MACTEC

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May 5, 2016

Mr. David Szymanski,
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2915

Subject: 2015/2016 Periodic Review Report
Alltift Landfill Site
Site Nos. 915054

Dear Mr. Szymanski:

MACTEC Engineering and Consulting, P.C. (Mactec), is submitting this Periodic Review Report (PRR) for the Alltift Landfill Site/Ramco Steel Site (site) on behalf of Honeywell International Inc. (Honeywell). The completed Site Management PRR Notice - Institutional and Engineering Controls Certification Form is provided herein as Attachment A, which includes a summary of deed restrictions. A report titled "2015/2016 Annual Operations, Maintenance, and Monitoring Report, Alltift Landfill Site" (OM&M Report), is included herein as Attachment B. The remainder of this document follows the outline presented in the Site Management Periodic Review Report and IC/EC Certification Submittal reminder notice letter dated April 8, 2016.

I. Introduction

A. Site Summary:
The primary remedial objectives at the Site are to eliminate the potential for direct contact with waste and impacted soils and sediments, and to eliminate the potential for impacted groundwater to discharge to the adjacent wetlands. Remedial construction activities began in November 2003 and were completed in November 2005. The key remedial actions for the site included:

- consolidation and capping of landfill waste and impacted soils and sediments
- construction of groundwater collection and relief trenches for groundwater control (see figures included in Appendix A of the attached OM&M report)
- groundwater monitoring
- restoration of ponds and wetlands.

The Alltift Landfill Site is located at 579 Tifft Street in the southern portion of the City of Buffalo, Erie County, New York. The Ramco Steel Site is adjacent to the southeastern tip of the Alltift Landfill (see figures included in Appendix A of the attached OM&M Report).

The Alltift Landfill Site was a former landfill/waste disposal area that was remediated between November 2003 and November 2005 under an Order of Consent between AlliedSignal (now Honeywell) and the New York State Department of Environmental Conservation (NYSDEC).

The remediation activities included the adjacent Ramco Steel Site (NYSDEC Site No. 915046B). The remediation involved consolidation of the wastes present on the Alltift Landfill and Ramco Steel sites into a capped landfill on the Alltift Landfill Site. A groundwater control system was installed at the downgradient toe of the landfill to collect and pump groundwater that emanates from the landfill to a sewer line owned by the Buffalo Sewer Authority (BSA) in accordance with the Buffalo Pollutant Discharge Elimination System (BPDES) Permit. As part of the remedial construction, man-made wetlands were created on the western and southern ends of the Alltift Landfill Site and the adjacent Ramco Steel Site.

On April 5, 2013, the NYSDEC accepted and approved the Construction Certification Report and Operation, Maintenance, and Monitoring Plan for the Alltift Landfill Site/Ramco Steel Site. The NYSDEC then re-classified the Alltift Landfill Site (NYSDEC Site No. 915054) from Class 2 to Class 4, and de-listed the Ramco Steel Site (NYSDEC Site No. 915046B).

During the 2015/2016 reporting period, the following routine OM&M activities were completed in accordance with the Operations, Maintenance, and Monitoring Manual, prepared by Parson Engineers, dated March 2006 (referred to hereafter as the OM&M Manual):

- BSA discharge monitoring
- groundwater monitoring
- quarterly site inspections
- routine maintenance activities.

B. Effectiveness Monitoring: The cap system is intact with suitable vegetative cover, and the wetlands mitigation area appears to be a successfully functioning wetland. Groundwater from the site is flowing into the groundwater capture trench as designed. Analytical results from the BSA monthly discharge sampling were within the BSA permit limits.

C. Compliance: The OM&M activities conducted during the reporting period were performed in accordance with the OM&M Manual, as described in the attached OM&M Report.

D. Recommendations: Implementation of the activities specified in the OM&M Manual will continue, as described in the attached OM&M Report and in Section VI E of this letter.

II. Site Overview

A. Site Location: The site plan is illustrated on the figures included in Appendix A of the attached OM&M Report. The site is located south of Tifft Street, approximately 1,300 feet west of Hopkins Street, and 5,000 feet east of the intersection of Tifft Street and Route 5. It is bounded on the north by Tifft Street; on the west by a railroad right-of-way and tracks; on the south by several ponds and the Ramco Steel Site; and on the east by Skyway Auto Parts, Inc. Prior to remediation, soils and sediments containing contaminant concentrations exceeding relevant NYSDEC standards were identified at the site.

The site remedy included consolidation and capping of landfill waste and impacted soils and sediments; construction of a groundwater collection trench and a groundwater relief trench; implementation of monthly BSA discharge monitoring; implementation of annual groundwater monitoring; and restoration of ponds and wetlands.

Groundwater collected in the trench is conveyed via a pumping system to a lift station located at the southeastern corner of the site. The lift station then discharges the collected groundwater to the sewer, under a BSA discharge permit. As required by the current BSA discharge permit, samples of the effluent were collected from the lift station on a semi-annual basis and analyzed for compliance with the parameter limits listed in the permit.

B. Chronology: Remediation of the site began in November 2003 and was concluded in November 2005. Waste and impacted sediment relocation was completed in September 2004, the construction of the groundwater collection trench was completed in October 2004, and the landfill capping system was completed in June 2005. Planting of wetland and woody vegetation, creating at least 11.2 acres of emergent marsh and open water habitats, was completed in November 2005.

III. Evaluation of Remedy Performance, Effectiveness and Protectiveness

A. The performance, effectiveness, and protectiveness of the remedy is verified by ensuring that the cap system is intact as constructed, that groundwater is being routed to the groundwater collection trench, and that the wetlands area is successfully functioning as designed.

- Ensuring the cap system is intact as constructed: Quarterly site inspections that include monitoring of landfill vegetation, ground inspections, and visual checks for evidence of erosion or subsidence are conducted. Resulting observations from the inspections indicate that the integrity of the cap appears sound (see the quarterly inspection reports included as Appendix G in the attached OM&M Report).
- Ensuring that groundwater is being routed to the groundwater collection trench: The integrity of the surface drainage and

groundwater collection systems is evaluated during the quarterly site inspections, and maintenance of these systems is performed when problems are identified. Water level measurements collected monthly from site monitoring wells, piezometers, and sumps are used to establish quarterly groundwater elevations at the site (see monthly and quarterly water level measurements, included as Appendix C and D, respectively, in the attached OM&M Report). The quarterly groundwater elevations are then used to plot quarterly groundwater contour maps. The contour maps indicate that groundwater at the site is being routed to the groundwater collection trench as designed (see quarterly groundwater contour maps included as Appendix E in the attached OM&M Report).

- Ensuring that the wetlands area is successfully functioning as designed: In its letter addressed to Honeywell, dated October 24, 2012, the USACE indicated that the terms and conditions of Permit No. 98-976-0162(0) had been met and that no further actions are required.

IV. IC/EC Plan Compliance Report – An IC/EC Plan was submitted to the NYSDEC on December 13, 2012. The IC/EC Plan has been adopted, and a description and status of institutional controls is included in Attachment A of this PRR. The status of site engineering controls is discussed in the attached OM&M Report.

V. Monitoring Plan Compliance Report – A separate Monitoring Plan Compliance Report is not required for this site. Monitoring requirements are addressed in the OM&M Manual.

VI. Operations and Maintenance Plan Compliance Report

A. Components of the OM&M Manual – Requirements of the OM&M Manual include the following:

- BSA Discharge Monitoring
- Groundwater Monitoring and Annual Groundwater Sampling
- Landfill Gas Monitoring
- Surface Water Level Measurements
- Quarterly Site Inspections
- Maintenance Activities (including annual mowing of cap, repair of access roads and areas without vegetative cover, repair of areas showing erosion or subsidence, and maintenance of the surface drainage and groundwater collection systems).

B. Summary of OM&M Completed during Reporting Period: BSA discharge monitoring, groundwater monitoring, quarterly site inspections, and other OM&M activities were completed in accordance with the OM&M Manual. The following summarizes the activities completed:

- BSA discharge monitoring was conducted on a semi-annual basis in accordance with the BPDES Permit in effect (Permit #15-12-BU098). Collected samples were submitted to TestAmerica Laboratories of Amherst, New York for analyses of the required parameters. Honeywell's OM&M Contractor - CH2M (formerly CH2M Hill) - prepared and submitted semi-annual discharge monitoring reports that documented the results of the monitoring to BSA. All sample results were within the permit limits.
- Groundwater levels for site piezometers, wells and groundwater collection trench sumps were recorded on a quarterly basis. The annual groundwater sampling event completed in October 2015 included collection of aqueous samples from background monitoring well MW-2 and collection system sumps; the samples were analyzed for parameters as described in the OM&M Manual. The results are summarized in the attached OM&M Report, and the analytical results are included in Appendix F.
- Quarterly site inspections were conducted as outlined in the OM&M Manual.
- Routine and non-routine maintenance activities completed during the reporting period included the following:
  - Periodic inspection and cleaning of the lift station flow meter
  - Periodic replacement of sump pumps
  - Troubleshooting and repair of electrical issues in September 2015
  - Plowing of snow from the entrance road as necessary
  - Repairs to perimeter fencing
  - Cleanout of sediment from low lift station on September 28, 2015
  - Cleaning of collection piping in September 2015

C. Evaluation of Remedial Systems: During the reporting period, the remedial systems appeared to be effectively achieving the objectives of the remedial action, as described in the attached OM&M Report.

D. OM&M Deficiencies: Most of the monitoring points are fully functional; however, there are three damaged or destroyed monitoring points (MW-1, PZ-14, and PZ-16). This condition does not impact the ability to monitor

groundwater conditions, and no actions to repair or replace are planned at this time.

E. Conclusions and Recommendations: The following conclusions are presented based on the data collected during the reporting period:

- Based on the results of the quarterly inspection reports, which verify that the integrity of the cap is satisfactory and vegetation is established, the remedy remains protective in its ability to eliminate the potential for direct contact with waste and impacted soils and sediments.
- Based on the evaluation of the collected groundwater elevation data, which indicates that impacted groundwater is flowing into the groundwater collection trench as designed, the remedy is eliminating the potential for impacted groundwater to discharge to the adjacent wetlands.
- Based on the analytical results from BSA discharge monitoring, concentrations of effluent parameters are within the BSA permit limits.

The following recommendations were developed based on the data collected during the reporting period:

- BSA Discharge Monitoring – In accordance with the current BSA permit, discharge monitoring will be conducted on a semi-annual basis, with reports issued to BSA and copied to the NYSDEC.
- Groundwater Monitoring – Annual groundwater monitoring will be completed in 2016 with groundwater monitoring results reported in the next annual PRR submittal.
- Water Level Measurements – Collection of water level measurements will be conducted on a quarterly basis.
- Landfill Gas Monitoring – Landfill gas monitoring will continue on an annual basis.
- Surface Water Level Measurements – in conjunction with the site inspections, surface water level measurements will continue to be collected using the top of the weir structure at the north end of Pond A as a reference.
- Site inspections will continue on a quarterly basis.
- Routine OM&M activities will continue on a monthly basis, or more frequently as needed based upon results of site inspections or to respond to groundwater collection system autodialer callouts.
- The next PRR submittal, to include the annual OM&M report, should be completed and submitted to NYSDEC by the end of May 2017.

VII. Overall PRR Conclusions

A. Compliance: Activities were completed during the reporting period as noted above.

B. Performance and Effectiveness of the Remedy: The condition of the cap system and consistent groundwater flow into the groundwater collection trench indicate that the remedy is performing effectively.

C. Future PRR submittals: It is anticipated that the next PRR will be submitted by the end of May 2017.

Closing

Please contact Ryan Belcher at (207) 828-3530 with any questions or comments on this submittal.

Respectfully,

MACTEC Engineering and Consulting P.C.

Ryan Belcher
Senior Engineer

Mark Stelmack, P.E.
Associate Engineer

Attachments

cc: M. Sweitzer (Honeywell)
D. Sutton (City of Buffalo)
K. Boland (CSX)

ATTACHMENT A

PRR NOTICE

IC/EC CONTROLS CERTIFICATION FORM

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **915054**

Site Name **Alltift Landfill**

Site Address: 302 Abby Street Zip Code: 14202
City/Town: Buffalo
County: Erie
Site Acreage: 37.8

Reporting Period: April 21, 2015 to April 21, 2016

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☑	☐
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 915054 Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
132-12-1-22	CSX Transportation Inc. - Adrian Realty	Ground Water Use Restriction Landuse Restriction O&M Plan

A Declaration of Covenants and Restrictions was placed on this property by the owner on 08/05/2011 (Filed 08/11/2011) as a requirement of the ROD dated 3/27/1995 for the Alltift Landfill Site, Site #915054.

Deed Restriction - 106 Abby Street:
No activity that will prevent or interfere with ongoing remediation;
will not disturb cap or cover;
prohibition of any new use without Department waiver;
prohibit use of groundwater;
allow Department access;
no interference with maintenance of wetlands;
will not impede maintenance of water elevation control (headwall);
no interference with ECs and Institutional Controls (ICs);
declaration deemed covenant, runs with the land and binding on successors and assigns; and,
any deed of conveyance shall recite the covenants and restrictions.

132.12-1-21	City of Buffalo, Prefecting	Ground Water Use Restriction Site Management Plan IC/EC Plan Monitoring Plan Landuse Restriction O&M Plan

In addition to the Engineering Controls in place after the remediation, this site is under the control of an Environmental Notice placed by the Department filed 3/12/2012.

Institutional Controls - Environmental Notice:

Property subject to provision of OM&M Manual;
no excavation that threatens engineering control(EC);
no disturbance of EC w/out Department waiver;
restrict re-use to commercial/industrial; and,
prohibit use of groundwater.

133.09-1-17	Skyway Auto Parts	Ground Water Use Restriction Landuse Restriction O&M Plan

No Engineering controls are required on this site. A Declaration of Covenants and Restrictions was placed on this property by the owner on 2/15/2012(Filed 3/01/2012) as a requirement of the ROD.

Deed Restriction - 637 Tifft Street

No activity that will prevent or interfere with ongoing remediation;
provide 60 day notice of any change of use;
prohibit groundwater use;
allow access for Department;
declaration deemed covenant, runs with the land and binding on successors and assigns; and,
any deed of conveyance shall recite the covenants and restrictions.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
132.12-1-21	Leachate Collection Cover System Fencing/Access Control

Engineering Controls:

Cover system - Part 360 composite cap
Leachate collection trench and sump system
Fencing around entire site

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 915054

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I MARK A. SWEITZER at 6100 PHILADELPHIA AVE CLAYMONT, DE 19703
print name print business address

am certifying as REMEDIAL PARTY (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

5-3-16
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Mark Stelmack (print name) at MACTEC ENGINEERING & CONSULTING, P.C. 511 CONGRESS ST., PORTLAND, ME 04101 (print business address),

am certifying as a Professional Engineer for the HONEYWELL INTERNATIONAL INC. (Owner or Remedial Party)

STATE OF NEW YORK
MARK JAMES STELMACK
080317
LICENSED PROFESSIONAL ENGINEER

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

5-3-2016

ATTACHMENT B

2015/2016 ANNUAL OPERATIONS, MAINTENANCE,

AND MONITORING REPORT

2015/2016 ANNUAL OPERATIONS, MAINTENANCE, AND MONITORING REPORT

ALLTIFT LANDFILL SITE

Buffalo, Erie County, New York
(NYSDEC Site Nos. 9-15-054)

Submitted To:

The New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation

Submitted By:

Honeywell

115 Tabor Road
Morris Plains, NJ 07950

Prepared By:

MACTEC

MACTEC Engineering and Consulting, P.C.
511 Congress Street
Portland, Maine 04101

MAY 2016

2015/2016 ANNUAL OPERATIONS, MAINTENANCE, AND MONITORING REPORT

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115 Tabor Road
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MACTEC Engineering and Consulting, P.C.
511 Congress Street
Portland, Maine 04101

MAY 2016

Ryan Belcher
Senior Engineer

Mark Stelmack, P.E.
Associate Engineer

Project Number: 3410120905

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TABLES

APPENDICES

1.0 INTRODUCTION

In accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent (Index No. B9-0194-87-07), Honeywell (formerly Allied-Signal, Inc.) performed a remedial action at the Alltift Landfill and the Ramco Steel sites, and is performing long-term operations, maintenance, and monitoring (OM&M) at the sites. MACTEC Engineering and Consulting, P.C. (Mactec), has prepared this report on behalf of Honeywell to document the results of the OM&M activities performed during the 2015/2016 reporting period. The activities described in this report were completed in accordance with the Operations, Maintenance, and Monitoring Manual (Parsons, 2006), as amended December 13, 2012.

The primary remedial objectives at the Alltift Landfill Site are to eliminate the potential for direct contact with waste and impacted soils and sediments, and to eliminate the potential for impacted groundwater to discharge to the Buffalo River. The key remedial actions for the site included the consolidation and capping of landfill waste and impacted soils and sediments; construction of groundwater collection and relief trenches for groundwater control; groundwater monitoring; and restoration of ponds and wetlands. Remedial construction began in November 2003 and was completed in November 2005.

This annual report has been prepared to summarize the OM&M activities completed at the sites from April 21, 2015 through April 21, 2016. Figures showing the site location and current conditions Site Plan are included as Appendix A. It is anticipated that the next annual OM&M report will be submitted by the end of May 2017.

1.1 PROJECT BACKGROUND AND SITE DESCRIPTION

The Alltift Landfill site is located at 579 Tifft Street in the southern portion of the City of Buffalo, Erie County, New York. Figures that show the site location and current conditions site plan are provided in Appendix A. The site is located south of Tifft Street, approximately 1,300 feet west of Hopkins Street, and 5,000 feet east of the intersection of Tifft Street and Route 5. It is bounded on the north by Tifft Street; on the west by a railroad right-of-way and tracks; on the south by several ponds and the Ramco Steel site; and on the east by Skyway Auto Parts, Inc.

The Ramco Steel Site is adjacent to the southeastern tip of the Alltift Landfill, and is approximately 8.5 acres in size and generally square in shape. The site is bounded on

the north by the Alltift Landfill and Skyway Auto Parts, Inc.; on the east by Niagara Cold Drawn; on the west by a railroad right-of-way and tracks; and on the south by LTV Steel (NYSDEC Site No. 9-15-047) and an abandoned facility formerly housing Sloan Auto Parts. The Ramco Steel Site encompasses the body of water known as the Ramco Pond.

The Alltift Landfill Site is a former landfill/waste disposal area that was remediated between November 2003 and November 2005 under an Order on Consent between AlliedSignal (now Honeywell) and the NYSDEC (NYSDEC, 1997). Remediation activities included those conducted on the adjacent Ramco Steel Site (NYSDEC Site No. 9-15-046B). The remediation involved consolidation of the wastes present on the Alltift Landfill and Ramco Steel sites into a capped landfill on the Alltift Site. A groundwater control system was installed at the downgradient toe of the landfill to collect and pump groundwater that emanates from the landfill to a sewer line owned by the Buffalo Sewer Authority (BSA) in accordance with a Buffalo Pollutant Discharge Elimination System Permit (BSA Permit). As part of the remedial construction, man-made wetlands were created on the western and southern ends of the Alltift Landfill site and the adjacent Ramco Steel property (see Site Plan in Appendix A).

On April 5, 2013, the NYSDEC accepted and approved the Construction Certification Report and Operation, Maintenance, and Monitoring Plan for the Alltift Landfill Site/Ramco Steel Site. The NYSDEC then re-classified the Alltift Landfill Site (NYSDEC Site No. 9-15-054) from Class 2 to Class 4, and de-listed the Ramco Steel Site (NYSDEC Site No. 9-15-046B).

1.2 2015/2016 OM&M ACTIVITIES

OM&M activities conducted at the site during the reporting period included BSA discharge monitoring, groundwater monitoring, quarterly site inspections, and routine and non-routine maintenance activities. These activities are described in detail in Section 2.0 of this report.

2.0 SUMMARY OF 2015/2016 OM&M ACTIVITIES

Since September 2007, Honeywell has contracted with CH2M (including various predecessor organizations) to perform the OM&M activities at the site. In 2015, the annual groundwater sampling activities were also conducted by CH2M. The following sections summarize the OM&M activities completed during the reporting period.

2.1 BSA DISCHARGE MONITORING

As part of the Remedial Action, a groundwater collection trench was installed along the western and southern perimeter of the landfill cap to intercept shallow groundwater, and a groundwater relief trench was installed along the western toe of the landfill to control leachate. The groundwater collection trench contains four vertical pumping points, identified as Sumps 1 through 4, which are constructed similar to extractions wells. Pumps in Sumps 1 and 2 operate continually in order to transfer groundwater from the collection and relief trenches to a lift station at the southeastern corner of the site. The lift station then transfers the water through a force main to a manhole located on Hopkins Street, under a permit with the BSA.

In accordance with the BSA permit, samples from the lift station were collected and analyzed semi-annually in May and October 2015. The results of the sampling are discussed in Section 3.1.

2.2 GROUNDWATER MONITORING

The groundwater monitoring activities conducted during the reporting period included the collection of quarterly water level measurements and annual groundwater sampling. These activities are summarized in the following subsections. The results of the activities are discussed in Section 3.2.

2.2.1 Quarterly Water Level Measurements

Water level measurements were collected on a quarterly basis from piezometers PZ-1 through PZ-13, piezometer PZ-15, and sumps 1 through 4, and annually from monitoring well MW-2, to monitor groundwater elevations upgradient, within, and downgradient of the groundwater collection trench. Three monitoring points specified in the OM&M Manual could not be included in the monitoring program: background monitoring well MW-1 and landfill piezometers PZ-14 and PZ-16 have damaged well casings which do not allow passage of a water level meter or sampling equipment.

2.2.2 Groundwater Sampling

On October 14, 2015 CH2M collected groundwater samples from background monitoring well MW-2 and the groundwater collection trench sumps. The samples were collected and analyzed in accordance with the OM&M Manual. During the sampling event, the depth to water and total well depth were gauged and recorded at monitoring well MW-2 prior to purging activities. Well MW-2 was purged and sampled using low-flow techniques, which includes monitoring field measurements such as pH, temperature, conductivity, and dissolved oxygen for stabilization prior to sampling. Field measurements of these parameters were also recorded at all of the sumps prior to sampling. A peristaltic pump with dedicated tubing was used to collect each sample. Grab samples were collected from each sump, and one composite sample was collected from the four sumps during the sampling event. Due to slow recharge in MW-2, a Matrix Spike (MS), Matrix Spike Duplicate (MSD), and duplicate sample were collected from Sump 4. Immediately upon completion of sample collection, the groundwater samples were packed with ice in laboratory coolers, and delivered to the laboratory. Chain-of-Custody procedures were followed in accordance with the OM&M Manual.

The 2015 groundwater samples were analyzed as follows:

Parameter	Analytical Method	Where Collected
Volatile Organic Compounds (VOCs) Benzene, chlorobenzene, ethylbenzene, xylenes, 1,2-dichlorobenzene, 1,4-dichlorobenzene	Environmental Protection Agency (EPA) 8260	MW-2 Sumps 1 through 4(1) Sump 4 (Duplicate, MS, MSD)
Semi volatile Organic Compounds (SVOCs) naphthalene, 4-chloroaniline	EPA 8270	MW-2 Sump 4 Sump Composite(2) Sump 4 (Duplicate, MS, MSD)
Total Metals antimony, arsenic, cadmium, chromium, iron, lead, manganese, mercury	EPA 6020/6010 /7470	MW-2 Sump 4 Sump Composite(2) Sump 4 (Duplicate, MS, MSD)

Notes:
(1) Individual samples were collected for VOC analysis to minimize potential volatilization of compounds
(2) Composite of Sump 1 through Sump 4

2.3 LANDFILL GAS MONITORING

Annual landfill gas monitoring was completed by CH2M at the three gas vents, the four corners of the landfill, and from each of the sumps during the reporting period. The results of the monitoring are described in Section 3.4.

2.4 SITE INSPECTIONS

Quarterly inspections were completed by CH2M during the reporting period on May 6, 2015, August 15, 2015, October 14, 2015, February 4, 2016, and April 7, 2016. The inspections were conducted in accordance with the OM&M Manual. The landfill cap, collection systems, monitoring points, and gas vents were visually inspected during each event. The results of the inspections are discussed in Section 3.5.

2.5 MAINTENANCE ACTIVITIES

Maintenance activities were performed routinely by CH2M for the site on a monthly basis or as needed throughout the year. The following is a summary of the routine and additional maintenance activities completed at the site during the reporting period:

- Periodic inspection and cleaning of the lift station flow meter.
- Periodic replacement of sump pumps.
- Troubleshooting and repair of electrical issues in September 2015.
- Plowing of snow from the entrance road as necessary.
- Repairs to perimeter fencing.
- Cleanout of sediment from low lift station on September 28, 2015.
- Cleaning of collection piping in September 2015.

3.0 RESULTS OF 2015/2016 OM&M ACTIVITIES

As discussed previously, CH2M completed the OM&M activities at the site and the annual groundwater sampling during the reporting period. The following sections summarize the results of CH2M's activities.

3.1 BSA DISCHARGE MONITORING

As required under the BSA discharge permit, samples of the system effluent were collected from the lift station by CH2M on a semi-annual basis during the reporting period. Samples collected were submitted to TestAmerica Laboratories of Amherst, New York for analyses of the required parameters. CH2M prepared and submitted semi-annual discharge monitoring reports documenting the results of the monitoring of discharge water to the BSA. All sampling results were within the BSA permit limits. These reports were sent to the BSA and NYSDEC on a semi-annual basis (Appendix B).

Semi-annual sampling will continue as required under the BSA discharge permit (Permit No. 15-12-BU98).

3.2 GROUNDWATER MONITORING

Groundwater monitoring activities completed during the reporting period included collection of quarterly water level measurements and annual groundwater sampling. The results of these activities are described in the following subsections.

3.2.1 Quarterly Water Level Measurements

Groundwater levels in site piezometers, wells and groundwater collection trench sumps were recorded on a quarterly basis. A table presenting the quarterly water level measurements is included in Appendix C. A table presenting the corresponding quarterly groundwater elevations is included in Appendix D. The groundwater elevations were used to prepare the quarterly groundwater contour maps presented in Appendix E. Based on the groundwater elevation data, it is concluded that groundwater flowing toward the toe of the Alltift landfill is being collected by the groundwater capture trench system, as intended by the system's design.

3.2.2 Groundwater Sampling

Groundwater sampling was conducted during the reporting period in accordance with the OM&M Manual. The analytical laboratory reports are provided as Appendix F. It

should be noted that the Sump 4 samples required re-sampling and analysis due to initial sample pH outside the required criteria when verified by the laboratory.

Analytical results for the groundwater sampling events conducted during the reporting period are summarized on Table 1. During the 2015 sampling event, concentrations of iron, manganese, and chlorobenzene were detected in one or more samples of the collection system at concentrations above the corresponding NYSDEC Class GA (groundwater) standard. Compared to results from recent previous years, it should be noted that VOCs were not detected in the Sump 2 sample; otherwise, results were generally consistent with previous events.

Based on a comparison of detections in the sump samples to detections in the background well (MW-2), it does not appear that contaminants of concern are migrating onto the site. Concentrations of benzene and chlorobenzene were not detected in MW-2. No analytes detected in MW-2 exceeded groundwater standards.

3.3 SURFACE WATER MEASUREMENTS

Surface water level measurements were collected from a weir structure located at the north end (i.e., outlet end) of Pond A. The top of the concrete weir has an elevation measurement point of 580.26 feet. The water level at the weir was measured as follows:

- March 12, 2015 – measured at 4 inches above the weir.
- July 15, 2015 – measured at 2 inches below the weir.
- April 7, 2016 – measured at 4 inches above the weir.

3.4 LANDFILL GAS MONITORING

Landfill gas monitoring was conducted on April 7, 2016. During the event the gas vents (GV-1, GV-2 and GV-3), the four sump locations (Sump 1 through Sump 4), and four ground monitoring locations were monitored. The four ground monitoring locations were:

- Ground 1 - Northwest corner of landfill

- Ground 2 – West side of landfill
- Ground 3 – Southeast corner of landfill
- Ground 4 – Northeast corner of landfill

The gas vents were monitored for percent of the Lower Explosive Limit (LEL) of Methane, Methane, Oxygen, and Carbon Dioxide (See Table 2).

During the landfill gas monitoring event, one percent of the LEL of methane gas was detected in all three monitoring gas vents GV-1, GV-2, and GV-3, all four ground monitoring locations, and all four sumps. The landfill gas monitoring data is summarized on Table 2. None of the detections require action to be taken.

3.5 SITE INSPECTIONS

Quarterly site inspections were performed by CH2M during the reporting period. The inspections were conducted in accordance with the OM&M Manual. The wetlands, groundwater monitoring wells, drainage system, gas vents, and landfill cap were visually inspected. Copies of the completed inspection checklists are provided in Appendix G.

The inspections indicated that the site has a substantial vegetative cover and that the surface drainage system is in good condition. The lack of sediment buildup, ponded water, uncontrolled runoff, and slope instability indicates that the drainage system is adequate and operational. The access road is in good condition. The condition of the perimeter fence, gates, locks, and signs are sufficient to restrict access. The integrity of the groundwater monitoring wells, piezometers, and sumps were verified during the inspections.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions were developed based on the data collected during the reporting period:

- Based on the results of the quarterly inspection reports, which verify that the integrity of the cap is adequate and vegetation is established, the remedy remains protective for direct contact with waste and impacted soils and sediments.
- Based on the evaluation of the collected groundwater elevation data, which indicates that impacted groundwater is flowing into the groundwater collection trench as designed, the remedy is preventing impacted groundwater from discharging into the adjacent wetlands.
- Based on the analytical results from BSA discharge monitoring, compounds in the discharge are within the BSA permit limits.

The following recommendations are presented based on the data collected during the reporting period:

- BSA Discharge Monitoring – In accordance with the current BSA permit (Permit No. 15-12-BU98, expires November 30, 2018), discharge monitoring will continue on a semi-annual basis, with reports issued to BSA and copied to the NYSDEC.
- Groundwater Monitoring – Annual groundwater monitoring will be completed in 2016 from the same monitoring points used during prior monitoring events. Groundwater monitoring results will be reported in the next annual Periodic Review Report submittal.
- Water Level Measurements – Water level measurements will continue on a quarterly basis, to be collected from site monitoring wells, piezometers, and sumps, consistent with the requirements presented in Table 2.2 of the OM&M Manual. Collection of water level measurements will be conducted in conjunction with site inspections.
- Landfill Gas Monitoring – Measurements of methane gas concentrations at gas vents GV-1, GV-2, GV-3, the four sump locations, and the four ground surface locations have been below the LEL since the third quarter of 2011. Consistent with the requirements set forth in the Operations, Maintenance, and Monitoring Manual, landfill gas monitoring will continue on an annual basis.

- Surface Water Level Measurements – in conjunction with the site inspections, surface water levels will continue to be collected on a quarterly basis, using the top of the weir structure at the north end of Pond A as a reference.
- Site inspections will continue on a quarterly basis.
- Routine OM&M activities will continue on an approximate monthly basis, or more frequently as needed.

5.0 REFERENCES

NYSDEC, 1997. Order on Consent between AlliedSignal, Inc. and NYSDEC, Index #B9-87-194, #B9-0358-91-2, Site Codes #9515054 and 915046B. December 1997.

Parsons, 2006 (As Amended December 13, 2012). Operations, Maintenance, and Monitoring Manual for Alltift Landfill Site, NYSDEC Site No. 9-15-054 and Ramco Steel Site, NYSDEC Site No. 9-15-046B, Buffalo, New York. March 2006.

6.0 LIST OF ACRONYMS AND ABBREVIATIONS

BSA	Buffalo Sewer Authority
EPA	Environmental Protection Agency
LEL	Lower Explosive Limit
Mactec	Mactec Engineering and Consulting, P.C.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NYSDEC	New York State Department of Environmental Conservation
OM&M	Operations and maintenance Manual
SVOC	Semi volatile Organic Compound
VOC	Volatile Organic Compound

TABLES

TABLE 1
Summary of Groundwater Analytical Results - 2015
2015/2016 Annual OM&M Report
Alltift Landfill /Ramco Steel Site

Parameter Name	Units	NYSDEC Class GA Standards	MW-2-101415 10/14/2015	Sump 1-101415 10/14/2015	Sump 2-101415 10/14/2015	Sump 3-101415 10/14/2015	Sump 4-101415 10/14/2015	FDUP- 101415 (Sump 4) 10/14/2015	Sump Comp 101415 10/14/2015
Metals (Dissolved)									
ANTIMONY	**mg/L**	**0.003**	**0.00035 J**	-- --	-- --	-- --	**0.0017**	**0.00087 J**	**0.00084 J**
ARSENIC	**mg/L**	**0.025**	**0.0016**	-- --	-- --	-- --	**0.0151**	**0.0117**	**0.0131**
CADMIUM	**mg/L**	**0.005**	0.0005 U	-- --	-- --	-- --	0.0005 U	0.0005 U	0.0005 U
CHROMIUM	**mg/L**	**0.05**	0.0040 U	-- --	-- --	-- --	**0.0035 J**	**0.0025 J**	**0.011**
IRON	**mg/L**	**0.3**	**0.056**	-- --	-- --	-- --	**37.4**	**35.9**	**19.6**
LEAD	**mg/L**	**0.025**	0.0050 U	-- --	-- --	-- --	0.0050 U	0.0050 U	**0.013**
MANGANESE	**mg/L**	**0.3**	**0.017**	-- --	-- --	-- --	**1.6**	**1.6**	**1.9**
MERCURY	**mg/L**	**0.0007**	0.00020 U	-- --	-- --	-- --	0.00020 U	0.00020 U	0.00020 U
VOCs									
BENZENE	**ug/L**	**1**	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	4.0 U	-- --
CHLOROBENZENE	**ug/L**	**5**	1.0 U	**1.4**	5.0 U	4.0 U	**25**	**25**	-- --
ETHYLBENZENE	**ug/L**	**5**	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	4.0 U	-- --
XYLENES, TOTAL	**ug/L**	**5**	2.0 U	2.0 U	10 U	8.0 U	8.0 U	8.0 U	-- --
1,2-DICHLOROBENZENE	**ug/L**	**3**	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	4.0 U	-- --
1,4-DICHLOROBENZENE	**ug/L**	**3**	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	4.0 U	-- --
SVOCs									
4-CHLOROANILINE	**ug/L**	**5**	4.6 U	-- --	-- --	-- --	4.7 U	4.6 U	4.6 U
NAPHTHALENE	**ug/L**	**10**	4.6 U	-- --	-- --	-- --	4.7 U	4.6 U	4.6 U

Note:
Bold - Detected during Laboratory Analysis
J - Analyte Detected Below Reporting Limit
U - Analyte not detected
-- - Not Analyzed
Shading indicates exceedance of NYSDEC Class GA Standard

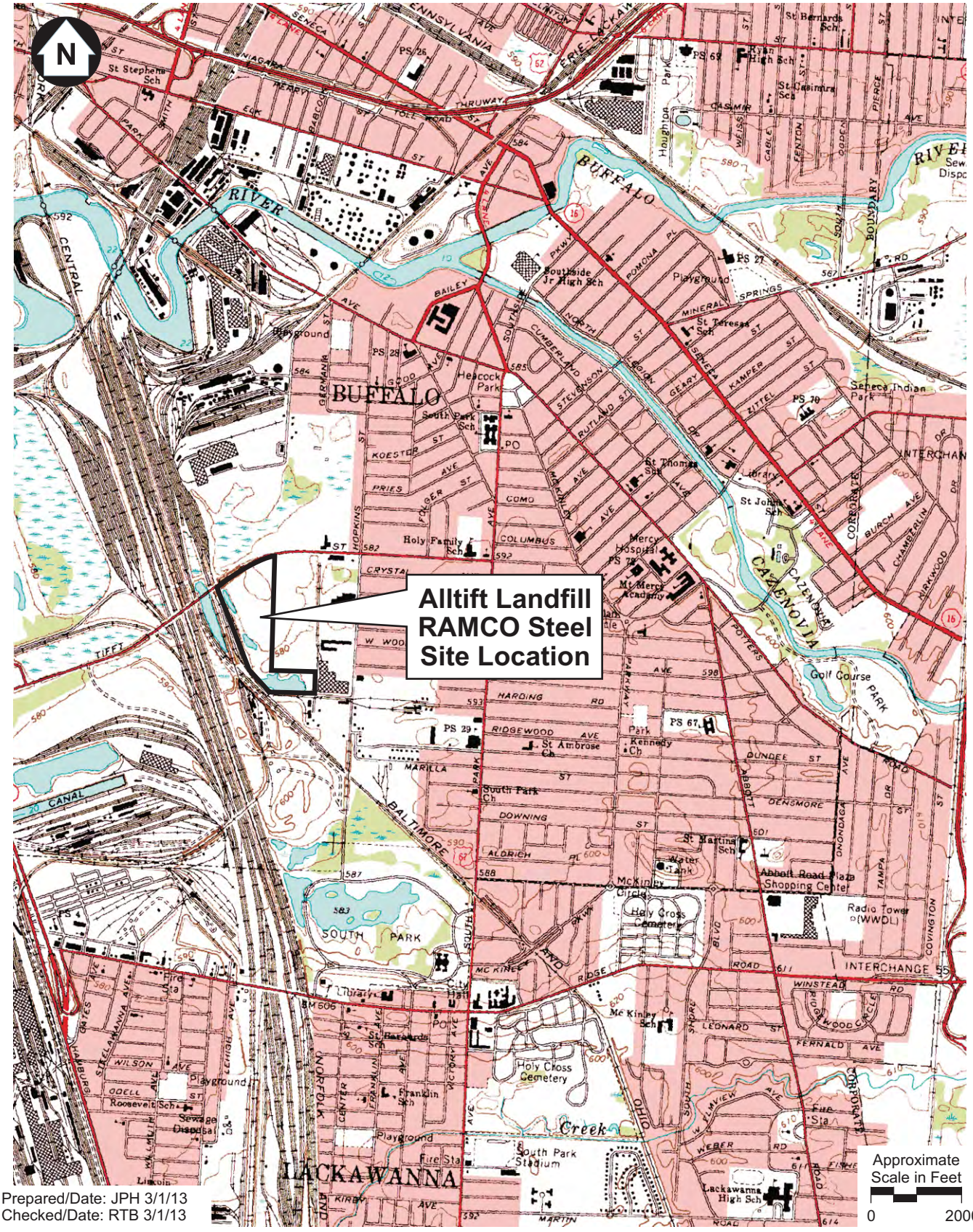
Prepared By: AG 04/14/2016
Checked By: RTB 04/22/2016

