MACTEC

engineering and constructing a better tomorrow

May 18, 2015

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: 2014/2015 Periodic Review Report
Alltift Landfill Site
Site Nos. 9-15-054

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 "2014/2015 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 March 9, 2015.

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. 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 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. 9-15-054) from Class 2 to Class 4, and de-listed the Ramco Steel Site (NYSDEC Site No. 9-15-046B).

During the 2014/2015 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 no further actions were 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 discussion of the status of institutional controls is included in 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 #09-10-BU098), as modified by BSA's letter dated July 24, 2013. Collected samples were submitted to TestAmerica Laboratories of Amherst, New York for analyses of the required parameters. Honeywell's OM&M Contractor - CH2M Hill (formerly CH2M Hill-OMI) - 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 was completed in September 2014 and 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
  - Plowing of snow from the entrance road as necessary
  - Cleared blockage between Sumps #1 and #2 and replaced clean out covers on May 21, 2014
  - Conducted additional cleaning of collection piping and installed Fernco fittings (each double clamped) on clean out covers the week of May 26, 2014
  - Conducted cleanout of sediment from low lift station on June 3, 2014
  - Conducted cleaning of collection piping on July 24, 2014
  - Completed annual landfill cap mowing on October 6, 2014
  - Changed the control board on Sump #2 on October 30, 2014

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).

E. 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 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 2015 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 2016.

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 2016.

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, 2014 to April 21, 2015

	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	Groundwater ~~Leachate~~ Collection Cover System Fencing/Access Control

Engineering Controls:
Groundwater
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 HONEYWELL- 101 COLUMBIA RD MORRISTOWN, NJ 07962
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

MAY 18, 2015
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 and 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)

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

Stamp (Required for PE)

Date: 5-18-2015

ATTACHMENT B

2014/2015 ANNUAL OPERATIONS, MAINTENANCE,

AND MONITORING REPORT

2014/2015 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

101 Columbia Road
Morristown, NJ 07962

Prepared By:

MACTEC

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

May 2015

2014/2015 ANNUAL OPERATIONS, MAINTENANCE, AND MONITORING REPORT

ALLTIFT LANDFILL SITE

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

Submitted To:
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Submitted By:

Honeywell

101 Columbia Road
Morristown, NJ 07962

Prepared By:

MACTEC

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

May 2015

Ryan Belcher
Senior Engineer

Mark Stelmack, P.E.
Associate Engineer

Project Number: 3410120905

TABLE OF CONTENTS

TABLES

APPENDICES

ACRONYMS AND ABBREVIATIONS

BSA	Buffalo Sewer Authority
EPA	Environmental Protection Agency
Honeywell	Honeywell International Inc.
LEL	Lower Explosive Limit
µg/L	micrograms per liter
Mactec	Mactec Engineering and Consulting, P.C.
mg/L	milligrams per liter
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NYSDEC	New York State Department of Environmental Conservation
OM&M	Operations and maintenance Manual
SVOC	Semivolatile Organic Compound
VOC	Volatile Organic Compound

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 International Inc. (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 2014/2015 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, 2014 through April 21, 2015. 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 2016.

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 was 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 2014/2015 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 2014/2015 OM&M ACTIVITIES

Since September 2007, Honeywell has contracted with CH2M Hill (formerly CH2M HILL-OMI) to perform the OM&M activities at the site. In 2014, the annual groundwater sampling activities were also conducted by CH2M Hill. 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 the 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 April and September 2014. 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 has apparently been destroyed or paved over by the adjacent property owner, and landfill piezometers PZ-14 and PZ-16 have damaged well casing, which does not allow passage of a water level meter or sampling equipment.

2.2.2 Groundwater Sampling

On September 9, 2014 CH2M Hill 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 per the OM&M Manual.

The Sump 4 samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs); however, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible. The Sump 4 samples were re-collected on October 6, 2014 and results presented herein are for Sump 4 samples collected on this date.

The 2014 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)
Semivolatile 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 basis by CH2M Hill 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 Hill during the reporting period on June 3, 2014, August 21, 2014, October 6, 2014, and January 20, 2015. The inspections were conducted in accordance with the OM&M Manual. The 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 Hill 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
- Plowing of snow from the entrance road as necessary
- Cleared blockage between Sumps #1 and #2 and replaced clean out covers on May 21, 2014
- Conducted additional cleaning of collection piping and installed Fernco fittings (each double clamped) on clean out covers the week of May 26, 2014
- Conducted cleanout of sediment from low lift station on June 3, 2014
- Conducted cleaning of collection piping on July 24, 2014
- Completed annual landfill cap mowing on October 6, 2014
- Changed the control board on Sump #2 on October 30, 2014.

2.5.1 May 2014 Groundwater Collection Trench Overflow Event

On the afternoon of Tuesday May 20, 2014, David Szymanski (NYSDEC) contacted Honeywell and Mactec via email to communicate that the NYSDEC had observed the main fence gate to be wide open, no one onsite, and the groundwater control system overflowing along the cleanouts next to the gravel roadway. In response, CH2M Hill visited the site the following morning (May 21, 2014) and found that the chain used with the lock to secure the main gate had been cut. The first cleanout had no flow coming from it but iron staining was observed and overflow of the second cleanout was observed. CH2M Hill had last been on site May 5, 2014 and did not observe any issues with the system or site security at that time. It is also not believed that any high level alarm

condition for the collection system sumps ever occurred as no such autodialer callout was received. The system was shut down while further investigation was conducted. What was observed suggested that a blockage of the line resulted in a pressure build-up that caused the cleanout caps to come loose. Acid cleaning of the line was conducted in order to reduce the blockage. The system was then turned back on and observed to be operating properly.

In response to NYSDEC's request, the following samples were collected on May 22, 2014 and submitted to TestAmerica Laboratories for select VOCs analysis (1,2-dichlorobenzene, 1,4-dichlorobenzene, benzene, chlorobenzene, ethylbenzene, and total xylene). Sediment samples were collected using Terra-Core samplers.

1. SSA1 – Sediment sample from edge of the pond outside (upgradient) of the overflow
2. SSA2 – Sediment sample from edge of the pond in the area of the overflow
3. SW1 – surface water sample from the pond in the area of the overflow
4. Sump 1 (including Field duplicate)
5. Sump 2.

The sample locations are presented in Figure 2 provided in Appendix A. Results for sample locations SSA1, SSA2, and SW1 were non-detect. Chlorobenzene was detected in the sample collected from Sump 1 (and associated duplicate) at a concentration of 1.3 and 1.6 micrograms per liter, respectively. Benzene and Chlorobenzene were detected at a concentration of 4.9 (estimated) and 62 micrograms per liter (µg/L), respectively.

CH2M Hill conducted a cleaning of the entire length of the groundwater control system piping to the low-lift station on May 28, 2014. The resulting sediment was subsequently characterized, profiled as non-hazardous, and transported to an off-site disposal facility.

A root-cause analysis was completed, it was determined that the following factors contributed to the occurrence of this event:

1. The groundwater control system piping became blocked with iron sediment due to insufficient preventative maintenance to prevent build-up of iron sediment
2. Flow rates were higher than normal due to increased rainfall
3. Design flaw consisting of the installation of cleanout caps that are not pressure rated
4. Lack of understanding that cleanout caps were not pressure rated. The cleanouts were never inspected by current personnel; otherwise, caps held in place with rocks would have observed. The contractor had not previously experienced issues with line clogging or sump high level alarms, and iron solids generally discharge without restriction to the low lift station.

On the basis of the identified root causes, it is determined that the following corrective actions are required to address the root-cause of this incident and minimize to the extent practicable the potential for such an event to occur in the future:

1. Revise the preventative maintenance plan to include mechanical lancing of the collection lines on biennial (every two years) basis with re-evaluation of this frequency following the next event
2. Replace existing cleanout caps with caps sufficient to withstand the pressures generated in the collection lines due to a blockage
3. Continue periodic acid cleaning of the lines to prevent iron sediment buildup at a frequency of every two months
4. Revise inspection requirements to include annual inspection of the cleanouts.

These corrective actions have been implemented.

3.0 RESULTS OF 2014/2015 OM&M ACTIVITIES

As discussed previously, CH2M Hill 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 Hill'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 HILL 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 HILL 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. 12-12-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 2014 sampling event, concentrations of arsenic, iron, manganese, benzene, chlorobenzene, and 4-chloroaniline were detected in

one or more samples of the collection system at concentrations above the corresponding NYSDEC Class GA (groundwater) standard.

Arsenic was detected above the NYSDEC Class GA (groundwater) standard of 0.025 µg/L in the Sumps 1 through 4 composite sample at a concentration of 0.03 milligrams per liter (mg/L).

Iron was detected above the groundwater standard of 0.3 mg/L in the grab sample from Sump 4 and the Sumps 1 through 4 composite sample (25 and 34.5 mg/L, respectively).

Manganese was detected above the groundwater standard of 0.3 mg/L in the grab sample from Sump 4 and the Sumps 1 through 4 composite sample (2.3 and 2.2 mg/L, respectively).

Benzene was detected above the groundwater standard of 1 µg/L in the grab sample from Sump 2 at a concentration of 8 µg/L.

Chlorobenzene was detected above the groundwater standard of 5 µg/L in samples collected from Sumps 1, 2, and 4 (12, 140, and 23 µg/L, respectively).

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.

The 2014 groundwater monitoring results are generally consistent with the results from prior groundwater monitoring events.

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:

- May 5, 2014 – measured at 1 inch above the weir.
- June 3, 2014 – measured at 5 inches below the weir.

3.4 Landfill gas monitoring

Landfill gas monitoring was conducted on March 12, 2015. 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 any action to be taken.

3.5 Site Inspections

Quarterly site inspections were performed by CH2M HILL on June 3, 2014, August 21, 2014, October 6, 2014, and January 20, 2015 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, or 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 2014/2015 OM&M 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 were developed based on the data collected during the 2014/2015 OM&M period:

- BSA Discharge Monitoring – in accordance with the current BSA permit (Permit No. 12-12-BU98, expires November 30, 2015), 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 2015 from the same monitoring points used during prior monitoring events. Groundwater monitoring results will be reported in the next annual PRR 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.

TABLES

TABLE 1
Summary of Groundwater Analytical Results - 2014
2014/2015 Annual OM&M Report
Alltift Landfill /Ramco Steel Site

Parameter Name	Units	NYSDEC Class GA Standards	MW-2-090914 9/9/2014	Sump 1-090914 9/9/2014	Sump 2-090914 9/9/2014	Sump 3-090914 9/9/2014	Sump 4-100614 10/6/2014	FDUP-100614 (Sump 4) 10/6/2014	Sump Comp-090914 9/9/2014
Metals (Dissolved)									
ANTIMONY	**mg/L**	**0.003**	**0.00016 J**	-- --	-- --	-- --	**0.0015**	**0.00067 J**	**0.0015**
ARSENIC	**mg/L**	**0.025**	**0.0018**	-- --	-- --	-- --	**0.0172**	**0.0142**	**0.0322**
CADMIUM	**mg/L**	**0.005**	**0.00011 J**	-- --	-- --	-- --	**0.00048 J**	**0.0003 J**	**0.00049 J**
CHROMIUM	**mg/L**	**0.05**	**0.001 J**	-- --	-- --	-- --	**0.01**	**0.0042**	**0.0072**
IRON	**mg/L**	**0.3**	**0.1**	-- --	-- --	-- --	**25 B**	**22.3 B**	**34.5**
LEAD	**mg/L**	**0.025**	**0.0042 J**	-- --	-- --	-- --	**0.0052**	0.005 U	**0.0045 J**
MANGANESE	**mg/L**	**0.3**	0.15 B	-- --	-- --	-- --	**2.3**	**2.2**	**2.2 B**
MERCURY	**mg/L**	**0.0007**	0.0002 U	-- --	-- --	-- --	0.0002 U	0.0002 U	0.00020 U
VOCs									
BENZENE	**ug/L**	**1**	1.0 U	1.0 U	**8.0**	4.0 U	4.0 U	4.0 U	-- --
CHLOROBENZENE	**ug/L**	**5**	1.0 U	**12**	**140**	4.0 U	**23**	**30**	-- --
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	10.0 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	**8.1**
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
B - Compound Was Found in the Blank and Sample
U - Analyte not detected
-- - Not Analyzed
E - Analyzed using E624/E625 Method
Shading indicates exceedance of NYSDEC Class GA Standard

Prepared By: VVN 04/20/2015
Checked By: RTB 4/21/2015

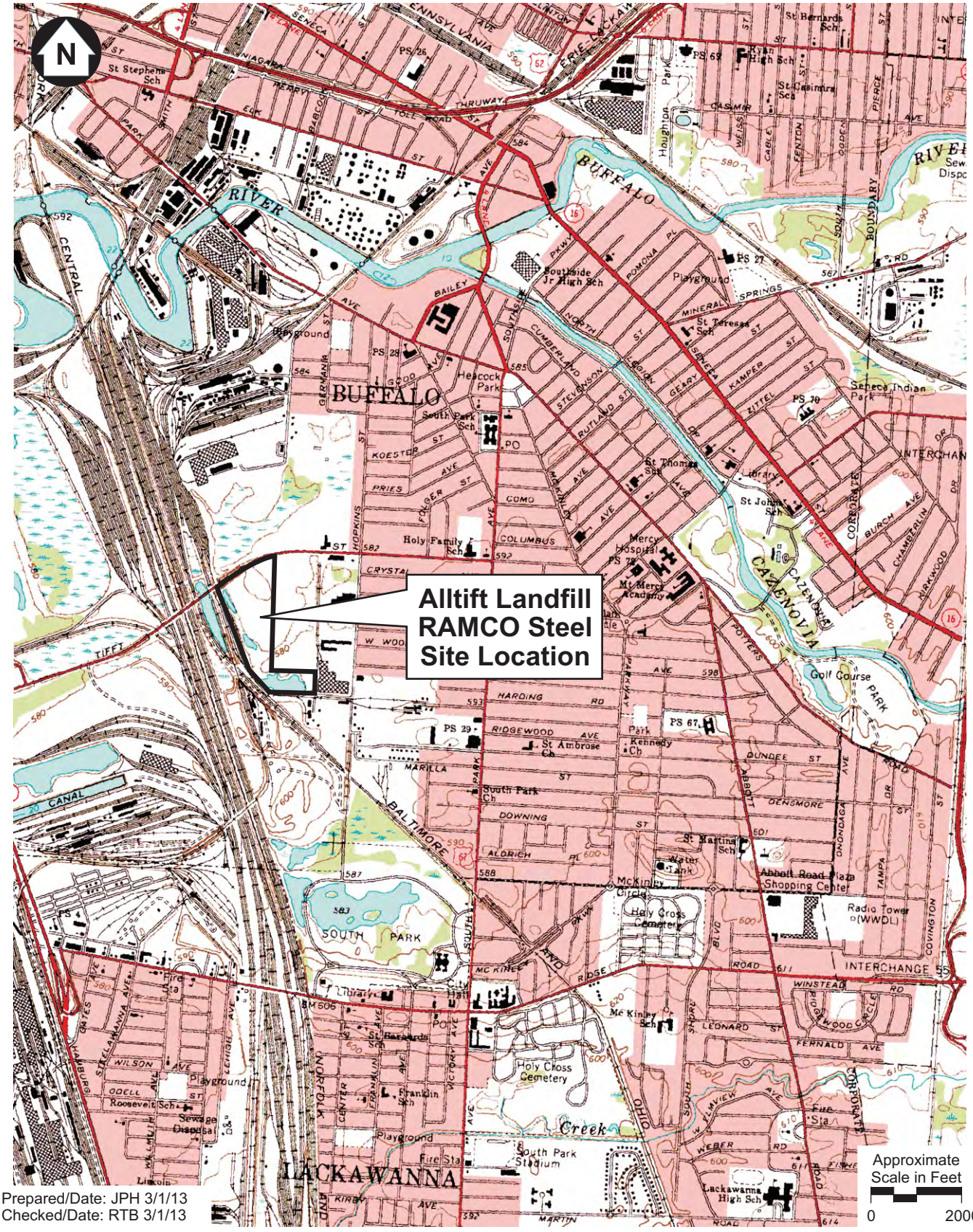
TABLE 2
Landfill Gas Monitoring Data - 2013 through 2015
2014/2015 Annual OM&M Report
Alltift Landfill/Ramco Steel Site

	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			
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**
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%
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%
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%
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%
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%
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%
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%
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%
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%
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%
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%

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

Lift Station

Sump-4

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 HILL OMI
Syracuse Honeywell
1563 Willis Avenue
Syracuse, NY 13204
Tel 315.468.1663
Fax 315.468.1664

CH2MHILL
OMI

April 29, 2014

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
2014 First Semi-Annual Report
Permit Number 12-12-BU098

Dear Ms. Adams:

Enclosed please find the 2014 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 3,344,778 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from September 9, 2013 through April 14, 2014 for a total of 217 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 April 14, 2014. Four samples were collected over an evenly-spaced work day period for VOCs and SVOCs, The four samples were composited in the laboratory per BSA 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 the BSA 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 HILL,

John W. Formoza
Area Manager

QC Review By: Ryan Belcher (Amec Environment & Infrastructure)

cc.: Mr. Rich Galloway (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Dennis Sutton (City of Buffalo)
Mr. Dan Forlastro (Amec Environment & Infrastructure)

Table 1
Alltift Landfill/Ramco Steel Site
First Semi-annual Report for 2014
Discharge Monitoring Report

BSA Permit No. 12-12-BU98	
Sample Date:	April 14, 2014
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	7.55	HF	0.100	SU	7.55	SU	5.0 - 12.0	SU	Yes
Benzene	11	J	50	µg/L	0.0014	lbs/day	0.068	lbs/day	Yes
Chlorobenzene	71		50	µg/L	0.009	lbs/day	0.148	lbs/day	Yes
4-Chloroaniline	11		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	0.0099	J	0.010	mg/L	0.001	lbs/day	0.864	lbs/day	Yes
Barium	0.26		0.002	mg/L	0.03	lbs/day	0.48	lbs/day	Yes
Chromium	0.0075		0.004	mg/L	0.001	lbs/day	2.4	lbs/day	Yes
Copper	0.021		0.010	mg/L	0.003	lbs/day	7.68	lbs/day	Yes
Nickel	0.017		0.010	mg/L	0.0022	lbs/day	6.72	lbs/day	Yes
Zinc	0.0340		0.010	mg/L	0.0044	lbs/day	12	lbs/day	Yes
Total Suspended Solids	28		4.0	mg/L	28.0	mg/L	250	mg/L	Yes
Total Phosphorus	0.081		0.010	mg/L	Monitor Only				
USEPA Test Method 624	ND - 71			µg/L					
USEPA Test Method 625	ND - 11			µg/L					
Total Flow (average)	10.70			gpm	15,414	gpd	57,600	gpd	Yes

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

Flow Calculations	Meter		
Initial Reading (pump station)	965900	9/9/2013	
Final Reading (pump station)	4310678	4/14/2014	
Total Days in Period		217	
Total Flow for Period	**3,344,778**		**gallons**
Average Flow for Period		**10.70**	**gpm**

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	Totalizer Reading (gallons)
9/9/2013	965,900
9/24/2013	966,800
10/4/2013	1,156,700
10/24/2014	1,509,500
11/15/2013	1,852,800
1/15/2014	3,303,900
3/18/2014	3,822,800
3/26/2014	4,003,560
4/14/2014	4,310,678

CERTIFICATION STATEMENT

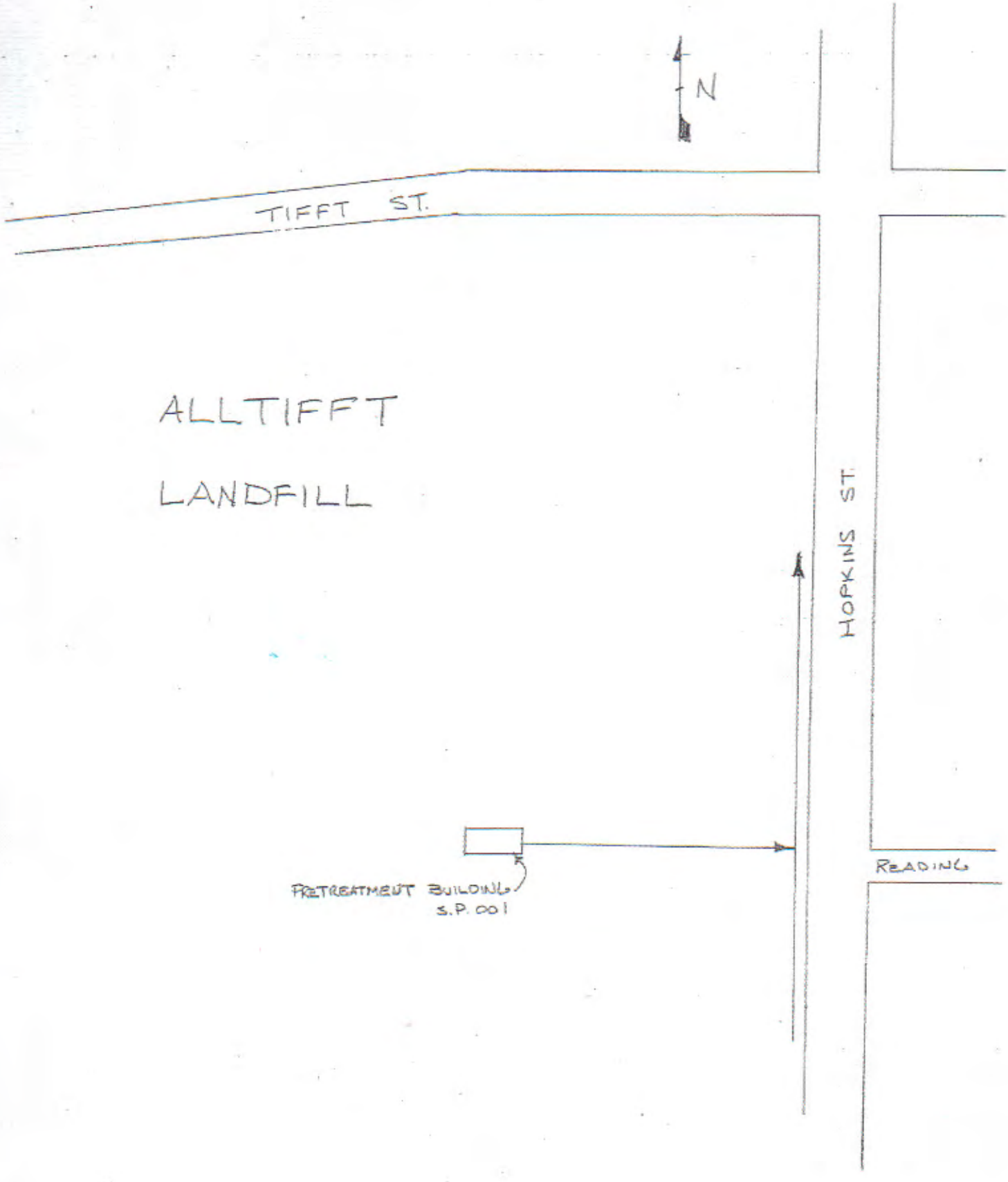
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage 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 4/29/14

JOHN W FORMOZA

(Print your name & title here) Date

(Print your company name here) CH2MHILL ON BEHALF OF HONEYWELL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TIFFT ST.
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LANDFILL
HOPKINS ST.
READING
PRETREATMENT BUILDING
S.P. 001

CH2MHILL

Project Name Honeywell - LCP Syracuse
Job Number 481662.S5.RM.RS
Field Team Patrick Higgins
Field Conditions Partly Cloudy, Breezy 68°F

Sampling Event Semi Annual Sampling AlTiff
Date April 14th, 2014
Page ___ of ___

Well/Sample Number BSA Discharge
Start Time 05:48 Finish Time ___
Initial Depth to Water 9.44 Measure Point: PVC Steel Casing Other: Vault cement

Purge Method:
Geopump Ded. Pump Other GRAB
Sample Method: Pole, Cup, Dipper

Sample ID ___ Sample Time ___
Duplicate Sample ID ___ Dupl. Time ___
Split Sample ID ___ Split. Time ___

Depth to Botton (from meas. pt): 13.0 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
05:50		7.39						9.44
06:00	GRAB 1	Sample		2-VOA				
	GRAB 1	Sample		2-AMBER				
	- Composite	Charboy						
08:00	GRAB 2	Sample		2-VOA				
				2-Amber				
10:00	GRAB 3	Sample		2-AMBER				
				2-VOA				
12:00	GRAB 4	Sample		2 AMBER				
				2 VOA				
12:15	Composite	Sample						

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes

Remarks: ___

Water Meter 4310678

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: 480-57908-1
Client Project/Site: 30130 - Alltift OM Phase / Semi Annual
Sampling Event: Honeywell - Alltift OM Phase (4,10)

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

Attn: Mr. Rich Galloway

Authorized for release by:
4/28/2014 9:30:42 AM
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

Definitions/Glossary

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

TestAmerica Job ID: 480-57908-1

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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD exceeds the 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.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

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
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: 480-57908-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-57908-1

Comments
No additional comments.

Receipt
The samples were received on 4/14/2014 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
Method(s) 624: The following sample(s) was composited by the laboratory on 4/15/14 as requested on the chain-of-custody: Alltift Collection Sump - Grab (480-57908-7).

Method(s) 624: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: Alltift Collection Sump - Grab (480-57908-7). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 625: The laboratory control sample (LCS) for preparation batch 176482 recovered outside control limits for the following analyte: Pyrene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 625: Internal standard responses were outside of acceptance limits for the following sample: Alltift Collection Sump - Grab (480-57908-7). The sample shows evidence of matrix interference. There were no detections for any target analyte associated with the failing internal standard, therefore the data has been reported.

No other analytical or quality issues were noted.

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

General Chemistry
Method(s) 9040C, SM 4500 H+ B: The following sample(s) was received outside of holding time: Alltift Collection Sump - Comp (480-57908-6).

No other analytical or quality issues were noted.

Organic Prep
Method(s) 625: The following sample was composited by the laboratory on 4/17/14 as requested on the chain-of-custody: Alltift Collection Sump - Grab (480-57908-7).

No other analytical or quality issues were noted.

Detection Summary

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Comp — Lab Sample ID: 480-57908-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0099	J	0.010	0.0056	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.26		0.0020	0.00070	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0075		0.0040	0.0010	mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.021		0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.017		0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.034		0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Phosphorus, Total	0.081		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	28.0		4.0	4.0	mg/L	1		SM 2540D	Total/NA
pH	7.55	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Alltift Collection Sump - Grab — Lab Sample ID: 480-57908-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	11	J	50	6.0	ug/L	10		624	Total/NA
Chlorobenzene	71		50	4.8	ug/L	10		624	Total/NA
4-Chloroaniline	11		5.0	0.69	ug/L	1		625	Total/NA
Acenaphthene	0.29	J	5.0	0.060	ug/L	1		625	Total/NA
N-Nitrosodiphenylamine	1.1	J	5.0	0.40	ug/L	1		625	Total/NA

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Comp
Date Collected: 04/14/14 12:15
Date Received: 04/14/14 17:00

Lab Sample ID: 480-57908-6
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0099	J	0.010	0.0056	mg/L		04/16/14 09:10	04/17/14 03:13	1
Barium	0.26		0.0020	0.00070	mg/L		04/16/14 09:10	04/17/14 03:13	1
Chromium	0.0075		0.0040	0.0010	mg/L		04/16/14 09:10	04/17/14 03:13	1
Copper	0.021		0.010	0.0016	mg/L		04/16/14 09:10	04/17/14 03:13	1
Nickel	0.017		0.010	0.0013	mg/L		04/16/14 09:10	04/17/14 03:13	1
Zinc	0.034		0.010	0.0015	mg/L		04/16/14 09:10	04/17/14 03:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	0.081		0.010	0.0050	mg/L			04/23/14 13:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	28.0		4.0	4.0	mg/L			04/15/14 17:45	1
pH	7.55	HF	0.100	0.100	SU			04/15/14 21:05	1

Client Sample ID: Alltift Collection Sump - Grab
Date Collected: 04/14/14 12:00
Date Received: 04/14/14 17:00

Lab Sample ID: 480-57908-7
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			04/15/14 16:17	10
1,1,2,2-Tetrachloroethane	ND		50	2.6	ug/L			04/15/14 16:17	10
1,1,2-Trichloroethane	ND		50	4.8	ug/L			04/15/14 16:17	10
1,1-Dichloroethane	ND		50	5.9	ug/L			04/15/14 16:17	10
1,1-Dichloroethene	ND		50	8.5	ug/L			04/15/14 16:17	10
1,2-Dichlorobenzene	ND		50	4.4	ug/L			04/15/14 16:17	10
1,2-Dichloroethane	ND		50	6.0	ug/L			04/15/14 16:17	10
1,2-Dichloroethene, Total	ND		100	32	ug/L			04/15/14 16:17	10
1,2-Dichloropropane	ND		50	6.1	ug/L			04/15/14 16:17	10
1,3-Dichlorobenzene	ND		50	5.4	ug/L			04/15/14 16:17	10
1,4-Dichlorobenzene	ND		50	5.1	ug/L			04/15/14 16:17	10
2-Chloroethyl vinyl ether	ND		250	19	ug/L			04/15/14 16:17	10
Acrolein	ND		1000	170	ug/L			04/15/14 16:17	10
Acrylonitrile	ND		500	19	ug/L			04/15/14 16:17	10
Benzene	**11**	**J**	50	6.0	ug/L			04/15/14 16:17	10
Bromoform	ND		50	4.7	ug/L			04/15/14 16:17	10
Bromomethane	ND		50	12	ug/L			04/15/14 16:17	10
Carbon tetrachloride	ND		50	5.1	ug/L			04/15/14 16:17	10
Chlorobenzene	**71**		50	4.8	ug/L			04/15/14 16:17	10
Chlorodibromomethane	ND		50	4.1	ug/L			04/15/14 16:17	10
Chloroethane	ND		50	8.7	ug/L			04/15/14 16:17	10
Chloroform	ND		50	5.4	ug/L			04/15/14 16:17	10
Chloromethane	ND		50	6.4	ug/L			04/15/14 16:17	10
cis-1,3-Dichloropropene	ND		50	3.3	ug/L			04/15/14 16:17	10
Dichlorobromomethane	ND		50	5.4	ug/L			04/15/14 16:17	10
Ethylbenzene	ND		50	4.6	ug/L			04/15/14 16:17	10
Methylene Chloride	ND		50	8.1	ug/L			04/15/14 16:17	10
Tetrachloroethene	ND		50	3.4	ug/L			04/15/14 16:17	10
Toluene	ND		50	4.5	ug/L			04/15/14 16:17	10
trans-1,2-Dichloroethene	ND		50	5.9	ug/L			04/15/14 16:17	10
trans-1,3-Dichloropropene	ND		50	4.4	ug/L			04/15/14 16:17	10
Trichloroethene	ND		50	6.0	ug/L			04/15/14 16:17	10
Vinyl chloride	ND		50	7.5	ug/L			04/15/14 16:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*		*04/15/14 16:17*	*10*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*		*04/15/14 16:17*	*10*
Toluene-d8 (Surr)	*85*		*70 - 123*		*04/15/14 16:17*	*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	0.49	ug/L		04/17/14 11:25	04/18/14 17:53	1
1,2-Dichlorobenzene	ND		10	0.15	ug/L		04/17/14 11:25	04/18/14 17:53	1
1,2-Diphenylhydrazine	ND		10	0.063	ug/L		04/17/14 11:25	04/18/14 17:53	1
1,3-Dichlorobenzene	ND		10	0.069	ug/L		04/17/14 11:25	04/18/14 17:53	1
1,4-Dichlorobenzene	ND		10	0.090	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,4,6-Trichlorophenol	ND		5.0	0.23	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,4-Dichlorophenol	ND		5.0	0.30	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,4-Dimethylphenol	ND		5.0	0.13	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,4-Dinitrophenol	ND		10	0.84	ug/L		04/17/14 11:25	04/18/14 17:53	1

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Grab
Date Collected: 04/14/14 12:00
Date Received: 04/14/14 17:00

