



HEALTH, SAFETY, ENVIRONMENTAL, PRODUCT STEWARDSHIP AND SUSTAINABILITY

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Morris Plains, New Jersey 07950
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April 10, 2022

Mr. Moshood Oduwole
EPA Project Coordinator
RCRA Operations Branch
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Edward M. Dexter
Administrator
Solid Waste Program
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230-1719

Re: Honeywell Baltimore Inner Harbor Site, First Quarter 2022 Progress Report, No. 130

Dear Messrs. Oduwole and Dexter:

Please find enclosed Quarterly Progress Report No. 130 for the Honeywell Baltimore Inner Harbor (BIH) Site. The report provides the project status and results of environmental monitoring for the period of January 1, 2022, through March 31, 2022, pursuant to Article V, paragraph 3, of the Consent Decree.

Corrective Measures Implementation (CMI)

A. Dismantlement: None.

B. CMI Design: CMI design was completed in 2002.

C. CMI Maintenance

Refer to the *Baltimore Inner Harbor HMS Groundwater Gradient Monitoring Quarterly Report No. 130, First Quarter 2022*, Section 1.5.2, for a complete list of maintenance repairs. Following are the major repairs performed during the first quarter:

- January 7, 2022—The ultrasonic level sensor for Outer Piezometer 2S was replaced.
- January 24, 2022—A discharge pipe was repaired in Well 2S.
- January 25, 2022—The piston pump was repaired in Well 7.
- January 25, 2022—The level sensor was replaced in Well 2D.
- February 17, 2022—A leaking flowmeter was repaired on Well 2S.
- March 9, 2022—The level transmitter on Storage Tank 202 was replaced.
- March 23, 2022—A split discharge pipe was replaced on Well 2S.

D. Redevelopment

The Sandlot was dismantled in March 2022 and has been relocated to the Western side of Parcel 3. Container structures have been positioned and are being connected to electric supplies. Shallow ground works and general site setup work is ongoing, with scheduled completion in May 2022.

Onsite construction preparation activities for Parcel 3 development began March 16, 2022. Intrusive work inside the MMC is scheduled to begin April 11, 2022, PDA piles are scheduled for April 25, 2022, and production piles are scheduled to be driven May 2, 2022.

Jacobs is monitoring the redevelopment activities and providing technical support to ensure uninterrupted operation of remedial components and continuing compliance of the HMS with the Consent Decree performance criteria.

Agency Correspondence

- January 3, 2022—Email from Ed Dexter to Jonathan Flesher requesting quantity of Perimeter Air Monitoring sites stated in the Area 1, Phase 2 Construction Air Monitoring Project Plan (CAMP) Parcel 3 Development. Confirmation email reply from Jonathan Flesher on January 3, 2022.
- January 13, 2022—Revised Parcel 4 DDP email attachment from Jonathan Flesher to Ed Dexter and Oduwole Moshood. Acknowledgement receipt from Richelle Hanson and Ed Dexter, January 18, 2022.
- January 13, 2022—Parcel 3 DDP rejection email with attached letter from Ed Dexter to Jonathan Flesher. Acknowledged by Jonathan Flesher on January 13, 2022.
- January 19, 2022—Email from Moshood Oduwole to Jonathan Flesher regarding Parcel 4, including request for USACE to review DDP. Receipt acknowledged by Jonathan Flesher on January 19, 2022.
- January 24, 2022—Email from Moshood Oduwole confirming EPA comments on Parcel 4 DDP have been adequately addressed by Beatty Development Group. Receipt acknowledged by Jonathan Flesher on January 25, 2022.
- January 24, 2022—Email from Darren Quillen (Environmental Resources Management) to Ed Dexter and Moshood Oduwole containing responses to MDE comments regarding Area 1, Parcel 3 DDP with link to entire DDP.
- January 27, 2022—Harbor Point Parcel 4 DDP approval email with attached letter from Ed Dexter to Jonathan Flesher, Moshood Oduwole, and Honeywell. Acknowledged by Jonathan Flesher January 27, 2022.
- January 27, 2022—Harbor Point Parcel 4 DDP approval email with attached letter from Moshood Oduwole to Jonathan Flesher, Ed Dexter, and Honeywell.
- February 7, 2022—Harbor Point Area 1, Phase 2, Parcel 3 DDP approval email with attached letter from Ed Dexter to Jonathan Flesher, Moshood Oduwole and Honeywell. Receipt acknowledgment email from Jonathan Flesher February 7, 2022.
- February 7, 2022—Harbor Point Area 1, Phase 2, Parcel 3 DDP approval email with attached letter from Moshood Oduwole to Jonathan Flesher, Ed Dexter, and Honeywell.
- February 17, 2022—Email from Marty Reif (Jacobs on behalf of Honeywell) to Ed Dexter and Moshood Oduwole requesting revision status of the adjusted Surface Soil Monitoring Plan at Baltimore Inner Harbor.
- March 18, 2022—Email from Jonathan Flesher to Moshood Oduwole, Ed Dexter, and Richelle Hanson with initial construction schedule for Area 1, Phase 2 – Parcel 3.

Attachment 1—Operation and Maintenance Schedule for Second Quarter 2022

Attachment 2—Environmental Media Monitoring Plan (EMMP) Report. Surface water sampling occurred during the first quarter of 2022.

Attachment 3—Head Maintenance System (HMS) Groundwater Gradient Performance Report. The first quarter HMS data document complies with the groundwater gradient performance standard.

Changes in CMI Reporting

There have been no changes in CMI reporting this quarter.

Copies of Daily Reports, Inspections, and Monitoring Data

The surface water data for the first quarter of 2022 are presented in the attachment to the EMMP report. Individual sample detection limits and electronic copies of the analytical results are also provided in the electronic attachments. The HMS gradient performance data for the reporting period include performance charts, piezometer data, and pumping data. The charts and supporting data are provided in the folder titled "Backup Files," provided via emailed link.

Results for the inspections performed during this quarter are stored onsite.

Projected Work for Second Quarter 2022

A. Maintenance

- Extraction well piston pump pilot installation will continue.
- Surface water, groundwater and drainage layer samples will be collected.
- Site-wide PLC upgrade assessment will be performed.
- Automated valves will be installed on the leachate storage tanks.

B. Redevelopment

- Construction on Parcel 3 (Area 1, Phase 2—Parcel 3 ([T. Rowe Price]) commences.
- Construction on Parcel 4 (Undesignated Area and Area 3) will begin next quarter.

C. Community Events: Beatty Development will continue to provide periodic updates to the local residents as the redevelopment projects progress.

Please call me at 973-455-2877 if you have any questions or comments.

Sincerely,



Eric Christodoulatos
Project Coordinator

cc: Peggy Otum/Arnold and Porter (letter only)
Jonathan Flesher/Beatty Development Group, LLC
File/Baltimore Inner Harbor Site

Enclosures

Attachment 1
Quarterly Operation and Maintenance Schedule for
Second Quarter 2022

April 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
27	28	29	30	31	1 Standard Inspections - MES 1	2
3	4 All Monthly Inspections -Ladder, Fall Equipment, SSMP, Fire Equipment	5 Peizometer Readings MES-2	6	7	8 Standard Inspections - MES 1 Q1 Quarterly Report Due	9
10	11 Q2 SWS Primary MES	12 Vault Inspections MES-2	13 Groundwater Sampling MES	14	15 Standard Inspections - MES 1	16
17	18	19	20 Annual Drainage Layer Sampling - MES	21	22 Standard Inspections - MES 1	23
24	25 Q2 SWS Backup MES	26	27	28	29	30
1	2	NOTES				

May 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6 Standard Inspections - MES 1	7
8	9 All Monthly Inspections -Ladder, Fall Equipment, SSMP, Fire Equipment	10 Peizometer Inspections - MES2	11 Q2 SWS Backup 2	12	13 Standard Inspections - MES 1	14
15	16	17 Vault Inspections - MES2	18	19	20 Standard Inspections - MES 1	21
22	23	24	25	26	27 Standard Inspections - MES 1	28
29	30 Memorial Day. Offices Closed.	31	1	2	3 Standard Inspections - MES 1	4
5	6	NOTES				

June 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	31	1	2	3 Standard Inspections - MES 1	4
5	6 All Monthly Inspections -Ladder, Fall Equipment, SSMP, Fire Equipment	7 Peizometer Inspections MES2	8	9	10 Standard Inspections - MES 1	11
12	13	14 Vault Inspection MES2	15	16	17 Standard Inspections - MES 1	18
19	20	21	22	23	24 Standard Inspections - MES 1	25
26	27	28	29	30	1 Standard Inspections - MES 1	2
3	4	NOTES				

Attachment 2
Environmental Media Monitoring Report

ENVIRONMENTAL MEDIA MONITORING
PLAN QUARTERLY REPORT NO. 130,
FIRST QUARTER 2022

BALTIMORE INNER HARBOR
BALTIMORE, MARYLAND

Prepared for

Honeywell

115 Tabor Road
Morris Plains, New Jersey 07950

Prepared by

Jacobs

Jacobs Engineering
2411 Dulles Corner Park Suite #500
Herndon, VA 20171

APRIL 2022

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Acronyms and Abbreviations

µg	microgram
BTV	background threshold value
EMMP	<i>Environmental Media Monitoring Plan</i>
EPA	U.S. Environmental Protection Agency
ERM	Environmental Resources Management Inc.
F&R	Froehling and Robertson
m ³	cubic meter
MDE	Maryland Department of the Environment
MES	Maryland Environmental Services
ng	nanogram
PM	particulate matter
ppb	parts per billion
Site	Honeywell Baltimore Inner Harbor Site
SSMP	<i>Surface Soil Monitoring Plan</i>
TOC	total organic carbon

1. Introduction

1.1 Purpose

This document summarizes data collected during the first quarter of 2022 at the Baltimore Inner Harbor Site (Site) as required by the Environmental Media Monitoring Program and set forth in the *Environmental Media Monitoring Plan* (EMMP) and the *Surface Soil Monitoring Plan* (SSMP). The submittal constitutes a Progress Report in accordance with the requirements of Section V.3 of the Consent Decree, entered into by Honeywell (formerly AlliedSignal, Inc.), the U.S. Environmental Protection Agency (EPA), and the Maryland Department of the Environment (MDE) dated September 29, 1989, and requiring that a progress report be submitted every calendar quarter during the life of the Consent Decree.

1.2 Scope of Work

The scope of work outlined in the EMMP (Environmental Media Monitoring Plan) covers sampling and analysis of environmental media before, during, and after dismantlement of the former plant, and the completion of the corrective measures implementation activities at the Honeywell Baltimore Inner Harbor Site (Site). The environmental media sampled as part of the EMMP are air, surface water, groundwater, and sediment.

The scope of work outlined in the SSMP (Surface Soil Monitoring Plan) covers sampling and analysis of environmental media after completion of Corrective Measures Implementation activities at the Site. The only environmental medium sampled as part of the SSMP is the drainage layer effluent.

Media are sampled on varying frequencies as required by the EMMP and the SSMP (quarterly, twice annually, annually, and every 3 years). Only data for the media sampled during each quarter are reported in this quarterly report.

1.3 Sampling Conducted This Quarter

Surface water samples were collected during the first quarter of 2022. Surface water sampling results are described in Section 2, with the analytical data provided in Appendix A.

Validata LLC validated all sampling data for the first quarter of 2022. The validation reports for first quarter 2022 surface water monitoring are provided in Appendix B. All data quality objectives were met for sample results reported herein.

1.4 Progress Report Organization

Progress reports prepared in accordance with the Consent Decree are organized by medium. The media section provides a summary of methodology, the current quarter's sampling plan, and a summary of results. Also provided in these sections: a discussion of the sampling event; explanations for any deviations from the EMMP or SSMP procedures; data summaries; and discussion of the data, quality control results, and pertinent data trends. Sampling monitoring details are presented in Section 2. Associated analytical data and chain-of-custody records are provided in Appendices A. Validation results are presented in Appendix B.

2. Surface Water Monitoring

2.1 Methodology

The surface water monitoring program provides information about surface water quality around the perimeter of the Site, at 18 predetermined stations, and at 2 stations upstream from the Site. Samples are collected at each station during each quarter and analyzed for total dissolved chromium.

Sampling is conducted within 1 hour of low tide and close to the predetermined sampling locations. The pH, temperature, specific conductance, and depth to the river bottom are measured before each sample is collected. A decontaminated Kemmerer sampler is used to collect the samples, which are placed in 500-milliliter plastic bottles. Two samples are collected—the first 1 foot below the water surface and the second 1 foot above the river bottom—at all locations except Station 20, where the water depth may be at or below 1 foot. When this is the case, only one sample is collected at Station 20. A mid-depth sample is required from sampling locations where the depth is more than 10 feet. The lateral placement of each sample location is about 5 feet from the bulkhead/shoreline. Laboratory sampling personnel record measurements and observations on sampling sheets, which are presented in Appendix A.

Surface water sample containers are placed on ice as soon as samples are collected. Field duplicate samples, field blanks, and rinsate blanks are also collected. At the end of the sample round, the samples are filtered and preserved. The samples are then transferred to the laboratory using documented chain-of-custody procedures and a dedicated courier. The samples are analyzed for total dissolved chromium using EPA SW-846 Method 6010B.

The results received from the laboratory are entered into a database in which data for each month are tabulated. When duplicate samples for a given station are taken, the average of the concentrations is used for that station. The analytical results, chain-of-custody documentation, and field sampling reports are presented in Appendix A.

2.2 Current Quarter Results

Surface water sampling for the first quarter of 2021 was performed by Maryland Environmental Services (MES) at all 20 surface water sampling locations on February 24, 2021. The surface water sampling locations are illustrated on Figure 2-1 (at the end of this section). Results for these surface water samples are included in this report. Field notes for the February 24, 2021, surface water sampling are provided in Appendix A-3 of this report.

All of the collected samples were transported to Lancaster Laboratories in Lancaster, Pennsylvania, for total dissolved chromium analysis. Summaries of the surface water data and average concentrations for February 24, 2021, including individual sample detection limits and validated data qualifiers, are presented in Tables 2-1 and 2-2.

2.3 Data Review

The surface water monitoring program is intended to provide information on surface water quality in the immediate vicinity of the waterside perimeter of the Site. This information is used to assess the performance of the corrective measures.

The Consent Decree, Section V, Part 12, establishes the Surface Water Performance Standard: “The surface water performance standard [...] for total chromium shall be 50 parts per billion (ppb), calculated for each sample location by arithmetically averaging the samples taken at all depths over 4 consecutive days.” In October 2002, the sample frequency was amended to 1 day of sampling at each sampling location per quarter.

In addition, the EMMP states that Honeywell will review analytical data for results greater than 11 ppb of dissolved hexavalent chromium. The 11-ppb reporting level is based on the following:

- Code of Maryland Regulation 26.08.02.03-1B, which states that the numerical toxic substance criteria for freshwater shall be applied to the surface water near the Site; and
- National Recommended Water Quality Criteria Correction EPA 822-Z-99-001 (April 1999), which states that the chronic exposure level for dissolved hexavalent chromium in freshwater is 11 ppb.

Total dissolved chromium concentrations detected in surface water samples reported for the first quarter of 2022 are similar to the analytical values reported for the fourth quarter of 2021. All values reported for the sampling event are below the performance standard of 50 ppb and the analytical detection limit of 15 ppb.

The percentages of actual or average surface water results meeting specific criteria (performance standard, chronic freshwater exposure, and detection limit) are listed in Table 2-1. Results of analyses for total dissolved chromium from each sampling location and each depth are presented in Table 2-2. The average analytical result from each sampling location is presented in Table 2-3.

Table 2-1. Percent of Average or Actual Surface Water Results Below Specific Criteria

Sample Event	Performance Standard Actual Concentration < 50 ppb	Fresh Water Chronic Exposure Level Actual Concentration <11 ppb	Analytical Detection Limit† Actual Concentration <0 ppb	Method Detection Limit† Actual Concentration <0 ppb
2/28/2022	100%	100%	100%	98%

† The Analytical Detection Limit as determined by the laboratory QC is 15 ppb.

Table 2-2. Surface Water Sampling Data per Location, February 2022

Station Number	Reporting Limit (ug/L)	Method Detection Limit (ug/L)	Total Dissolved Chromium (ug/L) 2/28/2022
3B	15	1.6	ND
3T	15	1.6	ND
4B	15	1.6	ND
4T	15	1.6	ND
5B	15	1.6	ND*
5T	15	1.6	ND
6B	15	1.6	ND
6T	15	1.6	ND
7B	15	1.6	ND
7T	15	1.6	ND
8B	15	1.6	ND
8T	15	1.6	ND
9B	15	1.6	ND
9T	15	1.6	ND
10B	15	1.6	ND
10T	15	1.6	ND
11B	15	1.6	ND
11T	15	1.6	ND*
12B	15	1.6	ND
12T	15	1.6	ND
13B	15	1.6	ND
13T	15	1.6	ND
14B	15	1.6	ND
14T	15	1.6	ND
15B	15	1.6	2.3 J
15T	15	1.6	ND
16B	15	1.6	ND*
16T	15	1.6	ND
17B	15	1.6	ND
17T	15	1.6	ND
18B	15	1.6	ND
18T	15	1.6	ND
19B	15	1.6	ND
19T	15	1.6	ND*
20B	15	1.6	ND
20T	15	1.6	ND
CENT B	15	1.6	ND
CENT T	15	1.6	ND
LADY B	15	1.6	ND
LADY T	15	1.6	ND

T - Sample collected 1 foot below the surface (TOP)

M - Sample collected from the measured middle of the TOP and BOTTOM measurements (MIDDLE)

B - Sample collected 1 foot from the bottom (BOTTOM)

* - Average of the sample result and its Field Duplicate

J - Result was reported below the Reporting Limit and above the Method Detection Limit

ND - Result not detected at the Method Detection Limit

Table 2-3. Water Sampling Data per Sampling Station, February 2022

Station Number	Total Dissolved Chromium (ug/L)
	2/28/2022 Station Average of All Depths
3	3.2 U
4	3.2 U
5	4.8 U
6	3.2 U
7	3.2 U
8	3.2 U
9	3.2 U
10	3.2 U
11	4.8 U
12	3.2 U
13	3.2 U
14	3.2 U
15	3.9 J
16	4.8 U
17	3.2 U
18	3.2 U
19	4.8 U
20	3.2 U
Cent	3.2 U
Lady	3.2 U

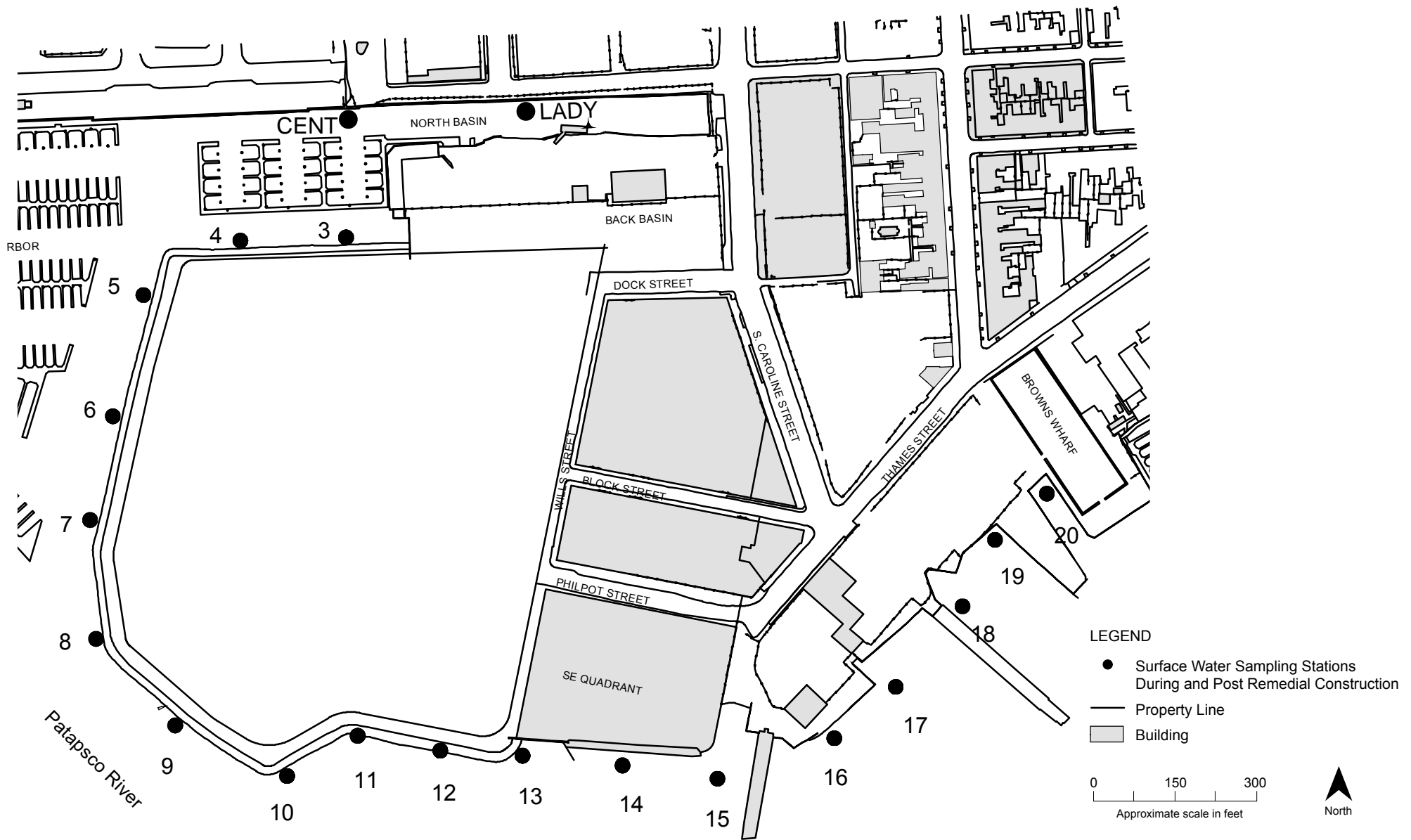


Figure 2-1. Surface Water Sample Locations
Honeywell Baltimore Site

Appendix A
Surface Water Sampling Program Data

Appendix A-1
Raw Laboratory Data—February 2022

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

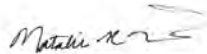
Laboratory Job ID: 410-74474-1

Client Project/Site: Baltimore Inner Harbor, MD

For:

Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Eric Christodoulatos



Authorized for release by:
3/10/2022 2:43:33 PM

Natalie Luciano, Principal Project Manager
(717)556-7258
Natalie.Luciano@eurofinset.com

LINKS

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results through
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.



Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
 - Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
 - Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Natalie Luciano
Principal Project Manager
3/10/2022 2:43:33 PM



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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Job ID: 410-74474-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative 410-74474-1

Receipt

The samples were received on 3/1/2022 4:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.0°C and 3.5°C

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): FB_022822 (410-74474-45). The container labels list FB1_022822, while the COC lists FB_022822. The COC was followed.

Metals

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



Detection Summary

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 3T_022822	Lab Sample ID: 410-74474-1
No Detections.	
Client Sample ID: 3B_022822	Lab Sample ID: 410-74474-2
No Detections.	
Client Sample ID: 4T_022822	Lab Sample ID: 410-74474-3
No Detections.	
Client Sample ID: 4B_022822	Lab Sample ID: 410-74474-4
No Detections.	
Client Sample ID: 5T_022822	Lab Sample ID: 410-74474-5
No Detections.	
Client Sample ID: 5B_022822	Lab Sample ID: 410-74474-6
No Detections.	
Client Sample ID: 6T_022822	Lab Sample ID: 410-74474-7
No Detections.	
Client Sample ID: 6B_022822	Lab Sample ID: 410-74474-8
No Detections.	
Client Sample ID: 7T_022822	Lab Sample ID: 410-74474-9
No Detections.	
Client Sample ID: 7B_022822	Lab Sample ID: 410-74474-10
No Detections.	
Client Sample ID: 8T_022822	Lab Sample ID: 410-74474-11
No Detections.	
Client Sample ID: 8B_022822	Lab Sample ID: 410-74474-12
No Detections.	
Client Sample ID: 9T_022822	Lab Sample ID: 410-74474-13
No Detections.	
Client Sample ID: 9B_022822	Lab Sample ID: 410-74474-14
No Detections.	
Client Sample ID: 10T_022822	Lab Sample ID: 410-74474-15
No Detections.	
Client Sample ID: 10B_022822	Lab Sample ID: 410-74474-16
No Detections.	

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 11T_022822

Lab Sample ID: 410-74474-17

No Detections.

Client Sample ID: 11B_022822

Lab Sample ID: 410-74474-18

No Detections.

Client Sample ID: 12T_022822

Lab Sample ID: 410-74474-19

No Detections.

Client Sample ID: 12B_022822

Lab Sample ID: 410-74474-20

No Detections.

Client Sample ID: 13T_022822

Lab Sample ID: 410-74474-21

No Detections.

Client Sample ID: 13B_022822

Lab Sample ID: 410-74474-22

No Detections.

Client Sample ID: 14T_022822

Lab Sample ID: 410-74474-23

No Detections.

Client Sample ID: 14B_022822

Lab Sample ID: 410-74474-24

No Detections.

Client Sample ID: 15T_022822

Lab Sample ID: 410-74474-25

No Detections.

Client Sample ID: 15B_022822

Lab Sample ID: 410-74474-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	2.3	J	15	1.6	ug/L	1		6010C	Dissolved

Client Sample ID: 16T_022822

Lab Sample ID: 410-74474-27

No Detections.

Client Sample ID: 16B_022822

Lab Sample ID: 410-74474-28

No Detections.

Client Sample ID: 17T_022822

Lab Sample ID: 410-74474-29

No Detections.

Client Sample ID: 17B_022822

Lab Sample ID: 410-74474-30

No Detections.

Client Sample ID: 18T_022822

Lab Sample ID: 410-74474-31

No Detections.

Client Sample ID: 18B_022822

Lab Sample ID: 410-74474-32

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 19T_022822 **Lab Sample ID: 410-74474-33**

No Detections.

Client Sample ID: 19B_022822 **Lab Sample ID: 410-74474-34**

No Detections.

Client Sample ID: 20T_022822 **Lab Sample ID: 410-74474-35**

No Detections.

Client Sample ID: 20B_022822 **Lab Sample ID: 410-74474-36**

No Detections.

Client Sample ID: Cent T_022822 **Lab Sample ID: 410-74474-37**

No Detections.

Client Sample ID: Cent B_022822 **Lab Sample ID: 410-74474-38**

No Detections.

Client Sample ID: Lady T_022822 **Lab Sample ID: 410-74474-39**

No Detections.

Client Sample ID: Lady B_022822 **Lab Sample ID: 410-74474-40**

No Detections.

Client Sample ID: D1_022822 **Lab Sample ID: 410-74474-41**

No Detections.

Client Sample ID: D2_022822 **Lab Sample ID: 410-74474-42**

No Detections.

Client Sample ID: D3_022822 **Lab Sample ID: 410-74474-43**

No Detections.

Client Sample ID: D4_022822 **Lab Sample ID: 410-74474-44**

No Detections.

Client Sample ID: FB_022822 **Lab Sample ID: 410-74474-45**

No Detections.

Client Sample ID: RB1_022822 **Lab Sample ID: 410-74474-46**

No Detections.