TABLE 2
Landfill Gas Monitoring Data - 2013 through 2016
2015/2016 Annual OM&M Report
Alltift Landfill/Ramco Steel Site

	First Quarter - 1/10/2013				Second Quarter - 5/21/2013				Third Quarter - 9/11/2013				Fourth Quarter - 10/24/2013				2014 - 3/18/2014				2015 - 3/12/2015				2016 - 4/7/2016			
Location:	**CH_4**	**CO_2**	**O_2**	**LEL CH_4**	**CH_4**	**CO_2**	**O_2**	**LEL CH_4**	**CH_4**	**CO_2**	**O_2**	**LEL CH_4**	**CH_4**	**CO_2**	**O_2**	**LEL CH_4**	**CH_4**	**CO_2**	**O_2**	**LEL CH_4**	**CH_4**	**CO_2**	**O_2**	**LEL CH_4**	**CH_4**	**CO_2**	**O_2**	**LEL CH_4**
GV-1	0.1%	0.0%	21.4%	3.0%	0.0%	0.0%	20.3%	0.0%	0.0%	0.0%	20.9%	1.0%	0.0%	0.0%	21.1%	1.0%	0.1%	0.1%	19.1%	1.0%	0.0%	0.1%	21.7%	1.0%	0.0%	0.1%	21.0%	1.0%
GV-2	0.1%	0.0%	21.3%	3.0%	0.0%	0.0%	20.2%	1.0%	0.0%	0.0%	20.4%	2.0%	0.0%	0.1%	20.8%	2.0%	0.1%	0.1%	18.9%	2.0%	0.0%	0.1%	21.6%	1.0%	0.0%	0.1%	21.1%	1.0%
GV-3	0.1%	0.0%	21.2%	4.0%	0.0%	0.0%	20.2%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.9%	20.1%	0.0%	0.1%	0.1%	19.2%	2.0%	0.1%	0.1%	21.9%	1.0%	0.0%	0.1%	21.1%	1.0%
Ground #1	0.2%	0.0%	21.5%	4.0%	0.1%	0.0%	20.4%	2.0%	0.1%	0.0%	20.4%	2.0%	0.0%	0.1%	20.9%	0.0%	0.3%	0.2%	18.5%	4.0%	0.0%	0.1%	20.8%	1.0%	0.0%	0.1%	21.0%	1.0%
Ground #2	0.2%	0.0%	21.3%	4.0%	0.1%	0.0%	20.3%	1.0%	0.0%	0.0%	20.6%	0.0%	0.0%	0.1%	20.9%	0.0%	0.2%	0.2%	18.7%	4.0%	0.0%	0.1%	21.8%	1.0%	0.0%	0.1%	21.1%	1.0%
Ground #3	0.2%	0.0%	21.3%	3.0%	0.0%	0.0%	20.3%	1.0%	0.0%	0.0%	20.4%	0.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.2%	18.6%	4.0%	0.0%	0.1%	21.7%	1.0%	0.0%	0.1%	21.1%	1.0%
Ground #4	0.2%	0.0%	21.3%	3.0%	0.0%	0.0%	20.3%	2.0%	0.0%	0.0%	20.7%	0.0%	0.0%	0.0%	21.0%	0.0%	0.0%	0.1%	19.6%	3.0%	0.0%	0.1%	21.8%	1.0%	0.0%	0.1%	21.1%	1.0%
Sump #1	0.2%	0.0%	21.4%	4.0%	0.0%	0.0%	20.4%	1.0%	0.0%	0.0%	21.2%	0.0%	0.0%	0.1%	20.9%	0.0%	0.0%	0.0%	20.4%	0.0%	0.1%	0.1%	20.9%	1.0%	0.1%	0.1%	21.0%	1.0%
Sump #2	0.2%	0.0%	21.3%	4.0%	0.2%	0.1%	20.2%	4.0%	0.7%	17.0%	0.6%	15.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.4%	18.7%	2.0%	0.0%	0.1%	21.4%	1.0%	0.0%	0.1%	21.0%	1.0%
Sump #3	0.2%	0.0%	21.2%	3.0%	0.1%	0.0%	20.3%	2.0%	0.0%	0.0%	20.4%	0.0%	0.0%	0.1%	20.9%	0.0%	0.1%	0.2%	18.9%	3.0%	0.0%	0.1%	21.8%	1.0%	0.0%	0.1%	21.1%	1.0%
Sump #4	0.1%	0.0%	21.1%	3.0%	0.0%	0.0%	20.3%	1.0%	0.1%	0.1%	19.9%	0.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.2%	18.7%	4.0%	0.0%	0.1%	21.8%	1.0%	0.0%	0.1%	21.1%	1.0%

Notes:
Ground 1 - Monitoring location in the Northwest corner of Landfill
Ground 2 - Monitoring location on the West side of Landfill
Ground 3 - Monitoring location in the Southeast corner of Landfill
Ground 4 - Monitoring location in the Northeast corner of Landfill
LEL - Lower Explosive Limit
CH4 - Methane
CO2 - Carbon Dioxide
O2 - Oxygen
Landfill Gas Monitoring Frequency revised, as approved, to Annual starting in 2014.

APPENDIX A
SITE LOCATION AND CURRENT CONDITIONS SITE PLAN FIGURES



Prepared/Date: JPH 3/1/13
Checked/Date: RTB 3/1/13

Honeywell

amec

Site Location Map
Alltift Landfill/Ramco Steel Site
Project No. 3410120905
Figure 1

PORT2011018a.cdr

MW-1
MW-2
Sump-1
SSA1
SW1
SSA2
Sump-2
Sump-3
Sump-4
Lift Station

Legend

- Monitoring Well
- Sediment
- Surface Water
- Lift Station
- Sump
- Planting Areas
- Coarse Woody Debris
- Open Water
- Deep Water Emergent
- Wet Meadow Emergent
- Approximate Wetland Boundary

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

N

0 90 180 Feet

Prepared/Date: BRP 04/27/15
Checked/Date: RTB 04/27/15

HONEYWELL

amec

Current Conditions
Site Plan

Project 3410120905 Figure 2

Document: P:\Projects\HoneywellO,M and M Team\Alltift Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\MapDocuments\Site_Conditions_11x17P.mxd PDF: P:\Projects\HoneywellO,M and M Team\Alltift Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\Figures\April 2015\Figure 2 - Current Conditions.pdf 04/27/2015 2:27 PM brian.peters

APPENDIX B
SEMI-ANNUAL DISCHARGE MONITORING REPORTS

CH2M
1563 Willis Avenue
Syracuse, New York 13204
O +1 315 468 1663
F +1 315 468 1664
www..ch2m.com

May 27, 2015

Ms. Traserra Adams
Buffalo Sewer Authority
Industrial Waste Section
90 West Ferry Street
Buffalo, New York 14213

Subject: **Alltift Landfill/Ramco Steel Site**
Discharge Monitoring Report
2015 First Semi-Annual Report
BPDES Permit Number 12-12-BU098

Dear Ms. Adams:

Enclosed please find the 2015 First Semi-Annual discharge monitoring report for the pumping facility located at the Alltift Landfill/Ramco Steel (Alltift) Site. The total flow to the Buffalo Sewer Authority (BSA) during this period was 3,123,953 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from September 9, 2014 through May 6, 2015 for a total of 239 days. Flow metering readings collected during the reporting period are included as Attachment 1.

A time composite discharge sample was collected from within the pump station on May 6, 2015. Four samples were collected over an evenly-spaced work day period for VOCs and SVOCs, The four samples were composited in the laboratory per permit requirements. The sample for metals, total suspended solids, total phosphorus, and pH was collected as a composite sample. A summary of the analytical results, compared to permit limits, is provided in Table 1. All parameters were in compliance with permit limits. The laboratory analytical report is provided as Attachment 2. If you have any questions or require additional information, please contact me at (315) 468-1663.

Sincerely,

CH2M,

John W. Formoza
Area Manager

QC Review By: Ryan Belcher (Amec Foster Wheeler)

cc.: Mr. Mark Sweitzer (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Dennis Sutton (City of Buffalo)
Mr. Robert Gersh (Amec Foster Wheeler)

Table 1
Alltift Landfill/Ramco Steel Site
First Semi-annual Report for 2015
Discharge Monitoring Report

BSA Permit No. 12-12-BU98	
Sample Date:	May 6, 2015
Sample Location:	Onsite Pump Station to BSA

BSA Permit Parameter	Input Analytical Results				Converted Analytical Results		BSA Daily Max Discharge Limit		Permit Compliance
	Quantity	Qualifier	Reporting Limit	Unit	Quantity	Unit	Quantity	Unit	
pH	7.02		0.100	SU	7.02	SU	5.0 - 12.0	SU	Yes
Benzene	ND		50	µg/L	ND	lbs/day	0.068	lbs/day	Yes
Chlorobenzene	54		50	µg/L	0.006	lbs/day	0.148	lbs/day	Yes
4-Chloroaniline	12		5.0	µg/L	0.001	lbs/day	0.048	lbs/day	Yes
Naphthalene	ND		5.0	µg/L	ND	lbs/day	0.048	lbs/day	Yes
Arsenic	0.022		0.010	mg/L	0.002	lbs/day	0.864	lbs/day	Yes
Barium	0.29		0.002	mg/L	0.03	lbs/day	0.48	lbs/day	Yes
Chromium	0.0044		0.004	mg/L	0.000	lbs/day	2.4	lbs/day	Yes
Copper	0.0059	J	0.010	mg/L	0.001	lbs/day	7.68	lbs/day	Yes
Nickel	0.012		0.010	mg/L	0.0013	lbs/day	6.72	lbs/day	Yes
Zinc	0.006	J	0.010	mg/L	0.0007	lbs/day	12	lbs/day	Yes
Total Suspended Solids	44.8		4.0	mg/L	44.8	mg/L	250	mg/L	Yes
Total Phosphorus	0.2		0.010	mg/L	Monitor Only				
USEPA Test Method 624	ND-54			µg/L					
USEPA Test Method 625	ND-12			µg/L					
Total Flow (average)	9.08			gpm	13,071	gpd	57,600	gpd	Yes

Notes:
J - estimated value below Reporting Limit/Practical Quantitation Limit
ND - Not detected at the reporting limit

µg/L - micrograms per liter
mg/L - milligrams per liter

gpm - gallons per minute
gpd - gallons per day
SU - Standard Units

Flow Calculations	Old Meter	New Meter		
Initial Reading (pump station)	5971742			9/9/2014
Fianl Reading/Initial Reading (Pump Station)	8422200	0		3/12/2015
Final Reading (pump station)		673495		5/6/2015
Total Days in Period			239	
Total Flow for Period	**2,450,458**	**673,495**	**3,123,953**	**gallons**
Average Flow for Period			**9.08**	**gpm**

Prepared by, Date: VVN Deepthi, 05/27/2015
Checked by, Date: Ryan Belcher, 05/27/2015

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station		
Date	Totalizer Reading (gallons)	
9/9/2014	5,971,742	
9/26/2014	6,138,500	
10/6/2014	6,200,319	
10/9/2014	6,213,191	
10/30/2014	6,521,328	
12/14/2014	7,168,500	
1/20/2015	7,856,800	
3/12/2015	8,422,200	
3/12/2015	0	New Meter
4/21/2015	535,300	
4/29/2015	579,300	
5/6/2015	673,495	

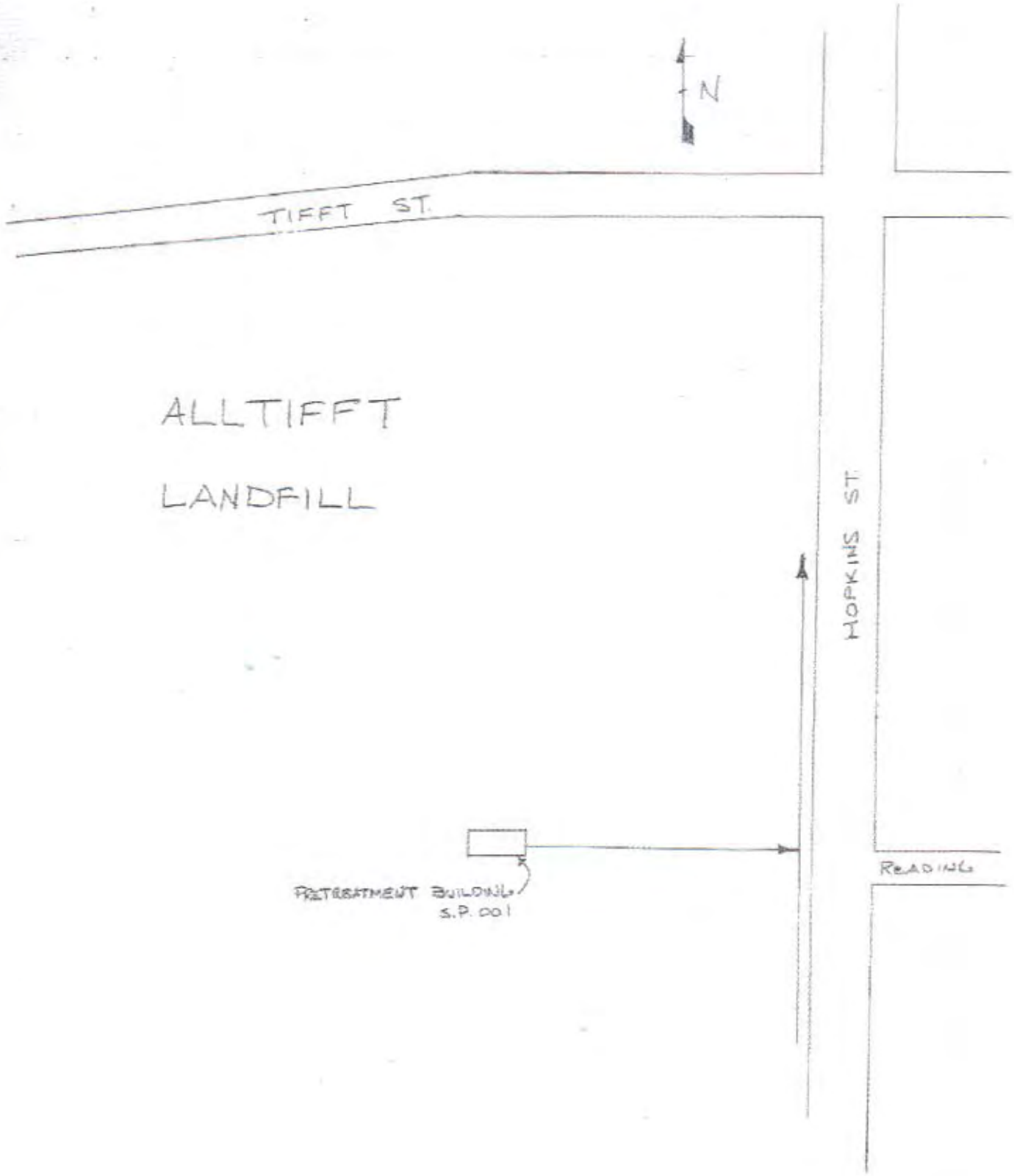
CERTIFICATION STATEMENT

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

(Your signature here) John W Formoza 5/27/15

(Print your name & title here) JOHN W FORMOZA Date

(Print your company name here) CH2M ON BEHALF OF HONEYWELL


N
TIFFT ST.
ALLTIFFT
LANDFILL
HOPKINS ST.
READING
PRETREATMENT BUILDING
S.P. 001

CH2MHILL

Project Name Honeywell - Buffalo
Job Number 481662.B5.RM.RS
Field Team Patrick Higgins/Mike Stout
Field Conditions Overcast Cool Morning giving Way to Sunshine

Sampling Event Semi Annual Sampling AlTiff
Date May 6th, 2015
Page 1 of 1

Well/Sample Number BSA Lift Station
Initial Depth to Water 9.55
Start Time 7:00
Finish Time 13:45
Measure Point: PVC Steel Casing Other Concrete Vault

Purge Method:
Geopump Ded. Pump Other
Sample Method: Bailer

Sample ID
Duplicate Sample ID
Split Sample ID

Sample Time 07.00
Dupl. Time
Split. Time

Depth to Bottom (from meas. pt): Min. Purge Volume (gal/L) Purge Rate (gpm)/(mLpm)
Water Quality Parameter Measurment Technique: flow-thru cell in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
0700	GRAB 1	Sample 3	VOA AND 2 Amber	+ Composite				
0900	GRAB 2	SAMPLE 3	VOA AND 2 AMBER	+ COMPOS.TE				
1100	GRAB 3	SAMPLE 3	VOA AND 2 AMBER	+ COMPOS.TE				
1300	GRAB 4	SAMPLE 3	VOA AND 2 AMBER	+ COMPOS.TE				
13:15	COMPOSITE	SAMPLING:	1	1 Liter Plastic				
			1	250 ml HNO3				
			1	250 ml Sulfuric				

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
GRAB 624 - 3ml	VOA	40ml	N	HCL		VOA-624
GRAB 625	AMBER	1 Liter	N	—		AMBER-625
Composite	PLASTIC	250ml	N	Sulfuric		4500 P-E Phosphorous total
Composite	PLASTIC	250ml	N	HNO3		200.7 Metals ICP
Composite	PLASTIC	1 Liter	N	~~HCL~~		TSS
Composite	PLASTIC	125	N	—		pH

Remarks: Water is Tinged Orange in color with no distinct odor
Water Meter @ 673495

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-79812-1
Client Project/Site: 30130 - Alltift OM Phase/Semi Annual
Revision: 1

For:
Honeywell International Inc
101 Columbia Road
Morristown, New Jersey 07962

Attn: Mr. Rich Galloway

Authorized for release by:
5/22/2015 3:37:55 PM
Rebecca Jones, Project Management Assistant I
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Designee for

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Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-79812-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-79812-1

Revision
This report has been revised to include Nickel results.

Receipt
The samples were received on 5/6/2015 2:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA
Method(s) 624: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: Grab 1-4-050615 (480-79812-5). Elevated reporting limits (RLs) are provided.

Method(s) 624: The following Volatile samples were composited by the laboratory on 5/8/15 as requested by the client: Grab 1-4-050615 (480-79812-5): Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using laboratory standard operating procedures.

Method(s) 624: The preservative used in the sample containers provided is not compatible with the Method 624 analytes requested. The following samples were received preserved with hydrochloric acid: Grab 1-4-050615 (480-79812-5) and TB-050615 (480-79812-7). The requested target analyte list contains 2-chloroethylvinyl ether, which is an acid-labile compound that degrades in an acidic medium.

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

GC/MS Semi VOA
Method(s) 625: The laboratory control sample duplicate (LCSD) for 241295 recovered outside control limits for the following analytes: Hexachloroethane, N-Nitrosodimethylamine. Hexachloroethane, N-Nitrosodimethylamine have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

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

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

General Chemistry
Method(s) SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: COMP 050615 (480-79812-6).

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

Organic Prep
Method(s) 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with 241295.

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

Detection Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: Grab 1-4-050615 — Lab Sample ID: 480-79812-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	37	J	100	32	ug/L	10		624	Total/NA
Chlorobenzene	54		50	4.8	ug/L	10		624	Total/NA
trans-1,2-Dichloroethene	6.7	J	50	5.9	ug/L	10		624	Total/NA
Vinyl chloride	14	J	50	7.5	ug/L	10		624	Total/NA
4-Chloroaniline	12		5.0	0.64	ug/L	1		625	Total/NA

Client Sample ID: COMP 050615 — Lab Sample ID: 480-79812-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.022		0.010	0.0056	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.29	B	0.0020	0.00070	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0044		0.0040	0.0010	mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.0059	J	0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.012		0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0060	J B	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Phosphorus, Total	0.20		0.010	0.0050	mg/L	1		SM 4500 P E	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	44.8		4.0	4.0	mg/L	1		SM 2540D	Total/NA
pH	7.02	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TB-050615 — Lab Sample ID: 480-79812-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: Grab 1-4-050615

Date Collected: 05/06/15 13:00
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-5

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.9	ug/L			05/09/15 07:09	10
1,1,2,2-Tetrachloroethane	ND		50	2.6	ug/L			05/09/15 07:09	10
1,1,2-Trichloroethane	ND		50	4.8	ug/L			05/09/15 07:09	10
1,1-Dichloroethane	ND		50	5.9	ug/L			05/09/15 07:09	10
1,1-Dichloroethene	ND		50	8.5	ug/L			05/09/15 07:09	10
1,2-Dichlorobenzene	ND		50	4.4	ug/L			05/09/15 07:09	10
1,2-Dichloroethane	ND		50	6.0	ug/L			05/09/15 07:09	10
1,2-Dichloroethene, Total	**37**	**J**	100	32	ug/L			05/09/15 07:09	10
1,2-Dichloropropane	ND		50	6.1	ug/L			05/09/15 07:09	10
1,3-Dichlorobenzene	ND		50	5.4	ug/L			05/09/15 07:09	10
1,4-Dichlorobenzene	ND		50	5.1	ug/L			05/09/15 07:09	10
2-Chloroethyl vinyl ether	ND		250	19	ug/L			05/09/15 07:09	10
Acrolein	ND		1000	170	ug/L			05/09/15 07:09	10
Acrylonitrile	ND		500	19	ug/L			05/09/15 07:09	10
Benzene	ND		50	6.0	ug/L			05/09/15 07:09	10
Bromoform	ND		50	4.7	ug/L			05/09/15 07:09	10
Bromomethane	ND		50	12	ug/L			05/09/15 07:09	10
Carbon tetrachloride	ND		50	5.1	ug/L			05/09/15 07:09	10
Chlorobenzene	**54**		50	4.8	ug/L			05/09/15 07:09	10
Chlorodibromomethane	ND		50	4.1	ug/L			05/09/15 07:09	10
Chloroethane	ND		50	8.7	ug/L			05/09/15 07:09	10
Chloroform	ND		50	5.4	ug/L			05/09/15 07:09	10
Chloromethane	ND		50	6.4	ug/L			05/09/15 07:09	10
cis-1,3-Dichloropropene	ND		50	3.3	ug/L			05/09/15 07:09	10
Dichlorobromomethane	ND		50	5.4	ug/L			05/09/15 07:09	10
Ethylbenzene	ND		50	4.6	ug/L			05/09/15 07:09	10
Methylene Chloride	ND		50	8.1	ug/L			05/09/15 07:09	10
Tetrachloroethene	ND		50	3.4	ug/L			05/09/15 07:09	10
Toluene	ND		50	4.5	ug/L			05/09/15 07:09	10
trans-1,2-Dichloroethene	**6.7**	**J**	50	5.9	ug/L			05/09/15 07:09	10
trans-1,3-Dichloropropene	ND		50	4.4	ug/L			05/09/15 07:09	10
Trichloroethene	ND		50	6.0	ug/L			05/09/15 07:09	10
Vinyl chloride	**14**	**J**	50	7.5	ug/L			05/09/15 07:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 130*		*05/09/15 07:09*	*10*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*		*05/09/15 07:09*	*10*
Toluene-d8 (Surr)	*103*		*70 - 123*		*05/09/15 07:09*	*10*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*05/09/15 07:09*	*10*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.82	ug/L		05/08/15 09:41	05/12/15 03:29	1
1,2-Dichlorobenzene	ND		10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
1,2-Diphenylhydrazine	ND		10	0.78	ug/L		05/08/15 09:41	05/12/15 03:29	1
1,3-Dichlorobenzene	ND		10	0.69	ug/L		05/08/15 09:41	05/12/15 03:29	1
1,4-Dichlorobenzene	ND		10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,4,6-Trichlorophenol	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,4-Dichlorophenol	ND		5.0	0.77	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,4-Dimethylphenol	ND		5.0	1.4	ug/L		05/08/15 09:41	05/12/15 03:29	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: Grab 1-4-050615
Date Collected: 05/06/15 13:00
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-5
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,4-Dinitrotoluene	ND		5.0	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,6-Dinitrotoluene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2-Chloronaphthalene	ND		5.0	0.91	ug/L		05/08/15 09:41	05/12/15 03:29	1
2-Chlorophenol	ND		5.0	0.66	ug/L		05/08/15 09:41	05/12/15 03:29	1
2-Nitrophenol	ND		5.0	0.70	ug/L		05/08/15 09:41	05/12/15 03:29	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		05/08/15 09:41	05/12/15 03:29	1
4,6-Dinitro-2-methylphenol	ND		10	0.66	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Bromophenyl phenyl ether	ND		5.0	1.4	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Chloro-3-methylphenol	ND		5.0	1.1	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Chloroaniline	**12**		5.0	0.64	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Chlorophenyl phenyl ether	ND		5.0	1.3	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Nitrophenol	ND		15	10	ug/L		05/08/15 09:41	05/12/15 03:29	1
Acenaphthene	ND		5.0	0.81	ug/L		05/08/15 09:41	05/12/15 03:29	1
Acenaphthylene	ND		5.0	0.87	ug/L		05/08/15 09:41	05/12/15 03:29	1
Anthracene	ND		5.0	1.4	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzidine	ND		80	35	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[a]anthracene	ND		5.0	1.1	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[a]pyrene	ND		5.0	1.3	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[b]fluoranthene	ND		5.0	1.2	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[g,h,i]perylene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[k]fluoranthene	ND		5.0	1.3	ug/L		05/08/15 09:41	05/12/15 03:29	1
bis (2-chloroisopropyl) ether	ND		5.0	0.84	ug/L		05/08/15 09:41	05/12/15 03:29	1
Bis(2-chloroethoxy)methane	ND		5.0	0.75	ug/L		05/08/15 09:41	05/12/15 03:29	1
Bis(2-chloroethyl)ether	ND		5.0	0.93	ug/L		05/08/15 09:41	05/12/15 03:29	1
Bis(2-ethylhexyl) phthalate	ND		10	1.2	ug/L		05/08/15 09:41	05/12/15 03:29	1
Butyl benzyl phthalate	ND		5.0	1.1	ug/L		05/08/15 09:41	05/12/15 03:29	1
Chrysene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Dibenz(a,h)anthracene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/12/15 03:29	1
Diethyl phthalate	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Dimethyl phthalate	ND		5.0	0.91	ug/L		05/08/15 09:41	05/12/15 03:29	1
Di-n-butyl phthalate	ND		5.0	1.6	ug/L		05/08/15 09:41	05/12/15 03:29	1
Di-n-octyl phthalate	ND		5.0	1.2	ug/L		05/08/15 09:41	05/12/15 03:29	1
Fluoranthene	ND		5.0	1.6	ug/L		05/08/15 09:41	05/12/15 03:29	1
Fluorene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Hexachlorobenzene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Hexachlorobutadiene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Hexachloroethane	ND	*	5.0	0.60	ug/L		05/08/15 09:41	05/12/15 03:29	1
Indeno[1,2,3-cd]pyrene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/12/15 03:29	1
Isophorone	ND		5.0	0.74	ug/L		05/08/15 09:41	05/12/15 03:29	1
Naphthalene	ND		5.0	0.86	ug/L		05/08/15 09:41	05/12/15 03:29	1
Nitrobenzene	ND		5.0	0.81	ug/L		05/08/15 09:41	05/12/15 03:29	1
N-Nitrosodimethylamine	ND	*	10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
N-Nitrosodi-n-propylamine	ND		5.0	0.89	ug/L		05/08/15 09:41	05/12/15 03:29	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		05/08/15 09:41	05/12/15 03:29	1
Pentachlorophenol	ND		10	1.6	ug/L		05/08/15 09:41	05/12/15 03:29	1
Phenanthrene	ND		5.0	1.2	ug/L		05/08/15 09:41	05/12/15 03:29	1
Phenol	ND		5.0	0.35	ug/L		05/08/15 09:41	05/12/15 03:29	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: Grab 1-4-050615
Date Collected: 05/06/15 13:00
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-5
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.0	1.4	ug/L		05/08/15 09:41	05/12/15 03:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*108*		*52 - 151*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
2-Fluorobiphenyl	*79*		*44 - 120*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
2-Fluorophenol	*40*		*17 - 120*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
Nitrobenzene-d5	*67*		*42 - 120*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
Phenol-d5	*32*		*10 - 120*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
p-Terphenyl-d14	*88*		*22 - 125*	*05/08/15 09:41*	*05/12/15 03:29*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: COMP 050615

Date Collected: 05/06/15 13:15
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-6

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.022		0.010	0.0056	mg/L		05/07/15 12:03	05/08/15 16:18	1
Barium	0.29	B	0.0020	0.00070	mg/L		05/07/15 12:03	05/08/15 16:18	1
Chromium	0.0044		0.0040	0.0010	mg/L		05/07/15 12:03	05/08/15 16:18	1
Copper	0.0059	J	0.010	0.0016	mg/L		05/07/15 12:03	05/08/15 16:18	1
Nickel	0.012		0.010	0.0013	mg/L		05/07/15 12:03	05/08/15 16:18	1
Zinc	0.0060	J B	0.010	0.0015	mg/L		05/07/15 12:03	05/08/15 16:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	0.20		0.010	0.0050	mg/L			05/10/15 12:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	44.8		4.0	4.0	mg/L			05/12/15 19:38	1
pH	7.02	HF	0.100	0.100	SU			05/07/15 10:30	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: TB-050615
Date Collected: 05/06/15 13:15
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-7
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			05/09/15 08:49	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			05/09/15 08:49	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			05/09/15 08:49	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			05/09/15 08:49	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			05/09/15 08:49	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			05/09/15 08:49	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			05/09/15 08:49	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			05/09/15 08:49	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			05/09/15 08:49	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			05/09/15 08:49	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			05/09/15 08:49	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			05/09/15 08:49	1
Acrolein	ND		100	17	ug/L			05/09/15 08:49	1
Acrylonitrile	ND		50	1.9	ug/L			05/09/15 08:49	1
Benzene	ND		5.0	0.60	ug/L			05/09/15 08:49	1
Bromoform	ND		5.0	0.47	ug/L			05/09/15 08:49	1
Bromomethane	ND		5.0	1.2	ug/L			05/09/15 08:49	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			05/09/15 08:49	1
Chlorobenzene	ND		5.0	0.48	ug/L			05/09/15 08:49	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			05/09/15 08:49	1
Chloroethane	ND		5.0	0.87	ug/L			05/09/15 08:49	1
Chloroform	ND		5.0	0.54	ug/L			05/09/15 08:49	1
Chloromethane	ND		5.0	0.64	ug/L			05/09/15 08:49	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			05/09/15 08:49	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			05/09/15 08:49	1
Ethylbenzene	ND		5.0	0.46	ug/L			05/09/15 08:49	1
Methylene Chloride	ND		5.0	0.81	ug/L			05/09/15 08:49	1
Tetrachloroethene	ND		5.0	0.34	ug/L			05/09/15 08:49	1
Toluene	ND		5.0	0.45	ug/L			05/09/15 08:49	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			05/09/15 08:49	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			05/09/15 08:49	1
Trichloroethene	ND		5.0	0.60	ug/L			05/09/15 08:49	1
Vinyl chloride	ND		5.0	0.75	ug/L			05/09/15 08:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*72 - 130*		*05/09/15 08:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*		*05/09/15 08:49*	*1*
Toluene-d8 (Surr)	*103*		*70 - 123*		*05/09/15 08:49*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*05/09/15 08:49*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Method: 624 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)	(70-130)
480-79812-5	Grab 1-4-050615	112	96	103	101
480-79812-7	TB-050615	110	96	103	99
LCS 480-241430/5	Lab Control Sample	107	95	101	106
MB 480-241430/7	Method Blank	113	95	102	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(42-120)	(10-120)	(22-125)
480-79812-5	Grab 1-4-050615	108	79	40	67	32	88
LCS 480-241295/2-A	Lab Control Sample	103	83	39	64	30	104
LCSD 480-241295/3-A	Lab Control Sample Dup	98	69	33	57	24	98
MB 480-241295/1-A	Method Blank	78	70	34	54	27	104

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-241430/7
Matrix: Water
Analysis Batch: 241430

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			05/08/15 23:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			05/08/15 23:01	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			05/08/15 23:01	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			05/08/15 23:01	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			05/08/15 23:01	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			05/08/15 23:01	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			05/08/15 23:01	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			05/08/15 23:01	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			05/08/15 23:01	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			05/08/15 23:01	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			05/08/15 23:01	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			05/08/15 23:01	1
Acrolein	ND		100	17	ug/L			05/08/15 23:01	1
Acrylonitrile	ND		50	1.9	ug/L			05/08/15 23:01	1
Benzene	ND		5.0	0.60	ug/L			05/08/15 23:01	1
Bromoform	ND		5.0	0.47	ug/L			05/08/15 23:01	1
Bromomethane	ND		5.0	1.2	ug/L			05/08/15 23:01	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			05/08/15 23:01	1
Chlorobenzene	ND		5.0	0.48	ug/L			05/08/15 23:01	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			05/08/15 23:01	1
Chloroethane	ND		5.0	0.87	ug/L			05/08/15 23:01	1
Chloroform	ND		5.0	0.54	ug/L			05/08/15 23:01	1
Chloromethane	ND		5.0	0.64	ug/L			05/08/15 23:01	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			05/08/15 23:01	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			05/08/15 23:01	1
Ethylbenzene	ND		5.0	0.46	ug/L			05/08/15 23:01	1
Methylene Chloride	ND		5.0	0.81	ug/L			05/08/15 23:01	1
Tetrachloroethene	ND		5.0	0.34	ug/L			05/08/15 23:01	1
Toluene	ND		5.0	0.45	ug/L			05/08/15 23:01	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			05/08/15 23:01	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			05/08/15 23:01	1
Trichloroethene	ND		5.0	0.60	ug/L			05/08/15 23:01	1
Vinyl chloride	ND		5.0	0.75	ug/L			05/08/15 23:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*32 - 170*		*05/09/15 27:01*	*1*
4-mrof obuorozen6ene (Surr)	*B5*		*TB - 121*		*05/09/15 27:01*	*1*
8oluene-d9 (Surr)	*102*		*30 - 127*		*05/09/15 27:01*	*1*
Dizrof obuorof ethane (Surr)	*101*		*30 - 170*		*05/09/15 27:01*	*1*

Lab Sample ID: LCS 480-241430/5
Matrix: Water
Analysis Batch: 241430

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.2		ug/L		111	52 - 162
1,1,2,2-Tetrachloroethane	20.0	22.7		ug/L		114	46 - 157
1,1,2-Trichloroethane	20.0	20.8		ug/L		104	52 - 150

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-241430/5
Matrix: Water
Analysis Batch: 241430

