-Nov-20	17	0.64	0.5	0.5	0.5	0.5	4.6
4	26-Apr-21	16	0.71	0.5	0.5	0.5	0.5	4.6
5	26-Oct-21	11	0.51	0.5	0.5	0.5	0.5	3.5
6	12-May-22	19	1	1	1	1	1	5.5
7	12-Oct-22	18	0.61	0.5	0.5	0.5	0.5	4.3
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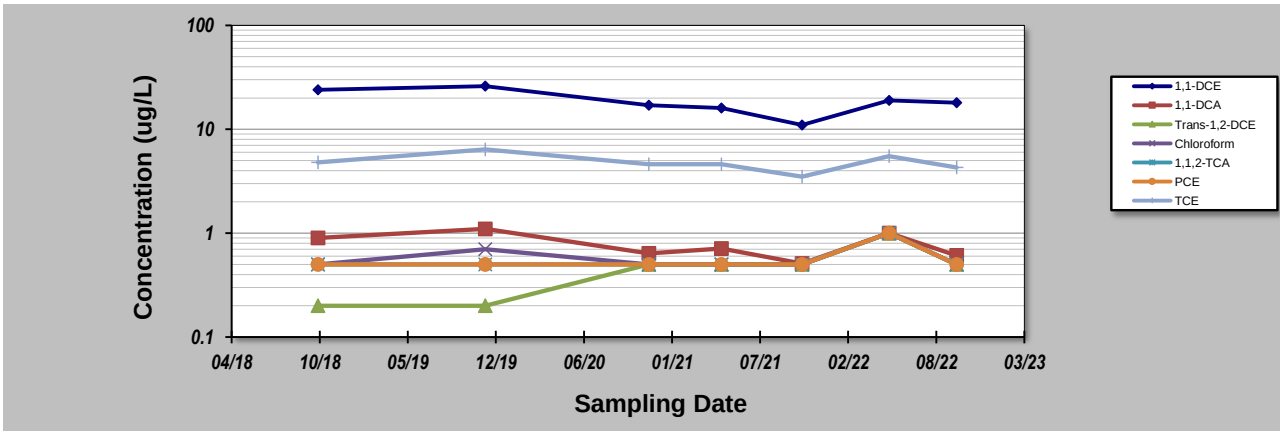
Coefficient of Variation:		0.27	0.28	0.55	0.32	0.33	0.33	0.19
Mann-Kendall Statistic (S):		-7	-7	12	1	4	4	-8
Confidence Factor:		80.9%	80.9%	94.9%	50.0%	66.7%	66.7%	84.5%
Concentration Trend:		Stable	Stable	Prob. Increasing	No Trend	No Trend	No Trend	Stable



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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	0.5	0.5	0.5	3.8	0.5	0.5	0.5
2	7-Nov-19	0.6	0.5	0.5	4.8	0.5	0.5	0.2
3	21-Apr-20	0.7	0.5	0.5	4.9	0.5	0.5	0.3
4	11-Nov-20	0.67	0.5	0.5	4	0.5	0.5	0.5
5	26-Apr-21	1	0.5	0.5	4.5	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-May-22	2.9	1	1	4.8	1	1	1.3
8	12-Oct-22	3.5	0.5	0.5	4.6	0.5	0.5	1.6
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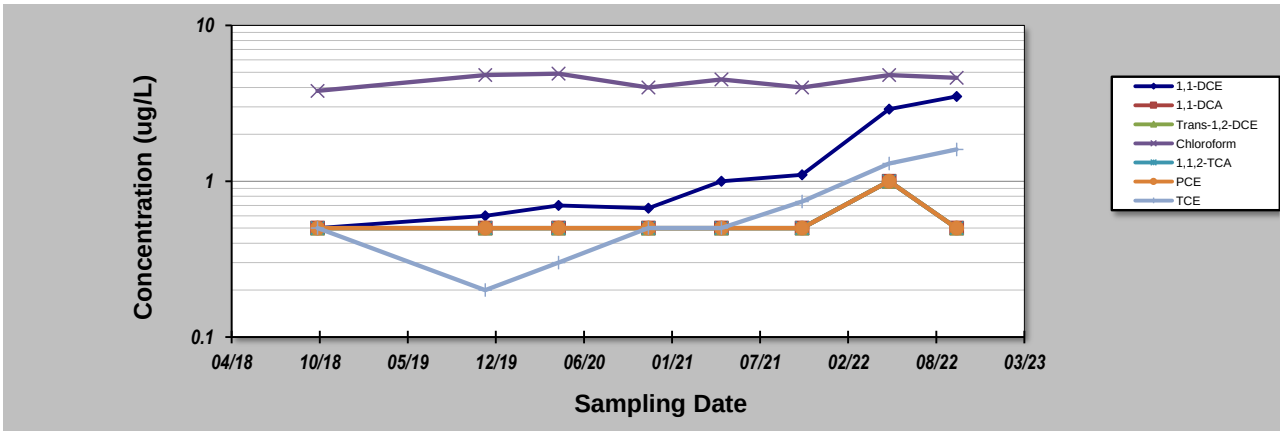
Coefficient of Variation:		0.84	0.31	0.31	0.10	0.31	0.31	0.70
Mann-Kendall Statistic (S):		26	5	5	4	5	5	21
Confidence Factor:		100.0%	68.3%	68.3%	64.0%	68.3%	68.3%	99.6%
Concentration Trend:		Increasing	No Trend	No Trend	No Trend	No Trend	No Trend	Increasing



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.
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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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
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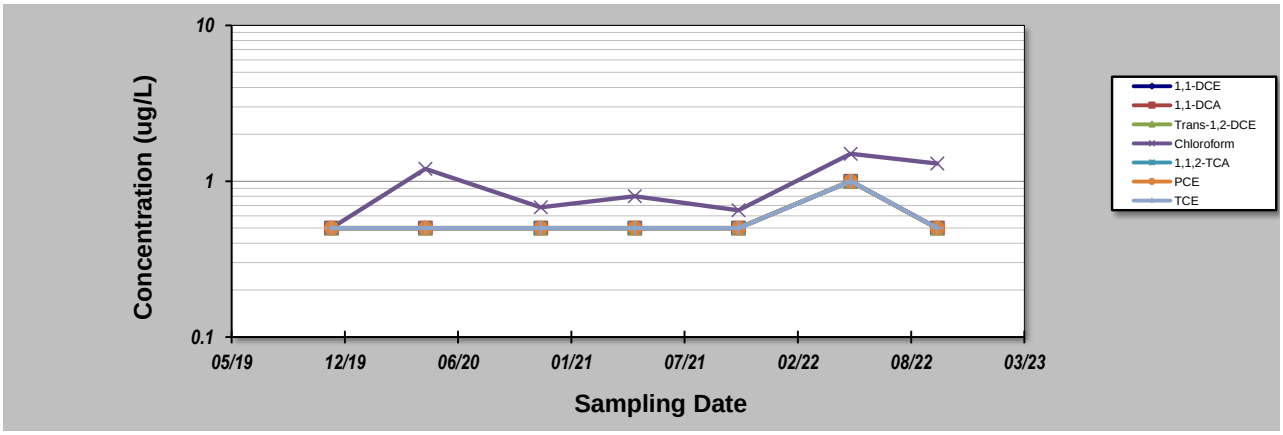
Coefficient of Variation:		0.33	0.33	0.33	0.40	0.33	0.33	0.33
Mann-Kendall Statistic (S):		4	4	4	9	4	4	4
Confidence Factor:		66.7%	66.7%	66.7%	88.1%	66.7%	66.7%	66.7%
Concentration Trend:		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend



Notes:

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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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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
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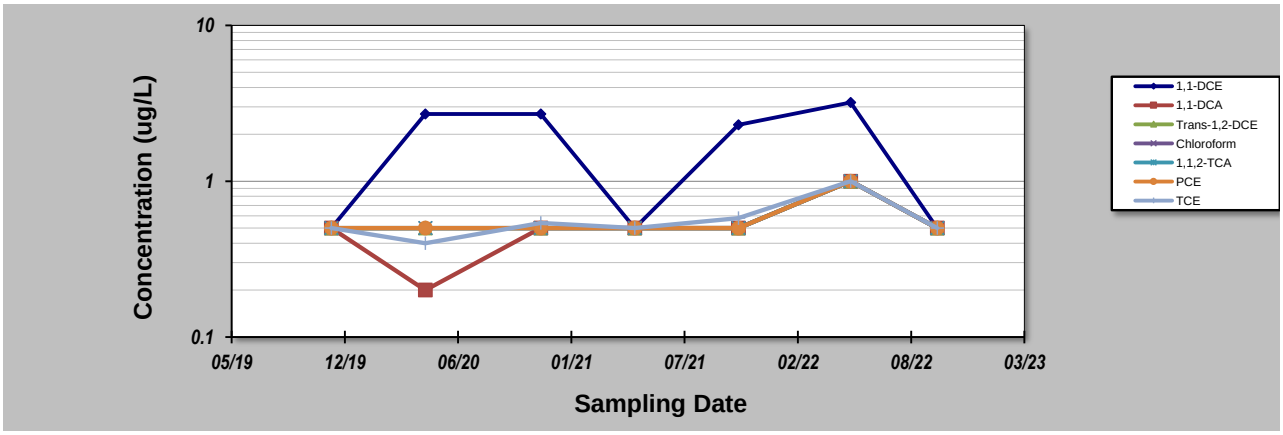
Coefficient of Variation:		0.69	0.45	0.33	0.33	0.33	0.33	0.34
Mann-Kendall Statistic (S):		1	7	4	4	4	4	8
Confidence Factor:		50.0%	80.9%	66.7%	66.7%	66.7%	66.7%	84.5%
Concentration Trend:		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend



Notes:

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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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	23-Oct-18	110	9.9	1	2.2	1	0.7	23
2	12-Nov-20	54	4.8	0.5	1.1	0.5	0.5	16
3	26-Apr-21	59	5.4	0.5	1.3	0.5	0.5	18
4	26-Oct-21	41	3.2	0.5	0.95	0.5	0.5	12
5	12-May-22	63	5	1	1.1	1	1	18
6	12-Oct-22	61	4.4	0.5	1.1	0.51	0.5	15
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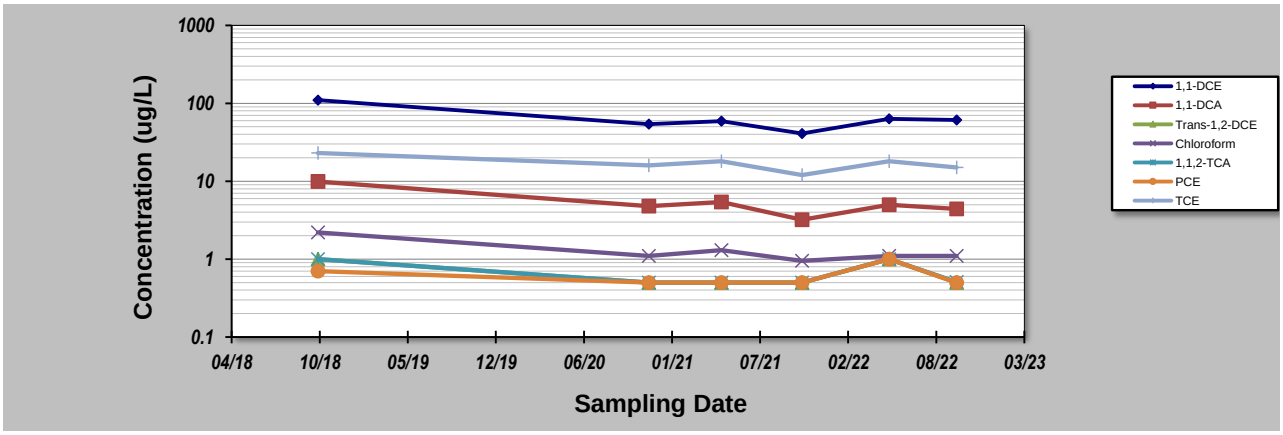
Coefficient of Variation:		0.36	0.42	0.39	0.36	0.38	0.33	0.22
Mann-Kendall Statistic (S):		-1	-7	-2	-6	1	-1	-6
Confidence Factor:		50.0%	86.4%	57.0%	81.5%	50.0%	50.0%	81.5%
Concentration Trend:		Stable	Stable	Stable	Stable	No Trend	Stable	Stable



Notes:

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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.

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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	3-Mar-23	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	22-Oct-18	24	0.3	0.5	0.2	0.5	0.5	17
2	19-Nov-19	24	0.3	0.5	0.3	0.5	0.5	25
3	11-Nov-20	20	0.5	0.5	0.5	0.5	0.5	30
4	2-Nov-21	25	0.5	0.5	0.5	0.5	0.5	33
5	12-Oct-22	25	0.5	0.5	0.5	0.5	0.5	28
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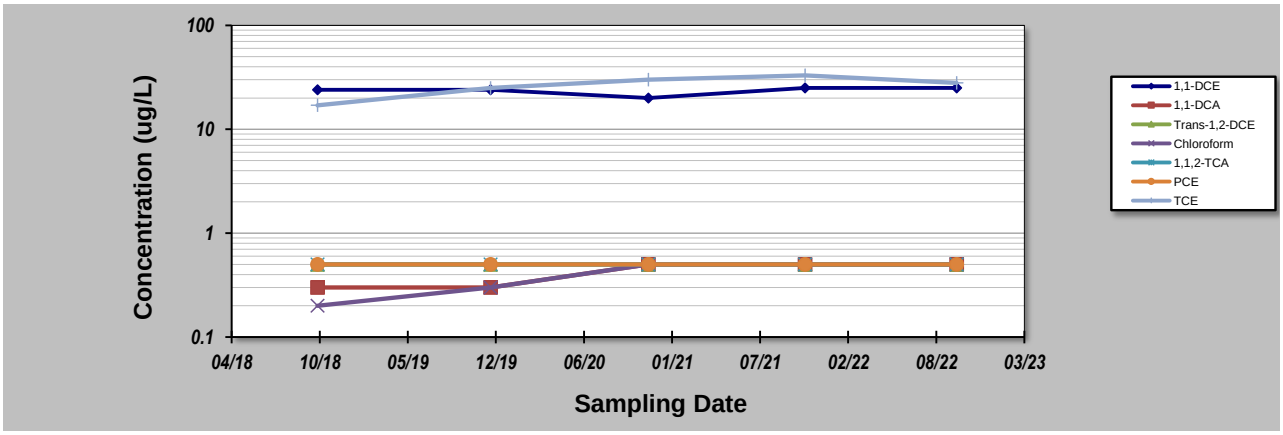
Coefficient of Variation:		0.09	0.26	0.00	0.35	0.00	0.00	0.23
Mann-Kendall Statistic (S):		4	6	0	7	0	0	6
Confidence Factor:		75.8%	88.3%	40.8%	92.1%	40.8%	40.8%	88.3%
Concentration Trend:		No Trend	No Trend	Stable	Prob. Increasing	Stable	Stable	No Trend



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.