Lab Sample ID: 480-57908-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.26	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,6-Dinitrotoluene	ND		5.0	0.72	ug/L		04/17/14 11:25	04/18/14 17:53	1
2-Chloronaphthalene	ND		5.0	0.068	ug/L		04/17/14 11:25	04/18/14 17:53	1
2-Chlorophenol	ND		5.0	0.16	ug/L		04/17/14 11:25	04/18/14 17:53	1
2-Nitrophenol	ND		5.0	0.14	ug/L		04/17/14 11:25	04/18/14 17:53	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		04/17/14 11:25	04/18/14 17:53	1
4,6-Dinitro-2-methylphenol	ND		10	0.76	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Bromophenyl phenyl ether	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Chloro-3-methylphenol	ND		5.0	0.56	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Chloroaniline	**11**		5.0	0.69	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Chlorophenyl phenyl ether	ND		5.0	0.21	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Nitrophenol	ND		10	1.3	ug/L		04/17/14 11:25	04/18/14 17:53	1
Acenaphthene	**0.29**	**J**	5.0	0.060	ug/L		04/17/14 11:25	04/18/14 17:53	1
Acenaphthylene	ND		5.0	0.034	ug/L		04/17/14 11:25	04/18/14 17:53	1
Anthracene	ND		5.0	0.052	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzidine	ND		80	2.5	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[a]anthracene	ND		5.0	0.043	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[a]pyrene	ND	*	5.0	0.058	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[b]fluoranthene	ND	*	5.0	0.062	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[g,h,i]perylene	ND	*	5.0	0.10	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[k]fluoranthene	ND	*	5.0	0.042	ug/L		04/17/14 11:25	04/18/14 17:53	1
bis (2-chloroisopropyl) ether	ND		5.0	0.086	ug/L		04/17/14 11:25	04/18/14 17:53	1
Bis(2-chloroethoxy)methane	ND		5.0	0.085	ug/L		04/17/14 11:25	04/18/14 17:53	1
Bis(2-chloroethyl)ether	ND		5.0	1.1	ug/L		04/17/14 11:25	04/18/14 17:53	1
Bis(2-ethylhexyl) phthalate	ND		10	0.86	ug/L		04/17/14 11:25	04/18/14 17:53	1
Butyl benzyl phthalate	ND		5.0	1.3	ug/L		04/17/14 11:25	04/18/14 17:53	1
Chrysene	ND		5.0	0.036	ug/L		04/17/14 11:25	04/18/14 17:53	1
Dibenz(a,h)anthracene	ND	*	5.0	0.055	ug/L		04/17/14 11:25	04/18/14 17:53	1
Diethyl phthalate	ND		5.0	0.17	ug/L		04/17/14 11:25	04/18/14 17:53	1
Dimethyl phthalate	ND		5.0	0.17	ug/L		04/17/14 11:25	04/18/14 17:53	1
Di-n-butyl phthalate	ND		5.0	0.94	ug/L		04/17/14 11:25	04/18/14 17:53	1
Di-n-octyl phthalate	ND		5.0	4.5	ug/L		04/17/14 11:25	04/18/14 17:53	1
Fluoranthene	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 17:53	1
Fluorene	ND		5.0	0.043	ug/L		04/17/14 11:25	04/18/14 17:53	1
Hexachlorobenzene	ND		5.0	0.28	ug/L		04/17/14 11:25	04/18/14 17:53	1
Hexachlorobutadiene	ND		5.0	0.62	ug/L		04/17/14 11:25	04/18/14 17:53	1
Hexachlorocyclopentadiene	ND		5.0	0.45	ug/L		04/17/14 11:25	04/18/14 17:53	1
Hexachloroethane	ND		5.0	0.48	ug/L		04/17/14 11:25	04/18/14 17:53	1
Indeno[1,2,3-cd]pyrene	ND	*	5.0	0.19	ug/L		04/17/14 11:25	04/18/14 17:53	1
Isophorone	ND		5.0	0.16	ug/L		04/17/14 11:25	04/18/14 17:53	1
Naphthalene	ND		5.0	0.080	ug/L		04/17/14 11:25	04/18/14 17:53	1
Nitrobenzene	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 17:53	1
N-Nitrosodimethylamine	ND		10	0.96	ug/L		04/17/14 11:25	04/18/14 17:53	1
N-Nitrosodi-n-propylamine	ND		5.0	0.23	ug/L		04/17/14 11:25	04/18/14 17:53	1
N-Nitrosodiphenylamine	**1.1**	**J**	5.0	0.40	ug/L		04/17/14 11:25	04/18/14 17:53	1
Pentachlorophenol	ND		10	0.41	ug/L		04/17/14 11:25	04/18/14 17:53	1
Phenanthrene	ND		5.0	0.071	ug/L		04/17/14 11:25	04/18/14 17:53	1
Phenol	ND		5.0	0.12	ug/L		04/17/14 11:25	04/18/14 17:53	1
Pyrene	ND	*	5.0	0.041	ug/L		04/17/14 11:25	04/18/14 17:53	1

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Grab
Date Collected: 04/14/14 12:00
Date Received: 04/14/14 17:00

Lab Sample ID: 480-57908-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		52 - 151	04/17/14 11:25	04/18/14 17:53	1
2-Fluorobiphenyl	70		44 - 120	04/17/14 11:25	04/18/14 17:53	1
2-Fluorophenol	37		17 - 120	04/17/14 11:25	04/18/14 17:53	1
Nitrobenzene-d5	66		42 - 120	04/17/14 11:25	04/18/14 17:53	1
Phenol-d5	26		10 - 120	04/17/14 11:25	04/18/14 17:53	1
p-Terphenyl-d14	97		22 - 125	04/17/14 11:25	04/18/14 17:53	1

Surrogate Summary

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

TestAmerica Job ID: 480-57908-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		12DCE	BFB	TOL							
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)							
480-57908-7	Alltift Collection Sump - Grab	92	96	85							
LCS 480-175909/5	Lab Control Sample	86	96	88							
MB 480-175909/6	Method Blank	89	95	87							

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (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)				
480-57908-7	Alltift Collection Sump - Grab	86	70	37	66	26	97				
LCS 480-176482/2-A	Lab Control Sample	95	78	46	79	33	121				
MB 480-176482/1-A	Method Blank	81	80	46	81	33	117				

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 480-175909/6
Matrix: Water
Analysis Batch: 175909

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			04/15/14 14:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			04/15/14 14:48	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			04/15/14 14:48	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			04/15/14 14:48	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			04/15/14 14:48	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			04/15/14 14:48	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			04/15/14 14:48	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			04/15/14 14:48	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			04/15/14 14:48	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			04/15/14 14:48	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			04/15/14 14:48	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			04/15/14 14:48	1
Acrolein	ND		100	17	ug/L			04/15/14 14:48	1
Acrylonitrile	ND		50	1.9	ug/L			04/15/14 14:48	1
Benzene	ND		5.0	0.60	ug/L			04/15/14 14:48	1
Bromoform	ND		5.0	0.47	ug/L			04/15/14 14:48	1
Bromomethane	ND		5.0	1.2	ug/L			04/15/14 14:48	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			04/15/14 14:48	1
Chlorobenzene	ND		5.0	0.48	ug/L			04/15/14 14:48	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			04/15/14 14:48	1
Chloroethane	ND		5.0	0.87	ug/L			04/15/14 14:48	1
Chloroform	ND		5.0	0.54	ug/L			04/15/14 14:48	1
Chloromethane	ND		5.0	0.64	ug/L			04/15/14 14:48	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			04/15/14 14:48	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			04/15/14 14:48	1
Ethylbenzene	ND		5.0	0.46	ug/L			04/15/14 14:48	1
Methylene Chloride	ND		5.0	0.81	ug/L			04/15/14 14:48	1
Tetrachloroethene	ND		5.0	0.34	ug/L			04/15/14 14:48	1
Toluene	ND		5.0	0.45	ug/L			04/15/14 14:48	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			04/15/14 14:48	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			04/15/14 14:48	1
Trichloroethene	ND		5.0	0.60	ug/L			04/15/14 14:48	1
Vinyl chloride	ND		5.0	0.75	ug/L			04/15/14 14:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*		*04/15/14 14:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*69 - 121*		*04/15/14 14:48*	*1*
Toluene-d8 (Surr)	*87*		*70 - 123*		*04/15/14 14:48*	*1*

Lab Sample ID: LCS 480-175909/5
Matrix: Water
Analysis Batch: 175909

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	20.5		ug/L		102	52 - 162
1,1,2,2-Tetrachloroethane	20.0	18.8		ug/L		94	46 - 157
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	52 - 150
1,1-Dichloroethane	20.0	22.2		ug/L		111	59 - 155

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

Lab Sample ID: LCS 480-175909/5
Matrix: Water
Analysis Batch: 175909

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	21.8		ug/L		109	1 - 234
1,2-Dichlorobenzene	20.0	18.7		ug/L		93	18 - 190
1,2-Dichloroethane	20.0	20.7		ug/L		103	49 - 155
1,2-Dichloropropane	20.0	22.1		ug/L		110	1 - 210
1,3-Dichlorobenzene	20.0	19.0		ug/L		95	59 - 156
1,4-Dichlorobenzene	20.0	19.1		ug/L		96	18 - 190
2-Chloroethyl vinyl ether	20.0	21.6	J	ug/L		108	1 - 305
Benzene	20.0	22.2		ug/L		111	37 - 151
Bromoform	20.0	16.0		ug/L		80	45 - 169
Bromomethane	20.0	24.3		ug/L		121	1 - 242
Carbon tetrachloride	20.0	21.1		ug/L		106	70 - 140
Chlorobenzene	20.0	20.4		ug/L		102	37 - 160
Chlorodibromomethane	19.6	17.7		ug/L		90	53 - 149
Chloroethane	20.0	21.4		ug/L		107	14 - 230
Chloroform	20.0	21.7		ug/L		109	51 - 138
Chloromethane	20.0	20.8		ug/L		104	1 - 273
cis-1,3-Dichloropropene	20.0	22.0		ug/L		110	1 - 227
Dichlorobromomethane	20.0	20.5		ug/L		102	35 - 155
Ethylbenzene	20.0	20.6		ug/L		103	37 - 162
Methylene Chloride	20.0	20.5		ug/L		103	1 - 221
Tetrachloroethene	20.0	20.1		ug/L		100	64 - 148
Toluene	20.0	18.9		ug/L		94	47 - 150
trans-1,2-Dichloroethene	20.0	21.7		ug/L		108	54 - 156
trans-1,3-Dichloropropene	20.0	20.0		ug/L		100	17 - 183
Trichloroethene	20.0	22.6		ug/L		113	71 - 157
Vinyl chloride	20.0	21.1		ug/L		106	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*
Toluene-d8 (Surr)	*88*		*70 - 123*

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

Lab Sample ID: MB 480-176482/1-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.49	ug/L		04/17/14 11:25	04/18/14 14:04	1
1,2-Dichlorobenzene	ND		10	0.15	ug/L		04/17/14 11:25	04/18/14 14:04	1
1,2-Diphenylhydrazine	ND		10	0.063	ug/L		04/17/14 11:25	04/18/14 14:04	1
1,3-Dichlorobenzene	ND		10	0.069	ug/L		04/17/14 11:25	04/18/14 14:04	1
1,4-Dichlorobenzene	ND		10	0.090	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,4,6-Trichlorophenol	ND		5.0	0.23	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,4-Dichlorophenol	ND		5.0	0.30	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,4-Dimethylphenol	ND		5.0	0.13	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,4-Dinitrophenol	ND		10	0.84	ug/L		04/17/14 11:25	04/18/14 14:04	1

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

Lab Sample ID: MB 480-176482/1-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.26	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,6-Dinitrotoluene	ND		5.0	0.72	ug/L		04/17/14 11:25	04/18/14 14:04	1
2-Chloronaphthalene	ND		5.0	0.068	ug/L		04/17/14 11:25	04/18/14 14:04	1
2-Chlorophenol	ND		5.0	0.16	ug/L		04/17/14 11:25	04/18/14 14:04	1
2-Nitrophenol	ND		5.0	0.14	ug/L		04/17/14 11:25	04/18/14 14:04	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		04/17/14 11:25	04/18/14 14:04	1
4,6-Dinitro-2-methylphenol	ND		10	0.76	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Bromophenyl phenyl ether	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Chloro-3-methylphenol	ND		5.0	0.56	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Chloroaniline	ND		5.0	0.69	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Chlorophenyl phenyl ether	ND		5.0	0.21	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Nitrophenol	ND		10	1.3	ug/L		04/17/14 11:25	04/18/14 14:04	1
Acenaphthene	ND		5.0	0.060	ug/L		04/17/14 11:25	04/18/14 14:04	1
Acenaphthylene	ND		5.0	0.034	ug/L		04/17/14 11:25	04/18/14 14:04	1
Anthracene	ND		5.0	0.052	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzidine	ND		80	2.5	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[a]anthracene	ND		5.0	0.043	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[a]pyrene	ND		5.0	0.058	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[b]fluoranthene	ND		5.0	0.062	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[g,h,i]perylene	ND		5.0	0.10	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[k]fluoranthene	ND		5.0	0.042	ug/L		04/17/14 11:25	04/18/14 14:04	1
bis (2-chloroisopropyl) ether	ND		5.0	0.086	ug/L		04/17/14 11:25	04/18/14 14:04	1
Bis(2-chloroethoxy)methane	ND		5.0	0.085	ug/L		04/17/14 11:25	04/18/14 14:04	1
Bis(2-chloroethyl)ether	ND		5.0	1.1	ug/L		04/17/14 11:25	04/18/14 14:04	1
Bis(2-ethylhexyl) phthalate	ND		10	0.86	ug/L		04/17/14 11:25	04/18/14 14:04	1
Butyl benzyl phthalate	ND		5.0	1.3	ug/L		04/17/14 11:25	04/18/14 14:04	1
Chrysene	ND		5.0	0.036	ug/L		04/17/14 11:25	04/18/14 14:04	1
Dibenz(a,h)anthracene	ND		5.0	0.055	ug/L		04/17/14 11:25	04/18/14 14:04	1
Diethyl phthalate	ND		5.0	0.17	ug/L		04/17/14 11:25	04/18/14 14:04	1
Dimethyl phthalate	ND		5.0	0.17	ug/L		04/17/14 11:25	04/18/14 14:04	1
Di-n-butyl phthalate	ND		5.0	0.94	ug/L		04/17/14 11:25	04/18/14 14:04	1
Di-n-octyl phthalate	ND		5.0	4.5	ug/L		04/17/14 11:25	04/18/14 14:04	1
Fluoranthene	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 14:04	1
Fluorene	ND		5.0	0.043	ug/L		04/17/14 11:25	04/18/14 14:04	1
Hexachlorobenzene	ND		5.0	0.28	ug/L		04/17/14 11:25	04/18/14 14:04	1
Hexachlorobutadiene	ND		5.0	0.62	ug/L		04/17/14 11:25	04/18/14 14:04	1
Hexachlorocyclopentadiene	ND		5.0	0.45	ug/L		04/17/14 11:25	04/18/14 14:04	1
Hexachloroethane	ND		5.0	0.48	ug/L		04/17/14 11:25	04/18/14 14:04	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.19	ug/L		04/17/14 11:25	04/18/14 14:04	1
Isophorone	ND		5.0	0.16	ug/L		04/17/14 11:25	04/18/14 14:04	1
Naphthalene	ND		5.0	0.080	ug/L		04/17/14 11:25	04/18/14 14:04	1
Nitrobenzene	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 14:04	1
N-Nitrosodimethylamine	ND		10	0.96	ug/L		04/17/14 11:25	04/18/14 14:04	1
N-Nitrosodi-n-propylamine	ND		5.0	0.23	ug/L		04/17/14 11:25	04/18/14 14:04	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		04/17/14 11:25	04/18/14 14:04	1
Pentachlorophenol	ND		10	0.41	ug/L		04/17/14 11:25	04/18/14 14:04	1
Phenanthrene	ND		5.0	0.071	ug/L		04/17/14 11:25	04/18/14 14:04	1
Phenol	ND		5.0	0.12	ug/L		04/17/14 11:25	04/18/14 14:04	1

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

Lab Sample ID: MB 480-176482/1-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.0	0.041	ug/L		04/17/14 11:25	04/18/14 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*52 - 151*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
2-Fluorobiphenyl	*80*		*44 - 120*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
2-Fluorophenol	*46*		*17 - 120*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
Nitrobenzene-d5	*81*		*42 - 120*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
Phenol-d5	*33*		*10 - 120*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
p-Terphenyl-d14	*117*		*22 - 125*	*04/17/14 11:25*	*04/18/14 14:04*	*1*

Lab Sample ID: LCS 480-176482/2-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176482

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	70.5		ug/L		71	44 - 142
1,2-Dichlorobenzene	100	66.3		ug/L		66	32 - 129
1,3-Dichlorobenzene	100	62.7		ug/L		63	1 - 172
1,4-Dichlorobenzene	100	64.4		ug/L		64	20 - 124
2,4,6-Trichlorophenol	100	88.6		ug/L		89	37 - 144
2,4-Dichlorophenol	100	86.6		ug/L		87	39 - 135
2,4-Dimethylphenol	100	86.7		ug/L		87	32 - 119
2,4-Dinitrophenol	200	194		ug/L		97	1 - 191
2,4-Dinitrotoluene	100	97.4		ug/L		97	39 - 139
2,6-Dinitrotoluene	100	93.4		ug/L		93	50 - 158
2-Chloronaphthalene	100	82.3		ug/L		82	60 - 118
2-Chlorophenol	100	78.5		ug/L		79	23 - 134
2-Nitrophenol	100	85.4		ug/L		85	29 - 182
3,3'-Dichlorobenzidine	100	64.3		ug/L		64	1 - 262
4,6-Dinitro-2-methylphenol	200	231		ug/L		116	1 - 181
4-Bromophenyl phenyl ether	100	91.7		ug/L		92	53 - 127
4-Chloro-3-methylphenol	100	92.6		ug/L		93	22 - 147
4-Chlorophenyl phenyl ether	100	85.7		ug/L		86	25 - 158
4-Nitrophenol	200	102		ug/L		51	1 - 132
Acenaphthene	100	86.3		ug/L		86	47 - 145
Acenaphthylene	100	81.3		ug/L		81	33 - 145
Anthracene	100	98.3		ug/L		98	27 - 133
Benzo[a]anthracene	100	105		ug/L		105	33 - 143
Benzo[a]pyrene	100	107		ug/L		107	17 - 163
Benzo[b]fluoranthene	100	97.3		ug/L		97	24 - 159
Benzo[g,h,i]perylene	100	114		ug/L		114	1 - 219
Benzo[k]fluoranthene	100	104		ug/L		104	11 - 162
bis (2-chloroisopropyl) ether	100	81.2		ug/L		81	36 - 166
Bis(2-chloroethoxy)methane	100	84.0		ug/L		84	33 - 184
Bis(2-chloroethyl)ether	100	78.9		ug/L		79	12 - 158
Bis(2-ethylhexyl) phthalate	100	110		ug/L		110	8 - 158
Butyl benzyl phthalate	100	115		ug/L		115	1 - 152
Chrysene	100	109		ug/L		109	17 - 168

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

Lab Sample ID: LCS 480-176482/2-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176482

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	100	110		ug/L		110	1 - 227
Diethyl phthalate	100	98.2		ug/L		98	1 - 114
Dimethyl phthalate	100	92.1		ug/L		92	1 - 112
Di-n-butyl phthalate	100	101		ug/L		101	1 - 118
Di-n-octyl phthalate	100	96.6		ug/L		97	4 - 146
Fluoranthene	100	102		ug/L		102	26 - 137
Fluorene	100	87.7		ug/L		88	59 - 121
Hexachlorobenzene	100	91.4		ug/L		91	1 - 152
Hexachlorocyclopentadiene	100	43.5		ug/L		44	5 - 120
Hexachloroethane	100	61.5		ug/L		62	40 - 113
Indeno[1,2,3-cd]pyrene	100	100		ug/L		100	1 - 171
Isophorone	100	85.4		ug/L		85	21 - 196
Naphthalene	100	79.6		ug/L		80	21 - 133
Nitrobenzene	100	82.5		ug/L		83	35 - 180
N-Nitrosodi-n-propylamine	100	84.4		ug/L		84	1 - 230
N-Nitrosodiphenylamine	100	96.4		ug/L		96	54 - 125
Pentachlorophenol	200	202		ug/L		101	14 - 176
Phenanthrene	100	97.4		ug/L		97	54 - 120
Phenol	100	38.2		ug/L		38	5 - 112
Pyrene	100	119	*	ug/L		119	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*95*		*52 - 151*
2-Fluorobiphenyl	*78*		*44 - 120*
2-Fluorophenol	*46*		*17 - 120*
Nitrobenzene-d5	*79*		*42 - 120*
Phenol-d5	*33*		*10 - 120*
p-Terphenyl-d14	*121*		*22 - 125*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-176065/1-A
Matrix: Water
Analysis Batch: 176375

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176065

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		04/16/14 09:10	04/17/14 02:25	1
Barium	ND		0.0020	0.00070	mg/L		04/16/14 09:10	04/17/14 02:25	1
Chromium	ND		0.0040	0.0010	mg/L		04/16/14 09:10	04/17/14 02:25	1
Copper	ND		0.010	0.0016	mg/L		04/16/14 09:10	04/17/14 02:25	1
Nickel	ND		0.010	0.0013	mg/L		04/16/14 09:10	04/17/14 02:25	1
Zinc	ND		0.010	0.0015	mg/L		04/16/14 09:10	04/17/14 02:25	1

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

Lab Sample ID: LCS 480-176065/2-A
Matrix: Water
Analysis Batch: 176375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.213		mg/L		107	85 - 115
Barium	0.200	0.212		mg/L		106	85 - 115
Chromium	0.200	0.205		mg/L		103	85 - 115
Copper	0.200	0.204		mg/L		102	85 - 115
Nickel	0.200	0.202		mg/L		101	85 - 115
Zinc	0.200	0.207		mg/L		103	85 - 115

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

Lab Sample ID: MB 480-175929/1
Matrix: Water
Analysis Batch: 175929

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			04/15/14 17:07	1

Lab Sample ID: LCS 480-175929/2
Matrix: Water
Analysis Batch: 175929

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	225	207.6		mg/L		92	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-176036/1
Matrix: Water
Analysis Batch: 176036

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	6.990		SU		100	99 - 101

Lab Sample ID: 480-57908-6 DU
Matrix: Water
Analysis Batch: 176036

Client Sample ID: Alltift Collection Sump - Comp
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.55	HF	7.560		SU		0.1	5

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 480-177841/27
Matrix: Water
Analysis Batch: 177841

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			04/23/14 13:22	1

Method: SM 4500 P E - Phosphorus (Continued)

Lab Sample ID: MB 480-177841/75
Matrix: Water
Analysis Batch: 177841

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			04/23/14 13:22	1

Lab Sample ID: LCS 480-177841/28
Matrix: Water
Analysis Batch: 177841

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	0.208		mg/L		104	90 - 110

Lab Sample ID: LCS 480-177841/76
Matrix: Water
Analysis Batch: 177841

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	0.190		mg/L		95	90 - 110

GC/MS VOA

Analysis Batch: 175909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-7	Alltift Collection Sump - Grab	Total/NA	Water	624	
LCS 480-175909/5	Lab Control Sample	Total/NA	Water	624	
MB 480-175909/6	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 176482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-7	Alltift Collection Sump - Grab	Total/NA	Water	625	
LCS 480-176482/2-A	Lab Control Sample	Total/NA	Water	625	
MB 480-176482/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 176761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-7	Alltift Collection Sump - Grab	Total/NA	Water	625	176482
LCS 480-176482/2-A	Lab Control Sample	Total/NA	Water	625	176482
MB 480-176482/1-A	Method Blank	Total/NA	Water	625	176482

Metals

Prep Batch: 176065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	200.7	
LCS 480-176065/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-176065/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 176375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	200.7 Rev 4.4	176065
LCS 480-176065/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	176065
MB 480-176065/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	176065

General Chemistry

Analysis Batch: 175929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	SM 2540D	
LCS 480-175929/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-175929/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 176036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 H+ B	
480-57908-6 DU	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 H+ B	
LCS 480-176036/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 177841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 P E	
LCS 480-177841/28	Lab Control Sample	Total/NA	Water	SM 4500 P E	

General Chemistry (Continued)

Analysis Batch: 177841 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-177841/76	Lab Control Sample	Total/NA	Water	SM 4500 P E	
MB 480-177841/27	Method Blank	Total/NA	Water	SM 4500 P E	
MB 480-177841/75	Method Blank	Total/NA	Water	SM 4500 P E	

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Comp

Lab Sample ID: 480-57908-6

Date Collected: 04/14/14 12:15

Matrix: Water

Date Received: 04/14/14 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			176065	04/16/14 09:10	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	176375	04/17/14 03:13	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	175929	04/15/14 17:45	KS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	176036	04/15/14 21:05	KS	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	177841	04/23/14 13:22	KMF	TAL BUF

Client Sample ID: Alltift Collection Sump - Grab

Lab Sample ID: 480-57908-7

Date Collected: 04/14/14 12:00

Matrix: Water

Date Received: 04/14/14 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		10	175909	04/15/14 16:17	TRB	TAL BUF
Total/NA	Prep	625			176482	04/17/14 11:25	MCZ	TAL BUF
Total/NA	Analysis	625		1	176761	04/18/14 17:53	ANM	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: 480-57908-1

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	03-31-15

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: 480-57908-1

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: 480-57908-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-57908-6	Alltift Collection Sump - Comp	Water	04/14/14 12:15	04/14/14 17:00
480-57908-7	Alltift Collection Sump - Grab	Water	04/14/14 12:00	04/14/14 17:00

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-57908 Chain of Custody

Client Information

Client Contact: John Formoza	Sampler: Patrick Higgins
Company: Honeywell International Inc	Phone: 315-468-1663
Address: 1563 Willis Ave.	Due Date Requested:
City: Syracuse	TAT Requested (days): 2 Weeks
State, Zip: NY, 13204	PO #: 4500073922
Phone: 315-468-1663	WO #:
Email: john.formoza@ch2m.com	Project #: 48003159
Project Name: Honeywell - Alltift OM phase / Semi Annual	SSOW#:
Site: Honeywell - Buffalo Sites	

Carrier Tracking No(s):

COC No: 480-21387-2026.1

Page: Page 1 of 1

Job #:

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_5ml - 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	4/14/14	0600	G	W	N	N					2	2	4	Prior to analysis grab samples to be composited by lab
BSA Discharge	GRAB 2	4/14/14	0800	G	W	N	N					2	2	4	
BSA Discharge	GRAB 3	4/14/14	1000	G	W	N	N					2	2	4	
BSA Discharge	GRAB 4	4/14/14	1200	G	W	N	N					2	2	4	
BSA Discharge	COMP	4/14/14	1215	C	W	N	N	1	1	1	1			4	
TRIPBLANK	-TB	4/14/14	12:15		W	N	N							0	TRIB 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:

	Date/Time	Company		Date/Time	Company
Relinquished by: Patrick Higgins	4/14/2014 17:00		Received by:	4/14/14 1700	TA Buff
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 2.7

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-57908-1

Login Number: 57908

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

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 comp 624/625 volume
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	True	Ok

CH2M HILL OMI
Syracuse Honeywell
1563 Willis Avenue
Syracuse, NY 13204
Tel 315.468.1663
Fax 315.468.1664

CH2MHILL
OMI

October 28, 2014

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
2014 Second Semi-Annual Report
BPDES Permit Number 12-12-BU098

Dear Ms. Adams:

Enclosed please find the 2014 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 1,661,064 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from April 14, 2014 through September 9, 2014 for a total of 148 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 September 9, 2014. 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 HILL,

John W. Formoza
Area Manager

QC Review By: Ryan Belcher (Amec Environment & Infrastructure)

cc.: Mr. Mark Sweitzer (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Dennis Sutton (City of Buffalo)
Mr. Dan Forlastro (Amec Environment & Infrastructure)

Table 1
Alltift Landfill/Ramco Steel Site
Second Semi-annual Report for 2014
Discharge Monitoring Report

BSA Permit No. 12-12-BU98	
Sample Date:	September 9, 2014
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	7.28		0.100	SU	7.28	SU	5.0 - 12.0	SU	Yes
Benzene	ND		50	µg/L	ND	lbs/day	0.068	lbs/day	Yes
Chlorobenzene	70		50	µg/L	0.007	lbs/day	0.148	lbs/day	Yes
4-Chloroaniline	24		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	0.018		0.010	mg/L	0.002	lbs/day	0.864	lbs/day	Yes
Barium	0.24		0.002	mg/L	0.02	lbs/day	0.48	lbs/day	Yes
Chromium	0.0044		0.004	mg/L	0.000	lbs/day	2.4	lbs/day	Yes
Copper	0.0066	J	0.010	mg/L	0.001	lbs/day	7.68	lbs/day	Yes
Nickel	0.013		0.010	mg/L	0.0012	lbs/day	6.72	lbs/day	Yes
Zinc	0.0055	J	0.010	mg/L	0.0005	lbs/day	12	lbs/day	Yes
Total Suspended Solids	53.2		4.0	mg/L	53.2	mg/L	250	mg/L	Yes
Total Phosphorus	0.077		0.010	mg/L	Monitor Only				
USEPA Test Method 624	ND-70			µg/L					
USEPA Test Method 625	ND-24			µg/L					
Total Flow (average)	7.79			gpm	11,223	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)	4310678	4/14/2014	
Final Reading (pump station)	5971742	9/9/2014	
Total Days in Period		148	
Total Flow for Period	**1,661,064**		**gallons**
Average Flow for Period		**7.79**	**gpm**

Prepared by, Date: Poornima R, 10/24/2014
Checked by, Date: Ryan Belcher, 10/27/2014

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	Totalizer Reading (gallons)
5/5/2014	4,727,561
6/3/2014	5,019,428
6/26/2014	5,308,886
7/24/2014	5,545,600
8/13/2014	5,667,690
8/20/2014	5,763,644
9/9/2015	5,971,742


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

Project Name Honeywell - Buffalo
Job Number 481662.S5.RM.RS
Field Team Patrick Higgins/Mike Stout
Field Conditions Sunny Nice day 70°F

Sampling Event Semi Annual Sampling AlTiff
Date September 9th, 2014
Page 1 of ___

Well/Sample Number BSA Discharge
Start Time 07:15 Finish Time 14:00
Initial Depth to Water 9.60 Measure Point: PVC Steel Casing Other: Vault Concrete

Purge Method:
Geopump Ded. Pump (Other) Whale Pump
Sample Method:

Sample ID
Duplicate Sample ID
Split Sample ID

Sample Time
Dupl. Time
Split. Time

Depth to Botton (from meas. pt): ___ Min. Purge Volume (gal)/(L) ___ Purge Rate (gpm)/(mLpm) .25

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
07:20	1.0							
07:30	GRAB	1 Sampled		2 VOA	2 Amber	@ 07:30		
09:30	GRAB	2 Sampled		2 VOA	2 Amber	@ 09:30		
11:30	GRAB	3 Sampled		2 VOA	2 Amber	@ 11:30		
13:30	GRAB	4 Sampled		2 VOA	2 Amber	@ 13:30		
13:45	Sump Composite Sampled							

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
	Amber	1 Ltr	N	—		priority pollutant
	VOA	40ml	N	HCl		priority pollutant
	Plastic	250ml	N	Sulfuric		4500 PE Total
	Plastic	250ml	N	HNO_3		metals
PA		125ml	1			
TSS		500ml				

Remarks: Water is turbid orange in color with no distinct odor
Flowmeter @ 05955630 @ 07:20

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 10/28/2014

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

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

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: 480-66924-1
Client Project/Site: 30130 - Alltift OM Phase / Semi Annual
Sampling Event: Honeywell - Alltift OM Phase (4,10)

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

Attn: Mr. Rich Galloway

Authorized for release by:
9/23/2014 3:56:41 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.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
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: 480-66924-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-66924-1

Comments
No additional comments.

Receipt
The samples were received on 9/9/2014 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8º 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: Alltift Collection Sump - Grab 1-4 (480-66924-2 MS), Alltift Collection Sump - Grab 1-4 (480-66924-2), Alltift Collection Sump - Grab 1-4 (480-66924-2 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 624: The following samples were composited by the laboratory on 09/09/14 as requested on the chain-of-custody: Alltift Collection Sump - Grab 1-4 (480-66924-2), Alltift Collection Sump - Grab 1-4 (480-66924-2 MS), Alltift Collection Sump - Grab 1-4 (480-66924-2 MSD).

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 and the laboratory control sample duplicate (LCS/LCSD) for batch 118075 recovered outside control limits for the following analyte(s): 2-Chloronaphalene. 2-Chloronaphthalene has been identified as a poor performing analyte 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) 9040C, SM 4500 H+ B: The following sample(s) was received outside of holding time: Alltift Collection Sump - Comp (480-66924-1).