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	20.0	20.9		ug/L		105	59 - 155
1,1-Dichloroethene	20.0	19.5		ug/L		97	1 - 234
1,2-Dichlorobenzene	20.0	21.0		ug/L		105	18 - 190
1,2-Dichloroethane	20.0	22.3		ug/L		112	49 - 155
1,2-Dichloropropane	20.0	21.6		ug/L		108	1 - 210
1,3-Dichlorobenzene	20.0	20.2		ug/L		101	59 - 156
1,4-Dichlorobenzene	20.0	20.3		ug/L		102	18 - 190
2-Chloroethyl vinyl ether	20.0	21.1	J	ug/L		105	1 - 305
Benzene	20.0	21.4		ug/L		107	37 - 151
Bromoform	20.0	16.7		ug/L		84	45 - 169
Bromomethane	20.0	22.3		ug/L		111	1 - 242
Carbon tetrachloride	20.0	23.0		ug/L		115	70 - 140
Chlorobenzene	20.0	20.3		ug/L		102	37 - 160
Chlorodibromomethane	20.0	18.6		ug/L		93	53 - 149
Chloroethane	20.0	21.0		ug/L		105	14 - 230
Chloroform	20.0	21.7		ug/L		109	51 - 138
Chloromethane	20.0	22.9		ug/L		114	1 - 273
cis-1,3-Dichloropropene	20.0	20.1		ug/L		101	1 - 227
Dichlorobromomethane	20.0	19.9		ug/L		100	35 - 155
Ethylbenzene	20.0	20.9		ug/L		104	37 - 162
Methylene Chloride	20.0	18.3		ug/L		91	1 - 221
Tetrachloroethene	20.0	20.9		ug/L		105	64 - 148
Toluene	20.0	21.3		ug/L		107	47 - 150
trans-1,2-Dichloroethene	20.0	22.2		ug/L		111	54 - 156
trans-1,3-Dichloropropene	20.0	19.7		ug/L		99	17 - 183
Trichloroethene	20.0	20.9		ug/L		105	71 - 157
Vinyl chloride	20.0	23.2		ug/L		116	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*32 - 170*
4-mrof obuorozen6ene (Surr)	*B5*		*TB - 121*
8oluene-d9 (Surr)	*101*		*30 - 127*
Dizrof obuorof ethane (Surr)	*10T*		*30 - 170*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-241295/1-A
Matrix: Water
Analysis Batch: 241661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.82	ug/L		05/08/15 09:41	05/11/15 18:43	1
1,2-Dichlorobenzene	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
1,2-Diphenylhydrazine	ND		10	0.78	ug/L		05/08/15 09:41	05/11/15 18:43	1
1,3-Dichlorobenzene	ND		10	0.69	ug/L		05/08/15 09:41	05/11/15 18:43	1
1,4-Dichlorobenzene	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,4,6-Trichlorophenol	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,4-Dichlorophenol	ND		5.0	0.77	ug/L		05/08/15 09:41	05/11/15 18:43	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-241295/1-A
Matrix: Water
Analysis Batch: 241661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		5.0	1.4	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,4-Dinitrophenol	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,4-Dinitrotoluene	ND		5.0	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,6-Dinitrotoluene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2-Chloronaphthalene	ND		5.0	0.91	ug/L		05/08/15 09:41	05/11/15 18:43	1
2-Chlorophenol	ND		5.0	0.66	ug/L		05/08/15 09:41	05/11/15 18:43	1
2-Nitrophenol	ND		5.0	0.70	ug/L		05/08/15 09:41	05/11/15 18:43	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		05/08/15 09:41	05/11/15 18:43	1
4,6-Dinitro-2-methylphenol	ND		10	0.66	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Bromophenyl phenyl ether	ND		5.0	1.4	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Chloro-3-methylphenol	ND		5.0	1.1	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Chloroaniline	ND		5.0	0.64	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Chlorophenyl phenyl ether	ND		5.0	1.3	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Nitrophenol	ND		15	10	ug/L		05/08/15 09:41	05/11/15 18:43	1
Acenaphthene	ND		5.0	0.81	ug/L		05/08/15 09:41	05/11/15 18:43	1
Acenaphthylene	ND		5.0	0.87	ug/L		05/08/15 09:41	05/11/15 18:43	1
Anthracene	ND		5.0	1.4	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzidine	ND		80	35	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[a]anthracene	ND		5.0	1.1	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[a]pyrene	ND		5.0	1.3	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[b]fluoranthene	ND		5.0	1.2	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[g,h,i]perylene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[k]fluoranthene	ND		5.0	1.3	ug/L		05/08/15 09:41	05/11/15 18:43	1
bis (2-chloroisopropyl) ether	ND		5.0	0.84	ug/L		05/08/15 09:41	05/11/15 18:43	1
Bis(2-chloroethoxy)methane	ND		5.0	0.75	ug/L		05/08/15 09:41	05/11/15 18:43	1
Bis(2-chloroethyl)ether	ND		5.0	0.93	ug/L		05/08/15 09:41	05/11/15 18:43	1
Bis(2-ethylhexyl) phthalate	ND		10	1.2	ug/L		05/08/15 09:41	05/11/15 18:43	1
Butyl benzyl phthalate	ND		5.0	1.1	ug/L		05/08/15 09:41	05/11/15 18:43	1
Chrysene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Dibenz(a,h)anthracene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/11/15 18:43	1
Diethyl phthalate	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Dimethyl phthalate	ND		5.0	0.91	ug/L		05/08/15 09:41	05/11/15 18:43	1
Di-n-butyl phthalate	ND		5.0	1.6	ug/L		05/08/15 09:41	05/11/15 18:43	1
Di-n-octyl phthalate	ND		5.0	1.2	ug/L		05/08/15 09:41	05/11/15 18:43	1
Fluoranthene	ND		5.0	1.6	ug/L		05/08/15 09:41	05/11/15 18:43	1
Fluorene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Hexachlorobenzene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Hexachlorobutadiene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Hexachloroethane	ND		5.0	0.60	ug/L		05/08/15 09:41	05/11/15 18:43	1
Indeno[1,2,3-cd]pyrene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/11/15 18:43	1
Isophorone	ND		5.0	0.74	ug/L		05/08/15 09:41	05/11/15 18:43	1
Naphthalene	ND		5.0	0.86	ug/L		05/08/15 09:41	05/11/15 18:43	1
Nitrobenzene	ND		5.0	0.81	ug/L		05/08/15 09:41	05/11/15 18:43	1
N-Nitrosodimethylamine	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
N-Nitrosodi-n-propylamine	ND		5.0	0.89	ug/L		05/08/15 09:41	05/11/15 18:43	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		05/08/15 09:41	05/11/15 18:43	1
Pentachlorophenol	ND		10	1.6	ug/L		05/08/15 09:41	05/11/15 18:43	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-241295/1-A
Matrix: Water
Analysis Batch: 241661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		5.0	1.2	ug/L		05/08/15 09:41	05/11/15 18:43	1
Phenol	ND		5.0	0.35	ug/L		05/08/15 09:41	05/11/15 18:43	1
Pyrene	ND		5.0	1.4	ug/L		05/08/15 09:41	05/11/15 18:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,T-8rizrof ophenol	*39*		*52 - 151*	*05/09/15 0B:41*	*05/11/15 19:47*	*1*
2-Fluoroziphenyl	*30*		*44 - 120*	*05/09/15 0B:41*	*05/11/15 19:47*	*1*
2-Fluorophenol	*74*		*13 - 120*	*05/09/15 0B:41*	*05/11/15 19:47*	*1*
Nitrozen6ene-d5	*54*		*42 - 120*	*05/09/15 0B:41*	*05/11/15 19:47*	*1*
Phenol-d5	*23*		*10 - 120*	*05/09/15 0B:41*	*05/11/15 19:47*	*1*
p-8erphenyl-d14	*104*		*22 - 125*	*05/09/15 0B:41*	*05/11/15 19:47*	*1*

Lab Sample ID: LCS 480-241295/2-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	50.0	29.8		ug/L		60	44 - 142
1,2-Dichlorobenzene	50.0	24.7		ug/L		49	32 - 129
1,3-Dichlorobenzene	50.0	23.7		ug/L		47	1 - 172
1,4-Dichlorobenzene	50.0	22.8		ug/L		46	20 - 124
2,4,6-Trichlorophenol	50.0	47.2		ug/L		94	37 - 144
2,4-Dichlorophenol	50.0	42.9		ug/L		86	39 - 135
2,4-Dimethylphenol	50.0	38.6		ug/L		77	32 - 119
2,4-Dinitrophenol	100	100		ug/L		100	1 - 191
2,4-Dinitrotoluene	50.0	46.4		ug/L		93	39 - 139
2,6-Dinitrotoluene	50.0	47.1		ug/L		94	50 - 158
2-Chloronaphthalene	50.0	40.2		ug/L		80	60 - 118
2-Chlorophenol	50.0	32.6		ug/L		65	23 - 134
2-Nitrophenol	50.0	40.5		ug/L		81	29 - 182
3,3'-Dichlorobenzidine	100	99.7		ug/L		100	1 - 262
4,6-Dinitro-2-methylphenol	100	101		ug/L		101	1 - 181
4-Bromophenyl phenyl ether	50.0	51.1		ug/L		102	53 - 127
4-Chloro-3-methylphenol	50.0	42.1		ug/L		84	22 - 147
4-Chlorophenyl phenyl ether	50.0	45.1		ug/L		90	25 - 158
4-Nitrophenol	100	48.1		ug/L		48	1 - 132
Acenaphthene	50.0	44.0		ug/L		88	47 - 145
Acenaphthylene	50.0	42.6		ug/L		85	33 - 145
Anthracene	50.0	47.9		ug/L		96	27 - 133
Benzo[a]anthracene	50.0	50.4		ug/L		101	33 - 143
Benzo[a]pyrene	50.0	50.0		ug/L		100	17 - 163
Benzo[b]fluoranthene	50.0	50.7		ug/L		101	24 - 159
Benzo[g,h,i]perylene	50.0	51.4		ug/L		103	1 - 219
Benzo[k]fluoranthene	50.0	49.6		ug/L		99	11 - 162
bis (2-chloroisopropyl) ether	50.0	28.1		ug/L		56	36 - 166
Bis(2-chloroethoxy)methane	50.0	37.2		ug/L		74	33 - 184
Bis(2-chloroethyl)ether	50.0	30.1		ug/L		60	12 - 158
Bis(2-ethylhexyl) phthalate	50.0	50.8		ug/L		102	8 - 158

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-241295/2-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	50.0	49.6		ug/L		99	1 - 152
Chrysene	50.0	49.3		ug/L		99	17 - 168
Dibenz(a,h)anthracene	50.0	52.0		ug/L		104	1 - 227
Diethyl phthalate	50.0	44.2		ug/L		88	1 - 114
Dimethyl phthalate	50.0	45.1		ug/L		90	1 - 112
Di-n-butyl phthalate	50.0	47.5		ug/L		95	1 - 118
Di-n-octyl phthalate	50.0	50.4		ug/L		101	4 - 146
Fluoranthene	50.0	44.5		ug/L		89	26 - 137
Fluorene	50.0	43.9		ug/L		88	59 - 121
Hexachlorobenzene	50.0	51.6		ug/L		103	1 - 152
Hexachlorocyclopentadiene	50.0	36.3		ug/L		73	5 - 120
Hexachloroethane	50.0	20.2		ug/L		40	40 - 113
Indeno[1,2,3-cd]pyrene	50.0	50.3		ug/L		101	1 - 171
Isophorone	50.0	38.5		ug/L		77	21 - 196
Naphthalene	50.0	35.3		ug/L		71	21 - 133
Nitrobenzene	50.0	35.8		ug/L		72	35 - 180
N-Nitrosodi-n-propylamine	50.0	33.4		ug/L		67	1 - 230
N-Nitrosodiphenylamine	100	98.2		ug/L		98	54 - 125
Pentachlorophenol	100	80.0		ug/L		80	14 - 176
Phenanthrene	50.0	47.2		ug/L		94	54 - 120
Phenol	50.0	15.5		ug/L		31	5 - 112
Pyrene	50.0	53.7		ug/L		107	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,T-8rizrof ophenol	*107*		*52 - 151*
2-Fluoroziphenyl	*97*		*44 - 120*
2-Fluorophenol	*7B*		*13 - 120*
Nitrozen6ene-d5	*T4*		*42 - 120*
Phenol-d5	*70*		*10 - 120*
p-8erphenyl-d14	*104*		*22 - 125*

Lab Sample ID: LCSD 480-241295/3-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 241295

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	26.9		ug/L		54	44 - 142	11	34
1,2-Dichlorobenzene	50.0	22.7		ug/L		45	32 - 129	9	38
1,3-Dichlorobenzene	50.0	19.6		ug/L		39	1 - 172	19	37
1,4-Dichlorobenzene	50.0	20.9		ug/L		42	20 - 124	9	40
2,4,6-Trichlorophenol	50.0	42.9		ug/L		86	37 - 144	10	20
2,4-Dichlorophenol	50.0	38.8		ug/L		78	39 - 135	10	23
2,4-Dimethylphenol	50.0	34.2		ug/L		68	32 - 119	12	18
2,4-Dinitrophenol	100	105		ug/L		105	1 - 191	5	29
2,4-Dinitrotoluene	50.0	48.5		ug/L		97	39 - 139	4	20
2,6-Dinitrotoluene	50.0	45.6		ug/L		91	50 - 158	3	17
2-Chloronaphthalene	50.0	37.3		ug/L		75	60 - 118	7	30
2-Chlorophenol	50.0	28.5		ug/L		57	23 - 134	13	26

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-241295/3-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 241295

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitrophenol			50.0	35.0		ug/L		70	29 - 182	15	28
3,3'-Dichlorobenzidine			100	88.4		ug/L		88	1 - 262	12	31
4,6-Dinitro-2-methylphenol			100	102		ug/L		102	1 - 181	0	30
4-Bromophenyl phenyl ether			50.0	47.5		ug/L		95	53 - 127	7	16
4-Chloro-3-methylphenol			50.0	38.1		ug/L		76	22 - 147	10	16
4-Chlorophenyl phenyl ether			50.0	43.9		ug/L		88	25 - 158	3	15
4-Nitrophenol			100	44.5		ug/L		44	1 - 132	8	24
Acenaphthene			50.0	39.5		ug/L		79	47 - 145	11	25
Acenaphthylene			50.0	39.5		ug/L		79	33 - 145	7	22
Anthracene			50.0	45.6		ug/L		91	27 - 133	5	15
Benzo[a]anthracene			50.0	46.9		ug/L		94	33 - 143	7	15
Benzo[a]pyrene			50.0	47.2		ug/L		94	17 - 163	6	15
Benzo[b]fluoranthene			50.0	49.4		ug/L		99	24 - 159	3	17
Benzo[g,h,i]perylene			50.0	45.8		ug/L		92	1 - 219	12	19
Benzo[k]fluoranthene			50.0	46.6		ug/L		93	11 - 162	6	19
bis (2-chloroisopropyl) ether			50.0	25.5		ug/L		51	36 - 166	10	36
Bis(2-chloroethoxy)methane			50.0	30.6		ug/L		61	33 - 184	19	23
Bis(2-chloroethyl)ether			50.0	26.6		ug/L		53	12 - 158	12	33
Bis(2-ethylhexyl) phthalate			50.0	47.5		ug/L		95	8 - 158	7	15
Butyl benzyl phthalate			50.0	48.2		ug/L		96	1 - 152	3	15
Chrysene			50.0	47.0		ug/L		94	17 - 168	5	15
Dibenz(a,h)anthracene			50.0	45.9		ug/L		92	1 - 227	13	18
Diethyl phthalate			50.0	44.8		ug/L		90	1 - 114	1	15
Dimethyl phthalate			50.0	45.0		ug/L		90	1 - 112	0	15
Di-n-butyl phthalate			50.0	47.8		ug/L		96	1 - 118	1	15
Di-n-octyl phthalate			50.0	44.9		ug/L		90	4 - 146	11	15
Fluoranthene			50.0	44.9		ug/L		90	26 - 137	1	15
Fluorene			50.0	42.6		ug/L		85	59 - 121	3	18
Hexachlorobenzene			50.0	47.3		ug/L		95	1 - 152	9	15
Hexachlorocyclopentadiene			50.0	31.1		ug/L		62	5 - 120	15	50
Hexachloroethane			50.0	18.6	*	ug/L		37	40 - 113	8	43
Indeno[1,2,3-cd]pyrene			50.0	45.4		ug/L		91	1 - 171	10	17
Isophorone			50.0	32.9		ug/L		66	21 - 196	16	21
Naphthalene			50.0	30.1		ug/L		60	21 - 133	16	31
Nitrobenzene			50.0	28.9		ug/L		58	35 - 180	21	27
N-Nitrosodi-n-propylamine			50.0	29.9		ug/L		60	1 - 230	11	23
N-Nitrosodiphenylamine			100	91.3		ug/L		91	54 - 125	7	15
Pentachlorophenol			100	75.2		ug/L		75	14 - 176	6	21
Phenanthrene			50.0	45.6		ug/L		91	54 - 120	3	16
Phenol			50.0	13.7		ug/L		27	5 - 112	13	36
Pyrene			50.0	50.9		ug/L		102	52 - 115	5	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,T-8rizrof ophenol	*B9*		*52 - 151*
2-Fluoroziphenyl	*TB*		*44 - 120*
2-Fluorophenol	*77*		*13 - 120*
Nitrozen6ene-d5	*53*		*42 - 120*
Phenol-d5	*24*		*10 - 120*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-241295/3-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 241295

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-8erphenyl-d14	*B9*		*22 - 125*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-241045/1-A
Matrix: Water
Analysis Batch: 241459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241045

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		05/07/15 12:03	05/08/15 15:34	1
Barium	0.000910	J	0.0020	0.00070	mg/L		05/07/15 12:03	05/08/15 15:34	1
Chromium	ND		0.0040	0.0010	mg/L		05/07/15 12:03	05/08/15 15:34	1
Copper	ND		0.010	0.0016	mg/L		05/07/15 12:03	05/08/15 15:34	1
Nickel	ND		0.010	0.0013	mg/L		05/07/15 12:03	05/08/15 15:34	1
Zinc	0.00188	J	0.010	0.0015	mg/L		05/07/15 12:03	05/08/15 15:34	1

Lab Sample ID: LCS 480-241045/2-A
Matrix: Water
Analysis Batch: 241459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.198		mg/L		99	85 - 115
Barium	0.200	0.202		mg/L		101	85 - 115
Chromium	0.200	0.207		mg/L		104	85 - 115
Copper	0.200	0.195		mg/L		97	85 - 115
Nickel	0.200	0.193		mg/L		96	85 - 115
Zinc	0.200	0.202		mg/L		101	85 - 115

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

Lab Sample ID: MB 480-242000/1
Matrix: Water
Analysis Batch: 242000

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			05/12/15 19:38	1

Lab Sample ID: LCS 480-242000/2
Matrix: Water
Analysis Batch: 242000

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	216	213.2		mg/L		99	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-241136/1
Matrix: Water
Analysis Batch: 241136

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	6.950		SU		99	99 - 101		

Lab Sample ID: 480-79812-6 DU
Matrix: Water
Analysis Batch: 241136

Client Sample ID: COMP 050615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.02	HF		7.040		SU				0.3	5

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 480-241569/3
Matrix: Water
Analysis Batch: 241569

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.010	0.0050	mg/L			05/10/15 12:29	1

Lab Sample ID: LCS 480-241569/4
Matrix: Water
Analysis Batch: 241569

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Phosphorus, Total			0.200	0.203		mg/L		101	90 - 110		

GC/MS VOA

Analysis Batch: 241430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-5	Grab 1-4-050615	Total/NA	Water	624	
480-79812-7	TB-050615	Total/NA	Water	624	
LCS 480-241430/5	Lab Control Sample	Total/NA	Water	624	
MB 480-241430/7	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 241295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-5	Grab 1-4-050615	Total/NA	Water	625	
LCS 480-241295/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-241295/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 480-241295/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 241661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-5	Grab 1-4-050615	Total/NA	Water	625	241295
MB 480-241295/1-A	Method Blank	Total/NA	Water	625	241295

Analysis Batch: 241889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-241295/2-A	Lab Control Sample	Total/NA	Water	625	241295
LCSD 480-241295/3-A	Lab Control Sample Dup	Total/NA	Water	625	241295

Metals

Prep Batch: 241045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	200.7	
LCS 480-241045/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-241045/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 241459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	200.7 Rev 4.4	241045
LCS 480-241045/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	241045
MB 480-241045/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	241045

General Chemistry

Analysis Batch: 241136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	SM 4500 H+ B	
480-79812-6 DU	COMP 050615	Total/NA	Water	SM 4500 H+ B	
LCS 480-241136/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 241569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	SM 4500 P E	
LCS 480-241569/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	

General Chemistry (Continued)

Analysis Batch: 241569 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-241569/3	Method Blank	Total/NA	Water	SM 4500 P E	

Analysis Batch: 242000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	SM 2540D	
LCS 480-242000/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-242000/1	Method Blank	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: Grab 1-4-050615

Lab Sample ID: 480-79812-5
Matrix: Water
Date Collected: 05/06/15 13:00
Date Received: 05/06/15 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		10	241430	05/09/15 07:09	CDC	TAL BUF
Total/NA	Prep	625			241295	05/08/15 09:41	JLS	TAL BUF
Total/NA	Analysis	625		1	241661	05/12/15 03:29	DMR	TAL BUF

Client Sample ID: COMP 050615

Lab Sample ID: 480-79812-6
Matrix: Water
Date Collected: 05/06/15 13:15
Date Received: 05/06/15 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			241045	05/07/15 12:03	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	241459	05/08/15 16:18	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	242000	05/12/15 19:38	KC	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	241136	05/07/15 10:30	MGH	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	241569	05/10/15 12:29	DLG	TAL BUF

Client Sample ID: TB-050615

Lab Sample ID: 480-79812-7
Matrix: Water
Date Collected: 05/06/15 13:15
Date Received: 05/06/15 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	241430	05/09/15 08:49	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
624		Water	1,2-Dichloroethene, Total
625	625	Water	1,2-Dichlorobenzene
625	625	Water	1,2-Diphenylhydrazine
625	625	Water	1,3-Dichlorobenzene
625	625	Water	1,4-Dichlorobenzene
625	625	Water	4-Chloroaniline
SM 4500 H+ B		Water	pH

Method Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 4500 P E	Phosphorus	SM	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-79812-5	Grab 1-4-050615	Water	05/06/15 13:00	05/06/15 14:00
480-79812-6	COMP 050615	Water	05/06/15 13:15	05/06/15 14:00
480-79812-7	TB-050615	Water	05/06/15 13:15	05/06/15 14:00

Chain of Custody Record

480-79812 Chain of Custody

erica MENTAL TESTING

Client Information	Sampler: Patrick Higgins	Lab PM: John Schove	Carrier Tracking No(s):	COC No: 480-21387-2026.1
Client Contact: John Formoza	Phone: 315-468-1663	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: Honeywell International Inc				Job #:
Address: 1563 Willis Ave.	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 Weeks			
State, Zip: NY, 13204				
Phone: 315-468-1663	PO #: 4500073922			
Email: john.formoza@ch2m.com	WO #:			
Project Name: Honeywell - Alltift OM phase / Semi Annual	Project #: 48003159			
Site: Honeywell - Buffalo Sites	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Location Identification	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E - Phosphorus, Total	200.7 - Metals ICP - As, Ba, Cr, Cu, Zn	2540D - Total Suspended Solids	SM4500_H+ - pH	624_6ml - Priority Pollutant List - VOA - 624	625 - Priority Pollutant List - SVOA - 625	Total Number of containers	Special Instructions/Note:
				Preservation Code:				S	D	N	N	A	N		
BSA Discharge	GRAB 1-050615	5/6/15	07:00	G	W	N	N					3	2	5	Prior to analysis grab samples to be composited by lab
BSA Discharge	GRAB 2-050615	5/6/15	09:00	G	W	N	N					3	2	5	
BSA Discharge	GRAB 3-050615	5/6/15	11:00	G	W	N	N					3	2	5	
BSA Discharge	GRAB 4 -050615	5/6/15	13:00	G	W	N	N					3	2	5	
BSA Discharge	COMP 050615	5/6/15	13:15	C	W	N	N	1	1	1	1			4	
TRIPBLANK	-TB-050615	5/6/15	13:15		W	N	N					1		1	TRIP BLANK

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Patrick C Higgins	Date/Time: 5/6/2015 1400	Company: CHOT	Received by:	Date/Time: 5/6/15 1400	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	3.1 #1	

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5/22/2015

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-79812-1

Login Number: 79812
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	omi
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	True	

CH2M
1563 Willis Avenue
Syracuse, New York 13204
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www..ch2m.com

November 19, 2015

Ms. Traserra Adams
Buffalo Sewer Authority
Industrial Waste Section
90 West Ferry Street
Buffalo, New York 14213

Subject: **Alltift Landfill/Ramco Steel Site**
Discharge Monitoring Report
2015 Second Semi-Annual Report
BPDES Permit Number 12-12-BU098

Dear Ms. Adams:

Enclosed please find the 2015 Second Semi-Annual discharge monitoring report for the pumping facility located at the Alltift Landfill/Ramco Steel (Alltift) Site. The total flow to the Buffalo Sewer Authority (BSA) during this period was 1,771,873 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from May 6, 2015 through October 14, 2015 for a total of 161 days. Flow metering readings collected during the reporting period are included as Attachment 1.

A time composite discharge sample was collected from within the pump station on October 14, 2015. Four samples were collected over an evenly-spaced work day period for VOCs and SVOCs, with the four samples composited in the laboratory per permit requirements. The sample for metals, total suspended solids, total phosphorus, and pH was collected as a composite sample. A summary of the analytical results, compared to permit limits, is provided in Table 1. All parameters were in compliance with permit limits. The laboratory analytical report is provided as Attachment 2. If you have any questions or require additional information, please contact me at (315) 468-1663.

Sincerely,

CH2M,

John W. Formoza
Area Manager

QC Review By: Ryan Belcher (Amec Foster Wheeler)

cc.: Mr. Mark Sweitzer (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Dennis Sutton (City of Buffalo)
Mr. Robert Gersh (Amec Foster Wheeler)

Table 1
Alltift Landfill/Ramco Steel Site
Second Semi-annual Report for 2015
Discharge Monitoring Report

BSA Permit No. 12-12-BU98	
Sample Date:	October 14, 2015
Sample Location:	Onsite Pump Station to BSA

BSA Permit Parameter	Input Analytical Results				Converted Analytical Results		BSA Daily Max Discharge Limit		Permit Compliance
	Quantity	Qualifier	Reporting Limit	Unit	Quantity	Unit	Quantity	Unit	
pH	7.71		0.100	SU	7.71	SU	5.0 - 12.0	SU	Yes
Benzene	ND		50	µg/L	ND	lbs/day	0.068	lbs/day	Yes
Chlorobenzene	55		50	µg/L	0.005	lbs/day	0.148	lbs/day	Yes
4-Chloroaniline	18		5.0	µg/L	0.002	lbs/day	0.048	lbs/day	Yes
Naphthalene	ND		5.0	µg/L	ND	lbs/day	0.048	lbs/day	Yes
Arsenic	0.013		0.010	mg/L	0.001	lbs/day	0.864	lbs/day	Yes
Barium	0.3		0.002	mg/L	0.03	lbs/day	0.48	lbs/day	Yes
Chromium	0.0046		0.004	mg/L	0.000	lbs/day	2.4	lbs/day	Yes
Copper	0.016		0.010	mg/L	0.001	lbs/day	7.68	lbs/day	Yes
Nickel	0.0093	J	0.010	mg/L	0.0009	lbs/day	6.72	lbs/day	Yes
Zinc	0.0053	J	0.010	mg/L	0.0005	lbs/day	12	lbs/day	Yes
Total Suspended Solids	29.2		4.0	mg/L	29.2	mg/L	250	mg/L	Yes
Total Phosphorus	0.2		0.010	mg/L	Monitor Only				
USEPA Test Method 624	ND-55			µg/L					
USEPA Test Method 625	ND-18			µg/L					
Total Flow (average)	7.64			gpm	11,005	gpd	57,600	gpd	Yes

Notes:
J - estimated value below Reporting Limit/Practical Quantitation Limit
ND - Not detected at the reporting limit
µg/L - micrograms per liter
mg/L - milligrams per liter
gpm - gallons per minute
gpd - gallons per day
SU - Standard Units

Flow Calculations	Meter	
Initial Reading (pump station)	673495	5/6/2015
Final Reading (pump station)	2445368	10/14/2015
Total Days in Period		161
Total Flow for Period	**1,771,873**	**gallons**
Average Flow for Period	**7.64**	**gpm**

Prepared by, Date: Poornima R, 11/11/2015
Checked by, Date: Ryan Belcher, 11/19/2015

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	**Totalizer Reading (gallons)**
5/6/2015	673,495
5/20/2015	798,000
6/11/2015	1,141,000
6/27/2015	1,349,120
7/15/2015	1,601,000
9/1/2015	2,101,200
9/28/2015	2,373,462
10/14/2015	2,445,368

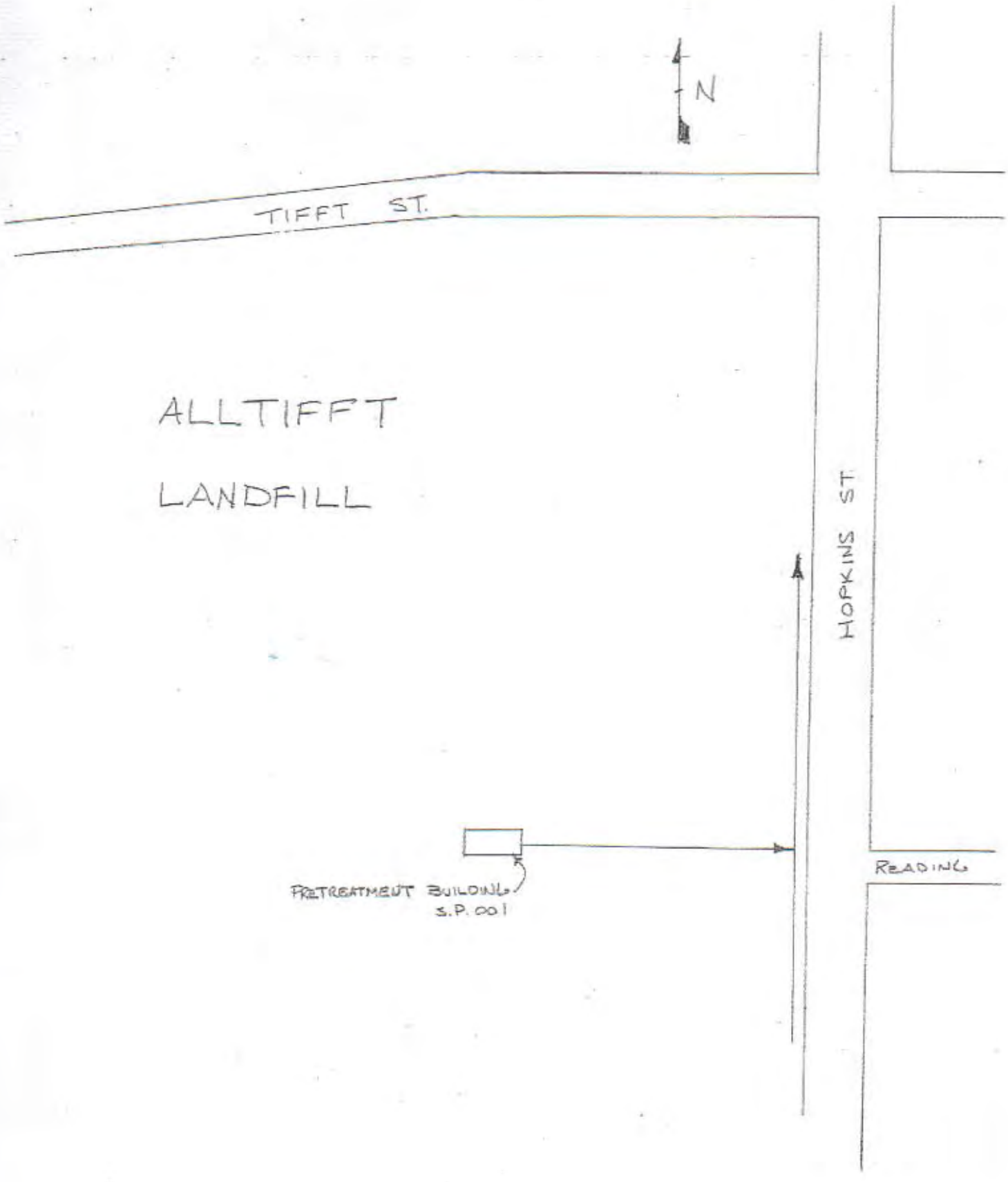
CERTIFICATION STATEMENT

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

(Your signature here) John W Formoza 11/19/15

(Print your name & title here) JOHN W FORMOZA Date

(Print your company name here) CH2M HILL ON BEHALF OF Honeywell


N
TIFFT ST.
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S.P. 001

CH2MHILL

Project Name Honeywell - Buffalo
Job Number 481662.B5.RM.RS
Field Team Patrick Higgins/Mike Stout/Bethany Macera
Field Conditions Overcast COLD 50°F

Sampling Event Semi Annual Sampling AlTiff
Date October 14th, 2015
Page ___ of ___

Well/Sample Number BSA Lift Station
Start Time 7:00 Finish Time 13:15
Initial Depth to Water 10.45 Measure Point: PVC Steel Casing Other:

Purge Method:
Geopump Ded. Pump Other
Sample Method: Bailer

Sample ID Grab1-101415 Sample Time 0700
Duplicate Sample ID GRAB2-101415 Dupl. Time 0900
Split Sample ID GRAB3-101415 Split. Time 1100
GRAB4-101415 1300
COMP 1415 1305

Depth to Botton (from meas. pt): ___ Min. Purge Volume (gal)/(L) ___ Purge Rate (gpm)/(mLpm) ___
Water Quality Parameter Measurment Technique: flow-thru cell in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
0700	- collect	7.16	SAMPLE	GRAB1	- 101415			10.45
0900	- collect		SAMPLE	GRAB2	- 101415			
1100	- collect		SAMPLE	GRAB3	- 101415			
1300	- collect		SAMPLE	GRAB4	- 101415			
1305	- collect		SAMPLE	COMP	- 101415			

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
624_5ml	VOA	40ml	N	HCl		VOC 624
625	Amber	1Liter	N	N		Priority Pollutant
Phosphorous	Plastic	250ml	N	H_2SO_4		4500 P-E
200.7	PLASTIC	250ml	N	HNO_3		Metals ICP AES, Ba, Cr, Cu, Zn, Ni
2540D	PLASTIC	1 Liter	N	N		Total Suspended Solids
SM4500 pH	PLASTIC	150ml	N	N		pH

Remarks: Water is cloudy with an orange tinge in color.
WATER METER READING 2445368

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-89087-1
Client Project/Site: 30130 - Alltift OM Phase
Sampling Event: Honeywell - Alltift OM Phase (4,10)

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

Attn: Mr. Rich Galloway

Authorized for release by:
10/27/2015 6:29:47 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

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

Metals

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

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-89087-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-89087-1

Comments
No additional comments.

Receipt
The samples were received on 10/14/2015 1:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7º C.

GC/MS VOA
Method(s) 624: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: Grab1-4 Lab Composite (480-89087-7), (480-89087-A-7 MS) and (480-89087-A-7 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 624: The following Volatile samples were composited by the laboratory on 10/14/15 as requested by the client: Grab1-4 Lab Composite (480-89087-7), (480-89087-A-7 MS) and (480-89087-A-7 MSD). Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and laboratory standard operating procedures.

Method(s) 624: The preservative used in the sample containers provided is not compatible with the Method 624 analytes requested. The following samples were received preserved with hydrochloric acid: TB-101415 (480-89087-6), Grab1-4 Lab Composite (480-89087-7), (480-89087-A-7 MS) and (480-89087-A-7 MSD). The requested target analyte list contains 2-chloroethyl vinyl ether which is an acid-labile compound that degrades in an acidic medium.

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

GC/MS Semi VOA
Method(s) 625: The continuing calibration verification (CCV) associated with batch 480-269120 recovered above the upper control limit for Benzidine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: Grab1-4 Lab Composite (480-89087-7).

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

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

General Chemistry
Method(s) SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: COMP-101415 (480-89087-5).

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

Organic Prep
Method(s) 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-269040.

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

Detection Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: COMP-101415 — Lab Sample ID: 480-89087-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.013		0.010	0.0056	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.30		0.0020	0.00070	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0046		0.0040	0.0010	mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.016		0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.0093	J	0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0053	J	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Phosphorus, Total	0.20		0.010	0.0050	mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	29.2		4.0	4.0	mg/L	1		SM 2540D	Total/NA
pH	7.71	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TB-101415 — Lab Sample ID: 480-89087-6

No Detections.

