Baltimore Inner Harbor Environmental Media Monitoring Plan Quarterly Report No. 96 Third Quarter 2013

Prepared for

Honeywell International Inc.

October 2013

CH2MHILL®

15010 Conference Center Drive Suite 200
Chantilly, VA 20151

SITE: R30905
SUBJECT: 4.16.1

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Acronyms and Abbreviations

EMMP	Environmental Media Monitoring Plan
EPA	U.S. Environmental Protection Agency
MDE	Maryland Department of the Environment
MES	Maryland Environmental Services
ppb	parts per billion
Site	Honeywell Baltimore Inner Harbor Site
SSMP	Surface Soil Monitoring Plan

SECTION 1

Introduction

1.1 Purpose

This document represents the partial fulfillment 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) on September 29, 1989. Specifically, this document satisfies Section V.3 of the Consent Decree, Exhibit 4 (RCRA Correction Action Plan Task XV.A.9). This section requires that a progress report be submitted every calendar quarter during the life of the Consent Decree. This report provides the data required by the Environmental Media Monitoring Program, as set forth in the Environmental Media Monitoring Plan (EMMP) and the Surface Soil Monitoring Plan (SSMP), as submitted to MDE and EPA.

This report summarizes the data collected during the third quarter of 2013.

1.2 Scope of Work

The scope of work outlined in the EMMP 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 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 SMMP 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 the associated quarterly report.

1.3 Sampling Conducted this Quarter

Surface water samples were collected during the third quarter 2013, as well as during the second quarter of 2013. Appendix A provides data associated with sampling during the second quarter; results for the third quarter will be provided in the fourth quarter 2013 report. The surface water sample results for the second quarter 2013 were validated by Critigen, and the validation report for this event is provided in Appendix B. All data quality objectives were met for surface water samples collected during the second quarter of 2013.

1.4 Progress Report Organization

Progress reports prepared in accordance with the Consent Decree are organized by medium. The media section included in this document provides a summary of methodology, the current quarter's sampling plan, and a summary of results. Also provided in the medium section are 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. Raw data and chain-of-custody records are provided in Appendix A.

This progress report describes the surface water monitoring performed during the third quarter of 2013.

SECTION 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 second and third quarters of 2013 was performed by Maryland Environmental Services (MES) at all 20 sampling locations on May 6, 2013, and on August 1, 2013, respectively. The surface water sampling locations are shown in Figure 2-1 (at the end of this section). Results for the surface water samples collected on May 6, 2013, are included in this report. Results of the analysis of the surface water samples collected on August 1, 2013, will be reported in the fourth quarter 2013 report (January 10, 2014). 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 May 2013, 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 be 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

- 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 in surface water reported for the third quarter 2013 (second quarter 2013 results) are similar to the analytical values reported in second quarter 2013 (first quarter 2013 results). 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 <10 ppb**	**Method Detection Limit† Actual Concentration <1.1 ppb**
May	100%	100%	100%	70%

† The Analytical Detection Limit as determined by the Laboratory QC is 10 ppb

Table 2-2
Surface Water Sampling Data per Location
May 2013

Station Number	Detection Limit	Total Dissolved Chromium (mg/L) 5/6/2013
3B	0.01	0.005 U
3T	0.01	0.005 U
4B	0.01	0.005 U *
4T	0.01	0.005 U
5B	0.01	0.005 U
5T	0.01	0.001 J
6B	0.01	0.005 U
6T	0.01	0.005 U
7B	0.01	0.005 U
7T	0.01	0.005 U
8B	0.01	0.005 U
8T	0.01	0.005 U
9B	0.01	0.005 U
9T	0.01	0.001 J
10B	0.01	0.005 U
10T	0.01	0.005 U *
11B	0.01	0.002 J
11T	0.01	0.005 U
12B	0.01	0.005 U
12T	0.01	0.005 U
13B	0.01	0.001 J
13T	0.01	0.005 U
14B	0.01	0.005 U
14T	0.01	0.005 U
15B	0.01	0.005 U *
15T	0.01	0.005 U
16B	0.01	0.002 J
16M	0.01	0.005 U
16T	0.01	0.001 J
17B	0.01	0.002 J
17T	0.01	0.005 U
18B	0.01	0.001 J
18M	0.01	0.001 J
18T	0.01	0.005 U
19B	0.01	0.001 J
19T	0.01	0.005 U *
20B	0.01	0.002 J
20T	0.01	0.001 J
Cent B	0.01	0.005 U
Cent T	0.01	0.001 J
LADY B	0.01	0.001 J
LADY T	0.01	0.001 J

NOTES
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 and its Field Duplicate
J - Results was reported below the Report Dectection Limit
U - Result below the Method Detection Limit

Table 2-3
Surface Water Sampling Data per Sampling Station
May 2013

	Total Dissolved Chromium (mg/L)
Station Number	5/6/2013 Station Average of All Depths
3	0.005
4	0.004
5	0.005
6	0.005
7	0.005
8	0.005
9	0.003
10	0.005
11	0.003
12	0.005
13	0.003
14	0.005
15	0.005
16	0.003
17	0.003
18	0.003
19	0.003
20	< 0.001
Cent	0.003
Lady	< 0.001

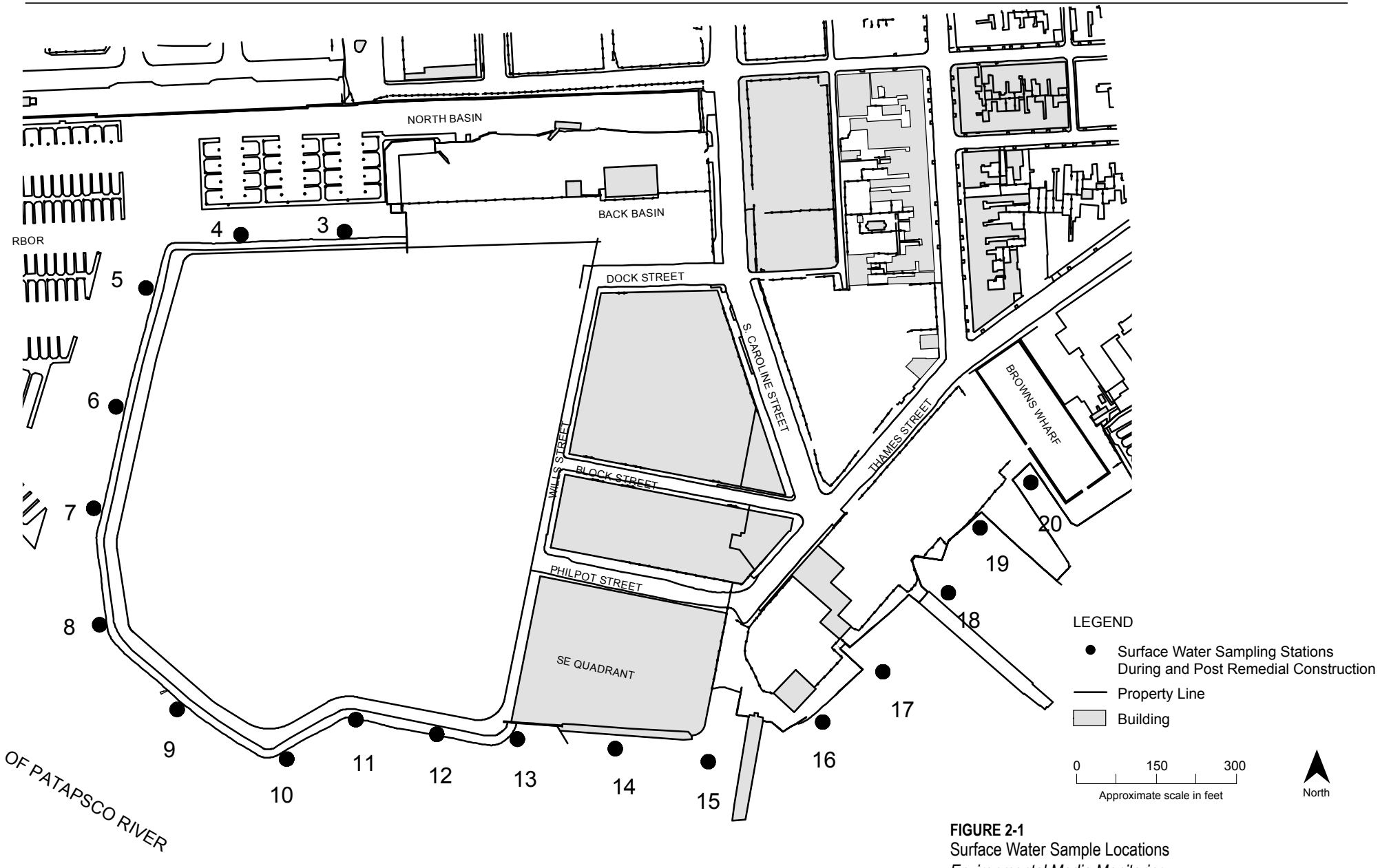

FIGURE 2-1
Surface Water Sample Locations
Environmental Media Monitoring

CH2MHILL

Appendix A
Surface Water Sampling Program Data

Appendix A-1
Raw Laboratory Data—May 2013

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

May 12, 2013

Project: Baltimore Inner Harbor, MD

Submittal Date: 05/07/2013
Group Number: 1388105
SDG: BHB06
PO Number: 4500013806
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LLI) #
30905-SW3T-050613 BKG Grab Water	7047519
30905-SW3T-050613 MS Grab Water	7047520
30905-SW3T-050613 MSD Grab Water	7047521
30905-SW3T-050613 DUP Grab Water	7047522
30905-SW3B-050613 Grab Water	7047523
30905-SW4T-050613 Grab Water	7047524
30905-SW4B-050613 Grab Water	7047525
30905-SW5T-050613 Grab Water	7047526
30905-SW5B-050613 Grab Water	7047527
30905-SW6T-050613 Grab Water	7047528
30905-SW6B-050613 Grab Water	7047529
30905-SW7T-050613 Grab Water	7047530
30905-SW7B-050613 Grab Water	7047531
30905-SW8T-050613 BKG Grab Water	7047532
30905-SW8T-050613 MS Grab Water	7047533
30905-SW8T-050613 MSD Grab Water	7047534
30905-SW8T-050613 DUP Grab Water	7047535
30905-SW8B-050613 Grab Water	7047536
30905-SW9T-050613 Grab Water	7047537
30905-SW9B-050613 Grab Water	7047538
30905-SW10T-050613 Grab Water	7047539
30905-SW10B-050613 Grab Water	7047540