Client Sample ID: RB2_022822 **Lab Sample ID: 410-74474-47**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC



Client Sample Results

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 3T_022822

Lab Sample ID: 410-74474-1

Date Collected: 02/28/22 10:07

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 01:18	1

Client Sample ID: 3B_022822

Lab Sample ID: 410-74474-2

Date Collected: 02/28/22 10:07

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:29	1

Client Sample ID: 4T_022822

Lab Sample ID: 410-74474-3

Date Collected: 02/28/22 10:11

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 03:15	1

Client Sample ID: 4B_022822

Lab Sample ID: 410-74474-4

Date Collected: 02/28/22 10:11

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:49	1

Client Sample ID: 5T_022822

Lab Sample ID: 410-74474-5

Date Collected: 02/28/22 10:13

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 01:50	1

Client Sample ID: 5B_022822

Lab Sample ID: 410-74474-6

Date Collected: 02/28/22 10:13

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:16	03/04/22 01:57	1

Client Sample ID: 6T_022822

Lab Sample ID: 410-74474-7

Date Collected: 02/28/22 10:17

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:39	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 6B_022822

Lab Sample ID: 410-74474-8

Date Collected: 02/28/22 10:17

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:13	03/04/22 01:47	1

Client Sample ID: 7T_022822

Lab Sample ID: 410-74474-9

Date Collected: 02/28/22 10:20

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:16	03/04/22 02:01	1

Client Sample ID: 7B_022822

Lab Sample ID: 410-74474-10

Date Collected: 02/28/22 10:20

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:16	03/04/22 01:54	1

Client Sample ID: 8T_022822

Lab Sample ID: 410-74474-11

Date Collected: 02/28/22 10:23

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/04/22 23:51	1

Client Sample ID: 8B_022822

Lab Sample ID: 410-74474-12

Date Collected: 02/28/22 10:23

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 03:08	1

Client Sample ID: 9T_022822

Lab Sample ID: 410-74474-13

Date Collected: 02/28/22 10:25

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:46	1

Client Sample ID: 9B_022822

Lab Sample ID: 410-74474-14

Date Collected: 02/28/22 10:25

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 03:12	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 10T_022822

Lab Sample ID: 410-74474-15

Date Collected: 02/28/22 10:28

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/04/22 23:45	1

Client Sample ID: 10B_022822

Lab Sample ID: 410-74474-16

Date Collected: 02/28/22 10:28

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:10	1

Client Sample ID: 11T_022822

Lab Sample ID: 410-74474-17

Date Collected: 02/28/22 10:36

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/04/22 23:03	1

Client Sample ID: 11B_022822

Lab Sample ID: 410-74474-18

Date Collected: 02/28/22 10:36

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:26	1

Client Sample ID: 12T_022822

Lab Sample ID: 410-74474-19

Date Collected: 02/28/22 10:40

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:36	1

Client Sample ID: 12B_022822

Lab Sample ID: 410-74474-20

Date Collected: 02/28/22 10:40

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:46	1

Client Sample ID: 13T_022822

Lab Sample ID: 410-74474-21

Date Collected: 02/28/22 10:42

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:07	1

Client Sample Results

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 13B_022822

Lab Sample ID: 410-74474-22

Date Collected: 02/28/22 10:42

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 03:05	1

Client Sample ID: 14T_022822

Lab Sample ID: 410-74474-23

Date Collected: 02/28/22 10:45

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:16	03/04/22 02:04	1

Client Sample ID: 14B_022822

Lab Sample ID: 410-74474-24

Date Collected: 02/28/22 10:45

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 01:57	1

Client Sample ID: 15T_022822

Lab Sample ID: 410-74474-25

Date Collected: 02/28/22 10:47

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:16	03/04/22 01:51	1

Client Sample ID: 15B_022822

Lab Sample ID: 410-74474-26

Date Collected: 02/28/22 10:47

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.3	J	15	1.6	ug/L		03/02/22 21:23	03/05/22 00:36	1

Client Sample ID: 16T_022822

Lab Sample ID: 410-74474-27

Date Collected: 02/28/22 10:50

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:13	03/04/22 01:40	1

Client Sample ID: 16B_022822

Lab Sample ID: 410-74474-28

Date Collected: 02/28/22 10:50

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/04/22 23:42	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 17T_022822

Lab Sample ID: 410-74474-29

Date Collected: 02/28/22 10:53

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 01:54	1

Client Sample ID: 17B_022822

Lab Sample ID: 410-74474-30

Date Collected: 02/28/22 10:53

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:13	03/04/22 01:44	1

Client Sample ID: 18T_022822

Lab Sample ID: 410-74474-31

Date Collected: 02/28/22 10:56

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:10	1

Client Sample ID: 18B_022822

Lab Sample ID: 410-74474-32

Date Collected: 02/28/22 10:56

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/04/22 23:38	1

Client Sample ID: 19T_022822

Lab Sample ID: 410-74474-33

Date Collected: 02/28/22 11:00

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:40	03/05/22 10:38	1

Client Sample ID: 19B_022822

Lab Sample ID: 410-74474-34

Date Collected: 02/28/22 11:00

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 01:09	1

Client Sample ID: 20T_022822

Lab Sample ID: 410-74474-35

Date Collected: 02/28/22 11:13

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:14	1

Client Sample Results

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 20B_022822

Lab Sample ID: 410-74474-36

Date Collected: 02/28/22 11:13

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:53	1

Client Sample ID: Cent T_022822

Lab Sample ID: 410-74474-37

Date Collected: 02/28/22 10:04

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:33	1

Client Sample ID: Cent B_022822

Lab Sample ID: 410-74474-38

Date Collected: 02/28/22 10:04

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:39	1

Client Sample ID: Lady T_022822

Lab Sample ID: 410-74474-39

Date Collected: 02/28/22 09:57

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:33	1

Client Sample ID: Lady B_022822

Lab Sample ID: 410-74474-40

Date Collected: 02/28/22 09:57

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:43	1

Client Sample ID: D1_022822

Lab Sample ID: 410-74474-41

Date Collected: 02/28/22 10:13

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/04/22 23:35	1

Client Sample ID: D2_022822

Lab Sample ID: 410-74474-42

Date Collected: 02/28/22 10:36

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/05/22 00:43	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: D3_022822

Lab Sample ID: 410-74474-43

Date Collected: 02/28/22 10:50

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:49	1

Client Sample ID: D4_022822

Lab Sample ID: 410-74474-44

Date Collected: 02/28/22 11:00

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:04	1

Client Sample ID: FB_022822

Lab Sample ID: 410-74474-45

Date Collected: 02/28/22 10:32

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/04/22 23:48	1

Client Sample ID: RB1_022822

Lab Sample ID: 410-74474-46

Date Collected: 02/28/22 10:33

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:29	1

Client Sample ID: RB2_022822

Lab Sample ID: 410-74474-47

Date Collected: 02/28/22 11:09

Matrix: Water

Date Received: 03/01/22 16:45

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 02:01	1

QC Sample Results

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 410-229425/1-A
Matrix: Water
Analysis Batch: 229983

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 229425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:13	03/04/22 00:06	1

Lab Sample ID: LCS 410-229425/2-A
Matrix: Water
Analysis Batch: 229983

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	500	527		ug/L		105	80 - 120

Lab Sample ID: MB 410-229427/1-A
Matrix: Water
Analysis Batch: 230484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 229427

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:19	03/05/22 01:12	1

Lab Sample ID: LCS 410-229427/2-A
Matrix: Water
Analysis Batch: 230484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229427

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	500	526		ug/L		105	80 - 120

Lab Sample ID: MB 410-229428/1-A
Matrix: Water
Analysis Batch: 230484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 229428

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:23	03/04/22 22:56	1

Lab Sample ID: LCS 410-229428/2-A
Matrix: Water
Analysis Batch: 230484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	500	520		ug/L		104	80 - 120

Lab Sample ID: MB 410-229432/1-A
Matrix: Water
Analysis Batch: 230482

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 229432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		15	1.6	ug/L		03/02/22 21:40	03/05/22 10:32	1

Lab Sample ID: LCS 410-229432/2-A
Matrix: Water
Analysis Batch: 230482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	500	544		ug/L		109	80 - 120

QC Sample Results

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Method: 6010C - Metals (ICP)

Lab Sample ID: 410-74474-1 MS
Matrix: Water
Analysis Batch: 230484

Client Sample ID: 3T_022822
Prep Type: Dissolved
Prep Batch: 229427

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	ND		500	521		ug/L		104	75 - 125

Lab Sample ID: 410-74474-1 MSD
Matrix: Water
Analysis Batch: 230484

Client Sample ID: 3T_022822
Prep Type: Dissolved
Prep Batch: 229427

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	ND		500	517		ug/L		103	75 - 125	1	20

Lab Sample ID: 410-74474-1 DU
Matrix: Water
Analysis Batch: 230484

Client Sample ID: 3T_022822
Prep Type: Dissolved
Prep Batch: 229427

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium	ND			ND		ug/L				NC	20

Lab Sample ID: 410-74474-17 MS
Matrix: Water
Analysis Batch: 230484

Client Sample ID: 11T_022822
Prep Type: Dissolved
Prep Batch: 229428

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	ND		500	510		ug/L		102	75 - 125

Lab Sample ID: 410-74474-17 MSD
Matrix: Water
Analysis Batch: 230484

Client Sample ID: 11T_022822
Prep Type: Dissolved
Prep Batch: 229428

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	ND		500	520		ug/L		104	75 - 125	2	20

Lab Sample ID: 410-74474-17 DU
Matrix: Water
Analysis Batch: 230484

Client Sample ID: 11T_022822
Prep Type: Dissolved
Prep Batch: 229428

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium	ND			ND		ug/L				NC	20

Lab Sample ID: 410-74474-33 MS
Matrix: Water
Analysis Batch: 230482

Client Sample ID: 19T_022822
Prep Type: Dissolved
Prep Batch: 229432

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	ND		500	534		ug/L		107	75 - 125

Lab Sample ID: 410-74474-33 MSD
Matrix: Water
Analysis Batch: 230482

Client Sample ID: 19T_022822
Prep Type: Dissolved
Prep Batch: 229432

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	ND		500	524		ug/L		105	75 - 125	2	20

QC Sample Results

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Method: 6010C - Metals (ICP)

Lab Sample ID: 410-74474-33 DU

Matrix: Water

Analysis Batch: 230482

Client Sample ID: 19T_022822

Prep Type: Dissolved

Prep Batch: 229432

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chromium	ND		ND		ug/L		NC	20

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

QC Association Summary

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Metals

Prep Batch: 229425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-6	5B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-8	6B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-9	7T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-10	7B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-23	14T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-25	15T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-27	16T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-30	17B_022822	Dissolved	Water	Non-Digest Prep	
MB 410-229425/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-229425/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Prep Batch: 229427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-1	3T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-3	4T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-5	5T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-12	8B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-14	9B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-18	11B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-19	12T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-20	12B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-21	13T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-22	13B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-24	14B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-29	17T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-31	18T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-37	Cent T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-38	Cent B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-40	Lady B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-43	D3_022822	Dissolved	Water	Non-Digest Prep	
410-74474-44	D4_022822	Dissolved	Water	Non-Digest Prep	
410-74474-46	RB1_022822	Dissolved	Water	Non-Digest Prep	
410-74474-47	RB2_022822	Dissolved	Water	Non-Digest Prep	
MB 410-229427/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-229427/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	
410-74474-1 MS	3T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-1 MSD	3T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-1 DU	3T_022822	Dissolved	Water	Non-Digest Prep	

Prep Batch: 229428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-2	3B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-4	4B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-7	6T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-11	8T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-13	9T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-15	10T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-16	10B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-17	11T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-26	15B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-28	16B_022822	Dissolved	Water	Non-Digest Prep	

QC Association Summary

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Metals (Continued)

Prep Batch: 229428 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-32	18B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-34	19B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-35	20T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-36	20B_022822	Dissolved	Water	Non-Digest Prep	
410-74474-39	Lady T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-41	D1_022822	Dissolved	Water	Non-Digest Prep	
410-74474-42	D2_022822	Dissolved	Water	Non-Digest Prep	
410-74474-45	FB_022822	Dissolved	Water	Non-Digest Prep	
MB 410-229428/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-229428/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	
410-74474-17 MS	11T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-17 MSD	11T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-17 DU	11T_022822	Dissolved	Water	Non-Digest Prep	

Prep Batch: 229432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-33	19T_022822	Dissolved	Water	Non-Digest Prep	
MB 410-229432/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-229432/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	
410-74474-33 MS	19T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-33 MSD	19T_022822	Dissolved	Water	Non-Digest Prep	
410-74474-33 DU	19T_022822	Dissolved	Water	Non-Digest Prep	

Analysis Batch: 229983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-6	5B_022822	Dissolved	Water	6010C	229425
410-74474-8	6B_022822	Dissolved	Water	6010C	229425
410-74474-9	7T_022822	Dissolved	Water	6010C	229425
410-74474-10	7B_022822	Dissolved	Water	6010C	229425
410-74474-23	14T_022822	Dissolved	Water	6010C	229425
410-74474-25	15T_022822	Dissolved	Water	6010C	229425
410-74474-27	16T_022822	Dissolved	Water	6010C	229425
410-74474-30	17B_022822	Dissolved	Water	6010C	229425
MB 410-229425/1-A	Method Blank	Total/NA	Water	6010C	229425
LCS 410-229425/2-A	Lab Control Sample	Total/NA	Water	6010C	229425

Analysis Batch: 230482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-33	19T_022822	Dissolved	Water	6010C	229432
MB 410-229432/1-A	Method Blank	Total/NA	Water	6010C	229432
LCS 410-229432/2-A	Lab Control Sample	Total/NA	Water	6010C	229432
410-74474-33 MS	19T_022822	Dissolved	Water	6010C	229432
410-74474-33 MSD	19T_022822	Dissolved	Water	6010C	229432
410-74474-33 DU	19T_022822	Dissolved	Water	6010C	229432

Analysis Batch: 230484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-1	3T_022822	Dissolved	Water	6010C	229427
410-74474-2	3B_022822	Dissolved	Water	6010C	229428
410-74474-3	4T_022822	Dissolved	Water	6010C	229427
410-74474-4	4B_022822	Dissolved	Water	6010C	229428

QC Association Summary

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Metals (Continued)

Analysis Batch: 230484 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-74474-5	5T_022822	Dissolved	Water	6010C	229427
410-74474-7	6T_022822	Dissolved	Water	6010C	229428
410-74474-11	8T_022822	Dissolved	Water	6010C	229428
410-74474-12	8B_022822	Dissolved	Water	6010C	229427
410-74474-13	9T_022822	Dissolved	Water	6010C	229428
410-74474-14	9B_022822	Dissolved	Water	6010C	229427
410-74474-15	10T_022822	Dissolved	Water	6010C	229428
410-74474-16	10B_022822	Dissolved	Water	6010C	229428
410-74474-17	11T_022822	Dissolved	Water	6010C	229428
410-74474-18	11B_022822	Dissolved	Water	6010C	229427
410-74474-19	12T_022822	Dissolved	Water	6010C	229427
410-74474-20	12B_022822	Dissolved	Water	6010C	229427
410-74474-21	13T_022822	Dissolved	Water	6010C	229427
410-74474-22	13B_022822	Dissolved	Water	6010C	229427
410-74474-24	14B_022822	Dissolved	Water	6010C	229427
410-74474-26	15B_022822	Dissolved	Water	6010C	229428
410-74474-28	16B_022822	Dissolved	Water	6010C	229428
410-74474-29	17T_022822	Dissolved	Water	6010C	229427
410-74474-31	18T_022822	Dissolved	Water	6010C	229427
410-74474-32	18B_022822	Dissolved	Water	6010C	229428
410-74474-34	19B_022822	Dissolved	Water	6010C	229428
410-74474-35	20T_022822	Dissolved	Water	6010C	229428
410-74474-36	20B_022822	Dissolved	Water	6010C	229428
410-74474-37	Cent T_022822	Dissolved	Water	6010C	229427
410-74474-38	Cent B_022822	Dissolved	Water	6010C	229427
410-74474-39	Lady T_022822	Dissolved	Water	6010C	229428
410-74474-40	Lady B_022822	Dissolved	Water	6010C	229427
410-74474-41	D1_022822	Dissolved	Water	6010C	229428
410-74474-42	D2_022822	Dissolved	Water	6010C	229428
410-74474-43	D3_022822	Dissolved	Water	6010C	229427
410-74474-44	D4_022822	Dissolved	Water	6010C	229427
410-74474-45	FB_022822	Dissolved	Water	6010C	229428
410-74474-46	RB1_022822	Dissolved	Water	6010C	229427
410-74474-47	RB2_022822	Dissolved	Water	6010C	229427
MB 410-229427/1-A	Method Blank	Total/NA	Water	6010C	229427
MB 410-229428/1-A	Method Blank	Total/NA	Water	6010C	229428
LCS 410-229427/2-A	Lab Control Sample	Total/NA	Water	6010C	229427
LCS 410-229428/2-A	Lab Control Sample	Total/NA	Water	6010C	229428
410-74474-1 MS	3T_022822	Dissolved	Water	6010C	229427
410-74474-1 MSD	3T_022822	Dissolved	Water	6010C	229427
410-74474-17 MS	11T_022822	Dissolved	Water	6010C	229428
410-74474-17 MSD	11T_022822	Dissolved	Water	6010C	229428
410-74474-1 DU	3T_022822	Dissolved	Water	6010C	229427
410-74474-17 DU	11T_022822	Dissolved	Water	6010C	229428

Lab Chronicle

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 3T_022822

Lab Sample ID: 410-74474-1

Date Collected: 02/28/22 10:07

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 01:18	WBK6	ELLE

Client Sample ID: 3B_022822

Lab Sample ID: 410-74474-2

Date Collected: 02/28/22 10:07

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:29	WBK6	ELLE

Client Sample ID: 4T_022822

Lab Sample ID: 410-74474-3

Date Collected: 02/28/22 10:11

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 03:15	WBK6	ELLE

Client Sample ID: 4B_022822

Lab Sample ID: 410-74474-4

Date Collected: 02/28/22 10:11

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:49	WBK6	ELLE

Client Sample ID: 5T_022822

Lab Sample ID: 410-74474-5

Date Collected: 02/28/22 10:13

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 01:50	WBK6	ELLE

Client Sample ID: 5B_022822

Lab Sample ID: 410-74474-6

Date Collected: 02/28/22 10:13

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229425	03/02/22 21:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	229983	03/04/22 01:57	WBK6	ELLE

Lab Chronicle

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 6T_022822

Lab Sample ID: 410-74474-7

Date Collected: 02/28/22 10:17

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:39	WBK6	ELLE

Client Sample ID: 6B_022822

Lab Sample ID: 410-74474-8

Date Collected: 02/28/22 10:17

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229425	03/02/22 21:13	UJLA	ELLE
Dissolved	Analysis	6010C		1	229983	03/04/22 01:47	WBK6	ELLE

Client Sample ID: 7T_022822

Lab Sample ID: 410-74474-9

Date Collected: 02/28/22 10:20

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229425	03/02/22 21:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	229983	03/04/22 02:01	WBK6	ELLE

Client Sample ID: 7B_022822

Lab Sample ID: 410-74474-10

Date Collected: 02/28/22 10:20

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229425	03/02/22 21:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	229983	03/04/22 01:54	WBK6	ELLE

Client Sample ID: 8T_022822

Lab Sample ID: 410-74474-11

Date Collected: 02/28/22 10:23

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/04/22 23:51	WBK6	ELLE

Client Sample ID: 8B_022822

Lab Sample ID: 410-74474-12

Date Collected: 02/28/22 10:23

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 03:08	WBK6	ELLE

Lab Chronicle

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 9T_022822

Lab Sample ID: 410-74474-13

Date Collected: 02/28/22 10:25

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:46	WBK6	ELLE

Client Sample ID: 9B_022822

Lab Sample ID: 410-74474-14

Date Collected: 02/28/22 10:25

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 03:12	WBK6	ELLE

Client Sample ID: 10T_022822

Lab Sample ID: 410-74474-15

Date Collected: 02/28/22 10:28

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/04/22 23:45	WBK6	ELLE

Client Sample ID: 10B_022822

Lab Sample ID: 410-74474-16

Date Collected: 02/28/22 10:28

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:10	WBK6	ELLE

Client Sample ID: 11T_022822

Lab Sample ID: 410-74474-17

Date Collected: 02/28/22 10:36

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/04/22 23:03	WBK6	ELLE

Client Sample ID: 11B_022822

Lab Sample ID: 410-74474-18

Date Collected: 02/28/22 10:36

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:26	WBK6	ELLE

Lab Chronicle

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 12T_022822

Lab Sample ID: 410-74474-19

Date Collected: 02/28/22 10:40

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:36	WBK6	ELLE

Client Sample ID: 12B_022822

Lab Sample ID: 410-74474-20

Date Collected: 02/28/22 10:40

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:46	WBK6	ELLE

Client Sample ID: 13T_022822

Lab Sample ID: 410-74474-21

Date Collected: 02/28/22 10:42

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:07	WBK6	ELLE

Client Sample ID: 13B_022822

Lab Sample ID: 410-74474-22

Date Collected: 02/28/22 10:42

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 03:05	WBK6	ELLE

Client Sample ID: 14T_022822

Lab Sample ID: 410-74474-23

Date Collected: 02/28/22 10:45

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229425	03/02/22 21:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	229983	03/04/22 02:04	WBK6	ELLE

Client Sample ID: 14B_022822

Lab Sample ID: 410-74474-24

Date Collected: 02/28/22 10:45

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 01:57	WBK6	ELLE

Lab Chronicle

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 15T_022822

Lab Sample ID: 410-74474-25

Date Collected: 02/28/22 10:47

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229425	03/02/22 21:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	229983	03/04/22 01:51	WBK6	ELLE

Client Sample ID: 15B_022822

Lab Sample ID: 410-74474-26

Date Collected: 02/28/22 10:47

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:36	WBK6	ELLE

Client Sample ID: 16T_022822

Lab Sample ID: 410-74474-27

Date Collected: 02/28/22 10:50

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229425	03/02/22 21:13	UJLA	ELLE
Dissolved	Analysis	6010C		1	229983	03/04/22 01:40	WBK6	ELLE

Client Sample ID: 16B_022822

Lab Sample ID: 410-74474-28

Date Collected: 02/28/22 10:50

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/04/22 23:42	WBK6	ELLE

Client Sample ID: 17T_022822

Lab Sample ID: 410-74474-29

Date Collected: 02/28/22 10:53

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 01:54	WBK6	ELLE

Client Sample ID: 17B_022822

Lab Sample ID: 410-74474-30

Date Collected: 02/28/22 10:53

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229425	03/02/22 21:13	UJLA	ELLE
Dissolved	Analysis	6010C		1	229983	03/04/22 01:44	WBK6	ELLE

Lab Chronicle

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: 18T_022822

Lab Sample ID: 410-74474-31

Date Collected: 02/28/22 10:56

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:10	WBK6	ELLE

Client Sample ID: 18B_022822

Lab Sample ID: 410-74474-32

Date Collected: 02/28/22 10:56

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/04/22 23:38	WBK6	ELLE

Client Sample ID: 19T_022822

Lab Sample ID: 410-74474-33

Date Collected: 02/28/22 11:00

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229432	03/02/22 21:40	UJLA	ELLE
Dissolved	Analysis	6010C		1	230482	03/05/22 10:38	WBK6	ELLE

Client Sample ID: 19B_022822

Lab Sample ID: 410-74474-34

Date Collected: 02/28/22 11:00

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 01:09	WBK6	ELLE

Client Sample ID: 20T_022822

Lab Sample ID: 410-74474-35

Date Collected: 02/28/22 11:13

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:14	WBK6	ELLE

Client Sample ID: 20B_022822

Lab Sample ID: 410-74474-36

Date Collected: 02/28/22 11:13

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:53	WBK6	ELLE

Lab Chronicle

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: Cent T_022822

Lab Sample ID: 410-74474-37

Date Collected: 02/28/22 10:04

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:33	WBK6	ELLE

Client Sample ID: Cent B_022822

Lab Sample ID: 410-74474-38

Date Collected: 02/28/22 10:04

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:39	WBK6	ELLE

Client Sample ID: Lady T_022822

Lab Sample ID: 410-74474-39

Date Collected: 02/28/22 09:57

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:33	WBK6	ELLE

Client Sample ID: Lady B_022822

Lab Sample ID: 410-74474-40

Date Collected: 02/28/22 09:57

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:43	WBK6	ELLE

Client Sample ID: D1_022822

Lab Sample ID: 410-74474-41

Date Collected: 02/28/22 10:13

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/04/22 23:35	WBK6	ELLE

Client Sample ID: D2_022822

Lab Sample ID: 410-74474-42

Date Collected: 02/28/22 10:36

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 00:43	WBK6	ELLE

Lab Chronicle

Client: Honeywell International Inc
 Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Client Sample ID: D3_022822

Lab Sample ID: 410-74474-43

Date Collected: 02/28/22 10:50

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:49	WBK6	ELLE

Client Sample ID: D4_022822

Lab Sample ID: 410-74474-44

Date Collected: 02/28/22 11:00

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:04	WBK6	ELLE

Client Sample ID: FB_022822

Lab Sample ID: 410-74474-45

Date Collected: 02/28/22 10:32

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229428	03/02/22 21:23	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/04/22 23:48	WBK6	ELLE

Client Sample ID: RB1_022822

Lab Sample ID: 410-74474-46

Date Collected: 02/28/22 10:33

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:29	WBK6	ELLE

Client Sample ID: RB2_022822

Lab Sample ID: 410-74474-47

Date Collected: 02/28/22 11:09

Matrix: Water

Date Received: 03/01/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			229427	03/02/22 21:19	UJLA	ELLE
Dissolved	Analysis	6010C		1	230484	03/05/22 02:01	WBK6	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Maryland	State	100	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010C	Non-Digest Prep	Water	Chromium

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

Method Summary

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	ELLE
Non-Digest Prep	Preparation, Non-Digested Aqueous Metals	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

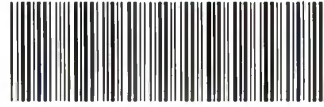


Sample Summary

Client: Honeywell International Inc
Project/Site: Baltimore Inner Harbor, MD

Job ID: 410-74474-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-74474-1	3T_022822	Water	02/28/22 10:07	03/01/22 16:45
410-74474-2	3B_022822	Water	02/28/22 10:07	03/01/22 16:45
410-74474-3	4T_022822	Water	02/28/22 10:11	03/01/22 16:45
410-74474-4	4B_022822	Water	02/28/22 10:11	03/01/22 16:45
410-74474-5	5T_022822	Water	02/28/22 10:13	03/01/22 16:45
410-74474-6	5B_022822	Water	02/28/22 10:13	03/01/22 16:45
410-74474-7	6T_022822	Water	02/28/22 10:17	03/01/22 16:45
410-74474-8	6B_022822	Water	02/28/22 10:17	03/01/22 16:45
410-74474-9	7T_022822	Water	02/28/22 10:20	03/01/22 16:45
410-74474-10	7B_022822	Water	02/28/22 10:20	03/01/22 16:45
410-74474-11	8T_022822	Water	02/28/22 10:23	03/01/22 16:45
410-74474-12	8B_022822	Water	02/28/22 10:23	03/01/22 16:45
410-74474-13	9T_022822	Water	02/28/22 10:25	03/01/22 16:45
410-74474-14	9B_022822	Water	02/28/22 10:25	03/01/22 16:45
410-74474-15	10T_022822	Water	02/28/22 10:28	03/01/22 16:45
410-74474-16	10B_022822	Water	02/28/22 10:28	03/01/22 16:45
410-74474-17	11T_022822	Water	02/28/22 10:36	03/01/22 16:45
410-74474-18	11B_022822	Water	02/28/22 10:36	03/01/22 16:45
410-74474-19	12T_022822	Water	02/28/22 10:40	03/01/22 16:45
410-74474-20	12B_022822	Water	02/28/22 10:40	03/01/22 16:45
410-74474-21	13T_022822	Water	02/28/22 10:42	03/01/22 16:45
410-74474-22	13B_022822	Water	02/28/22 10:42	03/01/22 16:45
410-74474-23	14T_022822	Water	02/28/22 10:45	03/01/22 16:45
410-74474-24	14B_022822	Water	02/28/22 10:45	03/01/22 16:45
410-74474-25	15T_022822	Water	02/28/22 10:47	03/01/22 16:45
410-74474-26	15B_022822	Water	02/28/22 10:47	03/01/22 16:45
410-74474-27	16T_022822	Water	02/28/22 10:50	03/01/22 16:45
410-74474-28	16B_022822	Water	02/28/22 10:50	03/01/22 16:45
410-74474-29	17T_022822	Water	02/28/22 10:53	03/01/22 16:45
410-74474-30	17B_022822	Water	02/28/22 10:53	03/01/22 16:45
410-74474-31	18T_022822	Water	02/28/22 10:56	03/01/22 16:45
410-74474-32	18B_022822	Water	02/28/22 10:56	03/01/22 16:45
410-74474-33	19T_022822	Water	02/28/22 11:00	03/01/22 16:45
410-74474-34	19B_022822	Water	02/28/22 11:00	03/01/22 16:45
410-74474-35	20T_022822	Water	02/28/22 11:13	03/01/22 16:45
410-74474-36	20B_022822	Water	02/28/22 11:13	03/01/22 16:45
410-74474-37	Cent T_022822	Water	02/28/22 10:04	03/01/22 16:45
410-74474-38	Cent B_022822	Water	02/28/22 10:04	03/01/22 16:45
410-74474-39	Lady T_022822	Water	02/28/22 09:57	03/01/22 16:45
410-74474-40	Lady B_022822	Water	02/28/22 09:57	03/01/22 16:45
410-74474-41	D1_022822	Water	02/28/22 10:13	03/01/22 16:45
410-74474-42	D2_022822	Water	02/28/22 10:36	03/01/22 16:45
410-74474-43	D3_022822	Water	02/28/22 10:50	03/01/22 16:45
410-74474-44	D4_022822	Water	02/28/22 11:00	03/01/22 16:45
410-74474-45	FB_022822	Water	02/28/22 10:32	03/01/22 16:45
410-74474-46	RB1_022822	Water	02/28/22 10:33	03/01/22 16:45
410-74474-47	RB2_022822	Water	02/28/22 11:09	03/01/22 16:45