Client Sample ID: Grab1-4 Lab Composite — Lab Sample ID: 480-89087-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	55		50	4.8	ug/L	10		624	Total/NA
4-Chloroaniline	18		5.0	0.64	ug/L	1		625	Total/NA
N-Nitrosodiphenylamine	0.79	J	5.0	0.40	ug/L	1		625	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: COMP-101415

Date Collected: 10/14/15 13:05
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-5

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.013		0.010	0.0056	mg/L		10/16/15 08:05	10/16/15 14:35	1
Barium	0.30		0.0020	0.00070	mg/L		10/16/15 08:05	10/16/15 14:35	1
Chromium	0.0046		0.0040	0.0010	mg/L		10/16/15 08:05	10/16/15 14:35	1
Copper	0.016		0.010	0.0016	mg/L		10/16/15 08:05	10/16/15 14:35	1
Nickel	0.0093	J	0.010	0.0013	mg/L		10/16/15 08:05	10/16/15 14:35	1
Zinc	0.0053	J	0.010	0.0015	mg/L		10/16/15 08:05	10/16/15 14:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	0.20		0.010	0.0050	mg/L			10/25/15 10:00	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	29.2		4.0	4.0	mg/L			10/20/15 08:20	1
pH	7.71	HF	0.100	0.100	SU			10/16/15 11:14	1

Client Sample ID: TB-101415
Date Collected: 10/14/15 13:05
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-6
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			10/15/15 06:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			10/15/15 06:46	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/15/15 06:46	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/15/15 06:46	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			10/15/15 06:46	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			10/15/15 06:46	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/15/15 06:46	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/15/15 06:46	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			10/15/15 06:46	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			10/15/15 06:46	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			10/15/15 06:46	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			10/15/15 06:46	1
Acrolein	ND		100	17	ug/L			10/15/15 06:46	1
Acrylonitrile	ND		50	1.9	ug/L			10/15/15 06:46	1
Benzene	ND		5.0	0.60	ug/L			10/15/15 06:46	1
Bromoform	ND		5.0	0.47	ug/L			10/15/15 06:46	1
Bromomethane	ND		5.0	1.2	ug/L			10/15/15 06:46	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/15/15 06:46	1
Chlorobenzene	ND		5.0	0.48	ug/L			10/15/15 06:46	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			10/15/15 06:46	1
Chloroethane	ND		5.0	0.87	ug/L			10/15/15 06:46	1
Chloroform	ND		5.0	0.54	ug/L			10/15/15 06:46	1
Chloromethane	ND		5.0	0.64	ug/L			10/15/15 06:46	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			10/15/15 06:46	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			10/15/15 06:46	1
Ethylbenzene	ND		5.0	0.46	ug/L			10/15/15 06:46	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/15/15 06:46	1
Tetrachloroethene	ND		5.0	0.34	ug/L			10/15/15 06:46	1
Toluene	ND		5.0	0.45	ug/L			10/15/15 06:46	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			10/15/15 06:46	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			10/15/15 06:46	1
Trichloroethene	ND		5.0	0.60	ug/L			10/15/15 06:46	1
Vinyl chloride	ND		5.0	0.75	ug/L			10/15/15 06:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*		*10/15/15 06:46*	*1*
4-Bromofluorobenzene (Surr)	*88*		*69 - 121*		*10/15/15 06:46*	*1*
Toluene-d8 (Surr)	*86*		*70 - 123*		*10/15/15 06:46*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*10/15/15 06:46*	*1*

Client Sample ID: Grab1-4 Lab Composite

Date Collected: 10/14/15 13:00
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-7

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.9	ug/L			10/15/15 07:12	10
1,1,2,2-Tetrachloroethane	ND		50	2.6	ug/L			10/15/15 07:12	10
1,1,2-Trichloroethane	ND		50	4.8	ug/L			10/15/15 07:12	10
1,1-Dichloroethane	ND		50	5.9	ug/L			10/15/15 07:12	10
1,1-Dichloroethene	ND		50	8.5	ug/L			10/15/15 07:12	10
1,2-Dichlorobenzene	ND		50	4.4	ug/L			10/15/15 07:12	10
1,2-Dichloroethane	ND		50	6.0	ug/L			10/15/15 07:12	10
1,2-Dichloroethene, Total	ND		100	32	ug/L			10/15/15 07:12	10
1,2-Dichloropropane	ND		50	6.1	ug/L			10/15/15 07:12	10
1,3-Dichlorobenzene	ND		50	5.4	ug/L			10/15/15 07:12	10
1,4-Dichlorobenzene	ND		50	5.1	ug/L			10/15/15 07:12	10
2-Chloroethyl vinyl ether	ND		250	19	ug/L			10/15/15 07:12	10
Acrolein	ND		1000	170	ug/L			10/15/15 07:12	10
Acrylonitrile	ND		500	19	ug/L			10/15/15 07:12	10
Benzene	ND		50	6.0	ug/L			10/15/15 07:12	10
Bromoform	ND		50	4.7	ug/L			10/15/15 07:12	10
Bromomethane	ND		50	12	ug/L			10/15/15 07:12	10
Carbon tetrachloride	ND		50	5.1	ug/L			10/15/15 07:12	10
Chlorobenzene	**55**		50	4.8	ug/L			10/15/15 07:12	10
Chlorodibromomethane	ND		50	4.1	ug/L			10/15/15 07:12	10
Chloroethane	ND	F2	50	8.7	ug/L			10/15/15 07:12	10
Chloroform	ND		50	5.4	ug/L			10/15/15 07:12	10
Chloromethane	ND		50	6.4	ug/L			10/15/15 07:12	10
cis-1,3-Dichloropropene	ND		50	3.3	ug/L			10/15/15 07:12	10
Dichlorobromomethane	ND		50	5.4	ug/L			10/15/15 07:12	10
Ethylbenzene	ND		50	4.6	ug/L			10/15/15 07:12	10
Methylene Chloride	ND		50	8.1	ug/L			10/15/15 07:12	10
Tetrachloroethene	ND		50	3.4	ug/L			10/15/15 07:12	10
Toluene	ND		50	4.5	ug/L			10/15/15 07:12	10
trans-1,2-Dichloroethene	ND		50	5.9	ug/L			10/15/15 07:12	10
trans-1,3-Dichloropropene	ND		50	4.4	ug/L			10/15/15 07:12	10
Trichloroethene	ND		50	6.0	ug/L			10/15/15 07:12	10
Vinyl chloride	ND	F2	50	7.5	ug/L			10/15/15 07:12	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*10/15/15 07:12*	*10*
4-Bromofluorobenzene (Surr)	*89*		*69 - 121*		*10/15/15 07:12*	*10*
Toluene-d8 (Surr)	*86*		*70 - 123*		*10/15/15 07:12*	*10*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*10/15/15 07:12*	*10*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.82	ug/L		10/15/15 15:23	10/16/15 23:58	1
1,2-Dichlorobenzene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
1,2-Diphenylhydrazine	ND		10	0.78	ug/L		10/15/15 15:23	10/16/15 23:58	1
1,3-Dichlorobenzene	ND		10	0.69	ug/L		10/15/15 15:23	10/16/15 23:58	1
1,4-Dichlorobenzene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,4,6-Trichlorophenol	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,4-Dichlorophenol	ND		5.0	0.77	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,4-Dimethylphenol	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 23:58	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: Grab1-4 Lab Composite
Date Collected: 10/14/15 13:00
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-7
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,4-Dinitrotoluene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,6-Dinitrotoluene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2-Chloronaphthalene	ND		5.0	0.91	ug/L		10/15/15 15:23	10/16/15 23:58	1
2-Chlorophenol	ND		5.0	0.66	ug/L		10/15/15 15:23	10/16/15 23:58	1
2-Nitrophenol	ND		5.0	0.70	ug/L		10/15/15 15:23	10/16/15 23:58	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		10/15/15 15:23	10/16/15 23:58	1
4,6-Dinitro-2-methylphenol	ND		10	0.66	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Bromophenyl phenyl ether	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Chloro-3-methylphenol	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Chloroaniline	**18**		5.0	0.64	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Chlorophenyl phenyl ether	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Nitrophenol	ND		15	10	ug/L		10/15/15 15:23	10/16/15 23:58	1
Acenaphthene	ND		5.0	0.81	ug/L		10/15/15 15:23	10/16/15 23:58	1
Acenaphthylene	ND		5.0	0.87	ug/L		10/15/15 15:23	10/16/15 23:58	1
Anthracene	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzidine	ND		80	35	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[a]anthracene	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[a]pyrene	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[b]fluoranthene	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[g,h,i]perylene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[k]fluoranthene	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 23:58	1
bis (2-chloroisopropyl) ether	ND		5.0	0.84	ug/L		10/15/15 15:23	10/16/15 23:58	1
Bis(2-chloroethoxy)methane	ND		5.0	0.75	ug/L		10/15/15 15:23	10/16/15 23:58	1
Bis(2-chloroethyl)ether	ND		5.0	0.93	ug/L		10/15/15 15:23	10/16/15 23:58	1
Bis(2-ethylhexyl) phthalate	ND		10	1.2	ug/L		10/15/15 15:23	10/16/15 23:58	1
Butyl benzyl phthalate	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 23:58	1
Chrysene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Dibenz(a,h)anthracene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 23:58	1
Diethyl phthalate	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Dimethyl phthalate	ND		5.0	0.91	ug/L		10/15/15 15:23	10/16/15 23:58	1
Di-n-butyl phthalate	ND		5.0	1.6	ug/L		10/15/15 15:23	10/16/15 23:58	1
Di-n-octyl phthalate	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 23:58	1
Fluoranthene	ND		5.0	1.6	ug/L		10/15/15 15:23	10/16/15 23:58	1
Fluorene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Hexachlorobenzene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Hexachlorobutadiene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Hexachloroethane	ND		5.0	0.60	ug/L		10/15/15 15:23	10/16/15 23:58	1
Indeno[1,2,3-cd]pyrene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 23:58	1
Isophorone	ND		5.0	0.74	ug/L		10/15/15 15:23	10/16/15 23:58	1
Naphthalene	ND		5.0	0.86	ug/L		10/15/15 15:23	10/16/15 23:58	1
Nitrobenzene	ND		5.0	0.81	ug/L		10/15/15 15:23	10/16/15 23:58	1
N-Nitrosodimethylamine	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
N-Nitrosodi-n-propylamine	ND		5.0	0.89	ug/L		10/15/15 15:23	10/16/15 23:58	1
N-Nitrosodiphenylamine	**0.79**	**J**	5.0	0.40	ug/L		10/15/15 15:23	10/16/15 23:58	1
Pentachlorophenol	ND		10	1.6	ug/L		10/15/15 15:23	10/16/15 23:58	1
Phenanthrene	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 23:58	1
Phenol	ND		5.0	0.35	ug/L		10/15/15 15:23	10/16/15 23:58	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: Grab1-4 Lab Composite
Date Collected: 10/14/15 13:00
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-7
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*111*		*52 - 151*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
2-Fluorobiphenyl	*90*		*44 - 120*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
2-Fluorophenol	*54*		*17 - 120*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
Nitrobenzene-d5	*85*		*42 - 120*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
Phenol-d5	*38*		*10 - 120*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
p-Terphenyl-d14	*87*		*22 - 125*	*10/15/15 15:23*	*10/16/15 23:58*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Method: 624 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)	(70-130)
480-89087-6	TB-101415	95	88	86	90
480-89087-7	Grab1-4 Lab Composite	98	89	86	90
480-89087-7 MS	Grab1-4 Lab Composite	97	91	87	93
480-89087-7 MSD	Grab1-4 Lab Composite	93	91	86	92
LCS 480-268843/5	Lab Control Sample	95	90	86	87
MB 480-268843/7	Method Blank	97	89	86	89

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(42-120)	(10-120)	(22-125)
480-89087-7	Grab1-4 Lab Composite	111	90	54	85	38	87
LCS 480-269040/2-A	Lab Control Sample	106	91	52	85	40	107
LCSD 480-269040/3-A	Lab Control Sample Dup	108	94	56	87	42	109
MB 480-269040/1-A	Method Blank	87	91	51	79	37	110

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-268843/7
Matrix: Water
Analysis Batch: 268843

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			10/15/15 01:00	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			10/15/15 01:00	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/15/15 01:00	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/15/15 01:00	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			10/15/15 01:00	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			10/15/15 01:00	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/15/15 01:00	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/15/15 01:00	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			10/15/15 01:00	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			10/15/15 01:00	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			10/15/15 01:00	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			10/15/15 01:00	1
Acrolein	ND		100	17	ug/L			10/15/15 01:00	1
Acrylonitrile	ND		50	1.9	ug/L			10/15/15 01:00	1
Benzene	ND		5.0	0.60	ug/L			10/15/15 01:00	1
Bromoform	ND		5.0	0.47	ug/L			10/15/15 01:00	1
Bromomethane	ND		5.0	1.2	ug/L			10/15/15 01:00	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/15/15 01:00	1
Chlorobenzene	ND		5.0	0.48	ug/L			10/15/15 01:00	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			10/15/15 01:00	1
Chloroethane	ND		5.0	0.87	ug/L			10/15/15 01:00	1
Chloroform	ND		5.0	0.54	ug/L			10/15/15 01:00	1
Chloromethane	ND		5.0	0.64	ug/L			10/15/15 01:00	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			10/15/15 01:00	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			10/15/15 01:00	1
Ethylbenzene	ND		5.0	0.46	ug/L			10/15/15 01:00	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/15/15 01:00	1
Tetrachloroethene	ND		5.0	0.34	ug/L			10/15/15 01:00	1
Toluene	ND		5.0	0.45	ug/L			10/15/15 01:00	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			10/15/15 01:00	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			10/15/15 01:00	1
Trichloroethene	ND		5.0	0.60	ug/L			10/15/15 01:00	1
Vinyl chloride	ND		5.0	0.75	ug/L			10/15/15 01:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*52 - 173*		*1301/01/31633*	*1*
4-Bromofluorobenzene (Surr)	*: 9*		*89 - 121*		*1301/01/31633*	*1*
Toluene-d: (Surr)	*: 8*		*53 - 127*		*1301/01/31633*	*1*
Dibromofluoromethane (Surr)	*: 9*		*53 - 173*		*1301/01/31633*	*1*

Lab Sample ID: LCS 480-268843/5
Matrix: Water
Analysis Batch: 268843

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.6		ug/L		98	52 - 162
1,1,2,2-Tetrachloroethane	20.0	18.1		ug/L		91	46 - 157
1,1,2-Trichloroethane	20.0	18.6		ug/L		93	52 - 150

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-268843/5
Matrix: Water
Analysis Batch: 268843

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	20.0	16.7		ug/L		84	59 - 155
1,1-Dichloroethene	20.0	16.8		ug/L		84	1 - 234
1,2-Dichlorobenzene	20.0	18.0		ug/L		90	18 - 190
1,2-Dichloroethane	20.0	19.6		ug/L		98	49 - 155
1,2-Dichloropropane	20.0	18.7		ug/L		94	1 - 210
1,3-Dichlorobenzene	20.0	18.6		ug/L		93	59 - 156
1,4-Dichlorobenzene	20.0	18.9		ug/L		95	18 - 190
2-Chloroethyl vinyl ether	20.0	22.6	J	ug/L		113	1 - 305
Benzene	20.0	18.1		ug/L		91	37 - 151
Bromoform	20.0	23.1		ug/L		116	45 - 169
Bromomethane	20.0	18.2		ug/L		91	1 - 242
Carbon tetrachloride	20.0	21.4		ug/L		107	70 - 140
Chlorobenzene	20.0	18.6		ug/L		93	37 - 160
Chlorodibromomethane	20.0	20.7		ug/L		103	53 - 149
Chloroethane	20.0	18.0		ug/L		90	14 - 230
Chloroform	20.0	18.6		ug/L		93	51 - 138
Chloromethane	20.0	15.4		ug/L		77	1 - 273
cis-1,3-Dichloropropene	20.0	21.5		ug/L		108	1 - 227
Dichlorobromomethane	20.0	20.9		ug/L		105	35 - 155
Ethylbenzene	20.0	18.8		ug/L		94	37 - 162
Methylene Chloride	20.0	16.3		ug/L		82	1 - 221
Tetrachloroethene	20.0	17.6		ug/L		88	64 - 148
Toluene	20.0	17.7		ug/L		89	47 - 150
trans-1,2-Dichloroethene	20.0	17.6		ug/L		88	54 - 156
trans-1,3-Dichloropropene	20.0	21.4		ug/L		107	17 - 183
Trichloroethene	20.0	19.0		ug/L		95	71 - 157
Vinyl chloride	20.0	16.8		ug/L		84	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*9/*		*52 - 173*
4-Bromofluorobenzene (Surr)	*93*		*89 - 121*
Toluene-d: (Surr)	*: 8*		*53 - 127*
Dibromofluoromethane (Surr)	*: 5*		*53 - 173*

Lab Sample ID: 480-89087-7 MS
Matrix: Water
Analysis Batch: 268843

Client Sample ID: Grab1-4 Lab Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		200	209		ug/L		104	52 - 162
1,1,2,2-Tetrachloroethane	ND		200	192		ug/L		96	46 - 157
1,1,2-Trichloroethane	ND		200	187		ug/L		93	52 - 150
1,1-Dichloroethane	ND		200	181		ug/L		90	59 - 155
1,1-Dichloroethene	ND		200	180		ug/L		90	1 - 234
1,2-Dichlorobenzene	ND		200	190		ug/L		95	18 - 190
1,2-Dichloroethane	ND		200	203		ug/L		102	49 - 155
1,2-Dichloropropane	ND		200	188		ug/L		94	1 - 210
1,3-Dichlorobenzene	ND		200	187		ug/L		93	59 - 156

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-89087-7 MS
Matrix: Water
Analysis Batch: 268843

Client Sample ID: Grab1-4 Lab Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	ND		200	187		ug/L		93	18 - 190
2-Chloroethyl vinyl ether	ND		200	200	J	ug/L		100	1 - 305
Benzene	ND		200	196		ug/L		98	37 - 151
Bromoform	ND		200	229		ug/L		114	45 - 169
Bromomethane	ND		200	195		ug/L		97	1 - 242
Carbon tetrachloride	ND		200	226		ug/L		113	70 - 140
Chlorobenzene	55		200	244		ug/L		95	37 - 160
Chlorodibromomethane	ND		200	205		ug/L		102	53 - 149
Chloroethane	ND	F2	200	192		ug/L		96	14 - 230
Chloroform	ND		200	199		ug/L		100	51 - 138
Chloromethane	ND		200	161		ug/L		80	1 - 273
cis-1,3-Dichloropropene	ND		200	203		ug/L		101	1 - 227
Dichlorobromomethane	ND		200	207		ug/L		104	35 - 155
Ethylbenzene	ND		200	190		ug/L		95	37 - 162
Methylene Chloride	ND		200	186		ug/L		93	1 - 221
Tetrachloroethene	ND		200	179		ug/L		89	64 - 148
Toluene	ND		200	182		ug/L		91	47 - 150
trans-1,2-Dichloroethene	ND		200	191		ug/L		95	54 - 156
trans-1,3-Dichloropropene	ND		200	198		ug/L		99	17 - 183
Trichloroethene	ND		200	195		ug/L		97	71 - 157
Vinyl chloride	ND	F2	200	188		ug/L		94	1 - 251

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*52 - 173*
4-Bromofluorobenzene (Surr)	*91*		*89 - 121*
Toluene-d: (Surr)	*: 5*		*53 - 127*
Dibromofluoromethane (Surr)	*97*		*53 - 173*

Lab Sample ID: 480-89087-7 MSD
Matrix: Water
Analysis Batch: 268843

Client Sample ID: Grab1-4 Lab Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		200	184		ug/L		92	52 - 162	13	15
1,1,2,2-Tetrachloroethane	ND		200	189		ug/L		95	46 - 157	2	15
1,1,2-Trichloroethane	ND		200	182		ug/L		91	52 - 150	3	15
1,1-Dichloroethane	ND		200	160		ug/L		80	59 - 155	12	15
1,1-Dichloroethene	ND		200	159		ug/L		80	1 - 234	12	15
1,2-Dichlorobenzene	ND		200	179		ug/L		90	18 - 190	6	15
1,2-Dichloroethane	ND		200	194		ug/L		97	49 - 155	5	15
1,2-Dichloropropane	ND		200	177		ug/L		89	1 - 210	6	15
1,3-Dichlorobenzene	ND		200	178		ug/L		89	59 - 156	5	15
1,4-Dichlorobenzene	ND		200	178		ug/L		89	18 - 190	5	15
2-Chloroethyl vinyl ether	ND		200	203	J	ug/L		102	1 - 305	2	15
Benzene	ND		200	177		ug/L		88	37 - 151	10	15
Bromoform	ND		200	220		ug/L		110	45 - 169	4	15
Bromomethane	ND		200	172		ug/L		86	1 - 242	12	15
Carbon tetrachloride	ND		200	194		ug/L		97	70 - 140	15	15

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-89087-7 MSD
Matrix: Water
Analysis Batch: 268843

Client Sample ID: Grab1-4 Lab Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	55		200	232		ug/L		88	37 - 160	5	15
Chlorodibromomethane	ND		200	198		ug/L		99	53 - 149	3	15
Chloroethane	ND	F2	200	161	F2	ug/L		81	14 - 230	18	15
Chloroform	ND		200	180		ug/L		90	51 - 138	10	15
Chloromethane	ND		200	141		ug/L		70	1 - 273	13	15
cis-1,3-Dichloropropene	ND		200	197		ug/L		99	1 - 227	3	15
Dichlorobromomethane	ND		200	194		ug/L		97	35 - 155	7	15
Ethylbenzene	ND		200	173		ug/L		86	37 - 162	10	15
Methylene Chloride	ND		200	167		ug/L		83	1 - 221	11	15
Tetrachloroethene	ND		200	162		ug/L		81	64 - 148	10	15
Toluene	ND		200	169		ug/L		84	47 - 150	8	15
trans-1,2-Dichloroethene	ND		200	169		ug/L		84	54 - 156	12	15
trans-1,3-Dichloropropene	ND		200	198		ug/L		99	17 - 183	0	15
Trichloroethene	ND		200	170		ug/L		85	71 - 157	14	15
Vinyl chloride	ND	F2	200	158	F2	ug/L		79	1 - 251	17	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*52 - 173*
4-Bromofluorobenzene (Surr)	*91*		*89 - 121*
Toluene-d: (Surr)	*: 8*		*53 - 127*
Dibromofluoromethane (Surr)	*92*		*53 - 173*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-269040/1-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.82	ug/L		10/15/15 15:23	10/16/15 06:35	1
1,2-Dichlorobenzene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
1,2-Diphenylhydrazine	ND		10	0.78	ug/L		10/15/15 15:23	10/16/15 06:35	1
1,3-Dichlorobenzene	ND		10	0.69	ug/L		10/15/15 15:23	10/16/15 06:35	1
1,4-Dichlorobenzene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4,6-Trichlorophenol	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4-Dichlorophenol	ND		5.0	0.77	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4-Dimethylphenol	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4-Dinitrophenol	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4-Dinitrotoluene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,6-Dinitrotoluene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2-Chloronaphthalene	ND		5.0	0.91	ug/L		10/15/15 15:23	10/16/15 06:35	1
2-Chlorophenol	ND		5.0	0.66	ug/L		10/15/15 15:23	10/16/15 06:35	1
2-Nitrophenol	ND		5.0	0.70	ug/L		10/15/15 15:23	10/16/15 06:35	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		10/15/15 15:23	10/16/15 06:35	1
4,6-Dinitro-2-methylphenol	ND		10	0.66	ug/L		10/15/15 15:23	10/16/15 06:35	1
4-Bromophenyl phenyl ether	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 06:35	1
4-Chloro-3-methylphenol	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 06:35	1
4-Chloroaniline	ND		5.0	0.64	ug/L		10/15/15 15:23	10/16/15 06:35	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-269040/1-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 06:35	1
4-Nitrophenol	ND		15	10	ug/L		10/15/15 15:23	10/16/15 06:35	1
Acenaphthene	ND		5.0	0.81	ug/L		10/15/15 15:23	10/16/15 06:35	1
Acenaphthylene	ND		5.0	0.87	ug/L		10/15/15 15:23	10/16/15 06:35	1
Anthracene	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzidine	ND		80	35	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[a]anthracene	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[a]pyrene	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[b]fluoranthene	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[g,h,i]perylene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[k]fluoranthene	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 06:35	1
bis (2-chloroisopropyl) ether	ND		5.0	0.84	ug/L		10/15/15 15:23	10/16/15 06:35	1
Bis(2-chloroethoxy)methane	ND		5.0	0.75	ug/L		10/15/15 15:23	10/16/15 06:35	1
Bis(2-chloroethyl)ether	ND		5.0	0.93	ug/L		10/15/15 15:23	10/16/15 06:35	1
Bis(2-ethylhexyl) phthalate	ND		10	1.2	ug/L		10/15/15 15:23	10/16/15 06:35	1
Butyl benzyl phthalate	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 06:35	1
Chrysene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Dibenz(a,h)anthracene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 06:35	1
Diethyl phthalate	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Dimethyl phthalate	ND		5.0	0.91	ug/L		10/15/15 15:23	10/16/15 06:35	1
Di-n-butyl phthalate	ND		5.0	1.6	ug/L		10/15/15 15:23	10/16/15 06:35	1
Di-n-octyl phthalate	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 06:35	1
Fluoranthene	ND		5.0	1.6	ug/L		10/15/15 15:23	10/16/15 06:35	1
Fluorene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Hexachlorobenzene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Hexachlorobutadiene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Hexachloroethane	ND		5.0	0.60	ug/L		10/15/15 15:23	10/16/15 06:35	1
Indeno[1,2,3-cd]pyrene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 06:35	1
Isophorone	ND		5.0	0.74	ug/L		10/15/15 15:23	10/16/15 06:35	1
Naphthalene	ND		5.0	0.86	ug/L		10/15/15 15:23	10/16/15 06:35	1
Nitrobenzene	ND		5.0	0.81	ug/L		10/15/15 15:23	10/16/15 06:35	1
N-Nitrosodimethylamine	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
N-Nitrosodi-n-propylamine	ND		5.0	0.89	ug/L		10/15/15 15:23	10/16/15 06:35	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		10/15/15 15:23	10/16/15 06:35	1
Pentachlorophenol	ND		10	1.6	ug/L		10/15/15 15:23	10/16/15 06:35	1
Phenanthrene	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 06:35	1
Phenol	ND		5.0	0.35	ug/L		10/15/15 15:23	10/16/15 06:35	1
Pyrene	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 06:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,8-Tribromophenol	*: 5*		*/ 2 - 1/ 1*	*1301/ 01/ 1/ 627*	*1301801/ 3867/*	*1*
2-Fluorobiphenyl	*91*		*44 - 123*	*1301/ 01/ 1/ 627*	*1301801/ 3867/*	*1*
2-Fluorophenol	*/ 1*		*15 - 123*	*1301/ 01/ 1/ 627*	*1301801/ 3867/*	*1*
Nitrobenzene-d/	*59*		*42 - 123*	*1301/ 01/ 1/ 627*	*1301801/ 3867/*	*1*
Phenol-d/	*75*		*13 - 123*	*1301/ 01/ 1/ 627*	*1301801/ 3867/*	*1*
p-Terphenyl-d14	*113*		*22 - 12/*	*1301/ 01/ 1/ 627*	*1301801/ 3867/*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-269040/2-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	50.0	31.5		ug/L		63	44 - 142
1,2-Dichlorobenzene	50.0	27.5		ug/L		55	32 - 129
1,3-Dichlorobenzene	50.0	24.7		ug/L		49	1 - 172
1,4-Dichlorobenzene	50.0	25.8		ug/L		52	20 - 124
2,4,6-Trichlorophenol	50.0	50.5		ug/L		101	37 - 144
2,4-Dichlorophenol	50.0	47.2		ug/L		94	39 - 135
2,4-Dimethylphenol	50.0	46.0		ug/L		92	32 - 119
2,4-Dinitrophenol	100	99.0		ug/L		99	1 - 191
2,4-Dinitrotoluene	50.0	51.2		ug/L		102	39 - 139
2,6-Dinitrotoluene	50.0	49.5		ug/L		99	50 - 158
2-Chloronaphthalene	50.0	41.8		ug/L		84	60 - 118
2-Chlorophenol	50.0	40.7		ug/L		81	23 - 134
2-Nitrophenol	50.0	52.1		ug/L		104	29 - 182
3,3'-Dichlorobenzidine	100	108		ug/L		108	1 - 262
4,6-Dinitro-2-methylphenol	100	106		ug/L		106	1 - 181
4-Bromophenyl phenyl ether	50.0	51.1		ug/L		102	53 - 127
4-Chloro-3-methylphenol	50.0	49.8		ug/L		100	22 - 147
4-Chlorophenyl phenyl ether	50.0	48.0		ug/L		96	25 - 158
4-Nitrophenol	100	56.5		ug/L		57	1 - 132
Acenaphthene	50.0	46.4		ug/L		93	47 - 145
Acenaphthylene	50.0	45.3		ug/L		91	33 - 145
Anthracene	50.0	51.1		ug/L		102	27 - 133
Benzo[a]anthracene	50.0	53.0		ug/L		106	33 - 143
Benzo[a]pyrene	50.0	52.7		ug/L		105	17 - 163
Benzo[b]fluoranthene	50.0	55.1		ug/L		110	24 - 159
Benzo[g,h,i]perylene	50.0	55.7		ug/L		111	1 - 219
Benzo[k]fluoranthene	50.0	51.2		ug/L		102	11 - 162
bis (2-chloroisopropyl) ether	50.0	37.1		ug/L		74	36 - 166
Bis(2-chloroethoxy)methane	50.0	45.1		ug/L		90	33 - 184
Bis(2-chloroethyl)ether	50.0	40.2		ug/L		80	12 - 158
Bis(2-ethylhexyl) phthalate	50.0	51.5		ug/L		103	8 - 158
Butyl benzyl phthalate	50.0	51.9		ug/L		104	1 - 152
Chrysene	50.0	52.7		ug/L		105	17 - 168
Dibenz(a,h)anthracene	50.0	53.3		ug/L		107	1 - 227
Diethyl phthalate	50.0	50.7		ug/L		101	1 - 114
Dimethyl phthalate	50.0	51.1		ug/L		102	1 - 112
Di-n-butyl phthalate	50.0	51.7		ug/L		103	1 - 118
Di-n-octyl phthalate	50.0	53.4		ug/L		107	4 - 146
Fluoranthene	50.0	53.5		ug/L		107	26 - 137
Fluorene	50.0	48.8		ug/L		98	59 - 121
Hexachlorobenzene	50.0	50.8		ug/L		102	1 - 152
Hexachlorocyclopentadiene	50.0	30.3		ug/L		61	5 - 120
Hexachloroethane	50.0	21.1		ug/L		42	40 - 113
Indeno[1,2,3-cd]pyrene	50.0	53.5		ug/L		107	1 - 171
Isophorone	50.0	45.2		ug/L		90	21 - 196
Naphthalene	50.0	38.4		ug/L		77	21 - 133
Nitrobenzene	50.0	42.7		ug/L		85	35 - 180
N-Nitrosodi-n-propylamine	50.0	44.5		ug/L		89	1 - 230

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-269040/2-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	100	104		ug/L		104	54 - 125
Pentachlorophenol	100	94.9		ug/L		95	14 - 176
Phenanthrene	50.0	51.7		ug/L		103	54 - 120
Phenol	50.0	19.9		ug/L		40	5 - 112
Pyrene	50.0	52.9		ug/L		106	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,8-Tribromophenol	*138*		*/ 2 - 1/ 1*
2-Fluorobiphenyl	*91*		*44 - 123*
2-Fluorophenol	*/ 2*		*15 - 123*
Nitrobenzene-d/	*: /*		*42 - 123*
Phenol-d/	*43*		*13 - 123*
p-Terphenyl-d14	*135*		*22 - 12/*

Lab Sample ID: LCSD 480-269040/3-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 269040

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	31.9		ug/L		64	44 - 142	1	34
1,2-Dichlorobenzene	50.0	28.8		ug/L		58	32 - 129	4	38
1,3-Dichlorobenzene	50.0	25.7		ug/L		51	1 - 172	4	37
1,4-Dichlorobenzene	50.0	27.3		ug/L		55	20 - 124	6	40
2,4,6-Trichlorophenol	50.0	51.1		ug/L		102	37 - 144	1	20
2,4-Dichlorophenol	50.0	47.3		ug/L		95	39 - 135	0	23
2,4-Dimethylphenol	50.0	46.5		ug/L		93	32 - 119	1	18
2,4-Dinitrophenol	100	104		ug/L		104	1 - 191	5	29
2,4-Dinitrotoluene	50.0	52.4		ug/L		105	39 - 139	2	20
2,6-Dinitrotoluene	50.0	52.0		ug/L		104	50 - 158	5	17
2-Chloronaphthalene	50.0	42.7		ug/L		85	60 - 118	2	30
2-Chlorophenol	50.0	42.9		ug/L		86	23 - 134	5	26
2-Nitrophenol	50.0	52.1		ug/L		104	29 - 182	0	28
3,3'-Dichlorobenzidine	100	109		ug/L		109	1 - 262	1	31
4,6-Dinitro-2-methylphenol	100	111		ug/L		111	1 - 181	4	30
4-Bromophenyl phenyl ether	50.0	50.4		ug/L		101	53 - 127	1	16
4-Chloro-3-methylphenol	50.0	50.1		ug/L		100	22 - 147	1	16
4-Chlorophenyl phenyl ether	50.0	48.9		ug/L		98	25 - 158	2	15
4-Nitrophenol	100	55.3		ug/L		55	1 - 132	2	24
Acenaphthene	50.0	46.6		ug/L		93	47 - 145	1	25
Acenaphthylene	50.0	46.6		ug/L		93	33 - 145	3	22
Anthracene	50.0	52.0		ug/L		104	27 - 133	2	15
Benzo[a]anthracene	50.0	53.7		ug/L		107	33 - 143	1	15
Benzo[a]pyrene	50.0	52.7		ug/L		105	17 - 163	0	15
Benzo[b]fluoranthene	50.0	54.3		ug/L		109	24 - 159	1	17
Benzo[g,h,i]perylene	50.0	56.5		ug/L		113	1 - 219	1	19
Benzo[k]fluoranthene	50.0	51.8		ug/L		104	11 - 162	1	19
bis (2-chloroisopropyl) ether	50.0	39.5		ug/L		79	36 - 166	6	36
Bis(2-chloroethoxy)methane	50.0	45.7		ug/L		91	33 - 184	1	23

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-269040/3-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 269040

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether			50.0	42.3		ug/L		85	12 - 158	5	33
Bis(2-ethylhexyl) phthalate			50.0	52.7		ug/L		105	8 - 158	2	15
Butyl benzyl phthalate			50.0	53.4		ug/L		107	1 - 152	3	15
Chrysene			50.0	53.2		ug/L		106	17 - 168	1	15
Dibenz(a,h)anthracene			50.0	53.6		ug/L		107	1 - 227	1	18
Diethyl phthalate			50.0	51.6		ug/L		103	1 - 114	2	15
Dimethyl phthalate			50.0	51.6		ug/L		103	1 - 112	1	15
Di-n-butyl phthalate			50.0	52.5		ug/L		105	1 - 118	2	15
Di-n-octyl phthalate			50.0	54.3		ug/L		109	4 - 146	2	15
Fluoranthene			50.0	54.4		ug/L		109	26 - 137	2	15
Fluorene			50.0	49.1		ug/L		98	59 - 121	1	18
Hexachlorobenzene			50.0	51.1		ug/L		102	1 - 152	1	15
Hexachlorocyclopentadiene			50.0	30.3		ug/L		61	5 - 120	0	50
Hexachloroethane			50.0	22.5		ug/L		45	40 - 113	6	43
Indeno[1,2,3-cd]pyrene			50.0	54.3		ug/L		109	1 - 171	2	17
Isophorone			50.0	46.3		ug/L		93	21 - 196	2	21
Naphthalene			50.0	38.5		ug/L		77	21 - 133	0	31
Nitrobenzene			50.0	43.7		ug/L		87	35 - 180	2	27
N-Nitrosodi-n-propylamine			50.0	45.8		ug/L		92	1 - 230	3	23
N-Nitrosodiphenylamine			100	105		ug/L		105	54 - 125	1	15
Pentachlorophenol			100	96.3		ug/L		96	14 - 176	1	21
Phenanthrene			50.0	51.4		ug/L		103	54 - 120	1	16
Phenol			50.0	20.3		ug/L		41	5 - 112	2	36
Pyrene			50.0	53.0		ug/L		106	52 - 115	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,8-Tribromophenol	*13:*		*/ 2 - 1/ 1*
2-Fluorobiphenyl	*94*		*44 - 123*
2-Fluorophenol	*/ 8*		*15 - 123*
Nitrobenzene-d/	*: 5*		*42 - 123*
Phenol-d/	*42*		*13 - 123*
p-Terphenyl-d14	*139*		*22 - 12/*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-269031/1-A
Matrix: Water
Analysis Batch: 269532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		10/16/15 08:05	10/16/15 13:55	1
Barium	ND		0.0020	0.00070	mg/L		10/16/15 08:05	10/16/15 13:55	1
Chromium	ND		0.0040	0.0010	mg/L		10/16/15 08:05	10/16/15 13:55	1
Copper	ND		0.010	0.0016	mg/L		10/16/15 08:05	10/16/15 13:55	1
Nickel	ND		0.010	0.0013	mg/L		10/16/15 08:05	10/16/15 13:55	1
Zinc	ND		0.010	0.0015	mg/L		10/16/15 08:05	10/16/15 13:55	1

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

Lab Sample ID: LCS 480-269031/2-A
Matrix: Water
Analysis Batch: 269532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.193		mg/L		97	85 - 115
Barium	0.200	0.200		mg/L		100	85 - 115
Chromium	0.200	0.201		mg/L		101	85 - 115
Copper	0.200	0.197		mg/L		99	85 - 115
Nickel	0.200	0.188		mg/L		94	85 - 115
Zinc	0.200	0.200		mg/L		100	85 - 115

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

Lab Sample ID: MB 480-269761/1
Matrix: Water
Analysis Batch: 269761

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			10/20/15 08:20	1

Lab Sample ID: LCS 480-269761/2
Matrix: Water
Analysis Batch: 269761

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	214	213.2		mg/L		100	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-269225/1
Matrix: Water
Analysis Batch: 269225

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.010		SU		100	99 - 101

Lab Sample ID: 480-89087-5 DU
Matrix: Water
Analysis Batch: 269225

Client Sample ID: COMP-101415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.71	HF	7.710		SU		0	5

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 480-270972/3
Matrix: Water
Analysis Batch: 270972

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.010	0.0050	mg/L			10/25/15 10:00	1

Method: SM 4500 P E - Phosphorus (Continued)

Lab Sample ID: MB 480-270972/51
Matrix: Water
Analysis Batch: 270972

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.010	0.0050	mg/L			10/25/15 10:00	1

Lab Sample ID: LCS 480-270972/4
Matrix: Water
Analysis Batch: 270972

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus, Total	0.200	0.213		mg/L		107	90 - 110

Lab Sample ID: LCS 480-270972/52
Matrix: Water
Analysis Batch: 270972

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus, Total	0.200	0.198		mg/L		99	90 - 110

GC/MS VOA

Analysis Batch: 268843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-6	TB-101415	Total/NA	Water	624	
480-89087-7	Grab1-4 Lab Composite	Total/NA	Water	624	
480-89087-7 MS	Grab1-4 Lab Composite	Total/NA	Water	624	
480-89087-7 MSD	Grab1-4 Lab Composite	Total/NA	Water	624	
LCS 480-268843/5	Lab Control Sample	Total/NA	Water	624	
MB 480-268843/7	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 269040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-7	Grab1-4 Lab Composite	Total/NA	Water	625	
LCS 480-269040/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-269040/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 480-269040/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 269120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-7	Grab1-4 Lab Composite	Total/NA	Water	625	269040
LCS 480-269040/2-A	Lab Control Sample	Total/NA	Water	625	269040
LCSD 480-269040/3-A	Lab Control Sample Dup	Total/NA	Water	625	269040
MB 480-269040/1-A	Method Blank	Total/NA	Water	625	269040

Metals

Prep Batch: 269031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	200.7	
LCS 480-269031/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-269031/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 269532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	200.7 Rev 4.4	269031
LCS 480-269031/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	269031
MB 480-269031/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	269031

General Chemistry

Analysis Batch: 269225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	SM 4500 H+ B	
480-89087-5 DU	COMP-101415	Total/NA	Water	SM 4500 H+ B	
LCS 480-269225/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 269761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	SM 2540D	
LCS 480-269761/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-269761/1	Method Blank	Total/NA	Water	SM 2540D	

General Chemistry (Continued)

Analysis Batch: 270972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	SM 4500 P E	
LCS 480-270972/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
LCS 480-270972/52	Lab Control Sample	Total/NA	Water	SM 4500 P E	
MB 480-270972/3	Method Blank	Total/NA	Water	SM 4500 P E	
MB 480-270972/51	Method Blank	Total/NA	Water	SM 4500 P E	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: COMP-101415