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Honeywell International Attn: Ken Biles

ELECTRONIC COPY TO	Critigen	Attn: Amy Klopper
ELECTRONIC COPY TO	CH2M Hill, Inc.	Attn: Robert Steele
ELECTRONIC COPY TO	Honeywell	Attn: Katherine Beach
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Rakesh Singh
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Peeyush Gupta
ELECTRONIC COPY TO	CH2M Hill, Inc.	Attn: Bernice Kidd
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Bindu Lingaiah
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Lakshmi Devi
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Parthiban P
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Aruna Chandraskekar
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Suraj Nayak

Respectfully Submitted,

Wendy A. Kozma
Principal Specialist Group Leader

(717) 556-7257

Sample Description: 30905-SW3T-050613 BKG Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047519
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:38 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW3T SDG#: BHB06-01BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 14:02	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW3T-050613 MS Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047520
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:38 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW3T SDG#: BHB06-01MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.210**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 14:15	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW3T-050613 MSD Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047521
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:38 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW3T SDG#: BHB06-01MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.205**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 14:19	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW3T-050613 DUP Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047522
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:38 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW3T SDG#: BHB06-01DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 14:11	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW3B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047523
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:40 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW3B SDG#: BHB06-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:16	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW4T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047524
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:43 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW4T SDG#: BHB06-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:20	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW4B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047525
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:44 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW4B SDG#: BHB06-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:32	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW5T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047526
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:47 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW5T SDG#: BHB06-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:37	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW5B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047527
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:48 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW5B SDG#: BHB06-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:41	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW6T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047528
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:51 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW6T SDG#: BHB06-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:45	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW6B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047529
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:53 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW6B SDG#: BHB06-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:50	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW7T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047530
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:56 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW7T SDG#: BHB06-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:54	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW7B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047531
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:58 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW7B SDG#: BHB06-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848006	05/11/2013 15:58	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848006	05/09/2013 10:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW8T-050613 BKG Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047532
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:00 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW8T SDG#: BHB06-11BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 08:15	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW8T-050613 MS Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047533
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:00 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW8T SDG#: BHB06-11MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.205**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 08:28	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW8T-050613 MSD Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047534
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:00 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW8T SDG#: BHB06-11MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.206**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 08:32	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW8T-050613 DUP Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047535
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:00 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW8T SDG#: BHB06-11DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 08:23	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW8B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047536
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:02 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW8B SDG#: BHB06-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 09:26	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW9T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047537
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:05 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW9T SDG#: BHB06-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0012 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 09:30	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW9B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047538
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:07 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW9B SDG#: BHB06-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 09:42	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW10T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047539
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:09 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-S10T SDG#: BHB06-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 09:46	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW10B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047540
LLI Group # 1388105
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:11 by AP

Submitted: 05/07/2013 17:35
Reported: 05/12/2013 07:17

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-S10B SDG#: BHB06-16*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 09:50	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Honeywell International, Inc. Group Number: 1388105
Reported: 05/12/13 at 07:17 AM

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 was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 131281848006	Sample number(s): 7047519-7047531								
Chromium	N.D.	0.0011	0.0100	mg/l	105		90-110		
Batch number: 131281848007	Sample number(s): 7047532-7047540								
Chromium	N.D.	0.0011	0.0100	mg/l	103		90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131281848006	Sample number(s): 7047519-7047531 UNSPK: 7047519 BKG: 7047519								
Chromium	105	103	81-120	2	20	N.D.	N.D.	0 (1)	20
Batch number: 131281848007	Sample number(s): 7047532-7047540 UNSPK: 7047532 BKG: 7047532								
Chromium	103	103	81-120	0	20	N.D.	N.D.	0 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

eurofins | Lancaster Laboratories

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

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

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

May 14, 2013

Project: Baltimore Inner Harbor, MD

Submittal Date: 05/07/2013
Group Number: 1388106
SDG: BHB07
PO Number: 4500013806
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LLI) #
30905-SW11T-050613 BKG Grab Water	7047541
30905-SW11T-050613 MS Grab Water	7047542
30905-SW11T-050613 MSD Grab Water	7047543
30905-SW11T-050613 DUP Grab Water	7047544
30905-SW11B-050613 Grab Water	7047545
30905-SW12T-050613 Grab Water	7047546
30905-SW12B-050613 Grab Water	7047547
30905-SW13T-050613 Grab Water	7047548
30905-SW13B-050613 Grab Water	7047549
30905-SW14T-050613 Grab Water	7047550
30905-SW14B-050613 Grab Water	7047551
30905-SW15T-050613 Grab Water	7047552
30905-SW15B-050613 Grab Water	7047553
30905-SW16T-050613 Grab Water	7047554
30905-SW16M-050613 Grab Water	7047555
30905-SW16B-050613 Grab Water	7047556
30905-SW17T-050613 Grab Water	7047557
30905-SW17B-050613 Grab Water	7047558
30905-SW18T-050613 BKG Grab Water	7047559
30905-SW18T-050613 MS Grab Water	7047560
30905-SW18T-050613 MSD Grab Water	7047561
30905-SW18T-050613 DUP Grab Water	7047562
30905-SW18M-050613 Grab Water	7047563
30905-SW18B-050613 Grab Water	7047564

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Honeywell International	Attn: Ken Biles
ELECTRONIC COPY TO	Critigen	Attn: Amy Klopper
ELECTRONIC COPY TO	CH2M Hill, Inc.	Attn: Robert Steele
ELECTRONIC COPY TO	Honeywell	Attn: Katherine Beach
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Rakesh Singh
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ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Aruna Chandraskekar
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Suraj Nayak

Respectfully Submitted,

Wendy A. Kozma
Principal Specialist Group Leader

(717) 556-7257

Sample Description: 30905-SW11T-050613 BKG Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047541
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:20 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY01 SDG#: BHB07-01BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 19:39	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW11T-050613 MS Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047542
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:20 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY01 SDG#: BHB07-01MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.204**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 19:51	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW11T-050613 MSD Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047543
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:20 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY01 SDG#: BHB07-01MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.199**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 19:55	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW11T-050613 DUP Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047544
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:20 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY01 SDG#: BHB07-01DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 19:47	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW11B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047545
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:22 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY02 SDG#: BHB07-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0018 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 20:42	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW12T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047546
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:24 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY03 SDG#: BHB07-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 20:46	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW12B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047547
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:26 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY04 SDG#: BHB07-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 20:50	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW13T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047548
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:28 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY05 SDG#: BHB07-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 20:54	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW13B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047549
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:30 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY06 SDG#: BHB07-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0014 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 21:05	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW14T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047550
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:33 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY07 SDG#: BHB07-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 21:09	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW14B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047551
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:34 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY08 SDG#: BHB07-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 21:14	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW15T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047552
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:37 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY09 SDG#: BHB07-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 21:18	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW15B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047553
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:39 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY10 SDG#: BHB07-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848008	05/12/2013 21:22	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848008	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW16T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047554
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:43 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY11 SDG#: BHB07-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0013 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:16	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW16M-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047555
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:45 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY12 SDG#: BHB07-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:20	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW16B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047556
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:47 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY13 SDG#: BHB07-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0019 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:32	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW17T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047557
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:50 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY14 SDG#: BHB07-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:36	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW17B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047558
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:52 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY15 SDG#: BHB07-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0016 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:40	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW18T-050613 BKG Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047559
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:56 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY16 SDG#: BHB07-16BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 22:52	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW18T-050613 MS Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047560
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:56 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY16 SDG#: BHB07-16MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.201**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:04	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW18T-050613 MSD Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047561
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:56 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY16 SDG#: BHB07-16MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.201**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:08	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW18T-050613 DUP Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047562
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:56 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY16 SDG#: BHB07-16DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:00	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW18M-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047563
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:57 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY17 SDG#: BHB07-17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0012 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:44	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW18B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047564
LLI Group # 1388106
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:58 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 10:32

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

HNY18 SDG#: BHB07-18*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0013 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:48	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Honeywell International, Inc. Group Number: 1388106
Reported: 05/14/13 at 10:32 AM

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 was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 131281848008	Sample number(s): 7047541-7047553								
Chromium	N.D.	0.0011	0.0100	mg/l	101		90-110		
Batch number: 131281848009	Sample number(s): 7047554-7047564								
Chromium	N.D.	0.0011	0.0100	mg/l	101		90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131281848008	Sample number(s): 7047541-7047553 UNSPK: 7047541 BKG: 7047541								
Chromium	102	100	81-120	2	20	N.D.	N.D.	0 (1)	20
Batch number: 131281848009	Sample number(s): 7047554-7047564 UNSPK: 7047559 BKG: 7047559								
Chromium	101	100	81-120	0	20	N.D.	N.D.	0 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

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

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

May 14, 2013

Project: Baltimore Inner Harbor, MD

Submittal Date: 05/07/2013
Group Number: 1388107
SDG: BHB08
PO Number: 4500013806
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LLI) #
30905-SW19T-050613 BKG Grab Water	7047565
30905-SW19T-050613 MS Grab Water	7047566
30905-SW19T-050613 MSD Grab Water	7047567
30905-SW19T-050613 DUP Grab Water	7047568
30905-SW19B-050613 Grab Water	7047569
30905-SW20T-050613 Grab Water	7047570
30905-SW20B-050613 Grab Water	7047571
30905-SWCentT-050613 Grab Water	7047572
30905-SWCentB-050613 Grab Water	7047573
30905-SWLadyT-050613 Grab Water	7047574
30905-SWLadyB-050613 Grab Water	7047575
30905-SWD1-050613 Grab Water	7047576
30905-SWD2-050613 Grab Water	7047577
30905-SWD3-050613 Grab Water	7047578
30905-SWD4-050613 Grab Water	7047579
30905-SW-FB1-050613 Grab Water	7047580
30905-SW-RB1-050613 Grab Water	7047581
30905-SW-RB2-050613 Grab Water	7047582