410-74474 Chain of Custody

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34345			
		Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase:		Lab Proj # (SDG):					
Sampling Co.: Maryland Environmental Service		EDD To: Bryn.Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program:		Surface Water Sampling		Lab ID: LLI					
Client Contact: (name, co., address) Mana Kaouris 115 Tabor Rd Morris Plains, NJ 07950		Sampler: Mana Kaouris		PO #: 4500013806		Preservative: 3				Site ID: BALTIMORE					
Preliminary Data To: mathew.ollis@jacobs.com; C:\VAL\DATA@mes.com		Analysis Turnaround Time (TAT): 7		Consultant: CH2M		Field Filtered Sample ?				Lab Job #:					
Sample Receipt: mathew.ollis@jacobs.com; C:\VAL\DATA@mes.com		Full Report TAT: 14				Composite/Grab				Authorized User: Honeywell					
Hard Copy To: Amy Kloppper						Field Filtered Sample ?				Excel & Test File Order					
Invoice To: Mana Kaouris						SW6010 Chromium				Copyright AESI: Version 8 & Unauthorized use strictly prohibited					
Sample Identification			Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	MS/MSD	Sampling Method (code)	Lab Sample Numbers			
Location ID	Start Depth (ft)	End Depth (ft)							ppb						
1	3T	0.00	1.45	2/28/2022	1007	W-SW	WATER	REG	4	grab	Y	X			
2	3M			2/28/2022		W-SW	WATER	REG		grab					
3	3B	0.45	1.45	2/28/2022	1007	W-SW	WATER	REG	1	grab	Y	X			
4	4T	0.00	1.75	2/28/2022	1011	W-SW	WATER	REG	1	grab	Y	X			
5	4M			2/28/2022		W-SW	WATER	REG		grab					
6	4B	0.75	1.75	2/28/2022	1011	W-SW	WATER	REG	1	grab	Y	X			
7	5T	0.00	1.68	2/28/2022	1013	W-SW	WATER	REG	1	grab	Y	X			
8	5M			2/28/2022		W-SW	WATER	REG		grab					
9	5B	0.68	1.68	2/28/2022	1013	W-SW	WATER	REG	1	grab	Y	X			
10	6T	0.00	3.50	2/28/2022	1017	W-SW	WATER	REG	1	grab	Y	X			
11	6M			2/28/2022		W-SW	WATER	REG		grab					
12	6B	2.50	3.50	2/28/2022	1017	W-SW	WATER	REG	1	grab	Y	X			
Relinquished by: <i>Rebecca Freshme</i>		Company: MES		Date/Time: 2/28/22 15:45		Received by: <i>WJHARK</i>		Company: MES		Date/Time: 2/28/22 15:45		Condition: Cooler Temp.		Custody Seals Intact	
Relinquished by: <i>WJHARK</i>		Company: MES		Date/Time: 3/1/22 10:45		Received by: <i>John</i>		Company: MES		Date/Time: 3/1/22 10:45		Condition: Cooler Temp. 3.0, 3.5		Custody Seals Intact	
Preservatives: (Other: Specify):													4(Deg C), 1 (4C NaOH (pH>12) & Ascorbic Acid), 12 (4C H2SO4 (pH<2) & Na2S2O3), 13 (Zn Acetate), sp (special instructions)		


John 3/1/22 12:25

John 3/1/22 10:45

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Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34521	
		Privileged & Confidential		N		Site Name: Baltimore BIH		Phase:		Lab Proj # (SDG):		COC#: 30905-102620-2	
Sampling Co.: Maryland Environmental Service		EDD To: Byn.Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program: Surface Water Sampling				Lab ID: LLJ		Site ID: BALTIMORE	
Client Contact: (name, co., address) Mana Kaouns 115 Tabor Rd Morris Plains, NJ 07950		Sampler:		PO #: 4500013806		Preservatives: 3				Lab Job #:		Authorized User: Honeywell	
Preliminary Data To: mathew.gillis@jacobs.com; GJ.VALIDATA@men.com; hernica.kudrinski@h2m.com		Analysis Turnaround Time (TAT): 7		Consultant: CH2M		Composite/Grab		Field Filtered Sample ?		SW610 Chromium		Text & Excel File Drive	
Sample Receipt		Full Report TAT: 14										Excel & Text File Order	
Hard Copy To: Amy Klopper												Copyright AESI. Version 8.0 Unauthorised use strictly prohibited.	
Invoice To: Mana Kaouns													
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	ug/L	Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID										
1	7T	0.00	1.46	7T_022822	2/28/2022	1020	W-SW	WATER	REG	1	grab	Y	X
2	7M			7M_022822	2/28/2022		W-SW	WATER	REG		grab		
3	7B	0.46	1.46	7B_022822	2/28/2022	1020	W-SW	WATER	REG	1	grab	Y	X
4	8T	6.00	3.44	8T_022822	2/28/2022	1023	W-SW	WATER	REG	1	grab	Y	X
5	8M			8M_022822	2/28/2022		W-SW	WATER	REG		grab		
6	8B	2.44	3.44	8B_022822	2/28/2022	1023	W-SW	WATER	REG	1	grab	Y	X
7	9T	0.00	2.77	9T_022822	2/28/2022	1025	W-SW	WATER	REG	1	grab	Y	X
8	9M			9M_022822	2/28/2022		W-SW	WATER	REG		grab		
9	9B	1.77	2.77	9B_022822	2/28/2022	1025	W-SW	WATER	REG	1	grab	Y	X
10	10T	0.00	2.04	10T_022822	2/28/2022	1028	W-SW	WATER	REG	1	grab	Y	X
11	10M			10M_022822	2/28/2022		W-SW	WATER	REG		grab		
12	10B	1.04	2.04	10B_022822	2/28/2022	1028	W-SW	WATER	REG	1	grab	Y	X
Relinquished by: Rebecca Kressman		Company: MES		Received by: WJA HRT		Company: MES		Condition: Cooler Temp.		Custody Seals Intact			
Date/Time: 2/28/22 15:45		Date/Time: 3/1/22 10:43		Date/Time: 2/28/22 15:45		Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43	
Relinquished by: WJA HRT		Company: MES		Received by: WJA HRT		Company: MES		Condition: Cooler Temp.		Custody Seals Intact			
Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43	
Preservatives: (Other; Specify)													

John 3/1/22 16:25

[Signature] 3/1/22 10:45

CL

Lancaster Laboratories		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34557			
2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase:		Lab Proj # (SDG):		COC#: 30905-102620-3			
Sampling Co.: Maryland Environmental Service		EDD To: Bryn Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program		Surface Water Sampling		Lab ID: LLI		Site ID: BALTIMORE			
Client Contact: (name, co., address)		Sampler:		Analysis Turnaround Time (TAT): 7		Preservative: 3				Lab Job #		Authorized User: Honeywell			
Maria Kaouris 115 Tabor Rd Morris Plains, NJ 07950		PO #: 4500013806		Consultant: CH2M						Text & Excel File Drive		Excel & Text File Order			
Preliminary Data To: mathew.gillis@jacobs.com, C.J.VALIDATA@msn.com, bernice.kidd@jacobs.com		Full Report TAT: 14								Copyright AESI: Version 6.0 Unauthorized use strictly prohibited.					
Sample Receipt: mathew.gillis@jacobs.com, C.J.VALIDATA@msn.com															
Hard Copy To: Amy Klopfer															
Invoice To: Maria Kaouris															
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW610 Chromium	MS/MSD	Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID												
1	11T	0.00	2.00	11T_022822	2/28/2022	1036	W-SW	WATER	REG	4	grab	Y	X	X	
2	11M			11M_022822	2/28/2022		W-SW	WATER	REG		grab				
3	11B	1.00	2.00	11B_022822	2/28/2022	1036	W-SW	WATER	REG	1	grab	Y	X		
4	12T	0.00	1.62	12T_022822	2/28/2022	1040	W-SW	WATER	REG	1	grab	Y	X		
5	12M			12M_022822	2/28/2022		W-SW	WATER	REG		grab				
6	12B	0.62	1.62	12B_022822	2/28/2022	1040	W-SW	WATER	REG	1	grab	Y	X		
7	13T	0.00	3.06	13T_022822	2/28/2022	1042	W-SW	WATER	REG	1	grab	Y	X		
8	13M			13M_022822	2/28/2022		W-SW	WATER	REG		grab				
9	13B	2.06	3.06	13B_022822	2/28/2022	1042	W-SW	WATER	REG	1	grab	Y	X		
10	14T	2.00	1.65	14T_022822	2/28/2022	1045	W-SW	WATER	REG	1	grab	Y	X		
11	14M			14M_022822	2/28/2022		W-SW	WATER	REG		grab				
12	14B	0.65	1.65	14B_022822	2/28/2022	1045	W-SW	WATER	REG	1	grab	Y	X		


Relinquished by: <i>Rebecca Kretschmer</i>	Company: MES	Received by: <i>MES</i>	Company: MES	Condition:	Custody Seals Intact:
Date/Time: 2/28/22 15:45		Date/Time: 2/28/22 15:45		Cooler Temp:	
Relinquished by: <i>WJA HKT</i>	Company: MES	Received by: <i>WJA HKT</i>	Company: MES	Condition:	Custody Seals Intact:
Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Cooler Temp: 3.0, 3.0	

Preservatives: (Other; Specify)


4(Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

John 3/1/22 16:25 *John 3/1/22 16:45*

CL

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34589 COC#: 30905-102620-4	
Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase: Surface Water Sampling		Lab Proj # (SDG):		Lab ID: LLI		Lab Job #: BALTIMORE	
Sampling Co.: Maryland Environmental Service		EDD To: Bryn.Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Preservative: 3		Authorized User: Honeywell		Text & Excel File Drive		Excel & Text File Order	
Client Contact: (name, co., address) Maria Kaouris 115 Tabor Rd Morris Plains, NJ 07950		Sampler: PO # 4500013808		Analysis Turnaround Time (TAT): 7		Consultant: CH2M		Full Report TAT: 14		Copyright AESI; Version 8.0 Unauthorized use strictly prohibited.			
Preliminary Data To: matthew.gillis@jacobs.com, C-IVAL.IDATA@men.com, bernice.kidd@jacobs.com		Sample Receipt Acknowledgement To: matthew.gillis@jacobs.com, C-IVAL.IDATA@men.com, bernice.kidd@jacobs.com		Hard Copy To: Amy Klopper		Invoice To: Mana Kaouris		Sample Identification		Sample Date		Sample Time	
Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		# of Cont.		Composite/Grab	
Field Sample ID		Date		Time		Type		Matrix		Purpose		# of Cont.	
Location ID		Start Depth (ft)		End Depth (ft)		Field Sample ID		Date		Time		Sample Type	
15T		0.00		1.00		15T 022822		2/28/2022		1047		W-SW WATER REG 1 grab Y X	
15M						15M 022822		2/28/2022				W-SW WATER REG grab	
15B		0.50		1.00		15B 022822		2/28/2022		1047		W-SW WATER REG 1 grab Y X	
16T		0.00		7.21		16T 022822		2/28/2022		1050		W-SW WATER REG 1 grab Y X	
16M						16M 022822		2/28/2022				W-SW WATER REG grab Y	
16B		6.21		7.21		16B 022822		2/28/2022		1050		W-SW WATER REG 1 grab Y X	
17T		0.00		1.00		17T 022822		2/28/2022		1053		W-SW WATER REG 1 grab Y X	
17M						17M 022822		2/28/2022				W-SW WATER REG grab	
17B		0.50		1.00		17B 022822		2/28/2022		1053		W-SW WATER REG 1 grab Y X	
18T		0.00		6.84		18T 022822		2/28/2022		1056		W-SW WATER REG 1 grab Y X	
18M						18M 022822		2/28/2022				W-SW WATER REG grab	
18B		5.84		6.84		18B 022822		2/28/2022		1056		W-SW WATER REG 1 grab Y X	
Relinquished by: Rebecca Kratsche		Company: MES		Received by: W. J. HART		Company: MES		Condition: Custody Seals Intact		Cooler Temp.		Date/Time: 2/28/22 15:45	
Relinquished by: W. J. HART		Company: MES		Received by: John 3/1/22 10:43		Company: MES		Condition: Custody Seals Intact		Cooler Temp. 30.3.9		Date/Time: 3/1/22 10:43	
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); 9 (HCl 4 Deg C); 10 (HNO3 pH<2), 4 Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)											

John 3/1/22 16:25
 AM 3/1/22 16:45
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Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 858-2300				Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34624 COC#: 30905-102620-5	
Privileged & Confidential				N		Site Name: Baltimore Inner Harbor		Phase:		Surface Water Sampling		Lab Proj # (SDG):			
Sampling Co.: Maryland Environmental Service				EDD To: Bryn Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program				Lab ID: LLI			
Client Contact: (name, co., address) Mana Kaouris 115 Tabor Rd Morris Plains, NJ 07950				Sampler:		Preservative:						Site ID: BALTIMORE			
Preliminary Data To: matthew.gillis@jacobs.com C:\MAIL\DATA\amen.crum_hernice.kirby@jacobs.com				PO #: 4500013806		Analysis Turnaround Time (TAT): 7		Consultant: CH2M				Lab Job #			
Sample Receipt: matthew.gillis@jacobs.com				Full Report TAT: 14								Authorized User: Honeywell			
Hard Copy To: Honeywell, 1000 Wills Street, Baltimore, MD 21231												Text & Excel File Drive: Excel & Text File Order			
Invoice To: Mana Kaouris												Copyright AESI, Version 8.0 Unauthorized use strictly prohibited. 			
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium	MS/MSD	Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID												
1	19T	0.00	4.20	19T_022822	2/28/2022	1100	W-SW	WATER	REG	4	grab	Y	X	X	
2	19M			19M_022822	2/28/2022		W-SW	WATER	REG		grab				
3	19B	3.20	4.20	19B_022822	2/28/2022	1100	W-SW	WATER	REG	1	grab	Y	X		
4	20T	0.00	0.60	20T_022822	2/28/2022	1113	W-SW	WATER	REG	1	grab	Y	X		
5	20M			20M_022822	2/28/2022		W-SW	WATER	REG		grab				
6	20B	0.30	0.60	20B_022822	2/28/2022	1113	W-SW	WATER	REG	1	grab	Y	X		
7	Cent T	6.00	5.8	Cent T_022822	2/28/2022	1004	W-SW	WATER	REG	1	grab	Y	X		
8	Cent M			Cent M_022822	2/28/2022		W-SW	WATER	REG		grab				
9	Cent B	4.80	5.80	Cent B_022822	2/28/2022	1004	W-SW	WATER	REG	1	grab	Y	X		
10	Lady T	0.00	0.42	Lady T_022822	2/28/2022	0957	W-SW	WATER	REG	1	grab	Y	X		
11	Lady M			Lady M_022822	2/28/2022		W-SW	WATER	REG		grab				
12	Lady B	0.22	0.42	Lady B_022822	2/28/2022	0957	W-SW	WATER	REG	1	grab	Y	X		
Relinquished by: Rebecca Krusch				Company: MES		Received by: WJH/HKA		Company: MES		Condition:		Custody Seals Intact			
Date/Time: 2/28/22 15:45				Date/Time: 2/28/22 15:45		Cooler Temp.:									
Relinquished by: WJH/HKA				Company: MES		Received by: JAH		Company:		Condition:		Custody Seals Intact			
Date/Time: 3/1/22 10:43				Date/Time: 3/1/22 10:43		Cooler Temp.:									
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); 9 (HCl 4 Deg C); 10 (HNO3)											

JAH 3/1/22 16:25

JAH 3/1/22 16:45

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Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300				Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34663			
Privileged & Confidential				N		Site Name: Baltimore Inner Harbor		Phase:		Location of Site: BALTIMORE, MD		Program:		Lab Proj # (SDG):			
Sampling Co.: Maryland Environmental Service				EDD To: Bryn Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Phase:		Program:		Lab ID: LLI		Site ID: BALTIMORE			
Client Contact: (name, co., address) Maria Kaouris 115 Tabor Rd Morris Plains, NJ 07950				Sampler: CO, RK, CC		PO #: 4500013806		Analysis Turnaround Time (TAT): 7		Preservative: 3		Lab Job #		Authorized User: Honeywell			
Preliminary Data To: matthew.pills@jacobs.com CIVIL IDATA@men.com; hernice.kidde@jacobs.com				Consultant		CH2M		Full Report TAT: 14		Composite/Grab		Field Filtered Sample		SW6010 Chromium			
Sample Receipt Hard Copy To: Amy Klopfer				Full Report TAT: 14										Text & Excel File Drive Excel & Text File Order			
Invoice To: Mana Kaouris														Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.			
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	ug/L					Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID														
1	5BDup	0.68	1.68	D1 022822	2/28/2022	1013	W-SW	WATER	FD	1	grab	Y	X				
2	11TDup	0.00	2.0	D2 022822	2/28/2022	1036	W-SW	WATER	FD	1	grab	Y	X				
3	16BDup	6.21	7.21	D3 022822	2/28/2022	1050	W-SW	WATER	FD	1	grab	Y	X				
4	19TDup	0.00	4.20	D4 022822	2/28/2022	1100	W-SW	WATER	FD	1	grab	Y	X				
5	FIELDQC	-	-	FB 022822	2/28/2022	1032	BLKWATER	WATER	FB	1	grab	Y	X				
6	FIELDQC	-	-	RB1 022822	2/28/2022	1033	BLKWATER	WATER	EB	1	grab	Y	X				
7	FIELDQC	-	-	RB2 022822	2/28/2022	1109	BLKWATER	WATER	EB	1	grab	Y	X				
8	FIELDQC	-	-	RB3 022822	2/28/2022		BLKWATER	WATER	EB	1	grab	Y	X				
9																	
10																	
11																	
12																	
Relinquished by: <i>Rebecca Robinson</i>				Company: MES	Date/Time: 2/28/22 15:45	Received by: <i>W. HART</i>				Company: MES	Date/Time: 2/28/22 15:45	Condition:	Custody Seals Intact				
Relinquished by: <i>W. HART</i>				Company: MES	Date/Time: 3/1/22 10:43	Received by: <i>AK</i>				Company: MES	Date/Time: 3/1/22 10:43	Condition:	Custody Seals Intact				
Preservatives: (Other; Special):				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); 9 (HCl 4 Deg C); 10 (HNO3 pH<2).													

John 3/1/22 16:25

AK 3/1/22 16:45

CL

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 410-74474-1

Login Number: 74474

List Source: Eurofins Lancaster Laboratories Env, LLC

List Number: 1

Creator: Leakway, Christian

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	



Appendix A-2
Chain-of-Custody Records—February 2022



410-74474 Chain of Custody

Lancaster Laboratories		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34345	
2425 New Holland Pike Lancaster, PA 17605-2425 (717) 668-2500		Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase:		Lab Proj # (SDG):		COC# 30905-102620-1	
Sampling Co.: Maryland Environmental Service		EDD To: Blyn.Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program:		Contract #/Order #/Sample #:		Lab ID: LLI		Site ID: BALTIMORE	
Client Contact: (name, co., address) Maria Kaours 115 Tabor Rd Morris Plains, NJ 07950		Sampler: Consultant		PO #: 4500013808		Analysis Turnaround Time (TAT): 7		Observation: 3		Lab Job #:		Authorized User: Honeywell	
Preliminary Data To: [Emails]		Full Report TAT: 14		Sample Matrix: CH2M		Sample Purpose: Composite/Grab		Field Filtered Sample		SW610 Chromium		Copyright AESI - Version 8.0. Unauthorized use strictly prohibited.	
Sample Receipt		Hard Copy To: Amy Klogger		Invoice To: Maria Kaours		Sample Date		Sample Time		Sample Type		Sample Matrix	
Sample Identification		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		# of Cont.	
Location ID	START Depth (ft)	END Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	grab	Y	X
1	3T	0.00	1.45	3T_022822	2/26/2022	1007	W-SW	WATER	REG	4	grab	Y	X
2	3M			3M_022822	2/26/2022		W-SW	WATER	REG	1	grab	Y	X
3	3B	0.45	1.45	3B_022822	2/26/2022	1007	W-SW	WATER	REG	1	grab	Y	X
4	4T	0.00	1.75	4T_022822	2/26/2022	1011	W-SW	WATER	REG	1	grab	Y	X
5	4M			4M_022822	2/26/2022		W-SW	WATER	REG	1	grab	Y	X
6	4B	0.75	1.75	4B_022822	2/26/2022	1011	W-SW	WATER	REG	1	grab	Y	X
7	5T	0.00	1.68	5T_022822	2/26/2022	1013	W-SW	WATER	REG	1	grab	Y	X
8	5M			5M_022822	2/26/2022		W-SW	WATER	REG	1	grab	Y	X
9	5B	0.68	1.68	5B_022822	2/26/2022	1013	W-SW	WATER	REG	1	grab	Y	X
10	6T	0.00	3.50	6T_022822	2/26/2022	1017	W-SW	WATER	REG	1	grab	Y	X
11	6M			6M_022822	2/26/2022		W-SW	WATER	REG	1	grab	Y	X
12	6B	2.50	3.50	6B_022822	2/26/2022	1017	W-SW	WATER	REG	1	grab	Y	X

Relinquished by: <i>Rebecca...</i>	Company: MES	Date/Time: 2/28/2022 15:45	Received by: <i>W...</i>	Company: MES	Date/Time: 2/28/2022 15:45	Condition:	Custody Seals Intact:
Relinquished by: <i>W...</i>	Company: MES	Date/Time: 3/1/22 10:45	Received by: <i>Jul</i>	Company: MES	Date/Time: 3/1/22 10:45	Condition:	Custody Seals Intact:

Preservatives: (Other: Seawater) 4(Deg C) 1 (4C NaOH (pH>12) & Ascorbic Acid) 12 (4C+2504 (pH<2) & Na2S2O3) 13 (2n Acetate) sp (special instructions)

John 3/1/22 12:25

Julian 3/1/22 10:45

110

CL

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request						AESI Ref: 44620.34621 COC#: 30905-102810-2																																																																																																																																																																																																				
Privileged & Confidential		N		Site Name: Baltimore BIH		Phase: Surface Water		Lab Proj # (SDG):																																																																																																																																																																																																				
Sampling Co.: Maryland Environmental Service		EDD To: Ryan.Hanson@labco.com		Location of Site: BALTIMORE, MD		Program: CH2M		Lab ID: LLI																																																																																																																																																																																																				
Client Contact: (name, co., address) Mana Kaoum 115 Tabor Rd Morris Plains, NJ 07950		Sampler: Mana Kaoum		PO #: 4500013606		Preservative: 3		Site ID: BALTIMORE																																																																																																																																																																																																				
Preliminary Data To: matt@labco.com / amy@labco.com		Analysis Turnaround Time (TAT): 7		Consultant: CH2M		Full Report TAT: 14		Lab Job #																																																																																																																																																																																																				
Sample Receipt: Amy Klopfer		Hard Copy To: Amy Klopfer		Invoice To: Mana Kaoum		Authorized User: Honeywell		Test & Excel File Drive: Local & Test File Drive																																																																																																																																																																																																				
<table border="1"> <thead> <tr> <th colspan="3">Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type</th> <th>Sample Matrix</th> <th>Sample Purpose</th> <th># of Cont.</th> <th>Composite/Grab</th> <th>Field Filtered Sample?</th> <th>BY650 Chromium</th> <th>Units</th> <th>Sampling Method (code)</th> <th>Lab Sample Numbers</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>7T</td> <td>0.00</td> <td>1.46</td> <td>7T_022822</td> <td>2/28/2022</td> <td>1020</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>7M</td> <td>0.46</td> <td>1.46</td> <td>7M_022822</td> <td>2/28/2022</td> <td>1020</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>7B</td> <td>0.46</td> <td>1.46</td> <td>7B_022822</td> <td>2/28/2022</td> <td>1020</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>8T</td> <td>0.00</td> <td>3.44</td> <td>8T_022822</td> <td>2/28/2022</td> <td>1023</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>8M</td> <td>0.00</td> <td>3.44</td> <td>8M_022822</td> <td>2/28/2022</td> <td>1023</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>8B</td> <td>2.44</td> <td>3.44</td> <td>8B_022822</td> <td>2/28/2022</td> <td>1023</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>9T</td> <td>0.00</td> <td>2.77</td> <td>9T_022822</td> <td>2/28/2022</td> <td>1025</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>9M</td> <td>0.00</td> <td>2.77</td> <td>9M_022822</td> <td>2/28/2022</td> <td>1025</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>9</td> <td>9B</td> <td>1.77</td> <td>2.77</td> <td>9B_022822</td> <td>2/28/2022</td> <td>1025</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>10T</td> <td>0.00</td> <td>2.04</td> <td>10T_022822</td> <td>2/28/2022</td> <td>1028</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>11</td> <td>10M</td> <td>0.00</td> <td>2.04</td> <td>10M_022822</td> <td>2/28/2022</td> <td>1028</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>12</td> <td>10B</td> <td>1.04</td> <td>2.04</td> <td>10B_022822</td> <td>2/28/2022</td> <td>1028</td> <td>W-SW WATER</td> <td>REG</td> <td>1</td> <td>grab</td> <td>Y</td> <td>X</td> <td></td> <td></td> </tr> </tbody> </table>										Sample Identification			Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample?	BY650 Chromium	Units	Sampling Method (code)	Lab Sample Numbers	1	7T	0.00	1.46	7T_022822	2/28/2022	1020	W-SW WATER	REG	1	grab	Y	X			2	7M	0.46	1.46	7M_022822	2/28/2022	1020	W-SW WATER	REG	1	grab	Y	X			3	7B	0.46	1.46	7B_022822	2/28/2022	1020	W-SW WATER	REG	1	grab	Y	X			4	8T	0.00	3.44	8T_022822	2/28/2022	1023	W-SW WATER	REG	1	grab	Y	X			5	8M	0.00	3.44	8M_022822	2/28/2022	1023	W-SW WATER	REG	1	grab	Y	X			6	8B	2.44	3.44	8B_022822	2/28/2022	1023	W-SW WATER	REG	1	grab	Y	X			7	9T	0.00	2.77	9T_022822	2/28/2022	1025	W-SW WATER	REG	1	grab	Y	X			8	9M	0.00	2.77	9M_022822	2/28/2022	1025	W-SW WATER	REG	1	grab	Y	X			9	9B	1.77	2.77	9B_022822	2/28/2022	1025	W-SW WATER	REG	1	grab	Y	X			10	10T	0.00	2.04	10T_022822	2/28/2022	1028	W-SW WATER	REG	1	grab	Y	X			11	10M	0.00	2.04	10M_022822	2/28/2022	1028	W-SW WATER	REG	1	grab	Y	X			12	10B	1.04	2.04	10B_022822	2/28/2022	1028	W-SW WATER	REG	1	grab	Y	X		
Sample Identification			Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample?	BY650 Chromium	Units	Sampling Method (code)	Lab Sample Numbers																																																																																																																																																																																														
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12	10B	1.04	2.04	10B_022822	2/28/2022	1028	W-SW WATER	REG	1	grab	Y	X																																																																																																																																																																																																
Relinquished by: Rebecca Kressner		Company: MES		Received by: WJA/HRT		Company: MES		Condition:		Custody Seals Intact																																																																																																																																																																																																		
Date/Time: 2/28/22 1545		Date/Time: 3/1/22 1045		Date/Time: 3/1/22 1045		Date/Time: 3/1/22 1045		Cooler Temp:		Cooler Temp: 30.3																																																																																																																																																																																																		
Relinquished by: John		Company: MES		Received by: John		Company: MES		Condition:		Custody Seals Intact																																																																																																																																																																																																		
Date/Time: 3/1/22 16:25		Date/Time: 3/1/22 16:25		Date/Time: 3/1/22 16:25		Date/Time: 3/1/22 16:25		Cooler Temp:		Cooler Temp: 30.3																																																																																																																																																																																																		