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 batch 118075. comp. 480-66924-2

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: 480-66924-1

Client Sample ID: Alltift Collection Sump - Comp — Lab Sample ID: 480-66924-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.018		0.010	0.0056	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.24		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	0.0066	J	0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.013		0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0055	J	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Phosphorus, Total	0.077		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	53.2		4.0	4.0	mg/L	1		SM 2540D	Total/NA
pH	7.28	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Alltift Collection Sump - Grab 1-4 — Lab Sample ID: 480-66924-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	70		50	4.8	ug/L	10		624	Total/NA
Vinyl chloride	9.6	J	50	7.5	ug/L	10		624	Total/NA
4-Chloroaniline	24		5.0	0.89	ug/L	1		625	Total/NA
Butyl benzyl phthalate	1.5	J	5.0	1.4	ug/L	1		625	Total/NA
Di-n-butyl phthalate	1.5	J	5.0	1.2	ug/L	1		625	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-66924-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Comp
Date Collected: 09/09/14 13:45
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-1
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.018		0.010	0.0056	mg/L		09/10/14 10:54	09/12/14 18:41	1
Barium	0.24		0.0020	0.00070	mg/L		09/10/14 10:54	09/12/14 18:41	1
Chromium	0.0044		0.0040	0.0010	mg/L		09/10/14 10:54	09/12/14 18:41	1
Copper	0.0066	J	0.010	0.0016	mg/L		09/10/14 10:54	09/12/14 18:41	1
Nickel	0.013		0.010	0.0013	mg/L		09/10/14 10:54	09/12/14 18:41	1
Zinc	0.0055	J	0.010	0.0015	mg/L		09/10/14 10:54	09/12/14 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	0.077		0.010	0.0050	mg/L			09/17/14 09:27	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	53.2		4.0	4.0	mg/L			09/11/14 09:52	1
pH	7.28	HF	0.100	0.100	SU			09/10/14 01:36	1

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Grab 1-4
Date Collected: 09/09/14 13:30
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-2
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			09/10/14 10:20	10
1,1,2,2-Tetrachloroethane	ND		50	2.6	ug/L			09/10/14 10:20	10
1,1,2-Trichloroethane	ND		50	4.8	ug/L			09/10/14 10:20	10
1,1-Dichloroethane	ND		50	5.9	ug/L			09/10/14 10:20	10
1,1-Dichloroethene	ND		50	8.5	ug/L			09/10/14 10:20	10
1,2-Dichlorobenzene	ND		50	4.4	ug/L			09/10/14 10:20	10
1,2-Dichloroethane	ND		50	6.0	ug/L			09/10/14 10:20	10
1,2-Dichloroethene, Total	ND		100	32	ug/L			09/10/14 10:20	10
1,2-Dichloropropane	ND		50	6.1	ug/L			09/10/14 10:20	10
1,3-Dichlorobenzene	ND		50	5.4	ug/L			09/10/14 10:20	10
1,4-Dichlorobenzene	ND		50	5.1	ug/L			09/10/14 10:20	10
2-Chloroethyl vinyl ether	ND		250	19	ug/L			09/10/14 10:20	10
Acrolein	ND		1000	170	ug/L			09/10/14 10:20	10
Acrylonitrile	ND		500	19	ug/L			09/10/14 10:20	10
Benzene	ND		50	6.0	ug/L			09/10/14 10:20	10
Bromoform	ND		50	4.7	ug/L			09/10/14 10:20	10
Bromomethane	ND		50	12	ug/L			09/10/14 10:20	10
Carbon tetrachloride	ND		50	5.1	ug/L			09/10/14 10:20	10
Chlorobenzene	**70**		50	4.8	ug/L			09/10/14 10:20	10
Chlorodibromomethane	ND		50	4.1	ug/L			09/10/14 10:20	10
Chloroethane	ND		50	8.7	ug/L			09/10/14 10:20	10
Chloroform	ND		50	5.4	ug/L			09/10/14 10:20	10
Chloromethane	ND		50	6.4	ug/L			09/10/14 10:20	10
cis-1,3-Dichloropropene	ND		50	3.3	ug/L			09/10/14 10:20	10
Dichlorobromomethane	ND		50	5.4	ug/L			09/10/14 10:20	10
Ethylbenzene	ND		50	4.6	ug/L			09/10/14 10:20	10
Methylene Chloride	ND		50	8.1	ug/L			09/10/14 10:20	10
Tetrachloroethene	ND		50	3.4	ug/L			09/10/14 10:20	10
Toluene	ND		50	4.5	ug/L			09/10/14 10:20	10
trans-1,2-Dichloroethene	ND		50	5.9	ug/L			09/10/14 10:20	10
trans-1,3-Dichloropropene	ND		50	4.4	ug/L			09/10/14 10:20	10
Trichloroethene	ND		50	6.0	ug/L			09/10/14 10:20	10
Vinyl chloride	**9.6**	**J**	50	7.5	ug/L			09/10/14 10:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 130*		*09/10/14 10:20*	*10*
4-Bromofluorobenzene (Surr)	*100*		*69 - 121*		*09/10/14 10:20*	*10*
Toluene-d8 (Surr)	*98*		*70 - 123*		*09/10/14 10:20*	*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	0.71	ug/L		09/15/14 14:06	09/19/14 01:08	1
1,2-Dichlorobenzene	ND		10	0.75	ug/L		09/15/14 14:06	09/19/14 01:08	1
1,2-Diphenylhydrazine	ND		10	0.66	ug/L		09/15/14 14:06	09/19/14 01:08	1
1,3-Dichlorobenzene	ND		10	0.74	ug/L		09/15/14 14:06	09/19/14 01:08	1
1,4-Dichlorobenzene	ND		10	0.74	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,4,6-Trichlorophenol	ND		5.0	1.7	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,4-Dichlorophenol	ND		5.0	0.33	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,4-Dimethylphenol	ND		5.0	0.85	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,4-Dinitrophenol	ND		10	6.1	ug/L		09/15/14 14:06	09/19/14 01:08	1

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Grab 1-4
Date Collected: 09/09/14 13:30
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.54	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,6-Dinitrotoluene	ND		5.0	0.80	ug/L		09/15/14 14:06	09/19/14 01:08	1
2-Chloronaphthalene	ND	*	5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
2-Chlorophenol	ND		5.0	1.7	ug/L		09/15/14 14:06	09/19/14 01:08	1
2-Nitrophenol	ND		5.0	1.7	ug/L		09/15/14 14:06	09/19/14 01:08	1
3,3'-Dichlorobenzidine	ND		5.0	1.1	ug/L		09/15/14 14:06	09/19/14 01:08	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Bromophenyl phenyl ether	ND		5.0	0.64	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Chloro-3-methylphenol	ND		5.0	0.75	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Chloroaniline	**24**		5.0	0.89	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Chlorophenyl phenyl ether	ND		5.0	0.50	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Nitrophenol	ND		10	6.5	ug/L		09/15/14 14:06	09/19/14 01:08	1
Acenaphthene	ND		5.0	0.14	ug/L		09/15/14 14:06	09/19/14 01:08	1
Acenaphthylene	ND		5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
Anthracene	ND		5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzidine	ND		80	35	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[a]anthracene	ND		5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[a]pyrene	ND		5.0	0.13	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[b]fluoranthene	ND		5.0	0.16	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[g,h,i]perylene	ND		5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[k]fluoranthene	ND		5.0	0.55	ug/L		09/15/14 14:06	09/19/14 01:08	1
bis (2-chloroisopropyl) ether	ND		5.0	0.20	ug/L		09/15/14 14:06	09/19/14 01:08	1
Bis(2-chloroethoxy)methane	ND		5.0	0.58	ug/L		09/15/14 14:06	09/19/14 01:08	1
Bis(2-chloroethyl)ether	ND		5.0	0.25	ug/L		09/15/14 14:06	09/19/14 01:08	1
Bis(2-ethylhexyl) phthalate	ND		13	13	ug/L		09/15/14 14:06	09/19/14 01:08	1
Butyl benzyl phthalate	**1.5**	**J**	5.0	1.4	ug/L		09/15/14 14:06	09/19/14 01:08	1
Chrysene	ND		5.0	0.14	ug/L		09/15/14 14:06	09/19/14 01:08	1
Dibenz(a,h)anthracene	ND		5.0	0.16	ug/L		09/15/14 14:06	09/19/14 01:08	1
Diethyl phthalate	ND		5.0	1.5	ug/L		09/15/14 14:06	09/19/14 01:08	1
Dimethyl phthalate	ND		5.0	0.77	ug/L		09/15/14 14:06	09/19/14 01:08	1
Di-n-butyl phthalate	**1.5**	**J**	5.0	1.2	ug/L		09/15/14 14:06	09/19/14 01:08	1
Di-n-octyl phthalate	ND		5.0	2.1	ug/L		09/15/14 14:06	09/19/14 01:08	1
Fluoranthene	ND		5.0	0.16	ug/L		09/15/14 14:06	09/19/14 01:08	1
Fluorene	ND		5.0	0.22	ug/L		09/15/14 14:06	09/19/14 01:08	1
Hexachlorobenzene	ND		5.0	0.18	ug/L		09/15/14 14:06	09/19/14 01:08	1
Hexachlorobutadiene	ND		5.0	0.17	ug/L		09/15/14 14:06	09/19/14 01:08	1
Hexachlorocyclopentadiene	ND		5.0	0.52	ug/L		09/15/14 14:06	09/19/14 01:08	1
Hexachloroethane	ND		5.0	0.63	ug/L		09/15/14 14:06	09/19/14 01:08	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.20	ug/L		09/15/14 14:06	09/19/14 01:08	1
Isophorone	ND		5.0	0.64	ug/L		09/15/14 14:06	09/19/14 01:08	1
Naphthalene	ND		5.0	0.14	ug/L		09/15/14 14:06	09/19/14 01:08	1
Nitrobenzene	ND		5.0	0.84	ug/L		09/15/14 14:06	09/19/14 01:08	1
N-Nitrosodimethylamine	ND		10	0.74	ug/L		09/15/14 14:06	09/19/14 01:08	1
N-Nitrosodi-n-propylamine	ND		5.0	0.31	ug/L		09/15/14 14:06	09/19/14 01:08	1
N-Nitrosodiphenylamine	ND		5.0	0.85	ug/L		09/15/14 14:06	09/19/14 01:08	1
Pentachlorophenol	ND		10	0.66	ug/L		09/15/14 14:06	09/19/14 01:08	1
Phenanthrene	ND		5.0	0.43	ug/L		09/15/14 14:06	09/19/14 01:08	1
Phenol	ND		5.0	0.58	ug/L		09/15/14 14:06	09/19/14 01:08	1
Pyrene	ND		5.0	0.16	ug/L		09/15/14 14:06	09/19/14 01:08	1

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Grab 1-4
Date Collected: 09/09/14 13:30
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	60		21 - 122	09/15/14 14:06	09/19/14 01:08	1
2-Fluorobiphenyl	52		30 - 110	09/15/14 14:06	09/19/14 01:08	1
2-Fluorophenol	49		31 - 104	09/15/14 14:06	09/19/14 01:08	1
Nitrobenzene-d5	51		32 - 112	09/15/14 14:06	09/19/14 01:08	1
Phenol-d5	54		30 - 117	09/15/14 14:06	09/19/14 01:08	1
Terphenyl-d14	36		21 - 121	09/15/14 14:06	09/19/14 01:08	1

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: TRIP BLANK
Date Collected: 09/09/14 00:00
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-3
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			09/10/14 10:45	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			09/10/14 10:45	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			09/10/14 10:45	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/10/14 10:45	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			09/10/14 10:45	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			09/10/14 10:45	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			09/10/14 10:45	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			09/10/14 10:45	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			09/10/14 10:45	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			09/10/14 10:45	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			09/10/14 10:45	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			09/10/14 10:45	1
Acrolein	ND		100	17	ug/L			09/10/14 10:45	1
Acrylonitrile	ND		50	1.9	ug/L			09/10/14 10:45	1
Benzene	ND		5.0	0.60	ug/L			09/10/14 10:45	1
Bromoform	ND		5.0	0.47	ug/L			09/10/14 10:45	1
Bromomethane	ND		5.0	1.2	ug/L			09/10/14 10:45	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			09/10/14 10:45	1
Chlorobenzene	ND		5.0	0.48	ug/L			09/10/14 10:45	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			09/10/14 10:45	1
Chloroethane	ND		5.0	0.87	ug/L			09/10/14 10:45	1
Chloroform	ND		5.0	0.54	ug/L			09/10/14 10:45	1
Chloromethane	ND		5.0	0.64	ug/L			09/10/14 10:45	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			09/10/14 10:45	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			09/10/14 10:45	1
Ethylbenzene	ND		5.0	0.46	ug/L			09/10/14 10:45	1
Methylene Chloride	ND		5.0	0.81	ug/L			09/10/14 10:45	1
Tetrachloroethene	ND		5.0	0.34	ug/L			09/10/14 10:45	1
Toluene	ND		5.0	0.45	ug/L			09/10/14 10:45	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			09/10/14 10:45	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			09/10/14 10:45	1
Trichloroethene	ND		5.0	0.60	ug/L			09/10/14 10:45	1
Vinyl chloride	ND		5.0	0.75	ug/L			09/10/14 10:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*72 - 130*		*09/10/14 10:45*	*1*
4-Bromofluorobenzene (Surr)	*100*		*69 - 121*		*09/10/14 10:45*	*1*
Toluene-d8 (Surr)	*98*		*70 - 123*		*09/10/14 10:45*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-66924-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)
480-66924-2	Alltift Collection Sump - Grab 1-4	115	100	98
480-66924-2 MS	Alltift Collection Sump - Grab 1-4	116	102	99
480-66924-2 MSD	Alltift Collection Sump - Grab 1-4	107	102	99
480-66924-3	TRIP BLANK	117	100	98
LCS 480-201524/13	Lab Control Sample	106	100	101
MB 480-201524/15	Method Blank	112	98	103

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (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	(21-122)	(30-110)	(31-104)	(32-112)	(30-117)	(21-121)
480-66924-2	Alltift Collection Sump - Grab 1-4	60	52	49	51	54	36
LCS 180-118075/2-A	Lab Control Sample	61	58	51	55	60	66
LCSD 180-118075/3-A	Lab Control Sample Dup	66	56	52	54	58	68
MB 180-118075/1-A	Method Blank	51	59	62	60	60	69

Surrogate Legend

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

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

Lab Sample ID: MB 480-201524/15
Matrix: Water
Analysis Batch: 201524

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			09/10/14 01:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			09/10/14 01:08	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			09/10/14 01:08	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/10/14 01:08	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			09/10/14 01:08	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			09/10/14 01:08	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			09/10/14 01:08	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			09/10/14 01:08	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			09/10/14 01:08	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			09/10/14 01:08	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			09/10/14 01:08	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			09/10/14 01:08	1
Acrolein	ND		100	17	ug/L			09/10/14 01:08	1
Acrylonitrile	ND		50	1.9	ug/L			09/10/14 01:08	1
Benzene	ND		5.0	0.60	ug/L			09/10/14 01:08	1
Bromoform	ND		5.0	0.47	ug/L			09/10/14 01:08	1
Bromomethane	ND		5.0	1.2	ug/L			09/10/14 01:08	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			09/10/14 01:08	1
Chlorobenzene	ND		5.0	0.48	ug/L			09/10/14 01:08	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			09/10/14 01:08	1
Chloroethane	ND		5.0	0.87	ug/L			09/10/14 01:08	1
Chloroform	ND		5.0	0.54	ug/L			09/10/14 01:08	1
Chloromethane	ND		5.0	0.64	ug/L			09/10/14 01:08	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			09/10/14 01:08	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			09/10/14 01:08	1
Ethylbenzene	ND		5.0	0.46	ug/L			09/10/14 01:08	1
Methylene Chloride	ND		5.0	0.81	ug/L			09/10/14 01:08	1
Tetrachloroethene	ND		5.0	0.34	ug/L			09/10/14 01:08	1
Toluene	ND		5.0	0.45	ug/L			09/10/14 01:08	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			09/10/14 01:08	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			09/10/14 01:08	1
Trichloroethene	ND		5.0	0.60	ug/L			09/10/14 01:08	1
Vinyl chloride	ND		5.0	0.75	ug/L			09/10/14 01:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 130*		*09/10/14 01:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*69 - 121*		*09/10/14 01:08*	*1*
Toluene-d8 (Surr)	*103*		*70 - 123*		*09/10/14 01:08*	*1*

Lab Sample ID: LCS 480-201524/13
Matrix: Water
Analysis Batch: 201524

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	18.4		ug/L		92	52 - 162
1,1,2,2-Tetrachloroethane	20.0	18.1		ug/L		91	46 - 157
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	52 - 150
1,1-Dichloroethane	20.0	20.1		ug/L		101	59 - 155

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

Lab Sample ID: LCS 480-201524/13
Matrix: Water
Analysis Batch: 201524

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	18.9		ug/L		94	1 - 234
1,2-Dichlorobenzene	20.0	17.7		ug/L		88	18 - 190
1,2-Dichloroethane	20.0	18.8		ug/L		94	49 - 155
1,2-Dichloropropane	20.0	19.4		ug/L		97	1 - 210
1,3-Dichlorobenzene	20.0	17.9		ug/L		89	59 - 156
1,4-Dichlorobenzene	20.0	17.8		ug/L		89	18 - 190
2-Chloroethyl vinyl ether	20.0	18.0	J	ug/L		90	1 - 305
Benzene	20.0	19.2		ug/L		96	37 - 151
Bromoform	20.0	16.2		ug/L		81	45 - 169
Bromomethane	20.0	20.7		ug/L		103	1 - 242
Carbon tetrachloride	20.0	18.0		ug/L		90	70 - 140
Chlorobenzene	20.0	18.3		ug/L		92	37 - 160
Chlorodibromomethane	20.0	17.3		ug/L		86	53 - 149
Chloroethane	20.0	19.5		ug/L		98	14 - 230
Chloroform	20.0	19.7		ug/L		98	51 - 138
Chloromethane	20.0	20.0		ug/L		100	1 - 273
cis-1,3-Dichloropropene	20.0	18.2		ug/L		91	1 - 227
Dichlorobromomethane	20.0	18.1		ug/L		91	35 - 155
Ethylbenzene	20.0	18.3		ug/L		91	37 - 162
Methylene Chloride	20.0	18.9		ug/L		94	1 - 221
Tetrachloroethene	20.0	17.6		ug/L		88	64 - 148
Toluene	20.0	18.5		ug/L		92	47 - 150
trans-1,2-Dichloroethene	20.0	20.1		ug/L		100	54 - 156
trans-1,3-Dichloropropene	20.0	19.7		ug/L		98	17 - 183
Trichloroethene	20.0	18.6		ug/L		93	71 - 157
Vinyl chloride	20.0	18.1		ug/L		91	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 130*
4-Bromofluorobenzene (Surr)	*100*		*69 - 121*
Toluene-d8 (Surr)	*101*		*70 - 123*

Lab Sample ID: 480-66924-2 MS
Matrix: Water
Analysis Batch: 201524

Client Sample ID: Alltift Collection Sump - Grab 1-4
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	178		ug/L		89	52 - 162
1,1,2,2-Tetrachloroethane	ND		200	167		ug/L		84	46 - 157
1,1,2-Trichloroethane	ND		200	168		ug/L		84	52 - 150
1,1-Dichloroethane	ND		200	185		ug/L		92	59 - 155
1,1-Dichloroethene	ND		200	210		ug/L		105	1 - 234
1,2-Dichlorobenzene	ND		200	165		ug/L		82	18 - 190
1,2-Dichloroethane	ND		200	184		ug/L		92	49 - 155
1,2-Dichloropropane	ND		200	168		ug/L		84	1 - 210
1,3-Dichlorobenzene	ND		200	163		ug/L		82	59 - 156
1,4-Dichlorobenzene	ND		200	160		ug/L		80	18 - 190
2-Chloroethyl vinyl ether	ND		200	159	J	ug/L		79	1 - 305

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

Lab Sample ID: 480-66924-2 MS
Matrix: Water
Analysis Batch: 201524

Client Sample ID: Alltift Collection Sump - Grab 1-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		200	177		ug/L		89	37 - 151
Bromoform	ND		200	122		ug/L		61	45 - 169
Bromomethane	ND		200	188		ug/L		94	1 - 242
Carbon tetrachloride	ND		200	177		ug/L		88	70 - 140
Chlorobenzene	70		200	232		ug/L		81	37 - 160
Chlorodibromomethane	ND		200	143		ug/L		72	53 - 149
Chloroethane	ND		200	194		ug/L		97	14 - 230
Chloroform	ND		200	181		ug/L		91	51 - 138
Chloromethane	ND		200	185		ug/L		92	1 - 273
cis-1,3-Dichloropropene	ND		200	150		ug/L		75	1 - 227
Dichlorobromomethane	ND		200	154		ug/L		77	35 - 155
Ethylbenzene	ND		200	167		ug/L		84	37 - 162
Methylene Chloride	ND		200	175		ug/L		87	1 - 221
Tetrachloroethene	ND		200	168		ug/L		84	64 - 148
Toluene	ND		200	167		ug/L		84	47 - 150
trans-1,2-Dichloroethene	ND		200	193		ug/L		96	54 - 156
trans-1,3-Dichloropropene	ND		200	162		ug/L		81	17 - 183
Trichloroethene	ND		200	171		ug/L		86	71 - 157
Vinyl chloride	9.6	J	200	200		ug/L		95	1 - 251

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*72 - 130*
4-Bromofluorobenzene (Surr)	*102*		*69 - 121*
Toluene-d8 (Surr)	*99*		*70 - 123*

Lab Sample ID: 480-66924-2 MSD
Matrix: Water
Analysis Batch: 201524

Client Sample ID: Alltift Collection Sump - Grab 1-4
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	201		ug/L		100	52 - 162	12	15
1,1,2,2-Tetrachloroethane	ND		200	195		ug/L		98	46 - 157	15	15
1,1,2-Trichloroethane	ND		200	193		ug/L		97	52 - 150	14	15
1,1-Dichloroethane	ND		200	204		ug/L		102	59 - 155	10	15
1,1-Dichloroethene	ND		200	212		ug/L		106	1 - 234	1	15
1,2-Dichlorobenzene	ND		200	189		ug/L		95	18 - 190	14	15
1,2-Dichloroethane	ND		200	196		ug/L		98	49 - 155	6	15
1,2-Dichloropropane	ND		200	187		ug/L		94	1 - 210	11	15
1,3-Dichlorobenzene	ND		200	186		ug/L		93	59 - 156	13	15
1,4-Dichlorobenzene	ND		200	185		ug/L		93	18 - 190	15	15
2-Chloroethyl vinyl ether	ND		200	173	J	ug/L		86	1 - 305	8	15
Benzene	ND		200	199		ug/L		100	37 - 151	12	15
Bromoform	ND		200	154	F2	ug/L		77	45 - 169	23	15
Bromomethane	ND		200	187		ug/L		93	1 - 242	0	15
Carbon tetrachloride	ND		200	196		ug/L		98	70 - 140	10	15
Chlorobenzene	70		200	258		ug/L		94	37 - 160	11	15
Chlorodibromomethane	ND		200	166		ug/L		83	53 - 149	15	15
Chloroethane	ND		200	190		ug/L		95	14 - 230	2	15

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

Lab Sample ID: 480-66924-2 MSD
Matrix: Water
Analysis Batch: 201524

Client Sample ID: Alltift Collection Sump - Grab 1-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform	ND		200	204		ug/L		102	51 - 138	12	15
Chloromethane	ND		200	187		ug/L		93	1 - 273	1	15
cis-1,3-Dichloropropene	ND		200	170		ug/L		85	1 - 227	13	15
Dichlorobromomethane	ND		200	176		ug/L		88	35 - 155	13	15
Ethylbenzene	ND		200	191		ug/L		96	37 - 162	14	15
Methylene Chloride	ND		200	197		ug/L		98	1 - 221	12	15
Tetrachloroethene	ND		200	190		ug/L		95	64 - 148	12	15
Toluene	ND		200	184		ug/L		92	47 - 150	10	15
trans-1,2-Dichloroethene	ND		200	204		ug/L		102	54 - 156	6	15
trans-1,3-Dichloropropene	ND		200	176		ug/L		88	17 - 183	8	15
Trichloroethene	ND		200	190		ug/L		95	71 - 157	11	15
Vinyl chloride	9.6	J	200	194		ug/L		92	1 - 251	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 130*
4-Bromofluorobenzene (Surr)	*102*		*69 - 121*
Toluene-d8 (Surr)	*99*		*70 - 123*

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

Lab Sample ID: MB 180-118075/1-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 118075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.71	ug/L		09/15/14 10:35	09/18/14 23:17	1
1,2-Dichlorobenzene	ND		10	0.75	ug/L		09/15/14 10:35	09/18/14 23:17	1
1,2-Diphenylhydrazine	ND		10	0.66	ug/L		09/15/14 10:35	09/18/14 23:17	1
1,3-Dichlorobenzene	ND		10	0.74	ug/L		09/15/14 10:35	09/18/14 23:17	1
1,4-Dichlorobenzene	ND		10	0.74	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4,6-Trichlorophenol	ND		5.0	1.7	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4-Dichlorophenol	ND		5.0	0.33	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4-Dimethylphenol	ND		5.0	0.85	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4-Dinitrophenol	ND		10	6.1	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4-Dinitrotoluene	ND		5.0	0.54	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,6-Dinitrotoluene	ND		5.0	0.80	ug/L		09/15/14 10:35	09/18/14 23:17	1
2-Chloronaphthalene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1
2-Chlorophenol	ND		5.0	1.7	ug/L		09/15/14 10:35	09/18/14 23:17	1
2-Nitrophenol	ND		5.0	1.7	ug/L		09/15/14 10:35	09/18/14 23:17	1
3,3'-Dichlorobenzidine	ND		5.0	1.1	ug/L		09/15/14 10:35	09/18/14 23:17	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Bromophenyl phenyl ether	ND		5.0	0.64	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Chloro-3-methylphenol	ND		5.0	0.75	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Chloroaniline	ND		5.0	0.89	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Chlorophenyl phenyl ether	ND		5.0	0.50	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Nitrophenol	ND		10	6.5	ug/L		09/15/14 10:35	09/18/14 23:17	1
Acenaphthene	ND		5.0	0.14	ug/L		09/15/14 10:35	09/18/14 23:17	1
Acenaphthylene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1

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

Lab Sample ID: MB 180-118075/1-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 118075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzidine	ND		80	35	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[a]anthracene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[a]pyrene	ND		5.0	0.13	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[b]fluoranthene	ND		5.0	0.16	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[g,h,i]perylene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[k]fluoranthene	ND		5.0	0.55	ug/L		09/15/14 10:35	09/18/14 23:17	1
bis (2-chloroisopropyl) ether	ND		5.0	0.20	ug/L		09/15/14 10:35	09/18/14 23:17	1
Bis(2-chloroethoxy)methane	ND		5.0	0.58	ug/L		09/15/14 10:35	09/18/14 23:17	1
Bis(2-chloroethyl)ether	ND		5.0	0.25	ug/L		09/15/14 10:35	09/18/14 23:17	1
Bis(2-ethylhexyl) phthalate	ND		13	13	ug/L		09/15/14 10:35	09/18/14 23:17	1
Butyl benzyl phthalate	ND		5.0	1.4	ug/L		09/15/14 10:35	09/18/14 23:17	1
Chrysene	ND		5.0	0.14	ug/L		09/15/14 10:35	09/18/14 23:17	1
Dibenz(a,h)anthracene	ND		5.0	0.16	ug/L		09/15/14 10:35	09/18/14 23:17	1
Diethyl phthalate	ND		5.0	1.5	ug/L		09/15/14 10:35	09/18/14 23:17	1
Dimethyl phthalate	ND		5.0	0.77	ug/L		09/15/14 10:35	09/18/14 23:17	1
Di-n-butyl phthalate	ND		5.0	1.2	ug/L		09/15/14 10:35	09/18/14 23:17	1
Di-n-octyl phthalate	ND		5.0	2.1	ug/L		09/15/14 10:35	09/18/14 23:17	1
Fluoranthene	ND		5.0	0.16	ug/L		09/15/14 10:35	09/18/14 23:17	1
Fluorene	ND		5.0	0.22	ug/L		09/15/14 10:35	09/18/14 23:17	1
Hexachlorobenzene	ND		5.0	0.18	ug/L		09/15/14 10:35	09/18/14 23:17	1
Hexachlorobutadiene	ND		5.0	0.17	ug/L		09/15/14 10:35	09/18/14 23:17	1
Hexachlorocyclopentadiene	ND		5.0	0.52	ug/L		09/15/14 10:35	09/18/14 23:17	1
Hexachloroethane	ND		5.0	0.63	ug/L		09/15/14 10:35	09/18/14 23:17	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.20	ug/L		09/15/14 10:35	09/18/14 23:17	1
Isophorone	ND		5.0	0.64	ug/L		09/15/14 10:35	09/18/14 23:17	1
Naphthalene	ND		5.0	0.14	ug/L		09/15/14 10:35	09/18/14 23:17	1
Nitrobenzene	ND		5.0	0.84	ug/L		09/15/14 10:35	09/18/14 23:17	1
N-Nitrosodimethylamine	ND		10	0.74	ug/L		09/15/14 10:35	09/18/14 23:17	1
N-Nitrosodi-n-propylamine	ND		5.0	0.31	ug/L		09/15/14 10:35	09/18/14 23:17	1
N-Nitrosodiphenylamine	ND		5.0	0.85	ug/L		09/15/14 10:35	09/18/14 23:17	1
Pentachlorophenol	ND		10	0.66	ug/L		09/15/14 10:35	09/18/14 23:17	1
Phenanthrene	ND		5.0	0.43	ug/L		09/15/14 10:35	09/18/14 23:17	1
Phenol	ND		5.0	0.58	ug/L		09/15/14 10:35	09/18/14 23:17	1
Pyrene	ND		5.0	0.16	ug/L		09/15/14 10:35	09/18/14 23:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*51*		*21 - 122*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
2-Fluorobiphenyl	*59*		*30 - 110*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
2-Fluorophenol	*62*		*31 - 104*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
Nitrobenzene-d5	*60*		*32 - 112*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
Phenol-d5	*60*		*30 - 117*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
Terphenyl-d14	*69*		*21 - 121*	*09/15/14 10:35*	*09/18/14 23:17*	*1*

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

Lab Sample ID: LCS 180-118075/2-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 118075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	59.8		ug/L		60	44 - 142
1,2-Dichlorobenzene	100	54.6		ug/L		55	32 - 129
1,3-Dichlorobenzene	100	53.3		ug/L		53	32 - 102
1,4-Dichlorobenzene	100	56.5		ug/L		56	28 - 110
2,4,6-Trichlorophenol	100	68.1		ug/L		68	37 - 144
2,4-Dichlorophenol	100	64.7		ug/L		65	39 - 135
2,4-Dimethylphenol	100	63.6		ug/L		64	32 - 119
2,4-Dinitrophenol	200	68.2		ug/L		34	10 - 150
2,4-Dinitrotoluene	100	73.8		ug/L		74	39 - 139
2,6-Dinitrotoluene	100	74.6		ug/L		75	50 - 158
2-Chloronaphthalene	100	56.8	*	ug/L		57	60 - 118
2-Chlorophenol	100	59.0		ug/L		59	23 - 124
2-Nitrophenol	100	62.3		ug/L		62	29 - 132
3,3'-Dichlorobenzidine	100	75.0		ug/L		75	10 - 150
4,6-Dinitro-2-methylphenol	200	108		ug/L		54	10 - 150
4-Bromophenyl phenyl ether	100	72.0		ug/L		72	53 - 127
4-Chloro-3-methylphenol	100	67.9		ug/L		68	22 - 134
4-Chlorophenyl phenyl ether	100	64.9		ug/L		65	28 - 125
4-Nitrophenol	200	151		ug/L		75	19 - 132
Acenaphthene	100	64.1		ug/L		64	47 - 145
Acenaphthylene	100	65.7		ug/L		66	33 - 145
Anthracene	100	70.2		ug/L		70	27 - 133
Benzo[a]anthracene	100	69.7		ug/L		70	33 - 143
Benzo[a]pyrene	100	67.0		ug/L		67	34 - 122
Benzo[b]fluoranthene	100	59.6		ug/L		60	24 - 159
Benzo[g,h,i]perylene	100	80.6		ug/L		81	10 - 149
Benzo[k]fluoranthene	100	65.5		ug/L		65	28 - 126
bis (2-chloroisopropyl) ether	100	57.1		ug/L		57	21 - 115
Bis(2-chloroethoxy)methane	100	61.9		ug/L		62	28 - 115
Bis(2-chloroethyl)ether	100	58.3		ug/L		58	30 - 140
Bis(2-ethylhexyl) phthalate	100	79.3		ug/L		79	21 - 126
Butyl benzyl phthalate	100	81.1		ug/L		81	25 - 119
Chrysene	100	69.4		ug/L		69	32 - 120
Dibenz(a,h)anthracene	100	73.7		ug/L		74	11 - 146
Diethyl phthalate	100	74.4		ug/L		74	10 - 114
Dimethyl phthalate	100	72.0		ug/L		72	13 - 112
Di-n-butyl phthalate	100	78.0		ug/L		78	36 - 118
Di-n-octyl phthalate	100	75.4		ug/L		75	18 - 125
Fluoranthene	100	74.4		ug/L		74	26 - 137
Fluorene	100	69.9		ug/L		70	59 - 121
Hexachlorobenzene	100	68.2		ug/L		68	28 - 128
Hexachlorocyclopentadiene	100	50.8		ug/L		51	10 - 138
Hexachloroethane	100	53.2		ug/L		53	40 - 113
Indeno[1,2,3-cd]pyrene	100	74.3		ug/L		74	10 - 150
Isophorone	100	68.5		ug/L		68	21 - 122
Naphthalene	100	59.2		ug/L		59	21 - 133
Nitrobenzene	100	61.7		ug/L		62	35 - 150
N-Nitrosodi-n-propylamine	100	67.8		ug/L		68	30 - 115

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

Lab Sample ID: LCS 180-118075/2-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 118075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	100	70.5		ug/L		71	25 - 118
Pentachlorophenol	200	138		ug/L		69	14 - 140
Phenanthrene	100	69.1		ug/L		69	54 - 120
Phenol	100	59.7		ug/L		60	31 - 112
Pyrene	100	66.6		ug/L		67	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*61*		*21 - 122*
2-Fluorobiphenyl	*58*		*30 - 110*
2-Fluorophenol	*51*		*31 - 104*
Nitrobenzene-d5	*55*		*32 - 112*
Phenol-d5	*60*		*30 - 117*
Terphenyl-d14	*66*		*21 - 121*

Lab Sample ID: LCSD 180-118075/3-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 118075

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	58.2		ug/L		58	44 - 142	3	35
1,2-Dichlorobenzene	100	54.3		ug/L		54	32 - 129	1	20
1,3-Dichlorobenzene	100	53.5		ug/L		53	32 - 102	0	35
1,4-Dichlorobenzene	100	53.7		ug/L		54	28 - 110	5	35
2,4,6-Trichlorophenol	100	68.6		ug/L		69	37 - 144	1	27
2,4-Dichlorophenol	100	62.9		ug/L		63	39 - 135	3	35
2,4-Dimethylphenol	100	61.6		ug/L		62	32 - 119	3	20
2,4-Dinitrophenol	200	72.3		ug/L		36	10 - 150	6	35
2,4-Dinitrotoluene	100	75.7		ug/L		76	39 - 139	3	32
2,6-Dinitrotoluene	100	72.4		ug/L		72	50 - 158	3	20
2-Chloronaphthalene	100	55.3	*	ug/L		55	60 - 118	3	20
2-Chlorophenol	100	57.5		ug/L		57	23 - 124	3	35
2-Nitrophenol	100	60.3		ug/L		60	29 - 132	3	32
3,3'-Dichlorobenzidine	100	76.9		ug/L		77	10 - 150	3	35
4,6-Dinitro-2-methylphenol	200	120		ug/L		60	10 - 150	10	35
4-Bromophenyl phenyl ether	100	69.2		ug/L		69	53 - 127	4	20
4-Chloro-3-methylphenol	100	67.8		ug/L		68	22 - 134	0	35
4-Chlorophenyl phenyl ether	100	65.6		ug/L		66	28 - 125	1	27
4-Nitrophenol	200	152		ug/L		76	19 - 132	1	34
Acenaphthene	100	64.4		ug/L		64	47 - 145	0	35
Acenaphthylene	100	63.2		ug/L		63	33 - 145	4	23
Anthracene	100	70.2		ug/L		70	27 - 133	0	22
Benzo[a]anthracene	100	70.1		ug/L		70	33 - 143	1	23
Benzo[a]pyrene	100	67.9		ug/L		68	34 - 122	1	31
Benzo[b]fluoranthene	100	62.5		ug/L		62	24 - 159	5	28
Benzo[g,h,i]perylene	100	81.5		ug/L		81	10 - 149	1	35
Benzo[k]fluoranthene	100	67.0		ug/L		67	28 - 126	2	31
bis (2-chloroisopropyl) ether	100	56.3		ug/L		56	21 - 115	1	27
Bis(2-chloroethoxy)methane	100	61.1		ug/L		61	28 - 115	1	30

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

Lab Sample ID: LCSD 180-118075/3-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 118075