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Honeywell International	Attn: Ken Biles
ELECTRONIC COPY TO	Critigen	Attn: Amy Klopper
ELECTRONIC COPY TO	CH2M Hill, Inc.	Attn: Robert Steele

ELECTRONIC COPY TO	Honeywell	Attn: Katherine Beach
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Rakesh Singh
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Peeyush Gupta
ELECTRONIC COPY TO	CH2M Hill, Inc.	Attn: Bernice Kidd
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ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Lakshmi Devi
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Parthiban P
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Aruna Chandraskekar
ELECTRONIC COPY TO	Honeywell International, Inc.	Attn: Suraj Nayak

Respectfully Submitted,

Wendy A. Kozma
Principal Specialist Group Leader

(717) 556-7257

Sample Description: 30905-SW19T-050613 BKG Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047565
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:02 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW19 SDG#: BHB08-01BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/12/2013 22:59	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW19T-050613 MS Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047566
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:02 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW19 SDG#: BHB08-01MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.197**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/12/2013 23:11	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW19T-050613 MSD Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047567
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:02 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW19 SDG#: BHB08-01MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.197**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/12/2013 23:15	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW19T-050613 DUP Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047568
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:02 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW19 SDG#: BHB08-01DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0012 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/12/2013 23:07	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW19B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047569
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:05 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-S19B SDG#: BHB08-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0012 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/13/2013 00:43	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW20T-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047570
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:10 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SW20 SDG#: BHB08-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0013 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/13/2013 00:47	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW20B-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047571
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:13 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-S20B SDG#: BHB08-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0016 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/13/2013 00:51	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SWCentT-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047572
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:32 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWCT SDG#: BHB08-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0012 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/13/2013 00:55	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SWCentB-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047573
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:34 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-S-CT SDG#: BHB08-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/13/2013 01:00	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SWLadyT-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047574
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:25 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWLT SDG#: BHB08-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0011 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/13/2013 01:04	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SWLadyB-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047575
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:29 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-S6LT SDG#: BHB08-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0013 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/13/2013 01:15	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SWD1-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047576
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:45 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWD1 SDG#: BHB08-09FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	**Chromium**	7440-47-3	**0.0018 J**	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131291848002	05/13/2013 01:19	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131291848002	05/11/2013 10:10	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SWD2-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047577
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:10 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWD2 SDG#: BHB08-10FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:52	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SWD3-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047578
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:40 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWD3 SDG#: BHB08-11FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848009	05/12/2013 23:56	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848009	05/09/2013 13:45	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SWD4-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047579
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:03 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWD4 SDG#: BHB08-12FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 09:54	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW-FB1-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047580
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 10:18 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWF1 SDG#: BHB08-13FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 09:58	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW-RB1-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047581
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 11:16 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWR1 SDG#: BHB08-14RB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 10:02	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: 30905-SW-RB2-050613 Grab Water
Baltimore Inner Harbor

LLI Sample # WW 7047582
LLI Group # 1388107
Account # 10651

Project Name: Baltimore Inner Harbor, MD

Collected: 05/06/2013 12:06 by AP

Submitted: 05/07/2013 17:35
Reported: 05/14/2013 07:46

Honeywell International, Inc.
101 Columbia Road
MEY-3
Morristown NJ 07962

-SWR2 SDG#: BHB08-15RB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0100	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010B	1	131281848007	05/11/2013 10:06	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131281848007	05/09/2013 13:33	James L Mertz	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Honeywell International, Inc. Group Number: 1388107
Reported: 05/14/13 at 07:46 AM

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 was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 131281848007	Sample number(s): 7047579-7047582								
Chromium	N.D.	0.0011	0.0100	mg/l	103		90-110		
Batch number: 131281848009	Sample number(s): 7047577-7047578								
Chromium	N.D.	0.0011	0.0100	mg/l	101		90-110		
Batch number: 131291848002	Sample number(s): 7047565-7047576								
Chromium	N.D.	0.0011	0.0100	mg/l	98		90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131281848007	Sample number(s): 7047579-7047582 UNSPK: P047532 BKG: P047532								
Chromium	103	103	81-120	0	20	N.D.	N.D.	0 (1)	20
Batch number: 131281848009	Sample number(s): 7047577-7047578 UNSPK: P047559 BKG: P047559								
Chromium	101	100	81-120	0	20	N.D.	N.D.	0 (1)	20
Batch number: 131291848002	Sample number(s): 7047565-7047576 UNSPK: 7047565 BKG: 7047565								
Chromium	99	98	81-120	0	20	N.D.	0.0012 J	200* (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

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

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

Appendix A-2
Chain-of-Custody Records—May 2013

10651 | 1388105 | 7047519-40

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

Honeywell — **Chain Of Custody / Analysis Request**

AESI Ref: 41397.57093
COC#: 30905-050613-1

Privileged & Confidential	N		Site Name:	Baltimore	Phase:		Lab Proj # (SDG):	
Sampling Co.:	Maryland Environmental Service	EDD To:	kenneth.biles@ch2m.com	Location of Site:	BALTIMORE, MD	Sampling Program	Surface Water Sampling	Lab ID: LLI
Client Contact: (name, co., address)		Sampler:	Amanda Penafiel; Rachael Griner, Maura Morris					Site ID: BALTIMORE
Christopher French		PO #	4500013806	Preservative	3			Lab Job #
101 Columbia Road Meyer 3		Analysis Turnaround Time (TAT):	14					Authorized User: Honeywell
Morristown, NJ 07962		Consultant	CH2M					
Preliminary Data To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;							Text & Excel File Drive / Excel & Text File Order
Sample Receipt Acknowledgement To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;							
Hard Copy To	Amy Klopper	Full Report TAT:	28					
Invoice To:	Christopher French							

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium												Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units		ppb													
1	3T	3.17	–	30905-SW3T-050613	5/6/2013	1038	W-SW	WATER	REG	1	grab	Y	X													
2	3M			30905-SW3M-050613	5/6/2013		W-SW	WATER	REG		grab															
3	3B	3.17	2.17	30905-SW3B-050613	5/6/2013	1040	W-SW	WATER	REG	1	grab	Y	X													
4	4T	2.5	–	30905-SW4T-050613	5/6/2013	1043	W-SW	WATER	REG	1	grab	Y	X													
5	4M			30905-SW4M-050613	5/6/2013		W-SW	WATER	REG		grab															
6	4B	2.5	1.5	30905-SW4B-050613	5/6/2013	1044	W-SW	WATER	REG	1	grab	Y	X													
7	5T	2.83	–	30905-SW5T-050613	5/6/2013	1047	W-SW	WATER	REG	1	grab	Y	X													
8	5M			30905-SW5M-050613	5/6/2013		W-SW	WATER	REG		grab															
9	5B	2.83	1.83	30905-SW5B-050613	5/6/2013	1048	W-SW	WATER	REG	1	grab	Y	X													
10	6T	3.67	–	30905-SW6T-050613	5/6/2013	1051	W-SW	WATER	REG	1	grab	Y	X													
11	6M			30905-SW6M-050613	5/6/2013		W-SW	WATER	REG		grab															
12	6B	3.67	2.67	30905-SW6B-050613	5/6/2013	1053	W-SW	WATER	REG	1	grab	Y	X													

Relinquished by	MES Company		Received by	Company CH2MHill	Condition		Custody Seals Intact	
Amanda Penafiel	5/7/13 9:08 Date/Time			Date/Time 5/07/13 09:08	Cooler Temp.			
Relinquished by	Company		Received by	Company LLI	Condition	Intact	Custody Seals Intact	Yes
	5/7/13 Date/Time 11:50	CH2M HILL		5/7/13 Date/Time 11:50	Cooler Temp.	0.7-1.0°		

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)

Relinquished [illegible] 5/7/13 17:31

5/7/13 1735

10651 | 1388105 | 7047519-40

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

Honeywell — **Chain Of Custody / Analysis Request**

AESI Ref: 41397.57147
COC#: 30905-050613-2

Privileged & Confidential	N		Site Name:	Baltimore	Phase:		Lab Proj # (SDG):	
Sampling Co.:	Maryland Environmental Service	EDD To:	kenneth.biles@ch2m.com	Location of Site:	BALTIMORE, MD	Sampling Program	Surface Water Sampling	Lab ID: LLI
Client Contact: (name, co., address)		Sampler:	Amanda Penafiel; Rachael Griner, Maura Morris					Site ID: BALTIMORE
Christopher French		PO #	4500013806	Preservative	3			Lab Job #
101 Columbia Road; Meyer 3		Analysis Turnaround Time (TAT):	14					Authorized User: Honeywell
Morristown, NJ 07962		Consultant	CH2M					
Preliminary Data To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;							Text & Excel File Drive: Excel & Text File Order
Sample Receipt Acknowledgement To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;							
Hard Copy To	Amy Klopper	Full Report TAT:	28					
Invoice To:	Christopher French							

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium											Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units		ug/L												
1	7T	2.58	–	30905-SW7T-050613	5/6/2013	1056	W-SW	WATER	REG	1	grab	Y	X												
2	7M			30905-SW7M-050613	5/6/2013		W-SW	WATER	REG		grab														
3	7B	2.58	1.58	30905-SW7B-050613	5/6/2013	1058	W-SW	WATER	REG	1	grab	Y	X												
4	8T	3.0	–	30905-SW8T-050613	5/6/2013	1100	W-SW	WATER	REG	1	grab	Y	X												
5	8M			30905-SW8M-050613	5/6/2013		W-SW	WATER	REG		grab														
6	8B	3.0	2.0	30905-SW8B-050613	5/6/2013	1102	W-SW	WATER	REG	1	grab	Y	X												
7	9T	3.0	–	30905-SW9T-050613	5/6/2013	1105	W-SW	WATER	REG	1	grab	Y	X												
8	9M			30905-SW9M-050613	5/6/2013		W-SW	WATER	REG		grab														
9	9B	3.0	2.0	30905-SW9B-050613	5/6/2013	1107	W-SW	WATER	REG	1	grab	Y	X												
10	10T	2.75	–	30905-SW10T-050613	5/6/2013	1109	W-SW	WATER	REG	1	grab	Y	X												
11	10M			30905-SW10M-050613	5/6/2013		W-SW	WATER	REG		grab														
12	10B	2.75	1.75	30905-SW10B-050613	5/6/2013	1111	W-SW	WATER	REG	1	grab	Y	X												