John 3/1/22 16:25

WJA/HRT 3/1/22 1045

CL

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620 34589 COC#: 30905-102620-4	
Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase: Sampling Program		Surface Water Sampling		Lab Proj # (SDG):		Lab ID: LLI	
Sampling Co.: Maryland Environmental Service		EDD To: Bryn.Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Site ID: BALTIMORE		Lab Job #:		Authorized User: Honeywell		Text & Excel File Drive Order	
Client Contact: (name, co., address) Maria Kacouns 115 Tabor Rd Moms Plains, NJ 07950		Sampler: PO # 4500013605		Analysis Turnaround Time (TAT): 7		Preservative: 3		Full Report TAT: 14		Sample Matrix: CH2M		Sample Purpose: Composite/Grab	
Preliminary Data To: Matthew.Cole@jacobs.com		Sample Receipt Acknowledgement To: Matthew.Cole@jacobs.com		Hard Copy To: Amy Klopfer		Invoice To: Maria Kacouns		Field Filtered Sample #: 7		SHE010 Chromium		Copyright AESI: Version 1.0 Unconditional use strictly prohibited.	
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample #	Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID										
1	15T	0.50	1.00	15T-022822	2/28/2022	1047	W-SW WATER	REG	1	grab	Y	X	
2	15K			15M-022822	2/28/2022		W-SW WATER	REG		grab			
3	15B	0.50	1.00	15B-022822	2/28/2022	1047	W-SW WATER	REG	1	grab	Y	X	
4	16T	0.00	7.21	16T-022822	2/28/2022	1050	W-SW WATER	REG	1	grab	Y	X	
5	16M			16M-022822	2/28/2022		W-SW WATER	REG		grab	Y		
6	16B	6.21	7.21	16B-022822	2/28/2022	1050	W-SW WATER	REG	1	grab	Y	X	
7	17T	0.00	1.00	17T-022822	2/28/2022	1053	W-SW WATER	REG	1	grab	Y	X	
8	17M			17M-022822	2/28/2022		W-SW WATER	REG		grab			
9	17B	0.50	1.00	17B-022822	2/28/2022	1053	W-SW WATER	REG	1	grab	Y	X	
10	18T	0.00	6.84	18T-022822	2/28/2022	1056	W-SW WATER	REG	1	grab	Y	X	
11	18M			18M-022822	2/28/2022		W-SW WATER	REG		grab			
12	18B	5.84	6.84	18B-022822	2/28/2022	1056	W-SW WATER	REG	1	grab	Y	X	
Relinquished by: Rebecca Krutcher		Company: MES		Date/Time: 2/28/22 1545		Received by: WJHART		Company: MES		Date/Time: 2/29/22 1545		Condition: Cooler Temp: Custody Seals Intact	
Relinquished by: WJHART		Company: MES		Date/Time: 3/1/22 1045		Received by: John		Company:		Date/Time: 3/1/22 1045		Condition: Cooler Temp: 30.3.9 Custody Seals Intact	
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); 8 (Deg C); 9 (HCl pH<2); 10 (HNO3 pH<2); 11 (4C NaOH pH<12) & Ascorbic Acid); 12 (4C H2SO4 pH<2) & Na2S2O3); 13 (Zn Acetate); 14 (special instructions)									

John 3/1/22 16:25
 John 3/1/22 16:45
 CL

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 858-2300		Honeywell Chain Of Custody / Analysis Request										AES1 Ref: 44620.34624 COC# 30905-102620-5			
Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase: Water/Water Sampling		Lab Proj # (SDG):		Lab ID: LI		Site ID: BALTIMORE			
Client Contact: (name, co., address) Maryland Environmental Service 115 Tabor Rd Moms Plains, NJ 07950		EDD To: Bryn Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program:		Lab Job #:		Authorized User: Honeywell		Excel & Text File Desc:			
Sample Receipt Hard Copy To: Honeywell, 1000 Wills Street, Baltimore, MD 21231		PO #: 4500013606		Analysis Turnaround Time (TAT): 7		Preservative:		Full Report TAT: 1d		Test & Excel File Desc:		Copyright AES1 Version 8.6. Unauthorized use strictly prohibited.			
Invoice To: Mana Kacurs		Consultant:		CH2M		Composite/Grab		Field Filled Sample		SW610 Chromium		MEMO			
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filled Sample	SW610 Chromium	MEMO	Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID												
1	19T	0.00	4.70	19T 022822	2/28/2022	1100	W-SW WATER	REG	4	grab	Y	X			
2	19M			19M 022822	2/28/2022		W-SW WATER	REG		grab					
3	10B	3.20	4.20	10B 022822	2/28/2022	1100	W-SW WATER	REG	1	grab	Y	X			
4	20T	0.00	0.60	20T 022822	2/28/2022	1113	W-SW WATER	REG	1	grab	Y	X			
5	20M			20M 022822	2/28/2022		W-SW WATER	REG		grab					
6	20B	0.30	0.60	20B 022822	2/28/2022	1113	W-SW WATER	REG	1	grab	Y	X			
7	Cent T	6.00	5.8	Cent T 022822	2/28/2022	1004	W-SW WATER	REG	1	grab	Y	X			
8	Cent M			Cent M 022822	2/28/2022		W-SW WATER	REG		grab					
9	Cent B	4.80	5.80	Cent B 022822	2/28/2022	1004	W-SW WATER	REG	1	grab	Y	X			
10	Lady T	0.00	0.42	Lady T 022822	2/28/2022	0957	W-SW WATER	REG	1	grab	Y	X			
11	Lady M			Lady M 022822	2/28/2022		W-SW WATER	REG		grab					
12	Lady B	0.22	0.42	Lady B 022822	2/28/2022	0957	W-SW WATER	REG	1	grab	Y	X			
Relinquished by: Rebecca Kowalski		Company: MES		Received by: WJANKA		Company: MES		Condition:		Custody Seals Intact:					
Date/Time: 2/28/22 1545		Date/Time: 3/1/22 1043		Date/Time: 3/1/22 1045		Date/Time: 3/1/22 1045		Cooler Temp:		Cooler Temp: 54.53					
Relinquished by: WJANKA		Company: MES		Received by: JAH		Company: MES		Condition:		Custody Seals Intact:					
Date/Time: 3/1/22 1043		Date/Time: 3/1/22 1043		Date/Time: 3/1/22 1045		Date/Time: 3/1/22 1045		Cooler Temp:		Cooler Temp: 54.53					
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), 8 (Deg C), 9 (HCl pH=2), 10 (HNO3)													

Jul 31/22 16:25

dym 3/1/22 10:45

CL

Lancaster Laboratories				Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620-34663	
2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300				Privileged & Confidential N										COC# 30005-102028-8	
Sampling Co.: Maryland Environmental Service				EOD To: Bryn Hansen@jacobs.com			Site Name: Baltimore Inner Harbor			Phase: Groundwater Sampling				Lab Proj # (SDG):	
Client Contact: (name, co., address)				Sampler: CO, RK, CC			Location of Site: BALTIMORE, MD			Program				Lab ID: LLI	
115 Tabor Rd Morris Plains, NJ 07950				PO #: 1450013806			Preservative: 3							Site ID: BALTIMORE	
Preliminary Data To: matthew.gilte@jacobs.com				Analysis Turnaround Time (TAT): 7			Composite/Grab							Lab Job #	
Sample Receipt				Consultant: CH2M			Field Filtered Sample #							Authorized User: Honeywell	
Hand Copy To: Amy Klopfer				Full Report TAT: 14			SW6510 Column							Text & Excel File Drive Excel & Text File Order	
Invoice To: Mana Kacurus														Copyright AESI. Version 8.0. Unauthorized use strictly prohibited.	
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Lab Sample Numbers		Sampling Method (code)		
1	58D.p	0.10	1.63	D1 022822	2/28/2022	10:30	W-SW WATER	FD	1	grab	Y X				
2	11TD.p	0.00	2.0	D2 022822	2/28/2022	10:30	W-SW WATER	FD	1	grab	Y X				
3	16B.p	6.21	7.21	D3 022822	2/28/2022	10:50	W-SW WATER	FD	1	grab	Y X				
4	19TD.p	0.00	4.20	D4 022822	2/28/2022	11:00	W-SW WATER	FD	1	grab	Y X				
5	FIELDQC	-	-	FB 022822	2/28/2022	10:32	BLKWATER WATER	FB	1	grab	Y X				
6	FIELDQC	-	-	RB1 022822	2/28/2022	10:33	BLKWATER WATER	EB	1	grab	Y X				
7	FIELDQC	-	-	RB2 022822	2/28/2022	11:09	BLKWATER WATER	EB	1	grab	Y X				
8	FIELDQC	-	-	RB3-022822	2/28/2022		BLKWATER WATER	EB	1	grab	Y				
9															
10															
11															
12															

Relinquished by: Rebecca [Signature]	Company: MES	Received by: [Signature]	Company: MES	Condition:	Custody Seals Intact:
Date/Time: 2/28/22 15:45		Date/Time: 2/28/22 15:45		Cooler Temp:	
Relinquished by: [Signature]	Company: MES	Received by: [Signature]	Company: MES	Condition:	Custody Seals Intact:
Date/Time: 3/1/22 10:43		Date/Time: 3/1/22 10:43		Cooler Temp: 30.75	

John 3/1/22 16:25

AJL 3/1/22 16:45

CL

Appendix A-3
Field Report—February 2022

BALTIMORE INNER HARBOR SURFACE WATER SAMPLING

February 28, 2022

Honeywell



METER CALIBRATION LOG

FIELD NOTES

BIH SW Sampling

①

Samplers: JS, CO, RK
 Boat captain: JM

Date: 2/28/22

Weather conditions: Sunny, 32°F, slight breeze *MSM/D

Low Tide: 10:29am

Sampling window: 9:29am - 11:29am

Sample ID	Depth to Bottom (ft)	Sample Depth (ft)	Time (hrs)	pH (units)	Temp (C°)	Sp. cond (ms/cm)	Initials
Lady T	0.42 0.42	0 in	0957	7.08	7.15	11.1	RK
Lady B	0.42 0.42	0.22	0957	7.91 7.91	6.49	10.4	RK
Cent T	5.8 5.8	4.8 4.8	1004	8.22	7.94	6.00	RK
Cent B	5.8	4.8	1004	8.21	6.27	12.9	RK
3T *	1.45	0	1007	8.50	5.58	13.4	RK
3B	1.45	0.45	1007	8.82	5.56	13.4	RK
4T	1.75	0	1011	8.82	5.97	13.5	RK
4B	1.75	0.75	1011	8.88	5.61	13.6	RK
5T	1.68	0	1013	8.90	5.64	11.6	RK
5B	1.68	0.68	1013	8.88	5.63	12.3	RK
5B Dup	1.68	0.68	1013	8.88	5.63	12.3	RK
6T	3.50	0	1017	8.89	5.52	13.2	RK
6B	3.50	2.50	1017	8.93	5.53	13.1	RK
7T	1.46	0	1020	9.00	5.57	12.1	RK
7B	1.46	0.46	1020	8.97	5.32	13.3	RK

② B14 SW Sampling

Sample ID	Depth to Bottom (ft)	Sample Depth (ft)	Time (hrs)	pH (units)	Temp (C°)	Sp cond. (ms/cm)	Initials
8T	3.44	0	1023 1024	9.02	5.44	12.5	RK
8B	3.44	2.44	1023	9.02	5.37	13.0	RK
9T	2.77	0	1025	9.02	5.31	14.1	RK
9B	2.77	1.77	1025	9.04	5.22	14.5	RK
10T	2.04	0	1028	8.99	5.24	14.2	RK
10B	2.04	1.04	1028	9.10	5.36	14.3	RK
FBI	8	-	1032	10.98	10.58	0.005	RK
RBI	8	-	1033	10.53	8.79	0.004	RK
11T	2.0	0	1036	8.06	6.32	13.6 13.6	RK
11TDup	2.0	0	1036	8.06	6.32	13.6	RK
11B	2.0	1.0	1036	8.38	5.62	14.2	RK
12T	1.62	0	1040	8.39	5.62	14.0	RK
12B	1.62	0.62	1040	8.73	5.55	14.1	RK
13T	3.06	0	1042	8.89	5.59	14.0	RK
13B	3.06	2.06	1042	8.93	5.40	14.2	RK
14T	1.65	0	1045	8.88	5.49	13.6	RK
14B	1.65	0.65	1045	9.08	5.52	13.9	RK
15T	1.0	0	1047	9.15	5.60	13.5	RK
15B	1.0	0.5	1047	9.18	5.75	13.6	RK

BIM SW Sampling

(3)

Sample ID	Depth to Bottom (ft)	Sample Depth (ft)	Time (hrs)	pH (units)	Temp (°C)	Sp cond. (ms/cm)	Initials
16T	7.21	0	1050	9.20	5.53	13.3	RK
16B	7.21	6.21	1050	9.06	4.95	15.4	RK
16B Dup	7.21	6.21	1050	9.06	4.95	15.4	RK
17T	1.0	0	1053	9.12	5.26	13.8	RK
17B	1.0	0.5	1053	9.15 8.99 RK	5.43	13.7	RK
18T	6.84	0	1056	9.16	5.33	13.9	RK
18B	6.84	5.84	1056	9.00	5.25	15.4	RK
19T	4.2	0	1100	9.07	5.37	14.0	RK
19T Dup	4.2	0	1100	9.07	5.37	14.0	RK
19B	4.2	3.2	1100	9.09	5.48	14.0	RK
RB2	-	-	1109	10.70 9.63 RK	9.60	0.011	RK
20T	0.6	0	1113	8.13	7.73	13.3	RK
20B	0.6	0.3	1113	8.54	6.99	13.7	RK

AM

CHAIN of CUSTODY

Lancaster Laboratories
 2425 New Holland Pike
 Lancaster, PA 17605-2425
 (717) 656-2300

Honeywell

Chain Of Custody / Analysis Request

AESI Ref: 44620.34345
 COC# 30905-102620-1

Privileged & Confidential		N	Site Name: Baltimore Inner Harbor	Phase:	Surface Water Sampling	Lab Proj # (SDG):			
Sampling Co.: Maryland Environmental Service		EDD To: Bryn.Hansen@jacobs.com	Location of Site: BALTIMORE, MD	Program:		Lab ID: LLI			
Client Contact: (name, co., address)		Sampler:				Site ID: BALTIMORE			
Maria Kaouris		PO #: 4500013806	Preservative: 3			Lab Job #:			
115 Tabor Rd		Analysis Turnaround Time (TAT): 7	Composite/Grab Field Filtered Sample ? SW6010 Chromium			Authorized User: Honeywell			
Morris Plains, NJ 07950		Consultant: CH2M							Text & Excel File Drive
Preliminary Data To: matthew.gillis@jacobs.com, C:\JVAL\DATA@msn.com									Excel & Text File Order
Sample Receipt: bernice.kidd@jacobs.com									
Hard Copy To: Amy Klopper		Full Report TAT: 14							
Invoice To: Maria Kaouris									

Sample Identification			Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	ppb	MS/MSD	Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)											
1	3T	0.00	1.45	2/28/2022	1007	W-SW	WATER	REG	4	grab	Y X		
2	3M			2/28/2022		W-SW	WATER	REG		grab			
3	3B	0.45	1.45	2/28/2022	1007	W-SW	WATER	REG	1	grab	Y X		
4	4T	0.00	1.75	2/28/2022	1011	W-SW	WATER	REG	1	grab	Y X		
5	4M			2/28/2022		W-SW	WATER	REG		grab			
6	4B	0.75	1.75	2/28/2022	1011	W-SW	WATER	REG	1	grab	Y X		
7	5T	0.00	1.68	2/28/2022	1013	W-SW	WATER	REG	1	grab	Y X		
8	5M			2/28/2022		W-SW	WATER	REG		grab			
9	5B	0.68	1.68	2/28/2022	1013	W-SW	WATER	REG	1	grab	Y X		
10	6T	0.00	3.50	2/28/2022	1017	W-SW	WATER	REG	1	grab	Y X		
11	6M			2/28/2022		W-SW	WATER	REG		grab			
12	6B	2.50	3.50	2/28/2022	1017	W-SW	WATER	REG	1	grab	Y X		

Relinquished by: <i>Rebecca Freshman</i>	Company: MES	Received by: <i>WJH/KJ</i>	Company: MES	Condition:	Custody Seals Intact:
Date/Time: 2/28/22 1545		Date/Time: 2/28/22 1545		Cooler Temp.:	
Relinquished by:	Company:	Received by:	Company:	Condition:	Custody Seals Intact:
Date/Time:		Date/Time:		Cooler Temp.:	

Preservatives: (Other; Specify): 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34521	
		Privileged & Confidential		N		Site Name: Baltimore BIH		Phase:		Surface Water Sampling		COC#: 30905-102620-2	
Sampling Co.: Maryland Environmental Service		EDD To: Bryn Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program						Lab Proj # (SDG):	

Client Contact: (name, co., address) Maria Kaouris 115 Tabor Rd Morris Plains, NJ 07950		Sampler: PO # 4500013806		Analysis Turnaround Time (TAT): 7 CH2M		Preservative: 3						Lab ID: LLI	
Preliminary Data To: matthew.gillis@jacobs.com; C.J.VALIDATA@men.com; hemira.kidd@ch2m.com		Consultant										Site ID: BALTIMORE	
Sample Receipt: matthew.gillis@jacobs.com; C.J.VALIDATA@men.com		Full Report TAT: 14										Lab Job #	
Hard Copy To: Amy Klopfer												Authorized User: Honeywell	
Invoice To: Maria Kaouris												Text & Excel File Drive Excel & Text File Order	

Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium	Units	ug/L	Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID													
1	7T	1.00	1.46	7T 022822	2/28/2022	1020	W-SW	WATER	REG	1	grab	Y	X			
2	7M			7M 022822	2/28/2022		W-SW	WATER	REG		grab					
3	7B	0.46	1.46	7B 022822	2/28/2022	1020	W-SW	WATER	REG	1	grab	Y	X			
4	8T	6.00	3.44	8T 022822	2/28/2022	1023	W-SW	WATER	REG	1	grab	Y	X			
5	8M			8M 022822	2/28/2022		W-SW	WATER	REG		grab					
6	8B	2.44	3.44	8B 022822	2/28/2022	1023	W-SW	WATER	REG	1	grab	Y	X			
7	9T	0.00	2.77	9T 022822	2/28/2022	1025	W-SW	WATER	REG	1	grab	Y	X			
8	9M			9M 022822	2/28/2022		W-SW	WATER	REG		grab					
9	9B	1.77	2.77	9B 022822	2/28/2022	1025	W-SW	WATER	REG	1	grab	Y	X			
10	10T	6.00	2.04	10T 022822	2/28/2022	1028	W-SW	WATER	REG	1	grab	Y	X			
11	10M			10M 022822	2/28/2022		W-SW	WATER	REG		grab					
12	10B	1.04	2.04	10B 022822	2/28/2022	1028	W-SW	WATER	REG	1	grab	Y	X			


Relinquished by: <i>Rebecca Kressman</i>	Company: <i>MES</i>	Received by: <i>WJH/HRT</i>	Company: <i>MES</i>	Condition:	Custody Seals Intact
Date/Time: <i>2/28/22 1545</i>	Date/Time: <i>2/28/22 1545</i>	Date/Time:	Date/Time:	Cooler Temp.:	
Relinquished by:	Company:	Received by:	Company:	Condition:	Custody Seals Intact
Date/Time:	Date/Time:	Date/Time:	Date/Time:	Cooler Temp.:	


Preservatives: (Other; Specify): 4(Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

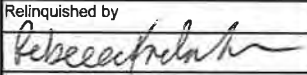
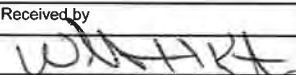
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Lancaster Laboratories		<h1>Honeywell</h1> Chain Of Custody / Analysis Request										AESI Ref: 44620.34557	
2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300												Privileged & Confidential	
Sampling Co.: Maryland Environmental Service		EDD To: Bryn.Hansen@iacobs.com		Location of Site: BALTIMORE, MD		Program: Surface Water Sampling		Lab Proj # (SDG):		Lab ID: LLI			
Client Contact: (name, co., address)		Sampler:		Preservative: 3		Site ID: BALTIMORE		Lab Job #:		Authorized User: Honeywell			
Maria Kaouris 115 Tabor Rd Morris Plains, NJ 07950		PO #: 4500013806		Analysis Turnaround Time (TAT): 7 Consultant: CH2M		Lab Job #:		Authorized User: Honeywell		Text & Excel File Drive: Excel & Text File Order			
Preliminary Data To: matthew.qillis@iacobs.com, CJVALIDATA@msn.com, bernice.kidd@iacobs.com		Full Report TAT: 14		Composite/Grab		Field Filtered Sample ?		SW6010 Chromium		MS/MSD			
Sample Receipt: matthew.qillis@iacobs.com, CJVALIDATA@msn.com		Hard Copy To: Amy Kiopper		Invoice To: Maria Kaouris		Sample Date		Sample Time		Sample Type			
Sample Matrix		Sample Purpose		# of Cont.		Units		Sampling Method (code)		Lab Sample Numbers			
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Y	X	
1	11T	0.00	2.00	11T_022822	2/28/2022	1036	W-SW	WATER	REG	4	grab	Y X	
2	11M			11M_022822	2/28/2022		W-SW	WATER	REG		grab		
3	11B	1.00	2.00	11B_022822	2/28/2022	1036	W-SW	WATER	REG	1	grab	Y X	
4	12T	0.00	1.62	12T_022822	2/28/2022	1040	W-SW	WATER	REG	1	grab	Y X	
5	12M			12M_022822	2/28/2022		W-SW	WATER	REG		grab		
6	12B	0.62	1.62	12B_022822	2/28/2022	1040	W-SW	WATER	REG	1	grab	Y X	
7	13T	0.00	3.06	13T_022822	2/28/2022	1042	W-SW	WATER	REG	1	grab	Y X	
8	13M			13M_022822	2/28/2022		W-SW	WATER	REG		grab		
9	13B	2.06	3.06	13B_022822	2/28/2022	1042	W-SW	WATER	REG	1	grab	Y X	
10	14T	0.00	1.65	14T_022822	2/28/2022	1045	W-SW	WATER	REG	1	grab	Y X	
11	14M			14M_022822	2/28/2022		W-SW	WATER	REG		grab		
12	14B	0.65	1.65	14B_022822	2/28/2022	1045	W-SW	WATER	REG	1	grab	Y X	
Relinquished by: <i>Rebecca Kretschmer</i>		Company: MES		Received by: <i>W. J. H. J.</i>		Date/Time: 2/28/22 1545		Condition:		Custody Seals Intact			
Relinquished by:		Company:		Received by:		Date/Time:		Condition:		Custody Seals Intact			
Date/Time:		Date/Time:		Date/Time:		Date/Time:		Cooler Temp.:		Cooler Temp.:			
Preservatives: (Other; Specify):				4Deg C: 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)									

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34589	
		Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase: Sampling Program		Surface Water Sampling		COC#: 30905-102620-4	
Sampling Co.: Maryland Environmental Service		EDD To: Bryn.Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Lab Proj # (SDG):		Lab ID: LLI		Site ID: BALTIMORE		Lab Job #:	
Client Contact: (name, co., address) Maria Kaouris 115 Tabor Rd Morris Plains, NJ 07950		Sampler: PO # 4500013806		Analysis Turnaround Time (TAT): 7 Consultant: CH2M		Preservative: 3		Full Report TAT: 14		Authorized User: Honeywell		Text & Excel File Drive: Excel & Text File Order	
Preliminary Data To: matthew.gillis@jacobs.com; CIVIL.IDATA@msn.com; bernice.kidd@jacobs.com		Sample Receipt Acknowledgement To: matthew.gillis@jacobs.com; CIVIL.IDATA@msn.com; bernice.kidd@jacobs.com		Hard Copy To: Amy Klopper		Invoice To: Maria Kaouris		Composite/Grab Field Filtered Sample ? SW6010 Chromium		Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.			
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Sampling Method (code)		Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID										
1	15T	0.00	15T 022822	2/28/2022	1047	W-SW	WATER	REG	1	grab	Y	X	
2	15M		15M 022822	2/28/2022		W-SW	WATER	REG		grab			
3	15B	0.50	15B 022822	2/28/2022	1047	W-SW	WATER	REG	1	grab	Y	X	
4	16T	0.00	16T 022822	2/28/2022	1050	W-SW	WATER	REG	1	grab	Y	X	
5	16M		16M 022822	2/28/2022		W-SW	WATER	REG		grab	Y		
6	16B	6.21	16B 022822	2/28/2022	1050	W-SW	WATER	REG	1	grab	Y	X	
7	17T	0.00	17T 022822	2/28/2022	1053	W-SW	WATER	REG	1	grab	Y	X	
8	17M		17M 022822	2/28/2022		W-SW	WATER	REG		grab			
9	17B	6.50	17B 022822	2/28/2022	1053	W-SW	WATER	REG	1	grab	Y	X	
10	18T	0.00	18T 022822	2/28/2022	1054	W-SW	WATER	REG	1	grab	Y	X	
11	18M		18M 022822	2/28/2022		W-STW	WATER	REG		grab			
12	18B	5.84	18B 022822	2/28/2022	1054	W-SW	WATER	REG	1	grab	Y	X	
Relinquished by: Rebecca Kratschen		Company: MES		Date/Time: 2/28/22 1545		Received by: WJA/HKT		Company: MES		Date/Time: 2/29/22 1545		Condition: Cooler Temp.	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Condition: Cooler Temp.	
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); 9 (HCl 4 Deg C); 10 (HNO3 pH<2, 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)											

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34624 COC#: 30905-102620-5	
Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase:		Lab Proj # (SDG):		Lab ID: LLI		Site ID: BALTIMORE	
Sampling Co.: Maryland Environmental Service		EDD To: Bryn.Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program: Surface Water Sampling		Lab Job #:		Authorized User: Honeywell		Text & Excel File Drive: Excel & Text File Order	
Client Contact: (name, co., address) Maria Kaouris 115 Tabor Rd Morris Plains, NJ 07950		Sampler: PO # 4500013806		Analysis Turnaround Time (TAT): 7 Consultant: CH2M		Preservative: 3		MS/MSD		Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.			
Preliminary Data To: matthew.gillis@jacobs.com; CIVIL DATA@msn.com; bernice.kidd@jacobs.com		Sample Receipt: matthew.gillis@jacobs.com		Full Report TAT: 14		Composite/Grab		Field Filtered Sample ?		SW6010 Chromium			
Hard Copy To: Honeywell; 1000 Wills Street; Baltimore, MD 21231		Invoice To: Maria Kaouris		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose	
Sample Identification		Start Depth (ft)		End Depth (ft)		Field Sample ID		Sample Date		Sample Time		# of Cont.	
Location ID		Start Depth (ft)		End Depth (ft)		Field Sample ID		Sample Date		Sample Time		# of Cont.	
Units												Sampling Method (code)	
Lab Sample Numbers													
1 19T 0.00 4.70 19T 022822 2/28/2022 1100 W-SW WATER REG 4 grab Y X												X	
2 19M 0.00 4.70 19M 022822 2/28/2022 1100 W-SW WATER REG 1 grab Y X													
3 19B 3.70 4.70 19B 022822 2/28/2022 1100 W-SW WATER REG 1 grab Y X													
4 20T 0.00 0.60 20T 022822 2/28/2022 1113 W-SW WATER REG 1 grab Y X													
5 20M 0.00 0.60 20M 022822 2/28/2022 1113 W-SW WATER REG 1 grab Y X													
6 20B 0.30 0.60 20B 022822 2/28/2022 1113 W-SW WATER REG 1 grab Y X													
7 Cent T 0.00 5.8 Cent T 022822 2/28/2022 1004 W-SW WATER REG 1 grab Y X													
8 Cent M 0.00 5.8 Cent M 022822 2/28/2022 1004 W-SW WATER REG 1 grab Y X													
9 Cent B 4.80 5.80 Cent B 022822 2/28/2022 1004 W-SW WATER REG 1 grab Y X													
10 Lady T 0.20 0.42 Lady T 022822 2/28/2022 0957 W-SW WATER REG 1 grab Y X													
11 Lady M 0.22 0.42 Lady M 022822 2/28/2022 0957 W-SW WATER REG 1 grab Y X													
12 Lady B 0.22 0.42 Lady B 022822 2/28/2022 0957 W-SW WATER REG 1 grab Y X													
Relinquished by: Rebecca Krabsch		Company: MES		Received by: WJH/HKA		Company: MES		Condition:		Custody Seals Intact			
Date/Time: 2/28/22 1545		Date/Time: 2/28/22 1545		Date/Time: 2/28/22 1545		Date/Time: 2/28/22 1545		Cooler Temp.:		Custody Seals Intact			
Relinquished by:		Company:		Received by:		Company:		Condition:		Custody Seals Intact			
Date/Time:		Date/Time:		Date/Time:		Date/Time:		Cooler Temp.:		Custody Seals Intact			
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); 9 (HCl 4 Deg C); 10 (HNO3											

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 44620.34663	
		Privileged & Confidential		N		Site Name: Baltimore Inner Harbor		Phase:		Lab Proj # (SDG):		COC#: 30905-102620-6	
Sampling Co.: Maryland Environmental Service		EDD To: Bryn.Hansen@jacobs.com		Location of Site: BALTIMORE, MD		Program: Surface Water Sampling				Lab ID: LLI			
Client Contact: (name, co., address) Maria Kaouris 115 Tabor Rd Morris Plains, NJ 07950		Sampler: CO, RK, CC		PO #: 4500013806		Preservative: 3				Site ID: BALTIMORE		Lab Job #:	
Preliminary Data To: matthew.gillis@jacobs.com; CIVIL DATA@men.com; bernice.kidd@jacobs.com; matthew.gillis@jacobs.com		Analysis Turnaround Time (TAT): 7		Consultant: CH2M		Composite/Grab Field Filtered Sample ? SW6010 Chromium				Authorized User: Honeywell		Text & Excel File Drive Excel & Text File Order	
Sample Receipt Hard Copy To: Amy Klopper		Full Report TAT: 14										Copyright AESI: Version 6.0 Unauthorized use strictly prohibited.	
Invoice To: Maria Kaouris													
Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	ug/L	Sampling Method (code)	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID										
1	SBDip	0.68	1.68	D1 022822	2/28/2022	1013	W-SW	WATER	FD	1	grab	Y	X
2	ITDip	0.00	2.0	D2 022822	2/28/2022	1036	W-SW	WATER	FD	1	grab	Y	X
3	16B Dip	6.21	7.21	D3 022822	2/28/2022	1050	W-SW	WATER	FD	1	grab	Y	X
4	19TDip	0.00	4.20	D4 022822	2/28/2022	1100	W-SW	WATER	FD	1	grab	Y	X
5	FIELDQC	-	-	FB 022822	2/28/2022	1032	BLKWATER	WATER	FB	1	grab	Y	X
6	FIELDQC	-	-	RB1 022822	2/28/2022	1033	BLKWATER	WATER	EB	1	grab	Y	X
7	FIELDQC	-	-	RB2 022822	2/28/2022	1109	BLKWATER	WATER	EB	1	grab	Y	X
8	FIELDQC	-	-	RB3 022822	2/28/2022		BLKWATER	WATER	EB	1	grab	Y	
9													
10													
11													
12													
Relinquished by: 		Company: MES		Received by: 		Company: MES		Condition:		Custody Seals Intact			
Date/Time: 2/28/22 1545		Date/Time: 2/28/22 1545		Date/Time: 2/28/22 1545		Date/Time: 2/28/22 1545		Cooler Temp.:		Cooler Temp.:			
Relinquished by:		Company:		Received by:		Company:		Condition:		Custody Seals Intact			
Date/Time:		Date/Time:		Date/Time:		Date/Time:		Cooler Temp.:		Cooler Temp.:			
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); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2)).									