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether			100	56.5		ug/L		57	30 - 140	3	30
Bis(2-ethylhexyl) phthalate			100	80.6		ug/L		81	21 - 126	2	31
Butyl benzyl phthalate			100	79.9		ug/L		80	25 - 119	1	35
Chrysene			100	69.7		ug/L		70	32 - 120	1	31
Dibenz(a,h)anthracene			100	75.5		ug/L		75	11 - 146	2	35
Diethyl phthalate			100	74.6		ug/L		75	10 - 114	0	24
Dimethyl phthalate			100	72.2		ug/L		72	13 - 112	0	22
Di-n-butyl phthalate			100	76.1		ug/L		76	36 - 118	3	24
Di-n-octyl phthalate			100	74.2		ug/L		74	18 - 125	2	29
Fluoranthene			100	74.2		ug/L		74	26 - 137	0	23
Fluorene			100	70.0		ug/L		70	59 - 121	0	20
Hexachlorobenzene			100	69.8		ug/L		70	28 - 128	2	22
Hexachlorocyclopentadiene			100	50.1		ug/L		50	10 - 138	2	35
Hexachloroethane			100	52.1		ug/L		52	40 - 113	2	33
Indeno[1,2,3-cd]pyrene			100	75.7		ug/L		76	10 - 150	2	35
Isophorone			100	66.4		ug/L		66	21 - 122	3	35
Naphthalene			100	58.0		ug/L		58	21 - 133	2	23
Nitrobenzene			100	58.0		ug/L		58	35 - 150	6	35
N-Nitrosodi-n-propylamine			100	66.0		ug/L		66	30 - 115	3	36
N-Nitrosodiphenylamine			100	70.0		ug/L		70	25 - 118	1	35
Pentachlorophenol			200	138		ug/L		69	14 - 140	0	35
Phenanthrene			100	68.1		ug/L		68	54 - 120	1	20
Phenol			100	57.8		ug/L		58	31 - 112	3	35
Pyrene			100	68.9		ug/L		69	52 - 115	3	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*66*		*21 - 122*
2-Fluorobiphenyl	*56*		*30 - 110*
2-Fluorophenol	*52*		*31 - 104*
Nitrobenzene-d5	*54*		*32 - 112*
Phenol-d5	*58*		*30 - 117*
Terphenyl-d14	*68*		*21 - 121*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-201609/1-A
Matrix: Water
Analysis Batch: 202449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201609

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		09/10/14 10:54	09/12/14 18:00	1
Barium	ND		0.0020	0.00070	mg/L		09/10/14 10:54	09/12/14 18:00	1
Chromium	ND		0.0040	0.0010	mg/L		09/10/14 10:54	09/12/14 18:00	1
Copper	ND		0.010	0.0016	mg/L		09/10/14 10:54	09/12/14 18:00	1
Nickel	ND		0.010	0.0013	mg/L		09/10/14 10:54	09/12/14 18:00	1
Zinc	ND		0.010	0.0015	mg/L		09/10/14 10:54	09/12/14 18:00	1

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

Lab Sample ID: LCS 480-201609/2-A
Matrix: Water
Analysis Batch: 202449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201609

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.196		mg/L		98	85 - 115
Barium	0.200	0.197		mg/L		99	85 - 115
Chromium	0.200	0.194		mg/L		97	85 - 115
Copper	0.200	0.206		mg/L		103	85 - 115
Nickel	0.200	0.187		mg/L		94	85 - 115
Zinc	0.200	0.201		mg/L		101	85 - 115

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

Lab Sample ID: MB 480-201862/1
Matrix: Water
Analysis Batch: 201862

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			09/11/14 09:35	1

Lab Sample ID: LCS 480-201862/2
Matrix: Water
Analysis Batch: 201862

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	271	263.2		mg/L		97	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-201570/1
Matrix: Water
Analysis Batch: 201570

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: LCS 480-201570/23
Matrix: Water
Analysis Batch: 201570

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	6.990		SU		100	99 - 101

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 480-202916/27
Matrix: Water
Analysis Batch: 202916

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			09/17/14 09:27	1

Method: SM 4500 P E - Phosphorus (Continued)

Lab Sample ID: MB 480-202916/75
Matrix: Water
Analysis Batch: 202916

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			09/17/14 09:27	1

Lab Sample ID: LCS 480-202916/28
Matrix: Water
Analysis Batch: 202916

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	0.214		mg/L		107	90 - 110

Lab Sample ID: LCS 480-202916/76
Matrix: Water
Analysis Batch: 202916

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	0.192		mg/L		96	90 - 110

GC/MS VOA

Analysis Batch: 201524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-2	Alltift Collection Sump - Grab 1-4	Total/NA	Water	624	
480-66924-2 MS	Alltift Collection Sump - Grab 1-4	Total/NA	Water	624	
480-66924-2 MSD	Alltift Collection Sump - Grab 1-4	Total/NA	Water	624	
480-66924-3	TRIP BLANK	Total/NA	Water	624	
LCS 480-201524/13	Lab Control Sample	Total/NA	Water	624	
MB 480-201524/15	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 118075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-2	Alltift Collection Sump - Grab 1-4	Total/NA	Water	625	
LCS 180-118075/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 180-118075/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 180-118075/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 118471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-2	Alltift Collection Sump - Grab 1-4	Total/NA	Water	625	118075
LCS 180-118075/2-A	Lab Control Sample	Total/NA	Water	625	118075
LCSD 180-118075/3-A	Lab Control Sample Dup	Total/NA	Water	625	118075
MB 180-118075/1-A	Method Blank	Total/NA	Water	625	118075

Metals

Prep Batch: 201609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	200.7	
LCS 480-201609/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-201609/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 202449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	200.7 Rev 4.4	201609
LCS 480-201609/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	201609
MB 480-201609/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	201609

General Chemistry

Analysis Batch: 201570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 H+ B	
LCS 480-201570/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 480-201570/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 201862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	SM 2540D	
LCS 480-201862/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-201862/1	Method Blank	Total/NA	Water	SM 2540D	

QC Association Summary

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

TestAmerica Job ID: 480-66924-1

General Chemistry (Continued)

Analysis Batch: 202916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 P E	
LCS 480-202916/28	Lab Control Sample	Total/NA	Water	SM 4500 P E	
LCS 480-202916/76	Lab Control Sample	Total/NA	Water	SM 4500 P E	
MB 480-202916/27	Method Blank	Total/NA	Water	SM 4500 P E	
MB 480-202916/75	Method Blank	Total/NA	Water	SM 4500 P E	

Lab Chronicle

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Comp

Lab Sample ID: 480-66924-1

Date Collected: 09/09/14 13:45

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			201609	09/10/14 10:54	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	202449	09/12/14 18:41	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	201862	09/11/14 09:52	KJ1	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	201570	09/10/14 01:36	VAJ	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	202916	09/17/14 09:27	KMF	TAL BUF

Client Sample ID: Alltift Collection Sump - Grab 1-4

Lab Sample ID: 480-66924-2

Date Collected: 09/09/14 13:30

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		10	201524	09/10/14 10:20	NMD1	TAL BUF
Total/NA	Prep	625			118075	09/15/14 14:06	BJT	TAL PIT
Total/NA	Analysis	625		1	118471	09/19/14 01:08	VVP	TAL PIT

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-66924-3

Date Collected: 09/09/14 00:00

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	201524	09/10/14 10:45	NMD1	TAL BUF

Laboratory References:

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

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Certification Summary

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

TestAmerica Job ID: 480-66924-1

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	03-31-15

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
SM 4500 H+ B		Water	pH

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15
California	State Program	9	2891	03-31-15
Connecticut	State Program	1	PH-0688	09-30-14 *
Florida	NELAP	4	E871008	06-30-15
Illinois	NELAP	5	002602	06-30-15
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-15
New Hampshire	NELAP	1	203011	04-04-15
New Jersey	NELAP	2	PA005	06-30-15
New York	NELAP	2	11182	03-31-15
North Carolina (WW/SW)	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-15
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	05-31-15
Virginia	NELAP	3	460189	09-14-15
West Virginia DEP	State Program	3	142	01-31-15

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 480-66924-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL PIT
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
TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

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

TestAmerica Job ID: 480-66924-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-66924-1	Alltift Collection Sump - Comp	Water	09/09/14 13:45	09/09/14 14:05
480-66924-2	Alltift Collection Sump - Grab 1-4	Water	09/09/14 13:30	09/09/14 14:05
480-66924-3	TRIP BLANK	Water	09/09/14 00:00	09/09/14 14:05

Chain of Custody Re

480-66924 Chain of Custody

America
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:	Analysis Requested	Preservation Codes:
City: Syracuse	TAT Requested (days): 2 Weeks		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)
State, Zip: NY, 13204			
Phone: 315-468-1663	PO #: 4500073922		Other:
Email: john.formoza@ch2m.com	WO #:		
Project Name: Honeywell - Alltift OM phase / Semi Annual	Project #: 48003159		
Site: Honeywell - Buffalo Sites	SSOW#:		

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	824_5ml - 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	9/14/14	0730	G	W	N	N					2	2	4	Prior to analysis grab samples to be composited by lab
BSA Discharge	GRAB 2	9/14/14	0930	G	W	N	N					2	2	4	
BSA Discharge	GRAB 3	9/14/14	1130	G	W	N	N					2	2	4	
BSA Discharge	GRAB 4	9/14/14	1330	G	W	N	N					2	2	4	
BSA Discharge	COMP 0909/14	9/14/14	1345	C	W	N	N	1	1	1	1			4	
TRIPBLANK	0909/14 -TB	9/14/14	1350		W	N	N					1		1	TRIB 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:	Date/Time:	Company	Received by:	Date/Time:	Company
	0909 20 1405			9/9/14 1405	TA 346
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: #2 4.8

Page 28 of 31

9/23/2014

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

BNAI

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-19303.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 480-66924-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/20/2014			Preservation Codes:
City: Pittsburgh	TAT Requested (days):			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)
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: 30130 - Altift OM Phase / Semi Annual	Project #: 48004175			
Site: Honeywell - Buffalo Sites (Altift)	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625/625_Prep (MOD) Priority Pollutant List - SVOA - 6	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Altift Collection Sump - Grab 1-4 (480-66924-2)	9/9/14	13:30 Eastern		Water			X	1	MAC01 - Composite Samples Prior to Analysis 4-7

480-66924 Chain of Custody

Possible Hazard Identification
Unconfirmed

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:	Company	Received by:	Date/Time:	Company
Cameron Wallace	9-10-14 1700	TAB		9/11/2014 0905	TAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

9/23/2014

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-66924-1

Login Number: 66924

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon M

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	

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-66924-1

Login Number: 66924
List Number: 2
Creator: Kovitch, Christina M

List Source: TestAmerica Pittsburgh
List Creation: 09/15/14 01:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

WATER LEVEL MEASUREMENTS

Alltift Landfill
Buffalo, New York

Piezometer Readings (DTW, ft)	5-May-14	3-Jun-14	26-Jun-14	24-Jul-14	13-Aug-14	20-Aug-14	9-Sep-14	10-Sep-14	26-Sep-14	6-Oct-14	30-Oct-14	16-Dec-14	20-Jan-15	12-Mar-15
PZ-1	8.80		8.42					7.04		6.91			8.13	10.78
PZ-2	8.93		8.84					8.85		8.90			8.92	8.55
PZ-3	10.15		10.34					11.80		13.35			6.99	7.32
PZ-4	7.72		7.20					6.84		6.60			7.63	8.57
PZ-5	8.88		7.78					7.85		7.90			7.52	7.68
PZ-6	9.28		9.32					10.60		12.10			6.51	6.77
PZ-7	7.95		6.50					9.10		10.22			6.12	6.40
PZ-8	6.40		6.04					7.32		8.30			5.20	5.43
PZ-9	6.82		8.55					7.68		8.40			6.48	6.66
PZ-10	7.91		8.60					10.02		9.34			7.98	7.88
PZ-11	6.94		7.95					8.78		8.95			7.76	8.81
PZ-12	7.68		8.84					9.87		10.12			8.62	9.95
PZ-13	5.95		6.80					7.62		7.38			5.82	5.84
PZ-14	dry		dry					dry		dry			dry	dry
PZ-15	7.84		7.72					7.97		8.20			7.98	8.37
PZ-16	dry		dry					dry		dry			dry	dry
Groundwater Collection Trench Sumps (DTW, ft)														
GWCT-1	9.95		9.82					7.72		8.00			13.43	13.59
GWCT-2	9.58		12.70					19.70		22.50			8.14	8.93
GWCT-3	8.95		9.08					10.19		11.40			6.59	6.85
GWCT-4	7.15		7.35					8.30		9.30			5.78	5.90
Relief Trench Sumps (DTW, ft)														
GWR-1	8.25		8.40					8.27		8.10			8.60	7.52
GWR-2	8.32		8.30					8.15		8.10			8.32	7.55
Lift Station (DTW, ft)														
Lift	9.62		9.52					9.90		9.60			9.45	9.50

APPENDIX D

QUARTERLY GROUNDWATER ELEVATIONS

QUARTERLY GROUNDWATER ELEVATIONS

2014/2015 ANNUAL REPORT

ALLTIFT LANDFILL SITE

BUFFALO, NEW YORK

			5/5/2014		6/26/2014		9/10/2014		10/6/2014		1/20/2015		3/12/2015	
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**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**
PIEZOMETERS														
PZ-1	16.8	585.01	8.80	576.21	8.42	576.59	7.04	577.97	6.91	578.10	8.13	576.88	10.78	574.23
PZ-2	16.9	584.96	8.93	576.03	8.84	576.12	8.85	576.11	8.90	576.06	8.92	576.04	8.55	576.41
PZ-3	16.9	585.05	10.15	574.90	10.34	574.71	11.80	573.25	13.35	571.70	6.99	578.06	7.32	577.73
PZ-4	16.6	585.79	7.72	578.07	7.20	578.59	6.84	578.95	6.60	579.19	7.63	578.16	8.57	577.22
PZ-5	16.9	584.52	8.88	575.64	7.78	576.74	7.85	576.67	7.90	576.62	7.52	577.00	7.68	576.84
PZ-6	17.8	584.74	9.28	575.46	9.32	575.42	10.60	574.14	12.10	572.64	6.51	578.23	6.77	577.97
PZ-7	20.0	584.99	7.95	577.04	6.50	578.49	9.10	575.89	10.22	574.77	6.12	578.87	6.40	578.59
PZ-8	20.7	584.48	6.40	578.08	6.04	578.44	7.32	577.16	8.30	576.18	5.20	579.28	5.43	579.05
PZ-9	15.1	586.86	6.82	580.04	8.55	578.31	7.68	579.18	8.40	578.46	6.48	580.38	6.66	580.20
PZ-10	11.5	589.41	7.91	581.50	8.60	580.81	10.02	579.39	9.34	580.07	7.98	581.43	7.88	581.53
PZ-11	19.5	594.72	6.94	587.78	7.95	586.77	8.78	585.94	8.95	585.77	7.76	586.96	8.81	585.91
PZ-12	21.8	592.78	7.68	585.10	8.84	583.94	9.87	582.91	10.12	582.66	8.62	584.16	9.95	582.83
PZ-13	22.5	589.04	5.95	583.09	6.80	582.24	7.62	581.42	7.38	581.66	5.82	583.22	5.84	583.20
PZ-14	55.0	619.11	dry	*	dry	*	dry	*	dry	*	dry	*	dry	dry
PZ-15	17.0	588.79	7.84	580.95	7.72	581.07	7.97	580.82	8.20	580.59	7.98	580.81	8.37	580.42
PZ-16	66.5	629.30	dry	**	dry	**	dry	**	dry	**	dry	**	dry	dry
BACKGROUND WELLS														
MW-1	20.4	585.22	NM	***	NM	***	NM	***	NM	***	NM	***	NM	NM
MW-2	17.0	586.67	NM	****	NM	****	11.30	575.37	NM	****	NM	****	NM	NM
GROUNDWATER COLLECTION TRENCH SUMPS														
S1	17.2	585.19	9.95	575.24	9.82	575.37	7.72	577.47	8.00	577.19	13.43	571.76	13.59	571.60
S2	24.8	585.45	9.58	575.87	12.70	572.75	19.70	565.75	22.50	562.95	8.14	577.31	8.93	576.52
S3	17.3	585.25	8.95	576.30	9.08	576.17	10.19	575.06	11.40	573.85	6.59	578.66	6.85	578.40
S4	17.8	585.00	7.15	577.85	7.35	577.65	8.30	576.70	9.30	575.70	5.78	579.22	5.90	579.10

*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, previously believed to have been destroyed, is believed to have been found but was not sampled or measured due to concerns regarding impacts.

**** Depth to Water for MW-2 is measured on annual basis.

MW-2 Depth to Water was measured on 9/9/2014.

NM - Not measured

APPENDIX E

QUARTERLY GROUNDWATER CONTOUR MAPS

Tifft Street

Stone Road

Stone Road

PZ-13
(583.09)

PZ-15
(580.95)

PZ-4
(578.07)

PZ-1
(576.21)

Sump-1
(575.24)

PZ-14
(Dry)

PZ-12
(585.10)

PZ-5
(575.64)

PZ-2
(576.03)

PZ-11
(587.78)

Sump-2
(575.87)

Groundwater Collection Trench

PZ-16
(Dry)

PZ-6
(575.46)

PZ-3
(574.90)

Sump-3
(576.30)

PZ-7
(577.04)

PZ-9
(580.04)

PZ-8
(578.08)

Sump-4
(577.85)

PZ-10
(581.50)

583

585

587

579

581

577

575

Legend

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

N

0 60 120 Feet

Prepared/Date: ANK 03/09/15
Checked/Date: RTB 04/01/15

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
May 5, 2014
Project 3410120905 Figure 1

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Stone Road

Tifft Street

Stone Road

PZ-13
(582.24)

583

581

PZ-15
(581.07)

579

PZ-4
(578.59)

577

PZ-1
(576.59)

Sump-1
(575.37)

PZ-14
(Dry)

PZ-12
(583.94)

585

PZ-5
(576.74)

PZ-2
(576.12)

PZ-11
(586.77)

Sump-2
(572.75)

575

573

Groundwater Collection Trench

PZ-16
(Dry)

PZ-6
(575.42)

PZ-3
(574.71)

585

Sump-3
(576.17)

PZ-7
(578.49)

PZ-9
(578.31)

583

PZ-8
(578.44)

577

Sump-4
(577.65)

PZ-10
(580.81)

579

581

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 04/02/15

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
Jun 26, 2014
Project 3410120905 Figure 2

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/16/2015 18:13:42

Stone Road
Tifft Street
Stone Road
581
579
577
575
573
571
569
583
585
585
583
581
579
577
577
PZ-13
(581.42)
PZ-15
(580.82)
PZ-4
(578.95)
PZ-1
(577.97)
Sump-1
(577.47)
PZ-14
(Dry)
PZ-12
(582.91)
PZ-5
(576.67)
PZ-2
(576.11)
Sump-2
(565.75)
PZ-11
(585.94)
Groundwater Collection Trench
PZ-16
(Dry)
PZ-3
(573.25)
PZ-6
(574.14)
Sump-3
(575.06)
PZ-7
(575.89)
PZ-8
(577.16)
PZ-9
(579.18)
PZ-10
(579.39)
Sump-4
(576.7)

Legend

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

N

0 60 120 Feet

Prepared/Date: ANK 03/09/15
Checked/Date: RTB 04/02/15

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
Sep 10, 2014
Project 3410120905 Figure 3

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/16/2015 16:38:01

Stone Road

Tifft Street

Stone Road

PZ-13
(581.66)

PZ-15
(580.59)

PZ-4
(579.19)

PZ-1
(578.10)

Sump-1
(577.19)

PZ-14
(Dry)

PZ-12
(582.66)

PZ-5
(576.62)

PZ-2
(576.06)

Sump-2
(562.95)

Groundwater Collection Trench

PZ-11
(585.77)

PZ-16
(Dry)

PZ-6
(572.64)

PZ-3
(571.70)

Sump-3
(573.85)

PZ-7
(574.77)

PZ-8
(576.18)

PZ-9
(578.46)

Sump-4
(575.70)

PZ-10
(580.07)

581

579

577

575

573

571

565

583

585

Legend

Piezometer

Groundwater Collection Sump

Interpreted Groundwater Contour

Interpreted Groundwater Flow Direction

(571.70) Measured Groundwater Elevation

N

0 60 120 Feet

Prepared/Date: ANK 03/09/15
Checked/Date: RTB 04/02/15

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
Oct 6, 2014
Project 3410120905 Figure 4

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/16/2015 16:38:17

Stone Road
Tifft Street
Stone Road
580
582
584
586
586
584
582
580
PZ-13
(583.22)
PZ-15
(580.81)
PZ-4
(578.16)
Sump-1
(571.76)
PZ-1
(576.88)
576
578
PZ-2
(576.04)
PZ-5
(577)
Sump-2
(577.31)
Groundwater Collection Trench
PZ-6
(578.23)
PZ-3
(578.06)
Sump-3
(578.66)
PZ-7
(578.87)
PZ-8
(579.28)
Sump-4
(579.22)
PZ-14
(Dry)
PZ-16
(Dry)
PZ-12
(584.16)
PZ-11
(586.96)
PZ-9
(580.38)
PZ-10
(581.43)

Legend

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

N

0 60 120 Feet

Prepared/Date: ANK 03/09/15
Checked/Date: RTB 04/02/15

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
Jan 20, 2015
Project 3410120905 Figure 5

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/16/2015 16:36:46

Tifft Street
Stone Road
Stone Road
580
582
584
574
576
578
PZ-1 (574.23)
PZ-2 (576.41)
PZ-3 (577.73)
PZ-4 (577.22)
PZ-5 (576.84)
PZ-6 (577.97)
PZ-7 (578.59)
PZ-8 (579.05)
PZ-9 (580.20)
PZ-10 (581.53)
PZ-11 (585.91)
PZ-12 (582.83)
PZ-13 (583.20)
PZ-14 (Dry)
PZ-15 (580.42)
PZ-16 (Dry)
Sump-1 (571.60)
Sump-2 (576.52)
Sump-3 (578.40)
Sump-4 (579.10)
Groundwater Collection Trench

Legend

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

N
0 60 120 Feet

Prepared/Date: ANK 03/09/15
Checked/Date: RTB 04/02/15

Honeywell Alltift Landfill Site
Buffalo, New York

amec foster wheeler

Interpreted Groundwater Contours
March 12, 2015
Project 3410120905 Figure 6

\\IE10NT3KS001\HONEYWELL\ALLTIFT\REPORTS\MAPFILES\2014\GWE_Q1-2014.mxd B. Manjunath 04/16/2015 16:37:05

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: 480-57908-1
Client Project/Site: 30130 - Alltift OM Phase / Semi Annual
Sampling Event: Honeywell - Alltift OM Phase (4,10)

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

Attn: Mr. Rich Galloway

Authorized for release by:
4/28/2014 9:30:42 AM
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

Definitions/Glossary

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

TestAmerica Job ID: 480-57908-1

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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD exceeds the 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.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

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
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: 480-57908-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-57908-1

Comments
No additional comments.

Receipt
The samples were received on 4/14/2014 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
Method(s) 624: The following sample(s) was composited by the laboratory on 4/15/14 as requested on the chain-of-custody: Alltift Collection Sump - Grab (480-57908-7).

Method(s) 624: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: Alltift Collection Sump - Grab (480-57908-7). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 625: The laboratory control sample (LCS) for preparation batch 176482 recovered outside control limits for the following analyte: Pyrene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 625: Internal standard responses were outside of acceptance limits for the following sample: Alltift Collection Sump - Grab (480-57908-7). The sample shows evidence of matrix interference. There were no detections for any target analyte associated with the failing internal standard, therefore the data has been reported.

No other analytical or quality issues were noted.

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

General Chemistry
Method(s) 9040C, SM 4500 H+ B: The following sample(s) was received outside of holding time: Alltift Collection Sump - Comp (480-57908-6).

No other analytical or quality issues were noted.

Organic Prep
Method(s) 625: The following sample was composited by the laboratory on 4/17/14 as requested on the chain-of-custody: Alltift Collection Sump - Grab (480-57908-7).

No other analytical or quality issues were noted.

Detection Summary

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Comp — Lab Sample ID: 480-57908-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0099	J	0.010	0.0056	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.26		0.0020	0.00070	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0075		0.0040	0.0010	mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.021		0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.017		0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.034		0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Phosphorus, Total	0.081		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	28.0		4.0	4.0	mg/L	1		SM 2540D	Total/NA
pH	7.55	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Alltift Collection Sump - Grab — Lab Sample ID: 480-57908-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	11	J	50	6.0	ug/L	10		624	Total/NA
Chlorobenzene	71		50	4.8	ug/L	10		624	Total/NA
4-Chloroaniline	11		5.0	0.69	ug/L	1		625	Total/NA
Acenaphthene	0.29	J	5.0	0.060	ug/L	1		625	Total/NA
N-Nitrosodiphenylamine	1.1	J	5.0	0.40	ug/L	1		625	Total/NA

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Comp
Date Collected: 04/14/14 12:15
Date Received: 04/14/14 17:00

Lab Sample ID: 480-57908-6
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0099	J	0.010	0.0056	mg/L		04/16/14 09:10	04/17/14 03:13	1
Barium	0.26		0.0020	0.00070	mg/L		04/16/14 09:10	04/17/14 03:13	1
Chromium	0.0075		0.0040	0.0010	mg/L		04/16/14 09:10	04/17/14 03:13	1
Copper	0.021		0.010	0.0016	mg/L		04/16/14 09:10	04/17/14 03:13	1
Nickel	0.017		0.010	0.0013	mg/L		04/16/14 09:10	04/17/14 03:13	1
Zinc	0.034		0.010	0.0015	mg/L		04/16/14 09:10	04/17/14 03:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	0.081		0.010	0.0050	mg/L			04/23/14 13:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	28.0		4.0	4.0	mg/L			04/15/14 17:45	1
pH	7.55	HF	0.100	0.100	SU			04/15/14 21:05	1

Client Sample ID: Alltift Collection Sump - Grab
Date Collected: 04/14/14 12:00
Date Received: 04/14/14 17:00

Lab Sample ID: 480-57908-7
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			04/15/14 16:17	10
1,1,2,2-Tetrachloroethane	ND		50	2.6	ug/L			04/15/14 16:17	10
1,1,2-Trichloroethane	ND		50	4.8	ug/L			04/15/14 16:17	10
1,1-Dichloroethane	ND		50	5.9	ug/L			04/15/14 16:17	10
1,1-Dichloroethene	ND		50	8.5	ug/L			04/15/14 16:17	10
1,2-Dichlorobenzene	ND		50	4.4	ug/L			04/15/14 16:17	10
1,2-Dichloroethane	ND		50	6.0	ug/L			04/15/14 16:17	10
1,2-Dichloroethene, Total	ND		100	32	ug/L			04/15/14 16:17	10
1,2-Dichloropropane	ND		50	6.1	ug/L			04/15/14 16:17	10
1,3-Dichlorobenzene	ND		50	5.4	ug/L			04/15/14 16:17	10
1,4-Dichlorobenzene	ND		50	5.1	ug/L			04/15/14 16:17	10
2-Chloroethyl vinyl ether	ND		250	19	ug/L			04/15/14 16:17	10
Acrolein	ND		1000	170	ug/L			04/15/14 16:17	10
Acrylonitrile	ND		500	19	ug/L			04/15/14 16:17	10
Benzene	**11**	**J**	50	6.0	ug/L			04/15/14 16:17	10
Bromoform	ND		50	4.7	ug/L			04/15/14 16:17	10
Bromomethane	ND		50	12	ug/L			04/15/14 16:17	10
Carbon tetrachloride	ND		50	5.1	ug/L			04/15/14 16:17	10
Chlorobenzene	**71**		50	4.8	ug/L			04/15/14 16:17	10
Chlorodibromomethane	ND		50	4.1	ug/L			04/15/14 16:17	10
Chloroethane	ND		50	8.7	ug/L			04/15/14 16:17	10
Chloroform	ND		50	5.4	ug/L			04/15/14 16:17	10
Chloromethane	ND		50	6.4	ug/L			04/15/14 16:17	10
cis-1,3-Dichloropropene	ND		50	3.3	ug/L			04/15/14 16:17	10
Dichlorobromomethane	ND		50	5.4	ug/L			04/15/14 16:17	10
Ethylbenzene	ND		50	4.6	ug/L			04/15/14 16:17	10
Methylene Chloride	ND		50	8.1	ug/L			04/15/14 16:17	10
Tetrachloroethene	ND		50	3.4	ug/L			04/15/14 16:17	10
Toluene	ND		50	4.5	ug/L			04/15/14 16:17	10
trans-1,2-Dichloroethene	ND		50	5.9	ug/L			04/15/14 16:17	10
trans-1,3-Dichloropropene	ND		50	4.4	ug/L			04/15/14 16:17	10
Trichloroethene	ND		50	6.0	ug/L			04/15/14 16:17	10
Vinyl chloride	ND		50	7.5	ug/L			04/15/14 16:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*		*04/15/14 16:17*	*10*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*		*04/15/14 16:17*	*10*
Toluene-d8 (Surr)	*85*		*70 - 123*		*04/15/14 16:17*	*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	0.49	ug/L		04/17/14 11:25	04/18/14 17:53	1
1,2-Dichlorobenzene	ND		10	0.15	ug/L		04/17/14 11:25	04/18/14 17:53	1
1,2-Diphenylhydrazine	ND		10	0.063	ug/L		04/17/14 11:25	04/18/14 17:53	1
1,3-Dichlorobenzene	ND		10	0.069	ug/L		04/17/14 11:25	04/18/14 17:53	1
1,4-Dichlorobenzene	ND		10	0.090	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,4,6-Trichlorophenol	ND		5.0	0.23	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,4-Dichlorophenol	ND		5.0	0.30	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,4-Dimethylphenol	ND		5.0	0.13	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,4-Dinitrophenol	ND		10	0.84	ug/L		04/17/14 11:25	04/18/14 17:53	1

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Grab
Date Collected: 04/14/14 12:00
Date Received: 04/14/14 17:00

Lab Sample ID: 480-57908-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.26	ug/L		04/17/14 11:25	04/18/14 17:53	1
2,6-Dinitrotoluene	ND		5.0	0.72	ug/L		04/17/14 11:25	04/18/14 17:53	1
2-Chloronaphthalene	ND		5.0	0.068	ug/L		04/17/14 11:25	04/18/14 17:53	1
2-Chlorophenol	ND		5.0	0.16	ug/L		04/17/14 11:25	04/18/14 17:53	1
2-Nitrophenol	ND		5.0	0.14	ug/L		04/17/14 11:25	04/18/14 17:53	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		04/17/14 11:25	04/18/14 17:53	1
4,6-Dinitro-2-methylphenol	ND		10	0.76	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Bromophenyl phenyl ether	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Chloro-3-methylphenol	ND		5.0	0.56	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Chloroaniline	**11**		5.0	0.69	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Chlorophenyl phenyl ether	ND		5.0	0.21	ug/L		04/17/14 11:25	04/18/14 17:53	1
4-Nitrophenol	ND		10	1.3	ug/L		04/17/14 11:25	04/18/14 17:53	1
Acenaphthene	**0.29**	**J**	5.0	0.060	ug/L		04/17/14 11:25	04/18/14 17:53	1
Acenaphthylene	ND		5.0	0.034	ug/L		04/17/14 11:25	04/18/14 17:53	1
Anthracene	ND		5.0	0.052	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzidine	ND		80	2.5	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[a]anthracene	ND		5.0	0.043	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[a]pyrene	ND	*	5.0	0.058	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[b]fluoranthene	ND	*	5.0	0.062	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[g,h,i]perylene	ND	*	5.0	0.10	ug/L		04/17/14 11:25	04/18/14 17:53	1
Benzo[k]fluoranthene	ND	*	5.0	0.042	ug/L		04/17/14 11:25	04/18/14 17:53	1
bis (2-chloroisopropyl) ether	ND		5.0	0.086	ug/L		04/17/14 11:25	04/18/14 17:53	1
Bis(2-chloroethoxy)methane	ND		5.0	0.085	ug/L		04/17/14 11:25	04/18/14 17:53	1
Bis(2-chloroethyl)ether	ND		5.0	1.1	ug/L		04/17/14 11:25	04/18/14 17:53	1
Bis(2-ethylhexyl) phthalate	ND		10	0.86	ug/L		04/17/14 11:25	04/18/14 17:53	1
Butyl benzyl phthalate	ND		5.0	1.3	ug/L		04/17/14 11:25	04/18/14 17:53	1
Chrysene	ND		5.0	0.036	ug/L		04/17/14 11:25	04/18/14 17:53	1
Dibenz(a,h)anthracene	ND	*	5.0	0.055	ug/L		04/17/14 11:25	04/18/14 17:53	1
Diethyl phthalate	ND		5.0	0.17	ug/L		04/17/14 11:25	04/18/14 17:53	1
Dimethyl phthalate	ND		5.0	0.17	ug/L		04/17/14 11:25	04/18/14 17:53	1
Di-n-butyl phthalate	ND		5.0	0.94	ug/L		04/17/14 11:25	04/18/14 17:53	1
Di-n-octyl phthalate	ND		5.0	4.5	ug/L		04/17/14 11:25	04/18/14 17:53	1
Fluoranthene	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 17:53	1
Fluorene	ND		5.0	0.043	ug/L		04/17/14 11:25	04/18/14 17:53	1
Hexachlorobenzene	ND		5.0	0.28	ug/L		04/17/14 11:25	04/18/14 17:53	1
Hexachlorobutadiene	ND		5.0	0.62	ug/L		04/17/14 11:25	04/18/14 17:53	1
Hexachlorocyclopentadiene	ND		5.0	0.45	ug/L		04/17/14 11:25	04/18/14 17:53	1
Hexachloroethane	ND		5.0	0.48	ug/L		04/17/14 11:25	04/18/14 17:53	1
Indeno[1,2,3-cd]pyrene	ND	*	5.0	0.19	ug/L		04/17/14 11:25	04/18/14 17:53	1
Isophorone	ND		5.0	0.16	ug/L		04/17/14 11:25	04/18/14 17:53	1
Naphthalene	ND		5.0	0.080	ug/L		04/17/14 11:25	04/18/14 17:53	1
Nitrobenzene	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 17:53	1
N-Nitrosodimethylamine	ND		10	0.96	ug/L		04/17/14 11:25	04/18/14 17:53	1
N-Nitrosodi-n-propylamine	ND		5.0	0.23	ug/L		04/17/14 11:25	04/18/14 17:53	1
N-Nitrosodiphenylamine	**1.1**	**J**	5.0	0.40	ug/L		04/17/14 11:25	04/18/14 17:53	1
Pentachlorophenol	ND		10	0.41	ug/L		04/17/14 11:25	04/18/14 17:53	1
Phenanthrene	ND		5.0	0.071	ug/L		04/17/14 11:25	04/18/14 17:53	1
Phenol	ND		5.0	0.12	ug/L		04/17/14 11:25	04/18/14 17:53	1
Pyrene	ND	*	5.0	0.041	ug/L		04/17/14 11:25	04/18/14 17:53	1