Lab Sample ID: 480-89087-5

Date Collected: 10/14/15 13:05

Matrix: Water

Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			269031	10/16/15 08:05	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	269532	10/16/15 14:35	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	269761	10/20/15 08:20	EKB	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	269225	10/16/15 11:14	DCB	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	270972	10/25/15 10:00	DLG	TAL BUF

Client Sample ID: TB-101415

Lab Sample ID: 480-89087-6

Date Collected: 10/14/15 13:05

Matrix: Water

Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	268843	10/15/15 06:46	NMD1	TAL BUF

Client Sample ID: Grab1-4 Lab Composite

Lab Sample ID: 480-89087-7

Date Collected: 10/14/15 13:00

Matrix: Water

Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		10	268843	10/15/15 07:12	NMD1	TAL BUF
Total/NA	Prep	625			269040	10/15/15 15:23	CPH	TAL BUF
Total/NA	Analysis	625		1	269120	10/16/15 23:58	CAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
624		Water	1,2-Dichloroethene, Total
625	625	Water	1,2-Dichlorobenzene
625	625	Water	1,2-Diphenylhydrazine
625	625	Water	1,3-Dichlorobenzene
625	625	Water	1,4-Dichlorobenzene
625	625	Water	4-Chloroaniline
SM 4500 H+ B		Water	pH

Method Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 4500 P E	Phosphorus	SM	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-89087-5	COMP-101415	Water	10/14/15 13:05	10/14/15 13:45
480-89087-6	TB-101415	Water	10/14/15 13:05	10/14/15 13:45
480-89087-7	Grab1-4 Lab Composite	Water	10/14/15 13:00	10/14/15 13:45

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Patrick Higgins	Lab PM: John Schove	Carrier Tracking No(s):	COC No: 480-21387-2026.1
Client Contact: John Formoza	Phone: 315-468-1663	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: Honeywell International Inc				Job #:
Address: 1563 Willis Ave.	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 Weeks			
State, Zip: NY, 13204				
Phone: 315-468-1663	PO #: 4500073922			
Email: john.formoza@ch2m.com	WO #:			
Project Name: Honeywell - Alltift OM phase / Semi Annual	Project #: 48003159			
Site: Honeywell - Buffalo Sites	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone

480-89087 Chain of Custody

Location Identification	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E - Phosphorus, Total	200.7 - Metals ICP - As, Ba, Cr, Cu, Zn, Ni	2540D - Total Suspended Solids	SM4500_H+ - pH	624_6ml - Priority Pollutant List - VOA - 624	625 - Priority Pollutant List - SVOA - 625	Total #	Special Instructions/Note:
				Preservation Code:				S	D	N	N	A	N		
BSA Discharge	GRAB 1-101415	10/14/15	07:00	G	W	N	N					3	2	5	Prior to analysis grab samples to be composited by lab
BSA Discharge	GRAB 2-101415	10/14/15	09:00	G	W	N	N					3	2	5	
BSA Discharge	GRAB 3-101415	10/14/15	11:00	G	W	N	N					3	2	5	
BSA Discharge	GRAB 4 -101415	10/14/15	13:00	G	W	N	N					3	2	5	
BSA Discharge	COMP-101415	10/14/15	13:05	C	W	N	N	1			1			4	
TRIPBLANK	TB-101415	10/14/15	13:05		W	N	N					1		1	TRIP BLANK

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Patrick C. Higgins	Date/Time: 13:45 10/14/15	Company: CHM	Received by:	Date/Time: 10/14/15 1345	Company: TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.7 #1

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-89087-1

Login Number: 89087
List Number: 1
Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	False	LAB TO COMPOSITE VOLUME PRIOR TO TESTING PER CLIENT INSTRUCTION
Sampling Company provided.	True	OMI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	Yes: Samples checked, no residual chlorine detected

APPENDIX C
WATER LEVEL MEASUREMENTS

Alltift Landfill
Buffalo, New York

Piezometer Readings (DTW, ft)	29-Apr-15	15-Jul-15	14-Oct-15	26-Jan-16	7-Apr-16
PZ-1	10.82	10.54	8.33	5.37	7.34
PZ-2	9.22	8.44	6.95	4.70	5.30
PZ-3	9.95	7.09	6.23	4.23	4.25
PZ-4	8.45	8.43	7.38	5.48	6.63
PZ-5	8.18	7.47	6.15	4.10	4.84
PZ-6	7.99	6.44	5.83	4.00	3.86
PZ-7	7.05	5.88	5.69	4.12	4.19
PZ-8	5.70	4.81	4.93	3.80	4.73
PZ-9	6.57	6.34	6.80	5.65	5.72
PZ-10	8.04	8.16	8.70	7.85	7.73
PZ-11	7.20	8.96	8.88	7.81	6.94
PZ-12	7.98	8.55	9.70	8.70	7.76
PZ-13	5.52	5.85	6.55	5.65	5.59
PZ-14	Dry	dry	dry	dry	dry
PZ-15	8.00	8.28	8.51	8.15	7.71
PZ-16	Dry	dry	dry	dry	dry
Groundwater Collection Trench Sumps (DTW, ft)					
GWCT-1	13.29	12.78	9.08	6.20	8.24
GWCT-2	10.95	8.36	6.80	4.90	8.36
GWCT-3	7.58	6.49	6.02	4.33	4.40
GWCT-4	6.42	5.60	5.40	3.95	4.23
Relief Trench Sumps (DTW, ft)					
GWR-1		7.08	8.43	6.10	7.33
GWR-2	7.41	7.10	8.35	6.09	4.58
Lift Station (DTW, ft)					
Lift			10.95	7.13	9.66
Offsite Background Wells (DTW, ft)					
MW-1					
MW-2			8.25		
Overflow Weir (DTW, ft)		2 " below			4" above

APPENDIX D
QUARTERLY GROUNDWATER ELEVATIONS

QUARTERLY GROUNDWATER ELEVATIONS

2015/2016 ANNUAL REPORT

ALLTIFT LANDFILL SITE

BUFFALO, NEW YORK

			4/29/2015		7/15/2015		10/14/2015		1/26/2016		4/7/2016	
MONITORING POINT	**TOTAL DEPTH (FT.)**	**TOP OF CASING ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**
PIEZOMETERS												
PZ-1	16.8	585.01	10.82	574.19	10.54	574.47	8.33	576.68	5.37	579.64	7.34	577.67
PZ-2	16.9	584.96	9.22	575.74	8.44	576.52	6.95	578.01	4.70	580.26	5.30	579.66
PZ-3	16.9	585.05	9.95	575.10	7.09	577.96	6.23	578.82	4.23	580.82	4.25	580.80
PZ-4	16.6	585.79	8.45	577.34	8.43	577.36	7.38	578.41	5.48	580.31	6.63	579.16
PZ-5	16.9	584.52	8.18	576.34	7.47	577.05	6.15	578.37	4.10	580.42	4.84	579.68
PZ-6	17.8	584.74	7.99	576.75	6.44	578.30	5.83	578.91	4.00	580.74	3.86	580.88
PZ-7	20.0	584.99	7.05	577.94	5.88	579.11	5.69	579.30	4.12	580.87	4.19	580.80
PZ-8	20.7	584.48	5.70	578.78	4.81	579.67	4.93	579.55	3.80	580.68	4.73	579.75
PZ-9	15.1	586.86	6.57	580.29	6.34	580.52	6.80	580.06	5.65	581.21	5.72	581.14
PZ-10	11.5	589.41	8.04	581.37	8.16	581.25	8.70	580.71	7.85	581.56	7.73	581.68
PZ-11	19.5	594.72	7.20	587.52	8.96	585.76	8.88	585.84	7.81	586.91	6.94	587.78
PZ-12	21.8	592.78	7.98	584.80	8.55	584.23	9.70	583.08	8.70	584.08	7.76	585.02
PZ-13	22.5	589.04	5.52	583.52	5.85	583.19	6.55	582.49	5.65	583.39	5.59	583.45
PZ-14	55.0	619.11	Dry	*	dry	*	dry	*	dry	*	dry	*
PZ-15	17.0	588.79	8.00	580.79	8.28	580.51	8.51	580.28	8.15	580.64	7.71	581.08
PZ-16	66.5	629.30	Dry	**	dry	**	dry	**	dry	**	dry	**
BACKGROUND WELLS												
MW-1	20.4	585.22	NM	***	NM	***	NM	***	NM	***	NM	***
MW-2	17.0	586.67	NM	****	NM	****	8.25	578.42	NM	****	NM	****
GROUNDWATER COLLECTION TRENCH SUMPS												
S1	17.2	585.19	13.29	571.90	12.78	572.41	9.08	576.11	6.20	578.99	8.24	576.95
S2	24.8	585.45	10.95	574.50	8.36	577.09	6.80	578.65	4.90	580.55	8.36	577.09
S3	17.3	585.25	7.58	577.67	6.49	578.76	6.02	579.23	4.33	580.92	4.40	580.85
S4	17.8	585.00	6.42	578.58	5.6	579.40	5.40	579.60	3.95	581.05	4.23	580.77

*PZ-14 riser pipe damaged; no depth to water level measurement possible. Tape stops at 10.29 feet below top of casing.
**PZ-16: Tape stops at 32.50 feet below top of casing; indicates that the well is dry at this level.
***Background well MW-1 riser pipe damaged; no depth to water level measurement possible.
**** Depth to Water for MW-2 is measured on annual basis.
NM - Not measured

APPENDIX E
QUARTERLY GROUNDWATER CONTOUR MAPS

Stone Road
Tifft Street
Stone Road
583
581
579
577
585
587
575
575
575
577
579
583
585
587
PZ-13
(583.52)
PZ-15
(580.79)
PZ-4
(577.34)
PZ-1
(574.19)
Sump-1
(571.90)
PZ-14
(Dry)
PZ-12
(584.80)
PZ-5
(576.34)
PZ-2
(575.74)
Sump-2
(574.50)
PZ-11
(587.52)
Groundwater Collection Trench
PZ-16
(Dry)
PZ-6
(576.75)
PZ-3
(575.10)
Sump-3
(577.67)
PZ-7
(577.94)
PZ-8
(578.78)
PZ-9
(580.29)
Sump-4
(578.58)
PZ-10
(581.37)

Legend

- Piezometer
- Groundwater Collection Sump
- Interpreted Groundwater Contour
- Interpreted Groundwater Flow Direction
- *(578.59)* Measured Groundwater Elevation

N

0 60 120 Feet

Prepared/Date: LPM 04/20/16
Checked/Date: RTB 04/23/16

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
April 29, 2015
Project 3410120905 Figure 1

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/22/2016 11:49:26

Stone Road

Tifft Street

Stone Road

PZ-13
(583.19)

583

581

579

PZ-15
(580.51)

PZ-4
(577.36)

PZ-1
(574.47)

Sump-1
(572.41)

577

PZ-12
(584.23)

PZ-14
(Dry)

585

PZ-2
(576.52)

PZ-5
(577.05)

PZ-11
(585.76)

Sump-2
(577.09)

Groundwater Collection Trench

PZ-16
(Dry)

PZ-3
(577.96)

PZ-6
(578.30)

585

583

Sump-3
(578.76)

PZ-7
(579.11)

PZ-8
(579.67)

PZ-9
(580.52)

Sump-4
(579.40)

579

PZ-10
(581.25)

581

Legend

- Piezometer
- Groundwater Collection Sump
- Interpreted Groundwater Contour
- Interpreted Groundwater Flow Direction
- *(576.21)* Measured Groundwater Elevation

N

0 60 120 Feet

Prepared/Date: LPM 04/20/16
Checked/Date: RTB 04/23/16

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
July 7, 2015
Project 3410120905 Figure 2

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/28/2016 11:19:38

Stone Road

Tifft Street

Stone Road

PZ-13
(582.49)

581

579

PZ-15
(580.28)

583

PZ-4
(578.41)

Sump-1
(576.11)

PZ-1
(576.68)

577

PZ-12
(583.08)

PZ-14
(Dry)

585

PZ-2
(578.01)

PZ-5
(578.37)

Groundwater Collection Trench

PZ-11
(585.84)

Sump-2
(578.65)

565

PZ-16
(Dry)

585

PZ-6
(578.91)

PZ-3
(578.82)

Sump-3
(579.23)

583

PZ-7
(579.30)

579

PZ-9
(580.06)

PZ-8
(579.55)

Sump-4
(579.60)

581

PZ-10
(580.71)

Legend

- Piezometer
- Groundwater Collection Sump
- Interpreted Groundwater Contour
- Interpreted Groundwater Flow Direction
- *(571.70)* Measured Groundwater Elevation

N

0 60 120 Feet

Prepared/Date: LPM 04/20/16
Checked/Date: RTB 04/23/16

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
October 14, 2015
Project 3410120905 Figure 3

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/28/2016 11:20:13

Stone Road

Tifft Street

Stone Road

581

583

PZ-13
(583.39)

PZ-15
(580.64)

Sump-1
(578.99)

PZ-4
(580.31)

PZ-1
(579.64)

579

PZ-12
(584.08)

PZ-14
(Dry)

585

PZ-2
(580.26)

PZ-5
(580.42)

PZ-11
(586.91)

Sump-2
(580.55)

Groundwater Collection Trench

PZ-16
(Dry)

PZ-3
(580.82)

PZ-6
(580.74)

585

Sump-3
(580.92)

PZ-7
(580.87)

PZ-9
(581.21)

583

PZ-8
(580.68)

Sump-4
(581.05)

581

PZ-10
(581.56)

Legend

- Piezometer
- Groundwater Collection Sump
- Interpreted Groundwater Contour
- Interpreted Groundwater Flow Direction
- *(580.38)* Measured Groundwater Elevation

N

0 60 120 Feet

Prepared/Date: LPM 04/20/16
Checked/Date: RTB 04/23/16

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
January 26, 2016
Project 3410120905 Figure 4

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/28/2016 11:23:17

Tifft Street
Stone Road
Stone Road
581
583
585
587
579
577
PZ-1 (577.67)
PZ-4 (579.16)
Sump-1 (576.95)
PZ-15 (581.08)
PZ-13 (583.45)
PZ-14 (Dry)
PZ-12 (585.02)
PZ-2 (579.66)
PZ-5 (579.68)
PZ-11 (587.78)
Sump-2 (577.09)
Groundwater Collection Trench
PZ-3 (580.80)
PZ-6 (580.88)
PZ-16 (Dry)
Sump-3 (580.85)
PZ-7 (580.80)
PZ-8 (579.75)
PZ-9 (581.14)
Sump-4 (580.77)
PZ-10 (581.68)

Legend

- Piezometer
- Groundwater Collection Sump
- Interpreted Groundwater Contour
- Interpreted Groundwater Flow Direction
- *(578.49)* Measured Groundwater Elevation

N

0 60 120 Feet

Prepared/Date: ANK 03/09/15
Checked/Date: RTB 04/23/16

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
April 07, 2016
Project 3410120905 Figure 5

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/28/2016 11:19:02

APPENDIX F
LABORATORY ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-79812-1
Client Project/Site: 30130 - Alltift OM Phase/Semi Annual
Revision: 1

For:
Honeywell International Inc
101 Columbia Road
Morristown, New Jersey 07962

Attn: Mr. Rich Galloway

Authorized for release by:
5/22/2015 3:37:55 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-79812-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-79812-1

Revision
This report has been revised to include Nickel results.

Receipt
The samples were received on 5/6/2015 2:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA
Method(s) 624: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: Grab 1-4-050615 (480-79812-5). Elevated reporting limits (RLs) are provided.

Method(s) 624: The following Volatile samples were composited by the laboratory on 5/8/15 as requested by the client: Grab 1-4-050615 (480-79812-5): Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using laboratory standard operating procedures.

Method(s) 624: The preservative used in the sample containers provided is not compatible with the Method 624 analytes requested. The following samples were received preserved with hydrochloric acid: Grab 1-4-050615 (480-79812-5) and TB-050615 (480-79812-7). The requested target analyte list contains 2-chloroethylvinyl ether, which is an acid-labile compound that degrades in an acidic medium.

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

GC/MS Semi VOA
Method(s) 625: The laboratory control sample duplicate (LCSD) for 241295 recovered outside control limits for the following analytes: Hexachloroethane, N-Nitrosodimethylamine. Hexachloroethane, N-Nitrosodimethylamine have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

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

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

General Chemistry
Method(s) SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: COMP 050615 (480-79812-6).

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

Organic Prep
Method(s) 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with 241295.

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

Detection Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: Grab 1-4-050615 — Lab Sample ID: 480-79812-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	37	J	100	32	ug/L	10		624	Total/NA
Chlorobenzene	54		50	4.8	ug/L	10		624	Total/NA
trans-1,2-Dichloroethene	6.7	J	50	5.9	ug/L	10		624	Total/NA
Vinyl chloride	14	J	50	7.5	ug/L	10		624	Total/NA
4-Chloroaniline	12		5.0	0.64	ug/L	1		625	Total/NA

Client Sample ID: COMP 050615 — Lab Sample ID: 480-79812-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.022		0.010	0.0056	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.29	B	0.0020	0.00070	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0044		0.0040	0.0010	mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.0059	J	0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.012		0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0060	J B	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Phosphorus, Total	0.20		0.010	0.0050	mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	44.8		4.0	4.0	mg/L	1		SM 2540D	Total/NA
pH	7.02	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TB-050615 — Lab Sample ID: 480-79812-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: Grab 1-4-050615

Date Collected: 05/06/15 13:00
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-5

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.9	ug/L			05/09/15 07:09	10
1,1,2,2-Tetrachloroethane	ND		50	2.6	ug/L			05/09/15 07:09	10
1,1,2-Trichloroethane	ND		50	4.8	ug/L			05/09/15 07:09	10
1,1-Dichloroethane	ND		50	5.9	ug/L			05/09/15 07:09	10
1,1-Dichloroethene	ND		50	8.5	ug/L			05/09/15 07:09	10
1,2-Dichlorobenzene	ND		50	4.4	ug/L			05/09/15 07:09	10
1,2-Dichloroethane	ND		50	6.0	ug/L			05/09/15 07:09	10
1,2-Dichloroethene, Total	**37**	**J**	100	32	ug/L			05/09/15 07:09	10
1,2-Dichloropropane	ND		50	6.1	ug/L			05/09/15 07:09	10
1,3-Dichlorobenzene	ND		50	5.4	ug/L			05/09/15 07:09	10
1,4-Dichlorobenzene	ND		50	5.1	ug/L			05/09/15 07:09	10
2-Chloroethyl vinyl ether	ND		250	19	ug/L			05/09/15 07:09	10
Acrolein	ND		1000	170	ug/L			05/09/15 07:09	10
Acrylonitrile	ND		500	19	ug/L			05/09/15 07:09	10
Benzene	ND		50	6.0	ug/L			05/09/15 07:09	10
Bromoform	ND		50	4.7	ug/L			05/09/15 07:09	10
Bromomethane	ND		50	12	ug/L			05/09/15 07:09	10
Carbon tetrachloride	ND		50	5.1	ug/L			05/09/15 07:09	10
Chlorobenzene	**54**		50	4.8	ug/L			05/09/15 07:09	10
Chlorodibromomethane	ND		50	4.1	ug/L			05/09/15 07:09	10
Chloroethane	ND		50	8.7	ug/L			05/09/15 07:09	10
Chloroform	ND		50	5.4	ug/L			05/09/15 07:09	10
Chloromethane	ND		50	6.4	ug/L			05/09/15 07:09	10
cis-1,3-Dichloropropene	ND		50	3.3	ug/L			05/09/15 07:09	10
Dichlorobromomethane	ND		50	5.4	ug/L			05/09/15 07:09	10
Ethylbenzene	ND		50	4.6	ug/L			05/09/15 07:09	10
Methylene Chloride	ND		50	8.1	ug/L			05/09/15 07:09	10
Tetrachloroethene	ND		50	3.4	ug/L			05/09/15 07:09	10
Toluene	ND		50	4.5	ug/L			05/09/15 07:09	10
trans-1,2-Dichloroethene	**6.7**	**J**	50	5.9	ug/L			05/09/15 07:09	10
trans-1,3-Dichloropropene	ND		50	4.4	ug/L			05/09/15 07:09	10
Trichloroethene	ND		50	6.0	ug/L			05/09/15 07:09	10
Vinyl chloride	**14**	**J**	50	7.5	ug/L			05/09/15 07:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 130*		*05/09/15 07:09*	*10*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*		*05/09/15 07:09*	*10*
Toluene-d8 (Surr)	*103*		*70 - 123*		*05/09/15 07:09*	*10*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*05/09/15 07:09*	*10*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.82	ug/L		05/08/15 09:41	05/12/15 03:29	1
1,2-Dichlorobenzene	ND		10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
1,2-Diphenylhydrazine	ND		10	0.78	ug/L		05/08/15 09:41	05/12/15 03:29	1
1,3-Dichlorobenzene	ND		10	0.69	ug/L		05/08/15 09:41	05/12/15 03:29	1
1,4-Dichlorobenzene	ND		10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,4,6-Trichlorophenol	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,4-Dichlorophenol	ND		5.0	0.77	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,4-Dimethylphenol	ND		5.0	1.4	ug/L		05/08/15 09:41	05/12/15 03:29	1

Client Sample ID: Grab 1-4-050615
Date Collected: 05/06/15 13:00
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-5
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,4-Dinitrotoluene	ND		5.0	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2,6-Dinitrotoluene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
2-Chloronaphthalene	ND		5.0	0.91	ug/L		05/08/15 09:41	05/12/15 03:29	1
2-Chlorophenol	ND		5.0	0.66	ug/L		05/08/15 09:41	05/12/15 03:29	1
2-Nitrophenol	ND		5.0	0.70	ug/L		05/08/15 09:41	05/12/15 03:29	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		05/08/15 09:41	05/12/15 03:29	1
4,6-Dinitro-2-methylphenol	ND		10	0.66	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Bromophenyl phenyl ether	ND		5.0	1.4	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Chloro-3-methylphenol	ND		5.0	1.1	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Chloroaniline	**12**		5.0	0.64	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Chlorophenyl phenyl ether	ND		5.0	1.3	ug/L		05/08/15 09:41	05/12/15 03:29	1
4-Nitrophenol	ND		15	10	ug/L		05/08/15 09:41	05/12/15 03:29	1
Acenaphthene	ND		5.0	0.81	ug/L		05/08/15 09:41	05/12/15 03:29	1
Acenaphthylene	ND		5.0	0.87	ug/L		05/08/15 09:41	05/12/15 03:29	1
Anthracene	ND		5.0	1.4	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzidine	ND		80	35	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[a]anthracene	ND		5.0	1.1	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[a]pyrene	ND		5.0	1.3	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[b]fluoranthene	ND		5.0	1.2	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[g,h,i]perylene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/12/15 03:29	1
Benzo[k]fluoranthene	ND		5.0	1.3	ug/L		05/08/15 09:41	05/12/15 03:29	1
bis (2-chloroisopropyl) ether	ND		5.0	0.84	ug/L		05/08/15 09:41	05/12/15 03:29	1
Bis(2-chloroethoxy)methane	ND		5.0	0.75	ug/L		05/08/15 09:41	05/12/15 03:29	1
Bis(2-chloroethyl)ether	ND		5.0	0.93	ug/L		05/08/15 09:41	05/12/15 03:29	1
Bis(2-ethylhexyl) phthalate	ND		10	1.2	ug/L		05/08/15 09:41	05/12/15 03:29	1
Butyl benzyl phthalate	ND		5.0	1.1	ug/L		05/08/15 09:41	05/12/15 03:29	1
Chrysene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Dibenz(a,h)anthracene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/12/15 03:29	1
Diethyl phthalate	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Dimethyl phthalate	ND		5.0	0.91	ug/L		05/08/15 09:41	05/12/15 03:29	1
Di-n-butyl phthalate	ND		5.0	1.6	ug/L		05/08/15 09:41	05/12/15 03:29	1
Di-n-octyl phthalate	ND		5.0	1.2	ug/L		05/08/15 09:41	05/12/15 03:29	1
Fluoranthene	ND		5.0	1.6	ug/L		05/08/15 09:41	05/12/15 03:29	1
Fluorene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Hexachlorobenzene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Hexachlorobutadiene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
Hexachloroethane	ND	*	5.0	0.60	ug/L		05/08/15 09:41	05/12/15 03:29	1
Indeno[1,2,3-cd]pyrene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/12/15 03:29	1
Isophorone	ND		5.0	0.74	ug/L		05/08/15 09:41	05/12/15 03:29	1
Naphthalene	ND		5.0	0.86	ug/L		05/08/15 09:41	05/12/15 03:29	1
Nitrobenzene	ND		5.0	0.81	ug/L		05/08/15 09:41	05/12/15 03:29	1
N-Nitrosodimethylamine	ND	*	10	5.0	ug/L		05/08/15 09:41	05/12/15 03:29	1
N-Nitrosodi-n-propylamine	ND		5.0	0.89	ug/L		05/08/15 09:41	05/12/15 03:29	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		05/08/15 09:41	05/12/15 03:29	1
Pentachlorophenol	ND		10	1.6	ug/L		05/08/15 09:41	05/12/15 03:29	1
Phenanthrene	ND		5.0	1.2	ug/L		05/08/15 09:41	05/12/15 03:29	1
Phenol	ND		5.0	0.35	ug/L		05/08/15 09:41	05/12/15 03:29	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: Grab 1-4-050615
Date Collected: 05/06/15 13:00
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-5
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.0	1.4	ug/L		05/08/15 09:41	05/12/15 03:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*108*		*52 - 151*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
2-Fluorobiphenyl	*79*		*44 - 120*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
2-Fluorophenol	*40*		*17 - 120*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
Nitrobenzene-d5	*67*		*42 - 120*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
Phenol-d5	*32*		*10 - 120*	*05/08/15 09:41*	*05/12/15 03:29*	*1*
p-Terphenyl-d14	*88*		*22 - 125*	*05/08/15 09:41*	*05/12/15 03:29*	*1*

Client Sample Results

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: COMP 050615
Date Collected: 05/06/15 13:15
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-6
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.022		0.010	0.0056	mg/L		05/07/15 12:03	05/08/15 16:18	1
Barium	0.29	B	0.0020	0.00070	mg/L		05/07/15 12:03	05/08/15 16:18	1
Chromium	0.0044		0.0040	0.0010	mg/L		05/07/15 12:03	05/08/15 16:18	1
Copper	0.0059	J	0.010	0.0016	mg/L		05/07/15 12:03	05/08/15 16:18	1
Nickel	0.012		0.010	0.0013	mg/L		05/07/15 12:03	05/08/15 16:18	1
Zinc	0.0060	J B	0.010	0.0015	mg/L		05/07/15 12:03	05/08/15 16:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	0.20		0.010	0.0050	mg/L			05/10/15 12:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	44.8		4.0	4.0	mg/L			05/12/15 19:38	1
pH	7.02	HF	0.100	0.100	SU			05/07/15 10:30	1

Client Sample ID: TB-050615
Date Collected: 05/06/15 13:15
Date Received: 05/06/15 14:00

Lab Sample ID: 480-79812-7
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			05/09/15 08:49	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			05/09/15 08:49	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			05/09/15 08:49	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			05/09/15 08:49	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			05/09/15 08:49	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			05/09/15 08:49	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			05/09/15 08:49	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			05/09/15 08:49	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			05/09/15 08:49	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			05/09/15 08:49	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			05/09/15 08:49	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			05/09/15 08:49	1
Acrolein	ND		100	17	ug/L			05/09/15 08:49	1
Acrylonitrile	ND		50	1.9	ug/L			05/09/15 08:49	1
Benzene	ND		5.0	0.60	ug/L			05/09/15 08:49	1
Bromoform	ND		5.0	0.47	ug/L			05/09/15 08:49	1
Bromomethane	ND		5.0	1.2	ug/L			05/09/15 08:49	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			05/09/15 08:49	1
Chlorobenzene	ND		5.0	0.48	ug/L			05/09/15 08:49	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			05/09/15 08:49	1
Chloroethane	ND		5.0	0.87	ug/L			05/09/15 08:49	1
Chloroform	ND		5.0	0.54	ug/L			05/09/15 08:49	1
Chloromethane	ND		5.0	0.64	ug/L			05/09/15 08:49	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			05/09/15 08:49	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			05/09/15 08:49	1
Ethylbenzene	ND		5.0	0.46	ug/L			05/09/15 08:49	1
Methylene Chloride	ND		5.0	0.81	ug/L			05/09/15 08:49	1
Tetrachloroethene	ND		5.0	0.34	ug/L			05/09/15 08:49	1
Toluene	ND		5.0	0.45	ug/L			05/09/15 08:49	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			05/09/15 08:49	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			05/09/15 08:49	1
Trichloroethene	ND		5.0	0.60	ug/L			05/09/15 08:49	1
Vinyl chloride	ND		5.0	0.75	ug/L			05/09/15 08:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*72 - 130*		*05/09/15 08:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*		*05/09/15 08:49*	*1*
Toluene-d8 (Surr)	*103*		*70 - 123*		*05/09/15 08:49*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*05/09/15 08:49*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Method: 624 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)	(70-130)
480-79812-5	Grab 1-4-050615	112	96	103	101
480-79812-7	TB-050615	110	96	103	99
LCS 480-241430/5	Lab Control Sample	107	95	101	106
MB 480-241430/7	Method Blank	113	95	102	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(42-120)	(10-120)	(22-125)
480-79812-5	Grab 1-4-050615	108	79	40	67	32	88
LCS 480-241295/2-A	Lab Control Sample	103	83	39	64	30	104
LCSD 480-241295/3-A	Lab Control Sample Dup	98	69	33	57	24	98
MB 480-241295/1-A	Method Blank	78	70	34	54	27	104

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-241430/7
Matrix: Water
Analysis Batch: 241430

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			05/08/15 23:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			05/08/15 23:01	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			05/08/15 23:01	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			05/08/15 23:01	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			05/08/15 23:01	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			05/08/15 23:01	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			05/08/15 23:01	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			05/08/15 23:01	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			05/08/15 23:01	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			05/08/15 23:01	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			05/08/15 23:01	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			05/08/15 23:01	1
Acrolein	ND		100	17	ug/L			05/08/15 23:01	1
Acrylonitrile	ND		50	1.9	ug/L			05/08/15 23:01	1
Benzene	ND		5.0	0.60	ug/L			05/08/15 23:01	1
Bromoform	ND		5.0	0.47	ug/L			05/08/15 23:01	1
Bromomethane	ND		5.0	1.2	ug/L			05/08/15 23:01	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			05/08/15 23:01	1
Chlorobenzene	ND		5.0	0.48	ug/L			05/08/15 23:01	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			05/08/15 23:01	1
Chloroethane	ND		5.0	0.87	ug/L			05/08/15 23:01	1
Chloroform	ND		5.0	0.54	ug/L			05/08/15 23:01	1
Chloromethane	ND		5.0	0.64	ug/L			05/08/15 23:01	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			05/08/15 23:01	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			05/08/15 23:01	1
Ethylbenzene	ND		5.0	0.46	ug/L			05/08/15 23:01	1
Methylene Chloride	ND		5.0	0.81	ug/L			05/08/15 23:01	1
Tetrachloroethene	ND		5.0	0.34	ug/L			05/08/15 23:01	1
Toluene	ND		5.0	0.45	ug/L			05/08/15 23:01	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			05/08/15 23:01	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			05/08/15 23:01	1
Trichloroethene	ND		5.0	0.60	ug/L			05/08/15 23:01	1
Vinyl chloride	ND		5.0	0.75	ug/L			05/08/15 23:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*72 - 130*		*05/08/15 23:01*	*1*
4-Bromofluorobenzene (Surr)	*95*		*69 - 121*		*05/08/15 23:01*	*1*
Toluene-d8 (Surr)	*102*		*70 - 123*		*05/08/15 23:01*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*05/08/15 23:01*	*1*

Lab Sample ID: LCS 480-241430/5
Matrix: Water
Analysis Batch: 241430

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.2		ug/L		111	52 - 162
1,1,2,2-Tetrachloroethane	20.0	22.7		ug/L		114	46 - 157
1,1,2-Trichloroethane	20.0	20.8		ug/L		104	52 - 150

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-241430/5
Matrix: Water
Analysis Batch: 241430

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	20.0	20.9		ug/L		105	59 - 155
1,1-Dichloroethene	20.0	19.5		ug/L		97	1 - 234
1,2-Dichlorobenzene	20.0	21.0		ug/L		105	18 - 190
1,2-Dichloroethane	20.0	22.3		ug/L		112	49 - 155
1,2-Dichloropropane	20.0	21.6		ug/L		108	1 - 210
1,3-Dichlorobenzene	20.0	20.2		ug/L		101	59 - 156
1,4-Dichlorobenzene	20.0	20.3		ug/L		102	18 - 190
2-Chloroethyl vinyl ether	20.0	21.1	J	ug/L		105	1 - 305
Benzene	20.0	21.4		ug/L		107	37 - 151
Bromoform	20.0	16.7		ug/L		84	45 - 169
Bromomethane	20.0	22.3		ug/L		111	1 - 242
Carbon tetrachloride	20.0	23.0		ug/L		115	70 - 140
Chlorobenzene	20.0	20.3		ug/L		102	37 - 160
Chlorodibromomethane	20.0	18.6		ug/L		93	53 - 149
Chloroethane	20.0	21.0		ug/L		105	14 - 230
Chloroform	20.0	21.7		ug/L		109	51 - 138
Chloromethane	20.0	22.9		ug/L		114	1 - 273
cis-1,3-Dichloropropene	20.0	20.1		ug/L		101	1 - 227
Dichlorobromomethane	20.0	19.9		ug/L		100	35 - 155
Ethylbenzene	20.0	20.9		ug/L		104	37 - 162
Methylene Chloride	20.0	18.3		ug/L		91	1 - 221
Tetrachloroethene	20.0	20.9		ug/L		105	64 - 148
Toluene	20.0	21.3		ug/L		107	47 - 150
trans-1,2-Dichloroethene	20.0	22.2		ug/L		111	54 - 156
trans-1,3-Dichloropropene	20.0	19.7		ug/L		99	17 - 183
Trichloroethene	20.0	20.9		ug/L		105	71 - 157
Vinyl chloride	20.0	23.2		ug/L		116	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 130*
4-Bromofluorobenzene (Surr)	*95*		*69 - 121*
Toluene-d8 (Surr)	*101*		*70 - 123*
Dibromofluoromethane (Surr)	*106*		*70 - 130*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-241295/1-A
Matrix: Water
Analysis Batch: 241661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.82	ug/L		05/08/15 09:41	05/11/15 18:43	1
1,2-Dichlorobenzene	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
1,2-Diphenylhydrazine	ND		10	0.78	ug/L		05/08/15 09:41	05/11/15 18:43	1
1,3-Dichlorobenzene	ND		10	0.69	ug/L		05/08/15 09:41	05/11/15 18:43	1
1,4-Dichlorobenzene	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,4,6-Trichlorophenol	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,4-Dichlorophenol	ND		5.0	0.77	ug/L		05/08/15 09:41	05/11/15 18:43	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-241295/1-A
Matrix: Water
Analysis Batch: 241661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		5.0	1.4	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,4-Dinitrophenol	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,4-Dinitrotoluene	ND		5.0	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2,6-Dinitrotoluene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
2-Chloronaphthalene	ND		5.0	0.91	ug/L		05/08/15 09:41	05/11/15 18:43	1
2-Chlorophenol	ND		5.0	0.66	ug/L		05/08/15 09:41	05/11/15 18:43	1
2-Nitrophenol	ND		5.0	0.70	ug/L		05/08/15 09:41	05/11/15 18:43	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		05/08/15 09:41	05/11/15 18:43	1
4,6-Dinitro-2-methylphenol	ND		10	0.66	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Bromophenyl phenyl ether	ND		5.0	1.4	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Chloro-3-methylphenol	ND		5.0	1.1	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Chloroaniline	ND		5.0	0.64	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Chlorophenyl phenyl ether	ND		5.0	1.3	ug/L		05/08/15 09:41	05/11/15 18:43	1
4-Nitrophenol	ND		15	10	ug/L		05/08/15 09:41	05/11/15 18:43	1
Acenaphthene	ND		5.0	0.81	ug/L		05/08/15 09:41	05/11/15 18:43	1
Acenaphthylene	ND		5.0	0.87	ug/L		05/08/15 09:41	05/11/15 18:43	1
Anthracene	ND		5.0	1.4	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzidine	ND		80	35	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[a]anthracene	ND		5.0	1.1	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[a]pyrene	ND		5.0	1.3	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[b]fluoranthene	ND		5.0	1.2	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[g,h,i]perylene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/11/15 18:43	1
Benzo[k]fluoranthene	ND		5.0	1.3	ug/L		05/08/15 09:41	05/11/15 18:43	1
bis (2-chloroisopropyl) ether	ND		5.0	0.84	ug/L		05/08/15 09:41	05/11/15 18:43	1
Bis(2-chloroethoxy)methane	ND		5.0	0.75	ug/L		05/08/15 09:41	05/11/15 18:43	1
Bis(2-chloroethyl)ether	ND		5.0	0.93	ug/L		05/08/15 09:41	05/11/15 18:43	1
Bis(2-ethylhexyl) phthalate	ND		10	1.2	ug/L		05/08/15 09:41	05/11/15 18:43	1
Butyl benzyl phthalate	ND		5.0	1.1	ug/L		05/08/15 09:41	05/11/15 18:43	1
Chrysene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Dibenz(a,h)anthracene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/11/15 18:43	1
Diethyl phthalate	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Dimethyl phthalate	ND		5.0	0.91	ug/L		05/08/15 09:41	05/11/15 18:43	1
Di-n-butyl phthalate	ND		5.0	1.6	ug/L		05/08/15 09:41	05/11/15 18:43	1
Di-n-octyl phthalate	ND		5.0	1.2	ug/L		05/08/15 09:41	05/11/15 18:43	1
Fluoranthene	ND		5.0	1.6	ug/L		05/08/15 09:41	05/11/15 18:43	1
Fluorene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Hexachlorobenzene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Hexachlorobutadiene	ND		5.0	1.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
Hexachloroethane	ND		5.0	0.60	ug/L		05/08/15 09:41	05/11/15 18:43	1
Indeno[1,2,3-cd]pyrene	ND		5.0	1.5	ug/L		05/08/15 09:41	05/11/15 18:43	1
Isophorone	ND		5.0	0.74	ug/L		05/08/15 09:41	05/11/15 18:43	1
Naphthalene	ND		5.0	0.86	ug/L		05/08/15 09:41	05/11/15 18:43	1
Nitrobenzene	ND		5.0	0.81	ug/L		05/08/15 09:41	05/11/15 18:43	1
N-Nitrosodimethylamine	ND		10	5.0	ug/L		05/08/15 09:41	05/11/15 18:43	1
N-Nitrosodi-n-propylamine	ND		5.0	0.89	ug/L		05/08/15 09:41	05/11/15 18:43	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		05/08/15 09:41	05/11/15 18:43	1
Pentachlorophenol	ND		10	1.6	ug/L		05/08/15 09:41	05/11/15 18:43	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-241295/1-A
Matrix: Water
Analysis Batch: 241661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		5.0	1.2	ug/L		05/08/15 09:41	05/11/15 18:43	1
Phenol	ND		5.0	0.35	ug/L		05/08/15 09:41	05/11/15 18:43	1
Pyrene	ND		5.0	1.4	ug/L		05/08/15 09:41	05/11/15 18:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*52 - 151*	*05/08/15 09:41*	*05/11/15 18:43*	*1*
2-Fluorobiphenyl	*70*		*44 - 120*	*05/08/15 09:41*	*05/11/15 18:43*	*1*
2-Fluorophenol	*34*		*17 - 120*	*05/08/15 09:41*	*05/11/15 18:43*	*1*
Nitrobenzene-d5	*54*		*42 - 120*	*05/08/15 09:41*	*05/11/15 18:43*	*1*
Phenol-d5	*27*		*10 - 120*	*05/08/15 09:41*	*05/11/15 18:43*	*1*
p-Terphenyl-d14	*104*		*22 - 125*	*05/08/15 09:41*	*05/11/15 18:43*	*1*