Relinquished by	AES Company		Received by	Company CH2M HILL	Condition		Custody Seals Intact	
Amanda Penafiel	5/7/13 Date/Time 7:08			Date/Time 5/7/13 0708	Cooler Temp.			
Relinquished by	Company		Received by	Company LLI	Condition	Intact	Custody Seals Intact	Yes
	5/7/13 Date/Time 11:30	CH2M Field		5/7/13 Date/Time 1735	Cooler Temp.	0.7-1.0		

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)

Relinquished 5/7/13 17:30

5/7/13 1735

10651 / 1388106 / 7047541-64

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

Honeywell — **Chain Of Custody / Analysis Request**

AESI Ref: 41397.57170
COC# 30905-050613-3

Privileged & Confidential	N		Site Name:	Baltimore	Phase:		Lab Proj # (SDG):	
Sampling Co.: Maryland Environmental Service	EDD To:	kbiles@omiinc.com	Location of Site:	BALTIMORE, MD	Sampling Program	Surface Water Sampling	Lab ID	LLI
Client Contact: (name, co., address)	Sampler:	Amanda Penafiel; Rachel Griner, Maura Morris					Site ID	BALTIMORE
Christopher French	PO #	4500013806	Preservative	3			Lab Job #	
101 Columbia Road; Meyer 3	Analysis Turnaround Time (TAT):	14					Authorized User:	Honeywell
Morristown, NJ 07962	Consultant	CH2M						
Preliminary Data To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;							Text & Excel File Drive	Excel & Text File Order
Sample Receipt Acknowledgement To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;								
Hard Copy To: Amy Klopper	Full Report TAT:	28						
Invoice To: Christopher French								

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium	Sampling Method (code)	Lab Sample Numbers
	Sample Identification										Units				
1	11T	3.5	—	30905-SW11T-050613	5/6/2013	1120	W-SW	WATER	REG	1	grab	Y	X		
2	11M			30905-SW11M-050613	5/6/2013		W-SW	WATER	REG		grab				
3	11B	3.5	2.5	30905-SW11B-050613	5/6/2013	1122	W-SW	WATER	REG	1	grab	Y	X		
4	12T	2.0	—	30905-SW12T-050613	5/6/2013	1124	W-SW	WATER	REG	1	grab	Y	X		
5	12M	2		30905-SW12M-050613	5/6/2013		W-SW	WATER	REG		grab				
6	12B	2.0	1.0	30905-SW12B-050613	5/6/2013	1126	W-SW	WATER	REG	1	grab	Y	X		
7	13T	2.83	—	30905-SW13T-050613	5/6/2013	1128	W-SW	WATER	REG	1	grab	Y	X		
8	13M			30905-SW13M-050613	5/6/2013	"	W-SW	WATER	REG		grab				
9	13B	2.83	1.83	30905-SW13B-050613	5/6/2013	1130	W-SW	WATER	REG	1	grab	Y	X		
10	14T	6.58	—	30905-SW14T-050613	5/6/2013	1133	W-SW	WATER	REG	1	grab	Y	X		
11	14M			30905-SW14M-050613	5/6/2013		W-SW	WATER	REG		grab				
12	14B	6.58	5.58	30905-SW14B-050613	5/6/2013	1134	W-SW	WATER	REG	1	grab	Y	X		

Relinquished by: Amanda Penafiel	Company: MES		Received by:	Company: GLAH Hall	Condition:		Custody Seals Intact:
	Date/Time: 5/7/08 7:08			Date/Time: 5/07/13 0720	Cooler Temp.		
Relinquished by:	Company:		Received by:	Company: LLI	Condition:	intact	Custody Seals Intact: Yes
	Date/Time: 5/7/13 11:50	LLI HALL		Date/Time: 5/7/13 11:10	Cooler Temp.	0.7-1.0	

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)

Relinquished [illegible] 5/7/13 17:2[illegible]

5/7/13 1735

10651/1388106/7047541-64

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

Honeywell — Chain Of Custody / Analysis Request

Privileged & Confidential	N	Site Name:	Baltimore
Sampling Co.:	Maryland Environmental Service	EDD To:	kenneth.biles@ch2m.com
Client Contact: (name, co., address)		Sampler:	Amanda Penafiel, Rachael Griner, Maura Morris
Christopher French		PO #	4500013806
101 Columbia Road; Meyer 3		Analysis Turnaround Time (TAT):	14
Morristown, NJ 07962		Consultant	CH2M
Preliminary Data To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;		
Sample Receipt Acknowledgement To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;		
Hard Copy To	Amy Klopper	Full Report TAT:	28
Invoice To:	Christopher French		

Location of Site:	BALTIMORE, MD
Phase:	
Sampling Program	Surface Water Sampling
Preservative	3

AESI Ref:	41397.57195
COC#	30905-050613-4
Lab Proj # (SDG):	
Lab ID	LLI
Site ID	BALTIMORE
Lab Job #	
Authorized User:	Honeywell

Text & Excel File Drive | Excel & Text File Order

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium	Sampling Method (code)	Lab Sample Numbers
	Sample Identification										Units				
1	15T	6.83	—	30905-SW15T-050613	5/6/2013	1137	W-SW	WATER	REG	1	grab	Y	X		
2	15M			30905-SW15M-050613	5/6/2013		W-SW	WATER	REG		grab				
3	15B	6.83	5.83	30905-SW15B-050613	5/6/2013	1139	W-SW	WATER	REG	1	grab	Y	X		
4	16T	10.5	—	30905-SW16T-050613	5/6/2013	1148	W-SW	WATER	REG	1	grab	Y	X		
5	16M	10.5	5.25	30905-SW16M-050613	5/6/2013	1145	W-SW	WATER	REG		grab				
6	16B	10.5	9.5	30905-SW16B-050613	5/6/2013	1147	W-SW	WATER	REG	1	grab	Y	X		
7	17T	8.25	—	30905-SW17T-050613	5/6/2013	1150	W-SW	WATER	REG	1	grab	Y	X		
8	17M			30905-SW17M-050613	5/6/2013		W-SW	WATER	REG		grab				
9	17B	8.25	7.25	30905-SW17B-050613	5/6/2013	1152	W-SW	WATER	REG	1	grab	Y	X		
10	18T	11	—	30905-SW18T-050613	5/6/2013	1156	W-SW	WATER	REG	1	grab	Y	X		
11	18M	11	4.5	30905-SW18M-050613	5/6/2013	1157	W-STW	WATER	REG	1	grab	Y	X		
12	18B	11	10	30905-SW18B-050613	5/6/2013	1158	W-SW	WATER	REG	1	grab	Y	X		

Relinquished by	MTS Company	Received by	Company	LIBS HELL	Condition		Custody Seals Intact	
Amanda Penafiel	5/7/13 Date/Time 7:08		Date/Time	05/07/13 07:08	Cooler Temp.			
Relinquished by	Company	Received by	Company	LVE	Condition	Wet	Custody Seals Intact	Yes
	5/7/13 Date/Time 11:30		5/7/13 Date/Time 11:40		Cooler Temp.	0.7-1.6		

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)

Relinquished by 5/7/13 17:30

5/7/13 1735

10651/388107/7047565-82

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

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 41397.57218
COC#: 30905-050613-5

Privileged & Confidential	N		Site Name:	Baltimore	Phase:		Lab Proj # (SDG):	
Sampling Co.:	Maryland Environmental Service	EDD To:	kenneth.biles@ch2m.com	Location of Site:	BALTIMORE, MD	Sampling Program	Surface Water Sampling	Lab ID: LLI
Client Contact: (name, co., address)		Sampler:	Amanda Penafiel; Rachael Griner, Maura Morris					Site ID: BALTIMORE
Christopher French		PO #	4500013806	Preservative	3			Lab Job #
101 Columbia Road; Meyer 3		Analysis Turnaround Time (TAT):	14					Authorized User: Honeywell
Morristown, NJ 07962		Consultant	CH2M					
Preliminary Data To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;							Text & Excel File Drive: Excel & Text File Order
Sample Receipt Acknowledgement To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;							
Hard Copy To	Honeywell; 1000 Wills Street; Baltimore, MD 21231	Full Report TAT:	28					
Invoice To:	Christopher French							

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium	Sampling Method (code)	Lab Sample Numbers
											Units				
1	19T	6.92	–	30905-SW19T-050613	5/6/2013	1202	W-SW	WATER	REG	1	grab	Y	X		
2	19M			30905-SW19M-050613	5/6/2013		W-SW	WATER	REG		grab				
3	19B	6.92	5.92	30905-SW19B-050613	5/6/2013	1205	W-SW	WATER	REG	1	grab	Y	X		
4	20T	2.42	–	30905-SW20T-050613	5/6/2013	1210	W-SW	WATER	REG	1	grab	Y	X		
5	20M			30905-SW20M-050613	5/6/2013		W-SW	WATER	REG		grab				
6	20B	2.42	1.42	30905-SW20B-050613	5/6/2013	1213	W-SW	WATER	REG	1	grab	Y	X		
7	Cent T	7.17	–	30905-SWCentT-050613	5/6/2013	1032	W-SW	WATER	REG	1	grab	Y	X		
8	Cent M			30905-SWCentM-050613	5/6/2013		W-SW	WATER	REG		grab				
9	Cent B	7.17	6.17	30905-SWCentB-050613	5/6/2013	1034	W-SW	WATER	REG	1	grab	Y	X		
10	LADY T	4.67	–	30905-SWLadyT-050613	5/6/2013	1025	W-SW	WATER	REG	1	grab	Y	X		
11	Lady M			30905-SWLadyM-050613	5/6/2013		W-SW	WATER	REG		grab				
12	LADY B	4.67	3.67	30905-SWLadyB-050613	5/6/2013	1029	W-SW	WATER	REG	1	grab	Y	X		

Relinquished by	MES Company		Received by	Company: CH2M HILL	Condition		Custody Seals Intact	
Amanda Penafiel	5/07/13 7:08 Date/Time			Date/Time: 05/08/13 0700	Cooler Temp.			
Relinquished by	Company		Received by	Company: LLI	Condition: intact		Custody Seals Intact	yes
	5/07/13 17:50 Date/Time	CH2M		Date/Time: 5/7/13 11:50	Cooler Temp.	0.7-1.0		

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)