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Grab
Date Collected: 04/14/14 12:00
Date Received: 04/14/14 17:00

Lab Sample ID: 480-57908-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		52 - 151	04/17/14 11:25	04/18/14 17:53	1
2-Fluorobiphenyl	70		44 - 120	04/17/14 11:25	04/18/14 17:53	1
2-Fluorophenol	37		17 - 120	04/17/14 11:25	04/18/14 17:53	1
Nitrobenzene-d5	66		42 - 120	04/17/14 11:25	04/18/14 17:53	1
Phenol-d5	26		10 - 120	04/17/14 11:25	04/18/14 17:53	1
p-Terphenyl-d14	97		22 - 125	04/17/14 11:25	04/18/14 17:53	1

Surrogate Summary

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

TestAmerica Job ID: 480-57908-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		12DCE	BFB	TOL							
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)							
480-57908-7	Alltift Collection Sump - Grab	92	96	85							
LCS 480-175909/5	Lab Control Sample	86	96	88							
MB 480-175909/6	Method Blank	89	95	87							

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (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)				
480-57908-7	Alltift Collection Sump - Grab	86	70	37	66	26	97				
LCS 480-176482/2-A	Lab Control Sample	95	78	46	79	33	121				
MB 480-176482/1-A	Method Blank	81	80	46	81	33	117				

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 480-175909/6
Matrix: Water
Analysis Batch: 175909

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			04/15/14 14:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			04/15/14 14:48	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			04/15/14 14:48	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			04/15/14 14:48	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			04/15/14 14:48	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			04/15/14 14:48	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			04/15/14 14:48	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			04/15/14 14:48	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			04/15/14 14:48	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			04/15/14 14:48	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			04/15/14 14:48	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			04/15/14 14:48	1
Acrolein	ND		100	17	ug/L			04/15/14 14:48	1
Acrylonitrile	ND		50	1.9	ug/L			04/15/14 14:48	1
Benzene	ND		5.0	0.60	ug/L			04/15/14 14:48	1
Bromoform	ND		5.0	0.47	ug/L			04/15/14 14:48	1
Bromomethane	ND		5.0	1.2	ug/L			04/15/14 14:48	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			04/15/14 14:48	1
Chlorobenzene	ND		5.0	0.48	ug/L			04/15/14 14:48	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			04/15/14 14:48	1
Chloroethane	ND		5.0	0.87	ug/L			04/15/14 14:48	1
Chloroform	ND		5.0	0.54	ug/L			04/15/14 14:48	1
Chloromethane	ND		5.0	0.64	ug/L			04/15/14 14:48	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			04/15/14 14:48	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			04/15/14 14:48	1
Ethylbenzene	ND		5.0	0.46	ug/L			04/15/14 14:48	1
Methylene Chloride	ND		5.0	0.81	ug/L			04/15/14 14:48	1
Tetrachloroethene	ND		5.0	0.34	ug/L			04/15/14 14:48	1
Toluene	ND		5.0	0.45	ug/L			04/15/14 14:48	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			04/15/14 14:48	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			04/15/14 14:48	1
Trichloroethene	ND		5.0	0.60	ug/L			04/15/14 14:48	1
Vinyl chloride	ND		5.0	0.75	ug/L			04/15/14 14:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*		*04/15/14 14:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*69 - 121*		*04/15/14 14:48*	*1*
Toluene-d8 (Surr)	*87*		*70 - 123*		*04/15/14 14:48*	*1*

Lab Sample ID: LCS 480-175909/5
Matrix: Water
Analysis Batch: 175909

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	20.5		ug/L		102	52 - 162
1,1,2,2-Tetrachloroethane	20.0	18.8		ug/L		94	46 - 157
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	52 - 150
1,1-Dichloroethane	20.0	22.2		ug/L		111	59 - 155

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

Lab Sample ID: LCS 480-175909/5
Matrix: Water
Analysis Batch: 175909

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	21.8		ug/L		109	1 - 234
1,2-Dichlorobenzene	20.0	18.7		ug/L		93	18 - 190
1,2-Dichloroethane	20.0	20.7		ug/L		103	49 - 155
1,2-Dichloropropane	20.0	22.1		ug/L		110	1 - 210
1,3-Dichlorobenzene	20.0	19.0		ug/L		95	59 - 156
1,4-Dichlorobenzene	20.0	19.1		ug/L		96	18 - 190
2-Chloroethyl vinyl ether	20.0	21.6	J	ug/L		108	1 - 305
Benzene	20.0	22.2		ug/L		111	37 - 151
Bromoform	20.0	16.0		ug/L		80	45 - 169
Bromomethane	20.0	24.3		ug/L		121	1 - 242
Carbon tetrachloride	20.0	21.1		ug/L		106	70 - 140
Chlorobenzene	20.0	20.4		ug/L		102	37 - 160
Chlorodibromomethane	19.6	17.7		ug/L		90	53 - 149
Chloroethane	20.0	21.4		ug/L		107	14 - 230
Chloroform	20.0	21.7		ug/L		109	51 - 138
Chloromethane	20.0	20.8		ug/L		104	1 - 273
cis-1,3-Dichloropropene	20.0	22.0		ug/L		110	1 - 227
Dichlorobromomethane	20.0	20.5		ug/L		102	35 - 155
Ethylbenzene	20.0	20.6		ug/L		103	37 - 162
Methylene Chloride	20.0	20.5		ug/L		103	1 - 221
Tetrachloroethene	20.0	20.1		ug/L		100	64 - 148
Toluene	20.0	18.9		ug/L		94	47 - 150
trans-1,2-Dichloroethene	20.0	21.7		ug/L		108	54 - 156
trans-1,3-Dichloropropene	20.0	20.0		ug/L		100	17 - 183
Trichloroethene	20.0	22.6		ug/L		113	71 - 157
Vinyl chloride	20.0	21.1		ug/L		106	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*
Toluene-d8 (Surr)	*88*		*70 - 123*

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

Lab Sample ID: MB 480-176482/1-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.49	ug/L		04/17/14 11:25	04/18/14 14:04	1
1,2-Dichlorobenzene	ND		10	0.15	ug/L		04/17/14 11:25	04/18/14 14:04	1
1,2-Diphenylhydrazine	ND		10	0.063	ug/L		04/17/14 11:25	04/18/14 14:04	1
1,3-Dichlorobenzene	ND		10	0.069	ug/L		04/17/14 11:25	04/18/14 14:04	1
1,4-Dichlorobenzene	ND		10	0.090	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,4,6-Trichlorophenol	ND		5.0	0.23	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,4-Dichlorophenol	ND		5.0	0.30	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,4-Dimethylphenol	ND		5.0	0.13	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,4-Dinitrophenol	ND		10	0.84	ug/L		04/17/14 11:25	04/18/14 14:04	1

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

Lab Sample ID: MB 480-176482/1-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.26	ug/L		04/17/14 11:25	04/18/14 14:04	1
2,6-Dinitrotoluene	ND		5.0	0.72	ug/L		04/17/14 11:25	04/18/14 14:04	1
2-Chloronaphthalene	ND		5.0	0.068	ug/L		04/17/14 11:25	04/18/14 14:04	1
2-Chlorophenol	ND		5.0	0.16	ug/L		04/17/14 11:25	04/18/14 14:04	1
2-Nitrophenol	ND		5.0	0.14	ug/L		04/17/14 11:25	04/18/14 14:04	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		04/17/14 11:25	04/18/14 14:04	1
4,6-Dinitro-2-methylphenol	ND		10	0.76	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Bromophenyl phenyl ether	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Chloro-3-methylphenol	ND		5.0	0.56	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Chloroaniline	ND		5.0	0.69	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Chlorophenyl phenyl ether	ND		5.0	0.21	ug/L		04/17/14 11:25	04/18/14 14:04	1
4-Nitrophenol	ND		10	1.3	ug/L		04/17/14 11:25	04/18/14 14:04	1
Acenaphthene	ND		5.0	0.060	ug/L		04/17/14 11:25	04/18/14 14:04	1
Acenaphthylene	ND		5.0	0.034	ug/L		04/17/14 11:25	04/18/14 14:04	1
Anthracene	ND		5.0	0.052	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzidine	ND		80	2.5	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[a]anthracene	ND		5.0	0.043	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[a]pyrene	ND		5.0	0.058	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[b]fluoranthene	ND		5.0	0.062	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[g,h,i]perylene	ND		5.0	0.10	ug/L		04/17/14 11:25	04/18/14 14:04	1
Benzo[k]fluoranthene	ND		5.0	0.042	ug/L		04/17/14 11:25	04/18/14 14:04	1
bis (2-chloroisopropyl) ether	ND		5.0	0.086	ug/L		04/17/14 11:25	04/18/14 14:04	1
Bis(2-chloroethoxy)methane	ND		5.0	0.085	ug/L		04/17/14 11:25	04/18/14 14:04	1
Bis(2-chloroethyl)ether	ND		5.0	1.1	ug/L		04/17/14 11:25	04/18/14 14:04	1
Bis(2-ethylhexyl) phthalate	ND		10	0.86	ug/L		04/17/14 11:25	04/18/14 14:04	1
Butyl benzyl phthalate	ND		5.0	1.3	ug/L		04/17/14 11:25	04/18/14 14:04	1
Chrysene	ND		5.0	0.036	ug/L		04/17/14 11:25	04/18/14 14:04	1
Dibenz(a,h)anthracene	ND		5.0	0.055	ug/L		04/17/14 11:25	04/18/14 14:04	1
Diethyl phthalate	ND		5.0	0.17	ug/L		04/17/14 11:25	04/18/14 14:04	1
Dimethyl phthalate	ND		5.0	0.17	ug/L		04/17/14 11:25	04/18/14 14:04	1
Di-n-butyl phthalate	ND		5.0	0.94	ug/L		04/17/14 11:25	04/18/14 14:04	1
Di-n-octyl phthalate	ND		5.0	4.5	ug/L		04/17/14 11:25	04/18/14 14:04	1
Fluoranthene	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 14:04	1
Fluorene	ND		5.0	0.043	ug/L		04/17/14 11:25	04/18/14 14:04	1
Hexachlorobenzene	ND		5.0	0.28	ug/L		04/17/14 11:25	04/18/14 14:04	1
Hexachlorobutadiene	ND		5.0	0.62	ug/L		04/17/14 11:25	04/18/14 14:04	1
Hexachlorocyclopentadiene	ND		5.0	0.45	ug/L		04/17/14 11:25	04/18/14 14:04	1
Hexachloroethane	ND		5.0	0.48	ug/L		04/17/14 11:25	04/18/14 14:04	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.19	ug/L		04/17/14 11:25	04/18/14 14:04	1
Isophorone	ND		5.0	0.16	ug/L		04/17/14 11:25	04/18/14 14:04	1
Naphthalene	ND		5.0	0.080	ug/L		04/17/14 11:25	04/18/14 14:04	1
Nitrobenzene	ND		5.0	0.11	ug/L		04/17/14 11:25	04/18/14 14:04	1
N-Nitrosodimethylamine	ND		10	0.96	ug/L		04/17/14 11:25	04/18/14 14:04	1
N-Nitrosodi-n-propylamine	ND		5.0	0.23	ug/L		04/17/14 11:25	04/18/14 14:04	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		04/17/14 11:25	04/18/14 14:04	1
Pentachlorophenol	ND		10	0.41	ug/L		04/17/14 11:25	04/18/14 14:04	1
Phenanthrene	ND		5.0	0.071	ug/L		04/17/14 11:25	04/18/14 14:04	1
Phenol	ND		5.0	0.12	ug/L		04/17/14 11:25	04/18/14 14:04	1

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

Lab Sample ID: MB 480-176482/1-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.0	0.041	ug/L		04/17/14 11:25	04/18/14 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*52 - 151*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
2-Fluorobiphenyl	*80*		*44 - 120*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
2-Fluorophenol	*46*		*17 - 120*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
Nitrobenzene-d5	*81*		*42 - 120*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
Phenol-d5	*33*		*10 - 120*	*04/17/14 11:25*	*04/18/14 14:04*	*1*
p-Terphenyl-d14	*117*		*22 - 125*	*04/17/14 11:25*	*04/18/14 14:04*	*1*

Lab Sample ID: LCS 480-176482/2-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176482

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	70.5		ug/L		71	44 - 142
1,2-Dichlorobenzene	100	66.3		ug/L		66	32 - 129
1,3-Dichlorobenzene	100	62.7		ug/L		63	1 - 172
1,4-Dichlorobenzene	100	64.4		ug/L		64	20 - 124
2,4,6-Trichlorophenol	100	88.6		ug/L		89	37 - 144
2,4-Dichlorophenol	100	86.6		ug/L		87	39 - 135
2,4-Dimethylphenol	100	86.7		ug/L		87	32 - 119
2,4-Dinitrophenol	200	194		ug/L		97	1 - 191
2,4-Dinitrotoluene	100	97.4		ug/L		97	39 - 139
2,6-Dinitrotoluene	100	93.4		ug/L		93	50 - 158
2-Chloronaphthalene	100	82.3		ug/L		82	60 - 118
2-Chlorophenol	100	78.5		ug/L		79	23 - 134
2-Nitrophenol	100	85.4		ug/L		85	29 - 182
3,3'-Dichlorobenzidine	100	64.3		ug/L		64	1 - 262
4,6-Dinitro-2-methylphenol	200	231		ug/L		116	1 - 181
4-Bromophenyl phenyl ether	100	91.7		ug/L		92	53 - 127
4-Chloro-3-methylphenol	100	92.6		ug/L		93	22 - 147
4-Chlorophenyl phenyl ether	100	85.7		ug/L		86	25 - 158
4-Nitrophenol	200	102		ug/L		51	1 - 132
Acenaphthene	100	86.3		ug/L		86	47 - 145
Acenaphthylene	100	81.3		ug/L		81	33 - 145
Anthracene	100	98.3		ug/L		98	27 - 133
Benzo[a]anthracene	100	105		ug/L		105	33 - 143
Benzo[a]pyrene	100	107		ug/L		107	17 - 163
Benzo[b]fluoranthene	100	97.3		ug/L		97	24 - 159
Benzo[g,h,i]perylene	100	114		ug/L		114	1 - 219
Benzo[k]fluoranthene	100	104		ug/L		104	11 - 162
bis (2-chloroisopropyl) ether	100	81.2		ug/L		81	36 - 166
Bis(2-chloroethoxy)methane	100	84.0		ug/L		84	33 - 184
Bis(2-chloroethyl)ether	100	78.9		ug/L		79	12 - 158
Bis(2-ethylhexyl) phthalate	100	110		ug/L		110	8 - 158
Butyl benzyl phthalate	100	115		ug/L		115	1 - 152
Chrysene	100	109		ug/L		109	17 - 168

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

Lab Sample ID: LCS 480-176482/2-A
Matrix: Water
Analysis Batch: 176761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176482

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	100	110		ug/L		110	1 - 227
Diethyl phthalate	100	98.2		ug/L		98	1 - 114
Dimethyl phthalate	100	92.1		ug/L		92	1 - 112
Di-n-butyl phthalate	100	101		ug/L		101	1 - 118
Di-n-octyl phthalate	100	96.6		ug/L		97	4 - 146
Fluoranthene	100	102		ug/L		102	26 - 137
Fluorene	100	87.7		ug/L		88	59 - 121
Hexachlorobenzene	100	91.4		ug/L		91	1 - 152
Hexachlorocyclopentadiene	100	43.5		ug/L		44	5 - 120
Hexachloroethane	100	61.5		ug/L		62	40 - 113
Indeno[1,2,3-cd]pyrene	100	100		ug/L		100	1 - 171
Isophorone	100	85.4		ug/L		85	21 - 196
Naphthalene	100	79.6		ug/L		80	21 - 133
Nitrobenzene	100	82.5		ug/L		83	35 - 180
N-Nitrosodi-n-propylamine	100	84.4		ug/L		84	1 - 230
N-Nitrosodiphenylamine	100	96.4		ug/L		96	54 - 125
Pentachlorophenol	200	202		ug/L		101	14 - 176
Phenanthrene	100	97.4		ug/L		97	54 - 120
Phenol	100	38.2		ug/L		38	5 - 112
Pyrene	100	119	*	ug/L		119	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*95*		*52 - 151*
2-Fluorobiphenyl	*78*		*44 - 120*
2-Fluorophenol	*46*		*17 - 120*
Nitrobenzene-d5	*79*		*42 - 120*
Phenol-d5	*33*		*10 - 120*
p-Terphenyl-d14	*121*		*22 - 125*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-176065/1-A
Matrix: Water
Analysis Batch: 176375

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176065

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		04/16/14 09:10	04/17/14 02:25	1
Barium	ND		0.0020	0.00070	mg/L		04/16/14 09:10	04/17/14 02:25	1
Chromium	ND		0.0040	0.0010	mg/L		04/16/14 09:10	04/17/14 02:25	1
Copper	ND		0.010	0.0016	mg/L		04/16/14 09:10	04/17/14 02:25	1
Nickel	ND		0.010	0.0013	mg/L		04/16/14 09:10	04/17/14 02:25	1
Zinc	ND		0.010	0.0015	mg/L		04/16/14 09:10	04/17/14 02:25	1

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

Lab Sample ID: LCS 480-176065/2-A
Matrix: Water
Analysis Batch: 176375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.213		mg/L		107	85 - 115
Barium	0.200	0.212		mg/L		106	85 - 115
Chromium	0.200	0.205		mg/L		103	85 - 115
Copper	0.200	0.204		mg/L		102	85 - 115
Nickel	0.200	0.202		mg/L		101	85 - 115
Zinc	0.200	0.207		mg/L		103	85 - 115

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

Lab Sample ID: MB 480-175929/1
Matrix: Water
Analysis Batch: 175929

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			04/15/14 17:07	1

Lab Sample ID: LCS 480-175929/2
Matrix: Water
Analysis Batch: 175929

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	225	207.6		mg/L		92	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-176036/1
Matrix: Water
Analysis Batch: 176036

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	6.990		SU		100	99 - 101

Lab Sample ID: 480-57908-6 DU
Matrix: Water
Analysis Batch: 176036

Client Sample ID: Alltift Collection Sump - Comp
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.55	HF	7.560		SU		0.1	5

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 480-177841/27
Matrix: Water
Analysis Batch: 177841

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			04/23/14 13:22	1

Method: SM 4500 P E - Phosphorus (Continued)

Lab Sample ID: MB 480-177841/75
Matrix: Water
Analysis Batch: 177841

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			04/23/14 13:22	1

Lab Sample ID: LCS 480-177841/28
Matrix: Water
Analysis Batch: 177841

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	0.208		mg/L		104	90 - 110

Lab Sample ID: LCS 480-177841/76
Matrix: Water
Analysis Batch: 177841

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	0.190		mg/L		95	90 - 110

GC/MS VOA

Analysis Batch: 175909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-7	Alltift Collection Sump - Grab	Total/NA	Water	624	
LCS 480-175909/5	Lab Control Sample	Total/NA	Water	624	
MB 480-175909/6	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 176482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-7	Alltift Collection Sump - Grab	Total/NA	Water	625	
LCS 480-176482/2-A	Lab Control Sample	Total/NA	Water	625	
MB 480-176482/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 176761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-7	Alltift Collection Sump - Grab	Total/NA	Water	625	176482
LCS 480-176482/2-A	Lab Control Sample	Total/NA	Water	625	176482
MB 480-176482/1-A	Method Blank	Total/NA	Water	625	176482

Metals

Prep Batch: 176065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	200.7	
LCS 480-176065/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-176065/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 176375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	200.7 Rev 4.4	176065
LCS 480-176065/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	176065
MB 480-176065/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	176065

General Chemistry

Analysis Batch: 175929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	SM 2540D	
LCS 480-175929/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-175929/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 176036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 H+ B	
480-57908-6 DU	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 H+ B	
LCS 480-176036/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 177841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-57908-6	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 P E	
LCS 480-177841/28	Lab Control Sample	Total/NA	Water	SM 4500 P E	

General Chemistry (Continued)

Analysis Batch: 177841 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-177841/76	Lab Control Sample	Total/NA	Water	SM 4500 P E	
MB 480-177841/27	Method Blank	Total/NA	Water	SM 4500 P E	
MB 480-177841/75	Method Blank	Total/NA	Water	SM 4500 P E	

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

TestAmerica Job ID: 480-57908-1

Client Sample ID: Alltift Collection Sump - Comp

Lab Sample ID: 480-57908-6

Date Collected: 04/14/14 12:15

Matrix: Water

Date Received: 04/14/14 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			176065	04/16/14 09:10	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	176375	04/17/14 03:13	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	175929	04/15/14 17:45	KS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	176036	04/15/14 21:05	KS	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	177841	04/23/14 13:22	KMF	TAL BUF

Client Sample ID: Alltift Collection Sump - Grab

Lab Sample ID: 480-57908-7

Date Collected: 04/14/14 12:00

Matrix: Water

Date Received: 04/14/14 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		10	175909	04/15/14 16:17	TRB	TAL BUF
Total/NA	Prep	625			176482	04/17/14 11:25	MCZ	TAL BUF
Total/NA	Analysis	625		1	176761	04/18/14 17:53	ANM	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: 480-57908-1

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	03-31-15

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: 480-57908-1

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: 480-57908-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-57908-6	Alltift Collection Sump - Comp	Water	04/14/14 12:15	04/14/14 17:00
480-57908-7	Alltift Collection Sump - Grab	Water	04/14/14 12:00	04/14/14 17:00

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480-57908 Chain of Custody

Client Information

Client Contact: John Formoza	Sampler: Patrick Higgins
Company: Honeywell International Inc	Phone: 315-468-1663
Address: 1563 Willis Ave.	Due Date Requested:
City: Syracuse	TAT Requested (days): 2 Weeks
State, Zip: NY, 13204	PO #: 4500073922
Phone: 315-468-1663	WO #:
Email: john.formoza@ch2m.com	Project #: 48003159
Project Name: Honeywell - Alltift OM phase / Semi Annual	SSOW#:
Site: Honeywell - Buffalo Sites	

Carrier Tracking No(s):

COC No: 480-21387-2026.1

Page: Page 1 of 1

Job #:

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_5ml - 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	4/14/14	0600	G	W	N	N					2	2	4	Prior to analysis grab samples to be composited by lab
BSA Discharge	GRAB 2	4/14/14	0800	G	W	N	N					2	2	4	
BSA Discharge	GRAB 3	4/14/14	1000	G	W	N	N					2	2	4	
BSA Discharge	GRAB 4	4/14/14	1200	G	W	N	N					2	2	4	
BSA Discharge	COMP	4/14/14	1215	C	W	N	N	1	1	1	1			4	
TRIPBLANK	-TB	4/14/14	12:15		W	N	N							0	TRIB 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:

	Date/Time	Company		Date/Time	Company
Relinquished by: Patrick Higgins	4/14/2014 17:00		Received by:	4/14/14 1700	TA Buff
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 2.7

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-57908-1

Login Number: 57908

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

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 comp 624/625 volume
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	True	Ok

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ANALYTICAL REPORT

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

TestAmerica Job ID: 480-60395-1
Client Project/Site: 30130 - Alltift Collection System

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

Attn: Mr. Rich Galloway

Authorized for release by:
5/27/2014 12:20:32 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
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: 480-60395-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-60395-1

Comments
No additional comments.

Receipt
The samples were received on 5/22/2014 1:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 3.9º 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 2-052214 (480-60395-3). 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.

Detection Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

Client Sample ID: Sump1-052214 — Lab Sample ID: 480-60395-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	1.3		1.0	0.75	ug/L	1		8260C	Total/NA

Client Sample ID: FDUP-052214 — Lab Sample ID: 480-60395-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	1.6		1.0	0.75	ug/L	1		8260C	Total/NA

Client Sample ID: Sump 2-052214 — Lab Sample ID: 480-60395-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.9	J	5.0	2.1	ug/L	5		8260C	Total/NA
Chlorobenzene	62		5.0	3.8	ug/L	5		8260C	Total/NA

Client Sample ID: SW 1-052214 — Lab Sample ID: 480-60395-4

No Detections.

Client Sample ID: 052214-TB — Lab Sample ID: 480-60395-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

Client Sample ID: Sump1-052214
Date Collected: 05/22/14 09:30
Date Received: 05/22/14 13:10

Lab Sample ID: 480-60395-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/24/14 15:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/24/14 15:01	1
Benzene	1.0	U	1.0	0.41	ug/L			05/24/14 15:01	1
Chlorobenzene	**1.3**		1.0	0.75	ug/L			05/24/14 15:01	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/24/14 15:01	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/24/14 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*66 - 137*		*05/24/14 15:01*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*05/24/14 15:01*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*05/24/14 15:01*	*1*

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

Client Sample ID: FDUP-052214
Date Collected: 05/22/14 09:35
Date Received: 05/22/14 13:10

Lab Sample ID: 480-60395-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/24/14 15:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/24/14 15:25	1
Benzene	1.0	U	1.0	0.41	ug/L			05/24/14 15:25	1
Chlorobenzene	**1.6**		1.0	0.75	ug/L			05/24/14 15:25	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/24/14 15:25	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/24/14 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*66 - 137*		*05/24/14 15:25*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*05/24/14 15:25*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*05/24/14 15:25*	*1*

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

Client Sample ID: Sump 2-052214
Date Collected: 05/22/14 09:55
Date Received: 05/22/14 13:10

Lab Sample ID: 480-60395-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	5.0	U	5.0	4.0	ug/L			05/24/14 06:11	5
1,4-Dichlorobenzene	5.0	U	5.0	4.2	ug/L			05/24/14 06:11	5
Benzene	**4.9**	**J**	5.0	2.1	ug/L			05/24/14 06:11	5
Chlorobenzene	**62**		5.0	3.8	ug/L			05/24/14 06:11	5
Ethylbenzene	5.0	U	5.0	3.7	ug/L			05/24/14 06:11	5
Xylenes, Total	10	U	10	3.3	ug/L			05/24/14 06:11	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*127*		*66 - 137*		*05/24/14 06:11*	*5*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/24/14 06:11*	*5*
Toluene-d8 (Surr)	*102*		*71 - 126*		*05/24/14 06:11*	*5*

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

Client Sample ID: SW 1-052214
Date Collected: 05/22/14 10:20
Date Received: 05/22/14 13:10

Lab Sample ID: 480-60395-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/24/14 06:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/24/14 06:35	1
Benzene	1.0	U	1.0	0.41	ug/L			05/24/14 06:35	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/24/14 06:35	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/24/14 06:35	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/24/14 06:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*127*		*66 - 137*		*05/24/14 06:35*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/24/14 06:35*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*05/24/14 06:35*	*1*

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

Client Sample ID: 052214-TB
Date Collected: 05/22/14 10:35
Date Received: 05/22/14 13:10

Lab Sample ID: 480-60395-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/24/14 06:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/24/14 06:59	1
Benzene	1.0	U	1.0	0.41	ug/L			05/24/14 06:59	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/24/14 06:59	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/24/14 06:59	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/24/14 06:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*128*		*66 - 137*		*05/24/14 06:59*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/24/14 06:59*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*05/24/14 06:59*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)								
		12DCE	BFB	TOL						
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(71-126)						
480-60395-1	Sump1-052214	123	94	105						
480-60395-2	FDUP-052214	124	96	103						
480-60395-3	Sump 2-052214	127	91	102						
480-60395-4	SW 1-052214	127	90	100						
480-60395-5	052214-TB	128	90	103						
LCS 480-183935/4	Lab Control Sample	116	101	107						
LCS 480-183987/4	Lab Control Sample	114	101	108						
MB 480-183935/6	Method Blank	121	93	101						
MB 480-183987/6	Method Blank	124	90	102						

Surrogate Legend

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

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

Lab Sample ID: MB 480-183935/6
Matrix: Water
Analysis Batch: 183935

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	1.0	U	1.0	0.79	ug/L			05/24/14 00:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/24/14 00:51	1
Benzene	1.0	U	1.0	0.41	ug/L			05/24/14 00:51	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/24/14 00:51	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/24/14 00:51	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/24/14 00:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*66 - 137*		*05/24/14 00:51*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*05/24/14 00:51*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*05/24/14 00:51*	*1*

Lab Sample ID: LCS 480-183935/4
Matrix: Water
Analysis Batch: 183935

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	26.0		ug/L		104	80 - 124
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	75 - 120
Benzene	25.0	25.2		ug/L		101	71 - 124
Chlorobenzene	25.0	25.8		ug/L		103	72 - 120
Ethylbenzene	25.0	26.5		ug/L		106	77 - 123
m-Xylene & p-Xylene	25.0	25.3		ug/L		101	76 - 122
o-Xylene	25.0	25.7		ug/L		103	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Toluene-d8 (Surr)	*107*		*71 - 126*

Lab Sample ID: MB 480-183987/6
Matrix: Water
Analysis Batch: 183987

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	1.0	U	1.0	0.79	ug/L			05/24/14 13:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/24/14 13:13	1
Benzene	1.0	U	1.0	0.41	ug/L			05/24/14 13:13	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/24/14 13:13	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/24/14 13:13	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/24/14 13:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*66 - 137*		*05/24/14 13:13*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/24/14 13:13*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*05/24/14 13:13*	*1*

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

Lab Sample ID: LCS 480-183987/4
Matrix: Water
Analysis Batch: 183987

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	25.6		ug/L		102	80 - 124
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	75 - 120
Benzene	25.0	25.8		ug/L		103	71 - 124
Chlorobenzene	25.0	26.3		ug/L		105	72 - 120
Ethylbenzene	25.0	27.2		ug/L		109	77 - 123
m-Xylene & p-Xylene	25.0	26.2		ug/L		105	76 - 122
o-Xylene	25.0	26.5		ug/L		106	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Toluene-d8 (Surr)	*108*		*71 - 126*

QC Association Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

GC/MS VOA

Analysis Batch: 183935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60395-3	Sump 2-052214	Total/NA	Water	8260C	
480-60395-4	SW 1-052214	Total/NA	Water	8260C	
480-60395-5	052214-TB	Total/NA	Water	8260C	
LCS 480-183935/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-183935/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 183987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60395-1	Sump1-052214	Total/NA	Water	8260C	
480-60395-2	FDUP-052214	Total/NA	Water	8260C	
LCS 480-183987/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-183987/6	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

Client Sample ID: Sump1-052214
Lab Sample ID: 480-60395-1
Date Collected: 05/22/14 09:30
Matrix: Water
Date Received: 05/22/14 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	183987	05/24/14 15:01	GTG	TAL BUF

Client Sample ID: FDUP-052214
Lab Sample ID: 480-60395-2
Date Collected: 05/22/14 09:35
Matrix: Water
Date Received: 05/22/14 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	183987	05/24/14 15:25	GTG	TAL BUF

Client Sample ID: Sump 2-052214
Lab Sample ID: 480-60395-3
Date Collected: 05/22/14 09:55
Matrix: Water
Date Received: 05/22/14 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	183935	05/24/14 06:11	RAL	TAL BUF

Client Sample ID: SW 1-052214
Lab Sample ID: 480-60395-4
Date Collected: 05/22/14 10:20
Matrix: Water
Date Received: 05/22/14 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	183935	05/24/14 06:35	RAL	TAL BUF

Client Sample ID: 052214-TB
Lab Sample ID: 480-60395-5
Date Collected: 05/22/14 10:35
Matrix: Water
Date Received: 05/22/14 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	183935	05/24/14 06:59	RAL	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 Collection System

TestAmerica Job ID: 480-60395-1

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	03-31-15

Method Summary

Client: Honeywell International Inc
Project/Site: 30130 - Alltift Collection System

TestAmerica Job ID: 480-60395-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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 Collection System

TestAmerica Job ID: 480-60395-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-60395-1	Sump1-052214	Water	05/22/14 09:30	05/22/14 13:10
480-60395-2	FDUP-052214	Water	05/22/14 09:35	05/22/14 13:10
480-60395-3	Sump 2-052214	Water	05/22/14 09:55	05/22/14 13:10
480-60395-4	SW 1-052214	Water	05/22/14 10:20	05/22/14 13:10
480-60395-5	052214-TB	Water	05/22/14 10:35	05/22/14 13:10

Chain of Custody Record

480-60395 Chain of Custody

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)	8260B- 1,2- dichlorobenzene, 1,4- dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, and total Xylene	Total Number of containers	Special Instructions/Note:
				Preservation Code:				S D N N N A		
Sump 1	Sump1 -052214	5/22/14	09:30	G	W	N	N	3	3	
Sump 1	FDUP-052214	5/22/14	09:35	G	W	N	N	3	3	
Sump 2	Sump 2-052214	5/22/14	09:55	G	W	N	N	3	3	
Surface Water 1	SW 1-052214	5/22/14	10:20	G	W	N	N	3	3	
TRIPBLANK	052214-TB	5/22/14	10:35	G	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 Higgins	Date/Time: 5/22/14 1310	Company: CH2M Hill	Received by:	Date/Time: 5/22/14 1310	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: #2 3.9

Page 19 of 20

5/27/2014

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-60395-1

Login Number: 60395

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon M

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	ch2mhill
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
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: 480-60397-1
Client Project/Site: 30130 - Alltift OM Phase / Semi Annual

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

Attn: Mr. Rich Galloway

Authorized for release by:
5/23/2014 5:16:42 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

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

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

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

Table of Contents

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
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: 480-60397-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-60397-1

Comments
No additional comments.

Receipt
The samples were received on 5/22/2014 1:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

GC/MS VOA
Method(s) 8260C: The method blank for batch 183519 contained Methylene chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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: 480-60397-1

Client Sample ID: SSA1-052214 — **Lab Sample ID: 480-60397-1**

No Detections.