Appendix B
Current Quarterly Validation Report

Appendix B-1
Quality Control Summary—Fourth Quarter
2021

pQUALITY CONTROL SUMMARY

This section is a summary of the quality control (QC) review results for samples collected on February 28, 2022, for the Honeywell, Baltimore Inner Harbor project. Eurofins Lancaster Laboratories of Lancaster, Pennsylvania performed the chemical analyses for all samples. The samples were verified in accordance with National Functional Guidelines for Inorganic Review (U.S. EPA 2002) as applicable to the specification contained in SW-846 methodologies, and the project specific requirements set forth in the Work Plan. One sample delivery group (SDG) was associated with this data set: 74474. All field samples and associated QC samples were analyzed for total and/or dissolved chromium by SW-846 6010C. Samples were filtered in the field for dissolved metals analysis.

The quality of the data was assessed according to the U.S. EPA's PARCC (precision, accuracy, representativeness, completeness, and comparability) parameters. These criteria were used to identify unacceptable or biased data that could result in corrective actions being implemented or otherwise require qualification of the data. The following is a brief summary of PARCC criteria that were reviewed during verification of the data.

PRECISION AND ACCURACY

Precision and accuracy were evaluated based on the QC results generated from laboratory matrix spike and matrix spike duplicate (MS/MSD) samples, laboratory control samples (LCS), laboratory control duplicate (LCSD) samples, and laboratory duplicate samples. In addition, initial and continuing calibration results were used to assess accuracy.

REPRESENTATIVENESS

Representativeness was evaluated through the analysis of method blank samples, field blank samples, and calibration blank samples. Analysis of these types of samples is important to distinguish between ambient sampling and analytical levels, and actual site contamination.

COMPLETENESS

Data completeness was evaluated based on the samples requested on the chain-of-custody documentation and the samples reported by the laboratory.

COMPARABILITY

Comparability was achieved by analyzing the samples according to the specified standard methods. Lancaster laboratory used U.S. EPA methods for the analysis of the samples. The reporting limits were elevated if the sample was analyzed at a dilution.

The following paragraphs summarize the review of data based on the PARCC criteria.

FIELD DUPLICATES

Four chromium field duplicate samples were collected during this sampling event and analyzed. All acceptance criteria were met.

LABORATORY REPLICATES

Three chromium laboratory replicates were analyzed during this sampling round. The results compared.

LABORATORY BLANKS

Chromium was not detected in the calibration or method blanks.

FIELD BLANKS

Two equipment rinsate blank and one field blank sample were collected during this sampling event. Chromium was not detected in the field blanks.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

Three chromium MS/MSD sets were analyzed during this sampling event. All acceptance criteria for precision and accuracy were met.

SAMPLE RECEIPT, HOLDING TIMES AND PRESERVATION

The samples were received within the recommended temperature of $4\pm 2^{\circ}\text{C}$ at 3.0 and 3.5° C. All samples were prepared and analyzed within holding time criteria.

SUMMARY OF DATA QUALITY AND RELIABILITY

The evaluation of the data against PARCC criteria provided information on the data quality and reliability. All data are of known and acceptable quality based on the laboratory-established acceptance control limits or U.S. EPA guidance.

Attachment 3
HMS Groundwater Gradient Performance Report

HEAD MAINTENANCE SYSTEM
GROUNDWATER GRADIENT MONITORING
QUARTERLY REPORT NO. 130
FIRST QUARTER 2022

BALTIMORE INNER HARBOR
BALTIMORE, MARYLAND

Prepared for

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Herndon, VA 20171

APRIL 2022

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- A HMS Gradient Charts
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Acronyms and Abbreviations

DDP	<i>Final Area 1, Phase 1 Detailed Development Plan, Baltimore Works Site, Baltimore, Maryland (December 3, 2013)</i>
EPA	U.S. Environmental Protection Agency
HMS	Head Maintenance System
INSQL	Industrial System Query Language
MDE	Maryland Department of the Environment
MSS	Master Supervisory System
Performance Standard	Groundwater Gradient Performance Standard
RAM	Random Access Memory
RIC	Remote Intelligence Controller
Site	Honeywell Baltimore Inner Harbor Site

1. HMS Groundwater Gradient Monitoring Report

1.1 Purpose

This report documents the performance of the hydraulic barrier and head maintenance system (HMS) at the Baltimore Inner Harbor Site (site), during the first quarter of 2022. The submittal constitutes a Progress Report in accordance with the requirements of Section V.3 of the Consent Decree, entered into by Honeywell (formerly AlliedSignal, Inc.), the U.S. Environmental Protection Agency (EPA), and the Maryland Department of the Environment (MDE) dated September 29, 1989, and requiring that a progress report be submitted every calendar quarter during the life of the Consent Decree. This report provides the data required to satisfy the requirements specified by the *Groundwater Gradient Monitoring Plan* (June 1995).

1.2 Objective

The objective of this report is to document the performance of the vertical hydraulic barrier and head maintenance system (HMS) at the Site. The HMS installed as part of the final remedial construction at the Site includes vaults, pumps, controls, valves, conduits, and tanks. This report documents compliance with the Groundwater Gradient Performance Standard (performance standard), which requires Honeywell to maintain an inward groundwater gradient at the Site. The HMS performance is monitored, controlled, and recorded by the Master Supervisory System (MSS) installed at the Site as part of the corrective measures.

1.3 Groundwater Gradient Performance Standard

The performance standard is set forth in Section V, Paragraphs 13.b and c, of the Consent Decree, Second Amendment:

b. The following Groundwater Gradient Performance Standard shall be established: for each pair of piezometers, for every 30 day period, the average hydraulic head measured at the piezometer inside the barrier shall be lower than the average hydraulic head measured at the piezometer outside the barrier, and the absolute value of the average hydraulic head differential shall be greater than a value which represents the sum of 0.01 feet plus two times the maximum potential error of measurement of the hydraulic head in any one piezometer. Said value shall represent the arithmetic average of hourly readings for the aforementioned period.

and

c. Defendant shall monitor the performance of the deep vertical hydraulic barrier at the points and times and in the manner specified in the approved Groundwater Gradient Monitoring Plan.

The performance standard was also described by the *Corrective Measures Implementation Program Plan*, May 1990, Section 2.3.2, Subpart 1, Horizontal Groundwater Gradient Performance Standard:

Piezometer pairs, one on the inside and one on the outside of the hydraulic barrier, located as described in the Consent Decree, will be monitored at the required frequency to demonstrate that an inward hydraulic gradient exists. Each piezometer will be measured hourly and averaged arithmetically over a 30-day period, to determine that the 30-day running average of the inside piezometer's hydraulic head is at least 0.01 foot less than the corresponding outside piezometer's hydraulic head for each piezometer pair location. Additionally, for each performance standard piezometer pair, for any hourly head measurement, if the inward gradient decreases to where the inside piezometric head is 0.01 foot, or less, than the outside piezometric head, groundwater extraction will commence in the vicinity of the inside piezometer. Groundwater extraction will continue until the piezometric head at the outside piezometer becomes greater than 0.01 foot relative to the corresponding inside piezometer.

The performance standard was further developed, based on design review, in the *HMS Corrective Measures Prefinal Design Plans, Volume II, Design Report*, 1994. The design report incorporated into

the performance standard the calculation of the HMS's inherent measurement error for the water levels, as detailed in the report's Section 3.4 and Appendix 2.2. The performance standard calculation for each piezometer pair was established as the minimum head difference, plus twice the measurement error at one piezometer, or

$$\text{Performance Standard} = [0.01 \text{ foot} + (2 \times \text{HMS water level measurement error})].$$

The 1994 design report calculated the HMS piezometer measurement error based on the then-current design and instrumentation selection. This calculation was revised because the water level instrumentation was updated and installed into the HMS piezometers. The current performance standard for the installed ultrasonic water level devices is $[0.01 \text{ foot} + (2 \times 0.031 \text{ measurement error})] = 0.072 \text{ foot}$. The revised error calculation memorandum is presented in Appendix E of the *Baltimore Works Operation and Maintenance Plan*, dated May 2001.

1.4 Gradient Data—First Quarter of 2022

During the first quarter of 2022, the HMS groundwater gradient met the performance standard according to the data recorded by the MSS. Data were not recorded during brief periods at certain locations when the water level monitoring system was disabled due to maintenance. The groundwater gradient data are presented in Appendix A. The data are presented via charts and plots that include the following:

- One 30-day running hourly average gradient chart (represents a compilation of all 16 piezometer pair gradients) documents that the groundwater gradient measured across the Site were above the calculated performance standard of 0.072 foot.
- Sixteen quarterly well level charts, one for each piezometer pair, indicate when a piezometer pair's hourly gradient falls below the MSS control set point (the programmed gradient set point which initiates pumping activity) and when the extraction wells begin to pump. The charts illustrate the approximate pumping periods and rates. The MSS control set point is established above the calculated performance standard (a preset operating margin). The MSS control set point is set to 0.10 foot, slightly above the calculated performance criterion of 0.072 foot, as discussed in Section 1.3.
- Three monthly summary plots of the groundwater gradient for the Site indicate the average of the hourly gradients for the specified month, for each piezometer pair.

This report is provided as a digital download, and all supporting data for the first quarter of 2022 are presented as follows:

- The data were transferred to Microsoft Excel workbooks from the Industrial System Query Language (INSQL) database, which resides on the MSS.
- Each workbook, except the pump rate comparison, contains separate worksheets for the source data, formatted data, and the data chart, and includes the individual piezometer readings.

An explanation of qualified data for each period is presented below.

1.5 Qualified Data

Select data used to generate the graphical representation of the 30-day running hourly average gradient may be interpolated (all other charts use the MSS data as recorded). Interpolation of the data may occur whenever a short-term problem occurs, such as a temporary loss of communications with ultrasonic sensors or a short-term power failure.

1.5.1 System Performance

In instances when an interruption in data collection occurred, the MSS data logging system was evaluated and repaired so data collection could resume. During these events, if the hourly gradient reached the MSS control set point, pumping started automatically unless system power was lost. The 30-

day running hourly average gradient remained in compliance with the performance standard during the first quarter.

1.5.2 System Events

During this quarter, the system was monitored consistently to maintain system performance and reduce periodic data non-acquisition. Table 1-1 presents descriptions of system events during this quarter.

Table 1-1. System Events

Date	Description
1/1/2022	All extraction well pump counters were reset for the year.
1/6/2022–1/11/2022	Monthly piezometer inspections were performed.
1/7/2022	The ultrasonic level sensor was replaced for Outer Piezometer 2S.
1/21/2022	Monthly vault inspections were performed.
1/24/2022	A leaking discharge pipe was repaired for Well 2S.
1/25/2022	The piston pump seal was replaced on Well 7.
1/25/2022	The level sensor was replaced in Well 2 Deep.
2/4/2022	The flowmeter was inspected for Well 1 Deep.
2/16/2022	Monthly vault inspections were performed.
2/17/2022	A leaking flowmeter was repaired on Well 2S.
2/17/2022	Monthly vault inspections were completed.
2/22/2022	Vault 3 was inspected for upcoming pump installation.
3/7/2022–3/8/2022	Monthly piezometer inspections were performed.
3/9/2022	The Level Transmitter on Storage Tank 202 was replaced.
3/22/2022	Monthly vault inspections were performed.
3/23/2022	A leaking discharge pipe was repaired on Well 2S.

1.6 Below-grade Vault Inspection

The equipment in the 13 below-grade vaults, located generally equidistant from each other along the perimeter of the Site, is inspected every month. Inspections are completed by staff from the site operations and maintenance (O&M) provider, Maryland Environmental Service.

The inspections identified the following items:

- January 2022
 - Multiple sump leads were cleaned to remove calcification.
 - The pump seal was replaced on Well 7.
- February 2022
 - Multiple sump leads were cleaned to remove calcification.
 - A pipe leak was detected in Well 2S and was repaired February 17, 2022.

- March 2022
 - Multiple sump leads were cleaned to remove calcification.
 - A pipe leak was detected in Well 2S and was repaired March 23, 2022.
 - Receptacles in Vault 2 and Vault 12 were not functioning and will be replaced in April 2022.
 - Well 4 Deep has a low flow and will be replaced first during the 2022 piston pump upgrade project.

1.7 HMS Pumping

The HMS has pumped groundwater at a stable rate since the completion of the multimedia cap in the second quarter of 1999, with a steady state condition reached in 2005. With the start of the installation of pile and opening of the synthetic layers during site redevelopment starting in June 2014, the pumping rates have increased. Groundwater pumping volumes by the HMS pumps for January, February, and March were approximately 30,000 gallons, 25,000 gallons, and 40,000 gallons, respectively. An additional estimated 25,000 gallons of water was extracted by the sump pumps.

The rate of groundwater pumping generally increases during the winter months, when tides are lower, and decreases generally in the summer months, when tides are higher. Groundwater pumping volumes from 1999 through the first quarter of 2022 were compared and are presented in two charts in Appendix B. These charts include the total pump volume per month and quarterly pump volume per extraction well.

During site development, construction perforations of the synthetic layers of the cap were required to drive pile. While the synthetic layers were removed, rainfall did account for a significant volume of water generated by the HMS. All synthetic layer penetrations for the Exelon Tower construction were closed on May 27, 2015. In February 2016, excavation began in preparation for the sheet pile wall extension associated with the Point Street Apartments construction project. In March 2016, the geomembrane was opened, and sheet pile driving began; driving was completed on March 28, 2016. HMS components were monitored closely during all below-cap work. On April 11, 2016, all synthetic layer penetrations associated with the Point Street Apartments construction were closed. Construction of the Wills Wharf office building began in May 2018. Between June 18, 2018, and August 24, 2018, sections of the geomembrane over the southeast portion of Area 1 were removed to allow sheet pile reinforcement and pile cap construction. Upon completion of the sheet pile installation and pile cap construction, the multimedia cap over the impacted areas was restored in accordance with the Final Area 1, Phase 1 Detailed Development Plan, Baltimore Works Site, Baltimore, Maryland (December 3, 2013) (DDP). Intrusive work activities associated with the Wills Wharf construction concluded on August 24, 2018. Water continues to be extracted by the shallow groundwater system and the sump system. Water volumes generated by the sump system are being recorded.

The HMS system performed as intended, maintaining the 30-day running average groundwater gradient below the performance standard throughout the first quarter.

In anticipation of construction activities in the second quarter of 2022, manual reduction of inboard water has commenced. This volume is estimated to be 5,000 – 10,000 gallons per week in excess of regular gradient pumping. The intention is to minimize gradient disruption when construction pile supports are driven during Parcel 3 construction. Approximately 800 piles are scheduled to be driven during the Parcel 3 development.

2. Piezometer Verification and Site Surveying

Section V.13 of the Consent Decree defines the requirements for monitoring the performance of the deep hydraulic barrier as follows: "...defendant shall monitor the performance of the deep vertical hydraulic barrier at the points and times and in the manner specified in the approved Groundwater Gradient Monitoring Plan." Section 4 of the *Groundwater Gradient Monitoring Plan* defines the procedures for validating water level readings taken by the HMS as "...obtaining manual measurements, resurveying of the piezometers and calibration and precision testing of the instrumentation." Section 4.7 of the *Groundwater Gradient Monitoring Plan* states that "...verification activities will be reported in the quarterly progress reports." These activities are described in this section.

2.1 Manual Verification of Sensor Readings

The *Groundwater Gradient Monitoring Plan* defines the procedures to obtain manual measurements in the following manner: "Each piezometer will be opened, and an electronic water level instrument will be inserted to record the current level." Section 4.2 of the *Groundwater Gradient Monitoring Plan* states that "replicate analyses will occur on 20 percent of manual water level measurements collected to assess precision." The data quality goal for precision is ± 5 percent, or less than 0.01 foot. Section 4.2 defines accuracy as "the difference between experimental results and true values." The method for determining accuracy is later defined as follows: "...accuracy will be based upon these readings." This statement is interpreted to mean that accuracy will be assessed by reviewing the readings taken during manual verification. The data quality goal for accuracy is ± 10 percent, or less than 0.02 foot.

Manual verification readings began with the installation of the final ultrasonic water level sensor in July 1999. Manual verification readings were taken every 2 weeks until December 2001 to establish a statistically relevant database of manual readings. In December 2001, the frequency of readings was reduced to once per month. Historically, only the data from the first monthly verification readings taken each quarter were included in the quarterly report. In compliance with comments in the U.S. Army Corps of Engineers report to EPA titled, *Honeywell Baltimore Works Surface Water Split Sampling and Horizontal Gradient Manual Verification Audit Report* (August 26, 2005), all manual verification readings taken during the time period covered by this report are included herein.

On January 6 and 11, 2022, groundwater elevation readings from 20 of the piezometers indicated that there was a difference greater than 0.02 foot between the value reported by the automated measurement devices and the manual measurements. The differences between 13 of the manual measurements from the piezometers and the automatic readings reported by the HMS were greater than 0.05 foot, and 7 of the differences were greater than 0.10 foot. The differences between the gradients recorded by the MSS computer from December 7, 2022, to January 11, 2022, and the gradients measured manually on January 6 and 11, 2022, were also reviewed. During this time period, a gradient greater than 0.072 was maintained even when the difference between the automated readings taken by the MSS and the manual readings taken during the manual verification readings were taken into account. These data are presented in Appendix C.

On February 10 and 11, 2022, readings from 19 of the piezometers indicated a difference greater than 0.02 foot between the measurement devices and the manual measurements. The differences between 12 of the manual measurements from the piezometers and the automatic readings reported by the HMS were greater than 0.05 foot, and 7 of the differences were greater than 0.10 foot. The differences between the gradients recorded by the MSS computer from January 6, 2022, to February 11, 2022, and the gradients measured manually on February 11, 2022, were reviewed. During the specified time period, a gradient greater than 0.072 was maintained, even when the differences between the automated readings taken by the MSS and the manual readings taken during the manual verification readings were taken into account. These data are presented in Appendix C.

On March 7 and 8, 2022, readings from 23 piezometers indicated a difference greater than 0.02 foot between the measurement devices and the manual measurements. The differences between 13 of the manual measurements from the piezometers and the automatic readings reported by the HMS were

greater than 0.05 foot, and 7 of the differences were greater than 0.10 foot. The differences between the gradients recorded by the MSS computer from February 11, 2022, to March 8, 2022, and the gradients measured manually on March 9, 2022, were reviewed. During the specified time period, a gradient greater than 0.072 was maintained, even when the differences between the automated readings taken by the MSS and the manual readings taken during the manual verification readings were taken into account. These data are presented in Appendix C.

The precision of the manual readings taken during the first quarter was 100 percent, as defined by the *Groundwater Gradient Monitoring Plan*. The manual verification readings taken during this quarter are included in Appendix C.

2.1.1 Actions Taken to Correct Variance in Reported Values

The following actions were taken to address the variance between the manual water level elevations taken in the field and the readings reported by the HMS:

- All data reported to the MSS were reviewed daily, except for data collected on weekends or holidays, which were reviewed on the following workday.
- The ultrasonic water level meters were calibrated using correction values obtained from manual verification readings taken in January, February, and March 2022. Additional manual verification readings were taken as needed due to noted errors.
- On January 7, 2022, the ultrasonic level sensor for Outer Piezometer 2S was replaced.
- On March 11, 2022, the Outer Piezometer 5 was manually verified and corrected.

2.2 Verification Surveying

Section 4.7 of the *Groundwater Gradient Monitoring Plan* specifies that annual surveying of the groundwater level reference elevation point will occur until three consecutive measurements show no change. Thereafter, the frequency of verification surveying is once every other year for three events, or 6 years. If no change is noted, then verification surveying will occur once every 5 years until there is a change in elevation readings.

Section 5.4 of the *Honeywell Baltimore Works Operation and Maintenance Plan* states that annual measurement of six settlement monitoring points will occur until three consecutive measurements show no change. Section 4.2 of the *Groundwater Gradient Monitoring Plan* defines the precision and accuracy goals of the readings taken during verification surveying as 0.01 and 0.02 foot, respectively.

The 2021 annual site survey was performed in December 2021, by Stantec. The next survey event is anticipated to be completed in the third quarter of 2022..

The accuracy of the surveying method for the 2021 annual survey was reported as plus or minus 0.01 foot, thereby meeting the accuracy requirement. In response to comments on the *Baltimore Inner Harbor HMS Groundwater Gradient Monitoring Quarterly Progress Report First Quarter, 2005*, Honeywell clarified that errors in precision and accuracy can be additive. If the current reading is within 0.03 foot of the reading from the prior year, no change in elevation reading is noted for that location.

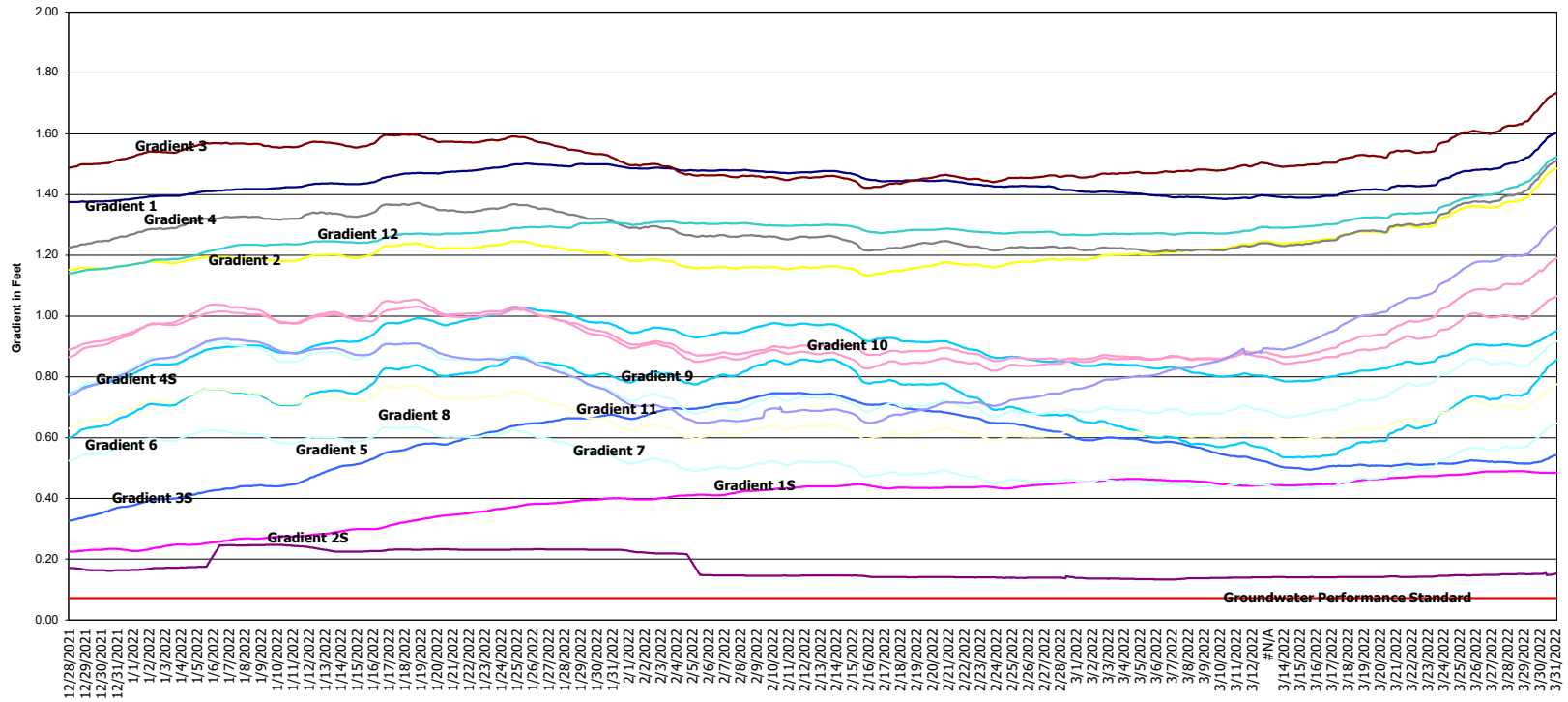
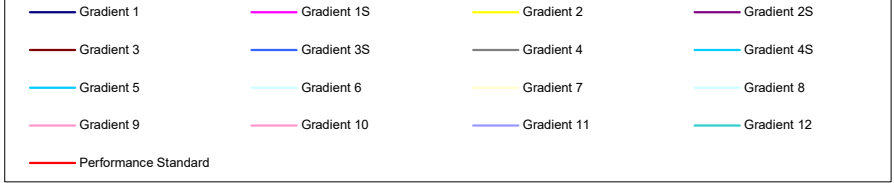
The *Baltimore Inner Harbor HMS Groundwater Gradient Monitoring Quarterly Report No. 92—Third Quarter 2011* included a review of the historical verification surveying data and established the precedent that current survey results be compared to historical maximum and minimum reported values. All of the vertical readings obtained during the 2021 annual verification survey were between the maximum and minimum historical values reported for each location, or within an acceptable deviation.