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

2022 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 - 1500 ug/L	No Trend	7 - 81 ug/L	No Trend	1.3 - 12 ug/L	No Trend	2.1 - 20 ug/L	No Trend	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	Prob. Increasing	2.4 - 20 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.3 - 2 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Increasing	1.4 - 26 ug/L
MW-4	Increasing	1.4 - 16 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	0.8 - 4.4 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	1.7 - 11 ug/L	No Trend	0.1 - 1 ug/L	No Trend	0.5 - 1 ug/L	Increasing	0.3 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Decreasing	1 - 10 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	Prob. Increasing	0.2 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Prob. Increasing	0.1 - 0.5 ug/L
MW-9	Stable	0.81 - 2.7 ug/L	Stable	0.5 - 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	Prob. Decreasing	0.5 - 1.3 ug/L
MW-10	Stable	11 - 26 ug/L	Stable	0.51 - 1.1 ug/L	Prob. Increasing	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	Stable	3.5 - 6.4 ug/L
MW-12	Increasing	0.5 - 3.5 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	No Trend	3.8 - 4.9 ug/L	No Trend	0.5 - 1 ug/L	No Trend	0.5 - 1 ug/L	Increasing	0.2 - 1.6 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	No Trend	0.5 - 1.5 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	Stable	41 - 110 ug/L	Stable	3.2 - 9.9 ug/L	Stable	0.5 - 1 ug/L	Stable	0.95 - 2.2 ug/L	No Trend	0.5 - 1 ug/L	Stable	0.5 - 1 ug/L	Stable	12 - 23 ug/L
EW-2	No Trend	20 - 25 ug/L	No Trend	0.3 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Prob. Increasing	0.2 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	17 - 33 ug/L

Notes:

Non-detect concentrations were used at their detection level for purposes of the evaluation.

NA = Not Available

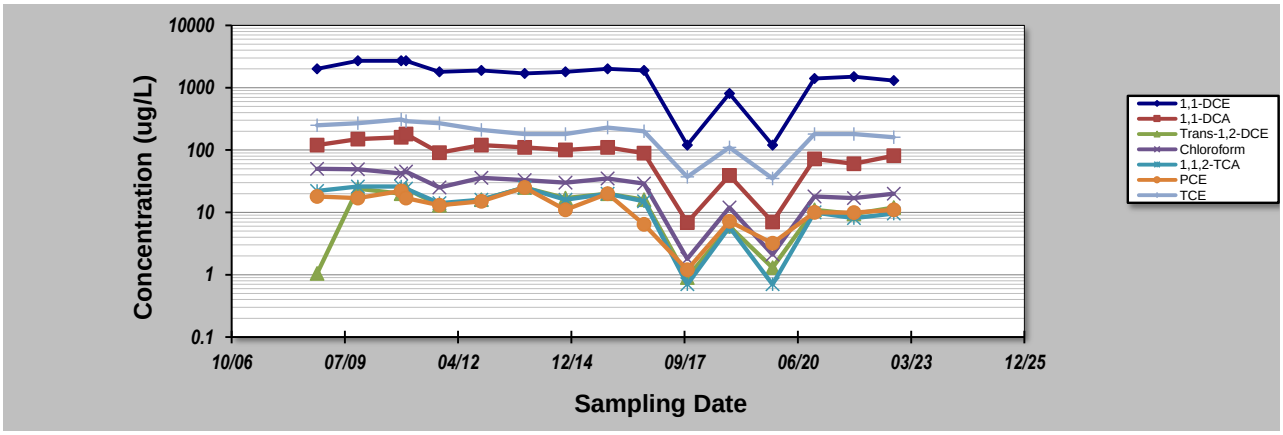
ug/L = micrograms per liter

Appendix F
Trend Analysis—15 Years

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	2000	120	1.05	50	22	18	250
2	29-Oct-09	2700	150	24	49	26	17	270
3	15-Nov-10	2700	160	20	42	26	22	310
4	27-Dec-10	2700	180	24	45	24	17	290
5	19-Oct-11	1800	91	13	25	14	13	270
6	22-Oct-12	1900	120	16	36	16	15	210
7	10-Nov-13	1700	110	25	33	25	25	180
8	5-Nov-14	1800	100	17	30	16	11	180
9	11-Nov-15	2000	110	20	35	20	20	230
10	28-Sep-16	1900	89	16	29	15	6.4	200
11	16-Oct-17	120	6.9	0.9	1.8	0.7	1.2	37
12	22-Oct-18	810	39	6	12	5.8	7.2	110
13	7-Nov-19	120	7	1.3	2.1	0.7	3.2	35
14	11-Nov-20	1400	72	11	18	10	10	180
15	26-Oct-21	1500	60	9.4	17	8.1	9.9	180
16	12-Oct-22	1300	81	12	20	9.6	11	160
17								
18								
19								
20								
Coefficient of Variation:		0.48	0.53	0.60	0.55	0.57	0.52	0.42
Mann-Kendall Statistic (S):		-67	-70	-37	-78	-69	-54	-71
Confidence Factor:		99.9%	99.9%	94.7%	>99.9%	99.9%	99.2%	100.0%
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.

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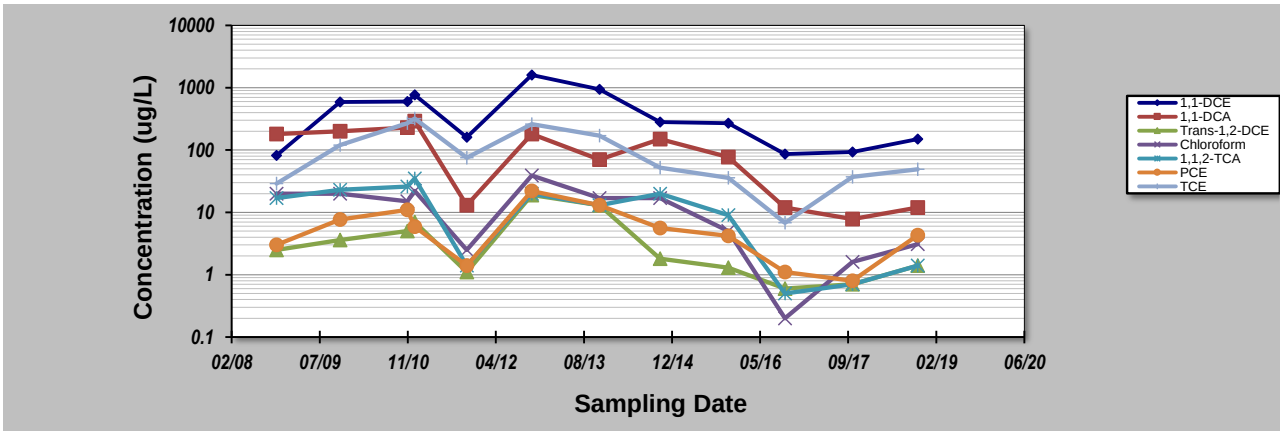
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	82	180	2.5	20	17	3	29
2	29-Oct-09	590	200	3.6	20	23	7.7	120
3	15-Nov-10	600	230	5	15	26	11	270
4	27-Dec-10	770	290	7	22	35	5.9	320
5	19-Oct-11	160	13	1.1	2.5	1.4	1.4	75
6	22-Oct-12	1600	180	19	39	20	22	260
7	10-Nov-13	940	70	13	17	13	13	170
8	20-Oct-14	280	150	1.8	17	20	5.6	52
9	11-Nov-15	270	77	1.3	5	9	4.2	36
10	28-Sep-16	86	12	0.6	0.2	0.5	1.1	6.8
11	16-Oct-17	93	7.8	0.7	1.6	0.7	0.8	37
12	22-Oct-18	150	12	1.4	3.1	1.4	4.3	49
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.98	0.83	1.21	0.85	0.82	0.92	0.92
Mann-Kendall Statistic (S):		-12	-38	-20	-30	-32	-20	-22
Confidence Factor:		77.0%	99.6%	90.2%	97.8%	98.4%	90.2%	92.4%
Concentration Trend:		Stable	Decreasing	Prob. Decreasing	Decreasing	Decreasing	Prob. Decreasing	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.*
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.