Client Sample ID: SSA2-052214 — **Lab Sample ID: 480-60397-2**

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-60397-1

Client Sample ID: SSA1-052214
Date Collected: 05/22/14 11:35
Date Received: 05/22/14 13:10

Lab Sample ID: 480-60397-1
Matrix: Solid
Percent Solids: 63.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		6.9	0.54	ug/Kg	☼	05/22/14 19:41	05/22/14 20:54	1
1,4-Dichlorobenzene	ND		6.9	0.96	ug/Kg	☼	05/22/14 19:41	05/22/14 20:54	1
Benzene	ND		6.9	0.34	ug/Kg	☼	05/22/14 19:41	05/22/14 20:54	1
Chlorobenzene	ND		6.9	0.91	ug/Kg	☼	05/22/14 19:41	05/22/14 20:54	1
Ethylbenzene	ND		6.9	0.47	ug/Kg	☼	05/22/14 19:41	05/22/14 20:54	1
Xylenes, Total	ND		14	1.2	ug/Kg	☼	05/22/14 19:41	05/22/14 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*05/22/14 19:41*	*05/22/14 20:54*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*05/22/14 19:41*	*05/22/14 20:54*	*1*
Toluene-d8 (Surr)	*101*		*71 - 125*	*05/22/14 19:41*	*05/22/14 20:54*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**37**		0.10	0.10	%			05/22/14 20:26	1

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

TestAmerica Job ID: 480-60397-1

Client Sample ID: SSA2-052214
Date Collected: 05/22/14 10:50
Date Received: 05/22/14 13:10

Lab Sample ID: 480-60397-2
Matrix: Solid
Percent Solids: 61.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		6.8	0.53	ug/Kg	☼	05/22/14 19:41	05/22/14 21:20	1
1,4-Dichlorobenzene	ND		6.8	0.95	ug/Kg	☼	05/22/14 19:41	05/22/14 21:20	1
Benzene	ND		6.8	0.33	ug/Kg	☼	05/22/14 19:41	05/22/14 21:20	1
Chlorobenzene	ND		6.8	0.90	ug/Kg	☼	05/22/14 19:41	05/22/14 21:20	1
Ethylbenzene	ND		6.8	0.47	ug/Kg	☼	05/22/14 19:41	05/22/14 21:20	1
Xylenes, Total	ND		14	1.1	ug/Kg	☼	05/22/14 19:41	05/22/14 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*05/22/14 19:41*	*05/22/14 21:20*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*05/22/14 19:41*	*05/22/14 21:20*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*05/22/14 19:41*	*05/22/14 21:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**39**		0.10	0.10	%			05/22/14 20:26	1

Surrogate Summary

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

TestAmerica Job ID: 480-60397-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(71-125)
480-60397-1	SSA1-052214	105	97	101
480-60397-2	SSA2-052214	102	96	100
LCS 480-183519/6	Lab Control Sample	89	96	100
LCSD 480-183519/7	Lab Control Sample Dup	93	98	100
MB 480-183519/8	Method Blank	93	94	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 480-183519/8
Matrix: Solid
Analysis Batch: 183519

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		5.0	0.39	ug/Kg			05/22/14 12:27	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			05/22/14 12:27	1
Benzene	ND		5.0	0.25	ug/Kg			05/22/14 12:27	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			05/22/14 12:27	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			05/22/14 12:27	1
Xylenes, Total	ND		10	0.84	ug/Kg			05/22/14 12:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*64 - 126*		*05/22/14 12:27*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*		*05/22/14 12:27*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*		*05/22/14 12:27*	*1*

Lab Sample ID: LCS 480-183519/6
Matrix: Solid
Analysis Batch: 183519

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	50.0	49.3		ug/Kg		99	75 - 120
1,4-Dichlorobenzene	50.0	49.4		ug/Kg		99	73 - 120
Benzene	50.0	47.7		ug/Kg		95	79 - 127
Chlorobenzene	50.0	49.6		ug/Kg		99	76 - 124
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 120
Xylenes, Total	100	99.8		ug/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*64 - 126*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*
Toluene-d8 (Surr)	*100*		*71 - 125*

Lab Sample ID: LCSD 480-183519/7
Matrix: Solid
Analysis Batch: 183519

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	49.8		ug/Kg		100	75 - 120	1	20
1,4-Dichlorobenzene	50.0	50.8		ug/Kg		102	73 - 120	3	20
Benzene	50.0	47.7		ug/Kg		95	79 - 127	0	20
Chlorobenzene	50.0	49.7		ug/Kg		99	76 - 124	0	20
Ethylbenzene	50.0	49.5		ug/Kg		99	80 - 120	2	20
Xylenes, Total	100	98.8		ug/Kg		99	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*64 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*
Toluene-d8 (Surr)	*100*		*71 - 125*

QC Association Summary

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

TestAmerica Job ID: 480-60397-1

GC/MS VOA

Analysis Batch: 183519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60397-1	SSA1-052214	Total/NA	Solid	8260C	183686
480-60397-2	SSA2-052214	Total/NA	Solid	8260C	183686
LCS 480-183519/6	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 480-183519/7	Lab Control Sample Dup	Total/NA	Solid	8260C	
MB 480-183519/8	Method Blank	Total/NA	Solid	8260C	

Prep Batch: 183686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60397-1	SSA1-052214	Total/NA	Solid	5035	
480-60397-2	SSA2-052214	Total/NA	Solid	5035	

General Chemistry

Analysis Batch: 183690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60397-1	SSA1-052214	Total/NA	Solid	Moisture	
480-60397-2	SSA2-052214	Total/NA	Solid	Moisture	

Lab Chronicle

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

TestAmerica Job ID: 480-60397-1

Client Sample ID: SSA1-052214

Lab Sample ID: 480-60397-1

Date Collected: 05/22/14 11:35

Matrix: Solid

Date Received: 05/22/14 13:10

Percent Solids: 63.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			183686	05/22/14 19:41	CDC	TAL BUF
Total/NA	Analysis	8260C		1	183519	05/22/14 20:54	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	183690	05/22/14 20:26	CDC	TAL BUF

Client Sample ID: SSA2-052214

Lab Sample ID: 480-60397-2

Date Collected: 05/22/14 10:50

Matrix: Solid

Date Received: 05/22/14 13:10

Percent Solids: 61.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			183686	05/22/14 19:41	CDC	TAL BUF
Total/NA	Analysis	8260C		1	183519	05/22/14 21:20	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	183690	05/22/14 20:26	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: 480-60397-1

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	03-31-15

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture

Method Summary

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

TestAmerica Job ID: 480-60397-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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: 480-60397-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-60397-1	SSA1-052214	Solid	05/22/14 11:35	05/22/14 13:10
480-60397-2	SSA2-052214	Solid	05/22/14 10:50	05/22/14 13:10

480-60397 Chain of Custody

Chain of Custody Record

erica
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, 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: CH_3OH

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)	EPA ME SW846-5035A	EPA ME SW846-5035A 1/04	Total Number of containers	Special Instructions/Note:
				Preservation Code:		X	X	S D N N N	Z	X	
Upland	SSA1-052214	5/22/14	11:35	G	S			1	3	4	1 Kit Terra Core
Source	SSA2-052214	5/22/14	10:50	G	S			1	3	4	1 Kit Terra Core

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: 5/22/14 1310	Company:	Received by:	Date/Time: 5/22/14 1310	Company:
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: #2 4.1		

Page 15 of 16

5/23/2014

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-60397-1

Login Number: 60397

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon M

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	ch2mhill
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
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: 480-66924-1
Client Project/Site: 30130 - Alltift OM Phase / Semi Annual
Sampling Event: Honeywell - Alltift OM Phase (4,10)

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

Attn: Mr. Rich Galloway

Authorized for release by:
9/23/2014 3:56:41 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.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
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: 480-66924-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-66924-1

Comments
No additional comments.

Receipt
The samples were received on 9/9/2014 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8º 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: Alltift Collection Sump - Grab 1-4 (480-66924-2 MS), Alltift Collection Sump - Grab 1-4 (480-66924-2), Alltift Collection Sump - Grab 1-4 (480-66924-2 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 624: The following samples were composited by the laboratory on 09/09/14 as requested on the chain-of-custody: Alltift Collection Sump - Grab 1-4 (480-66924-2), Alltift Collection Sump - Grab 1-4 (480-66924-2 MS), Alltift Collection Sump - Grab 1-4 (480-66924-2 MSD).

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 and the laboratory control sample duplicate (LCS/LCSD) for batch 118075 recovered outside control limits for the following analyte(s): 2-Chloronaphalene. 2-Chloronaphthalene has been identified as a poor performing analyte 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) 9040C, SM 4500 H+ B: The following sample(s) was received outside of holding time: Alltift Collection Sump - Comp (480-66924-1).

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 batch 118075. comp. 480-66924-2

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: 480-66924-1

Client Sample ID: Alltift Collection Sump - Comp — Lab Sample ID: 480-66924-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.018		0.010	0.0056	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.24		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	0.0066	J	0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.013		0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0055	J	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Phosphorus, Total	0.077		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	53.2		4.0	4.0	mg/L	1		SM 2540D	Total/NA
pH	7.28	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Alltift Collection Sump - Grab 1-4 — Lab Sample ID: 480-66924-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	70		50	4.8	ug/L	10		624	Total/NA
Vinyl chloride	9.6	J	50	7.5	ug/L	10		624	Total/NA
4-Chloroaniline	24		5.0	0.89	ug/L	1		625	Total/NA
Butyl benzyl phthalate	1.5	J	5.0	1.4	ug/L	1		625	Total/NA
Di-n-butyl phthalate	1.5	J	5.0	1.2	ug/L	1		625	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-66924-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Comp
Date Collected: 09/09/14 13:45
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-1
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.018		0.010	0.0056	mg/L		09/10/14 10:54	09/12/14 18:41	1
Barium	0.24		0.0020	0.00070	mg/L		09/10/14 10:54	09/12/14 18:41	1
Chromium	0.0044		0.0040	0.0010	mg/L		09/10/14 10:54	09/12/14 18:41	1
Copper	0.0066	J	0.010	0.0016	mg/L		09/10/14 10:54	09/12/14 18:41	1
Nickel	0.013		0.010	0.0013	mg/L		09/10/14 10:54	09/12/14 18:41	1
Zinc	0.0055	J	0.010	0.0015	mg/L		09/10/14 10:54	09/12/14 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	0.077		0.010	0.0050	mg/L			09/17/14 09:27	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	53.2		4.0	4.0	mg/L			09/11/14 09:52	1
pH	7.28	HF	0.100	0.100	SU			09/10/14 01:36	1

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Grab 1-4
Date Collected: 09/09/14 13:30
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-2
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			09/10/14 10:20	10
1,1,2,2-Tetrachloroethane	ND		50	2.6	ug/L			09/10/14 10:20	10
1,1,2-Trichloroethane	ND		50	4.8	ug/L			09/10/14 10:20	10
1,1-Dichloroethane	ND		50	5.9	ug/L			09/10/14 10:20	10
1,1-Dichloroethene	ND		50	8.5	ug/L			09/10/14 10:20	10
1,2-Dichlorobenzene	ND		50	4.4	ug/L			09/10/14 10:20	10
1,2-Dichloroethane	ND		50	6.0	ug/L			09/10/14 10:20	10
1,2-Dichloroethene, Total	ND		100	32	ug/L			09/10/14 10:20	10
1,2-Dichloropropane	ND		50	6.1	ug/L			09/10/14 10:20	10
1,3-Dichlorobenzene	ND		50	5.4	ug/L			09/10/14 10:20	10
1,4-Dichlorobenzene	ND		50	5.1	ug/L			09/10/14 10:20	10
2-Chloroethyl vinyl ether	ND		250	19	ug/L			09/10/14 10:20	10
Acrolein	ND		1000	170	ug/L			09/10/14 10:20	10
Acrylonitrile	ND		500	19	ug/L			09/10/14 10:20	10
Benzene	ND		50	6.0	ug/L			09/10/14 10:20	10
Bromoform	ND		50	4.7	ug/L			09/10/14 10:20	10
Bromomethane	ND		50	12	ug/L			09/10/14 10:20	10
Carbon tetrachloride	ND		50	5.1	ug/L			09/10/14 10:20	10
Chlorobenzene	**70**		50	4.8	ug/L			09/10/14 10:20	10
Chlorodibromomethane	ND		50	4.1	ug/L			09/10/14 10:20	10
Chloroethane	ND		50	8.7	ug/L			09/10/14 10:20	10
Chloroform	ND		50	5.4	ug/L			09/10/14 10:20	10
Chloromethane	ND		50	6.4	ug/L			09/10/14 10:20	10
cis-1,3-Dichloropropene	ND		50	3.3	ug/L			09/10/14 10:20	10
Dichlorobromomethane	ND		50	5.4	ug/L			09/10/14 10:20	10
Ethylbenzene	ND		50	4.6	ug/L			09/10/14 10:20	10
Methylene Chloride	ND		50	8.1	ug/L			09/10/14 10:20	10
Tetrachloroethene	ND		50	3.4	ug/L			09/10/14 10:20	10
Toluene	ND		50	4.5	ug/L			09/10/14 10:20	10
trans-1,2-Dichloroethene	ND		50	5.9	ug/L			09/10/14 10:20	10
trans-1,3-Dichloropropene	ND		50	4.4	ug/L			09/10/14 10:20	10
Trichloroethene	ND		50	6.0	ug/L			09/10/14 10:20	10
Vinyl chloride	**9.6**	**J**	50	7.5	ug/L			09/10/14 10:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 130*		*09/10/14 10:20*	*10*
4-Bromofluorobenzene (Surr)	*100*		*69 - 121*		*09/10/14 10:20*	*10*
Toluene-d8 (Surr)	*98*		*70 - 123*		*09/10/14 10:20*	*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	0.71	ug/L		09/15/14 14:06	09/19/14 01:08	1
1,2-Dichlorobenzene	ND		10	0.75	ug/L		09/15/14 14:06	09/19/14 01:08	1
1,2-Diphenylhydrazine	ND		10	0.66	ug/L		09/15/14 14:06	09/19/14 01:08	1
1,3-Dichlorobenzene	ND		10	0.74	ug/L		09/15/14 14:06	09/19/14 01:08	1
1,4-Dichlorobenzene	ND		10	0.74	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,4,6-Trichlorophenol	ND		5.0	1.7	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,4-Dichlorophenol	ND		5.0	0.33	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,4-Dimethylphenol	ND		5.0	0.85	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,4-Dinitrophenol	ND		10	6.1	ug/L		09/15/14 14:06	09/19/14 01:08	1

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Grab 1-4
Date Collected: 09/09/14 13:30
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.54	ug/L		09/15/14 14:06	09/19/14 01:08	1
2,6-Dinitrotoluene	ND		5.0	0.80	ug/L		09/15/14 14:06	09/19/14 01:08	1
2-Chloronaphthalene	ND	*	5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
2-Chlorophenol	ND		5.0	1.7	ug/L		09/15/14 14:06	09/19/14 01:08	1
2-Nitrophenol	ND		5.0	1.7	ug/L		09/15/14 14:06	09/19/14 01:08	1
3,3'-Dichlorobenzidine	ND		5.0	1.1	ug/L		09/15/14 14:06	09/19/14 01:08	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Bromophenyl phenyl ether	ND		5.0	0.64	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Chloro-3-methylphenol	ND		5.0	0.75	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Chloroaniline	**24**		5.0	0.89	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Chlorophenyl phenyl ether	ND		5.0	0.50	ug/L		09/15/14 14:06	09/19/14 01:08	1
4-Nitrophenol	ND		10	6.5	ug/L		09/15/14 14:06	09/19/14 01:08	1
Acenaphthene	ND		5.0	0.14	ug/L		09/15/14 14:06	09/19/14 01:08	1
Acenaphthylene	ND		5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
Anthracene	ND		5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzidine	ND		80	35	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[a]anthracene	ND		5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[a]pyrene	ND		5.0	0.13	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[b]fluoranthene	ND		5.0	0.16	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[g,h,i]perylene	ND		5.0	0.15	ug/L		09/15/14 14:06	09/19/14 01:08	1
Benzo[k]fluoranthene	ND		5.0	0.55	ug/L		09/15/14 14:06	09/19/14 01:08	1
bis (2-chloroisopropyl) ether	ND		5.0	0.20	ug/L		09/15/14 14:06	09/19/14 01:08	1
Bis(2-chloroethoxy)methane	ND		5.0	0.58	ug/L		09/15/14 14:06	09/19/14 01:08	1
Bis(2-chloroethyl)ether	ND		5.0	0.25	ug/L		09/15/14 14:06	09/19/14 01:08	1
Bis(2-ethylhexyl) phthalate	ND		13	13	ug/L		09/15/14 14:06	09/19/14 01:08	1
Butyl benzyl phthalate	**1.5**	**J**	5.0	1.4	ug/L		09/15/14 14:06	09/19/14 01:08	1
Chrysene	ND		5.0	0.14	ug/L		09/15/14 14:06	09/19/14 01:08	1
Dibenz(a,h)anthracene	ND		5.0	0.16	ug/L		09/15/14 14:06	09/19/14 01:08	1
Diethyl phthalate	ND		5.0	1.5	ug/L		09/15/14 14:06	09/19/14 01:08	1
Dimethyl phthalate	ND		5.0	0.77	ug/L		09/15/14 14:06	09/19/14 01:08	1
Di-n-butyl phthalate	**1.5**	**J**	5.0	1.2	ug/L		09/15/14 14:06	09/19/14 01:08	1
Di-n-octyl phthalate	ND		5.0	2.1	ug/L		09/15/14 14:06	09/19/14 01:08	1
Fluoranthene	ND		5.0	0.16	ug/L		09/15/14 14:06	09/19/14 01:08	1
Fluorene	ND		5.0	0.22	ug/L		09/15/14 14:06	09/19/14 01:08	1
Hexachlorobenzene	ND		5.0	0.18	ug/L		09/15/14 14:06	09/19/14 01:08	1
Hexachlorobutadiene	ND		5.0	0.17	ug/L		09/15/14 14:06	09/19/14 01:08	1
Hexachlorocyclopentadiene	ND		5.0	0.52	ug/L		09/15/14 14:06	09/19/14 01:08	1
Hexachloroethane	ND		5.0	0.63	ug/L		09/15/14 14:06	09/19/14 01:08	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.20	ug/L		09/15/14 14:06	09/19/14 01:08	1
Isophorone	ND		5.0	0.64	ug/L		09/15/14 14:06	09/19/14 01:08	1
Naphthalene	ND		5.0	0.14	ug/L		09/15/14 14:06	09/19/14 01:08	1
Nitrobenzene	ND		5.0	0.84	ug/L		09/15/14 14:06	09/19/14 01:08	1
N-Nitrosodimethylamine	ND		10	0.74	ug/L		09/15/14 14:06	09/19/14 01:08	1
N-Nitrosodi-n-propylamine	ND		5.0	0.31	ug/L		09/15/14 14:06	09/19/14 01:08	1
N-Nitrosodiphenylamine	ND		5.0	0.85	ug/L		09/15/14 14:06	09/19/14 01:08	1
Pentachlorophenol	ND		10	0.66	ug/L		09/15/14 14:06	09/19/14 01:08	1
Phenanthrene	ND		5.0	0.43	ug/L		09/15/14 14:06	09/19/14 01:08	1
Phenol	ND		5.0	0.58	ug/L		09/15/14 14:06	09/19/14 01:08	1
Pyrene	ND		5.0	0.16	ug/L		09/15/14 14:06	09/19/14 01:08	1

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Grab 1-4
Date Collected: 09/09/14 13:30
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	60		21 - 122	09/15/14 14:06	09/19/14 01:08	1
2-Fluorobiphenyl	52		30 - 110	09/15/14 14:06	09/19/14 01:08	1
2-Fluorophenol	49		31 - 104	09/15/14 14:06	09/19/14 01:08	1
Nitrobenzene-d5	51		32 - 112	09/15/14 14:06	09/19/14 01:08	1
Phenol-d5	54		30 - 117	09/15/14 14:06	09/19/14 01:08	1
Terphenyl-d14	36		21 - 121	09/15/14 14:06	09/19/14 01:08	1

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: TRIP BLANK
Date Collected: 09/09/14 00:00
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66924-3
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			09/10/14 10:45	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			09/10/14 10:45	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			09/10/14 10:45	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/10/14 10:45	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			09/10/14 10:45	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			09/10/14 10:45	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			09/10/14 10:45	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			09/10/14 10:45	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			09/10/14 10:45	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			09/10/14 10:45	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			09/10/14 10:45	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			09/10/14 10:45	1
Acrolein	ND		100	17	ug/L			09/10/14 10:45	1
Acrylonitrile	ND		50	1.9	ug/L			09/10/14 10:45	1
Benzene	ND		5.0	0.60	ug/L			09/10/14 10:45	1
Bromoform	ND		5.0	0.47	ug/L			09/10/14 10:45	1
Bromomethane	ND		5.0	1.2	ug/L			09/10/14 10:45	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			09/10/14 10:45	1
Chlorobenzene	ND		5.0	0.48	ug/L			09/10/14 10:45	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			09/10/14 10:45	1
Chloroethane	ND		5.0	0.87	ug/L			09/10/14 10:45	1
Chloroform	ND		5.0	0.54	ug/L			09/10/14 10:45	1
Chloromethane	ND		5.0	0.64	ug/L			09/10/14 10:45	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			09/10/14 10:45	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			09/10/14 10:45	1
Ethylbenzene	ND		5.0	0.46	ug/L			09/10/14 10:45	1
Methylene Chloride	ND		5.0	0.81	ug/L			09/10/14 10:45	1
Tetrachloroethene	ND		5.0	0.34	ug/L			09/10/14 10:45	1
Toluene	ND		5.0	0.45	ug/L			09/10/14 10:45	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			09/10/14 10:45	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			09/10/14 10:45	1
Trichloroethene	ND		5.0	0.60	ug/L			09/10/14 10:45	1
Vinyl chloride	ND		5.0	0.75	ug/L			09/10/14 10:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*72 - 130*		*09/10/14 10:45*	*1*
4-Bromofluorobenzene (Surr)	*100*		*69 - 121*		*09/10/14 10:45*	*1*
Toluene-d8 (Surr)	*98*		*70 - 123*		*09/10/14 10:45*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-66924-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)
480-66924-2	Alltift Collection Sump - Grab 1-4	115	100	98
480-66924-2 MS	Alltift Collection Sump - Grab 1-4	116	102	99
480-66924-2 MSD	Alltift Collection Sump - Grab 1-4	107	102	99
480-66924-3	TRIP BLANK	117	100	98
LCS 480-201524/13	Lab Control Sample	106	100	101
MB 480-201524/15	Method Blank	112	98	103

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (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	(21-122)	(30-110)	(31-104)	(32-112)	(30-117)	(21-121)
480-66924-2	Alltift Collection Sump - Grab 1-4	60	52	49	51	54	36
LCS 180-118075/2-A	Lab Control Sample	61	58	51	55	60	66
LCSD 180-118075/3-A	Lab Control Sample Dup	66	56	52	54	58	68
MB 180-118075/1-A	Method Blank	51	59	62	60	60	69

Surrogate Legend

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

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

Lab Sample ID: MB 480-201524/15
Matrix: Water
Analysis Batch: 201524

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			09/10/14 01:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			09/10/14 01:08	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			09/10/14 01:08	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/10/14 01:08	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			09/10/14 01:08	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			09/10/14 01:08	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			09/10/14 01:08	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			09/10/14 01:08	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			09/10/14 01:08	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			09/10/14 01:08	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			09/10/14 01:08	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			09/10/14 01:08	1
Acrolein	ND		100	17	ug/L			09/10/14 01:08	1
Acrylonitrile	ND		50	1.9	ug/L			09/10/14 01:08	1
Benzene	ND		5.0	0.60	ug/L			09/10/14 01:08	1
Bromoform	ND		5.0	0.47	ug/L			09/10/14 01:08	1
Bromomethane	ND		5.0	1.2	ug/L			09/10/14 01:08	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			09/10/14 01:08	1
Chlorobenzene	ND		5.0	0.48	ug/L			09/10/14 01:08	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			09/10/14 01:08	1
Chloroethane	ND		5.0	0.87	ug/L			09/10/14 01:08	1
Chloroform	ND		5.0	0.54	ug/L			09/10/14 01:08	1
Chloromethane	ND		5.0	0.64	ug/L			09/10/14 01:08	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			09/10/14 01:08	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			09/10/14 01:08	1
Ethylbenzene	ND		5.0	0.46	ug/L			09/10/14 01:08	1
Methylene Chloride	ND		5.0	0.81	ug/L			09/10/14 01:08	1
Tetrachloroethene	ND		5.0	0.34	ug/L			09/10/14 01:08	1
Toluene	ND		5.0	0.45	ug/L			09/10/14 01:08	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			09/10/14 01:08	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			09/10/14 01:08	1
Trichloroethene	ND		5.0	0.60	ug/L			09/10/14 01:08	1
Vinyl chloride	ND		5.0	0.75	ug/L			09/10/14 01:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 130*		*09/10/14 01:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*69 - 121*		*09/10/14 01:08*	*1*
Toluene-d8 (Surr)	*103*		*70 - 123*		*09/10/14 01:08*	*1*

Lab Sample ID: LCS 480-201524/13
Matrix: Water
Analysis Batch: 201524

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	18.4		ug/L		92	52 - 162
1,1,2,2-Tetrachloroethane	20.0	18.1		ug/L		91	46 - 157
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	52 - 150
1,1-Dichloroethane	20.0	20.1		ug/L		101	59 - 155

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

Lab Sample ID: LCS 480-201524/13
Matrix: Water
Analysis Batch: 201524

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	18.9		ug/L		94	1 - 234
1,2-Dichlorobenzene	20.0	17.7		ug/L		88	18 - 190
1,2-Dichloroethane	20.0	18.8		ug/L		94	49 - 155
1,2-Dichloropropane	20.0	19.4		ug/L		97	1 - 210
1,3-Dichlorobenzene	20.0	17.9		ug/L		89	59 - 156
1,4-Dichlorobenzene	20.0	17.8		ug/L		89	18 - 190
2-Chloroethyl vinyl ether	20.0	18.0	J	ug/L		90	1 - 305
Benzene	20.0	19.2		ug/L		96	37 - 151
Bromoform	20.0	16.2		ug/L		81	45 - 169
Bromomethane	20.0	20.7		ug/L		103	1 - 242
Carbon tetrachloride	20.0	18.0		ug/L		90	70 - 140
Chlorobenzene	20.0	18.3		ug/L		92	37 - 160
Chlorodibromomethane	20.0	17.3		ug/L		86	53 - 149
Chloroethane	20.0	19.5		ug/L		98	14 - 230
Chloroform	20.0	19.7		ug/L		98	51 - 138
Chloromethane	20.0	20.0		ug/L		100	1 - 273
cis-1,3-Dichloropropene	20.0	18.2		ug/L		91	1 - 227
Dichlorobromomethane	20.0	18.1		ug/L		91	35 - 155
Ethylbenzene	20.0	18.3		ug/L		91	37 - 162
Methylene Chloride	20.0	18.9		ug/L		94	1 - 221
Tetrachloroethene	20.0	17.6		ug/L		88	64 - 148
Toluene	20.0	18.5		ug/L		92	47 - 150
trans-1,2-Dichloroethene	20.0	20.1		ug/L		100	54 - 156
trans-1,3-Dichloropropene	20.0	19.7		ug/L		98	17 - 183
Trichloroethene	20.0	18.6		ug/L		93	71 - 157
Vinyl chloride	20.0	18.1		ug/L		91	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 130*
4-Bromofluorobenzene (Surr)	*100*		*69 - 121*
Toluene-d8 (Surr)	*101*		*70 - 123*

Lab Sample ID: 480-66924-2 MS
Matrix: Water
Analysis Batch: 201524

Client Sample ID: Alltift Collection Sump - Grab 1-4
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	178		ug/L		89	52 - 162
1,1,2,2-Tetrachloroethane	ND		200	167		ug/L		84	46 - 157
1,1,2-Trichloroethane	ND		200	168		ug/L		84	52 - 150
1,1-Dichloroethane	ND		200	185		ug/L		92	59 - 155
1,1-Dichloroethene	ND		200	210		ug/L		105	1 - 234
1,2-Dichlorobenzene	ND		200	165		ug/L		82	18 - 190
1,2-Dichloroethane	ND		200	184		ug/L		92	49 - 155
1,2-Dichloropropane	ND		200	168		ug/L		84	1 - 210
1,3-Dichlorobenzene	ND		200	163		ug/L		82	59 - 156
1,4-Dichlorobenzene	ND		200	160		ug/L		80	18 - 190
2-Chloroethyl vinyl ether	ND		200	159	J	ug/L		79	1 - 305

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

Lab Sample ID: 480-66924-2 MS
Matrix: Water
Analysis Batch: 201524

Client Sample ID: Alltift Collection Sump - Grab 1-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		200	177		ug/L		89	37 - 151
Bromoform	ND		200	122		ug/L		61	45 - 169
Bromomethane	ND		200	188		ug/L		94	1 - 242
Carbon tetrachloride	ND		200	177		ug/L		88	70 - 140
Chlorobenzene	70		200	232		ug/L		81	37 - 160
Chlorodibromomethane	ND		200	143		ug/L		72	53 - 149
Chloroethane	ND		200	194		ug/L		97	14 - 230
Chloroform	ND		200	181		ug/L		91	51 - 138
Chloromethane	ND		200	185		ug/L		92	1 - 273
cis-1,3-Dichloropropene	ND		200	150		ug/L		75	1 - 227
Dichlorobromomethane	ND		200	154		ug/L		77	35 - 155
Ethylbenzene	ND		200	167		ug/L		84	37 - 162
Methylene Chloride	ND		200	175		ug/L		87	1 - 221
Tetrachloroethene	ND		200	168		ug/L		84	64 - 148
Toluene	ND		200	167		ug/L		84	47 - 150
trans-1,2-Dichloroethene	ND		200	193		ug/L		96	54 - 156
trans-1,3-Dichloropropene	ND		200	162		ug/L		81	17 - 183
Trichloroethene	ND		200	171		ug/L		86	71 - 157
Vinyl chloride	9.6	J	200	200		ug/L		95	1 - 251

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*72 - 130*
4-Bromofluorobenzene (Surr)	*102*		*69 - 121*
Toluene-d8 (Surr)	*99*		*70 - 123*

Lab Sample ID: 480-66924-2 MSD
Matrix: Water
Analysis Batch: 201524

Client Sample ID: Alltift Collection Sump - Grab 1-4
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	201		ug/L		100	52 - 162	12	15
1,1,2,2-Tetrachloroethane	ND		200	195		ug/L		98	46 - 157	15	15
1,1,2-Trichloroethane	ND		200	193		ug/L		97	52 - 150	14	15
1,1-Dichloroethane	ND		200	204		ug/L		102	59 - 155	10	15
1,1-Dichloroethene	ND		200	212		ug/L		106	1 - 234	1	15
1,2-Dichlorobenzene	ND		200	189		ug/L		95	18 - 190	14	15
1,2-Dichloroethane	ND		200	196		ug/L		98	49 - 155	6	15
1,2-Dichloropropane	ND		200	187		ug/L		94	1 - 210	11	15
1,3-Dichlorobenzene	ND		200	186		ug/L		93	59 - 156	13	15
1,4-Dichlorobenzene	ND		200	185		ug/L		93	18 - 190	15	15
2-Chloroethyl vinyl ether	ND		200	173	J	ug/L		86	1 - 305	8	15
Benzene	ND		200	199		ug/L		100	37 - 151	12	15
Bromoform	ND		200	154	F2	ug/L		77	45 - 169	23	15
Bromomethane	ND		200	187		ug/L		93	1 - 242	0	15
Carbon tetrachloride	ND		200	196		ug/L		98	70 - 140	10	15
Chlorobenzene	70		200	258		ug/L		94	37 - 160	11	15
Chlorodibromomethane	ND		200	166		ug/L		83	53 - 149	15	15
Chloroethane	ND		200	190		ug/L		95	14 - 230	2	15

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

Lab Sample ID: 480-66924-2 MSD
Matrix: Water
Analysis Batch: 201524

Client Sample ID: Alltift Collection Sump - Grab 1-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform	ND		200	204		ug/L		102	51 - 138	12	15
Chloromethane	ND		200	187		ug/L		93	1 - 273	1	15
cis-1,3-Dichloropropene	ND		200	170		ug/L		85	1 - 227	13	15
Dichlorobromomethane	ND		200	176		ug/L		88	35 - 155	13	15
Ethylbenzene	ND		200	191		ug/L		96	37 - 162	14	15
Methylene Chloride	ND		200	197		ug/L		98	1 - 221	12	15
Tetrachloroethene	ND		200	190		ug/L		95	64 - 148	12	15
Toluene	ND		200	184		ug/L		92	47 - 150	10	15
trans-1,2-Dichloroethene	ND		200	204		ug/L		102	54 - 156	6	15
trans-1,3-Dichloropropene	ND		200	176		ug/L		88	17 - 183	8	15
Trichloroethene	ND		200	190		ug/L		95	71 - 157	11	15
Vinyl chloride	9.6	J	200	194		ug/L		92	1 - 251	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 130*
4-Bromofluorobenzene (Surr)	*102*		*69 - 121*
Toluene-d8 (Surr)	*99*		*70 - 123*

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

Lab Sample ID: MB 180-118075/1-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 118075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.71	ug/L		09/15/14 10:35	09/18/14 23:17	1
1,2-Dichlorobenzene	ND		10	0.75	ug/L		09/15/14 10:35	09/18/14 23:17	1
1,2-Diphenylhydrazine	ND		10	0.66	ug/L		09/15/14 10:35	09/18/14 23:17	1
1,3-Dichlorobenzene	ND		10	0.74	ug/L		09/15/14 10:35	09/18/14 23:17	1
1,4-Dichlorobenzene	ND		10	0.74	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4,6-Trichlorophenol	ND		5.0	1.7	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4-Dichlorophenol	ND		5.0	0.33	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4-Dimethylphenol	ND		5.0	0.85	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4-Dinitrophenol	ND		10	6.1	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,4-Dinitrotoluene	ND		5.0	0.54	ug/L		09/15/14 10:35	09/18/14 23:17	1
2,6-Dinitrotoluene	ND		5.0	0.80	ug/L		09/15/14 10:35	09/18/14 23:17	1
2-Chloronaphthalene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1
2-Chlorophenol	ND		5.0	1.7	ug/L		09/15/14 10:35	09/18/14 23:17	1
2-Nitrophenol	ND		5.0	1.7	ug/L		09/15/14 10:35	09/18/14 23:17	1
3,3'-Dichlorobenzidine	ND		5.0	1.1	ug/L		09/15/14 10:35	09/18/14 23:17	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Bromophenyl phenyl ether	ND		5.0	0.64	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Chloro-3-methylphenol	ND		5.0	0.75	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Chloroaniline	ND		5.0	0.89	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Chlorophenyl phenyl ether	ND		5.0	0.50	ug/L		09/15/14 10:35	09/18/14 23:17	1
4-Nitrophenol	ND		10	6.5	ug/L		09/15/14 10:35	09/18/14 23:17	1
Acenaphthene	ND		5.0	0.14	ug/L		09/15/14 10:35	09/18/14 23:17	1
Acenaphthylene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1