Lab Sample ID: LCS 480-241295/2-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	50.0	29.8		ug/L		60	44 - 142
1,2-Dichlorobenzene	50.0	24.7		ug/L		49	32 - 129
1,3-Dichlorobenzene	50.0	23.7		ug/L		47	1 - 172
1,4-Dichlorobenzene	50.0	22.8		ug/L		46	20 - 124
2,4,6-Trichlorophenol	50.0	47.2		ug/L		94	37 - 144
2,4-Dichlorophenol	50.0	42.9		ug/L		86	39 - 135
2,4-Dimethylphenol	50.0	38.6		ug/L		77	32 - 119
2,4-Dinitrophenol	100	100		ug/L		100	1 - 191
2,4-Dinitrotoluene	50.0	46.4		ug/L		93	39 - 139
2,6-Dinitrotoluene	50.0	47.1		ug/L		94	50 - 158
2-Chloronaphthalene	50.0	40.2		ug/L		80	60 - 118
2-Chlorophenol	50.0	32.6		ug/L		65	23 - 134
2-Nitrophenol	50.0	40.5		ug/L		81	29 - 182
3,3'-Dichlorobenzidine	100	99.7		ug/L		100	1 - 262
4,6-Dinitro-2-methylphenol	100	101		ug/L		101	1 - 181
4-Bromophenyl phenyl ether	50.0	51.1		ug/L		102	53 - 127
4-Chloro-3-methylphenol	50.0	42.1		ug/L		84	22 - 147
4-Chlorophenyl phenyl ether	50.0	45.1		ug/L		90	25 - 158
4-Nitrophenol	100	48.1		ug/L		48	1 - 132
Acenaphthene	50.0	44.0		ug/L		88	47 - 145
Acenaphthylene	50.0	42.6		ug/L		85	33 - 145
Anthracene	50.0	47.9		ug/L		96	27 - 133
Benzo[a]anthracene	50.0	50.4		ug/L		101	33 - 143
Benzo[a]pyrene	50.0	50.0		ug/L		100	17 - 163
Benzo[b]fluoranthene	50.0	50.7		ug/L		101	24 - 159
Benzo[g,h,i]perylene	50.0	51.4		ug/L		103	1 - 219
Benzo[k]fluoranthene	50.0	49.6		ug/L		99	11 - 162
bis (2-chloroisopropyl) ether	50.0	28.1		ug/L		56	36 - 166
Bis(2-chloroethoxy)methane	50.0	37.2		ug/L		74	33 - 184
Bis(2-chloroethyl)ether	50.0	30.1		ug/L		60	12 - 158
Bis(2-ethylhexyl) phthalate	50.0	50.8		ug/L		102	8 - 158

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-241295/2-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	50.0	49.6		ug/L		99	1 - 152
Chrysene	50.0	49.3		ug/L		99	17 - 168
Dibenz(a,h)anthracene	50.0	52.0		ug/L		104	1 - 227
Diethyl phthalate	50.0	44.2		ug/L		88	1 - 114
Dimethyl phthalate	50.0	45.1		ug/L		90	1 - 112
Di-n-butyl phthalate	50.0	47.5		ug/L		95	1 - 118
Di-n-octyl phthalate	50.0	50.4		ug/L		101	4 - 146
Fluoranthene	50.0	44.5		ug/L		89	26 - 137
Fluorene	50.0	43.9		ug/L		88	59 - 121
Hexachlorobenzene	50.0	51.6		ug/L		103	1 - 152
Hexachlorocyclopentadiene	50.0	36.3		ug/L		73	5 - 120
Hexachloroethane	50.0	20.2		ug/L		40	40 - 113
Indeno[1,2,3-cd]pyrene	50.0	50.3		ug/L		101	1 - 171
Isophorone	50.0	38.5		ug/L		77	21 - 196
Naphthalene	50.0	35.3		ug/L		71	21 - 133
Nitrobenzene	50.0	35.8		ug/L		72	35 - 180
N-Nitrosodi-n-propylamine	50.0	33.4		ug/L		67	1 - 230
N-Nitrosodiphenylamine	100	98.2		ug/L		98	54 - 125
Pentachlorophenol	100	80.0		ug/L		80	14 - 176
Phenanthrene	50.0	47.2		ug/L		94	54 - 120
Phenol	50.0	15.5		ug/L		31	5 - 112
Pyrene	50.0	53.7		ug/L		107	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*103*		*52 - 151*
2-Fluorobiphenyl	*83*		*44 - 120*
2-Fluorophenol	*39*		*17 - 120*
Nitrobenzene-d5	*64*		*42 - 120*
Phenol-d5	*30*		*10 - 120*
p-Terphenyl-d14	*104*		*22 - 125*

Lab Sample ID: LCSD 480-241295/3-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 241295

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	26.9		ug/L		54	44 - 142	11	34
1,2-Dichlorobenzene	50.0	22.7		ug/L		45	32 - 129	9	38
1,3-Dichlorobenzene	50.0	19.6		ug/L		39	1 - 172	19	37
1,4-Dichlorobenzene	50.0	20.9		ug/L		42	20 - 124	9	40
2,4,6-Trichlorophenol	50.0	42.9		ug/L		86	37 - 144	10	20
2,4-Dichlorophenol	50.0	38.8		ug/L		78	39 - 135	10	23
2,4-Dimethylphenol	50.0	34.2		ug/L		68	32 - 119	12	18
2,4-Dinitrophenol	100	105		ug/L		105	1 - 191	5	29
2,4-Dinitrotoluene	50.0	48.5		ug/L		97	39 - 139	4	20
2,6-Dinitrotoluene	50.0	45.6		ug/L		91	50 - 158	3	17
2-Chloronaphthalene	50.0	37.3		ug/L		75	60 - 118	7	30
2-Chlorophenol	50.0	28.5		ug/L		57	23 - 134	13	26

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-241295/3-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 241295

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitrophenol			50.0	35.0		ug/L		70	29 - 182	15	28
3,3'-Dichlorobenzidine			100	88.4		ug/L		88	1 - 262	12	31
4,6-Dinitro-2-methylphenol			100	102		ug/L		102	1 - 181	0	30
4-Bromophenyl phenyl ether			50.0	47.5		ug/L		95	53 - 127	7	16
4-Chloro-3-methylphenol			50.0	38.1		ug/L		76	22 - 147	10	16
4-Chlorophenyl phenyl ether			50.0	43.9		ug/L		88	25 - 158	3	15
4-Nitrophenol			100	44.5		ug/L		44	1 - 132	8	24
Acenaphthene			50.0	39.5		ug/L		79	47 - 145	11	25
Acenaphthylene			50.0	39.5		ug/L		79	33 - 145	7	22
Anthracene			50.0	45.6		ug/L		91	27 - 133	5	15
Benzo[a]anthracene			50.0	46.9		ug/L		94	33 - 143	7	15
Benzo[a]pyrene			50.0	47.2		ug/L		94	17 - 163	6	15
Benzo[b]fluoranthene			50.0	49.4		ug/L		99	24 - 159	3	17
Benzo[g,h,i]perylene			50.0	45.8		ug/L		92	1 - 219	12	19
Benzo[k]fluoranthene			50.0	46.6		ug/L		93	11 - 162	6	19
bis (2-chloroisopropyl) ether			50.0	25.5		ug/L		51	36 - 166	10	36
Bis(2-chloroethoxy)methane			50.0	30.6		ug/L		61	33 - 184	19	23
Bis(2-chloroethyl)ether			50.0	26.6		ug/L		53	12 - 158	12	33
Bis(2-ethylhexyl) phthalate			50.0	47.5		ug/L		95	8 - 158	7	15
Butyl benzyl phthalate			50.0	48.2		ug/L		96	1 - 152	3	15
Chrysene			50.0	47.0		ug/L		94	17 - 168	5	15
Dibenz(a,h)anthracene			50.0	45.9		ug/L		92	1 - 227	13	18
Diethyl phthalate			50.0	44.8		ug/L		90	1 - 114	1	15
Dimethyl phthalate			50.0	45.0		ug/L		90	1 - 112	0	15
Di-n-butyl phthalate			50.0	47.8		ug/L		96	1 - 118	1	15
Di-n-octyl phthalate			50.0	44.9		ug/L		90	4 - 146	11	15
Fluoranthene			50.0	44.9		ug/L		90	26 - 137	1	15
Fluorene			50.0	42.6		ug/L		85	59 - 121	3	18
Hexachlorobenzene			50.0	47.3		ug/L		95	1 - 152	9	15
Hexachlorocyclopentadiene			50.0	31.1		ug/L		62	5 - 120	15	50
Hexachloroethane			50.0	18.6	*	ug/L		37	40 - 113	8	43
Indeno[1,2,3-cd]pyrene			50.0	45.4		ug/L		91	1 - 171	10	17
Isophorone			50.0	32.9		ug/L		66	21 - 196	16	21
Naphthalene			50.0	30.1		ug/L		60	21 - 133	16	31
Nitrobenzene			50.0	28.9		ug/L		58	35 - 180	21	27
N-Nitrosodi-n-propylamine			50.0	29.9		ug/L		60	1 - 230	11	23
N-Nitrosodiphenylamine			100	91.3		ug/L		91	54 - 125	7	15
Pentachlorophenol			100	75.2		ug/L		75	14 - 176	6	21
Phenanthrene			50.0	45.6		ug/L		91	54 - 120	3	16
Phenol			50.0	13.7		ug/L		27	5 - 112	13	36
Pyrene			50.0	50.9		ug/L		102	52 - 115	5	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*98*		*52 - 151*
2-Fluorobiphenyl	*69*		*44 - 120*
2-Fluorophenol	*33*		*17 - 120*
Nitrobenzene-d5	*57*		*42 - 120*
Phenol-d5	*24*		*10 - 120*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-241295/3-A
Matrix: Water
Analysis Batch: 241889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 241295

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl-d14	*98*		*22 - 125*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-241045/1-A
Matrix: Water
Analysis Batch: 241459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241045

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		05/07/15 12:03	05/08/15 15:34	1
Barium	0.000910	J	0.0020	0.00070	mg/L		05/07/15 12:03	05/08/15 15:34	1
Chromium	ND		0.0040	0.0010	mg/L		05/07/15 12:03	05/08/15 15:34	1
Copper	ND		0.010	0.0016	mg/L		05/07/15 12:03	05/08/15 15:34	1
Nickel	ND		0.010	0.0013	mg/L		05/07/15 12:03	05/08/15 15:34	1
Zinc	0.00188	J	0.010	0.0015	mg/L		05/07/15 12:03	05/08/15 15:34	1

Lab Sample ID: LCS 480-241045/2-A
Matrix: Water
Analysis Batch: 241459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.198		mg/L		99	85 - 115
Barium	0.200	0.202		mg/L		101	85 - 115
Chromium	0.200	0.207		mg/L		104	85 - 115
Copper	0.200	0.195		mg/L		97	85 - 115
Nickel	0.200	0.193		mg/L		96	85 - 115
Zinc	0.200	0.202		mg/L		101	85 - 115

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

Lab Sample ID: MB 480-242000/1
Matrix: Water
Analysis Batch: 242000

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			05/12/15 19:38	1

Lab Sample ID: LCS 480-242000/2
Matrix: Water
Analysis Batch: 242000

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	216	213.2		mg/L		99	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-241136/1
Matrix: Water
Analysis Batch: 241136

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	6.950		SU		99	99 - 101		

Lab Sample ID: 480-79812-6 DU
Matrix: Water
Analysis Batch: 241136

Client Sample ID: COMP 050615
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.02	HF		7.040		SU				0.3	5

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 480-241569/3
Matrix: Water
Analysis Batch: 241569

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.010	0.0050	mg/L			05/10/15 12:29	1

Lab Sample ID: LCS 480-241569/4
Matrix: Water
Analysis Batch: 241569

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Phosphorus, Total			0.200	0.203		mg/L		101	90 - 110		

GC/MS VOA

Analysis Batch: 241430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-5	Grab 1-4-050615	Total/NA	Water	624	
480-79812-7	TB-050615	Total/NA	Water	624	
LCS 480-241430/5	Lab Control Sample	Total/NA	Water	624	
MB 480-241430/7	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 241295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-5	Grab 1-4-050615	Total/NA	Water	625	
LCS 480-241295/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-241295/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 480-241295/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 241661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-5	Grab 1-4-050615	Total/NA	Water	625	241295
MB 480-241295/1-A	Method Blank	Total/NA	Water	625	241295

Analysis Batch: 241889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-241295/2-A	Lab Control Sample	Total/NA	Water	625	241295
LCSD 480-241295/3-A	Lab Control Sample Dup	Total/NA	Water	625	241295

Metals

Prep Batch: 241045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	200.7	
LCS 480-241045/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-241045/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 241459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	200.7 Rev 4.4	241045
LCS 480-241045/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	241045
MB 480-241045/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	241045

General Chemistry

Analysis Batch: 241136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	SM 4500 H+ B	
480-79812-6 DU	COMP 050615	Total/NA	Water	SM 4500 H+ B	
LCS 480-241136/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 241569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	SM 4500 P E	
LCS 480-241569/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	

General Chemistry (Continued)

Analysis Batch: 241569 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-241569/3	Method Blank	Total/NA	Water	SM 4500 P E	

Analysis Batch: 242000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79812-6	COMP 050615	Total/NA	Water	SM 2540D	
LCS 480-242000/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-242000/1	Method Blank	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Client Sample ID: Grab 1-4-050615

Lab Sample ID: 480-79812-5
Matrix: Water
Date Collected: 05/06/15 13:00
Date Received: 05/06/15 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		10	241430	05/09/15 07:09	CDC	TAL BUF
Total/NA	Prep	625			241295	05/08/15 09:41	JLS	TAL BUF
Total/NA	Analysis	625		1	241661	05/12/15 03:29	DMR	TAL BUF

Client Sample ID: COMP 050615

Lab Sample ID: 480-79812-6
Matrix: Water
Date Collected: 05/06/15 13:15
Date Received: 05/06/15 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			241045	05/07/15 12:03	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	241459	05/08/15 16:18	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	242000	05/12/15 19:38	KC	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	241136	05/07/15 10:30	MGH	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	241569	05/10/15 12:29	DLG	TAL BUF

Client Sample ID: TB-050615

Lab Sample ID: 480-79812-7
Matrix: Water
Date Collected: 05/06/15 13:15
Date Received: 05/06/15 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	241430	05/09/15 08:49	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
624		Water	1,2-Dichloroethene, Total
625	625	Water	1,2-Dichlorobenzene
625	625	Water	1,2-Diphenylhydrazine
625	625	Water	1,3-Dichlorobenzene
625	625	Water	1,4-Dichlorobenzene
625	625	Water	4-Chloroaniline
SM 4500 H+ B		Water	pH

Method Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 4500 P E	Phosphorus	SM	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase/Semi Annual

TestAmerica Job ID: 480-79812-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-79812-5	Grab 1-4-050615	Water	05/06/15 13:00	05/06/15 14:00
480-79812-6	COMP 050615	Water	05/06/15 13:15	05/06/15 14:00
480-79812-7	TB-050615	Water	05/06/15 13:15	05/06/15 14:00

Chain of Custody Record

480-79812 Chain of Custody

erica MENTAL TESTING

Client Information	Sampler: Patrick Higgins	Lab PM: John Schove	Carrier Tracking No(s):	COC No: 480-21387-2026.1
Client Contact: John Formoza	Phone: 315-468-1663	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: Honeywell International Inc				Job #:
Address: 1563 Willis Ave.	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 Weeks			
State, Zip: NY, 13204				
Phone: 315-468-1663	PO #: 4500073922			
Email: john.formoza@ch2m.com	WO #:			
Project Name: Honeywell - Alltift OM phase / Semi Annual	Project #: 48003159			
Site: Honeywell - Buffalo Sites	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Location Identification	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4600_P_E - Phosphorus, Total	200.7 - Metals ICP - As, Ba, Cr, Cu, Zn	2540D - Total Suspended Solids	SM4500_H+ - pH	624_6ml - Priority Pollutant List - VOA - 624	625 - Priority Pollutant List - SVOA - 625	Total Number of containers	Special Instructions/Note:
				Preservation Code:				S	D	N	N	A	N		
BSA Discharge	GRAB 1-050615	5/6/15	07:00	G	W	N	N					3	2	5	Prior to analysis grab samples to be composited by lab
BSA Discharge	GRAB 2-050615	5/6/15	09:00	G	W	N	N					3	2	5	
BSA Discharge	GRAB 3-050615	5/6/15	11:00	G	W	N	N					3	2	5	
BSA Discharge	GRAB 4 -050615	5/6/15	13:00	G	W	N	N					3	2	5	
BSA Discharge	COMP 050615	5/6/15	13:15	C	W	N	N	1	1	1	1			4	
TRIPBLANK	-TB-050615	5/6/15	13:15		W	N	N					1		1	TRIP BLANK

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Patrick C Higgins	Date/Time: 5/6/2015 1400	Company: CHM	Received by:	Date/Time: 5/6/15 1400	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.1 #1

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5/22/2015

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-79812-1

Login Number: 79812
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	omi
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-89080-1
Client Project/Site: 30130-Alltift GW Monitoring

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

Attn: Mr. Rich Galloway

Authorized for release by:
10/26/2015 5:17:03 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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Table of Contents

Definitions/Glossary

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-89080-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-89080-1

Comments
No additional comments.

Receipt
The samples were received on 10/14/2015 1:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0º C.

GC/MS VOA
Method(s) 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: Sump 2-101415 (480-89080-3), Sump 3-101415 (480-89080-4), Sump 4-101415 (480-89080-5), Sump 4-101415 (480-89080-5[MS]), Sump 4-101415 (480-89080-5[MSD]) and FDUP- 101415 SUMP 4 (480-89080-7). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: Sump 4-101415 (480-89080-5[MS]). These results have been reported and qualified.

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

Metals
Method(s) 6010C: The recovery of Post Spike, (480-89080-C-5-D PDS), in batch 480-268970 exhibited results outside the quality control limits for Total Manganese. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary.

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

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

Detection Summary

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Client Sample ID: Sump Comp 101415 — Lab Sample ID: 480-89080-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.011		0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	19.6		0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.013		0.0050	0.0030	mg/L	1		6010C	Total/NA
Manganese	1.9		0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	0.84	J	1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	13.1		1.0	0.27	ug/L	1		6020A	Total/NA
Nickel	57.2		1.0	0.11	ug/L	1		6020A	Total/NA

Client Sample ID: Sump 1-101415 — Lab Sample ID: 480-89080-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	1.4		1.0	0.75	ug/L	1		8260C	Total/NA

Client Sample ID: Sump 2-101415 — Lab Sample ID: 480-89080-3

No Detections.

Client Sample ID: Sump 3-101415 — Lab Sample ID: 480-89080-4

No Detections.

Client Sample ID: Sump 4-101415 — Lab Sample ID: 480-89080-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	25		4.0	3.0	ug/L	4		8260C	Total/NA
Chromium	0.0035	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	37.4	F1	0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	1.6		0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	1.7		1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	15.1		1.0	0.27	ug/L	1		6020A	Total/NA
Nickel	17.8		1.0	0.11	ug/L	1		6020A	Total/NA

Client Sample ID: MW-2-101415 — Lab Sample ID: 480-89080-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.056		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.017		0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	0.35	J	1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	1.6		1.0	0.27	ug/L	1		6020A	Total/NA
Nickel	3.8		1.0	0.11	ug/L	1		6020A	Total/NA

Client Sample ID: FDUP- 101415 SUMP 4 — Lab Sample ID: 480-89080-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	25		4.0	3.0	ug/L	4		8260C	Total/NA
Chromium	0.0025	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	35.9		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	1.6		0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	0.87	J	1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	11.7		1.0	0.27	ug/L	1		6020A	Total/NA
Nickel	18.3		1.0	0.11	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Client Sample ID: TRIP BLANK **Lab Sample ID: 480-89080-8**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: Sump Comp 101415
Date Collected: 10/14/15 10:30
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		4.6	0.55	ug/L		10/15/15 08:19	10/23/15 08:40	1
Naphthalene	ND		4.6	0.70	ug/L		10/15/15 08:19	10/23/15 08:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*72*		*46 - 120*	*10/15/15 08:19*	*10/23/15 08:40*	*1*
2-Fluorobiphenyl	*86*		*48 - 120*	*10/15/15 08:19*	*10/23/15 08:40*	*1*
p-Terphenyl-d14	*72*		*67 - 150*	*10/15/15 08:19*	*10/23/15 08:40*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.011**		0.0040	0.0010	mg/L		10/15/15 12:10	10/15/15 23:58	1
Iron	**19.6**		0.050	0.019	mg/L		10/15/15 12:10	10/15/15 23:58	1
Lead	**0.013**		0.0050	0.0030	mg/L		10/15/15 12:10	10/15/15 23:58	1
Manganese	**1.9**		0.0030	0.00040	mg/L		10/15/15 12:10	10/15/15 23:58	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.84**	**J**	1.0	0.15	ug/L		10/16/15 11:45	10/16/15 21:58	1
Arsenic	**13.1**		1.0	0.27	ug/L		10/16/15 11:45	10/16/15 21:58	1
Cadmium	ND		0.50	0.071	ug/L		10/16/15 11:45	10/16/15 21:58	1
Nickel	**57.2**		1.0	0.11	ug/L		10/16/15 11:45	10/16/15 21:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		10/15/15 10:40	10/15/15 14:30	1

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Client Sample ID: Sump 1-101415
Date Collected: 10/14/15 10:20
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/23/15 02:34	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/23/15 02:34	1
Benzene	ND		1.0	0.41	ug/L			10/23/15 02:34	1
Chlorobenzene	**1.4**		1.0	0.75	ug/L			10/23/15 02:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/23/15 02:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/23/15 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 137*		*10/23/15 02:34*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*10/23/15 02:34*	*1*
Toluene-d8 (Surr)	*94*		*71 - 126*		*10/23/15 02:34*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*10/23/15 02:34*	*1*

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Client Sample ID: Sump 2-101415
Date Collected: 10/14/15 10:10
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			10/23/15 02:57	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			10/23/15 02:57	5
Benzene	ND		5.0	2.1	ug/L			10/23/15 02:57	5
Chlorobenzene	ND		5.0	3.8	ug/L			10/23/15 02:57	5
Ethylbenzene	ND		5.0	3.7	ug/L			10/23/15 02:57	5
Xylenes, Total	ND		10	3.3	ug/L			10/23/15 02:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*66 - 137*		*10/23/15 02:57*	*5*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*10/23/15 02:57*	*5*
Toluene-d8 (Surr)	*92*		*71 - 126*		*10/23/15 02:57*	*5*
Dibromofluoromethane (Surr)	*97*		*60 - 140*		*10/23/15 02:57*	*5*

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Client Sample ID: Sump 3-101415
Date Collected: 10/14/15 09:50
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			10/23/15 03:19	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			10/23/15 03:19	4
Benzene	ND		4.0	1.6	ug/L			10/23/15 03:19	4
Chlorobenzene	ND		4.0	3.0	ug/L			10/23/15 03:19	4
Ethylbenzene	ND		4.0	3.0	ug/L			10/23/15 03:19	4
Xylenes, Total	ND		8.0	2.6	ug/L			10/23/15 03:19	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 137*		*10/23/15 03:19*	*4*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*10/23/15 03:19*	*4*
Toluene-d8 (Surr)	*94*		*71 - 126*		*10/23/15 03:19*	*4*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*10/23/15 03:19*	*4*

Client Sample ID: Sump 4-101415

Date Collected: 10/14/15 09:15
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			10/23/15 03:41	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			10/23/15 03:41	4
Benzene	ND		4.0	1.6	ug/L			10/23/15 03:41	4
Chlorobenzene	**25**		4.0	3.0	ug/L			10/23/15 03:41	4
Ethylbenzene	ND		4.0	3.0	ug/L			10/23/15 03:41	4
Xylenes, Total	ND		8.0	2.6	ug/L			10/23/15 03:41	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*10/23/15 03:41*	*4*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*10/23/15 03:41*	*4*
Toluene-d8 (Surr)	*95*		*71 - 126*		*10/23/15 03:41*	*4*
Dibromofluoromethane (Surr)	*104*		*60 - 140*		*10/23/15 03:41*	*4*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND	F1	4.7	0.55	ug/L		10/15/15 08:19	10/23/15 09:09	1
Naphthalene	ND		4.7	0.71	ug/L		10/15/15 08:19	10/23/15 09:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*46 - 120*	*10/15/15 08:19*	*10/23/15 09:09*	*1*
2-Fluorobiphenyl	*80*		*48 - 120*	*10/15/15 08:19*	*10/23/15 09:09*	*1*
p-Terphenyl-d14	*67*		*67 - 150*	*10/15/15 08:19*	*10/23/15 09:09*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.0035**	**J**	0.0040	0.0010	mg/L		10/15/15 12:10	10/16/15 00:02	1
Iron	**37.4**	**F1**	0.050	0.019	mg/L		10/15/15 12:10	10/16/15 00:02	1
Lead	ND		0.0050	0.0030	mg/L		10/15/15 12:10	10/16/15 00:02	1
Manganese	**1.6**		0.0030	0.00040	mg/L		10/15/15 12:10	10/16/15 00:02	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.7**		1.0	0.15	ug/L		10/16/15 11:45	10/16/15 22:05	1
Arsenic	**15.1**		1.0	0.27	ug/L		10/16/15 11:45	10/16/15 22:05	1
Cadmium	ND		0.50	0.071	ug/L		10/16/15 11:45	10/16/15 22:05	1
Nickel	**17.8**		1.0	0.11	ug/L		10/16/15 11:45	10/16/15 22:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		10/15/15 10:40	10/15/15 14:32	1

Client Sample ID: MW-2-101415

Date Collected: 10/14/15 08:00
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/23/15 04:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/23/15 04:03	1
Benzene	ND		1.0	0.41	ug/L			10/23/15 04:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/23/15 04:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/23/15 04:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/23/15 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 137*		*10/23/15 04:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*10/23/15 04:03*	*1*
Toluene-d8 (Surr)	*93*		*71 - 126*		*10/23/15 04:03*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*10/23/15 04:03*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		4.6	0.55	ug/L		10/15/15 08:19	10/23/15 09:38	1
Naphthalene	ND		4.6	0.70	ug/L		10/15/15 08:19	10/23/15 09:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*64*		*46 - 120*	*10/15/15 08:19*	*10/23/15 09:38*	*1*
2-Fluorobiphenyl	*80*		*48 - 120*	*10/15/15 08:19*	*10/23/15 09:38*	*1*
p-Terphenyl-d14	*88*		*67 - 150*	*10/15/15 08:19*	*10/23/15 09:38*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0040	0.0010	mg/L		10/15/15 12:10	10/16/15 00:28	1
Iron	**0.056**		0.050	0.019	mg/L		10/15/15 12:10	10/16/15 00:28	1
Lead	ND		0.0050	0.0030	mg/L		10/15/15 12:10	10/16/15 00:28	1
Manganese	**0.017**		0.0030	0.00040	mg/L		10/15/15 12:10	10/16/15 00:28	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.35**	**J**	1.0	0.15	ug/L		10/16/15 11:45	10/16/15 22:37	1
Arsenic	**1.6**		1.0	0.27	ug/L		10/16/15 11:45	10/16/15 22:37	1
Cadmium	ND		0.50	0.071	ug/L		10/16/15 11:45	10/16/15 22:37	1
Nickel	**3.8**		1.0	0.11	ug/L		10/16/15 11:45	10/16/15 22:37	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		10/15/15 10:40	10/15/15 14:39	1

Client Sample ID: FDUP- 101415 SUMP 4

Lab Sample ID: 480-89080-7

Date Collected: 10/14/15 09:30

Matrix: Water

Date Received: 10/14/15 13:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			10/23/15 04:25	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			10/23/15 04:25	4
Benzene	ND		4.0	1.6	ug/L			10/23/15 04:25	4
Chlorobenzene	**25**		4.0	3.0	ug/L			10/23/15 04:25	4
Ethylbenzene	ND		4.0	3.0	ug/L			10/23/15 04:25	4
Xylenes, Total	ND		8.0	2.6	ug/L			10/23/15 04:25	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*10/23/15 04:25*	*4*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*10/23/15 04:25*	*4*
Toluene-d8 (Surr)	*96*		*71 - 126*		*10/23/15 04:25*	*4*
Dibromofluoromethane (Surr)	*102*		*60 - 140*		*10/23/15 04:25*	*4*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		4.6	0.55	ug/L		10/15/15 08:19	10/23/15 10:08	1
Naphthalene	ND		4.6	0.70	ug/L		10/15/15 08:19	10/23/15 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*78*		*46 - 120*	*10/15/15 08:19*	*10/23/15 10:08*	*1*
2-Fluorobiphenyl	*90*		*48 - 120*	*10/15/15 08:19*	*10/23/15 10:08*	*1*
p-Terphenyl-d14	*77*		*67 - 150*	*10/15/15 08:19*	*10/23/15 10:08*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.0025**	**J**	0.0040	0.0010	mg/L		10/15/15 12:10	10/16/15 00:31	1
Iron	**35.9**		0.050	0.019	mg/L		10/15/15 12:10	10/16/15 00:31	1
Lead	ND		0.0050	0.0030	mg/L		10/15/15 12:10	10/16/15 00:31	1
Manganese	**1.6**		0.0030	0.00040	mg/L		10/15/15 12:10	10/16/15 00:31	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.87**	**J**	1.0	0.15	ug/L		10/16/15 11:45	10/16/15 22:44	1
Arsenic	**11.7**		1.0	0.27	ug/L		10/16/15 11:45	10/16/15 22:44	1
Cadmium	ND		0.50	0.071	ug/L		10/16/15 11:45	10/16/15 22:44	1
Nickel	**18.3**		1.0	0.11	ug/L		10/16/15 11:45	10/16/15 22:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		10/15/15 10:40	10/15/15 14:42	1

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Client Sample ID: TRIP BLANK
Date Collected: 10/14/15 10:35
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/22/15 22:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/22/15 22:06	1
Benzene	ND		1.0	0.41	ug/L			10/22/15 22:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/22/15 22:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/22/15 22:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/22/15 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 137*		*10/22/15 22:06*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*10/22/15 22:06*	*1*
Toluene-d8 (Surr)	*92*		*71 - 126*		*10/22/15 22:06*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*		*10/22/15 22:06*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(71-126)	(60-140)
480-89080-2	Sump 1-101415	99	99	94	101
480-89080-3	Sump 2-101415	96	95	92	97
480-89080-4	Sump 3-101415	94	98	94	98
480-89080-5	Sump 4-101415	101	101	95	104
480-89080-5 MS	Sump 4-101415	93	104	96	97
480-89080-5 MSD	Sump 4-101415	99	106	99	102
480-89080-6	MW-2-101415	95	97	93	98
480-89080-7	FDUP- 101415 SUMP 4	100	100	96	102
480-89080-8	TRIP BLANK	95	97	92	96
LCS 480-270536/4	Lab Control Sample	93	101	93	96
MB 480-270536/6	Method Blank	95	99	94	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPH
Lab Sample ID	Client Sample ID	(46-120)	(48-120)	(67-150)
480-89080-1	Sump Comp 101415	72	86	72
480-89080-5	Sump 4-101415	65	80	67
480-89080-5 MS	Sump 4-101415	78	87	66 X
480-89080-5 MSD	Sump 4-101415	74	84	70
480-89080-6	MW-2-101415	64	80	88
480-89080-7	FDUP- 101415 SUMP 4	78	90	77
LCS 480-268920/2-A	Lab Control Sample	71	80	93
MB 480-268920/1-A	Method Blank	77	90	93

Surrogate Legend

NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TPH = p-Terphenyl-d14

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-270536/6
Matrix: Water
Analysis Batch: 270536

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/22/15 21:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/22/15 21:25	1
Benzene	ND		1.0	0.41	ug/L			10/22/15 21:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/22/15 21:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/22/15 21:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/22/15 21:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 137*		*10/22/15 21:25*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*10/22/15 21:25*	*1*
Toluene-d8 (Surr)	*94*		*71 - 126*		*10/22/15 21:25*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*10/22/15 21:25*	*1*

Lab Sample ID: LCS 480-270536/4
Matrix: Water
Analysis Batch: 270536

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	25.0	22.2		ug/L		89	80 - 124
1,4-Dichlorobenzene	25.0	21.7		ug/L		87	75 - 120
Benzene	25.0	22.3		ug/L		89	71 - 124
Chlorobenzene	25.0	22.2		ug/L		89	72 - 120
Ethylbenzene	25.0	21.9		ug/L		88	77 - 123
m,p-Xylene	25.0	22.4		ug/L		90	76 - 122
o-Xylene	25.0	23.0		ug/L		92	76 - 122
Xylenes, Total	50.0	45.4		ug/L		91	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*66 - 137*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Toluene-d8 (Surr)	*93*		*71 - 126*
Dibromofluoromethane (Surr)	*96*		*60 - 140*

Lab Sample ID: 480-89080-5 MS
Matrix: Water
Analysis Batch: 270536

Client Sample ID: Sump 4-101415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		100	93.1		ug/L		93	80 - 124
1,4-Dichlorobenzene	ND		100	92.1		ug/L		92	75 - 120
Benzene	ND		100	94.7		ug/L		95	71 - 124
Chlorobenzene	25		100	117		ug/L		92	72 - 120
Ethylbenzene	ND		100	94.2		ug/L		94	77 - 123
m,p-Xylene	ND		100	96.7		ug/L		97	76 - 122
o-Xylene	ND		100	97.2		ug/L		97	76 - 122
Xylenes, Total	ND		200	194		ug/L		97	76 - 122

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

Lab Sample ID: 480-89080-5 MS
Matrix: Water
Analysis Batch: 270536

Client Sample ID: Sump 4-101415
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*66 - 137*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*
Toluene-d8 (Surr)	*96*		*71 - 126*
Dibromofluoromethane (Surr)	*97*		*60 - 140*

Lab Sample ID: 480-89080-5 MSD
Matrix: Water
Analysis Batch: 270536

Client Sample ID: Sump 4-101415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	ND		100	95.7		ug/L		96	80 - 124	3	20
1,4-Dichlorobenzene	ND		100	93.3		ug/L		93	75 - 120	1	20
Benzene	ND		100	98.5		ug/L		98	71 - 124	4	13
Chlorobenzene	25		100	119		ug/L		93	72 - 120	1	25
Ethylbenzene	ND		100	95.7		ug/L		96	77 - 123	2	15
m,p-Xylene	ND		100	97.6		ug/L		98	76 - 122	1	16
o-Xylene	ND		100	97.7		ug/L		98	76 - 122	1	16
Xylenes, Total	ND		200	195		ug/L		98	76 - 122	1	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 137*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Toluene-d8 (Surr)	*99*		*71 - 126*
Dibromofluoromethane (Surr)	*102*		*60 - 140*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-268920/1-A
Matrix: Water
Analysis Batch: 270512

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		5.0	0.59	ug/L		10/15/15 08:19	10/23/15 06:45	1
Naphthalene	ND		5.0	0.76	ug/L		10/15/15 08:19	10/23/15 06:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*46 - 120*	*10/15/15 08:19*	*10/23/15 06:45*	*1*
2-Fluorobiphenyl	*90*		*48 - 120*	*10/15/15 08:19*	*10/23/15 06:45*	*1*
p-Terphenyl-d14	*93*		*67 - 150*	*10/15/15 08:19*	*10/23/15 06:45*	*1*