Relinquished 5/7/13 17:35 — 5/7/13 1735

10651/1388107/7047565-82

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

Honeywell — **Chain Of Custody / Analysis Request**

AESI Ref:	41397.57253
COC#	30905-050613-6
Lab Proj # (SDG):	
Lab ID	LLI
Site ID	BALTIMORE
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential: N

Site Name: Baltimore | Phase:
Location of Site: BALTIMORE, MD | Sampling Program: Surface Water Sampling

Sampling Co.:	Maryland Environmental Service
EDD To:	kenneth.biles@ch2m.com
Client Contact: (name, co., address)	
Sampler:	Amanda Penafiel; Rachael Griner, Maura Morris
Christopher French	PO # 4500013806
101 Columbia Road Meyer 3	Analysis Turnaround Time (TAT): 14
Morristown, NJ 07962	Consultant: CH2M
Preliminary Data To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;
Sample Receipt Acknowledgement To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;
Hard Copy To	Amy Klopper
Invoice To:	Christopher French
Full Report TAT:	28

Preservative: 3

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#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium (ug/L)	Sampling Method (code)	Lab Sample Numbers
1	4B	2.5	1.5	30905-SWD1-050613	5/6/2013	1045	W-SW	WATER	FD	1	grab	Y	X		
2	10T	2.75	–	30905-SWD2-050613	5/6/2013	1110	W-SW	WATER	FD	1	grab	Y	X		
3	15B	6.83	5.83	30905-SWD3-050613	5/6/2013	1140	W-SW	WATER	FD	1	grab	Y	X		
4	19T	6.92	–	30905-SWD4-050613	5/6/2013	1203	W-SW	WATER	FD	1	grab	Y	X		
5	FIELDQC			30905-SW-FB1-050613	5/6/2013	1018	BLKWATER	WATER	FB	1	grab	N	X		
6	FIELDQC			30905-SW-RB1-050613	5/6/2013	~~10~~ 1116	BLKWATER	WATER	EB	1	grab	N	X		
7	FIELDQC			30905-SW-RB2-050613	5/6/2013	1206	BLKWATER	WATER	EB	1	grab	N	X		
8	FIELDQC			30905-SW-RB3-050613	5/6/2013		BLKWATER	WATER	EB		grab				
9															
10															
11															
12															

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
Amanda Penafiel	MES	5/07/13 7:08	[signature]	Honeywell	5/07/13 0708			
[signature]	Honeywell	5/07/13 11:50	[signature]	LLI	5/7/13 11:50	Intact	0.7-1.6	Yes

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)

Relinquished Kim 5/7/13 17:35 — [signature] 5/7/13 1735

Appendix A-3
Field Report—May 2013

BALTIMORE INNER HARBOR

SURFACE WATER MONITORING

2nd Quarter 2013

May 6, 2013

Honeywell

MARYLAND ENVIRONMENTAL SERVICE

METER CALIBRATION LOG

Notebook No. _____

Continued From Page _____

PROJECT _____

Date	Time	Meter	Buffer	Int	Comments
3/8/13	0730	YSI 63	7,4,10	AP	BIH Surface Water
3/9/13	0840	YSI 63	7,4,10	RDD	DMT Dry weather
3/13/13	0822	YSI 63	7,4,10	J.E.	DMT WET
4/17/13	0800	Horiba	Auto Cal	AP	BIH GW Monitoring
4/20/13	0803	YSI 63	7,4,10	RDD	DMT WET
4/24/13	0830	Horiba	7,4,10	RG	BIH drainage layer samp.
4/30/13	0845	YSI 63	7,4,10	RG	NPDES wet weather
5/6/13	0930	YSI 63	7,4,10	mm	BIH Surface Water

Continued on Page _____

Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

FIELD NOTES

BIH Surface H_2O Samp. 05/06/18

Samplers: Rachel Griner, Maura Morris, Josh Chapman
Boat Captain: Steven Kellers

Weather Conditions: Cloudy | Misty High 50s / Low 60s

Low Tide: 11:43am

Sample ID	Depth to Bottom	Sample Depth	Time	pH	Temp	Sp. Cond	Int
FB1	—	—	**10:18**	**8.18**	**16.8**	**18.8**	**RG**
Lady ~~Mary~~ T	4'8"	—	10:25	7.29	16.7	13.9	RG
Lady Mary B	4'8"	3'8"	10:29	7.53	17.1	8.11	RG
centT	7'2"	—	10:32	7.08	17.1	6.66	RG
centB	7'2"	6'2"	10:34	7.~~69~~	17.2	8.53	RG
3T	3'2"	—	10:38	7.29	16.7	7.82	RG
3B	3'2"	2'2"	10:40	7.61	17.0	7.98	RG
4T	2'6"	—	10:43	7.73	16.9	7.84	RG
4B	2'6"	1'6"	10:44	7.82	16.5	8.9	RG
4B(D1)	2'6"	1'6"	10:45	8.04	16.9	7.87	RG
5T	2'10"	—	10:47	7.87	16.6	7.98	RG
5B	2'10"	1'10"	10:48	8.09	16.7	8.04	RG
6T	3'8"	—	1051	8.66	16.8	784	RG
6B	3'8"	2'8"	1053	8.82	16.9	7.93	RG
7T	2'7"	—	10:56	8.70	16.8	7.97	RG
7B	2'7"	1'7"	10:58	8.87	16.8	7.97	RG

Scale: 1 square = _____

BIH Surface H_2O Sampling

05/06/2013

Sample ID	Depth to Bottom	Sample Depth	Time	pH	Temp	Sp. Cond	Init
8T	3'	—	1100	8.73	16.7	8.03	RG
8B	3'	2'	1102	8.67	16.6	8.05	RG
9T	3'	—	1105	8.63	16.7	8.10	RG
9B	3'	2'	1107	8.53	16.6	8.13	RG
10T	2'9"	—	10:09	8.57	16.8	8.34	RG
10T(D2)	2'9"	—	10:10	8.70	16.8	8.33	RG
10B	2'9"	1'9"	10:11	8.98	16.6	8.40	RG
RB1	—	—	10:~~13~~ 14	9.11	17.7	2.30	RG
11T	3'6"	—	11:20	8.46	17.0	8.38	RG
11B	3'6"	2'6"	11:22	8.40	16.8	8.41	RG
12T	2'	—	11:24	8.24	16.9	8.26	RG
12B	2'	1'	11:26	8.47	17.0	8.22	RG
13T	2'10"	—	11:28	8.51	16.9	8.24	RG
13B	2'10"	1'10"	11:30	8.32	16.8	8.22	RG
14T	6'7"	—	1133	8.39	16.7	8.03	RG
14B	6'7"	~~5~~ 5'7"	1134	8.71	16.9	8.00	RG
15T	6'10"	—	1137	8.36	16.6	8.11	RG
15B	6'10"	5'10"	1139	8.55	16.6	8.25	RG

BIH Surface H_2O Sampling

05/06/2013

Sample ID	Depth to Bottom	Sample Depth	Time	pH	Temp	Sp. Cond.	Int
15B(D3)	6'10"	5'10"	1140	8.71	16.6	8.25	RG
16T	10'6"	—	1143	8.71	16.8	8.21	RG
16M	10'6"	5'5"	1145	8.86	16.7	8.49	RG
16B	10'6"	9'6"	1147	8.67	16.7	9.12	RG
17T	8'3"	—	1150	8.63	16.8	8.17	RG
17B	8'3"	7'3"	1152	8.80	16.7	8.92	RG
18T	11'	—	11:56	8.86	16.6	8.29	RG
18M	11'	5'5"	11:56	8.99	16.7	8.34	RG
18B	11'	10'0	11:58	8.92	16.8	9.04	RG
19T	6'11"	—	1202	8.75	16.7	8.30	RG
19T(D4)	6'11"	—	1203	8.98	16.8	8.29	RG
19B	6'11	5'11"	1205	9.06	16.8	8.37	RG
RB2	—	—	1206	8.92	17.2	3.80	RG
20T	2'5"	—	1210	8.16	16.7	7.9	RG
20B	2'5"	1'5"	1213	8.27	16.6	8.31	RG

Scale: 1 square = _____

CHAIN of CUSTODY

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

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 41397.57093
COC#: 30905-050613-1

Privileged & Confidential	N		Site Name:	Baltimore	Phase:		Lab Proj # (SDG):	
Sampling Co.:	Maryland Environmental Service	EDD To:	kenneth.biles@ch2m.com	Location of Site:	BALTIMORE, MD	Sampling Program	Surface Water Sampling	Lab ID	LLI
Client Contact: (name, co., address)		Sampler:	Amanda Penafiel; Rachael Griner, Maura Morris					Site ID	BALTIMORE
Christopher French		PO #	4500013806	Preservative	3			Lab Job #	
101 Columbia Road Meyer 3		Analysis Turnaround Time (TAT):	14					Authorized User:	Honeywell
Morristown, NJ 07962		Consultant	CH2M						
Preliminary Data To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;							Text & Excel File Drive	Excel & Text File Order
Sample Receipt Acknowledgement To	kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;								
Hard Copy To	Amy Klopper [illegible]	Full Report TAT:	28						
Invoice To:	Christopher French								

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium										Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units		ppb											
1	3T	3.17	—	30905-SW3T-050613	5/6/2013	1038	W-SW	WATER	REG	1	grab	Y	X											
2	3M			30905-SW3M-050613	5/6/2013		W-SW	WATER	REG		grab													
3	3B	3.17	2.17	30905-SW3B-050613	5/6/2013	1040	W-SW	WATER	REG	1	grab	Y	X											
4	4T	2.5	—	30905-SW4T-050613	5/6/2013	1043	W-SW	WATER	REG	1	grab	Y	X											
5	4M			30905-SW4M-050613	5/6/2013		W-SW	WATER	REG		grab													
6	4B	2.5	1.5	30905-SW4B-050613	5/6/2013	1044	W-SW	WATER	REG	1	grab	Y	X											
7	5T	2.83	—	30905-SW5T-050613	5/6/2013	1047	W-SW	WATER	REG	1	grab	Y	X											
8	5M			30905-SW5M-050613	5/6/2013		W-SW	WATER	REG		grab													
9	5B	2.83	1.83	30905-SW5B-050613	5/6/2013	1048	W-SW	WATER	REG	1	grab	Y	X											
10	6T	3.67	—	30905-SW6T-050613	5/6/2013	1051	W-SW	WATER	REG	1	grab	Y	X											
11	6M			30905-SW6M-050613	5/6/2013		W-SW	WATER	REG		grab													
12	6B	3.67	2.67	30905-SW6B-050613	5/6/2013	1053	W-SW	WATER	REG	1	grab	Y	X											