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

Lab Sample ID: MB 180-118075/1-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 118075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzidine	ND		80	35	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[a]anthracene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[a]pyrene	ND		5.0	0.13	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[b]fluoranthene	ND		5.0	0.16	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[g,h,i]perylene	ND		5.0	0.15	ug/L		09/15/14 10:35	09/18/14 23:17	1
Benzo[k]fluoranthene	ND		5.0	0.55	ug/L		09/15/14 10:35	09/18/14 23:17	1
bis (2-chloroisopropyl) ether	ND		5.0	0.20	ug/L		09/15/14 10:35	09/18/14 23:17	1
Bis(2-chloroethoxy)methane	ND		5.0	0.58	ug/L		09/15/14 10:35	09/18/14 23:17	1
Bis(2-chloroethyl)ether	ND		5.0	0.25	ug/L		09/15/14 10:35	09/18/14 23:17	1
Bis(2-ethylhexyl) phthalate	ND		13	13	ug/L		09/15/14 10:35	09/18/14 23:17	1
Butyl benzyl phthalate	ND		5.0	1.4	ug/L		09/15/14 10:35	09/18/14 23:17	1
Chrysene	ND		5.0	0.14	ug/L		09/15/14 10:35	09/18/14 23:17	1
Dibenz(a,h)anthracene	ND		5.0	0.16	ug/L		09/15/14 10:35	09/18/14 23:17	1
Diethyl phthalate	ND		5.0	1.5	ug/L		09/15/14 10:35	09/18/14 23:17	1
Dimethyl phthalate	ND		5.0	0.77	ug/L		09/15/14 10:35	09/18/14 23:17	1
Di-n-butyl phthalate	ND		5.0	1.2	ug/L		09/15/14 10:35	09/18/14 23:17	1
Di-n-octyl phthalate	ND		5.0	2.1	ug/L		09/15/14 10:35	09/18/14 23:17	1
Fluoranthene	ND		5.0	0.16	ug/L		09/15/14 10:35	09/18/14 23:17	1
Fluorene	ND		5.0	0.22	ug/L		09/15/14 10:35	09/18/14 23:17	1
Hexachlorobenzene	ND		5.0	0.18	ug/L		09/15/14 10:35	09/18/14 23:17	1
Hexachlorobutadiene	ND		5.0	0.17	ug/L		09/15/14 10:35	09/18/14 23:17	1
Hexachlorocyclopentadiene	ND		5.0	0.52	ug/L		09/15/14 10:35	09/18/14 23:17	1
Hexachloroethane	ND		5.0	0.63	ug/L		09/15/14 10:35	09/18/14 23:17	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.20	ug/L		09/15/14 10:35	09/18/14 23:17	1
Isophorone	ND		5.0	0.64	ug/L		09/15/14 10:35	09/18/14 23:17	1
Naphthalene	ND		5.0	0.14	ug/L		09/15/14 10:35	09/18/14 23:17	1
Nitrobenzene	ND		5.0	0.84	ug/L		09/15/14 10:35	09/18/14 23:17	1
N-Nitrosodimethylamine	ND		10	0.74	ug/L		09/15/14 10:35	09/18/14 23:17	1
N-Nitrosodi-n-propylamine	ND		5.0	0.31	ug/L		09/15/14 10:35	09/18/14 23:17	1
N-Nitrosodiphenylamine	ND		5.0	0.85	ug/L		09/15/14 10:35	09/18/14 23:17	1
Pentachlorophenol	ND		10	0.66	ug/L		09/15/14 10:35	09/18/14 23:17	1
Phenanthrene	ND		5.0	0.43	ug/L		09/15/14 10:35	09/18/14 23:17	1
Phenol	ND		5.0	0.58	ug/L		09/15/14 10:35	09/18/14 23:17	1
Pyrene	ND		5.0	0.16	ug/L		09/15/14 10:35	09/18/14 23:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*51*		*21 - 122*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
2-Fluorobiphenyl	*59*		*30 - 110*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
2-Fluorophenol	*62*		*31 - 104*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
Nitrobenzene-d5	*60*		*32 - 112*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
Phenol-d5	*60*		*30 - 117*	*09/15/14 10:35*	*09/18/14 23:17*	*1*
Terphenyl-d14	*69*		*21 - 121*	*09/15/14 10:35*	*09/18/14 23:17*	*1*

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

Lab Sample ID: LCS 180-118075/2-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 118075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	59.8		ug/L		60	44 - 142
1,2-Dichlorobenzene	100	54.6		ug/L		55	32 - 129
1,3-Dichlorobenzene	100	53.3		ug/L		53	32 - 102
1,4-Dichlorobenzene	100	56.5		ug/L		56	28 - 110
2,4,6-Trichlorophenol	100	68.1		ug/L		68	37 - 144
2,4-Dichlorophenol	100	64.7		ug/L		65	39 - 135
2,4-Dimethylphenol	100	63.6		ug/L		64	32 - 119
2,4-Dinitrophenol	200	68.2		ug/L		34	10 - 150
2,4-Dinitrotoluene	100	73.8		ug/L		74	39 - 139
2,6-Dinitrotoluene	100	74.6		ug/L		75	50 - 158
2-Chloronaphthalene	100	56.8	*	ug/L		57	60 - 118
2-Chlorophenol	100	59.0		ug/L		59	23 - 124
2-Nitrophenol	100	62.3		ug/L		62	29 - 132
3,3'-Dichlorobenzidine	100	75.0		ug/L		75	10 - 150
4,6-Dinitro-2-methylphenol	200	108		ug/L		54	10 - 150
4-Bromophenyl phenyl ether	100	72.0		ug/L		72	53 - 127
4-Chloro-3-methylphenol	100	67.9		ug/L		68	22 - 134
4-Chlorophenyl phenyl ether	100	64.9		ug/L		65	28 - 125
4-Nitrophenol	200	151		ug/L		75	19 - 132
Acenaphthene	100	64.1		ug/L		64	47 - 145
Acenaphthylene	100	65.7		ug/L		66	33 - 145
Anthracene	100	70.2		ug/L		70	27 - 133
Benzo[a]anthracene	100	69.7		ug/L		70	33 - 143
Benzo[a]pyrene	100	67.0		ug/L		67	34 - 122
Benzo[b]fluoranthene	100	59.6		ug/L		60	24 - 159
Benzo[g,h,i]perylene	100	80.6		ug/L		81	10 - 149
Benzo[k]fluoranthene	100	65.5		ug/L		65	28 - 126
bis (2-chloroisopropyl) ether	100	57.1		ug/L		57	21 - 115
Bis(2-chloroethoxy)methane	100	61.9		ug/L		62	28 - 115
Bis(2-chloroethyl)ether	100	58.3		ug/L		58	30 - 140
Bis(2-ethylhexyl) phthalate	100	79.3		ug/L		79	21 - 126
Butyl benzyl phthalate	100	81.1		ug/L		81	25 - 119
Chrysene	100	69.4		ug/L		69	32 - 120
Dibenz(a,h)anthracene	100	73.7		ug/L		74	11 - 146
Diethyl phthalate	100	74.4		ug/L		74	10 - 114
Dimethyl phthalate	100	72.0		ug/L		72	13 - 112
Di-n-butyl phthalate	100	78.0		ug/L		78	36 - 118
Di-n-octyl phthalate	100	75.4		ug/L		75	18 - 125
Fluoranthene	100	74.4		ug/L		74	26 - 137
Fluorene	100	69.9		ug/L		70	59 - 121
Hexachlorobenzene	100	68.2		ug/L		68	28 - 128
Hexachlorocyclopentadiene	100	50.8		ug/L		51	10 - 138
Hexachloroethane	100	53.2		ug/L		53	40 - 113
Indeno[1,2,3-cd]pyrene	100	74.3		ug/L		74	10 - 150
Isophorone	100	68.5		ug/L		68	21 - 122
Naphthalene	100	59.2		ug/L		59	21 - 133
Nitrobenzene	100	61.7		ug/L		62	35 - 150
N-Nitrosodi-n-propylamine	100	67.8		ug/L		68	30 - 115

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

Lab Sample ID: LCS 180-118075/2-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 118075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	100	70.5		ug/L		71	25 - 118
Pentachlorophenol	200	138		ug/L		69	14 - 140
Phenanthrene	100	69.1		ug/L		69	54 - 120
Phenol	100	59.7		ug/L		60	31 - 112
Pyrene	100	66.6		ug/L		67	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*61*		*21 - 122*
2-Fluorobiphenyl	*58*		*30 - 110*
2-Fluorophenol	*51*		*31 - 104*
Nitrobenzene-d5	*55*		*32 - 112*
Phenol-d5	*60*		*30 - 117*
Terphenyl-d14	*66*		*21 - 121*

Lab Sample ID: LCSD 180-118075/3-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 118075

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	58.2		ug/L		58	44 - 142	3	35
1,2-Dichlorobenzene	100	54.3		ug/L		54	32 - 129	1	20
1,3-Dichlorobenzene	100	53.5		ug/L		53	32 - 102	0	35
1,4-Dichlorobenzene	100	53.7		ug/L		54	28 - 110	5	35
2,4,6-Trichlorophenol	100	68.6		ug/L		69	37 - 144	1	27
2,4-Dichlorophenol	100	62.9		ug/L		63	39 - 135	3	35
2,4-Dimethylphenol	100	61.6		ug/L		62	32 - 119	3	20
2,4-Dinitrophenol	200	72.3		ug/L		36	10 - 150	6	35
2,4-Dinitrotoluene	100	75.7		ug/L		76	39 - 139	3	32
2,6-Dinitrotoluene	100	72.4		ug/L		72	50 - 158	3	20
2-Chloronaphthalene	100	55.3	*	ug/L		55	60 - 118	3	20
2-Chlorophenol	100	57.5		ug/L		57	23 - 124	3	35
2-Nitrophenol	100	60.3		ug/L		60	29 - 132	3	32
3,3'-Dichlorobenzidine	100	76.9		ug/L		77	10 - 150	3	35
4,6-Dinitro-2-methylphenol	200	120		ug/L		60	10 - 150	10	35
4-Bromophenyl phenyl ether	100	69.2		ug/L		69	53 - 127	4	20
4-Chloro-3-methylphenol	100	67.8		ug/L		68	22 - 134	0	35
4-Chlorophenyl phenyl ether	100	65.6		ug/L		66	28 - 125	1	27
4-Nitrophenol	200	152		ug/L		76	19 - 132	1	34
Acenaphthene	100	64.4		ug/L		64	47 - 145	0	35
Acenaphthylene	100	63.2		ug/L		63	33 - 145	4	23
Anthracene	100	70.2		ug/L		70	27 - 133	0	22
Benzo[a]anthracene	100	70.1		ug/L		70	33 - 143	1	23
Benzo[a]pyrene	100	67.9		ug/L		68	34 - 122	1	31
Benzo[b]fluoranthene	100	62.5		ug/L		62	24 - 159	5	28
Benzo[g,h,i]perylene	100	81.5		ug/L		81	10 - 149	1	35
Benzo[k]fluoranthene	100	67.0		ug/L		67	28 - 126	2	31
bis (2-chloroisopropyl) ether	100	56.3		ug/L		56	21 - 115	1	27
Bis(2-chloroethoxy)methane	100	61.1		ug/L		61	28 - 115	1	30

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

Lab Sample ID: LCSD 180-118075/3-A
Matrix: Water
Analysis Batch: 118471

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 118075

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether			100	56.5		ug/L		57	30 - 140	3	30
Bis(2-ethylhexyl) phthalate			100	80.6		ug/L		81	21 - 126	2	31
Butyl benzyl phthalate			100	79.9		ug/L		80	25 - 119	1	35
Chrysene			100	69.7		ug/L		70	32 - 120	1	31
Dibenz(a,h)anthracene			100	75.5		ug/L		75	11 - 146	2	35
Diethyl phthalate			100	74.6		ug/L		75	10 - 114	0	24
Dimethyl phthalate			100	72.2		ug/L		72	13 - 112	0	22
Di-n-butyl phthalate			100	76.1		ug/L		76	36 - 118	3	24
Di-n-octyl phthalate			100	74.2		ug/L		74	18 - 125	2	29
Fluoranthene			100	74.2		ug/L		74	26 - 137	0	23
Fluorene			100	70.0		ug/L		70	59 - 121	0	20
Hexachlorobenzene			100	69.8		ug/L		70	28 - 128	2	22
Hexachlorocyclopentadiene			100	50.1		ug/L		50	10 - 138	2	35
Hexachloroethane			100	52.1		ug/L		52	40 - 113	2	33
Indeno[1,2,3-cd]pyrene			100	75.7		ug/L		76	10 - 150	2	35
Isophorone			100	66.4		ug/L		66	21 - 122	3	35
Naphthalene			100	58.0		ug/L		58	21 - 133	2	23
Nitrobenzene			100	58.0		ug/L		58	35 - 150	6	35
N-Nitrosodi-n-propylamine			100	66.0		ug/L		66	30 - 115	3	36
N-Nitrosodiphenylamine			100	70.0		ug/L		70	25 - 118	1	35
Pentachlorophenol			200	138		ug/L		69	14 - 140	0	35
Phenanthrene			100	68.1		ug/L		68	54 - 120	1	20
Phenol			100	57.8		ug/L		58	31 - 112	3	35
Pyrene			100	68.9		ug/L		69	52 - 115	3	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*66*		*21 - 122*
2-Fluorobiphenyl	*56*		*30 - 110*
2-Fluorophenol	*52*		*31 - 104*
Nitrobenzene-d5	*54*		*32 - 112*
Phenol-d5	*58*		*30 - 117*
Terphenyl-d14	*68*		*21 - 121*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-201609/1-A
Matrix: Water
Analysis Batch: 202449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201609

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		09/10/14 10:54	09/12/14 18:00	1
Barium	ND		0.0020	0.00070	mg/L		09/10/14 10:54	09/12/14 18:00	1
Chromium	ND		0.0040	0.0010	mg/L		09/10/14 10:54	09/12/14 18:00	1
Copper	ND		0.010	0.0016	mg/L		09/10/14 10:54	09/12/14 18:00	1
Nickel	ND		0.010	0.0013	mg/L		09/10/14 10:54	09/12/14 18:00	1
Zinc	ND		0.010	0.0015	mg/L		09/10/14 10:54	09/12/14 18:00	1

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

Lab Sample ID: LCS 480-201609/2-A
Matrix: Water
Analysis Batch: 202449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201609

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.196		mg/L		98	85 - 115
Barium	0.200	0.197		mg/L		99	85 - 115
Chromium	0.200	0.194		mg/L		97	85 - 115
Copper	0.200	0.206		mg/L		103	85 - 115
Nickel	0.200	0.187		mg/L		94	85 - 115
Zinc	0.200	0.201		mg/L		101	85 - 115

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

Lab Sample ID: MB 480-201862/1
Matrix: Water
Analysis Batch: 201862

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			09/11/14 09:35	1

Lab Sample ID: LCS 480-201862/2
Matrix: Water
Analysis Batch: 201862

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	271	263.2		mg/L		97	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-201570/1
Matrix: Water
Analysis Batch: 201570

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: LCS 480-201570/23
Matrix: Water
Analysis Batch: 201570

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	6.990		SU		100	99 - 101

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 480-202916/27
Matrix: Water
Analysis Batch: 202916

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			09/17/14 09:27	1

Method: SM 4500 P E - Phosphorus (Continued)

Lab Sample ID: MB 480-202916/75
Matrix: Water
Analysis Batch: 202916

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			09/17/14 09:27	1

Lab Sample ID: LCS 480-202916/28
Matrix: Water
Analysis Batch: 202916

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	0.214		mg/L		107	90 - 110

Lab Sample ID: LCS 480-202916/76
Matrix: Water
Analysis Batch: 202916

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	0.192		mg/L		96	90 - 110

GC/MS VOA

Analysis Batch: 201524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-2	Alltift Collection Sump - Grab 1-4	Total/NA	Water	624	
480-66924-2 MS	Alltift Collection Sump - Grab 1-4	Total/NA	Water	624	
480-66924-2 MSD	Alltift Collection Sump - Grab 1-4	Total/NA	Water	624	
480-66924-3	TRIP BLANK	Total/NA	Water	624	
LCS 480-201524/13	Lab Control Sample	Total/NA	Water	624	
MB 480-201524/15	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 118075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-2	Alltift Collection Sump - Grab 1-4	Total/NA	Water	625	
LCS 180-118075/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 180-118075/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 180-118075/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 118471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-2	Alltift Collection Sump - Grab 1-4	Total/NA	Water	625	118075
LCS 180-118075/2-A	Lab Control Sample	Total/NA	Water	625	118075
LCSD 180-118075/3-A	Lab Control Sample Dup	Total/NA	Water	625	118075
MB 180-118075/1-A	Method Blank	Total/NA	Water	625	118075

Metals

Prep Batch: 201609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	200.7	
LCS 480-201609/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-201609/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 202449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	200.7 Rev 4.4	201609
LCS 480-201609/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	201609
MB 480-201609/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	201609

General Chemistry

Analysis Batch: 201570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 H+ B	
LCS 480-201570/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 480-201570/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 201862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	SM 2540D	
LCS 480-201862/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-201862/1	Method Blank	Total/NA	Water	SM 2540D	

QC Association Summary

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

TestAmerica Job ID: 480-66924-1

General Chemistry (Continued)

Analysis Batch: 202916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66924-1	Alltift Collection Sump - Comp	Total/NA	Water	SM 4500 P E	
LCS 480-202916/28	Lab Control Sample	Total/NA	Water	SM 4500 P E	
LCS 480-202916/76	Lab Control Sample	Total/NA	Water	SM 4500 P E	
MB 480-202916/27	Method Blank	Total/NA	Water	SM 4500 P E	
MB 480-202916/75	Method Blank	Total/NA	Water	SM 4500 P E	

Lab Chronicle

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

TestAmerica Job ID: 480-66924-1

Client Sample ID: Alltift Collection Sump - Comp

Lab Sample ID: 480-66924-1

Date Collected: 09/09/14 13:45

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			201609	09/10/14 10:54	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	202449	09/12/14 18:41	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	201862	09/11/14 09:52	KJ1	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	201570	09/10/14 01:36	VAJ	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	202916	09/17/14 09:27	KMF	TAL BUF

Client Sample ID: Alltift Collection Sump - Grab 1-4

Lab Sample ID: 480-66924-2

Date Collected: 09/09/14 13:30

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		10	201524	09/10/14 10:20	NMD1	TAL BUF
Total/NA	Prep	625			118075	09/15/14 14:06	BJT	TAL PIT
Total/NA	Analysis	625		1	118471	09/19/14 01:08	VVP	TAL PIT

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-66924-3

Date Collected: 09/09/14 00:00

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	201524	09/10/14 10:45	NMD1	TAL BUF

Laboratory References:

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

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Certification Summary

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

TestAmerica Job ID: 480-66924-1

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	03-31-15

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
SM 4500 H+ B		Water	pH

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15
California	State Program	9	2891	03-31-15
Connecticut	State Program	1	PH-0688	09-30-14 *
Florida	NELAP	4	E871008	06-30-15
Illinois	NELAP	5	002602	06-30-15
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-15
New Hampshire	NELAP	1	203011	04-04-15
New Jersey	NELAP	2	PA005	06-30-15
New York	NELAP	2	11182	03-31-15
North Carolina (WW/SW)	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-15
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	05-31-15
Virginia	NELAP	3	460189	09-14-15
West Virginia DEP	State Program	3	142	01-31-15

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 480-66924-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL PIT
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
TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

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

TestAmerica Job ID: 480-66924-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-66924-1	Alltift Collection Sump - Comp	Water	09/09/14 13:45	09/09/14 14:05
480-66924-2	Alltift Collection Sump - Grab 1-4	Water	09/09/14 13:30	09/09/14 14:05
480-66924-3	TRIP BLANK	Water	09/09/14 00:00	09/09/14 14:05

Chain of Custody Re

480-66924 Chain of Custody

America
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:	Analysis Requested	Preservation Codes:
City: Syracuse	TAT Requested (days): 2 Weeks		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)
State, Zip: NY, 13204			
Phone: 315-468-1663	PO #: 4500073922		Other:
Email: john.formoza@ch2m.com	WO #:		
Project Name: Honeywell - Alltift OM phase / Semi Annual	Project #: 48003159		
Site: Honeywell - Buffalo Sites	SSOW#:		

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	824_5ml - 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	9/14/14	0730	G	W	N	N					2	2	4	Prior to analysis grab samples to be composited by lab
BSA Discharge	GRAB 2	9/14/14	0930	G	W	N	N					2	2	4	
BSA Discharge	GRAB 3	9/14/14	1130	G	W	N	N					2	2	4	
BSA Discharge	GRAB 4	9/14/14	1330	G	W	N	N					2	2	4	
BSA Discharge	COMP 0909/14	9/14/14	1345	C	W	N	N	1	1	1	1			4	
TRIPBLANK	0909/14 -TB	9/14/14	1350		W	N	N					1		1	TRIB 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:	Date/Time:	Company	Received by:	Date/Time:	Company
	0909 20 1405			9/9/14 1405	TA 346
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: #2 4.8

Page 28 of 31

9/23/2014

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

BNAI

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-19303.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 480-66924-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/20/2014			Preservation Codes:
City: Pittsburgh	TAT Requested (days):			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)
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: 30130 - Altift OM Phase / Semi Annual	Project #: 48004175			
Site: Honeywell - Buffalo Sites (Altift)	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625/625_Prep (MOD) Priority Pollutant List - SVOA - 6	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Altift Collection Sump - Grab 1-4 (480-66924-2)	9/9/14	13:30 Eastern		Water			X	1	MAC01 - Composite Samples Prior to Analysis 4-7

480-66924 Chain of Custody

Possible Hazard Identification
Unconfirmed

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:	Company	Received by:	Date/Time:	Company
Cameron Wallace	9-10-14 1700	TAB		9/11/2014 0905	TAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

9/23/2014

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-66924-1

Login Number: 66924

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon M

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	

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-66924-1

Login Number: 66924
List Number: 2
Creator: Kovitch, Christina M

List Source: TestAmerica Pittsburgh
List Creation: 09/15/14 01:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	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: 480-66930-1
Client Project/Site: 30130 - Alltift GW Monitoring
Sampling Event: Honeywell - Alltift GW Monitoring (10)

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

Attn: Mr. Rich Galloway

Authorized for release by:
10/14/2014 3:49:06 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

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

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

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

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
F1	MS and/or MSD Recovery exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds 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.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: 480-66930-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-66930-1

Comments
No additional comments.

Receipt
The samples were received on 9/9/2014 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8º C.

GC/MS VOA
Method(s) 8260C: The following sample(s) were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: Sump 4- 090914 (480-66930-6), Sump 4- 090914 (480-66930-6 MS), Sump 4- 090914 (480-66930-6 MSD).

Method(s) 8260C: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: Sump 2- 090914 (480-66930-4), Sump 3- 090914 (480-66930-5), Sump 4- 090914 (480-66930-6), Sump 4- 090914 (480-66930-6 MS), Sump 4- 090914 (480-66930-6 MSD). 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: The continuing calibration verification (CCV) analyzed in batch 205376 was outside the method criteria for the following analytes: 2,2'oxybis[1-chloropropane} and 2,4-Dinitrophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample(s): MW-2- MS 090914 (480-66930-2 MS), MW-2- MSD 090914 (480-66930-2 MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

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

Metals
Method(s) 6010C: The method blank for batch 480-201605 contained total manganese above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples FDUP- 090914 (480-66930-1), MW-2- 090914 (480-66930-2) was not performed.

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: 480-66930-1

Client Sample ID: FDUP- 090914 — Lab Sample ID: 480-66930-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.52	J	1.0	0.41	ug/L	1		8260C	Total/NA
Chlorobenzene	20		1.0	0.75	ug/L	1		8260C	Total/NA
Chromium	0.0043		0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	36.2		0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0042	J	0.0050	0.0030	mg/L	1		6010C	Total/NA
Manganese	2.4	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	3.4		1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	32.6		1.0	0.078	ug/L	1		6020A	Total/NA
Cadmium	0.41	J	0.50	0.071	ug/L	1		6020A	Total/NA

Client Sample ID: MW-2- 090914 — Lab Sample ID: 480-66930-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0010	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	0.10		0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0042	J	0.0050	0.0030	mg/L	1		6010C	Total/NA
Manganese	0.15	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	0.16	J	1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	1.8		1.0	0.078	ug/L	1		6020A	Total/NA
Cadmium	0.11	J	0.50	0.071	ug/L	1		6020A	Total/NA

Client Sample ID: Sump 1- 090914 — Lab Sample ID: 480-66930-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	12		1.0	0.75	ug/L	1		8260C	Total/NA

Client Sample ID: Sump 2- 090914 — Lab Sample ID: 480-66930-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.0		5.0	2.1	ug/L	5		8260C	Total/NA
Chlorobenzene	140		5.0	3.8	ug/L	5		8260C	Total/NA

Client Sample ID: Sump 3- 090914 — Lab Sample ID: 480-66930-5

No Detections.

Client Sample ID: Sump 4- 090914 — Lab Sample ID: 480-66930-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	22		4.0	3.0	ug/L	4		8260C	Total/NA

Client Sample ID: TRIP BLANK 090914 — Lab Sample ID: 480-66930-7

No Detections.

Client Sample ID: Sump Comp 090914 — Lab Sample ID: 480-66930-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Chloroaniline	8.1		4.6	0.54	ug/L	1		8270D	Total/NA
Chromium	0.0072		0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	34.5		0.050	0.019	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: Sump Comp 090914 (Continued)

Lab Sample ID: 480-66930-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0045	J	0.0050	0.0030	mg/L	1		6010C	Total/NA
Manganese	2.2	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	1.5		1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	32.2		1.0	0.078	ug/L	1		6020A	Total/NA
Cadmium	0.49	J	0.50	0.071	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: FDUP- 090914
Date Collected: 09/09/14 09:55
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66930-1
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			09/19/14 15:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/14 15:33	1
Benzene	**0.52**	**J**	1.0	0.41	ug/L			09/19/14 15:33	1
Chlorobenzene	**20**		1.0	0.75	ug/L			09/19/14 15:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/14 15:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/14 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*09/19/14 15:33*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*09/19/14 15:33*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*09/19/14 15:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		4.7	0.55	ug/L		09/10/14 07:56	10/01/14 14:12	1
Naphthalene	ND		4.7	0.71	ug/L		09/10/14 07:56	10/01/14 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*73*		*46 - 120*	*09/10/14 07:56*	*10/01/14 14:12*	*1*
2-Fluorobiphenyl	*77*		*48 - 120*	*09/10/14 07:56*	*10/01/14 14:12*	*1*
p-Terphenyl-d14	*71*		*67 - 150*	*09/10/14 07:56*	*10/01/14 14:12*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.0043**		0.0040	0.0010	mg/L		09/12/14 08:17	09/15/14 12:22	1
Iron	**36.2**		0.050	0.019	mg/L		09/12/14 08:17	09/15/14 12:22	1
Lead	**0.0042**	**J**	0.0050	0.0030	mg/L		09/12/14 08:17	09/15/14 12:22	1
Manganese	**2.4**	**B**	0.0030	0.00040	mg/L		09/12/14 08:17	09/15/14 12:22	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**3.4**		1.0	0.15	ug/L		09/10/14 10:10	09/12/14 23:54	1
Arsenic	**32.6**		1.0	0.078	ug/L		09/10/14 10:10	09/12/14 23:54	1
Cadmium	**0.41**	**J**	0.50	0.071	ug/L		09/10/14 10:10	09/12/14 23:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		09/11/14 07:30	09/11/14 12:53	1

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: MW-2- 090914
Date Collected: 09/09/14 08:25
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66930-2
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			09/19/14 15:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/14 15:56	1
Benzene	ND		1.0	0.41	ug/L			09/19/14 15:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/14 15:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/14 15:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/14 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*09/19/14 15:56*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*09/19/14 15:56*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*09/19/14 15:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		4.6	0.54	ug/L		09/10/14 07:56	10/01/14 14:40	1
Naphthalene	ND		4.6	0.70	ug/L		09/10/14 07:56	10/01/14 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*46 - 120*	*09/10/14 07:56*	*10/01/14 14:40*	*1*
2-Fluorobiphenyl	*72*		*48 - 120*	*09/10/14 07:56*	*10/01/14 14:40*	*1*
p-Terphenyl-d14	*82*		*67 - 150*	*09/10/14 07:56*	*10/01/14 14:40*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.0010**	**J**	0.0040	0.0010	mg/L		09/12/14 08:17	09/15/14 12:32	1
Iron	**0.10**		0.050	0.019	mg/L		09/12/14 08:17	09/15/14 12:32	1
Lead	**0.0042**	**J**	0.0050	0.0030	mg/L		09/12/14 08:17	09/15/14 12:32	1
Manganese	**0.15**	**B**	0.0030	0.00040	mg/L		09/12/14 08:17	09/15/14 12:32	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.16**	**J**	1.0	0.15	ug/L		09/10/14 10:10	09/12/14 23:59	1
Arsenic	**1.8**		1.0	0.078	ug/L		09/10/14 10:10	09/12/14 23:59	1
Cadmium	**0.11**	**J**	0.50	0.071	ug/L		09/10/14 10:10	09/12/14 23:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		09/11/14 07:30	09/11/14 12:55	1

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: Sump 1- 090914
Date Collected: 09/09/14 11:15
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66930-3
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		1.0	0.79	ug/L			09/19/14 16:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/14 16:21	1
Benzene	ND		1.0	0.41	ug/L			09/19/14 16:21	1
Chlorobenzene	**12**		1.0	0.75	ug/L			09/19/14 16:21	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/14 16:21	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/14 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*09/19/14 16:21*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*09/19/14 16:21*	*1*
Toluene-d8 (Surr)	*101*		*71 - 126*		*09/19/14 16:21*	*1*

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: Sump 2- 090914
Date Collected: 09/09/14 10:55
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66930-4
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		5.0	4.0	ug/L			09/19/14 16:44	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/19/14 16:44	5
Benzene	**8.0**		5.0	2.1	ug/L			09/19/14 16:44	5
Chlorobenzene	**140**		5.0	3.8	ug/L			09/19/14 16:44	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/19/14 16:44	5
Xylenes, Total	ND		10	3.3	ug/L			09/19/14 16:44	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*09/19/14 16:44*	*5*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*09/19/14 16:44*	*5*
Toluene-d8 (Surr)	*102*		*71 - 126*		*09/19/14 16:44*	*5*

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: Sump 3- 090914
Date Collected: 09/09/14 10:35
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66930-5
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			09/19/14 17:09	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			09/19/14 17:09	4
Benzene	ND		4.0	1.6	ug/L			09/19/14 17:09	4
Chlorobenzene	ND		4.0	3.0	ug/L			09/19/14 17:09	4
Ethylbenzene	ND		4.0	3.0	ug/L			09/19/14 17:09	4
Xylenes, Total	ND		8.0	2.6	ug/L			09/19/14 17:09	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*09/19/14 17:09*	*4*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*09/19/14 17:09*	*4*
Toluene-d8 (Surr)	*101*		*71 - 126*		*09/19/14 17:09*	*4*

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: Sump 4- 090914
Date Collected: 09/09/14 09:50
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66930-6
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		4.0	3.2	ug/L			09/19/14 17:32	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			09/19/14 17:32	4
Benzene	ND		4.0	1.6	ug/L			09/19/14 17:32	4
Chlorobenzene	**22**		4.0	3.0	ug/L			09/19/14 17:32	4
Ethylbenzene	ND		4.0	3.0	ug/L			09/19/14 17:32	4
Xylenes, Total	ND		8.0	2.6	ug/L			09/19/14 17:32	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*09/19/14 17:32*	*4*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*09/19/14 17:32*	*4*
Toluene-d8 (Surr)	*101*		*71 - 126*		*09/19/14 17:32*	*4*

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: TRIP BLANK 090914
Date Collected: 09/09/14 11:25
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66930-7
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			09/19/14 17:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/14 17:56	1
Benzene	ND		1.0	0.41	ug/L			09/19/14 17:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/14 17:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/14 17:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/14 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*09/19/14 17:56*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*09/19/14 17:56*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*09/19/14 17:56*	*1*

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: Sump Comp 090914
Date Collected: 09/09/14 11:20
Date Received: 09/09/14 14:05

Lab Sample ID: 480-66930-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	8.1		4.6	0.54	ug/L		09/10/14 07:56	10/01/14 15:07	1
Naphthalene	ND		4.6	0.70	ug/L		09/10/14 07:56	10/01/14 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*46 - 120*	*09/10/14 07:56*	*10/01/14 15:07*	*1*
2-Fluorobiphenyl	*74*		*48 - 120*	*09/10/14 07:56*	*10/01/14 15:07*	*1*
p-Terphenyl-d14	*73*		*67 - 150*	*09/10/14 07:56*	*10/01/14 15:07*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0072		0.0040	0.0010	mg/L		09/12/14 08:17	09/15/14 12:45	1
Iron	34.5		0.050	0.019	mg/L		09/12/14 08:17	09/15/14 12:45	1
Lead	0.0045	J	0.0050	0.0030	mg/L		09/12/14 08:17	09/15/14 12:45	1
Manganese	2.2	B	0.0030	0.00040	mg/L		09/12/14 08:17	09/15/14 12:45	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5		1.0	0.15	ug/L		09/10/14 10:10	09/13/14 00:45	1
Arsenic	32.2		1.0	0.078	ug/L		09/10/14 10:10	09/13/14 00:45	1
Cadmium	0.49	J	0.50	0.071	ug/L		09/10/14 10:10	09/13/14 00:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		09/11/14 07:30	09/11/14 13:03	1