Lab Sample ID: LCS 480-268920/2-A
Matrix: Water
Analysis Batch: 270512

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268920

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Chloroaniline			16.0	12.2		ug/L		76	10 - 130		
Naphthalene			16.0	13.8		ug/L		86	35 - 130		

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-268920/2-A
Matrix: Water
Analysis Batch: 270512

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268920

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*71*		*46 - 120*
2-Fluorobiphenyl	*80*		*48 - 120*
p-Terphenyl-d14	*93*		*67 - 150*

Lab Sample ID: 480-89080-5 MS
Matrix: Water
Analysis Batch: 270512

Client Sample ID: Sump 4-101415
Prep Type: Total/NA
Prep Batch: 268920

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	ND	F1	14.7	5.99	F1	ug/L		41	60 - 124
Naphthalene	ND		14.7	12.7		ug/L		87	35 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*78*		*46 - 120*
2-Fluorobiphenyl	*87*		*48 - 120*
p-Terphenyl-d14	*66*	*X*	*67 - 150*

Lab Sample ID: 480-89080-5 MSD
Matrix: Water
Analysis Batch: 270512

Client Sample ID: Sump 4-101415
Prep Type: Total/NA
Prep Batch: 268920

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloroaniline	ND	F1	14.7	6.41	F1	ug/L		44	60 - 124	7	22
Naphthalene	ND		14.7	11.9		ug/L		81	35 - 130	7	29

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*74*		*46 - 120*
2-Fluorobiphenyl	*84*		*48 - 120*
p-Terphenyl-d14	*70*		*67 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-268970/1-A
Matrix: Water
Analysis Batch: 269140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0040	0.0010	mg/L		10/15/15 12:10	10/15/15 23:20	1
Iron	ND		0.050	0.019	mg/L		10/15/15 12:10	10/15/15 23:20	1
Lead	ND		0.0050	0.0030	mg/L		10/15/15 12:10	10/15/15 23:20	1
Manganese	ND		0.0030	0.00040	mg/L		10/15/15 12:10	10/15/15 23:20	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-268970/2-A
Matrix: Water
Analysis Batch: 269140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.200	0.207		mg/L		103	80 - 120
Iron	10.0	9.37		mg/L		94	80 - 120
Lead	0.200	0.201		mg/L		100	80 - 120
Manganese	0.200	0.199		mg/L		99	80 - 120

Lab Sample ID: 480-89080-5 MS
Matrix: Water
Analysis Batch: 269140

Client Sample ID: Sump 4-101415
Prep Type: Total/NA
Prep Batch: 268970

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.0035	J	0.200	0.197		mg/L		97	75 - 125
Iron	37.4	F1	10.0	44.46	F1	mg/L		71	75 - 125
Lead	ND		0.200	0.200		mg/L		100	75 - 125
Manganese	1.6		0.200	1.73	4	mg/L		82	75 - 125

Lab Sample ID: 480-89080-5 MSD
Matrix: Water
Analysis Batch: 269530

Client Sample ID: Sump 4-101415
Prep Type: Total/NA
Prep Batch: 268970

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	0.0035	J	0.200	0.205		mg/L		101	75 - 125	4	20
Iron	37.4	F1	10.0	45.43		mg/L		80	75 - 125	2	20
Lead	ND		0.200	0.210		mg/L		105	75 - 125	5	20
Manganese	1.6		0.200	1.79	4	mg/L		108	75 - 125	3	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 480-269087/1-A
Matrix: Water
Analysis Batch: 269435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269087

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.15	ug/L		10/16/15 11:45	10/16/15 20:28	1
Arsenic	ND		1.0	0.27	ug/L		10/16/15 11:45	10/16/15 20:28	1
Cadmium	ND		0.50	0.071	ug/L		10/16/15 11:45	10/16/15 20:28	1
Nickel	ND		1.0	0.11	ug/L		10/16/15 11:45	10/16/15 20:28	1

Lab Sample ID: LCS 480-269087/2-A
Matrix: Water
Analysis Batch: 269435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	20.0	19.64		ug/L		98	80 - 120
Arsenic	20.0	19.46		ug/L		97	80 - 120
Cadmium	20.0	19.98		ug/L		100	80 - 120
Nickel	20.0	20.40		ug/L		102	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 480-89080-5 MS — **Client Sample ID: Sump 4-101415**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269435 — **Prep Batch: 269087**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.7		20.0	22.33		ug/L		103	75 - 125
Arsenic	15.1		20.0	35.19		ug/L		101	75 - 125
Cadmium	ND		20.0	20.13		ug/L		101	75 - 125
Nickel	17.8		20.0	35.87		ug/L		91	75 - 125

Lab Sample ID: 480-89080-5 MSD — **Client Sample ID: Sump 4-101415**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269435 — **Prep Batch: 269087**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.7		20.0	23.36		ug/L		108	75 - 125	4	20
Arsenic	15.1		20.0	36.80		ug/L		109	75 - 125	4	20
Cadmium	ND		20.0	20.73		ug/L		104	75 - 125	3	20
Nickel	17.8		20.0	37.74		ug/L		100	75 - 125	5	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-268928/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269055 — **Prep Batch: 268928**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		10/15/15 10:40	10/15/15 14:25	1

Lab Sample ID: LCS 480-268928/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269055 — **Prep Batch: 268928**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00602		mg/L		90	80 - 120

Lab Sample ID: 480-89080-5 MS — **Client Sample ID: Sump 4-101415**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269055 — **Prep Batch: 268928**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00667	0.00625		mg/L		94	80 - 120

Lab Sample ID: 480-89080-5 MSD — **Client Sample ID: Sump 4-101415**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269055 — **Prep Batch: 268928**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00628		mg/L		94	80 - 120	1	20

GC/MS VOA

Analysis Batch: 270536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-2	Sump 1-101415	Total/NA	Water	8260C	
480-89080-3	Sump 2-101415	Total/NA	Water	8260C	
480-89080-4	Sump 3-101415	Total/NA	Water	8260C	
480-89080-5	Sump 4-101415	Total/NA	Water	8260C	
480-89080-5 MS	Sump 4-101415	Total/NA	Water	8260C	
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	8260C	
480-89080-6	MW-2-101415	Total/NA	Water	8260C	
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	8260C	
480-89080-8	TRIP BLANK	Total/NA	Water	8260C	
LCS 480-270536/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-270536/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 268920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-1	Sump Comp 101415	Total/NA	Water	3510C	
480-89080-5	Sump 4-101415	Total/NA	Water	3510C	
480-89080-5 MS	Sump 4-101415	Total/NA	Water	3510C	
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	3510C	
480-89080-6	MW-2-101415	Total/NA	Water	3510C	
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	3510C	
LCS 480-268920/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-268920/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 270512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-1	Sump Comp 101415	Total/NA	Water	8270D	268920
480-89080-5	Sump 4-101415	Total/NA	Water	8270D	268920
480-89080-5 MS	Sump 4-101415	Total/NA	Water	8270D	268920
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	8270D	268920
480-89080-6	MW-2-101415	Total/NA	Water	8270D	268920
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	8270D	268920
LCS 480-268920/2-A	Lab Control Sample	Total/NA	Water	8270D	268920
MB 480-268920/1-A	Method Blank	Total/NA	Water	8270D	268920

Metals

Prep Batch: 268928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-1	Sump Comp 101415	Total/NA	Water	7470A	
480-89080-5	Sump 4-101415	Total/NA	Water	7470A	
480-89080-5 MS	Sump 4-101415	Total/NA	Water	7470A	
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	7470A	
480-89080-6	MW-2-101415	Total/NA	Water	7470A	
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	7470A	
LCS 480-268928/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-268928/1-A	Method Blank	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 268970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-1	Sump Comp 101415	Total/NA	Water	3005A	
480-89080-5	Sump 4-101415	Total/NA	Water	3005A	
480-89080-5 MS	Sump 4-101415	Total/NA	Water	3005A	
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	3005A	
480-89080-6	MW-2-101415	Total/NA	Water	3005A	
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	3005A	
LCS 480-268970/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-268970/1-A	Method Blank	Total/NA	Water	3005A	

Analysis Batch: 269055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-1	Sump Comp 101415	Total/NA	Water	7470A	268928
480-89080-5	Sump 4-101415	Total/NA	Water	7470A	268928
480-89080-5 MS	Sump 4-101415	Total/NA	Water	7470A	268928
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	7470A	268928
480-89080-6	MW-2-101415	Total/NA	Water	7470A	268928
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	7470A	268928
LCS 480-268928/2-A	Lab Control Sample	Total/NA	Water	7470A	268928
MB 480-268928/1-A	Method Blank	Total/NA	Water	7470A	268928

Prep Batch: 269087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-1	Sump Comp 101415	Total/NA	Water	3020A	
480-89080-5	Sump 4-101415	Total/NA	Water	3020A	
480-89080-5 MS	Sump 4-101415	Total/NA	Water	3020A	
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	3020A	
480-89080-6	MW-2-101415	Total/NA	Water	3020A	
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	3020A	
LCS 480-269087/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-269087/1-A	Method Blank	Total/NA	Water	3020A	

Analysis Batch: 269140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-1	Sump Comp 101415	Total/NA	Water	6010C	268970
480-89080-5	Sump 4-101415	Total/NA	Water	6010C	268970
480-89080-5 MS	Sump 4-101415	Total/NA	Water	6010C	268970
480-89080-6	MW-2-101415	Total/NA	Water	6010C	268970
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	6010C	268970
LCS 480-268970/2-A	Lab Control Sample	Total/NA	Water	6010C	268970
MB 480-268970/1-A	Method Blank	Total/NA	Water	6010C	268970

Analysis Batch: 269435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-1	Sump Comp 101415	Total/NA	Water	6020A	269087
480-89080-5	Sump 4-101415	Total/NA	Water	6020A	269087
480-89080-5 MS	Sump 4-101415	Total/NA	Water	6020A	269087
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	6020A	269087
480-89080-6	MW-2-101415	Total/NA	Water	6020A	269087
480-89080-7	FDUP- 101415 SUMP 4	Total/NA	Water	6020A	269087
LCS 480-269087/2-A	Lab Control Sample	Total/NA	Water	6020A	269087
MB 480-269087/1-A	Method Blank	Total/NA	Water	6020A	269087

Metals (Continued)

Analysis Batch: 269530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89080-5 MSD	Sump 4-101415	Total/NA	Water	6010C	268970

Lab Chronicle

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Client Sample ID: Sump Comp 101415
Lab Sample ID: 480-89080-1
Date Collected: 10/14/15 10:30
Matrix: Water
Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			268920	10/15/15 08:19	RJS	TAL BUF
Total/NA	Analysis	8270D		1	270512	10/23/15 08:40	DMR	TAL BUF
Total/NA	Prep	3005A			268970	10/15/15 12:10	CMM	TAL BUF
Total/NA	Analysis	6010C		1	269140	10/15/15 23:58	AMH	TAL BUF
Total/NA	Prep	3020A			269087	10/16/15 11:45	CMM	TAL BUF
Total/NA	Analysis	6020A		1	269435	10/16/15 21:58	MTM2	TAL BUF
Total/NA	Prep	7470A			268928	10/15/15 10:40	TAS	TAL BUF
Total/NA	Analysis	7470A		1	269055	10/15/15 14:30	TAS	TAL BUF

Client Sample ID: Sump 1-101415
Lab Sample ID: 480-89080-2
Date Collected: 10/14/15 10:20
Matrix: Water
Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270536	10/23/15 02:34	LJF	TAL BUF

Client Sample ID: Sump 2-101415
Lab Sample ID: 480-89080-3
Date Collected: 10/14/15 10:10
Matrix: Water
Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	270536	10/23/15 02:57	LJF	TAL BUF

Client Sample ID: Sump 3-101415
Lab Sample ID: 480-89080-4
Date Collected: 10/14/15 09:50
Matrix: Water
Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	270536	10/23/15 03:19	LJF	TAL BUF

Client Sample ID: Sump 4-101415
Lab Sample ID: 480-89080-5
Date Collected: 10/14/15 09:15
Matrix: Water
Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	270536	10/23/15 03:41	LJF	TAL BUF
Total/NA	Prep	3510C			268920	10/15/15 08:19	RJS	TAL BUF
Total/NA	Analysis	8270D		1	270512	10/23/15 09:09	DMR	TAL BUF
Total/NA	Prep	3005A			268970	10/15/15 12:10	CMM	TAL BUF
Total/NA	Analysis	6010C		1	269140	10/16/15 00:02	AMH	TAL BUF
Total/NA	Prep	3020A			269087	10/16/15 11:45	CMM	TAL BUF
Total/NA	Analysis	6020A		1	269435	10/16/15 22:05	MTM2	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Client Sample ID: Sump 4-101415

Date Collected: 10/14/15 09:15
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			268928	10/15/15 10:40	TAS	TAL BUF
Total/NA	Analysis	7470A		1	269055	10/15/15 14:32	TAS	TAL BUF

Client Sample ID: MW-2-101415

Date Collected: 10/14/15 08:00
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270536	10/23/15 04:03	LJF	TAL BUF
Total/NA	Prep	3510C			268920	10/15/15 08:19	RJS	TAL BUF
Total/NA	Analysis	8270D		1	270512	10/23/15 09:38	DMR	TAL BUF
Total/NA	Prep	3005A			268970	10/15/15 12:10	CMM	TAL BUF
Total/NA	Analysis	6010C		1	269140	10/16/15 00:28	AMH	TAL BUF
Total/NA	Prep	3020A			269087	10/16/15 11:45	CMM	TAL BUF
Total/NA	Analysis	6020A		1	269435	10/16/15 22:37	MTM2	TAL BUF
Total/NA	Prep	7470A			268928	10/15/15 10:40	TAS	TAL BUF
Total/NA	Analysis	7470A		1	269055	10/15/15 14:39	TAS	TAL BUF

Client Sample ID: FDUP- 101415 SUMP 4

Date Collected: 10/14/15 09:30
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	270536	10/23/15 04:25	LJF	TAL BUF
Total/NA	Prep	3510C			268920	10/15/15 08:19	RJS	TAL BUF
Total/NA	Analysis	8270D		1	270512	10/23/15 10:08	DMR	TAL BUF
Total/NA	Prep	3005A			268970	10/15/15 12:10	CMM	TAL BUF
Total/NA	Analysis	6010C		1	269140	10/16/15 00:31	AMH	TAL BUF
Total/NA	Prep	3020A			269087	10/16/15 11:45	CMM	TAL BUF
Total/NA	Analysis	6020A		1	269435	10/16/15 22:44	MTM2	TAL BUF
Total/NA	Prep	7470A			268928	10/15/15 10:40	TAS	TAL BUF
Total/NA	Analysis	7470A		1	269055	10/15/15 14:42	TAS	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 10/14/15 10:35
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89080-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270536	10/22/15 22:06	LJF	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

Method Summary

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
6020A	Metals (ICP/MS)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Honeywell International Inc
Project/Site: 30130-Alltift GW Monitoring

TestAmerica Job ID: 480-89080-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-89080-1	Sump Comp 101415	Water	10/14/15 10:30	10/14/15 13:45
480-89080-2	Sump 1-101415	Water	10/14/15 10:20	10/14/15 13:45
480-89080-3	Sump 2-101415	Water	10/14/15 10:10	10/14/15 13:45
480-89080-4	Sump 3-101415	Water	10/14/15 09:50	10/14/15 13:45
480-89080-5	Sump 4-101415	Water	10/14/15 09:15	10/14/15 13:45
480-89080-6	MW-2-101415	Water	10/14/15 08:00	10/14/15 13:45
480-89080-7	FDUP- 101415 SUMP 4	Water	10/14/15 09:30	10/14/15 13:45
480-89080-8	TRIP BLANK	Water	10/14/15 10:35	10/14/15 13:45

Chain of Custody Record

480-89080 Chain of Custody

Client Information	Sampler: Patrick Higgins	Lab PM: John Schove	Carrier Tracking
Client Contact: John Formoza	Phone: 315-468-1663	E-Mail: john.schove@testamericainc.com	Page: Page 1 of 1
Company: Honeywell International Inc			Job #:
Address: 1563 Willis Ave.	Due Date Requested:		
City: Syracuse	TAT Requested (days): 2 Weeks		
State, Zip: NY, 13204			
Phone: 315-468-1663	PO #: 4500073922		
Email: john.formoza@ch2m.com	WO #:		
Project Name: Honeywell - Buffalo Alltift - 30130 Annual Sampling	Project #: 48004175		
Site: Honeywell - Buffalo Sites	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Location Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Metals ICP - As, Cd, Cr, Fe, Pb, Mn, Sb, 7470A, Mercury,NI	8270C - SVOCs (4-Chloroaniline and Napthalene)	8260B - 1,2 - dichlorobenzene, benzene, chlorobenzene, ethylbenzene, and total xylene										Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	A											
Sump Comp - 101415	10/14/15	10:30	G	W	N	N	1	2											3	
Sump 1 - 101415	10/14/15	10:20	G	W	N	N			3										3	
Sump 2 - 101415	10/14/15	10:10	G	W	N	N			3										3	
Sump 3 - 101415	10/14/15	09:50	G	W	N	N			3										3	
Sump 4- 101415	10/14/15	09:15	G	W	N	N	1	2	3										6	
MW2 - 101415	10/14/15	0800	G	W	N	N	1	2	3										6	
Sump 4 FDUP - 101415	10/14/15	0930	G	W	N	N	1	2	3										6	
Trip Blank-101415	10/14/15	10:35	G	W	N	N			1										1	Trip Blank
Sump 4-101415_MS	10/14/15	09:20	G	W	N	N	1	2	3										6	
Sump 4-101415_MSD	10/14/15	09:25	G	W	N	N	1	2	3										6	

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 10/14/15 13:45	Company: ONT	Received by:	Date/Time: 10/14/15 1345	Company: TAL BUF
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #1 4.0

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10/29/2015

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-89080-1

Login Number: 89080
List Number: 1
Creator: Wallace, Cameron

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	HONEYWELL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-89087-1
Client Project/Site: 30130 - Alltift OM Phase
Sampling Event: Honeywell - Alltift OM Phase (4,10)

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

Attn: Mr. Rich Galloway

Authorized for release by:
10/27/2015 6:29:47 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

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

Metals

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

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-89087-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-89087-1

Comments
No additional comments.

Receipt
The samples were received on 10/14/2015 1:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7º C.

GC/MS VOA
Method(s) 624: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: Grab1-4 Lab Composite (480-89087-7), (480-89087-A-7 MS) and (480-89087-A-7 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 624: The following Volatile samples were composited by the laboratory on 10/14/15 as requested by the client: Grab1-4 Lab Composite (480-89087-7), (480-89087-A-7 MS) and (480-89087-A-7 MSD). Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and laboratory standard operating procedures.

Method(s) 624: The preservative used in the sample containers provided is not compatible with the Method 624 analytes requested. The following samples were received preserved with hydrochloric acid: TB-101415 (480-89087-6), Grab1-4 Lab Composite (480-89087-7), (480-89087-A-7 MS) and (480-89087-A-7 MSD). The requested target analyte list contains 2-chloroethyl vinyl ether which is an acid-labile compound that degrades in an acidic medium.

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

GC/MS Semi VOA
Method(s) 625: The continuing calibration verification (CCV) associated with batch 480-269120 recovered above the upper control limit for Benzidine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: Grab1-4 Lab Composite (480-89087-7).

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

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

General Chemistry
Method(s) SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: COMP-101415 (480-89087-5).

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

Organic Prep
Method(s) 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-269040.

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

Detection Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: COMP-101415 — Lab Sample ID: 480-89087-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.013		0.010	0.0056	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.30		0.0020	0.00070	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0046		0.0040	0.0010	mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.016		0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.0093	J	0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0053	J	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Phosphorus, Total	0.20		0.010	0.0050	mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	29.2		4.0	4.0	mg/L	1		SM 2540D	Total/NA
pH	7.71	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TB-101415 — Lab Sample ID: 480-89087-6

No Detections.

Client Sample ID: Grab1-4 Lab Composite — Lab Sample ID: 480-89087-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	55		50	4.8	ug/L	10		624	Total/NA
4-Chloroaniline	18		5.0	0.64	ug/L	1		625	Total/NA
N-Nitrosodiphenylamine	0.79	J	5.0	0.40	ug/L	1		625	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: COMP-101415
Date Collected: 10/14/15 13:05
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-5
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.013		0.010	0.0056	mg/L		10/16/15 08:05	10/16/15 14:35	1
Barium	0.30		0.0020	0.00070	mg/L		10/16/15 08:05	10/16/15 14:35	1
Chromium	0.0046		0.0040	0.0010	mg/L		10/16/15 08:05	10/16/15 14:35	1
Copper	0.016		0.010	0.0016	mg/L		10/16/15 08:05	10/16/15 14:35	1
Nickel	0.0093	J	0.010	0.0013	mg/L		10/16/15 08:05	10/16/15 14:35	1
Zinc	0.0053	J	0.010	0.0015	mg/L		10/16/15 08:05	10/16/15 14:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	0.20		0.010	0.0050	mg/L			10/25/15 10:00	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	29.2		4.0	4.0	mg/L			10/20/15 08:20	1
pH	7.71	HF	0.100	0.100	SU			10/16/15 11:14	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: TB-101415
Date Collected: 10/14/15 13:05
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-6
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			10/15/15 06:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			10/15/15 06:46	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/15/15 06:46	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/15/15 06:46	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			10/15/15 06:46	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			10/15/15 06:46	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/15/15 06:46	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/15/15 06:46	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			10/15/15 06:46	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			10/15/15 06:46	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			10/15/15 06:46	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			10/15/15 06:46	1
Acrolein	ND		100	17	ug/L			10/15/15 06:46	1
Acrylonitrile	ND		50	1.9	ug/L			10/15/15 06:46	1
Benzene	ND		5.0	0.60	ug/L			10/15/15 06:46	1
Bromoform	ND		5.0	0.47	ug/L			10/15/15 06:46	1
Bromomethane	ND		5.0	1.2	ug/L			10/15/15 06:46	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/15/15 06:46	1
Chlorobenzene	ND		5.0	0.48	ug/L			10/15/15 06:46	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			10/15/15 06:46	1
Chloroethane	ND		5.0	0.87	ug/L			10/15/15 06:46	1
Chloroform	ND		5.0	0.54	ug/L			10/15/15 06:46	1
Chloromethane	ND		5.0	0.64	ug/L			10/15/15 06:46	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			10/15/15 06:46	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			10/15/15 06:46	1
Ethylbenzene	ND		5.0	0.46	ug/L			10/15/15 06:46	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/15/15 06:46	1
Tetrachloroethene	ND		5.0	0.34	ug/L			10/15/15 06:46	1
Toluene	ND		5.0	0.45	ug/L			10/15/15 06:46	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			10/15/15 06:46	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			10/15/15 06:46	1
Trichloroethene	ND		5.0	0.60	ug/L			10/15/15 06:46	1
Vinyl chloride	ND		5.0	0.75	ug/L			10/15/15 06:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*		*10/15/15 06:46*	*1*
4-Bromofluorobenzene (Surr)	*88*		*69 - 121*		*10/15/15 06:46*	*1*
Toluene-d8 (Surr)	*86*		*70 - 123*		*10/15/15 06:46*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*10/15/15 06:46*	*1*

Client Sample ID: Grab1-4 Lab Composite

Date Collected: 10/14/15 13:00
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-7

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.9	ug/L			10/15/15 07:12	10
1,1,2,2-Tetrachloroethane	ND		50	2.6	ug/L			10/15/15 07:12	10
1,1,2-Trichloroethane	ND		50	4.8	ug/L			10/15/15 07:12	10
1,1-Dichloroethane	ND		50	5.9	ug/L			10/15/15 07:12	10
1,1-Dichloroethene	ND		50	8.5	ug/L			10/15/15 07:12	10
1,2-Dichlorobenzene	ND		50	4.4	ug/L			10/15/15 07:12	10
1,2-Dichloroethane	ND		50	6.0	ug/L			10/15/15 07:12	10
1,2-Dichloroethene, Total	ND		100	32	ug/L			10/15/15 07:12	10
1,2-Dichloropropane	ND		50	6.1	ug/L			10/15/15 07:12	10
1,3-Dichlorobenzene	ND		50	5.4	ug/L			10/15/15 07:12	10
1,4-Dichlorobenzene	ND		50	5.1	ug/L			10/15/15 07:12	10
2-Chloroethyl vinyl ether	ND		250	19	ug/L			10/15/15 07:12	10
Acrolein	ND		1000	170	ug/L			10/15/15 07:12	10
Acrylonitrile	ND		500	19	ug/L			10/15/15 07:12	10
Benzene	ND		50	6.0	ug/L			10/15/15 07:12	10
Bromoform	ND		50	4.7	ug/L			10/15/15 07:12	10
Bromomethane	ND		50	12	ug/L			10/15/15 07:12	10
Carbon tetrachloride	ND		50	5.1	ug/L			10/15/15 07:12	10
Chlorobenzene	**55**		50	4.8	ug/L			10/15/15 07:12	10
Chlorodibromomethane	ND		50	4.1	ug/L			10/15/15 07:12	10
Chloroethane	ND	F2	50	8.7	ug/L			10/15/15 07:12	10
Chloroform	ND		50	5.4	ug/L			10/15/15 07:12	10
Chloromethane	ND		50	6.4	ug/L			10/15/15 07:12	10
cis-1,3-Dichloropropene	ND		50	3.3	ug/L			10/15/15 07:12	10
Dichlorobromomethane	ND		50	5.4	ug/L			10/15/15 07:12	10
Ethylbenzene	ND		50	4.6	ug/L			10/15/15 07:12	10
Methylene Chloride	ND		50	8.1	ug/L			10/15/15 07:12	10
Tetrachloroethene	ND		50	3.4	ug/L			10/15/15 07:12	10
Toluene	ND		50	4.5	ug/L			10/15/15 07:12	10
trans-1,2-Dichloroethene	ND		50	5.9	ug/L			10/15/15 07:12	10
trans-1,3-Dichloropropene	ND		50	4.4	ug/L			10/15/15 07:12	10
Trichloroethene	ND		50	6.0	ug/L			10/15/15 07:12	10
Vinyl chloride	ND	F2	50	7.5	ug/L			10/15/15 07:12	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*10/15/15 07:12*	*10*
4-Bromofluorobenzene (Surr)	*89*		*69 - 121*		*10/15/15 07:12*	*10*
Toluene-d8 (Surr)	*86*		*70 - 123*		*10/15/15 07:12*	*10*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*10/15/15 07:12*	*10*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.82	ug/L		10/15/15 15:23	10/16/15 23:58	1
1,2-Dichlorobenzene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
1,2-Diphenylhydrazine	ND		10	0.78	ug/L		10/15/15 15:23	10/16/15 23:58	1
1,3-Dichlorobenzene	ND		10	0.69	ug/L		10/15/15 15:23	10/16/15 23:58	1
1,4-Dichlorobenzene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,4,6-Trichlorophenol	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,4-Dichlorophenol	ND		5.0	0.77	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,4-Dimethylphenol	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 23:58	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: Grab1-4 Lab Composite
Date Collected: 10/14/15 13:00
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-7
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,4-Dinitrotoluene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2,6-Dinitrotoluene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
2-Chloronaphthalene	ND		5.0	0.91	ug/L		10/15/15 15:23	10/16/15 23:58	1
2-Chlorophenol	ND		5.0	0.66	ug/L		10/15/15 15:23	10/16/15 23:58	1
2-Nitrophenol	ND		5.0	0.70	ug/L		10/15/15 15:23	10/16/15 23:58	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		10/15/15 15:23	10/16/15 23:58	1
4,6-Dinitro-2-methylphenol	ND		10	0.66	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Bromophenyl phenyl ether	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Chloro-3-methylphenol	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Chloroaniline	**18**		5.0	0.64	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Chlorophenyl phenyl ether	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 23:58	1
4-Nitrophenol	ND		15	10	ug/L		10/15/15 15:23	10/16/15 23:58	1
Acenaphthene	ND		5.0	0.81	ug/L		10/15/15 15:23	10/16/15 23:58	1
Acenaphthylene	ND		5.0	0.87	ug/L		10/15/15 15:23	10/16/15 23:58	1
Anthracene	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzidine	ND		80	35	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[a]anthracene	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[a]pyrene	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[b]fluoranthene	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[g,h,i]perylene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 23:58	1
Benzo[k]fluoranthene	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 23:58	1
bis (2-chloroisopropyl) ether	ND		5.0	0.84	ug/L		10/15/15 15:23	10/16/15 23:58	1
Bis(2-chloroethoxy)methane	ND		5.0	0.75	ug/L		10/15/15 15:23	10/16/15 23:58	1
Bis(2-chloroethyl)ether	ND		5.0	0.93	ug/L		10/15/15 15:23	10/16/15 23:58	1
Bis(2-ethylhexyl) phthalate	ND		10	1.2	ug/L		10/15/15 15:23	10/16/15 23:58	1
Butyl benzyl phthalate	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 23:58	1
Chrysene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Dibenz(a,h)anthracene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 23:58	1
Diethyl phthalate	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Dimethyl phthalate	ND		5.0	0.91	ug/L		10/15/15 15:23	10/16/15 23:58	1
Di-n-butyl phthalate	ND		5.0	1.6	ug/L		10/15/15 15:23	10/16/15 23:58	1
Di-n-octyl phthalate	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 23:58	1
Fluoranthene	ND		5.0	1.6	ug/L		10/15/15 15:23	10/16/15 23:58	1
Fluorene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Hexachlorobenzene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Hexachlorobutadiene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
Hexachloroethane	ND		5.0	0.60	ug/L		10/15/15 15:23	10/16/15 23:58	1
Indeno[1,2,3-cd]pyrene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 23:58	1
Isophorone	ND		5.0	0.74	ug/L		10/15/15 15:23	10/16/15 23:58	1
Naphthalene	ND		5.0	0.86	ug/L		10/15/15 15:23	10/16/15 23:58	1
Nitrobenzene	ND		5.0	0.81	ug/L		10/15/15 15:23	10/16/15 23:58	1
N-Nitrosodimethylamine	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 23:58	1
N-Nitrosodi-n-propylamine	ND		5.0	0.89	ug/L		10/15/15 15:23	10/16/15 23:58	1
N-Nitrosodiphenylamine	**0.79**	**J**	5.0	0.40	ug/L		10/15/15 15:23	10/16/15 23:58	1
Pentachlorophenol	ND		10	1.6	ug/L		10/15/15 15:23	10/16/15 23:58	1
Phenanthrene	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 23:58	1
Phenol	ND		5.0	0.35	ug/L		10/15/15 15:23	10/16/15 23:58	1

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: Grab1-4 Lab Composite
Date Collected: 10/14/15 13:00
Date Received: 10/14/15 13:45

Lab Sample ID: 480-89087-7
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*111*		*52 - 151*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
2-Fluorobiphenyl	*90*		*44 - 120*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
2-Fluorophenol	*54*		*17 - 120*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
Nitrobenzene-d5	*85*		*42 - 120*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
Phenol-d5	*38*		*10 - 120*	*10/15/15 15:23*	*10/16/15 23:58*	*1*
p-Terphenyl-d14	*87*		*22 - 125*	*10/15/15 15:23*	*10/16/15 23:58*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Method: 624 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)	(70-130)
480-89087-6	TB-101415	95	88	86	90
480-89087-7	Grab1-4 Lab Composite	98	89	86	90
480-89087-7 MS	Grab1-4 Lab Composite	97	91	87	93
480-89087-7 MSD	Grab1-4 Lab Composite	93	91	86	92
LCS 480-268843/5	Lab Control Sample	95	90	86	87
MB 480-268843/7	Method Blank	97	89	86	89

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(42-120)	(10-120)	(22-125)
480-89087-7	Grab1-4 Lab Composite	111	90	54	85	38	87
LCS 480-269040/2-A	Lab Control Sample	106	91	52	85	40	107
LCSD 480-269040/3-A	Lab Control Sample Dup	108	94	56	87	42	109
MB 480-269040/1-A	Method Blank	87	91	51	79	37	110

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-268843/7
Matrix: Water
Analysis Batch: 268843

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			10/15/15 01:00	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			10/15/15 01:00	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/15/15 01:00	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/15/15 01:00	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			10/15/15 01:00	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			10/15/15 01:00	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/15/15 01:00	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/15/15 01:00	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			10/15/15 01:00	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			10/15/15 01:00	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			10/15/15 01:00	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			10/15/15 01:00	1
Acrolein	ND		100	17	ug/L			10/15/15 01:00	1
Acrylonitrile	ND		50	1.9	ug/L			10/15/15 01:00	1
Benzene	ND		5.0	0.60	ug/L			10/15/15 01:00	1
Bromoform	ND		5.0	0.47	ug/L			10/15/15 01:00	1
Bromomethane	ND		5.0	1.2	ug/L			10/15/15 01:00	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/15/15 01:00	1
Chlorobenzene	ND		5.0	0.48	ug/L			10/15/15 01:00	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			10/15/15 01:00	1
Chloroethane	ND		5.0	0.87	ug/L			10/15/15 01:00	1
Chloroform	ND		5.0	0.54	ug/L			10/15/15 01:00	1
Chloromethane	ND		5.0	0.64	ug/L			10/15/15 01:00	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			10/15/15 01:00	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			10/15/15 01:00	1
Ethylbenzene	ND		5.0	0.46	ug/L			10/15/15 01:00	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/15/15 01:00	1
Tetrachloroethene	ND		5.0	0.34	ug/L			10/15/15 01:00	1
Toluene	ND		5.0	0.45	ug/L			10/15/15 01:00	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			10/15/15 01:00	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			10/15/15 01:00	1
Trichloroethene	ND		5.0	0.60	ug/L			10/15/15 01:00	1
Vinyl chloride	ND		5.0	0.75	ug/L			10/15/15 01:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*		*10/15/15 01:00*	*1*
4-Bromofluorobenzene (Surr)	*89*		*69 - 121*		*10/15/15 01:00*	*1*
Toluene-d8 (Surr)	*86*		*70 - 123*		*10/15/15 01:00*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*10/15/15 01:00*	*1*

Lab Sample ID: LCS 480-268843/5
Matrix: Water
Analysis Batch: 268843

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.6		ug/L		98	52 - 162
1,1,2,2-Tetrachloroethane	20.0	18.1		ug/L		91	46 - 157
1,1,2-Trichloroethane	20.0	18.6		ug/L		93	52 - 150

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-268843/5
Matrix: Water
Analysis Batch: 268843

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	20.0	16.7		ug/L		84	59 - 155
1,1-Dichloroethene	20.0	16.8		ug/L		84	1 - 234
1,2-Dichlorobenzene	20.0	18.0		ug/L		90	18 - 190
1,2-Dichloroethane	20.0	19.6		ug/L		98	49 - 155
1,2-Dichloropropane	20.0	18.7		ug/L		94	1 - 210
1,3-Dichlorobenzene	20.0	18.6		ug/L		93	59 - 156
1,4-Dichlorobenzene	20.0	18.9		ug/L		95	18 - 190
2-Chloroethyl vinyl ether	20.0	22.6	J	ug/L		113	1 - 305
Benzene	20.0	18.1		ug/L		91	37 - 151
Bromoform	20.0	23.1		ug/L		116	45 - 169
Bromomethane	20.0	18.2		ug/L		91	1 - 242
Carbon tetrachloride	20.0	21.4		ug/L		107	70 - 140
Chlorobenzene	20.0	18.6		ug/L		93	37 - 160
Chlorodibromomethane	20.0	20.7		ug/L		103	53 - 149
Chloroethane	20.0	18.0		ug/L		90	14 - 230
Chloroform	20.0	18.6		ug/L		93	51 - 138
Chloromethane	20.0	15.4		ug/L		77	1 - 273
cis-1,3-Dichloropropene	20.0	21.5		ug/L		108	1 - 227
Dichlorobromomethane	20.0	20.9		ug/L		105	35 - 155
Ethylbenzene	20.0	18.8		ug/L		94	37 - 162
Methylene Chloride	20.0	16.3		ug/L		82	1 - 221
Tetrachloroethene	20.0	17.6		ug/L		88	64 - 148
Toluene	20.0	17.7		ug/L		89	47 - 150
trans-1,2-Dichloroethene	20.0	17.6		ug/L		88	54 - 156
trans-1,3-Dichloropropene	20.0	21.4		ug/L		107	17 - 183
Trichloroethene	20.0	19.0		ug/L		95	71 - 157
Vinyl chloride	20.0	16.8		ug/L		84	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
4-Bromofluorobenzene (Surr)	*90*		*69 - 121*
Toluene-d8 (Surr)	*86*		*70 - 123*
Dibromofluoromethane (Surr)	*87*		*70 - 130*

Lab Sample ID: 480-89087-7 MS
Matrix: Water
Analysis Batch: 268843

Client Sample ID: Grab1-4 Lab Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		200	209		ug/L		104	52 - 162
1,1,2,2-Tetrachloroethane	ND		200	192		ug/L		96	46 - 157
1,1,2-Trichloroethane	ND		200	187		ug/L		93	52 - 150
1,1-Dichloroethane	ND		200	181		ug/L		90	59 - 155
1,1-Dichloroethene	ND		200	180		ug/L		90	1 - 234
1,2-Dichlorobenzene	ND		200	190		ug/L		95	18 - 190
1,2-Dichloroethane	ND		200	203		ug/L		102	49 - 155
1,2-Dichloropropane	ND		200	188		ug/L		94	1 - 210
1,3-Dichlorobenzene	ND		200	187		ug/L		93	59 - 156

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-89087-7 MS
Matrix: Water
Analysis Batch: 268843