Appendix A

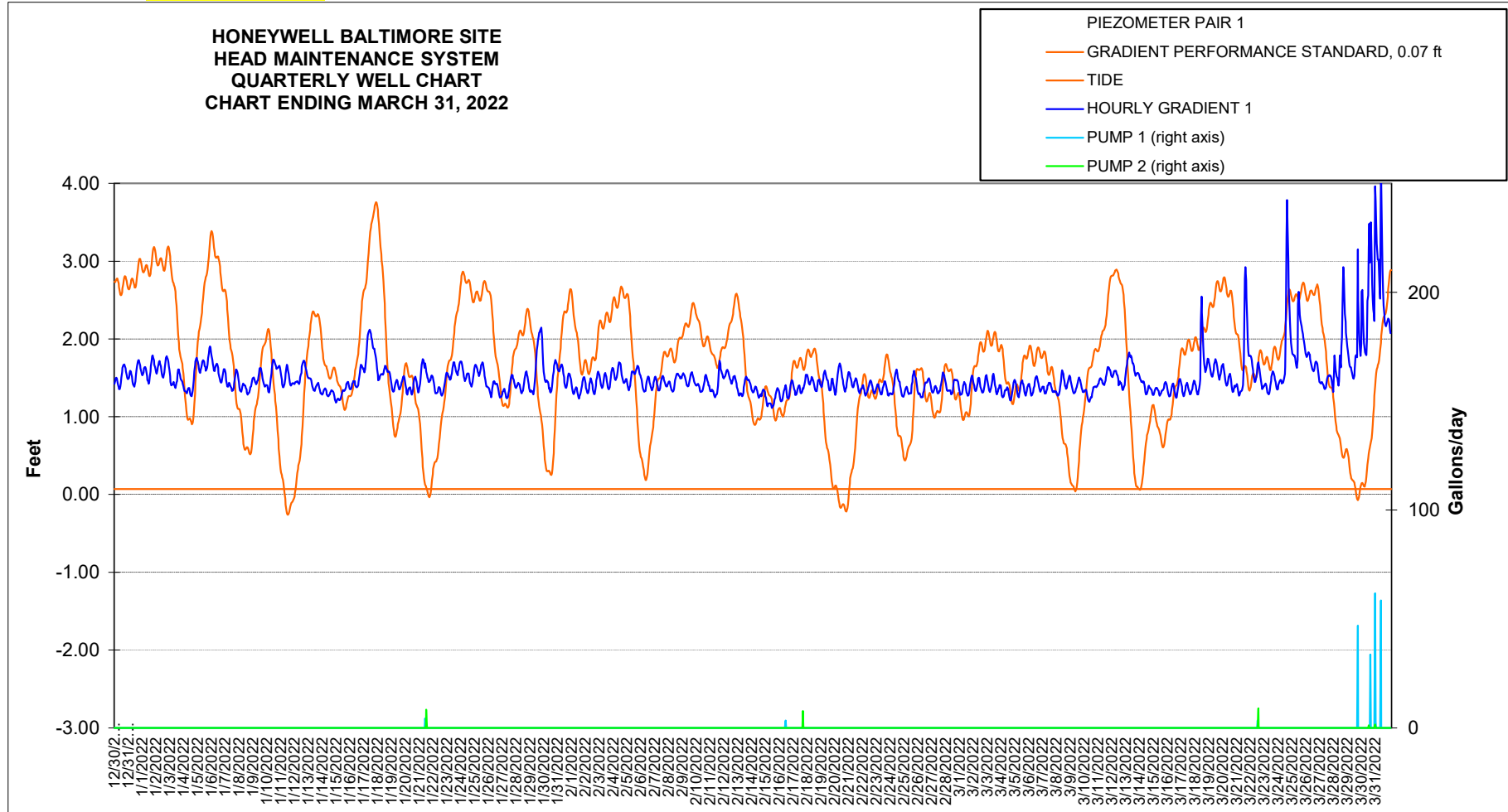
HMS Gradient Charts

- 30-Day Running Hourly Average Gradient Chart (All Wells)
- Quarterly Well Level and Pumping Charts: Wells 1, 1S, 2, 2S, 3, 3S, 4, 4s, and 5 through 12
- Monthly Averages of Hourly HMS Gradients

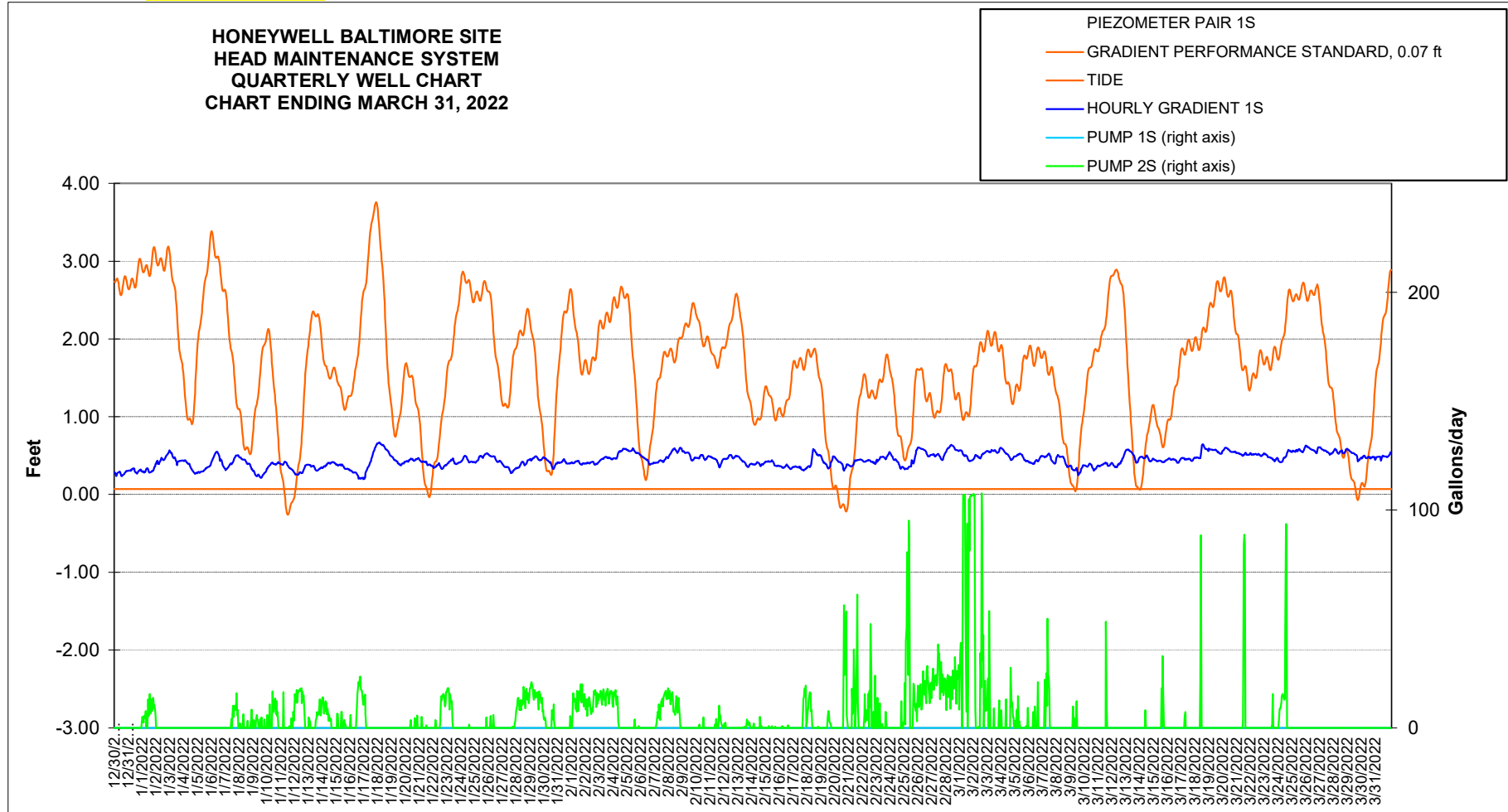
HONEYWELL BALTIMORE SITE HEAD MAINTENANCE SYSTEM 30 DAY RUNNING HOURLY AVERAGE GRADIENT CHART QUARTER ENDING MARCH 31, 2022



Piezometer Pair 1
End 3/31/22 11:59 PM

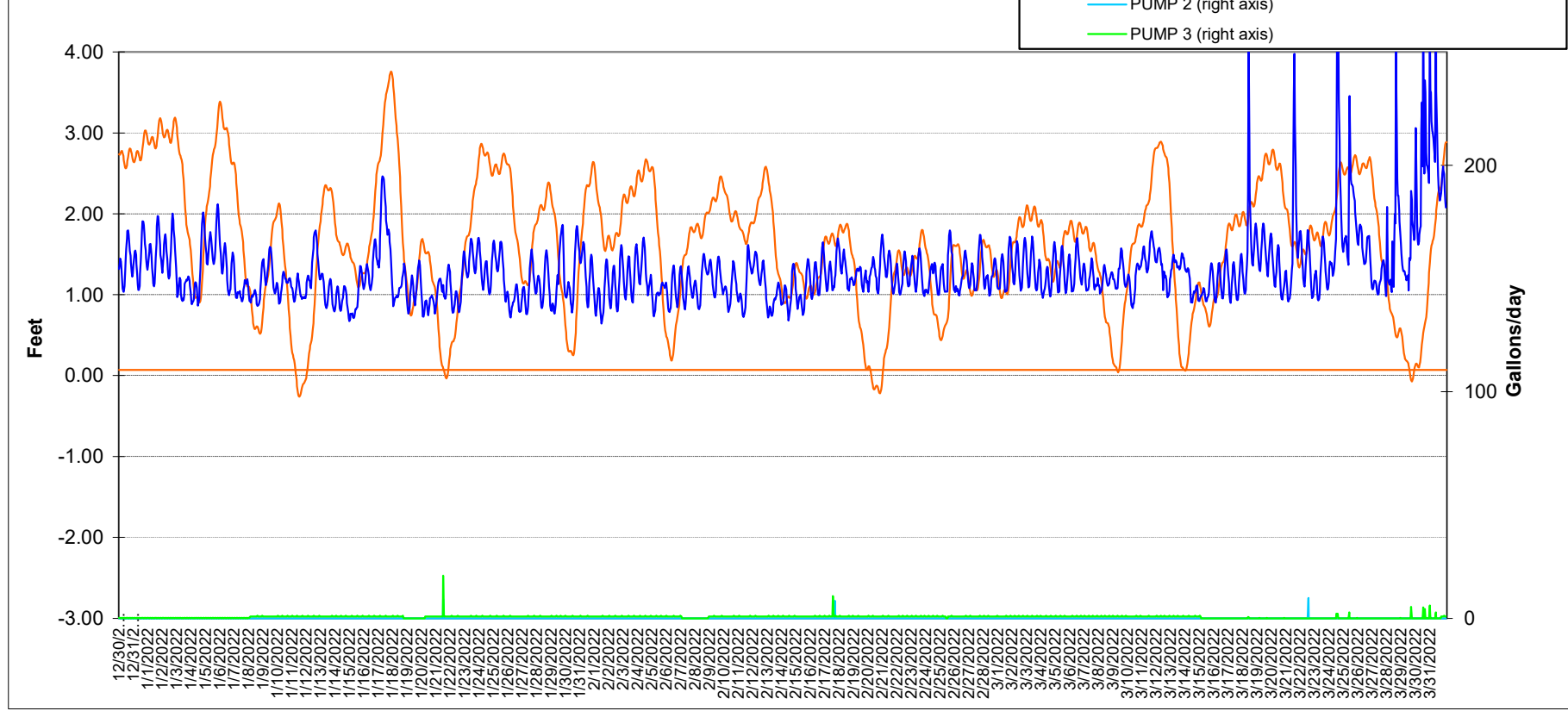


Piezometer Pair 1S
End 3/31/22 11:59 PM



**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

- PIEZOMETER PAIR 2
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 2
- PUMP 2 (right axis)
- PUMP 3 (right axis)



Piezometer Pair

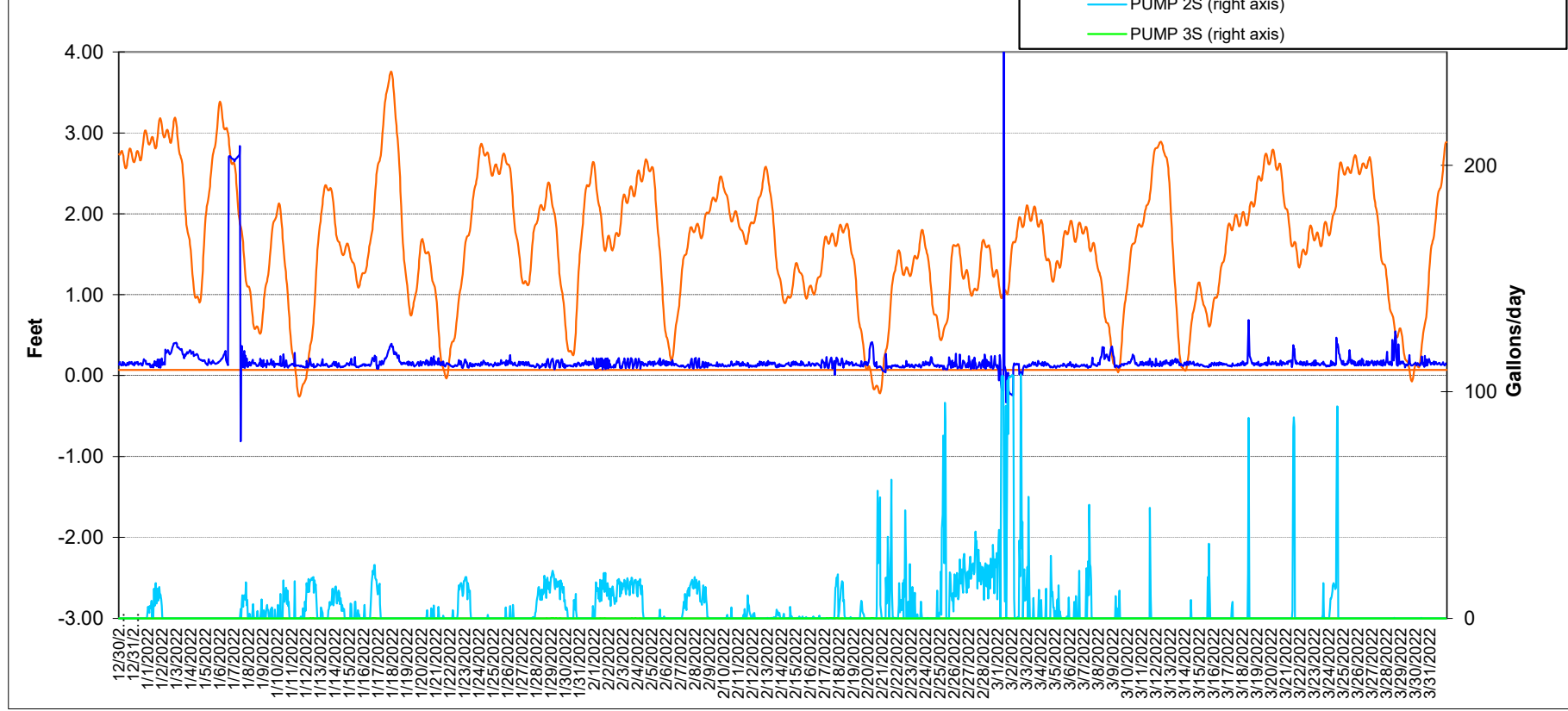
2S

End

3/31/22 11:59 PM

HONEYWELL BALTIMORE SITE HEAD MAINTENANCE SYSTEM QUARTERLY WELL CHART CHART ENDING MARCH 31, 2022

- PIEZOMETER PAIR 2S
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 2S
- PUMP 2S (right axis)
- PUMP 3S (right axis)



Piezometer Pair

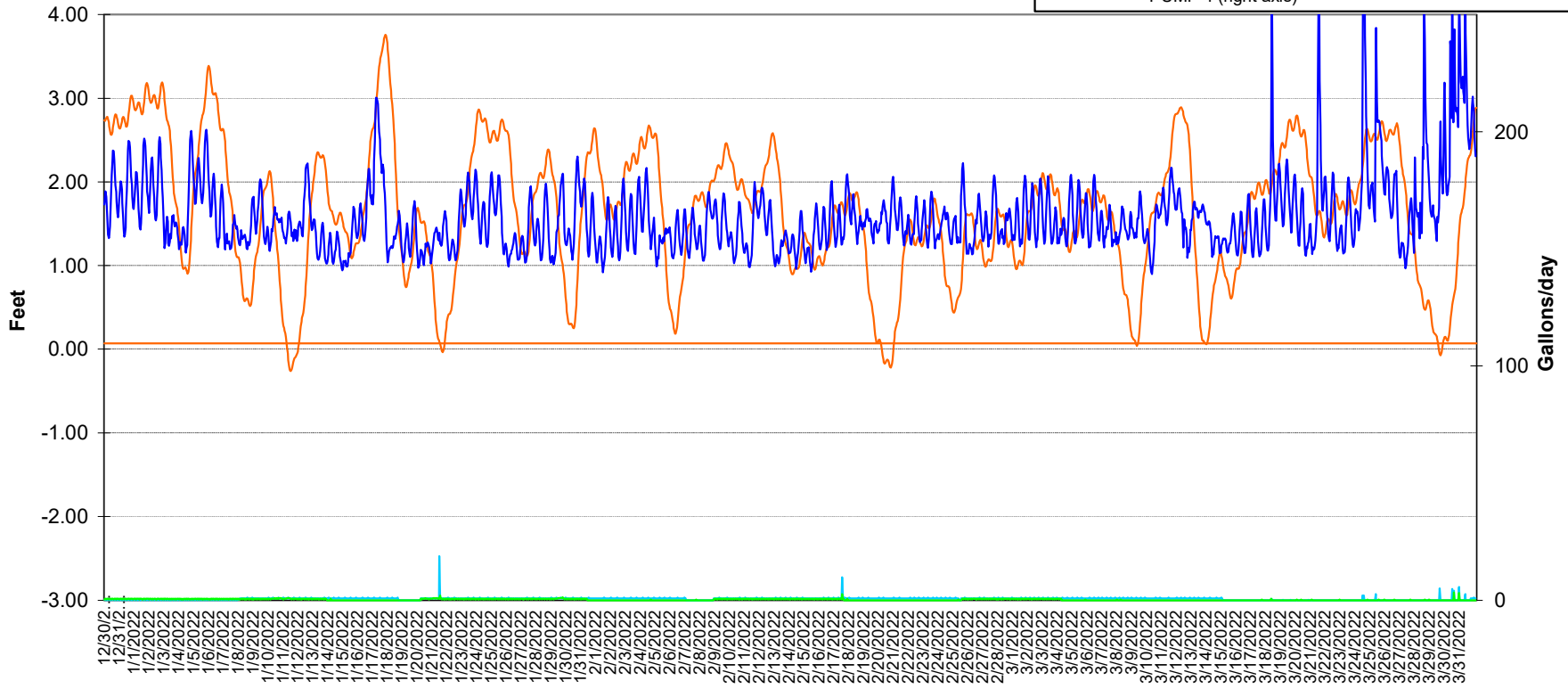
3

End

3/31/22 11:59 PM

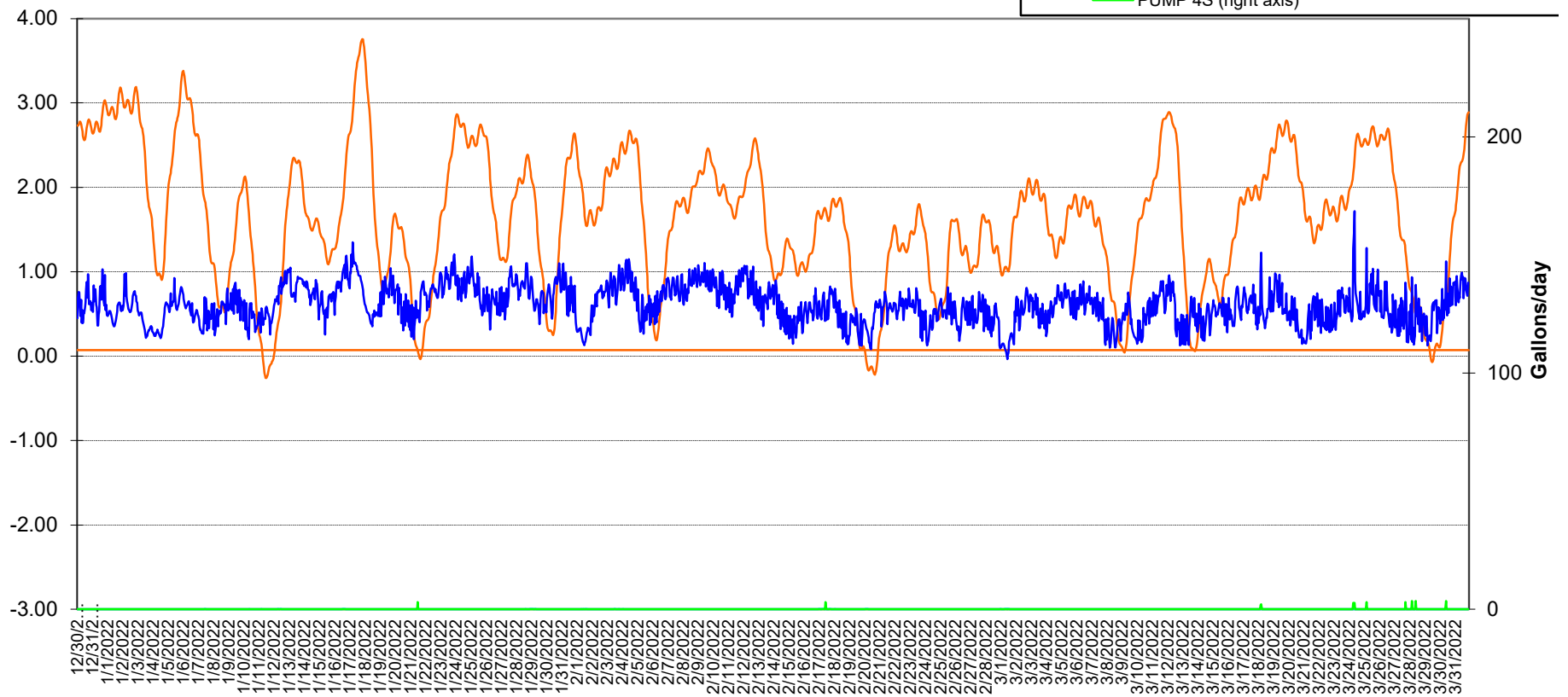
**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

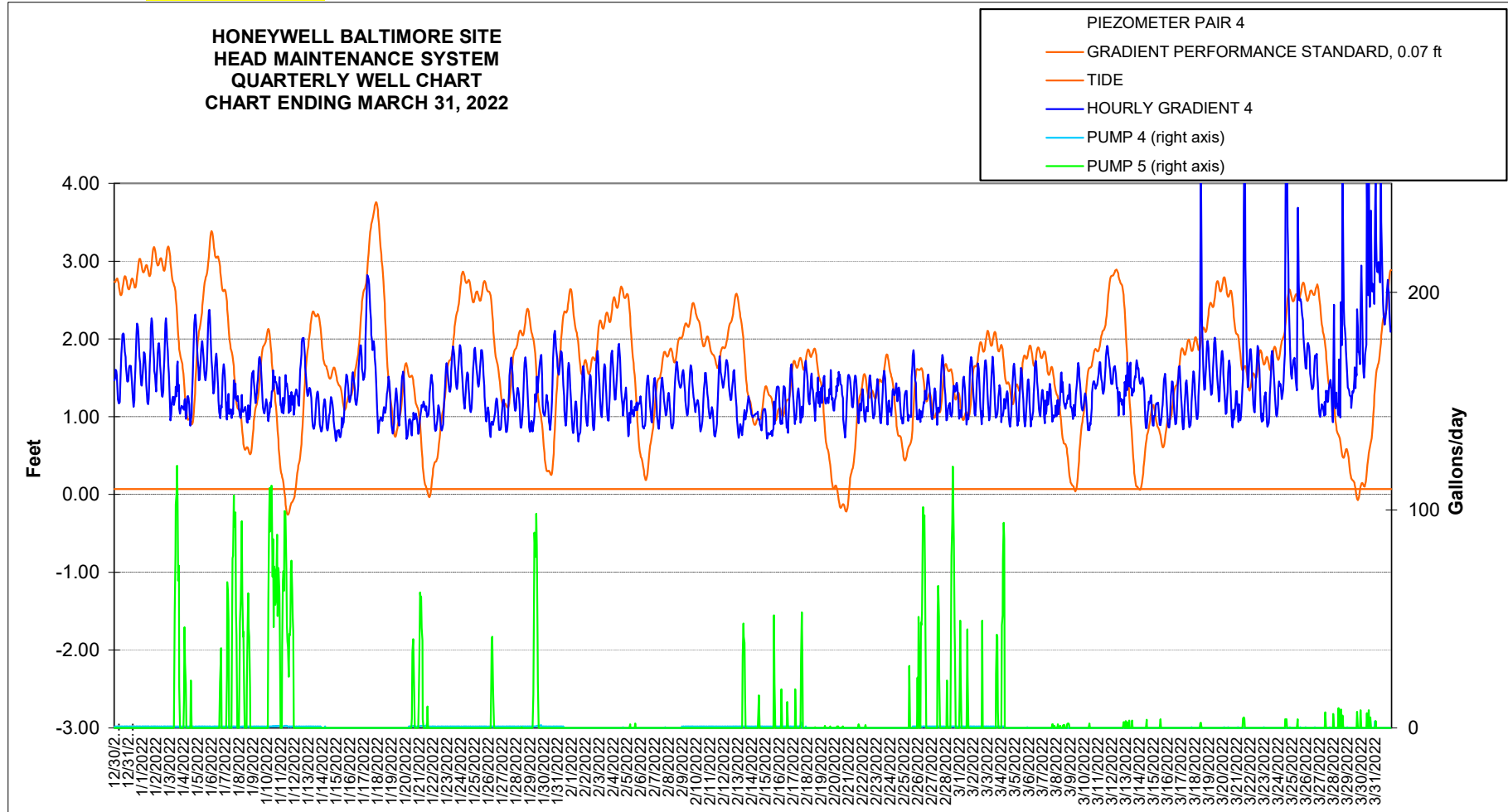
- PIEZOMETER PAIR 3
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 3
- PUMP 3 (right axis)
- PUMP 4 (right axis)



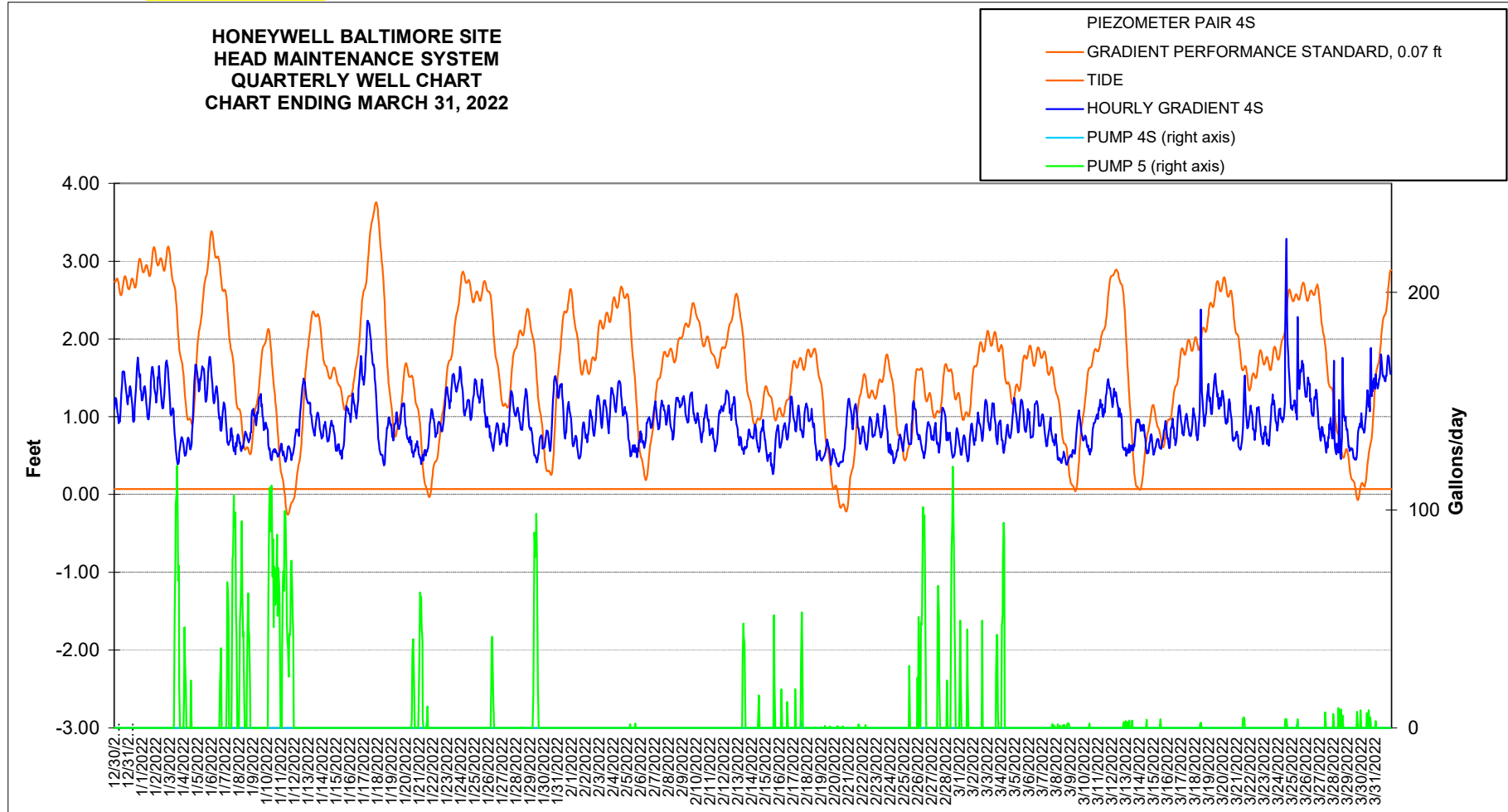
**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