Relinquished by	MES Company		Received by	Company	CH2MHill	Condition		Custody Seals Intact	
Amanda Penafiel	5/7/13 9:08 Date/Time			Date/Time	5/7/13 09:00	Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		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	Honeywell	Chain Of Custody / Analysis Request	AESI Ref:	41397.57147
2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300	Privileged & Confidential: N	Site Name: Baltimore	Phase:	COC#: 30905-050613-2
				Lab Proj # (SDG):
Sampling Co.: Maryland Environmental Service	EDD To: kenneth.biles@ch2m.com	Location of Site: BALTIMORE, MD	Sampling Program: Surface Water Sampling	Lab ID: LLI
Client Contact: (name, co., address)	Sampler: Amanda Penafiel; Rachael Griner, Maura Morris			Site ID: BALTIMORE
Christopher French	PO # 4500013806	Preservative: 3		Lab Job #:
101 Columbia Road; Meyer 3	Analysis Turnaround Time (TAT): 14			Authorized User: Honeywell
Morristown, NJ 07962	Consultant: CH2M			
Preliminary Data To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;				Text & Excel File Drive / Excel & Text File Order
Sample Receipt Acknowledgement To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;				
Hard Copy To: Amy Klopper [illegible]	Full Report TAT: 28			
Invoice To: Christopher French				

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium												Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units		ug/L													
1	7T	2.58	–	30905-SW7T-050613	5/6/2013	1056	W-SW	WATER	REG	1	grab	Y	X													
2	7M			30905-SW7M-050613	5/6/2013		W-SW	WATER	REG		grab															
3	7B	2.58	1.58	30905-SW7B-050613	5/6/2013	1058	W-SW	WATER	REG	1	grab	Y	X													
4	8T	3.0	–	30905-SW8T-050613	5/6/2013	1100	W-SW	WATER	REG	1	grab	Y	X													
5	8M			30905-SW8M-050613	5/6/2013		W-SW	WATER	REG		grab															
6	8B	3.0	2.0	30905-SW8B-050613	5/6/2013	1102	W-SW	WATER	REG	1	grab	Y	X													
7	9T	3.0	–	30905-SW9T-050613	5/6/2013	1105	W-SW	WATER	REG	1	grab	Y	X													
8	9M			30905-SW9M-050613	5/6/2013		W-SW	WATER	REG		grab															
9	9B	3.0	2.0	30905-SW9B-050613	5/6/2013	1107	W-SW	WATER	REG	1	grab	Y	X													
10	10T	2.75	–	30905-SW10T-050613	5/6/2013	1109	W-SW	WATER	REG	1	grab	Y	X													
11	10M			30905-SW10M-050613	5/6/2013		W-SW	WATER	REG		grab															
12	10B	2.75	1.75	30905-SW10B-050613	5/6/2013	1111	W-SW	WATER	REG	1	grab	Y	X													

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Amanda Penafiel	MES	[illegible]	CH2M HILL		
	Date/Time 5/7/13 7:08		Date/Time 5/7/13 0708	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	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	Honeywell	Chain Of Custody / Analysis Request	AESI Ref:	41397.57170
2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2300	Privileged & Confidential: N	Site Name: Baltimore	Phase:	COC#: 30905-050613-3
				Lab Proj # (SDG):
Sampling Co.: Maryland Environmental Service	EDD To: kbiles@omiinc.com	Location of Site: BALTIMORE, MD	Sampling Program: Surface Water Sampling	Lab ID: LLI
Client Contact: (name, co., address)	Sampler: Amanda Penafiel; Rachel Griner, Maura Morris			Site ID: BALTIMORE
Christopher French	PO #: 4500013806	Preservative: 3		Lab Job #:
101 Columbia Road; Meyer 3	Analysis Turnaround Time (TAT): 14			Authorized User: Honeywell
Morristown, NJ 07962	Consultant: CH2M			
Preliminary Data To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;				Text & Excel File Drive / Excel & Text File Order
Sample Receipt Acknowledgement To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;				
Hard Copy To: Amy Klopper [illegible] Road	Full Report TAT: 28			
Invoice To: Christopher French				

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium												Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units															
1	11T	3.5	—	30905-SW11T-050613	5/6/2013	1120	W-SW	WATER	REG	1	grab	Y	X													
2	11M			30905-SW11M-050613	5/6/2013		W-SW	WATER	REG		grab															
3	11B	3.5	2.5	30905-SW11B-050613	5/6/2013	1122	W-SW	WATER	REG	1	grab	Y	X													
4	12T	2.0	—	30905-SW12T-050613	5/6/2013	1124	W-SW	WATER	REG	1	grab	Y	X													
5	12M	2-		30905-SW12M-050613	5/6/2013		W-SW	WATER	REG		grab															
6	12B	2.0	1.0	30905-SW12B-050613	5/6/2013	1126	W-SW	WATER	REG	1	grab	Y	X													
7	13T	2.83	—	30905-SW13T-050613	5/6/2013	1128	W-SW	WATER	REG	1	grab	Y	X													
8	13M			30905-SW13M-050613	5/6/2013	—	W-SW	WATER	REG		grab															
9	13B	2.83	1.83	30905-SW13B-050613	5/6/2013	1130	W-SW	WATER	REG	1	grab	Y	X													
10	14T	6.58	—	30905-SW14T-050613	5/6/2013	1133	W-SW	WATER	REG	1	grab	Y	X													
11	14M			30905-SW14M-050613	5/6/2013		W-SW	WATER	REG		grab															
12	14B	6.58	5.58	30905-SW14B-050613	5/6/2013	1134	W-SW	WATER	REG	1	grab	Y	X													

Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
Amanda Penafiel	MES		[illegible]	H2M Hill					
	Date/Time 5/7/08 7:08			Date/Time 5/07/13 0700		Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		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: 41397.57195
COC#: 30905-050613-4

Privileged & Confidential	N		Site Name:	Baltimore	Phase:
EDD To:	kenneth.biles@ch2m.com		Location of Site:	BALTIMORE, MD	Sampling Program: Surface Water Sampling
Sampler:	Amanda Penafiel, Rachael Griner, Maura Morris		Preservative	3	
PO #	4500013806				
Analysis Turnaround Time (TAT):	14				
Consultant	CH2M				
Full Report TAT:	28				

Lab Proj # (SDG):
Lab ID: LLI
Site ID: BALTIMORE
Lab Job #:
Authorized User: Honeywell

Sampling Co.: Maryland Environmental Service

Client Contact: (name, co., address)
Christopher French
101 Columbia Road; Meyer 3
Morristown, NJ 07962

Preliminary Data To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com
Sample Receipt Acknowledgement To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com
Hard Copy To: Amy Klopper
Invoice To: Christopher French

Text & Excel File Drive | Excel & Text File Order

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium	Sampling Method (code)	Lab Sample Numbers
	Sample Identification										Units				
1	15T	6.83	—	30905-SW15T-050613	5/6/2013	1137	W-SW	WATER	REG	1	grab	Y	X		
2	15M			30905-SW15M-050613	5/6/2013		W-SW	WATER	REG		grab				
3	15B	6.83	5.83	30905-SW15B-050613	5/6/2013	1139	W-SW	WATER	REG	1	grab	Y	X		
4	16T	10.5	—	30905-SW16T-050613	5/6/2013	1148	W-SW	WATER	REG	1	grab	Y	X		
5	16M	10.5	5.25	30905-SW16M-050613	5/6/2013	1145	W-SW	WATER	REG		grab				
6	16B	10.5	9.5	30905-SW16B-050613	5/6/2013	1147	W-SW	WATER	REG	1	grab	Y	X		
7	17T	8.25	—	30905-SW17T-050613	5/6/2013	1150	W-SW	WATER	REG	1	grab	Y	X		
8	17M			30905-SW17M-050613	5/6/2013		W-SW	WATER	REG		grab				
9	17B	8.25	7.25	30905-SW17B-050613	5/6/2013	1152	W-SW	WATER	REG	1	grab	Y	X		
10	18T	11	—	30905-SW18T-050613	5/6/2013	1156	W-SW	WATER	REG	1	grab	Y	X		
11	18M	11	4.5	30905-SW18M-050613	5/6/2013	1157	W-STW	WATER	REG	1	grab	Y	X		
12	18B	11	10	30905-SW18B-050613	5/6/2013	1158	W-SW	WATER	REG	1	grab	Y	X		

Relinquished by: Amanda Penafiel	Company: MES	Received by: [illegible]	Company: CH2M HILL	Condition:	Custody Seals Intact:
	Date/Time: 5/7/13 7:08		Date/Time: 05/07/13 07:08	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	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: 41397.57218
COC#: 30905-050613-5

Privileged & Confidential	N		Site Name:	Baltimore	Phase:		Lab Proj # (SDG):	
EDD To:	kenneth.biles@ch2m.com		Location of Site:	BALTIMORE, MD	Sampling Program	Surface Water Sampling	Lab ID	LLI
Sampler:	Amanda Penafiel; Rachael Griner, Maura Morris		Preservative	3			Site ID	BALTIMORE
PO #	4500013806						Lab Job #	
Analysis Turnaround Time (TAT):	14						Authorized User:	Honeywell
Consultant	CH2M							
Full Report TAT:	28							

Sampling Co.: Maryland Environmental Service

Client Contact: (name, co., address)
Christopher French
101 Columbia Road; Meyer 3
Morristown, NJ 07962

Preliminary Data To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;
Sample Receipt Acknowledgement To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com;
Hard Copy To: Honeywell; 1000 Wills Street; Baltimore, MD 21231
Invoice To: Christopher French