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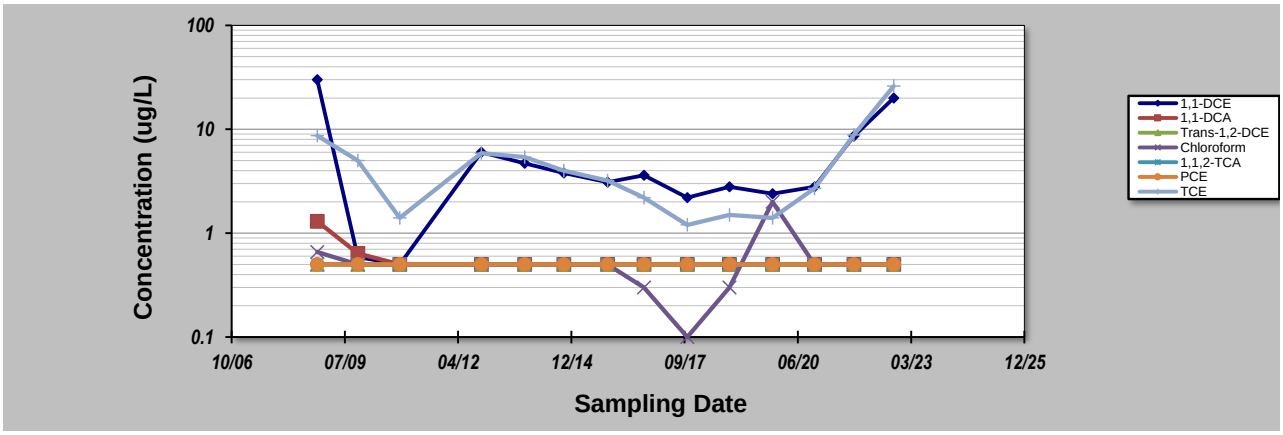
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	4-Nov-08	30	1.3	0.5	0.66	0.5	0.5	8.7
2	29-Oct-09	0.59	0.64	0.5	0.5	0.5	0.5	5
3	3-Nov-10	0.5	0.5	0.5	0.5	0.5	0.5	1.4
4	22-Oct-12	6	0.5	0.5	0.5	0.5	0.5	5.9
5	10-Nov-13	4.7	0.5	0.5	0.5	0.5	0.5	5.4
6	20-Oct-14	3.8	0.5	0.5	0.5	0.5	0.5	4
7	11-Nov-15	3.1	0.5	0.5	0.5	0.5	0.5	3.2
8	28-Sep-16	3.6	0.5	0.5	0.3	0.5	0.5	2.2
9	16-Oct-17	2.2	0.5	0.5	0.1	0.5	0.5	1.2
10	22-Oct-18	2.8	0.5	0.5	0.3	0.5	0.5	1.5
11	7-Nov-19	2.4	0.5	0.5	2	0.5	0.5	1.4
12	11-Nov-20	2.8	0.5	0.5	0.5	0.5	0.5	2.7
13	26-Oct-21	8.6	0.5	0.5	0.5	0.5	0.5	8.8
14	12-Oct-22	20	0.5	0.5	0.5	0.5	0.5	26
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		1.28	0.38	0.00	0.78	0.00	0.00	1.16
Mann-Kendall Statistic (S):		2	-25	0	-14	0	0	-10
Confidence Factor:		52.2%	90.4%	47.8%	75.8%	47.8%	47.8%	68.6%
Concentration Trend:		No Trend	Prob. Decreasing	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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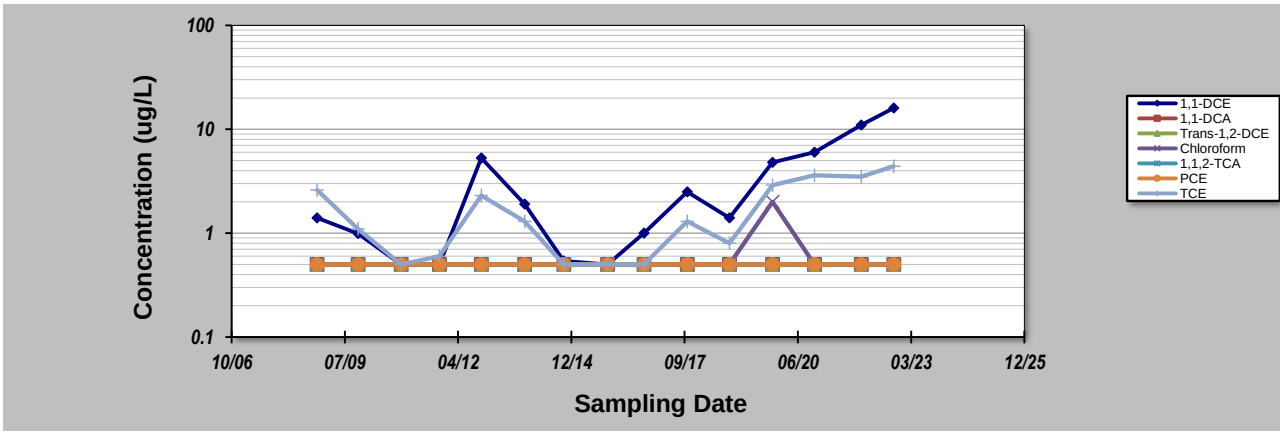
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	1.4	0.5	0.5	0.5	0.5	0.5	2.6
2	30-Oct-09	0.99	0.5	0.5	0.5	0.5	0.5	1.1
3	15-Nov-10	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	19-Oct-11	0.5	0.5	0.5	0.5	0.5	0.5	0.6
5	22-Oct-12	5.3	0.5	0.5	0.5	0.5	0.5	2.3
6	10-Nov-13	1.9	0.5	0.5	0.5	0.5	0.5	1.3
7	20-Oct-14	0.54	0.5	0.5	0.5	0.5	0.5	0.5
8	11-Nov-15	0.5	0.5	0.5	0.5	0.5	0.5	0.5
9	28-Sep-16	1	0.5	0.5	0.5	0.5	0.5	0.5
10	16-Oct-17	2.5	0.5	0.5	0.5	0.5	0.5	1.3
11	22-Oct-18	1.4	0.5	0.5	0.5	0.5	0.5	0.8
12	7-Nov-19	4.8	0.5	0.5	2	0.5	0.5	2.9
13	11-Nov-20	6	0.5	0.5	0.5	0.5	0.5	3.6
14	29-Dec-21	11	0.5	0.5	0.5	0.5	0.5	3.5
15	12-Oct-22	16	0.5	0.5	0.5	0.5	0.5	4.4
16								
17								
18								
19								
20								
Coefficient of Variation:		1.24	0.00	0.00	0.65	0.00	0.00	0.76
Mann-Kendall Statistic (S):		55	0	0	8	0	0	36
Confidence Factor:		99.7%	48.0%	48.0%	63.3%	48.0%	48.0%	95.9%
Concentration Trend:		Increasing	Stable	Stable	No Trend	Stable	Stable	Increasing



Notes:

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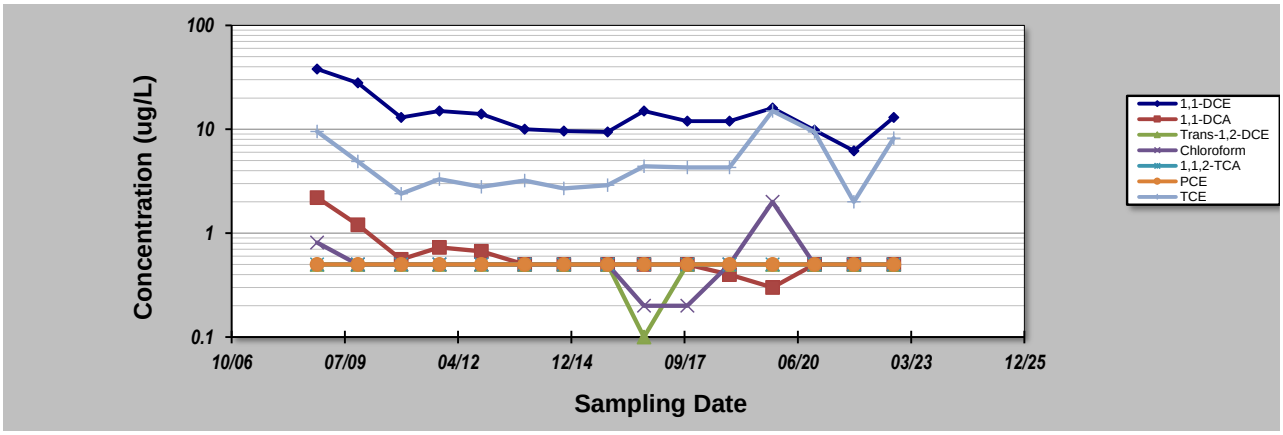
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	38	2.2	0.5	0.81	0.5	0.5	9.5
2	29-Oct-09	28	1.2	0.5	0.5	0.5	0.5	4.9
3	15-Nov-10	13	0.56	0.5	0.5	0.5	0.5	2.4
4	19-Oct-11	15	0.73	0.5	0.5	0.5	0.5	3.3
5	22-Oct-12	14	0.67	0.5	0.5	0.5	0.5	2.8
6	10-Nov-13	10	0.5	0.5	0.5	0.5	0.5	3.2
7	20-Oct-14	9.6	0.5	0.5	0.5	0.5	0.5	2.7
8	11-Nov-15	9.4	0.5	0.5	0.5	0.5	0.5	2.9
9	28-Sep-16	15	0.5	0.1	0.2	0.5	0.5	4.4
10	16-Oct-17	12	0.5	0.5	0.2	0.5	0.5	4.3
11	22-Oct-18	12	0.4	0.5	0.5	0.5	0.5	4.3
12	7-Nov-19	16	0.3	0.5	2	0.5	0.5	15
13	12-Nov-20	9.8	0.5	0.5	0.5	0.5	0.5	9.4
14	26-Oct-21	6.2	0.5	0.5	0.5	0.5	0.5	2
15	12-Oct-22	13	0.5	0.5	0.5	0.5	0.5	8.2
16								
17								
18								
19								
20								
Coefficient of Variation:		0.55	0.70	0.22	0.72	0.00	0.00	0.69
Mann-Kendall Statistic (S):		-40	-61	-2	-11	0	0	12
Confidence Factor:		97.4%	99.9%	52.0%	68.7%	48.0%	48.0%	70.4%
Concentration Trend:		Decreasing	Decreasing	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.

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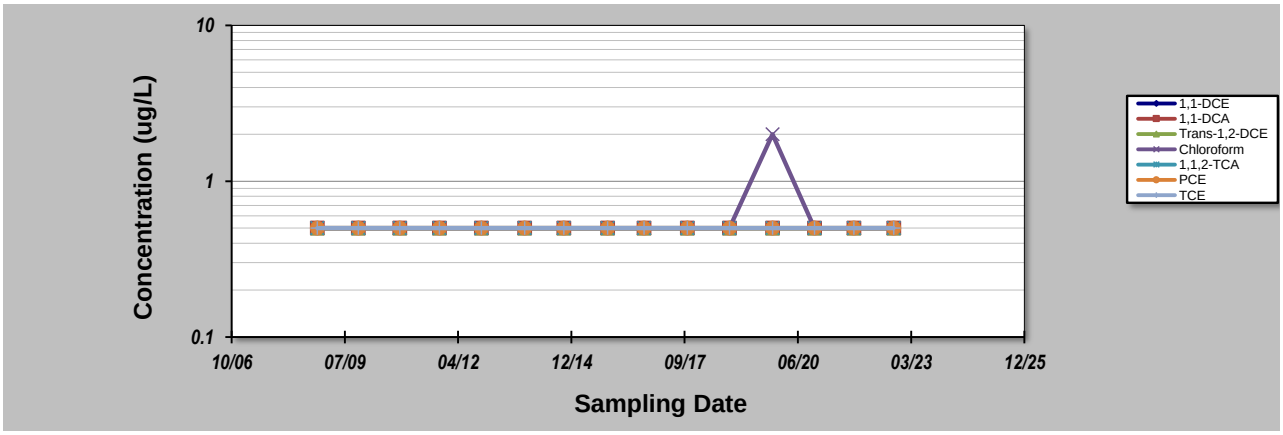
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	4-Nov-08	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	2-Nov-09	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3	3-Nov-10	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	19-Oct-11	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	22-Oct-12	0.5	0.5	0.5	0.5	0.5	0.5	0.5
6	10-Nov-13	0.5	0.5	0.5	0.5	0.5	0.5	0.5
7	20-Oct-14	0.5	0.5	0.5	0.5	0.5	0.5	0.5
8	11-Nov-15	0.5	0.5	0.5	0.5	0.5	0.5	0.5
9	28-Sep-16	0.5	0.5	0.5	0.5	0.5	0.5	0.5
10	16-Oct-17	0.5	0.5	0.5	0.5	0.5	0.5	0.5
11	22-Oct-18	0.5	0.5	0.5	0.5	0.5	0.5	0.5
12	7-Nov-19	0.5	0.5	0.5	2	0.5	0.5	0.5
13	11-Nov-20	0.5	0.5	0.5	0.5	0.5	0.5	0.5
14	26-Oct-21	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	12-Oct-22	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	8	0	0	0
Confidence Factor:		48.0%	48.0%	48.0%	63.3%	48.0%	48.0%	48.0%
Concentration Trend:		Stable	Stable	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.
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.

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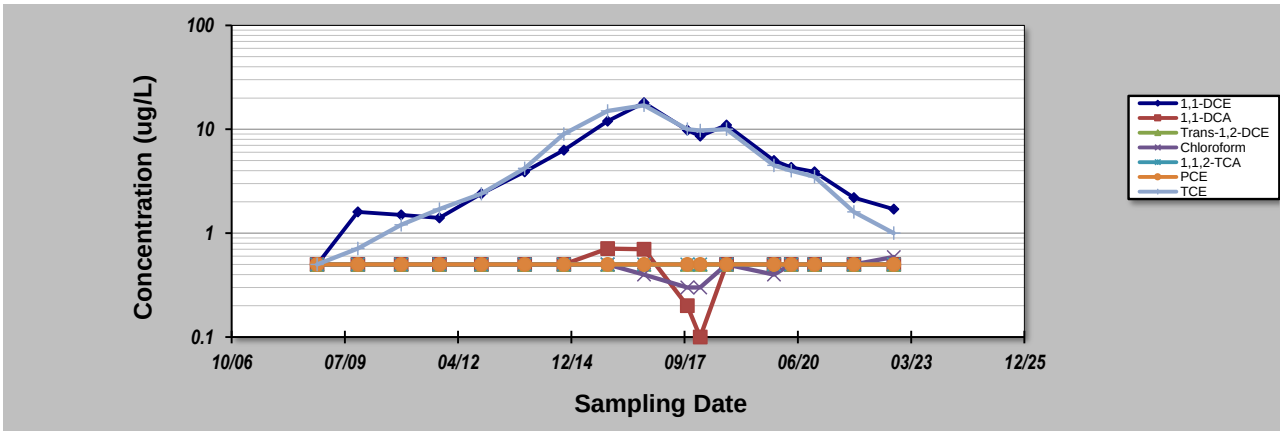
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	29-Oct-09	1.6	0.5	0.5	0.5	0.5	0.5	0.71
3	15-Nov-10	1.5	0.5	0.5	0.5	0.5	0.5	1.2
4	19-Oct-11	1.4	0.5	0.5	0.5	0.5	0.5	1.7
5	22-Oct-12	2.4	0.5	0.5	0.5	0.5	0.5	2.4
6	10-Nov-13	3.9	0.5	0.5	0.5	0.5	0.5	4.2
7	20-Oct-14	6.3	0.5	0.5	0.5	0.5	0.5	9
8	11-Nov-15	12	0.71	0.5	0.5	0.5	0.5	15
9	28-Sep-16	18	0.7	0.5	0.4	0.5	0.5	17
10	16-Oct-17	9.8	0.2	0.5	0.3	0.5	0.5	10
11	6-Feb-18	8.6	0.1	0.5	0.3	0.5	0.5	9.7
12	26-Sep-18	11	0.5	0.5	0.5	0.5	0.5	10
13	19-Nov-19	5	0.5	0.5	0.4	0.5	0.5	4.5
14	21-Apr-20	4.3	0.5	0.5	0.5	0.5	0.5	4
15	11-Nov-20	3.9	0.5	0.5	0.5	0.5	0.5	3.5
16	26-Oct-21	2.2	0.5	0.5	0.5	0.5	0.5	1.6
17	12-Oct-22	1.7	0.5	0.5	0.59	0.5	0.5	1
18								
19								
20								
Coefficient of Variation:		0.87	0.30	0.00	0.16	0.00	0.00	0.92
Mann-Kendall Statistic (S):		27	-6	0	-2	0	0	23
Confidence Factor:		85.6%	58.0%	48.4%	51.6%	48.4%	48.4%	81.5%
Concentration Trend:		No Trend	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.