- PIEZOMETER PAIR 3S
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 3S
- PUMP 3S (right axis)
- PUMP 4S (right axis)



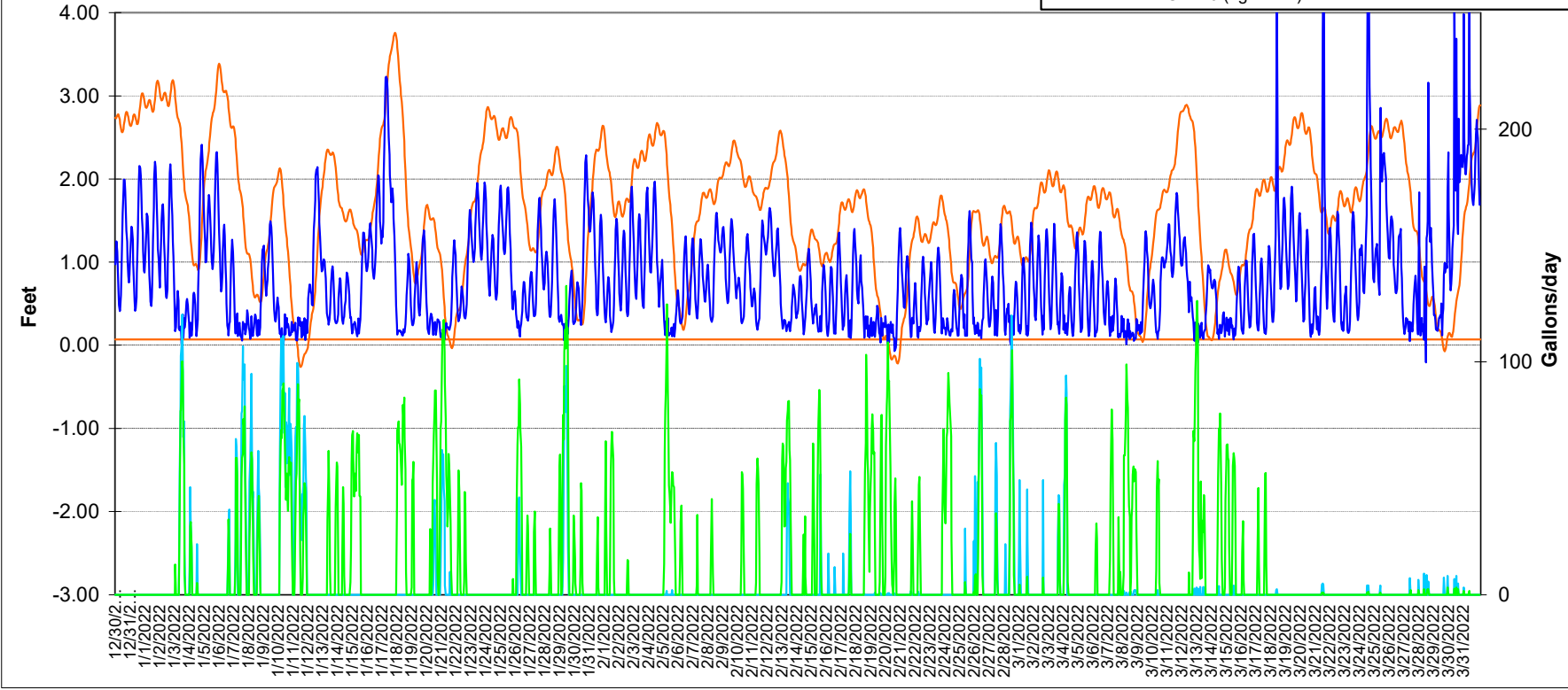


Piezometer Pair 4S
End 3/31/22 11:59 PM



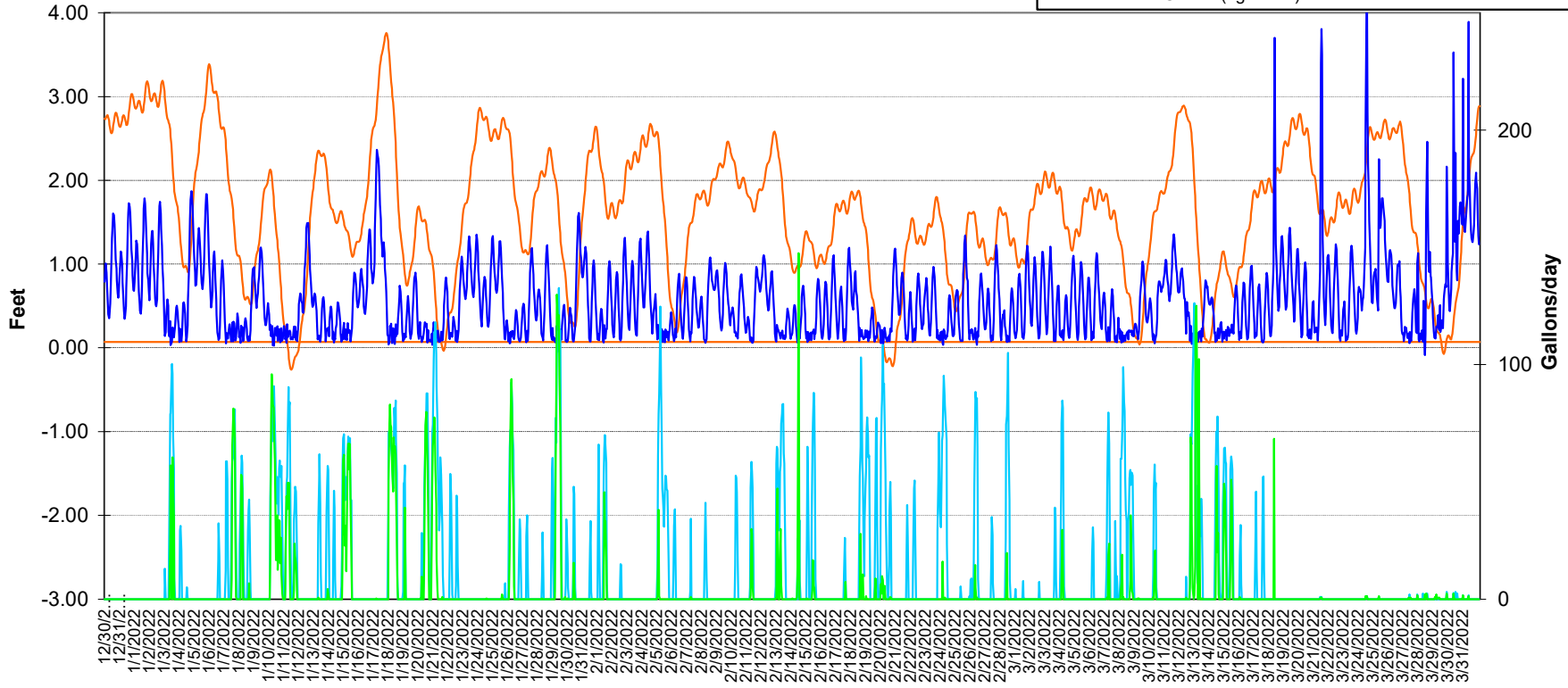
**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

- PIEZOMETER PAIR 5
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 5
- PUMP 5 (right axis)
- PUMP 6 (right axis)

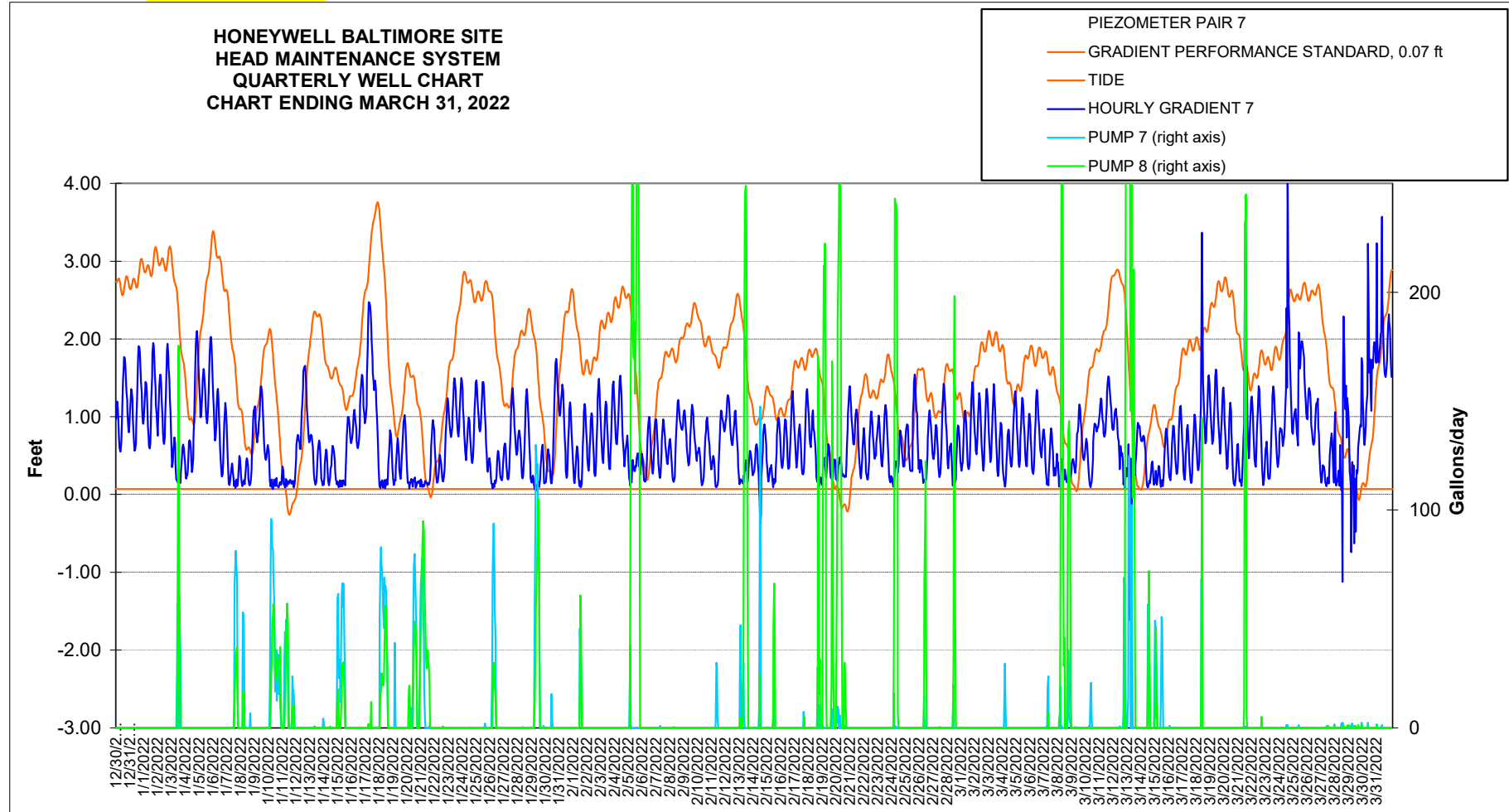


**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

- PIEZOMETER PAIR 6
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 6
- PUMP 6 (right axis)
- PUMP 7 (right axis)

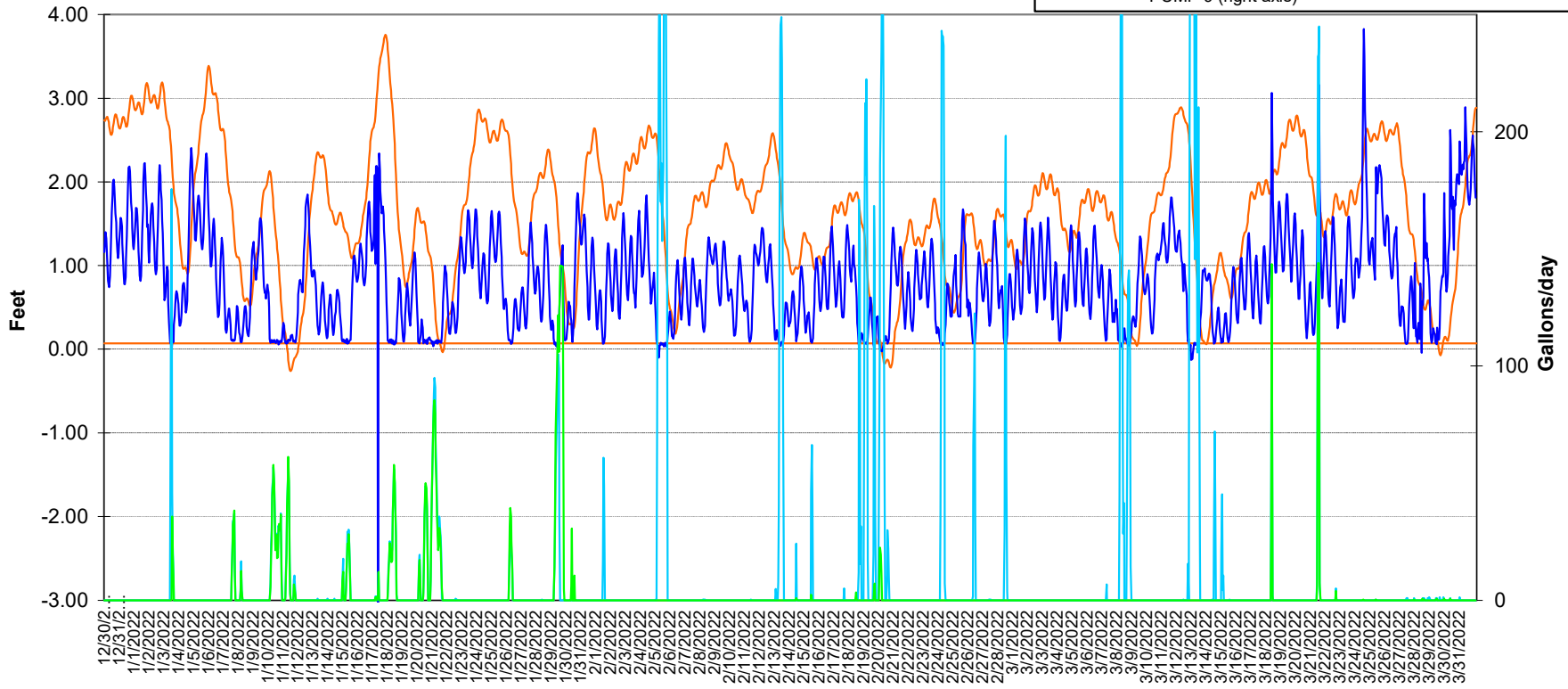


Piezometer Pair 7
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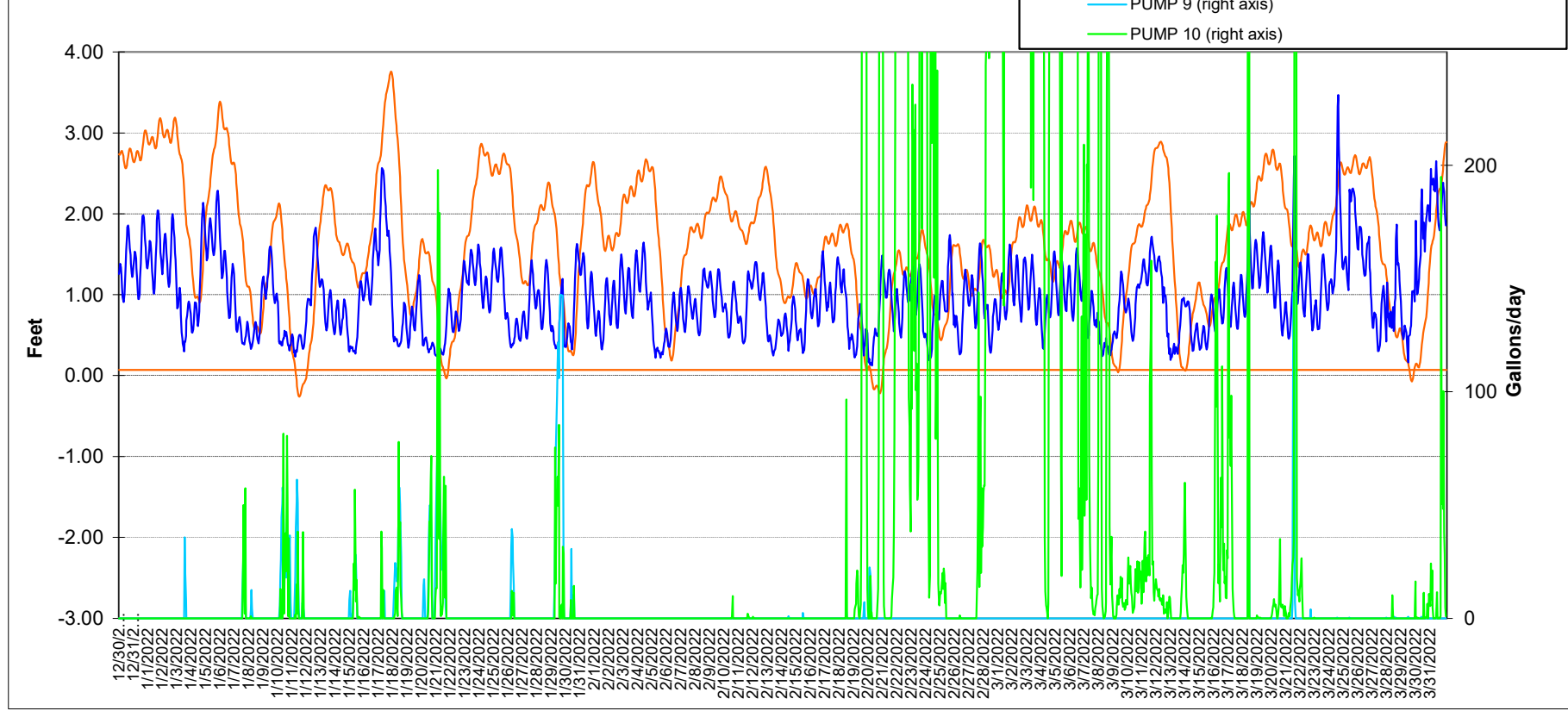
**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

- PIEZOMETER PAIR 8
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 8
- PUMP 8 (right axis)
- PUMP 9 (right axis)

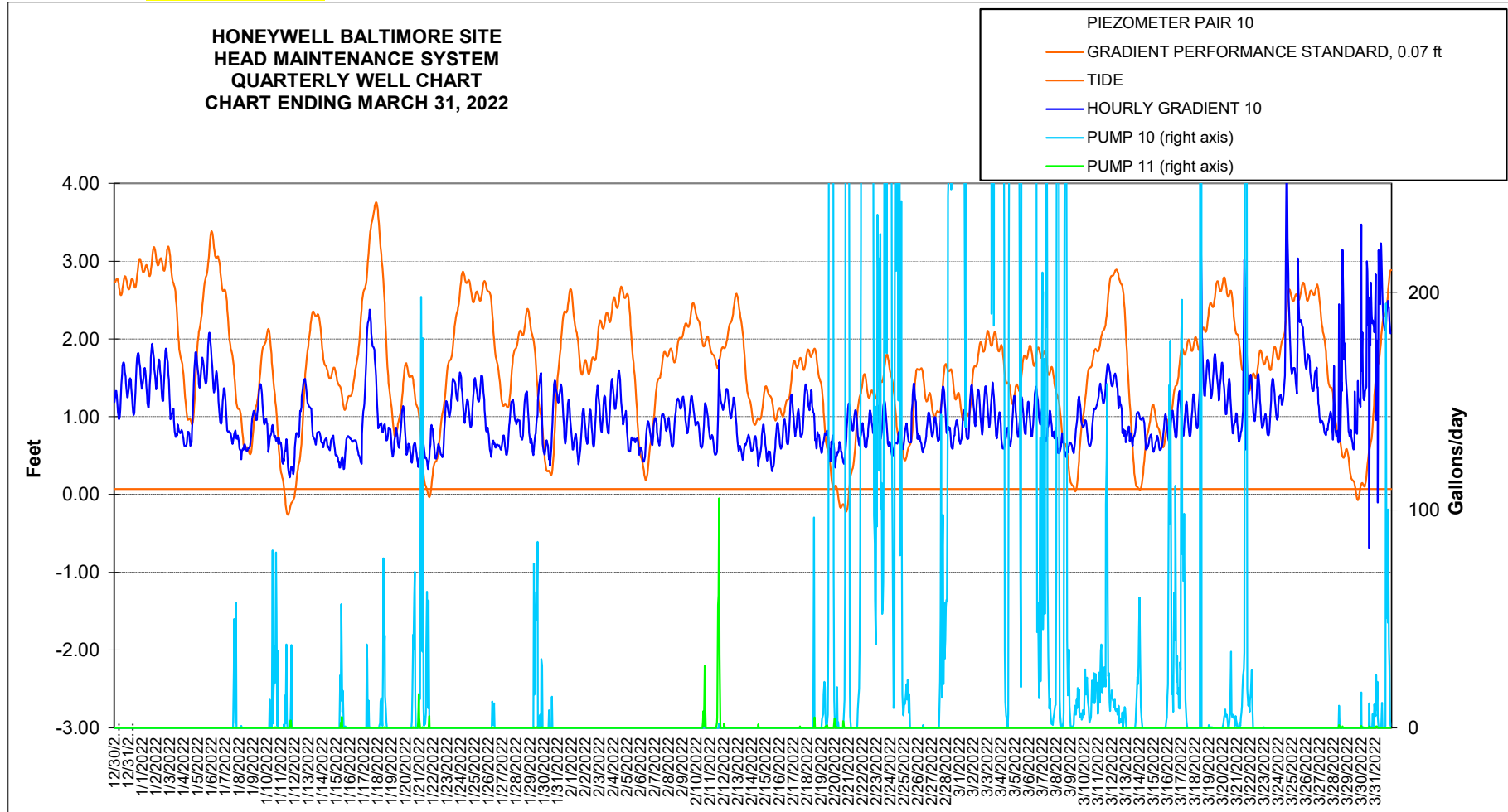


**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

- PIEZOMETER PAIR 9
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 9
- PUMP 9 (right axis)
- PUMP 10 (right axis)

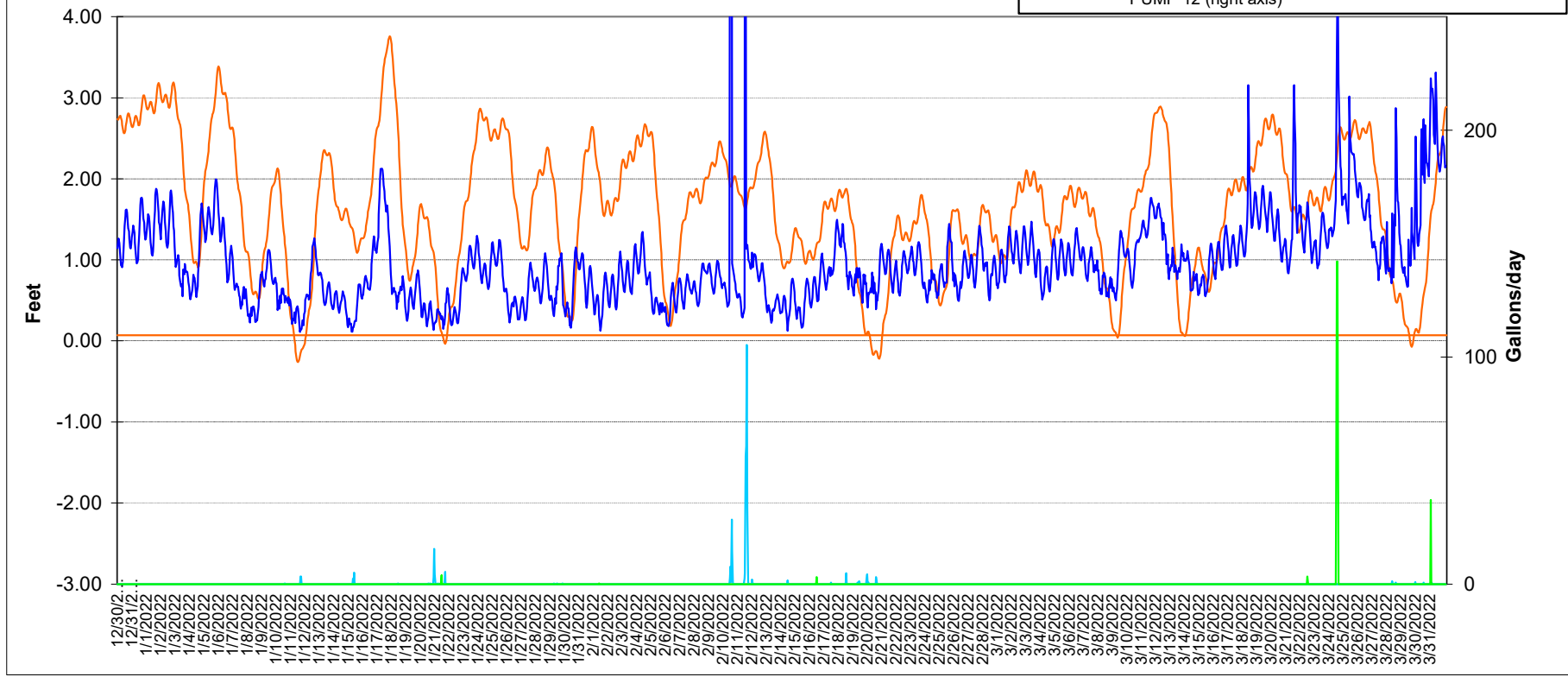


Piezometer Pair 10
End 3/31/22 11:59 PM



**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

- PIEZOMETER PAIR 11
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 11
- PUMP 11 (right axis)
- PUMP 12 (right axis)