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										Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units													
1	19T	6.92	—	30905-SW19T-050613	5/6/2013	1202	W-SW	WATER	REG	1	grab	Y	X											
2	19M			30905-SW19M-050613	5/6/2013		W-SW	WATER	REG		grab													
3	19B	6.92	5.92	30905-SW19B-050613	5/6/2013	1205	W-SW	WATER	REG	1	grab	Y	X											
4	20T	2.42	—	30905-SW20T-050613	5/6/2013	1210	W-SW	WATER	REG	1	grab	Y	X											
5	20M			30905-SW20M-050613	5/6/2013		W-SW	WATER	REG		grab													
6	20B	2.42	1.42	30905-SW20B-050613	5/6/2013	1213	W-SW	WATER	REG	1	grab	Y	X											
7	Cent T	7.17	—	30905-SWCentT-050613	5/6/2013	1032	W-SW	WATER	REG	1	grab	Y	X											
8	Cent M			30905-SWCentM-050613	5/6/2013		W-SW	WATER	REG		grab													
9	Cent B	7.17	6.17	30905-SWCentB-050613	5/6/2013	1034	W-SW	WATER	REG	1	grab	Y	X											
10	LADY T	4.67	—	30905-SWLadyT-050613	5/6/2013	1025	W-SW	WATER	REG	1	grab	Y	X											
11	Lady M			30905-SWLadyM-050613	5/6/2013		W-SW	WATER	REG		grab													
12	LADY B	4.67	3.67	30905-SWLadyB-050613	5/6/2013	1029	W-SW	WATER	REG	1	grab	Y	X											

Relinquished by	MES Company		Received by	Company	CH2M HILL	Condition		Custody Seals Intact	
Amanda Penafiel	Date/Time 5/07/13 7:08			Date/Time	05/07/13 0700	Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		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: 41397.57253
COC#: 30905-050613-6

Privileged & Confidential	N		Site Name:	Baltimore	Phase:		Lab Proj # (SDG):	
EDD To:	kenneth.biles@ch2m.com		Location of Site:	BALTIMORE, MD	Sampling Program	Surface Water Sampling	Lab ID	LLI
Sampler:	Amanda Penafiel; Rachael Griner, Maura Morris						Site ID	BALTIMORE
PO #	4500013806		Preservative	3			Lab Job #	
Analysis Turnaround Time (TAT):	14						Authorized User:	Honeywell
Consultant	CH2M							
Full Report TAT:	28						Text & Excel File Drive	Excel & Text File Order

Sampling Co.: Maryland Environmental Service

Client Contact: (name, co., address)
Christopher French
101 Columbia Road Meyer 3
Morristown, NJ 07962

Preliminary Data To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com
Sample Receipt Acknowledgement To: kenneth.biles@ch2m.com; amy.klopper@critigen.com; bernice.kidd@ch2m.com
Hard Copy To: Amy Klopper [redacted]
Invoice To: Christopher French

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW6010 Chromium												Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units		ug/L													
1	4B	2.5	1.5	30905-SWD1-050613	5/6/2013	1045	W-SW	WATER	FD	1	grab	Y	X													
2	10T	2.75	-	30905-SWD2-050613	5/6/2013	1110	W-SW	WATER	FD	1	grab	Y	X													
3	15B	6.83	5.83	30905-SWD3-050613	5/6/2013	1140	W-SW	WATER	FD	1	grab	Y	X													
4	19T	6.92	-	30905-SWD4-050613	5/6/2013	1203	W-SW	WATER	FD	1	grab	Y	X													
5	FIELDQC			30905-SW-FB1-050613	5/6/2013	1018	BLKWATER	WATER	FB	1	grab	N	X													
6	FIELDQC			30905-SW-RB1-050613	5/6/2013	1116	BLKWATER	WATER	EB	1	grab	N	X													
7	FIELDQC			30905-SW-RB2-050613	5/6/2013	1206	BLKWATER	WATER	EB	1	grab	N	X													
8	FIELDQC			30905-SW-RB3-050613	5/6/2013		BLKWATER	WATER	EB		grab															
9																										
10																										
11																										
12																										

Relinquished by	MES Company		Received by		Company	4hrs ice	Condition		Custody Seals Intact	
Amanda Penafiel	5/07/13 Date/Time 7:00		[signature]		Date/Time	5/07/13 0708	Cooler Temp.			
Relinquished by	Company		Received by		Company		Condition		Custody Seals Intact	
	Date/Time				Date/Time		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)

Appendix B
Quarterly Validation Report

Appendix B-1
Quality Control Summary—Third Quarter 2013

QUALITY CONTROL SUMMARY

This section is a summary of the quality control (QC) review results for samples collected on May 5, 2013, for the Honeywell, Baltimore Inner Harbor project. 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 2010) as applicable to the specification contained in SW-846 methodologies, and the project specific requirements set forth in the Work Plan. Three sample delivery groups (SDG's) were associated with this data set: BHB06, BHB07, and BHB08. All field samples and associated QC samples were analyzed for total and/or dissolved chromium by SW-846 6010B.

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

LABORATORY REPLICATES

Five laboratory replicates were analyzed during this sampling round. All acceptance criteria for precision were met.

LABORATORY BLANKS

Chromium was not detected in the calibration or laboratory method blanks.

FIELD BLANKS

Two equipment rinsate blank samples and one field blank samples were collected during these sampling events. Chromium was not detected in the field blank samples.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

Five MS/MSD sets were analyzed during this sampling event. All acceptance criteria for precision were met:

SAMPLE RECEIPT, HOLDING TIMES AND PRESERVATION

The samples were received at the recommended temperature of 4±2°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.

SDG BHB06

Calibration Verification

(ICV) Initial Calibration Verification
(ICB) Initial Calibration Blank
(CCB) Continuing Calibration Blank
(PBW) Preparation Blank
(CCV) Continuing Calibration Verification
(IDL) Instrument Detection Limit
(MDL) Method Detection Limit
(RL) Reporting Limit
(N/A) Not Applicable

ICV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0741	600	591.92	98.653	98.7	90	110

ICB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0745	15	1.2	-0.03	1.2	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0800	500	495.48	99.096	99.1	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0804	15	1.2	0.47	1.2	U	ug/l

PBW	Element	ID(time)	RL	MDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0808	15	1.1	-0.04	1.1	U	µg/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0847	500	495.18	99.036	99	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0851	15	1.2	0.32	1.2	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0934	500	493.96	98.792	98.8	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0938	15	1.2	-0.07	1.2	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	1021	500	492.21	98.442	98.4	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	1025	15	1.2	-0.32	1.2	U	ug/l

ICV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	1326	600	606.66	101.110	101.1	90	110

ICB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	1330	15	1.2	0.2	1.2	U	ug/l

SDG BHB06

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	1346	500	503.85	100.770	100.8	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	1350	15	1.2	-0.41	1.2	U	ug/l

PBW	Element	ID(time)	RL	MDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	1354	15	1.1	-0.2	1.1	U	µg/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	1436	500	506.06	101.212	101.2	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	1440	15	1.2	0	1.2	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	1525	500	506.33	101.266	101.3	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	1528	15	1.2	0.29	1.2	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	1615	500	508.15	101.630	101.6	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	1619	15	1.2	0.6	1.2	U	ug/l

Interference Check Samples (ICS)

Initial	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	478.8	95.760	95.8	80	120

Final	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	482.1	96.420	96.4	80	120

Initial	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	495.5	99.100	99.1	80	120

Final	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	495.5	99.100	99.1	80	120

SDG BHB06

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

Client Sample ID: 7047519BKG

Element	Sample Result	Raw MS Result	Raw MSD Result	MS Spike Amount	MSD Spike Amount	MS % Rec.	MSD % Rec.	Reported MS % Rec.	Reported MSD % Rec.	% Rec. Limits		RPD	Reported RPD	RPD Limits
Cr	0	210.23	205.28	200	200	105.115	102.640	105	103	81	120	2.383	2	20

Client Sample ID: 7047532BKG

Element	Sample Result	Raw MS Result	Raw MSD Result	MS Spike Amount	MSD Spike Amount	MS % Rec.	MSD % Rec.	Reported MS % Rec.	Reported MSD % Rec.	% Rec. Limits		RPD	Reported RPD	RPD Limits
Cr	0	205.42	205.57	200	200	102.710	102.785	103	103	81	120	0.073	0	20

Duplicates (Dup)

Client Sample ID: 7047519BKG

Element	Raw Sample Result	Raw Dup Result	RPD	Reported RPD	RPD Limits
Cr	0	0	N/A	0	20

Comment: RPD is not applicable (N/A), sample concentrations less than five times the PQL of 5 µg/l.

Client Sample ID: 7047532BKG

Element	Raw Sample Result	Raw Dup Result	RPD	Reported RPD	RPD Limits
Cr	0	0	N/A	0	20

Comment: RPD is not applicable (N/A), sample concentrations less than five times the PQL of 5 µg/l.

Laboratory Control Samples

Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
Cr	200	210.78	105.390	105	80	120

Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
Cr	200	206.28	103.140	103	80	120

Serial Dilutions

Client Sample ID: 7047519BKG

Element	Raw Sample Result	Raw Ser. Dil. Result	(%D)	Reported % Rec.	Limits (%D)
Cr	0	0	N/A	N/A	10

Comment: Serial dilution is not applicable (N/A), sample concentrations less than fifty times the MDL.

Client Sample ID: 7047532BKG

Element	Raw Sample Result	Raw Ser. Dil. Result	(%D)	Reported % Rec.	Limits (%D)
Cr	0	0	N/A	N/A	10

Comment: Serial dilution is not applicable (N/A), sample concentrations less than fifty times the MDL.