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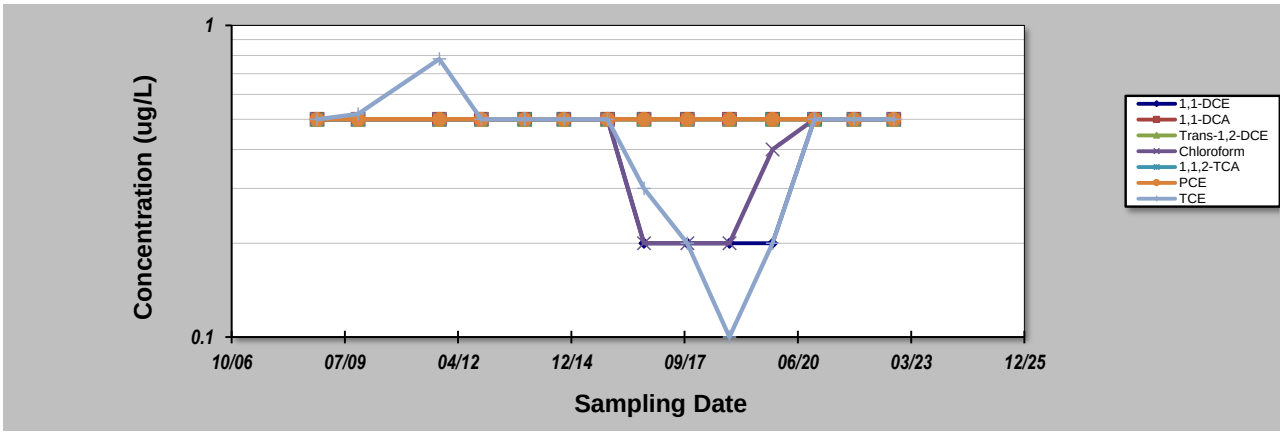
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	30-Oct-09	0.5	0.5	0.5	0.5	0.5	0.5	0.52
3	19-Oct-11	0.5	0.5	0.5	0.5	0.5	0.5	0.78
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	0.2	0.5	0.5	0.2	0.5	0.5	0.3
9	16-Oct-17	0.2	0.5	0.5	0.2	0.5	0.5	0.2
10	22-Oct-18	0.2	0.5	0.5	0.2	0.5	0.5	0.1
11	7-Nov-19	0.2	0.5	0.5	0.4	0.5	0.5	0.2
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								
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):		-16	0	0	-13	0	0	-30
Confidence Factor:		79.1%	47.8%	47.8%	74.1%	47.8%	47.8%	94.4%
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.

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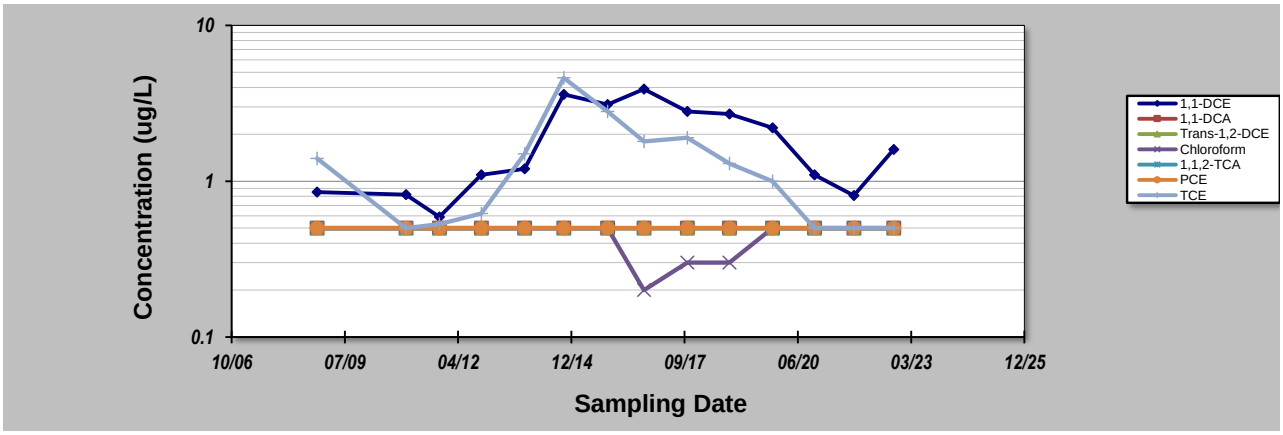
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	0.85	0.5	0.5	0.5	0.5	0.5	1.4
2	27-Dec-10	0.82	0.5	0.5	0.5	0.5	0.5	0.5
3	19-Oct-11	0.59	0.5	0.5	0.5	0.5	0.5	0.53
4	22-Oct-12	1.1	0.5	0.5	0.5	0.5	0.5	0.62
5	10-Nov-13	1.2	0.5	0.5	0.5	0.5	0.5	1.5
6	20-Oct-14	3.6	0.5	0.5	0.5	0.5	0.5	4.6
7	11-Nov-15	3.1	0.5	0.5	0.5	0.5	0.5	2.8
8	28-Sep-16	3.9	0.5	0.5	0.2	0.5	0.5	1.8
9	16-Oct-17	2.8	0.5	0.5	0.3	0.5	0.5	1.9
10	22-Oct-18	2.7	0.5	0.5	0.3	0.5	0.5	1.3
11	7-Nov-19	2.2	0.5	0.5	0.5	0.5	0.5	1
12	12-Nov-20	1.1	0.5	0.5	0.5	0.5	0.5	0.5
13	26-Oct-21	0.81	0.5	0.5	0.5	0.5	0.5	0.5
14	12-Oct-22	1.6	0.5	0.5	0.5	0.5	0.5	0.5
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.61	0.00	0.00	0.23	0.00	0.00	0.83
Mann-Kendall Statistic (S):		10	0	0	-7	0	0	-17
Confidence Factor:		68.6%	47.8%	47.8%	62.6%	47.8%	47.8%	80.6%
Concentration Trend:		No Trend	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.