Piezometer Pair

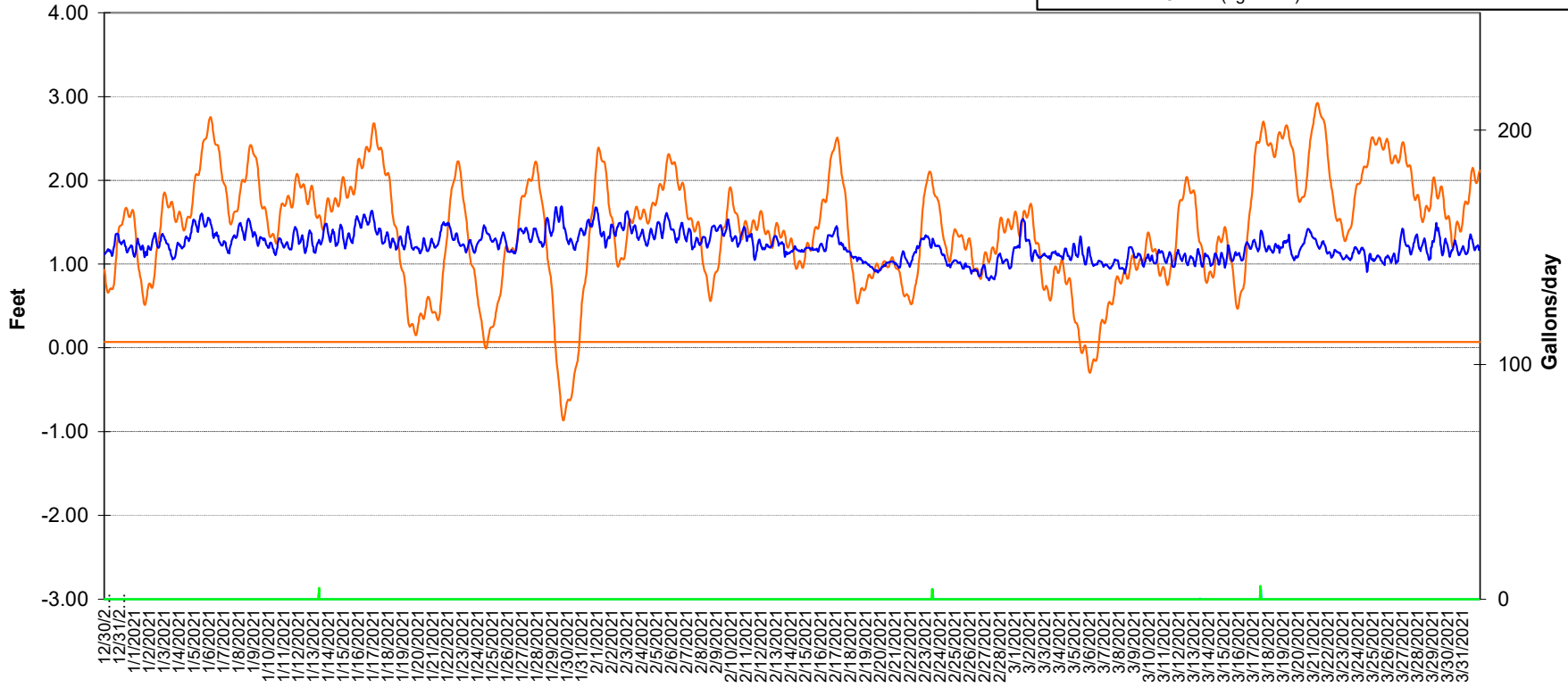
12

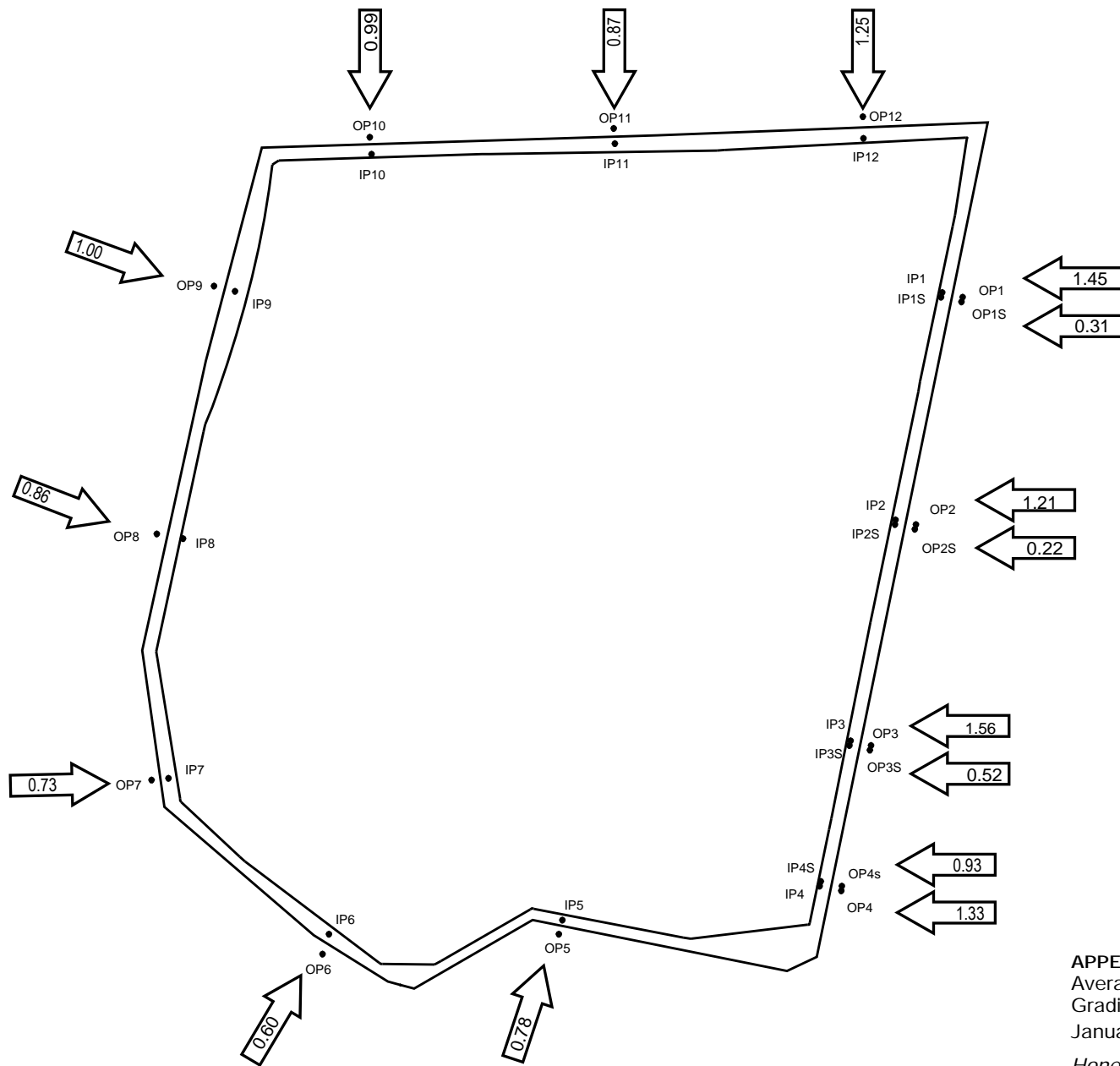
End

3/31/21 11:59 PM

**HONEYWELL BALTIMORE SITE
HEAD MAINTENANCE SYSTEM
QUARTERLY WELL CHART
CHART ENDING MARCH 31, 2022**

- PIEZOMETER PAIR 12
- GRADIENT PERFORMANCE STANDARD, 0.07 ft
- TIDE
- HOURLY GRADIENT 12
- PUMP 12 (right axis)
- PUMP 1 (right axis)

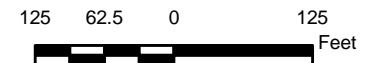




LEGEND

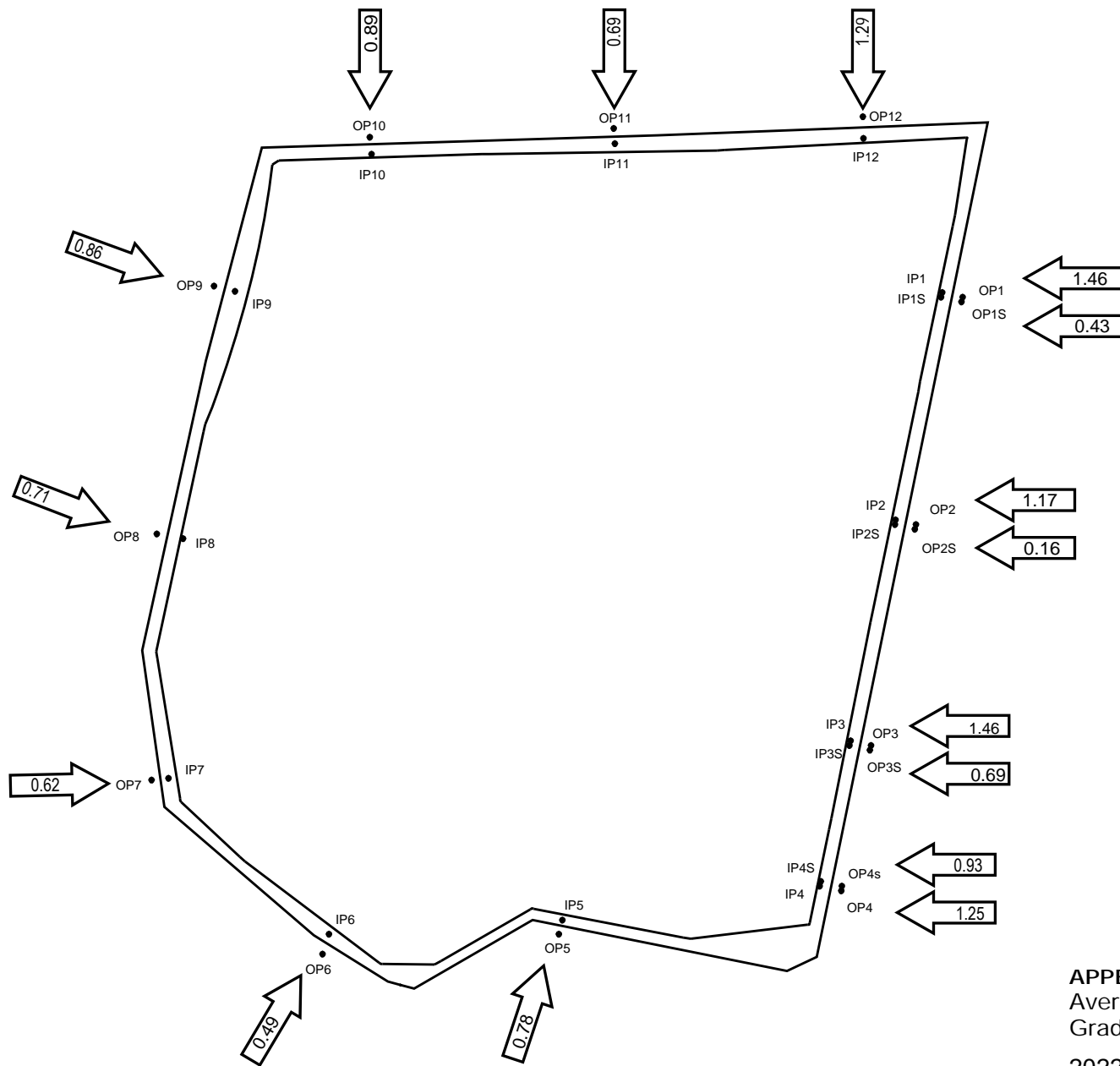
- Inward Gradient (Toward Site)
- Outward Gradient (Away from Site)

- IP - Inboard Piezometer
- OP - Outboard Piezometer
- IP_S - Inboard Piezometer - Shallow
- OP_S - Outboard Piezometer - Shallow



APPENDIX A
Average of Hourly HMS
Gradients for Month of
January 2022

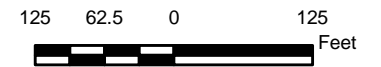
Honeywell Baltimore Site



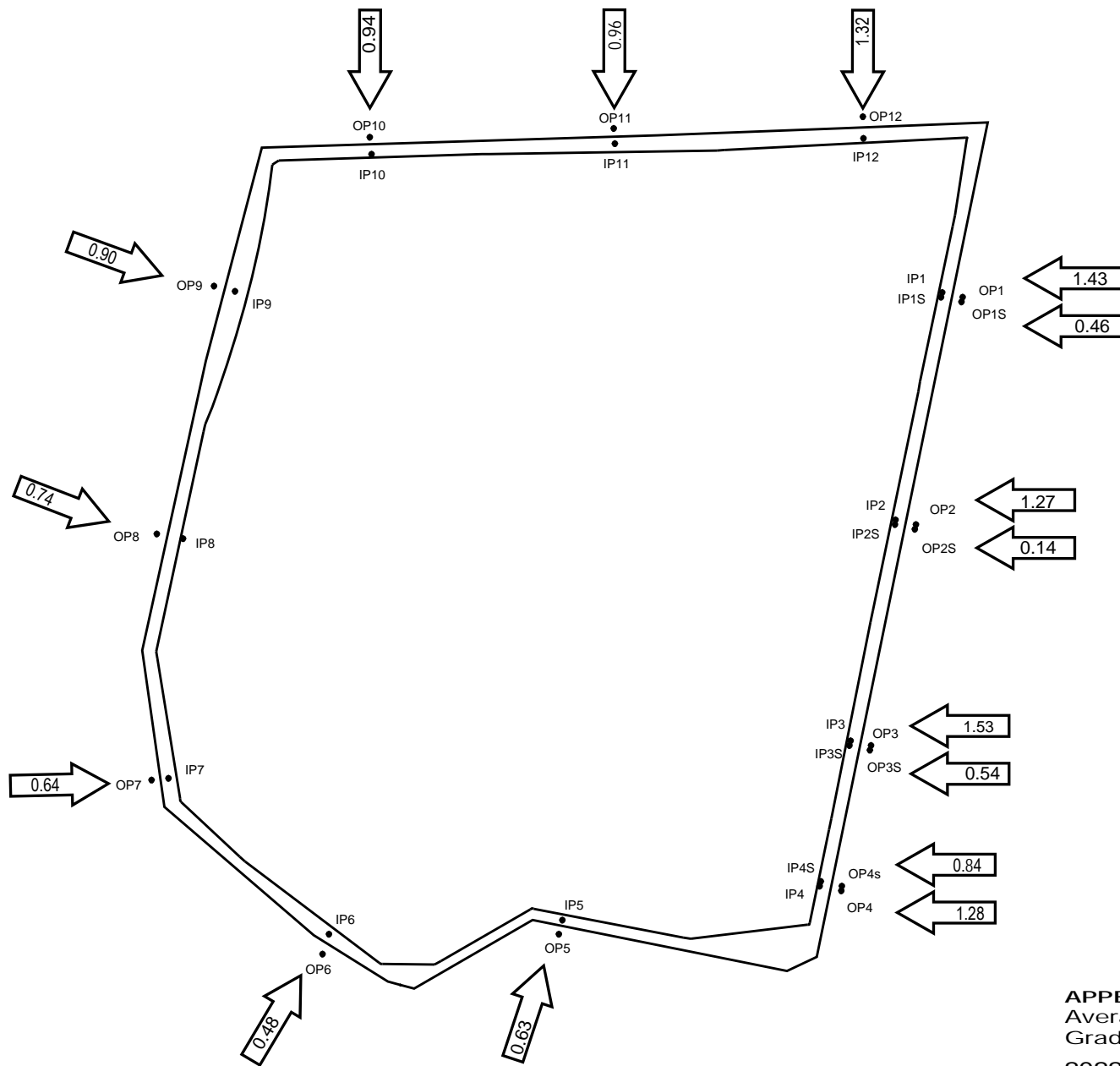
LEGEND

- Inward Gradient (Toward Site)
- Outward Gradient (Away from Site)



- IP - Inboard Piezometer
- OP - Outboard Piezometer
- IP_S - Inboard Piezometer - Shallow
- OP_S - Outboard Piezometer - Shallow



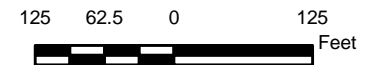
APPENDIX A
 Average of Hourly HMS
 Gradients for Month of February
 2022 Honeywell Baltimore Site



LEGEND

-  Inward Gradient (Toward Site)
-  Outward Gradient (Away from Site)

- IP - Inboard Piezometer
- OP - Outboard Piezometer
- IP_S - Inboard Piezometer - Shallow
- OP_S - Outboard Piezometer - Shallow



APPENDIX A
 Average of Hourly HMS
 Gradients for Month of March
 2022 *Honeywell Baltimore Site*

Appendix B

HMS Pumping Charts

- Monthly Pumping: 1999–2022
- Well Pumping: First Quarter Comparisons: 1999–2022

Appendix C

Manual Verification Reports

- January
- February
- March

		1/6/2022 & 1/11/22					
		ELEVATION, WELL CAP, FEET	FIELD READING, FEET , (RADIO)	FIELD CALCULATED ELEVATION FEET	COMPUTER DISPLAY, FEET (WONDERW)	DELTA: FIELD MINUS COMPUTER, FEET	DELTA: CURRENT ONGOING AVERAGE
IP 1	*	19.88	18.51	1.37	1.37	0.00	-0.02
OP 1	*	20.70	17.62	3.08	3.05	0.03	0.02
IP 1 S	*	20.11	18.66	1.45	1.40	0.05	0.01
OP 1 S	*	20.94	19.02	1.92	1.93	-0.01	0.07
IP 2	*	12.79	11.50	1.29	1.32	-0.03	-0.01
OP 2	*	12.86	9.97	2.89	2.89	-0.01	-0.06
IP 2 S	*	12.85	12.09	0.76	0.66	0.10	0.01
OP 2 S	*	12.92	11.53	1.39	1.38	0.00	0.02
IP 3	*	19.37	19.63	-0.26	-0.45	0.19	0.00
OP 3	*	19.60	18.24	1.36	1.20	0.16	-0.01
IP 3 S	*	19.19	18.49	0.70	0.80	-0.10	0.01
OP 3 S	*	19.39	17.99	1.40	1.32	0.08	0.02
IP 4	*	13.07	13.01	0.06	-0.02	0.08	-0.01
OP 4	*	13.21	11.79	1.42	1.31	0.11	0.00
IP 4 S	*	13.25	12.64	0.61	0.56	0.05	0.01
OP 4 S	*	13.08	11.95	1.13	1.01	0.12	0.00
TIDE		9.65	9.58	0.07	-0.22	0.29	0.06
IP 5	*	8.99	7.55	1.44	1.49	-0.05	0.03
OP 5		7.82	7.31	0.51	0.27	0.24	-0.02
IP 6	*	8.79	7.58	1.21	1.22	-0.01	0.00
OP 6	*	6.98	4.99	1.99	1.99	0.00	0.01
IP 7		8.77	7.60	1.17	1.13	0.04	-0.03
OP 7	*	8.17	6.18	1.99	1.98	0.01	-0.07
IP 8	*	10.33	9.03	1.30	1.30	0.00	0.00
OP 8	*	6.62	4.30	2.32	2.35	-0.03	0.01
IP 9	*	9.57	9.78	-0.21	-0.20	-0.01	0.01
OP 9	*	7.90	7.63	0.27	0.29	-0.02	0.00
IP 10	*	8.46	8.35	0.11	-0.08	0.19	0.01
OP 10	*	6.48	5.72	0.76	0.56	0.20	-0.01
IP 11	*	18.47	17.15	1.32	1.27	0.05	0.00
OP 11	*	17.57	14.91	2.66	2.75	-0.09	0.00
IP 12	*	11.39	9.98	1.41	1.40	0.01	0.02
OP 12	*	11.18	8.29	2.89	2.89	0.00	0.01
DUPLICATE READINGS(TAKE FIVE DUPLICATE READINGS LIST WELL IDENTIFIER AND READING)							
IP 12			9.98				
IP 3 S			18.49				
OP 7			6.18				
IP 5			7.55				
OP 9			7.63				
Cvr'd Slip		11.86	10.80	1.06			
Gas Vent		18.92	8.82	10.10			

Note: Elevations based on Stantec survey 2019

** Denotes readings are taken from the PVC casing rather than the steel outer casing

		2/10/22&2/11/22					
		ELEVATION, WELL CAP, FEET	FIELD READING, FEET , (RADIO)	FIELD CALCULATED ELEVATION FEET	COMPUTER DISPLAY, FEET (WONDERW)	DELTA: FIELD MINUS COMPUTER, FEET	DELTA: CURRENT ONGOING AVERAGE
IP 1	*	19.88	18.70	1.18	1.16	0.02	-0.02
OP 1	*	20.70	18.24	2.46	2.50	-0.04	0.02
IP 1 S	*	20.11	18.71	1.40	1.42	-0.02	0.01
OP 1 S	*	20.94	19.03	1.91	1.92	-0.01	0.07
IP 2	*	12.79	11.64	1.15	1.13	0.02	-0.01
OP 2	*	12.86	10.55	2.31	2.15	0.16	-0.06
IP 2 S	*	12.85	11.85	1.00	1.05	-0.05	0.01
OP 2 S	*	12.92	11.70	1.22	1.22	-0.01	0.02
IP 3	*	19.37	18.50	0.87	1.12	-0.25	0.00
OP 3	*	19.60	17.43	2.17	2.35	-0.18	-0.01
IP 3 S	*	19.19	18.20	0.99	0.85	0.14	0.01
OP 3 S	*	19.39	17.89	1.50	1.55	-0.05	0.02
IP 4	*	13.07	11.67	1.40	1.50	-0.10	-0.01
OP 4	*	13.21	10.90	2.31	2.47	-0.16	0.00
IP 4 S	*	13.25	12.25	1.00	1.04	-0.04	0.01
OP 4 S	*	13.08	11.24	1.84	1.94	-0.10	0.00
TIDE		9.65	7.83	1.82	2.20	-0.38	0.06
IP 5	*	8.99	8.15	0.84	0.75	0.09	0.03
OP 5		7.82	7.05	0.77	0.89	-0.12	-0.02
IP 6	*	8.79	7.66	1.13	1.12	0.01	0.00
OP 6	*	6.98	5.50	1.48	1.50	-0.02	0.01
IP 7		8.77	7.42	1.35	1.38	-0.03	-0.03
OP 7		8.17	6.45	1.72	1.72	0.00	-0.07
IP 8	*	10.33	9.20	1.13	1.13	0.00	0.00
OP 8	*	6.62	4.67	1.95	1.94	0.01	0.01
IP 9	*	9.57	8.99	0.58	0.60	-0.02	0.01
OP 9	*	7.90	6.34	1.56	1.55	0.01	0.00
IP 10	*	8.46	7.86	0.60	0.78	-0.18	0.01
OP 10	*	6.48	4.69	1.79	1.96	-0.17	-0.01
IP 11	*	18.47	17.34	1.13	1.15	-0.02	0.00
OP 11	*	17.57	15.40	2.17	2.08	0.09	0.00
IP 12	*	11.39	10.19	1.20	1.21	-0.01	0.02
OP 12	*	11.18	8.77	2.41	2.42	-0.01	0.01
DUPLICATE READINGS(TAKE FIVE DUPLICATE READINGS LIST WELL IDENTIFIER AND READING)							
OP 3			17.43				
IP 5			8.15				
IP 2			11.64				
IP 3			18.50				
OP 12			8.77				
Cvr'd Slip		11.86	10.80	1.06			
Gas Vent		18.92	8.82	10.10			

Note: Elevations based on Stantec survey 2019

** Denotes readings are taken from the PVC casing rather than the steel outer casing

		3/7/2022 & 3/8/2022					
		ELEVATION, WELL CAP, FEET	FIELD READING, FEET , (RADIO)	FIELD CALCULATED ELEVATION FEET	COMPUTER DISPLAY, FEET (WONDERW)	DELTA: FIELD MINUS COMPUTER, FEET	DELTA: CURRENT ONGOING AVERAGE
IP 1	*	19.88	18.73	1.15	1.20	-0.05	-0.02
OP 1	*	20.70	18.10	2.60	2.65	-0.05	0.02
IP 1 S	*	20.11	18.67	1.44	1.46	-0.02	0.01
OP 1 S	*	20.94	18.99	1.95	1.96	-0.01	0.07
IP 2	*	12.79	11.64	1.15	1.14	0.01	-0.01
OP 2	*	12.86	10.37	2.49	2.55	-0.06	-0.06
IP 2 S	*	12.85	11.89	0.96	0.96	0.00	0.01
OP 2 S	*	12.92	11.70	1.22	1.17	0.04	0.02
IP 3	*	19.37	19.07	0.30	0.21	0.09	0.00
OP 3	*	19.60	17.92	1.68	1.68	0.00	-0.01
IP 3 S	*	19.20	18.28	0.92	0.87	0.05	0.01
OP 3 S	*	19.39	18.25	1.14	1.03	0.11	0.02
IP 4	*	13.07	12.55	0.52	0.38	0.14	-0.01
OP 4	*	13.21	11.44	1.77	1.63	0.14	0.00
IP 4 S	*	13.25	12.52	0.73	0.69	0.04	0.01
OP 4 S	*	13.08	11.79	1.29	1.19	0.10	0.00
TIDE		9.65	9.33	0.32	0.06	0.26	0.06
IP 5	*	8.99	8.35	0.64	0.60	0.04	0.03
OP 5		7.82	6.94	0.88	0.76	0.12	-0.02
IP 6	*	8.79	8.12	0.67	0.59	0.08	0.00
OP 6	*	6.98	6.16	0.82	0.78	0.04	0.01
IP 7		8.77	8.18	0.59	0.47	0.12	-0.03
OP 7		8.17	7.45	0.72	0.72	0.00	-0.07
IP 8	*	10.33	9.60	0.73	0.70	0.03	0.00
OP 8	*	6.62	5.81	0.81	0.80	0.01	0.01
IP 9	*	9.57	9.34	0.23	0.19	0.04	0.01
OP 9	*	7.90	7.34	0.56	0.54	0.02	0.00
IP 10	*	8.46	8.06	0.40	0.30	0.10	0.01
OP 10	*	6.49	5.49	1.00	0.86	0.14	-0.01
IP 11	*	18.47	17.35	1.12	1.15	-0.03	0.00
OP 11	*	17.58	16.37	1.21	1.11	0.10	0.00
IP 12	*	11.39	10.18	1.21	1.20	0.01	0.02
OP 12	*	11.18	8.61	2.57	2.56	0.01	0.01
DUPLICATE READINGS(TAKE FIVE DUPLICATE READINGS LIST WELL IDENTIFIER AND READING)							
IP 10			8.06				
OP 6			6.16				
IP 4			12.55				
OP 7			7.45				
OP 8			5.81				
Cvr'd Slip		11.86	10.80	1.06			
Gas Vent		18.92	8.81	10.11			

Note: Elevations based on Stantec survey 2021

** Denotes readings are taken from the PVC casing rather than the steel outer casing

Appendix C
Manual Verification Gradient Review
First Quarter 2022

January	Gradient 1	Gradient 1S	Gradient 2	Gradient 2S	Gradient 3	Gradient 3S	Gradient 4	Gradient 4S	Gradient 5	Gradient 6	Gradient 7	Gradient 8	Gradient 9	Gradient 10	Gradient 11	Gradient 12
Average	1.45	0.31	1.21	0.22	1.56	0.52	1.33	0.93	0.78	0.60	0.73	0.86	1.00	0.99	0.87	1.25
Max	1.50	0.40	1.25	0.25	1.60	0.68	1.37	1.03	0.87	0.64	0.77	0.92	1.05	1.03	0.93	1.31
Min	1.38	0.23	1.16	0.16	1.51	0.37	1.26	0.79	0.66	0.54	0.65	0.75	0.92	0.93	0.74	1.16
Delta Manual Verification	0.03	-0.06	0.03	-0.09	-0.03	0.18	0.03	0.08	-0.05	0.01	-0.02	-0.03	-0.01	0.01	-0.14	-0.01
Value plus 0.072	0.10	0.13	0.10	0.17	0.10	0.25	0.10	0.15	0.12	0.08	0.10	0.10	0.08	0.08	0.21	0.08
Gradient Greater Than Variance	1.28	0.09	1.07	0.00	1.41	0.12	1.15	0.64	0.54	0.45	0.55	0.65	0.84	0.85	0.53	1.08
February																
Average	1.46	0.43	1.17	0.16	1.46	0.69	1.25	0.93	0.78	0.49	0.62	0.71	0.86	0.89	0.69	1.29
Max	1.50	0.45	1.20	0.23	1.52	0.75	1.31	0.98	0.86	0.54	0.65	0.75	0.92	0.93	0.75	1.31
Min	1.41	0.40	1.13	0.14	1.42	0.59	1.22	0.84	0.65	0.45	0.59	0.67	0.82	0.85	0.65	1.27
Delta Manual Verification	-0.01	0.06	-0.11	-0.02	-0.02	0.11	0.06	0.15	-0.05	-0.03	0.04	0.01	0.03	0.01	0.11	0.00
Value plus 0.072	0.09	0.13	0.19	0.09	0.09	0.18	0.13	0.23	0.12	0.10	0.11	0.08	0.10	0.08	0.18	0.07
Gradient Greater Than Variance	1.32	0.27	0.95	0.05	1.33	0.41	1.08	0.61	0.53	0.35	0.48	0.58	0.72	0.77	0.47	1.19
March																
Average	1.43	0.46	1.27	0.14	1.53	0.54	1.28	0.84	0.63	0.48	0.64	0.74	0.90	0.94	0.96	1.32
Max	1.60	0.49	1.49	0.15	1.74	0.62	1.51	0.95	0.86	0.65	0.78	0.92	1.07	1.19	1.30	1.52
Min	1.39	0.44	1.18	0.13	1.46	0.49	1.21	0.79	0.53	0.43	0.59	0.67	0.84	0.86	0.75	1.27
Delta Manual Verification	0.00	0.01	-0.07	0.05	-0.09	0.06	0.00	0.06	0.08	-0.03	0.04	0.01	0.03	0.01	0.11	0.00
Value plus 0.072	0.08	0.08	0.15	0.12	0.16	0.13	0.07	0.14	0.15	0.10	0.11	0.08	0.10	0.08	0.18	0.07
Gradient Greater Than Variance	1.31	0.36	1.04	0.02	1.29	0.36	1.14	0.65	0.38	0.33	0.48	0.58	0.74	0.77	0.56	1.19