SDG BHB07

Calibration Verification

(ICV) Initial Calibration Verification
(ICB) Initial Calibration Blank
(CCB) Continuing Calibration Blank
(PBW) Preparation Blank
(CCV) Continuing Calibration Verification
(IDL) Instrument Detection Limit
(MDL) Method Detection Limit
(RL) Reporting Limit
(N/A) Not Applicable

				Raw		Reported		
ICV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	1905	600	579.69	96.615	96.6	90	110

					Raw	Reported		
ICB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	1908	15	1.6	0.22	1.6	U	ug/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	1923	500	478.45	95.690	95.7	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	1927	15	1.6	-0.3	1.6	U	ug/l

					Raw	Reported		
PBW	Element	ID(time)	RL	MDL	Conc.	Conc.	Lab Flag	Units
	Cr	1931	15	1.1	-0.24	1.1	U	µg/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	2010	500	479.97	95.994	96	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	2014	15	1.6	0.07	1.6	U	ug/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	2058	500	473.23	94.646	94.6	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	2102	15	1.6	0.91	1.6	U	ug/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	2145	500	472.34	94.468	94.5	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	2148	15	1.6	-0.92	1.6	U	ug/l

				Raw		Reported		
ICV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	2218	600	582.18	97.030	97	90	110

					Raw	Reported		
ICB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	2222	15	1.6	0.28	1.6	U	ug/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	2237	500	488.69	97.738	97.7	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	2241	15	1.6	1.27	1.6	U	ug/l

SDG BHB07

SDG BHB07

PBW	Element	ID(time)	RL	MDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	2244	15	1.1	0.38	1.1	U	µg/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	2324	500	495.97	99.194	99.2	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	2328	15	1.6	0.99	1.6	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0012	500	478.95	95.790	95.8	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0016	15	1.6	-0.32	1.6	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0049	500	485.89	97.178	97.2	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0053	15	1.6	0.52	1.6	U	ug/l

Interference Check Samples (ICS)

Initial	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	475.9	95.180	95.2	80	120

Final	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	473.2	94.640	94.6	80	120

Initial	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	485.6	97.120	97.1	80	120

Final	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	480.7	96.140	96.1	80	120

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

Client Sample ID: 7047541BKG

Element	Sample Result	Raw MS Result	Raw MSD Result	MS Spike Amount	MSD Spike Amount	MS % Rec.	MSD % Rec.	Reported MS % Rec.	Reported MSD % Rec.	% Rec. Limits		RPD	Reported RPD	RPD Limits
Cr	0	203.52	199.13	200	200	101.760	99.565	192	100	81	120	2.181	2	20

Client Sample ID: 7047559BKG

Element	Sample Result	Raw MS Result	Raw MSD Result	MS Spike Amount	MSD Spike Amount	MS % Rec.	MSD % Rec.	Reported MS % Rec.	Reported MSD % Rec.	% Rec. Limits		RPD	Reported RPD	RPD Limits
Cr	0	201.03	200.64	200	200	100.515	100.320	101	100	81	120	0.194	0	20

SDG BHB07

Duplicates (Dup)

Client Sample ID: 7047541BKG

Element	Raw Sample Result	Raw Dup Result	RPD	Reported RPD	RPD Limits
Cr	0	0	N/A	0	20

Comment: RPD is not applicable (N/A), sample concentrations less than five times the PQL of 5 µg/l.

Client Sample ID: 7047559BKG

Element	Raw Sample Result	Raw Dup Result	RPD	Reported RPD	RPD Limits
Cr	0	0	N/A	0	20

Comment: RPD is not applicable (N/A), sample concentrations less than five times the PQL of 5 µg/l.

Laboratory Control Samples

Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
Cr	200	202.12	101.060	101	80	120

Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
Cr	200	201.5	100.750	101	80	120

Serial Dilutions

Client Sample ID: 7047541BKG

Element	Raw Sample Result	Raw Ser. Dil. Result	(%D)	Reported % Rec.	Limits (%D)
Cr	0	6.3	N/A	N/A	10

Comment: Serial dilution is not applicable (N/A), sample concentrations less than fifty times the MDL.

Client Sample ID: 7047559BKG

Element	Raw Sample Result	Raw Ser. Dil. Result	(%D)	Reported % Rec.	Limits (%D)
Cr	0	0	N/A	N/A	10

Comment: Serial dilution is not applicable (N/A), sample concentrations less than fifty times the MDL.

SDG BHB08

Calibration Verification

(ICV) Initial Calibration Verification
(ICB) Initial Calibration Blank
(CCB) Continuing Calibration Blank
(PBW) Preparation Blank
(CCV) Continuing Calibration Verification
(IDL) Instrument Detection Limit
(MDL) Method Detection Limit
(RL) Reporting Limit
(N/A) Not Applicable

				Raw		Reported		
ICV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	0741	600	591.92	98.653	98.7	90	110

					Raw	Reported		
ICB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	0745	15	1.6	-0.03	1.6	U	ug/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	0800	500	495.48	99.096	99.1	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	0804	15	1.6	0.47	1.6	U	ug/l

					Raw	Reported		
PBW	Element	ID(time)	RL	MDL	Conc.	Conc.	Lab Flag	Units
	Cr	0808	15	1.1	-0.04	1.1	U	µg/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	0847	500	495.18	99.036	99	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	0851	15	1.6	0.32	1.6	U	ug/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	0934	500	493.96	98.792	98.8	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	0938	15	1.6	-0.07	1.6	U	ug/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	1021	500	492.21	98.442	98.4	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	1025	15	1.6	-0.32	1.6	U	ug/l

				Raw		Reported		
ICV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	2218	600	582.18	97.030	97	90	110

					Raw	Reported		
ICB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	2222	15	1.6	0.28	1.6	U	ug/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	2237	500	488.69	97.738	97.7	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	2241	15	1.6	1.27	1.6	U	ug/l

					Raw	Reported		
PBW	Element	ID(time)	RL	MDL	Conc.	Conc.	Lab Flag	Units
	Cr	2244	15	1.1	0.38	1.1	U	µg/l

				Raw		Reported		
CCV	Element	ID(time)	True	Found	% Rec.	% Rec.	Limits	
	Cr	2324	500	495.97	99.194	99.2	90	110

					Raw	Reported		
CCB	Element	ID(time)	RL	IDL	Conc.	Conc.	Lab Flag	Units
	Cr	2328	15	1.6	0.99	1.6	U	ug/l

SDG BHB08

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0012	500	478.95	95.790	95.8	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0016	15	1.6	-0.32	1.6	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0049	500	485.89	97.178	97.2	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0053	15	1.6	0.52	1.6	U	ug/l

ICV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	2225	600	605	100.833	100.8	90	110

ICB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	2228	15	1.6	-0.38	1.6	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	2244	500	496.92	99.384	99.4	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	2247	15	1.6	-0.42	1.6	U	ug/l

PBW	Element	ID(time)	RL	MDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	2251	15	1.1	-0.13	1.1	U	µg/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	2331	500	482.18	96.436	96.4	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	2335	15	1.6	-0.16	1.6	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0020	500	485.37	97.074	97.1	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0023	15	1.6	-0.16	1.6	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0108	500	484.45	96.890	96.9	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0111	15	1.6	-0.71	1.6	U	ug/l

CCV	Element	ID(time)	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	0135	500	485.96	97.192	97.2	90	110

CCB	Element	ID(time)	RL	IDL	Raw Conc.	Reported Conc.	Lab Flag	Units
	Cr	0139	15	1.6	-0.22	1.6	U	ug/l

SDG BHB08

Interference Check Samples (ICS)

Initial	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	478.8	95.760	95.8	80	120

Final	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	482.1	96.420	96.4	80	120

Initial	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	485.6	97.120	97.1	80	120

Final	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	480.7	96.140	96.1	80	120

Initial	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	496.7	99.340	99.3	80	120

Final	Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
	Cr	500	481.5	96.300	96.3	80	120

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

Client Sample ID: *47532BKG

Element	Sample Result	Raw MS Result	Raw MSD Result	MS Spike Amount	MSD Spike Amount	MS % Rec.	MSD % Rec.	Reported MS % Rec.	Reported MSD % Rec.	% Rec. Limits		RPD	Reported RPD	RPD Limits
Cr	0	205.42	205.57	200	200	102.710	102.785	103	103	81	120	0.073	0	20

Client Sample ID: *47559BKG

Element	Sample Result	Raw MS Result	Raw MSD Result	MS Spike Amount	MSD Spike Amount	MS % Rec.	MSD % Rec.	Reported MS % Rec.	Reported MSD % Rec.	% Rec. Limits		RPD	Reported RPD	RPD Limits
Cr	0	201.03	200.64	200	200	100.515	100.320	101	100	81	120	0.194	0	20

Client Sample ID: 7047565BKG

Element	Sample Result	Raw MS Result	Raw MSD Result	MS Spike Amount	MSD Spike Amount	MS % Rec.	MSD % Rec.	Reported MS % Rec.	Reported MSD % Rec.	% Rec. Limits		RPD	Reported RPD	RPD Limits
Cr	0	197.24	196.72	200	200	98.620	98.360	99	98	81	120	0.264	0	20

SDG BHB08

Duplicates (Dup)

Client Sample ID: *47532BKG

Element	Raw Sample Result	Raw Dup Result	RPD	Reported RPD	RPD Limits
Cr	0	0	N/A	0	20

Comment: RPD is not applicable (N/A), sample concentrations less than five times the PQL of 5 µg/l.

Client Sample ID: *47559BKG

Element	Raw Sample Result	Raw Dup Result	RPD	Reported RPD	RPD Limits
Cr	0	0	N/A	0	20

Comment: RPD is not applicable (N/A), sample concentrations less than five times the PQL of 5 µg/l.

Client Sample ID: 7047565BKG

Element	Raw Sample Result	Raw Dup Result	RPD	Reported RPD	RPD Limits
Cr	0	1.19	N/A	0	20

Comment: RPD is not applicable (N/A), sample concentrations less than five times the PQL of 5 µg/l.

Laboratory Control Samples

Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
Cr	200	206.28	103.140	103	80	120

Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
Cr	200	201.5	100.750	101	80	120

Element	True	Raw Found	% Rec.	Reported % Rec.	Limits	
Cr	200	196.78	98.390	98	80	120

Serial Dilutions

Client Sample ID: *47532BKG

Element	Raw Sample Result	Raw Ser. Dil. Result	(%D)	Reported % Rec.	Limits (%D)
Cr	0	0	N/A	N/A	10

Comment: Serial dilution is not applicable (N/A), sample concentrations less than fifty times the MDL.

Client Sample ID: *47559BKG

Element	Raw Sample Result	Raw Ser. Dil. Result	(%D)	Reported % Rec.	Limits (%D)
Cr	0	0	N/A	N/A	10

Comment: Serial dilution is not applicable (N/A), sample concentrations less than fifty times the MDL.

Client Sample ID: 7047565BKG

Element	Raw Sample Result	Raw Ser. Dil. Result	(%D)	Reported % Rec.	Limits (%D)
Cr	0	0	N/A	N/A	10

Comment: Serial dilution is not applicable (N/A), sample concentrations less than fifty times the MDL.