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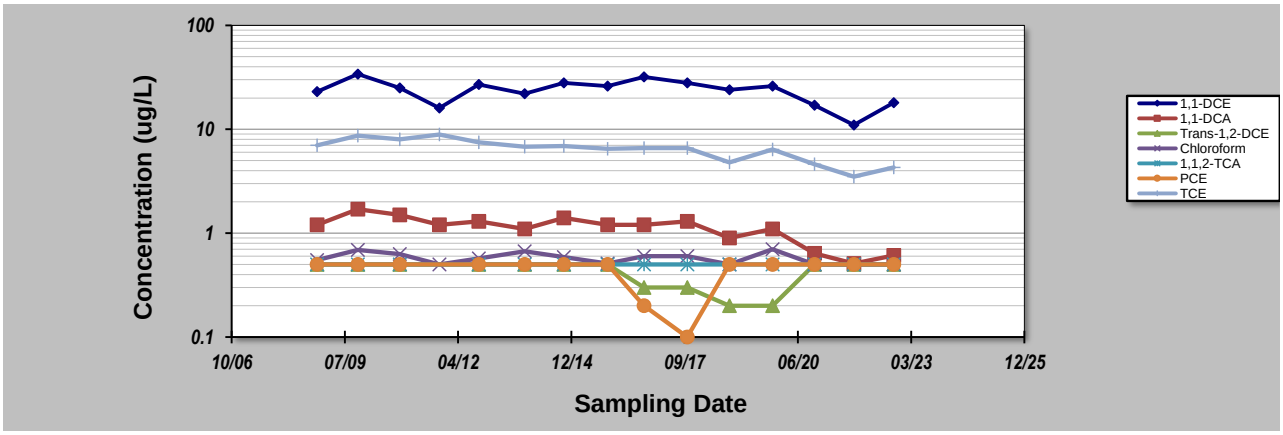
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	23	1.2	0.5	0.55	0.5	0.5	7
2	29-Oct-09	34	1.7	0.5	0.69	0.5	0.5	8.7
3	3-Nov-10	25	1.5	0.5	0.63	0.5	0.5	8
4	19-Oct-11	16	1.2		0.5			8.9
5	1-Oct-12	27	1.3	0.5	0.57	0.5	0.5	7.5
6	10-Nov-13	22	1.1	0.5	0.67	0.5	0.5	6.8
7	20-Oct-14	28	1.4	0.5	0.59	0.5	0.5	6.9
8	11-Nov-15	26	1.2	0.5	0.51	0.5	0.5	6.5
9	28-Sep-16	32	1.2	0.3	0.6	0.5	0.2	6.6
10	16-Oct-17	28	1.3	0.3	0.6	0.5	0.1	6.6
11	23-Oct-18	24	0.9	0.2	0.5	0.5	0.5	4.8
12	7-Nov-19	26	1.1	0.2	0.7	0.5	0.5	6.4
13	12-Nov-20	17	0.64	0.5	0.5	0.5	0.5	4.6
14	26-Oct-21	11	0.51	0.5	0.5	0.5	0.5	3.5
15	12-Oct-22	18	0.61	0.5	0.5	0.5	0.5	4.3
16								
17								
18								
19								
20								
Coefficient of Variation:		0.26	0.30	0.28	0.13	0.00	0.29	0.24
Mann-Kendall Statistic (S):		-23	-63	-20	-28	0	-5	-82
Confidence Factor:		85.9%	99.9%	84.8%	90.8%	47.8%	58.5%	>99.9%
Concentration Trend:		Stable	Decreasing	Stable	Prob. Decreasing	Stable	Stable	Decreasing



Notes:

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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.

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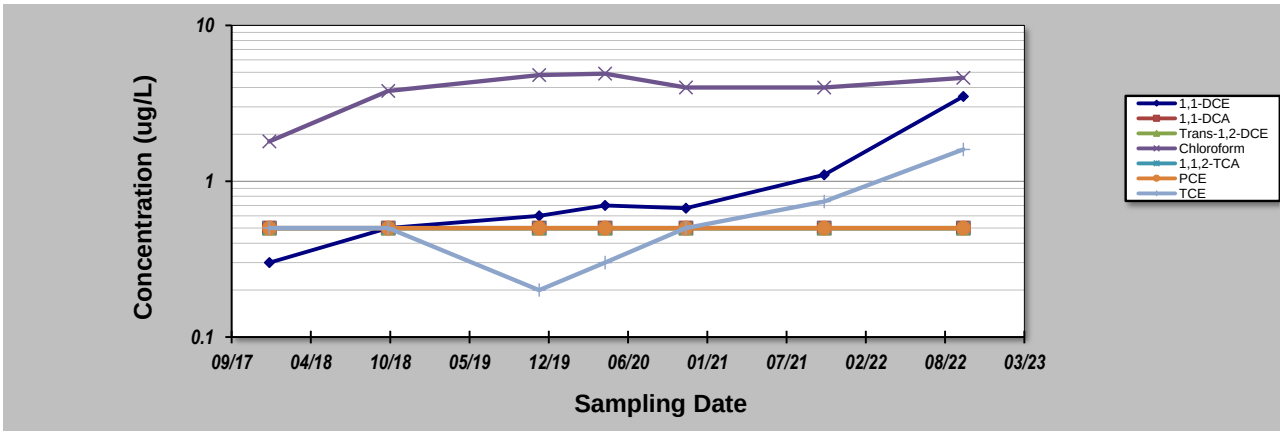
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		1.05	0.00	0.00	0.26	0.00	0.00	0.75
Mann-Kendall Statistic (S):		19	0	0	8	0	0	10
Confidence Factor:		99.9%	37.9%	37.9%	84.5%	37.9%	37.9%	90.7%
Concentration Trend:		Increasing	Stable	Stable	No Trend	Stable	Stable	Prob. 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.

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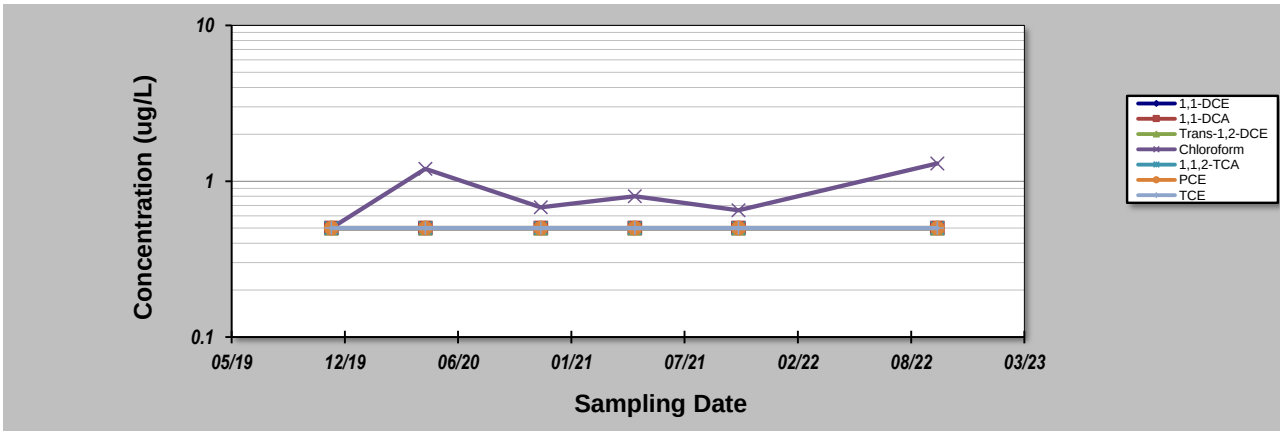
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.00	0.00	0.00	0.38	0.00	0.00	0.00
Mann-Kendall Statistic (S):		0	0	0	5	0	0	0
Confidence Factor:		39.3%	39.3%	39.3%	76.5%	39.3%	39.3%	39.3%
Concentration Trend:		Stable	Stable	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.
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.

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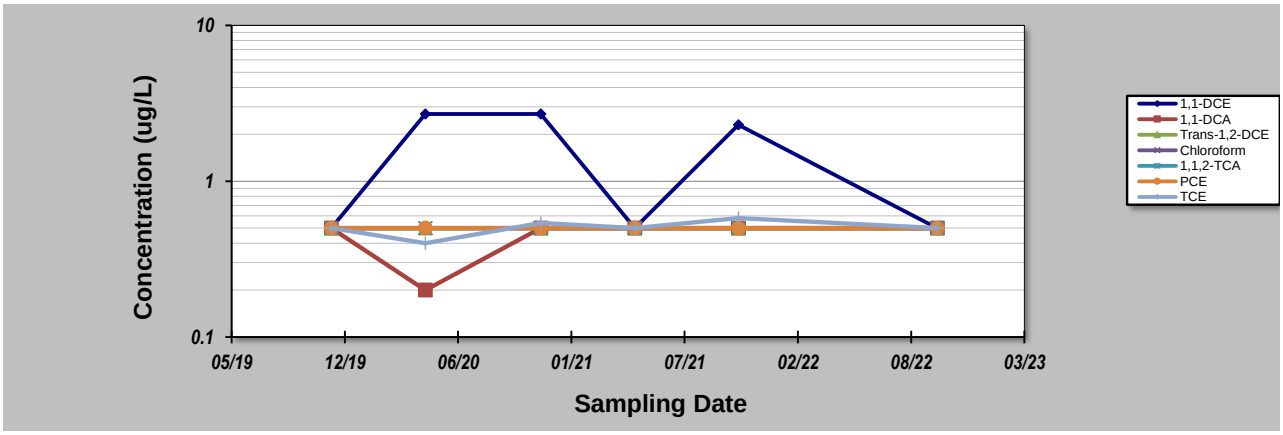
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.74	0.27	0.00	0.00	0.00	0.00	0.12
Mann-Kendall Statistic (S):		-3	3	0	0	0	0	4
Confidence Factor:		64.0%	64.0%	39.3%	39.3%	39.3%	39.3%	70.3%
Concentration Trend:		Stable	No Trend	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.