Client Sample ID: Grab1-4 Lab Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	ND		200	187		ug/L		93	18 - 190
2-Chloroethyl vinyl ether	ND		200	200	J	ug/L		100	1 - 305
Benzene	ND		200	196		ug/L		98	37 - 151
Bromoform	ND		200	229		ug/L		114	45 - 169
Bromomethane	ND		200	195		ug/L		97	1 - 242
Carbon tetrachloride	ND		200	226		ug/L		113	70 - 140
Chlorobenzene	55		200	244		ug/L		95	37 - 160
Chlorodibromomethane	ND		200	205		ug/L		102	53 - 149
Chloroethane	ND	F2	200	192		ug/L		96	14 - 230
Chloroform	ND		200	199		ug/L		100	51 - 138
Chloromethane	ND		200	161		ug/L		80	1 - 273
cis-1,3-Dichloropropene	ND		200	203		ug/L		101	1 - 227
Dichlorobromomethane	ND		200	207		ug/L		104	35 - 155
Ethylbenzene	ND		200	190		ug/L		95	37 - 162
Methylene Chloride	ND		200	186		ug/L		93	1 - 221
Tetrachloroethene	ND		200	179		ug/L		89	64 - 148
Toluene	ND		200	182		ug/L		91	47 - 150
trans-1,2-Dichloroethene	ND		200	191		ug/L		95	54 - 156
trans-1,3-Dichloropropene	ND		200	198		ug/L		99	17 - 183
Trichloroethene	ND		200	195		ug/L		97	71 - 157
Vinyl chloride	ND	F2	200	188		ug/L		94	1 - 251

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*
4-Bromofluorobenzene (Surr)	*91*		*69 - 121*
Toluene-d8 (Surr)	*87*		*70 - 123*
Dibromofluoromethane (Surr)	*93*		*70 - 130*

Lab Sample ID: 480-89087-7 MSD
Matrix: Water
Analysis Batch: 268843

Client Sample ID: Grab1-4 Lab Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		200	184		ug/L		92	52 - 162	13	15
1,1,2,2-Tetrachloroethane	ND		200	189		ug/L		95	46 - 157	2	15
1,1,2-Trichloroethane	ND		200	182		ug/L		91	52 - 150	3	15
1,1-Dichloroethane	ND		200	160		ug/L		80	59 - 155	12	15
1,1-Dichloroethene	ND		200	159		ug/L		80	1 - 234	12	15
1,2-Dichlorobenzene	ND		200	179		ug/L		90	18 - 190	6	15
1,2-Dichloroethane	ND		200	194		ug/L		97	49 - 155	5	15
1,2-Dichloropropane	ND		200	177		ug/L		89	1 - 210	6	15
1,3-Dichlorobenzene	ND		200	178		ug/L		89	59 - 156	5	15
1,4-Dichlorobenzene	ND		200	178		ug/L		89	18 - 190	5	15
2-Chloroethyl vinyl ether	ND		200	203	J	ug/L		102	1 - 305	2	15
Benzene	ND		200	177		ug/L		88	37 - 151	10	15
Bromoform	ND		200	220		ug/L		110	45 - 169	4	15
Bromomethane	ND		200	172		ug/L		86	1 - 242	12	15
Carbon tetrachloride	ND		200	194		ug/L		97	70 - 140	15	15

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-89087-7 MSD
Matrix: Water
Analysis Batch: 268843

Client Sample ID: Grab1-4 Lab Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	55		200	232		ug/L		88	37 - 160	5	15
Chlorodibromomethane	ND		200	198		ug/L		99	53 - 149	3	15
Chloroethane	ND	F2	200	161	F2	ug/L		81	14 - 230	18	15
Chloroform	ND		200	180		ug/L		90	51 - 138	10	15
Chloromethane	ND		200	141		ug/L		70	1 - 273	13	15
cis-1,3-Dichloropropene	ND		200	197		ug/L		99	1 - 227	3	15
Dichlorobromomethane	ND		200	194		ug/L		97	35 - 155	7	15
Ethylbenzene	ND		200	173		ug/L		86	37 - 162	10	15
Methylene Chloride	ND		200	167		ug/L		83	1 - 221	11	15
Tetrachloroethene	ND		200	162		ug/L		81	64 - 148	10	15
Toluene	ND		200	169		ug/L		84	47 - 150	8	15
trans-1,2-Dichloroethene	ND		200	169		ug/L		84	54 - 156	12	15
trans-1,3-Dichloropropene	ND		200	198		ug/L		99	17 - 183	0	15
Trichloroethene	ND		200	170		ug/L		85	71 - 157	14	15
Vinyl chloride	ND	F2	200	158	F2	ug/L		79	1 - 251	17	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*
4-Bromofluorobenzene (Surr)	*91*		*69 - 121*
Toluene-d8 (Surr)	*86*		*70 - 123*
Dibromofluoromethane (Surr)	*92*		*70 - 130*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-269040/1-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.82	ug/L		10/15/15 15:23	10/16/15 06:35	1
1,2-Dichlorobenzene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
1,2-Diphenylhydrazine	ND		10	0.78	ug/L		10/15/15 15:23	10/16/15 06:35	1
1,3-Dichlorobenzene	ND		10	0.69	ug/L		10/15/15 15:23	10/16/15 06:35	1
1,4-Dichlorobenzene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4,6-Trichlorophenol	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4-Dichlorophenol	ND		5.0	0.77	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4-Dimethylphenol	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4-Dinitrophenol	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,4-Dinitrotoluene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2,6-Dinitrotoluene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
2-Chloronaphthalene	ND		5.0	0.91	ug/L		10/15/15 15:23	10/16/15 06:35	1
2-Chlorophenol	ND		5.0	0.66	ug/L		10/15/15 15:23	10/16/15 06:35	1
2-Nitrophenol	ND		5.0	0.70	ug/L		10/15/15 15:23	10/16/15 06:35	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		10/15/15 15:23	10/16/15 06:35	1
4,6-Dinitro-2-methylphenol	ND		10	0.66	ug/L		10/15/15 15:23	10/16/15 06:35	1
4-Bromophenyl phenyl ether	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 06:35	1
4-Chloro-3-methylphenol	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 06:35	1
4-Chloroaniline	ND		5.0	0.64	ug/L		10/15/15 15:23	10/16/15 06:35	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-269040/1-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 06:35	1
4-Nitrophenol	ND		15	10	ug/L		10/15/15 15:23	10/16/15 06:35	1
Acenaphthene	ND		5.0	0.81	ug/L		10/15/15 15:23	10/16/15 06:35	1
Acenaphthylene	ND		5.0	0.87	ug/L		10/15/15 15:23	10/16/15 06:35	1
Anthracene	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzidine	ND		80	35	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[a]anthracene	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[a]pyrene	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[b]fluoranthene	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[g,h,i]perylene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 06:35	1
Benzo[k]fluoranthene	ND		5.0	1.3	ug/L		10/15/15 15:23	10/16/15 06:35	1
bis (2-chloroisopropyl) ether	ND		5.0	0.84	ug/L		10/15/15 15:23	10/16/15 06:35	1
Bis(2-chloroethoxy)methane	ND		5.0	0.75	ug/L		10/15/15 15:23	10/16/15 06:35	1
Bis(2-chloroethyl)ether	ND		5.0	0.93	ug/L		10/15/15 15:23	10/16/15 06:35	1
Bis(2-ethylhexyl) phthalate	ND		10	1.2	ug/L		10/15/15 15:23	10/16/15 06:35	1
Butyl benzyl phthalate	ND		5.0	1.1	ug/L		10/15/15 15:23	10/16/15 06:35	1
Chrysene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Dibenz(a,h)anthracene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 06:35	1
Diethyl phthalate	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Dimethyl phthalate	ND		5.0	0.91	ug/L		10/15/15 15:23	10/16/15 06:35	1
Di-n-butyl phthalate	ND		5.0	1.6	ug/L		10/15/15 15:23	10/16/15 06:35	1
Di-n-octyl phthalate	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 06:35	1
Fluoranthene	ND		5.0	1.6	ug/L		10/15/15 15:23	10/16/15 06:35	1
Fluorene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Hexachlorobenzene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Hexachlorobutadiene	ND		5.0	1.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Hexachlorocyclopentadiene	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
Hexachloroethane	ND		5.0	0.60	ug/L		10/15/15 15:23	10/16/15 06:35	1
Indeno[1,2,3-cd]pyrene	ND		5.0	1.5	ug/L		10/15/15 15:23	10/16/15 06:35	1
Isophorone	ND		5.0	0.74	ug/L		10/15/15 15:23	10/16/15 06:35	1
Naphthalene	ND		5.0	0.86	ug/L		10/15/15 15:23	10/16/15 06:35	1
Nitrobenzene	ND		5.0	0.81	ug/L		10/15/15 15:23	10/16/15 06:35	1
N-Nitrosodimethylamine	ND		10	5.0	ug/L		10/15/15 15:23	10/16/15 06:35	1
N-Nitrosodi-n-propylamine	ND		5.0	0.89	ug/L		10/15/15 15:23	10/16/15 06:35	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		10/15/15 15:23	10/16/15 06:35	1
Pentachlorophenol	ND		10	1.6	ug/L		10/15/15 15:23	10/16/15 06:35	1
Phenanthrene	ND		5.0	1.2	ug/L		10/15/15 15:23	10/16/15 06:35	1
Phenol	ND		5.0	0.35	ug/L		10/15/15 15:23	10/16/15 06:35	1
Pyrene	ND		5.0	1.4	ug/L		10/15/15 15:23	10/16/15 06:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*52 - 151*	*10/15/15 15:23*	*10/16/15 06:35*	*1*
2-Fluorobiphenyl	*91*		*44 - 120*	*10/15/15 15:23*	*10/16/15 06:35*	*1*
2-Fluorophenol	*51*		*17 - 120*	*10/15/15 15:23*	*10/16/15 06:35*	*1*
Nitrobenzene-d5	*79*		*42 - 120*	*10/15/15 15:23*	*10/16/15 06:35*	*1*
Phenol-d5	*37*		*10 - 120*	*10/15/15 15:23*	*10/16/15 06:35*	*1*
p-Terphenyl-d14	*110*		*22 - 125*	*10/15/15 15:23*	*10/16/15 06:35*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-269040/2-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	50.0	31.5		ug/L		63	44 - 142
1,2-Dichlorobenzene	50.0	27.5		ug/L		55	32 - 129
1,3-Dichlorobenzene	50.0	24.7		ug/L		49	1 - 172
1,4-Dichlorobenzene	50.0	25.8		ug/L		52	20 - 124
2,4,6-Trichlorophenol	50.0	50.5		ug/L		101	37 - 144
2,4-Dichlorophenol	50.0	47.2		ug/L		94	39 - 135
2,4-Dimethylphenol	50.0	46.0		ug/L		92	32 - 119
2,4-Dinitrophenol	100	99.0		ug/L		99	1 - 191
2,4-Dinitrotoluene	50.0	51.2		ug/L		102	39 - 139
2,6-Dinitrotoluene	50.0	49.5		ug/L		99	50 - 158
2-Chloronaphthalene	50.0	41.8		ug/L		84	60 - 118
2-Chlorophenol	50.0	40.7		ug/L		81	23 - 134
2-Nitrophenol	50.0	52.1		ug/L		104	29 - 182
3,3'-Dichlorobenzidine	100	108		ug/L		108	1 - 262
4,6-Dinitro-2-methylphenol	100	106		ug/L		106	1 - 181
4-Bromophenyl phenyl ether	50.0	51.1		ug/L		102	53 - 127
4-Chloro-3-methylphenol	50.0	49.8		ug/L		100	22 - 147
4-Chlorophenyl phenyl ether	50.0	48.0		ug/L		96	25 - 158
4-Nitrophenol	100	56.5		ug/L		57	1 - 132
Acenaphthene	50.0	46.4		ug/L		93	47 - 145
Acenaphthylene	50.0	45.3		ug/L		91	33 - 145
Anthracene	50.0	51.1		ug/L		102	27 - 133
Benzo[a]anthracene	50.0	53.0		ug/L		106	33 - 143
Benzo[a]pyrene	50.0	52.7		ug/L		105	17 - 163
Benzo[b]fluoranthene	50.0	55.1		ug/L		110	24 - 159
Benzo[g,h,i]perylene	50.0	55.7		ug/L		111	1 - 219
Benzo[k]fluoranthene	50.0	51.2		ug/L		102	11 - 162
bis (2-chloroisopropyl) ether	50.0	37.1		ug/L		74	36 - 166
Bis(2-chloroethoxy)methane	50.0	45.1		ug/L		90	33 - 184
Bis(2-chloroethyl)ether	50.0	40.2		ug/L		80	12 - 158
Bis(2-ethylhexyl) phthalate	50.0	51.5		ug/L		103	8 - 158
Butyl benzyl phthalate	50.0	51.9		ug/L		104	1 - 152
Chrysene	50.0	52.7		ug/L		105	17 - 168
Dibenz(a,h)anthracene	50.0	53.3		ug/L		107	1 - 227
Diethyl phthalate	50.0	50.7		ug/L		101	1 - 114
Dimethyl phthalate	50.0	51.1		ug/L		102	1 - 112
Di-n-butyl phthalate	50.0	51.7		ug/L		103	1 - 118
Di-n-octyl phthalate	50.0	53.4		ug/L		107	4 - 146
Fluoranthene	50.0	53.5		ug/L		107	26 - 137
Fluorene	50.0	48.8		ug/L		98	59 - 121
Hexachlorobenzene	50.0	50.8		ug/L		102	1 - 152
Hexachlorocyclopentadiene	50.0	30.3		ug/L		61	5 - 120
Hexachloroethane	50.0	21.1		ug/L		42	40 - 113
Indeno[1,2,3-cd]pyrene	50.0	53.5		ug/L		107	1 - 171
Isophorone	50.0	45.2		ug/L		90	21 - 196
Naphthalene	50.0	38.4		ug/L		77	21 - 133
Nitrobenzene	50.0	42.7		ug/L		85	35 - 180
N-Nitrosodi-n-propylamine	50.0	44.5		ug/L		89	1 - 230

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-269040/2-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	100	104		ug/L		104	54 - 125
Pentachlorophenol	100	94.9		ug/L		95	14 - 176
Phenanthrene	50.0	51.7		ug/L		103	54 - 120
Phenol	50.0	19.9		ug/L		40	5 - 112
Pyrene	50.0	52.9		ug/L		106	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*106*		*52 - 151*
2-Fluorobiphenyl	*91*		*44 - 120*
2-Fluorophenol	*52*		*17 - 120*
Nitrobenzene-d5	*85*		*42 - 120*
Phenol-d5	*40*		*10 - 120*
p-Terphenyl-d14	*107*		*22 - 125*

Lab Sample ID: LCSD 480-269040/3-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 269040

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	31.9		ug/L		64	44 - 142	1	34
1,2-Dichlorobenzene	50.0	28.8		ug/L		58	32 - 129	4	38
1,3-Dichlorobenzene	50.0	25.7		ug/L		51	1 - 172	4	37
1,4-Dichlorobenzene	50.0	27.3		ug/L		55	20 - 124	6	40
2,4,6-Trichlorophenol	50.0	51.1		ug/L		102	37 - 144	1	20
2,4-Dichlorophenol	50.0	47.3		ug/L		95	39 - 135	0	23
2,4-Dimethylphenol	50.0	46.5		ug/L		93	32 - 119	1	18
2,4-Dinitrophenol	100	104		ug/L		104	1 - 191	5	29
2,4-Dinitrotoluene	50.0	52.4		ug/L		105	39 - 139	2	20
2,6-Dinitrotoluene	50.0	52.0		ug/L		104	50 - 158	5	17
2-Chloronaphthalene	50.0	42.7		ug/L		85	60 - 118	2	30
2-Chlorophenol	50.0	42.9		ug/L		86	23 - 134	5	26
2-Nitrophenol	50.0	52.1		ug/L		104	29 - 182	0	28
3,3'-Dichlorobenzidine	100	109		ug/L		109	1 - 262	1	31
4,6-Dinitro-2-methylphenol	100	111		ug/L		111	1 - 181	4	30
4-Bromophenyl phenyl ether	50.0	50.4		ug/L		101	53 - 127	1	16
4-Chloro-3-methylphenol	50.0	50.1		ug/L		100	22 - 147	1	16
4-Chlorophenyl phenyl ether	50.0	48.9		ug/L		98	25 - 158	2	15
4-Nitrophenol	100	55.3		ug/L		55	1 - 132	2	24
Acenaphthene	50.0	46.6		ug/L		93	47 - 145	1	25
Acenaphthylene	50.0	46.6		ug/L		93	33 - 145	3	22
Anthracene	50.0	52.0		ug/L		104	27 - 133	2	15
Benzo[a]anthracene	50.0	53.7		ug/L		107	33 - 143	1	15
Benzo[a]pyrene	50.0	52.7		ug/L		105	17 - 163	0	15
Benzo[b]fluoranthene	50.0	54.3		ug/L		109	24 - 159	1	17
Benzo[g,h,i]perylene	50.0	56.5		ug/L		113	1 - 219	1	19
Benzo[k]fluoranthene	50.0	51.8		ug/L		104	11 - 162	1	19
bis (2-chloroisopropyl) ether	50.0	39.5		ug/L		79	36 - 166	6	36
Bis(2-chloroethoxy)methane	50.0	45.7		ug/L		91	33 - 184	1	23

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-269040/3-A
Matrix: Water
Analysis Batch: 269120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 269040

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether			50.0	42.3		ug/L		85	12 - 158	5	33
Bis(2-ethylhexyl) phthalate			50.0	52.7		ug/L		105	8 - 158	2	15
Butyl benzyl phthalate			50.0	53.4		ug/L		107	1 - 152	3	15
Chrysene			50.0	53.2		ug/L		106	17 - 168	1	15
Dibenz(a,h)anthracene			50.0	53.6		ug/L		107	1 - 227	1	18
Diethyl phthalate			50.0	51.6		ug/L		103	1 - 114	2	15
Dimethyl phthalate			50.0	51.6		ug/L		103	1 - 112	1	15
Di-n-butyl phthalate			50.0	52.5		ug/L		105	1 - 118	2	15
Di-n-octyl phthalate			50.0	54.3		ug/L		109	4 - 146	2	15
Fluoranthene			50.0	54.4		ug/L		109	26 - 137	2	15
Fluorene			50.0	49.1		ug/L		98	59 - 121	1	18
Hexachlorobenzene			50.0	51.1		ug/L		102	1 - 152	1	15
Hexachlorocyclopentadiene			50.0	30.3		ug/L		61	5 - 120	0	50
Hexachloroethane			50.0	22.5		ug/L		45	40 - 113	6	43
Indeno[1,2,3-cd]pyrene			50.0	54.3		ug/L		109	1 - 171	2	17
Isophorone			50.0	46.3		ug/L		93	21 - 196	2	21
Naphthalene			50.0	38.5		ug/L		77	21 - 133	0	31
Nitrobenzene			50.0	43.7		ug/L		87	35 - 180	2	27
N-Nitrosodi-n-propylamine			50.0	45.8		ug/L		92	1 - 230	3	23
N-Nitrosodiphenylamine			100	105		ug/L		105	54 - 125	1	15
Pentachlorophenol			100	96.3		ug/L		96	14 - 176	1	21
Phenanthrene			50.0	51.4		ug/L		103	54 - 120	1	16
Phenol			50.0	20.3		ug/L		41	5 - 112	2	36
Pyrene			50.0	53.0		ug/L		106	52 - 115	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*108*		*52 - 151*
2-Fluorobiphenyl	*94*		*44 - 120*
2-Fluorophenol	*56*		*17 - 120*
Nitrobenzene-d5	*87*		*42 - 120*
Phenol-d5	*42*		*10 - 120*
p-Terphenyl-d14	*109*		*22 - 125*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-269031/1-A
Matrix: Water
Analysis Batch: 269532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		10/16/15 08:05	10/16/15 13:55	1
Barium	ND		0.0020	0.00070	mg/L		10/16/15 08:05	10/16/15 13:55	1
Chromium	ND		0.0040	0.0010	mg/L		10/16/15 08:05	10/16/15 13:55	1
Copper	ND		0.010	0.0016	mg/L		10/16/15 08:05	10/16/15 13:55	1
Nickel	ND		0.010	0.0013	mg/L		10/16/15 08:05	10/16/15 13:55	1
Zinc	ND		0.010	0.0015	mg/L		10/16/15 08:05	10/16/15 13:55	1

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

Lab Sample ID: LCS 480-269031/2-A
Matrix: Water
Analysis Batch: 269532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.193		mg/L		97	85 - 115
Barium	0.200	0.200		mg/L		100	85 - 115
Chromium	0.200	0.201		mg/L		101	85 - 115
Copper	0.200	0.197		mg/L		99	85 - 115
Nickel	0.200	0.188		mg/L		94	85 - 115
Zinc	0.200	0.200		mg/L		100	85 - 115

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

Lab Sample ID: MB 480-269761/1
Matrix: Water
Analysis Batch: 269761

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			10/20/15 08:20	1

Lab Sample ID: LCS 480-269761/2
Matrix: Water
Analysis Batch: 269761

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	214	213.2		mg/L		100	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-269225/1
Matrix: Water
Analysis Batch: 269225

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.010		SU		100	99 - 101

Lab Sample ID: 480-89087-5 DU
Matrix: Water
Analysis Batch: 269225

Client Sample ID: COMP-101415
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.71	HF	7.710		SU		0	5

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 480-270972/3
Matrix: Water
Analysis Batch: 270972

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.010	0.0050	mg/L			10/25/15 10:00	1

Method: SM 4500 P E - Phosphorus (Continued)

Lab Sample ID: MB 480-270972/51
Matrix: Water
Analysis Batch: 270972

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.010	0.0050	mg/L			10/25/15 10:00	1

Lab Sample ID: LCS 480-270972/4
Matrix: Water
Analysis Batch: 270972

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus, Total	0.200	0.213		mg/L		107	90 - 110

Lab Sample ID: LCS 480-270972/52
Matrix: Water
Analysis Batch: 270972

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus, Total	0.200	0.198		mg/L		99	90 - 110

GC/MS VOA

Analysis Batch: 268843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-6	TB-101415	Total/NA	Water	624	
480-89087-7	Grab1-4 Lab Composite	Total/NA	Water	624	
480-89087-7 MS	Grab1-4 Lab Composite	Total/NA	Water	624	
480-89087-7 MSD	Grab1-4 Lab Composite	Total/NA	Water	624	
LCS 480-268843/5	Lab Control Sample	Total/NA	Water	624	
MB 480-268843/7	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 269040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-7	Grab1-4 Lab Composite	Total/NA	Water	625	
LCS 480-269040/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-269040/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 480-269040/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 269120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-7	Grab1-4 Lab Composite	Total/NA	Water	625	269040
LCS 480-269040/2-A	Lab Control Sample	Total/NA	Water	625	269040
LCSD 480-269040/3-A	Lab Control Sample Dup	Total/NA	Water	625	269040
MB 480-269040/1-A	Method Blank	Total/NA	Water	625	269040

Metals

Prep Batch: 269031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	200.7	
LCS 480-269031/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-269031/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 269532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	200.7 Rev 4.4	269031
LCS 480-269031/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	269031
MB 480-269031/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	269031

General Chemistry

Analysis Batch: 269225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	SM 4500 H+ B	
480-89087-5 DU	COMP-101415	Total/NA	Water	SM 4500 H+ B	
LCS 480-269225/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 269761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	SM 2540D	
LCS 480-269761/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-269761/1	Method Blank	Total/NA	Water	SM 2540D	

General Chemistry (Continued)

Analysis Batch: 270972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89087-5	COMP-101415	Total/NA	Water	SM 4500 P E	
LCS 480-270972/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
LCS 480-270972/52	Lab Control Sample	Total/NA	Water	SM 4500 P E	
MB 480-270972/3	Method Blank	Total/NA	Water	SM 4500 P E	
MB 480-270972/51	Method Blank	Total/NA	Water	SM 4500 P E	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Client Sample ID: COMP-101415

Lab Sample ID: 480-89087-5
Date Collected: 10/14/15 13:05
Matrix: Water
Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			269031	10/16/15 08:05	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	269532	10/16/15 14:35	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	269761	10/20/15 08:20	EKB	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	269225	10/16/15 11:14	DCB	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	270972	10/25/15 10:00	DLG	TAL BUF

Client Sample ID: TB-101415

Lab Sample ID: 480-89087-6
Date Collected: 10/14/15 13:05
Matrix: Water
Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	268843	10/15/15 06:46	NMD1	TAL BUF

Client Sample ID: Grab1-4 Lab Composite

Lab Sample ID: 480-89087-7
Date Collected: 10/14/15 13:00
Matrix: Water
Date Received: 10/14/15 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		10	268843	10/15/15 07:12	NMD1	TAL BUF
Total/NA	Prep	625			269040	10/15/15 15:23	CPH	TAL BUF
Total/NA	Analysis	625		1	269120	10/16/15 23:58	CAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
624		Water	1,2-Dichloroethene, Total
625	625	Water	1,2-Dichlorobenzene
625	625	Water	1,2-Diphenylhydrazine
625	625	Water	1,3-Dichlorobenzene
625	625	Water	1,4-Dichlorobenzene
625	625	Water	4-Chloroaniline
SM 4500 H+ B		Water	pH

Method Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 4500 P E	Phosphorus	SM	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift OM Phase

TestAmerica Job ID: 480-89087-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-89087-5	COMP-101415	Water	10/14/15 13:05	10/14/15 13:45
480-89087-6	TB-101415	Water	10/14/15 13:05	10/14/15 13:45
480-89087-7	Grab1-4 Lab Composite	Water	10/14/15 13:00	10/14/15 13:45

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Patrick Higgins	Lab PM: John Schove	Carrier Tracking No(s):	COC No: 480-21387-2026.1
Client Contact: John Formoza	Phone: 315-468-1663	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: Honeywell International Inc				Job #:
Address: 1563 Willis Ave.	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 Weeks			
State, Zip: NY, 13204				
Phone: 315-468-1663	PO #: 4500073922			
Email: john.formoza@ch2m.com	WO #:			
Project Name: Honeywell - Alltift OM phase / Semi Annual	Project #: 48003159			
Site: Honeywell - Buffalo Sites	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone

480-89087 Chain of Custody

Location Identification	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E - Phosphorus, Total	200.7 - Metals ICP - As, Ba, Cr, Cu, Zn, Ni	2540D - Total Suspended Solids	SM4500_H+ - pH	624_5ml - Priority Pollutant List - VOA - 624	625 - Priority Pollutant List - SVOA - 625	Total	Special Instructions/Note:
				Preservation Code:				S	D	N	N	A	N		
BSA Discharge	GRAB 1-101415	10/14/15	07:00	G	W	N	N					3	2	5	Prior to analysis grab samples to be composited by lab
BSA Discharge	GRAB 2-101415	10/14/15	09:00	G	W	N	N					3	2	5	
BSA Discharge	GRAB 3-101415	10/14/15	11:00	G	W	N	N					3	2	5	
BSA Discharge	GRAB 4 -101415	10/14/15	13:00	G	W	N	N					3	2	5	
BSA Discharge	COMP-101415	10/14/15	13:05	C	W	N	N	1	1	1	1			4	
TRIPBLANK	TB-101415	10/14/15	13:05		W	N	N					1		1	TRIP BLANK

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Patrick C Higgins	Date/Time: 13:45 10/14/15	Company CH2M	Received by:	Date/Time: 10/14/15 1345	Company TRIBUE
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 3.7 #1		

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-89087-1

Login Number: 89087
List Number: 1
Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	False	LAB TO COMPOSITE VOLUME PRIOR TO TESTING PER CLIENT INSTRUCTION
Sampling Company provided.	True	OMI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	Yes: Samples checked, no residual chlorine detected

APPENDIX G
SITE INSPECTION FORMS

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 5/06/2015

Weather: Overcast cool morning giving way to sunshine temperature in the upper 70's.
Assessment Patrick Higgins and Mike Stout

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☒	☐	☐	2. Is there a breach in fence? We repaired holes in fencing along Metalico side of landfill
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☒	☐	☐	5. Signs of trespassers/vandalism?
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress? _____
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable? _____
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

Site Inspection Form

Yes	No	N/A	
☒	☐	☐	1. Does one exist? _____
☒	☐	☐	2. Is system active or passive? active
☐	☒	☐	3. Permanent methane gas probes? _____
☒	☐	☐	4. Locks on monitoring wells? _____
☒	☐	☐	5. Vents in working order?
☒	☐	☐	6. Well seals in place? _____
☒	☐	☐	7. Methane levels within LEL limits?
☒	☐	☐	8. Monitoring reports current?
			9. Other _____

F. Leachate Collection System

☒	☐	☐	1. Does one exist? _____
			2. Collection method:
☒	☐	☐	a. Sump? 2
☐	☐	☒	b. Well point? _____
☐	☐	☒	c. Earthen basin/pond? _____
☐	☐	☒	d. Structure secured? _____
			e. Other _____
			3. Pumping system:
☒	☐	☐	a. Automatic? _____
☐	☒	☐	b. Manual? _____
☒	☐	☐	c. Mechanically operable? _____
☐	☒	☐	d. Leaks/failures? _____
			4. Disposals:
☐	☐	☒	a. Onsite pretreatment/treatment? _____
☐	☐	☒	b. Surface discharge? (NPDES/SPDES) _____
☐	☐	☒	c. POTW – hardpiped? _____
☐	☐	☒	d. Quick disconnect caps in place? _____
			5. Transportation (if any):
☐	☐	☒	a. Chemicals? _____
☐	☐	☒	b. Filter cake? _____
☒	☐	☐	6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____
☒	☐	☐	7. Monitoring reports current? _____
			8. Other _____

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Site Inspection Form

Yes	No	N/A	
			H. Treatment Plant
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

On May 6th 2015: Mike Stout and Pat Higgins on site for semi-sample the BSA lift station.

Patrick C. Higgins 5/18/2015

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 8/15/2015

Weather: Partly Cloudy with temperatures in the 70's.
Assessment James Haas and Robert Davies

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☒	☐	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☒	☐	☐	5. Signs of trespassers/vandalism?
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress? _____
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable? _____
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

Site Inspection Form

Yes	No	N/A	
☒	☐	☐	1. Does one exist? _____
☒	☐	☐	2. Is system active or passive? active
☐	☒	☐	3. Permanent methane gas probes? _____
☒	☐	☐	4. Locks on monitoring wells? _____
☒	☐	☐	5. Vents in working order?
☒	☐	☐	6. Well seals in place? _____
☒	☐	☐	7. Methane levels within LEL limits?
☒	☐	☐	8. Monitoring reports current?
			9. Other _____

F. Leachate Collection System

☒	☐	☐	1. Does one exist? _____
			2. Collection method:
☒	☐	☐	a. Sump? 2
☐	☐	☒	b. Well point? _____
☐	☐	☒	c. Earthen basin/pond? _____
☐	☐	☒	d. Structure secured? _____
			e. Other _____
			3. Pumping system:
☒	☐	☐	a. Automatic? _____
☐	☒	☐	b. Manual? _____
☒	☐	☐	c. Mechanically operable? _____
☐	☒	☐	d. Leaks/failures? _____
			4. Disposals:
☐	☐	☒	a. Onsite pretreatment/treatment? _____
☐	☐	☒	b. Surface discharge? (NPDES/SPDES) _____
☐	☐	☒	c. POTW – hardpiped? _____
☐	☐	☒	d. Quick disconnect caps in place? _____
			5. Transportation (if any):
☐	☐	☒	a. Chemicals? _____
☐	☐	☒	b. Filter cake? _____
☒	☐	☐	6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____
☒	☐	☐	7. Monitoring reports current? _____
			8. Other _____

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Site Inspection Form

Yes	No	N/A	
			H. Treatment Plant
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

On July 15, 2015: James Haas and Robert Davies on site, manually measured depth to water at PZ wells. On August 31st 2015, Mike Stout, Jim Haas, and Bethany Macera pressure lanced the force main. Also, they installed new submersible pump in collection sump.

Patrick C. Higgins 9/18/2015

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 10/14/2015

Weather: Overcast cold 50 degrees with a breeze.
Assessment: Patrick Higgins, Michael Stout, and Bethany Macera

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☒	☐	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☒	☐	☐	5. Signs of trespassers/vandalism?
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress? _____
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable? _____
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

Site Inspection Form

Yes	No	N/A	
☒	☐	☐	1. Does one exist? _____
☒	☐	☐	2. Is system active or passive? active
☐	☒	☐	3. Permanent methane gas probes? _____
☒	☐	☐	4. Locks on monitoring wells? _____
☒	☐	☐	5. Vents in working order?
☒	☐	☐	6. Well seals in place? _____
☒	☐	☐	7. Methane levels within LEL limits?
☒	☐	☐	8. Monitoring reports current?
			9. Other _____

F. Leachate Collection System

☒	☐	☐	1. Does one exist? _____
			2. Collection method:
☒	☐	☐	a. Sump? 2
☐	☐	☒	b. Well point? _____
☐	☐	☒	c. Earthen basin/pond? _____
☐	☐	☒	d. Structure secured? _____
			e. Other _____
			3. Pumping system:
☒	☐	☐	a. Automatic? _____
☐	☒	☐	b. Manual? _____
☒	☐	☐	c. Mechanically operable? _____
☐	☒	☐	d. Leaks/failures? _____
			4. Disposals:
☐	☐	☒	a. Onsite pretreatment/treatment? _____
☐	☐	☒	b. Surface discharge? (NPDES/SPDES) _____
☐	☐	☒	c. POTW – hardpiped? _____
☐	☐	☒	d. Quick disconnect caps in place? _____
			5. Transportation (if any):
☐	☐	☒	a. Chemicals? _____
☐	☐	☒	b. Filter cake? _____
☒	☐	☐	6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____
☒	☐	☐	7. Monitoring reports current? _____
			8. Other _____

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Site Inspection Form

Yes	No	N/A	
			H. Treatment Plant
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

On October 14th, 2015, Mike Stout, Bethany Macera, and Pat Higgins visited the Altift site. Mike, Pat, and Bethany completed both the Semi-Annual and the Annual Sampling events. Also, they completed the manual measurements of depth to water in PZ and sump locations and entered the results into the log book.

Patrick C. Higgins 10/15/2015

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 1/20/2015

Weather: Overcast Cold 36 degrees Fahrenheit with breeze
Assessment by: James Haas and Mike Stout

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☐	☒	☐	5. Signs of trespassers/vandalism? _____
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress? Snow covered
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable? Drifting Snow
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control
☒	☐	☐	1. Does one exist? _____

Site Inspection Form

Yes	No	N/A	
☒	☐	☐	2. Is system active or passive? active
☐	☒	☐	3. Permanent methane gas probes? _____
☒	☐	☐	4. Locks on monitoring wells? _____
☒	☐	☐	5. Vents in working order?)
☒	☐	☐	6. Well seals in place? _____
☒	☐	☐	7. Methane levels within LEL limits?
☒	☐	☐	8. Monitoring reports current?
			9. Other _____

F. Leachate Collection System

☒	☐	☐	1. Does one exist? _____
			2. Collection method:
☒	☐	☐	a. Sump? 2
☐	☐	☒	b. Well point? _____
☐	☐	☒	c. Earthen basin/pond? _____
☐	☐	☒	d. Structure secured? _____
			e. Other _____
			3. Pumping system:
☒	☐	☐	a. Automatic? _____
☐	☒	☐	b. Manual? _____
☒	☐	☐	c. Mechanically operable? _____
☐	☒	☐	d. Leaks/failures? _____
			4. Disposals:
☐	☐	☒	a. Onsite pretreatment/treatment? _____
☐	☐	☒	b. Surface discharge? (NPDES/SPDES) _____
☐	☐	☒	c. POTW – hardpiped? _____
☐	☐	☒	d. Quick disconnect caps in place? _____
			5. Transportation (if any):
☐	☐	☒	a. Chemicals? _____
☐	☐	☒	b. Filter cake? _____
☒	☐	☐	6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____
☒	☐	☐	7. Monitoring reports current? _____
			8. Other _____

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Site Inspection Form

Yes	No	N/A	
			H. Treatment Plant
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

On February 4th, 2016, Mike Stout, and James Haas were on site. Well depths were manually measured on January 16, 2016.


HUSKY

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 4/7/16

Weather: Overcast, cloudy, rainy, cold 36 degrees
Assessment by: Bethany Macera and Mike Stout

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☐	☒	☐	5. Signs of trespassers/vandalism? _____
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress? Snow covered
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable? Drifting Snow
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

Site Inspection Form

Yes	No	N/A	
☒	☐	☐	1. Does one exist? _____
☒	☐	☐	2. Is system active or passive? active
☐	☒	☐	3. Permanent methane gas probes? _____
☒	☐	☐	4. Locks on monitoring wells? _____
☒	☐	☐	5. Vents in working order?)
☒	☐	☐	6. Well seals in place? _____
☒	☐	☐	7. Methane levels within LEL limits?
☒	☐	☐	8. Monitoring reports current?
			9. Other _____

F. Leachate Collection System

☒	☐	☐	1. Does one exist? _____
			2. Collection method:
☒	☐	☐	a. Sump? 2
☐	☐	☒	b. Well point? _____
☐	☐	☒	c. Earthen basin/pond? _____
☐	☐	☒	d. Structure secured? _____
			e. Other _____
			3. Pumping system:
☒	☐	☐	a. Automatic? _____
☐	☒	☐	b. Manual? _____
☒	☐	☐	c. Mechanically operable? _____
☐	☒	☐	d. Leaks/failures? _____
			4. Disposals:
☐	☐	☒	a. Onsite pretreatment/treatment? _____
☐	☐	☒	b. Surface discharge? (NPDES/SPDES) _____
☐	☐	☒	c. POTW – hardpiped? _____
☐	☐	☒	d. Quick disconnect caps in place? _____
			5. Transportation (if any):
☐	☐	☒	a. Chemicals? _____
☐	☐	☒	b. Filter cake? _____
☒	☐	☐	6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____
☒	☐	☐	7. Monitoring reports current? _____
			8. Other _____

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Site Inspection Form

Yes	No	N/A	
			H. Treatment Plant
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

None