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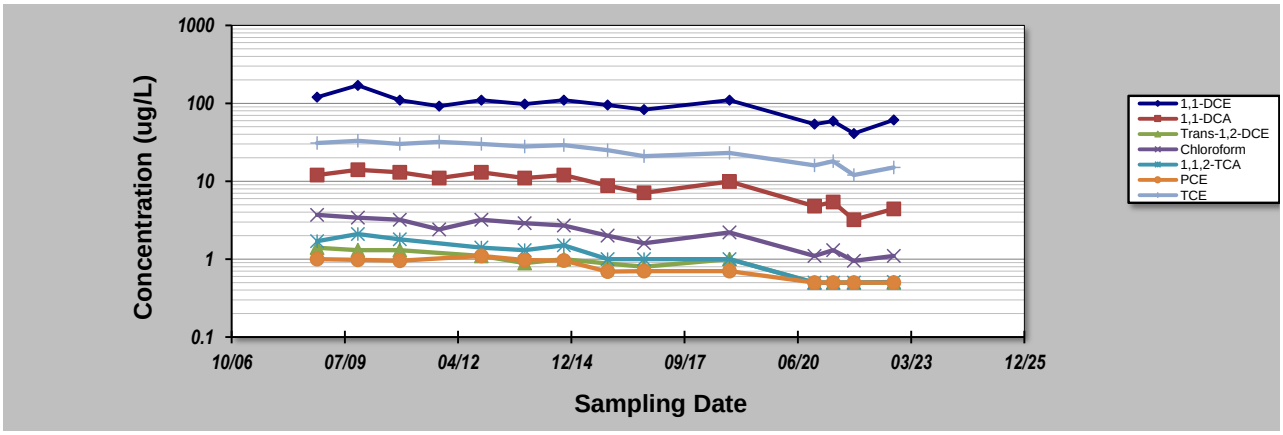
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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	3-Nov-08	120	12	1.4	3.7	1.7	1	31
2	29-Oct-09	170	14	1.3	3.4	2.1	0.98	33
3	3-Nov-10	110	13	1.3	3.2	1.8	0.95	30
4	17-Oct-11	92	11		2.4			32
5	23-Oct-12	110	13	1.1	3.2	1.4	1.1	30
6	10-Nov-13	98	11	0.89	2.9	1.3	0.97	28
7	20-Oct-14	110	12	1	2.7	1.5	0.96	29
8	11-Nov-15	95	8.8	0.88	2	1	0.69	25
9	28-Sep-16	83	7.1	0.8	1.6	1	0.7	21
10	23-Oct-18	110	9.9	1	2.2	1	0.7	23
11	12-Nov-20	54	4.8	0.5	1.1	0.5	0.5	16
12	26-Apr-21	59	5.4	0.5	1.3	0.5	0.5	18
13	26-Oct-21	41	3.2	0.5	0.95	0.5	0.5	12
14	12-Oct-22	61	4.4	0.5	1.1	0.51	0.5	15
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.35	0.39	0.36	0.42	0.48	0.29	0.29
Mann-Kendall Statistic (S):		-57	-68	-62	-75	-58	-57	-76
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



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.

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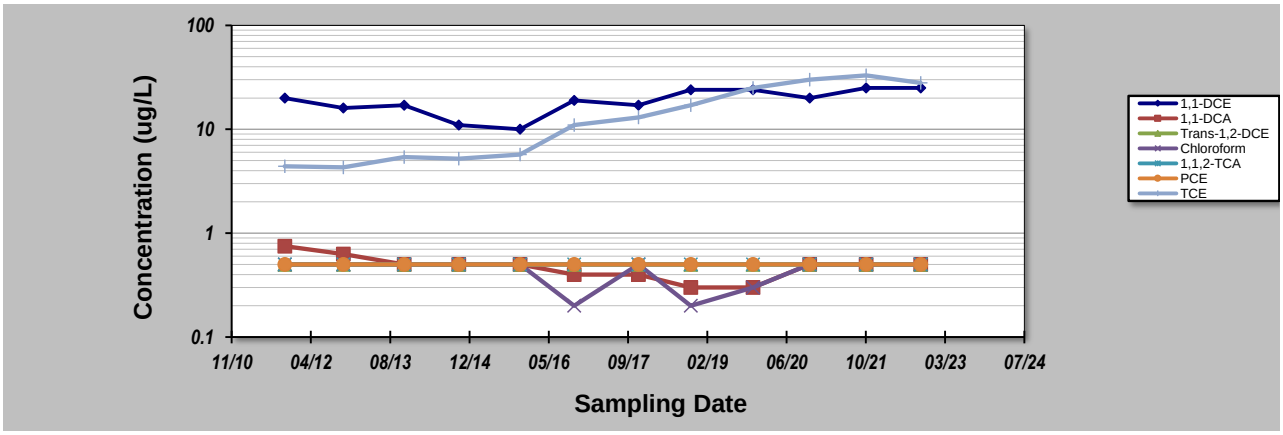
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Dec-22	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								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.27	0.26	0.00	0.28	0.00	0.00	0.73
Mann-Kendall Statistic (S):		34	-25	0	-5	0	0	58
Confidence Factor:		99.0%	95.0%	47.3%	60.6%	47.3%	47.3%	>99.9%
Concentration Trend:		Increasing	Prob. Decreasing	Stable	Stable	Stable	Stable	Increasing



Notes:

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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 - 15 Years
2022 Annual Groundwater Monitoring Report
Honeywell Peoria Avenue Site, Phoenix, Arizona

	1,1-DCE		1,1-DCA		Trans-1,2-DCE		Chloroform		1,1,2-TCA		PCE		TCE	
Well	**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	Prob. Decreasing	0.9 - 25 ug/L	Decreasing	1.8 - 50 ug/L	Decreasing	0.7 - 26 ug/L	Decreasing	1.2 - 25 ug/L	Decreasing	35 - 310 ug/L
MW-2	Stable	82 - 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	Prob. Decreasing	0.8 - 22 ug/L	Prob. Decreasing	6.8 - 320 ug/L
MW-3	No Trend	0.5 - 30 ug/L	Prob. Decreasing	0.5 - 1.3 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 - 26 ug/L
MW-4	Increasing	0.5 - 16 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 - 4.4 ug/L
MW-5	Decreasing	6.2 - 38 ug/L	Decreasing	0.3 - 2.2 ug/L	Stable	0.1 - 0.5 ug/L	Stable	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	No Trend	0.5 - 18 ug/L	Stable	0.1 - 0.71 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.3 - 0.59 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	0.5 - 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	No Trend	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	Stable	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 - 3.5 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	No Trend	1.8 - 4.9 ug/L	Stable	0.5 - 0.5 ug/L	Stable	0.5 - 0.5 ug/L	Prob. Increasing	0.2 - 1.6 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	No Trend	0.5 - 1.3 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	Stable	0.5 - 2.7 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 - 1.4 ug/L	Decreasing	0.95 - 3.7 ug/L	Decreasing	0.5 - 2.1 ug/L	Decreasing	0.5 - 1.1 ug/L	Decreasing	12 - 33 ug/L
EW-2	Increasing	10 - 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
µg/L = micrograms per liter