Surrogate Summary

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

TestAmerica Job ID: 480-66930-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(71-126)
480-66930-1	FDUP- 090914	105	99	102
480-66930-2	MW-2- 090914	104	98	100
480-66930-3	Sump 1- 090914	104	98	101
480-66930-4	Sump 2- 090914	105	98	102
480-66930-5	Sump 3- 090914	105	99	101
480-66930-6	Sump 4- 090914	105	95	101
480-66930-6 MS	Sump 4- 090914	103	99	100
480-66930-6 MSD	Sump 4- 090914	102	100	98
480-66930-7	TRIP BLANK 090914	106	97	100
LCS 480-203303/6	Lab Control Sample	102	103	102
MB 480-203303/8	Method Blank	103	100	103

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (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)
480-66930-1	FDUP- 090914	73	77	71
480-66930-2	MW-2- 090914	66	72	82
480-66930-2 MS	MW-2- 090914	76	81	62 X
480-66930-2 MSD	MW-2- 090914	75	78	58 X
480-66930-8	Sump Comp 090914	76	74	73
LCS 480-201600/2-A	Lab Control Sample	80	86	104
MB 480-201600/1-A	Method Blank	85	89	105

Surrogate Legend

NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TPH = p-Terphenyl-d14

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

Lab Sample ID: MB 480-203303/8
Matrix: Water
Analysis Batch: 203303

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			09/19/14 14:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/14 14:33	1
Benzene	ND		1.0	0.41	ug/L			09/19/14 14:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/14 14:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/14 14:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/14 14:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*09/19/14 14:33*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*09/19/14 14:33*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*09/19/14 14:33*	*1*

Lab Sample ID: LCS 480-203303/6
Matrix: Water
Analysis Batch: 203303

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	25.0		ug/L		100	80 - 124
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	75 - 120
Benzene	25.0	25.3		ug/L		101	71 - 124
Chlorobenzene	25.0	25.8		ug/L		103	72 - 120
Ethylbenzene	25.0	26.5		ug/L		106	77 - 123
m,p-Xylene	25.0	26.1		ug/L		105	76 - 122
o-Xylene	25.0	26.1		ug/L		104	76 - 122
Xylenes, Total	50.0	52.2		ug/L		104	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Toluene-d8 (Surr)	*102*		*71 - 126*

Lab Sample ID: 480-66930-6 MS
Matrix: Water
Analysis Batch: 203303

Client Sample ID: Sump 4- 090914
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	109		ug/L		109	80 - 124
1,4-Dichlorobenzene	ND		100	107		ug/L		107	75 - 120
Benzene	ND		100	110		ug/L		110	71 - 124
Chlorobenzene	22		100	129		ug/L		107	72 - 120
Ethylbenzene	ND		100	113		ug/L		113	77 - 123
m,p-Xylene	ND		100	110		ug/L		110	76 - 122
o-Xylene	ND		100	110		ug/L		110	76 - 122
Xylenes, Total	ND		200	220		ug/L		110	76 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*

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

Lab Sample ID: 480-66930-6 MS
Matrix: Water
Analysis Batch: 203303

Client Sample ID: Sump 4- 090914
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Toluene-d8 (Surr)	*100*		*71 - 126*

Lab Sample ID: 480-66930-6 MSD
Matrix: Water
Analysis Batch: 203303

Client Sample ID: Sump 4- 090914
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	108		ug/L		108	80 - 124	1	20
1,4-Dichlorobenzene	ND		100	107		ug/L		107	75 - 120	0	20
Benzene	ND		100	108		ug/L		108	71 - 124	2	13
Chlorobenzene	22		100	126		ug/L		104	72 - 120	2	25
Ethylbenzene	ND		100	109		ug/L		109	77 - 123	4	15
m,p-Xylene	ND		100	107		ug/L		107	76 - 122	2	16
o-Xylene	ND		100	109		ug/L		109	76 - 122	1	16
Xylenes, Total	ND		200	216		ug/L		108	76 - 122	2	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Toluene-d8 (Surr)	*98*		*71 - 126*

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

Lab Sample ID: MB 480-201600/1-A
Matrix: Water
Analysis Batch: 205376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201600

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		5.0	0.59	ug/L		09/10/14 07:56	10/01/14 12:22	1
Naphthalene	ND		5.0	0.76	ug/L		09/10/14 07:56	10/01/14 12:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*85*		*46 - 120*	*09/10/14 07:56*	*10/01/14 12:22*	*1*
2-Fluorobiphenyl	*89*		*48 - 120*	*09/10/14 07:56*	*10/01/14 12:22*	*1*
p-Terphenyl-d14	*105*		*67 - 150*	*09/10/14 07:56*	*10/01/14 12:22*	*1*

Lab Sample ID: LCS 480-201600/2-A
Matrix: Water
Analysis Batch: 205376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201600

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Chloroaniline			32.0	17.5		ug/L		55	10 - 77		
Naphthalene			32.0	27.8		ug/L		87	35 - 117		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	*80*		*46 - 120*

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

Lab Sample ID: LCS 480-201600/2-A
Matrix: Water
Analysis Batch: 205376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201600

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	86		48 - 120
p-Terphenyl-d14	104		67 - 150

Lab Sample ID: 480-66930-2 MS
Matrix: Water
Analysis Batch: 205376

Client Sample ID: MW-2- 090914
Prep Type: Total/NA
Prep Batch: 201600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	ND		29.5	3.71	J F1	ug/L		13	60 - 124
Naphthalene	ND		29.5	24.3		ug/L		83	35 - 117

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5	76		46 - 120
2-Fluorobiphenyl	81		48 - 120
p-Terphenyl-d14	62	X	67 - 150

Lab Sample ID: 480-66930-2 MSD
Matrix: Water
Analysis Batch: 205376

Client Sample ID: MW-2- 090914
Prep Type: Total/NA
Prep Batch: 201600

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloroaniline	ND		29.7	4.97	F1 F2	ug/L		17	60 - 124	29	22
Naphthalene	ND		29.7	24.0		ug/L		81	35 - 117	1	29

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5	75		46 - 120
2-Fluorobiphenyl	78		48 - 120
p-Terphenyl-d14	58	X	67 - 150

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-201605/1-A
Matrix: Water
Analysis Batch: 202557

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0040	0.0010	mg/L		09/12/14 08:17	09/15/14 11:27	1
Iron	ND		0.050	0.019	mg/L		09/12/14 08:17	09/15/14 11:27	1
Lead	ND		0.0050	0.0030	mg/L		09/12/14 08:17	09/15/14 11:27	1
Manganese	0.000700	J	0.0030	0.00040	mg/L		09/12/14 08:17	09/15/14 11:27	1

Lab Sample ID: LCS 480-201605/2-A
Matrix: Water
Analysis Batch: 202557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.200	0.193		mg/L		96	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-201605/2-A
Matrix: Water
Analysis Batch: 202557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.43		mg/L		94	80 - 120
Lead	0.200	0.189		mg/L		95	80 - 120
Manganese	0.200	0.201		mg/L		100	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 480-201649/1-A
Matrix: Water
Analysis Batch: 202286

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201649

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.15	ug/L		09/10/14 10:10	09/12/14 23:42	1
Arsenic	ND		1.0	0.078	ug/L		09/10/14 10:10	09/12/14 23:42	1
Cadmium	ND		0.50	0.071	ug/L		09/10/14 10:10	09/12/14 23:42	1

Lab Sample ID: LCS 480-201649/2-A
Matrix: Water
Analysis Batch: 202286

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201649

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	20.0	20.41		ug/L		102	80 - 120
Arsenic	20.0	18.62		ug/L		93	80 - 120
Cadmium	20.0	19.70		ug/L		98	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-201837/1-A
Matrix: Water
Analysis Batch: 201937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201837

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		09/11/14 07:30	09/11/14 12:36	1

Lab Sample ID: LCS 480-201837/2-A
Matrix: Water
Analysis Batch: 201937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201837

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00658		mg/L		99	80 - 120

GC/MS VOA

Analysis Batch: 203303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	8260C	
480-66930-2	MW-2- 090914	Total/NA	Water	8260C	
480-66930-3	Sump 1- 090914	Total/NA	Water	8260C	
480-66930-4	Sump 2- 090914	Total/NA	Water	8260C	
480-66930-5	Sump 3- 090914	Total/NA	Water	8260C	
480-66930-6	Sump 4- 090914	Total/NA	Water	8260C	
480-66930-6 MS	Sump 4- 090914	Total/NA	Water	8260C	
480-66930-6 MSD	Sump 4- 090914	Total/NA	Water	8260C	
480-66930-7	TRIP BLANK 090914	Total/NA	Water	8260C	
LCS 480-203303/6	Lab Control Sample	Total/NA	Water	8260C	
MB 480-203303/8	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 201600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	3510C	
480-66930-2	MW-2- 090914	Total/NA	Water	3510C	
480-66930-2 MS	MW-2- 090914	Total/NA	Water	3510C	
480-66930-2 MSD	MW-2- 090914	Total/NA	Water	3510C	
480-66930-8	Sump Comp 090914	Total/NA	Water	3510C	
LCS 480-201600/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-201600/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 205376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	8270D	201600
480-66930-2	MW-2- 090914	Total/NA	Water	8270D	201600
480-66930-2 MS	MW-2- 090914	Total/NA	Water	8270D	201600
480-66930-2 MSD	MW-2- 090914	Total/NA	Water	8270D	201600
480-66930-8	Sump Comp 090914	Total/NA	Water	8270D	201600
LCS 480-201600/2-A	Lab Control Sample	Total/NA	Water	8270D	201600
MB 480-201600/1-A	Method Blank	Total/NA	Water	8270D	201600

Metals

Prep Batch: 201605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	3005A	
480-66930-2	MW-2- 090914	Total/NA	Water	3005A	
480-66930-8	Sump Comp 090914	Total/NA	Water	3005A	
LCS 480-201605/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-201605/1-A	Method Blank	Total/NA	Water	3005A	

Prep Batch: 201649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	3020A	
480-66930-2	MW-2- 090914	Total/NA	Water	3020A	
480-66930-8	Sump Comp 090914	Total/NA	Water	3020A	
LCS 480-201649/2-A	Lab Control Sample	Total/NA	Water	3020A	

Metals (Continued)

Prep Batch: 201649 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-201649/1-A	Method Blank	Total/NA	Water	3020A	

Prep Batch: 201837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	7470A	
480-66930-2	MW-2- 090914	Total/NA	Water	7470A	
480-66930-8	Sump Comp 090914	Total/NA	Water	7470A	
LCS 480-201837/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-201837/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 201937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	7470A	201837
480-66930-2	MW-2- 090914	Total/NA	Water	7470A	201837
480-66930-8	Sump Comp 090914	Total/NA	Water	7470A	201837
LCS 480-201837/2-A	Lab Control Sample	Total/NA	Water	7470A	201837
MB 480-201837/1-A	Method Blank	Total/NA	Water	7470A	201837

Analysis Batch: 202286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	6020A	201649
480-66930-2	MW-2- 090914	Total/NA	Water	6020A	201649
480-66930-8	Sump Comp 090914	Total/NA	Water	6020A	201649
LCS 480-201649/2-A	Lab Control Sample	Total/NA	Water	6020A	201649
MB 480-201649/1-A	Method Blank	Total/NA	Water	6020A	201649

Analysis Batch: 202557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-66930-1	FDUP- 090914	Total/NA	Water	6010C	201605
480-66930-2	MW-2- 090914	Total/NA	Water	6010C	201605
480-66930-8	Sump Comp 090914	Total/NA	Water	6010C	201605
LCS 480-201605/2-A	Lab Control Sample	Total/NA	Water	6010C	201605
MB 480-201605/1-A	Method Blank	Total/NA	Water	6010C	201605

Lab Chronicle

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: FDUP- 090914

Lab Sample ID: 480-66930-1

Date Collected: 09/09/14 09:55

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	203303	09/19/14 15:33	GTG	TAL BUF
Total/NA	Prep	3510C			201600	09/10/14 07:56	TRG	TAL BUF
Total/NA	Analysis	8270D		1	205376	10/01/14 14:12	DMR	TAL BUF
Total/NA	Prep	3005A			201605	09/12/14 08:17	SLB	TAL BUF
Total/NA	Analysis	6010C		1	202557	09/15/14 12:22	LMH	TAL BUF
Total/NA	Prep	3020A			201649	09/10/14 10:10	SLB	TAL BUF
Total/NA	Analysis	6020A		1	202286	09/12/14 23:54	TRB	TAL BUF
Total/NA	Prep	7470A			201837	09/11/14 07:30	LRK	TAL BUF
Total/NA	Analysis	7470A		1	201937	09/11/14 12:53	LRK	TAL BUF

Client Sample ID: MW-2- 090914

Lab Sample ID: 480-66930-2

Date Collected: 09/09/14 08:25

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	203303	09/19/14 15:56	GTG	TAL BUF
Total/NA	Prep	3510C			201600	09/10/14 07:56	TRG	TAL BUF
Total/NA	Analysis	8270D		1	205376	10/01/14 14:40	DMR	TAL BUF
Total/NA	Prep	3005A			201605	09/12/14 08:17	SLB	TAL BUF
Total/NA	Analysis	6010C		1	202557	09/15/14 12:32	LMH	TAL BUF
Total/NA	Prep	3020A			201649	09/10/14 10:10	SLB	TAL BUF
Total/NA	Analysis	6020A		1	202286	09/12/14 23:59	TRB	TAL BUF
Total/NA	Prep	7470A			201837	09/11/14 07:30	LRK	TAL BUF
Total/NA	Analysis	7470A		1	201937	09/11/14 12:55	LRK	TAL BUF

Client Sample ID: Sump 1- 090914

Lab Sample ID: 480-66930-3

Date Collected: 09/09/14 11:15

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	203303	09/19/14 16:21	GTG	TAL BUF

Client Sample ID: Sump 2- 090914

Lab Sample ID: 480-66930-4

Date Collected: 09/09/14 10:55

Matrix: Water

Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	203303	09/19/14 16:44	GTG	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-66930-1

Client Sample ID: Sump 3- 090914

Lab Sample ID: 480-66930-5

Date Collected: 09/09/14 10:35
Matrix: Water
Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	203303	09/19/14 17:09	GTG	TAL BUF

Client Sample ID: Sump 4- 090914

Lab Sample ID: 480-66930-6

Date Collected: 09/09/14 09:50
Matrix: Water
Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	203303	09/19/14 17:32	GTG	TAL BUF

Client Sample ID: TRIP BLANK 090914

Lab Sample ID: 480-66930-7

Date Collected: 09/09/14 11:25
Matrix: Water
Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	203303	09/19/14 17:56	GTG	TAL BUF

Client Sample ID: Sump Comp 090914

Lab Sample ID: 480-66930-8

Date Collected: 09/09/14 11:20
Matrix: Water
Date Received: 09/09/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			201600	09/10/14 07:56	TRG	TAL BUF
Total/NA	Analysis	8270D		1	205376	10/01/14 15:07	DMR	TAL BUF
Total/NA	Prep	3005A			201605	09/12/14 08:17	SLB	TAL BUF
Total/NA	Analysis	6010C		1	202557	09/15/14 12:45	LMH	TAL BUF
Total/NA	Prep	3020A			201649	09/10/14 10:10	SLB	TAL BUF
Total/NA	Analysis	6020A		1	202286	09/13/14 00:45	TRB	TAL BUF
Total/NA	Prep	7470A			201837	09/11/14 07:30	LRK	TAL BUF
Total/NA	Analysis	7470A		1	201937	09/11/14 13:03	LRK	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: 480-66930-1

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	03-31-15

Method Summary

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

TestAmerica Job ID: 480-66930-1

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: 480-66930-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-66930-1	FDUP- 090914	Water	09/09/14 09:55	09/09/14 14:05
480-66930-2	MW-2- 090914	Water	09/09/14 08:25	09/09/14 14:05
480-66930-3	Sump 1- 090914	Water	09/09/14 11:15	09/09/14 14:05
480-66930-4	Sump 2- 090914	Water	09/09/14 10:55	09/09/14 14:05
480-66930-5	Sump 3- 090914	Water	09/09/14 10:35	09/09/14 14:05
480-66930-6	Sump 4- 090914	Water	09/09/14 09:50	09/09/14 14:05
480-66930-7	TRIP BLANK 090914	Water	09/09/14 11:25	09/09/14 14:05
480-66930-8	Sump Comp 090914	Water	09/09/14 11:20	09/09/14 14:05

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: PATRICK HIGGINS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-54295-7003.1
Client Contact: Mr. Mohammed Salam	Phone: 315 468 1663	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 2
Company: CH2M Hill OMI.		Analysis Requested		Job #:
Address: 1563 Willis Avenue	Due Date Requested:			Preservation Codes:
City: Syracuse	TAT Requested (days): 14 days			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)
State, Zip: NY, 13209				
Phone: 973-455-4682(Tel)	PO #: 4500073922			
Email: mohammed.salam@ch2m.com	WO #: 30130 - Alltift Landfill			Other:
Project Name: Honeywell - Buffalo (Alltift) - 30130/ Event Desc: Honeywell - Alt	Project #: 48004175			
Site: New York	SSOW#:			

480-66930 Chain of Custody

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)	8260B - Appendix I Volatiles	6010B, 6020, 7470A	8270C - Appendix 2 Semi-volatiles	Total Number of containe	Special Instructions/Note:
			Preservation Code:				A	D	N		
MS 090914	090914	10:05	GRAB	Water	N	N	3	1	2	6	
MSD 090914	090914	10:00	GRAB	Water	N	N	3	1	2	6	
FDUP- 090914	090914	9:55	GRAB	Water	N	N	3	1	2	6	
MW-2- 090914	090914	8:25	GRAB	Water	N	N	3	1	2	6	
Sump 1- 090914	090914	11:15	GRAB	Water	N	N	3			3	
Sump 2- 090914	090914	10:55	GRAB	Water	N	N	3			3	
Sump 3- 090914	090914	10:35	GRAB	Water	N	N	3			3	
Sump 4- 090914	090914	9:50	GRAB	Water	N	N	3			3	
TRIP BLANK 090914	090914	11:25	GRAB	Water	N	N	1			1	
[redacted] Sump Comp 090914	090914	11:20	GRAB	Water	N	N		1	2	3	
[redacted]				Water							

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ 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:	Company	Received by:	Date/Time:	Company
[redacted]	09/08/2014 @ 14:05	OMI	[redacted]	9/9/14 1405	TA BUFF
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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: #2 3.8

10/14/2014

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-66930-1

Login Number: 66930

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robison, Zachary J

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.	N/A	

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ANALYTICAL REPORT

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

TestAmerica Job ID: 480-68653-1
Client Project/Site: Honeywell - Buffalo (Alltift) - 30130

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

Attn: Mr. Rich Galloway

Authorized for release by:
10/22/2014 12:02:40 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 Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds 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.
B	Compound was found in the blank and sample.
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.
F1	MS and/or MSD Recovery exceeds the control limits

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)

Case Narrative

Client: Honeywell International Inc
Project/Site: Honeywell - Buffalo (Alltift) - 30130

TestAmerica Job ID: 480-68653-1

Job ID: 480-68653-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-68653-1

Comments
No additional comments.

Receipt
The samples were received on 10/6/2014 1:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS VOA
Method(s) 8260C: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: Sump 4 DUP-101614 (480-68653-2), Sump 4-100614 (480-68653-1), Sump 4-100614 MS (480-68653-1 MS), Sump 4-100614 MSD (480-68653-1 MSD). 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: Surrogate recovery for the following samples was outside control limits: Sump 4-100614 (480-68653-1), Sump 4-100614 MS (480-68653-1 MS), Sump 4-100614 MSD (480-68653-1 MSD). Evidence of matrix interference is present; therefore, re-extraction and/or 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.

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: Honeywell - Buffalo (Alltift) - 30130

TestAmerica Job ID: 480-68653-1

Client Sample ID: Sump 4-100614 — Lab Sample ID: 480-68653-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	23		4.0	3.0	ug/L	4		8260C	Total/NA
Chromium	0.010		0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	25.0	B	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0052		0.0050	0.0030	mg/L	1		6010C	Total/NA
Manganese	2.3		0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	1.5		1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	17.2		1.0	0.078	ug/L	1		6020A	Total/NA
Cadmium	0.48	J	0.50	0.071	ug/L	1		6020A	Total/NA

Client Sample ID: Sump 4 DUP-100614 — Lab Sample ID: 480-68653-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	30		4.0	3.0	ug/L	4		8260C	Total/NA
Chromium	0.0042		0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	22.3	B	0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	2.2		0.0030	0.00040	mg/L	1		6010C	Total/NA
Antimony	0.67	J	1.0	0.15	ug/L	1		6020A	Total/NA
Arsenic	14.2		1.0	0.078	ug/L	1		6020A	Total/NA
Cadmium	0.30	J	0.50	0.071	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Sump 4-100614

Date Collected: 10/06/14 07:40
Date Received: 10/06/14 13:30

Lab Sample ID: 480-68653-1

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			10/07/14 12:47	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			10/07/14 12:47	4
Benzene	ND		4.0	1.6	ug/L			10/07/14 12:47	4
Chlorobenzene	**23**		4.0	3.0	ug/L			10/07/14 12:47	4
Ethylbenzene	ND		4.0	3.0	ug/L			10/07/14 12:47	4
Xylenes, Total	ND		8.0	2.6	ug/L			10/07/14 12:47	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*66 - 137*		*10/07/14 12:47*	*4*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*10/07/14 12:47*	*4*
Toluene-d8 (Surr)	*96*		*71 - 126*		*10/07/14 12:47*	*4*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		4.7	0.55	ug/L		10/08/14 05:59	10/10/14 16:22	1
Naphthalene	ND		4.7	0.71	ug/L		10/08/14 05:59	10/10/14 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*40*	*X*	*46 - 120*	*10/08/14 05:59*	*10/10/14 16:22*	*1*
2-Fluorobiphenyl	*42*	*X*	*48 - 120*	*10/08/14 05:59*	*10/10/14 16:22*	*1*
p-Terphenyl-d14	*51*	*X*	*67 - 150*	*10/08/14 05:59*	*10/10/14 16:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.010**		0.0040	0.0010	mg/L		10/08/14 08:55	10/08/14 18:30	1
Iron	**25.0**	**B**	0.050	0.019	mg/L		10/08/14 08:55	10/08/14 18:30	1
Lead	**0.0052**		0.0050	0.0030	mg/L		10/08/14 08:55	10/08/14 18:30	1
Manganese	**2.3**		0.0030	0.00040	mg/L		10/08/14 08:55	10/08/14 18:30	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.5**		1.0	0.15	ug/L		10/08/14 12:36	10/09/14 07:38	1
Arsenic	**17.2**		1.0	0.078	ug/L		10/08/14 12:36	10/09/14 07:38	1
Cadmium	**0.48**	**J**	0.50	0.071	ug/L		10/08/14 12:36	10/09/14 07:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		10/07/14 08:00	10/07/14 13:05	1

Client: Honeywell International Inc
Project/Site: Honeywell - Buffalo (Alltift) - 30130

TestAmerica Job ID: 480-68653-1

Client Sample ID: Sump 4 DUP-100614

Lab Sample ID: 480-68653-2

Date Collected: 10/06/14 07:55

Matrix: Water

Date Received: 10/06/14 13:30

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			10/07/14 14:02	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			10/07/14 14:02	4
Benzene	ND		4.0	1.6	ug/L			10/07/14 14:02	4
Chlorobenzene	**30**		4.0	3.0	ug/L			10/07/14 14:02	4
Ethylbenzene	ND		4.0	3.0	ug/L			10/07/14 14:02	4
Xylenes, Total	ND		8.0	2.6	ug/L			10/07/14 14:02	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*66 - 137*		*10/07/14 14:02*	*4*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*10/07/14 14:02*	*4*
Toluene-d8 (Surr)	*96*		*71 - 126*		*10/07/14 14:02*	*4*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		4.6	0.54	ug/L		10/08/14 05:59	10/10/14 16:49	1
Naphthalene	ND		4.6	0.70	ug/L		10/08/14 05:59	10/10/14 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*46 - 120*	*10/08/14 05:59*	*10/10/14 16:49*	*1*
2-Fluorobiphenyl	*92*		*48 - 120*	*10/08/14 05:59*	*10/10/14 16:49*	*1*
p-Terphenyl-d14	*79*		*67 - 150*	*10/08/14 05:59*	*10/10/14 16:49*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.0042**		0.0040	0.0010	mg/L		10/08/14 08:55	10/08/14 18:44	1
Iron	**22.3**	**B**	0.050	0.019	mg/L		10/08/14 08:55	10/08/14 18:44	1
Lead	ND		0.0050	0.0030	mg/L		10/08/14 08:55	10/08/14 18:44	1
Manganese	**2.2**		0.0030	0.00040	mg/L		10/08/14 08:55	10/08/14 18:44	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.67**	**J**	1.0	0.15	ug/L		10/08/14 12:36	10/09/14 08:11	1
Arsenic	**14.2**		1.0	0.078	ug/L		10/08/14 12:36	10/09/14 08:11	1
Cadmium	**0.30**	**J**	0.50	0.071	ug/L		10/08/14 12:36	10/09/14 08:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		10/07/14 08:00	10/07/14 13:11	1

Surrogate Summary

Client: Honeywell International Inc
Project/Site: Honeywell - Buffalo (Alltift) - 30130

TestAmerica Job ID: 480-68653-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(71-126)
480-68653-1	Sump 4-100614	121	99	96
480-68653-1 MS	Sump 4-100614 MS	115	106	95
480-68653-1 MSD	Sump 4-100614 MSD	113	102	97
480-68653-2	Sump 4 DUP-100614	115	99	96
LCS 480-206312/5	Lab Control Sample	108	101	97
MB 480-206312/6	Method Blank	111	98	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (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)
480-68653-1	Sump 4-100614	40 X	42 X	51 X
480-68653-1 MS	Sump 4-100614 MS	96	98	60 X
480-68653-1 MSD	Sump 4-100614 MSD	95	101	62 X
480-68653-2	Sump 4 DUP-100614	87	92	79
LCS 480-206491/2-A	Lab Control Sample	91	92	102
MB 480-206491/1-A	Method Blank	82	86	103

Surrogate Legend

NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TPH = p-Terphenyl-d14

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

Lab Sample ID: MB 480-206312/6
Matrix: Water
Analysis Batch: 206312

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			10/07/14 10:45	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/07/14 10:45	1
Benzene	ND		1.0	0.41	ug/L			10/07/14 10:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/07/14 10:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/07/14 10:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/07/14 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*10/07/14 10:45*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*10/07/14 10:45*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*10/07/14 10:45*	*1*

Lab Sample ID: LCS 480-206312/5
Matrix: Water
Analysis Batch: 206312

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	23.2		ug/L		93	80 - 124
1,4-Dichlorobenzene	25.0	22.9		ug/L		92	75 - 120
Benzene	25.0	22.9		ug/L		92	71 - 124
Chlorobenzene	25.0	23.0		ug/L		92	72 - 120
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
m,p-Xylene	25.0	22.5		ug/L		90	76 - 122
o-Xylene	25.0	22.6		ug/L		90	76 - 122
Xylenes, Total	50.0	45.1		ug/L		90	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Toluene-d8 (Surr)	*97*		*71 - 126*

Lab Sample ID: 480-68653-1 MS
Matrix: Water
Analysis Batch: 206312

Client Sample ID: Sump 4-100614 MS
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	95.3		ug/L		95	80 - 124
1,4-Dichlorobenzene	ND		100	94.6		ug/L		95	75 - 120
Benzene	ND		100	92.8		ug/L		93	71 - 124
Chlorobenzene	23		100	116		ug/L		93	72 - 120
Ethylbenzene	ND		100	98.1		ug/L		98	77 - 123
m,p-Xylene	ND		100	93.3		ug/L		93	76 - 122
o-Xylene	ND		100	92.2		ug/L		92	76 - 122
Xylenes, Total	ND		200	186		ug/L		93	76 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*66 - 137*

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

Lab Sample ID: 480-68653-1 MS
Matrix: Water
Analysis Batch: 206312

Client Sample ID: Sump 4-100614 MS
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Toluene-d8 (Surr)	*95*		*71 - 126*

Lab Sample ID: 480-68653-1 MSD
Matrix: Water
Analysis Batch: 206312

Client Sample ID: Sump 4-100614 MSD
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	93.7		ug/L		94	80 - 124	2	20
1,4-Dichlorobenzene	ND		100	93.2		ug/L		93	75 - 120	2	20
Benzene	ND		100	91.9		ug/L		92	71 - 124	1	13
Chlorobenzene	23		100	116		ug/L		93	72 - 120	0	25
Ethylbenzene	ND		100	95.6		ug/L		96	77 - 123	3	15
m,p-Xylene	ND		100	90.8		ug/L		91	76 - 122	3	16
o-Xylene	ND		100	91.4		ug/L		91	76 - 122	1	16
Xylenes, Total	ND		200	182		ug/L		91	76 - 122	2	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Toluene-d8 (Surr)	*97*		*71 - 126*

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

Lab Sample ID: MB 480-206491/1-A
Matrix: Water
Analysis Batch: 207108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 206491

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		5.0	0.59	ug/L		10/08/14 05:59	10/10/14 14:31	1
Naphthalene	ND		5.0	0.76	ug/L		10/08/14 05:59	10/10/14 14:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*82*		*46 - 120*	*10/08/14 05:59*	*10/10/14 14:31*	*1*
2-Fluorobiphenyl	*86*		*48 - 120*	*10/08/14 05:59*	*10/10/14 14:31*	*1*
p-Terphenyl-d14	*103*		*67 - 150*	*10/08/14 05:59*	*10/10/14 14:31*	*1*

Lab Sample ID: LCS 480-206491/2-A
Matrix: Water
Analysis Batch: 207108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 206491

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Chloroaniline			32.0	24.2		ug/L		75	10 - 77		
Naphthalene			32.0	27.8		ug/L		87	35 - 117		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	*91*		*46 - 120*

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

Lab Sample ID: LCS 480-206491/2-A
Matrix: Water
Analysis Batch: 207108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 206491

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	92		48 - 120
p-Terphenyl-d14	102		67 - 150

Lab Sample ID: 480-68653-1 MS
Matrix: Water
Analysis Batch: 207108

Client Sample ID: Sump 4-100614 MS
Prep Type: Total/NA
Prep Batch: 206491

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	ND		29.5	6.15	F1	ug/L		21	60 - 124
Naphthalene	ND		29.5	27.4		ug/L		93	35 - 117

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5	96		46 - 120
2-Fluorobiphenyl	98		48 - 120
p-Terphenyl-d14	60	X	67 - 150

Lab Sample ID: 480-68653-1 MSD
Matrix: Water
Analysis Batch: 207108

Client Sample ID: Sump 4-100614 MSD
Prep Type: Total/NA
Prep Batch: 206491

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloroaniline	ND		29.3	12.6	F1 F2	ug/L		43	60 - 124	69	22
Naphthalene	ND		29.3	26.7		ug/L		91	35 - 117	2	29

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5	95		46 - 120
2-Fluorobiphenyl	101		48 - 120
p-Terphenyl-d14	62	X	67 - 150

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-206499/1-A
Matrix: Water
Analysis Batch: 207036

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 206499

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0040	0.0010	mg/L		10/08/14 08:55	10/09/14 13:26	1
Iron	0.0326	J	0.050	0.019	mg/L		10/08/14 08:55	10/09/14 13:26	1
Lead	ND		0.0050	0.0030	mg/L		10/08/14 08:55	10/09/14 13:26	1
Manganese	ND		0.0030	0.00040	mg/L		10/08/14 08:55	10/09/14 13:26	1

Lab Sample ID: LCS 480-206499/2-A
Matrix: Water
Analysis Batch: 206924

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 206499

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.201	0.188		mg/L		94	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-206499/2-A
Matrix: Water
Analysis Batch: 206924

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 206499

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.07		mg/L		91	80 - 120
Lead	0.201	0.187		mg/L		93	80 - 120
Manganese	0.201	0.202		mg/L		101	80 - 120

Lab Sample ID: 480-68653-1 MS
Matrix: Water
Analysis Batch: 206924

Client Sample ID: Sump 4-100614 MS
Prep Type: Total/NA
Prep Batch: 206499

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.010		0.201	0.194		mg/L		92	75 - 125
Iron	25.0	B	10.0	33.17		mg/L		82	75 - 125
Lead	0.0052		0.201	0.197		mg/L		96	75 - 125
Manganese	2.3		0.201	2.53	4	mg/L		99	75 - 125

Lab Sample ID: 480-68653-1 MSD
Matrix: Water
Analysis Batch: 206924

Client Sample ID: Sump 4-100614 MSD
Prep Type: Total/NA
Prep Batch: 206499

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	0.010		0.201	0.189		mg/L		90	75 - 125	2	20
Iron	25.0	B	10.0	31.63	F1	mg/L		67	75 - 125	5	20
Lead	0.0052		0.201	0.199		mg/L		96	75 - 125	1	20
Manganese	2.3		0.201	2.45	4	mg/L		58	75 - 125	3	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 480-206584/1-A
Matrix: Water
Analysis Batch: 206893

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 206584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.15	ug/L		10/08/14 12:36	10/09/14 06:24	1
Arsenic	ND		1.0	0.078	ug/L		10/08/14 12:36	10/09/14 06:24	1
Cadmium	ND		0.50	0.071	ug/L		10/08/14 12:36	10/09/14 06:24	1

Lab Sample ID: LCS 480-206584/2-A
Matrix: Water
Analysis Batch: 206893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 206584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	20.0	19.73		ug/L		99	80 - 120
Arsenic	20.0	18.49		ug/L		92	80 - 120
Cadmium	20.0	19.67		ug/L		98	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 480-68653-1 MS — **Client Sample ID: Sump 4-100614 MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206893 — **Prep Batch: 206584**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.5		20.0	21.81		ug/L		101	75 - 125
Arsenic	17.2		20.0	35.62		ug/L		92	75 - 125
Cadmium	0.48	J	20.0	19.51		ug/L		95	75 - 125

Lab Sample ID: 480-68653-1 MSD — **Client Sample ID: Sump 4-100614 MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206893 — **Prep Batch: 206584**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.5		20.0	21.18		ug/L		98	75 - 125	3	20
Arsenic	17.2		20.0	32.33		ug/L		76	75 - 125	10	20
Cadmium	0.48	J	20.0	19.19		ug/L		94	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-206295/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206395 — **Prep Batch: 206295**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		10/07/14 08:00	10/07/14 12:31	1

Lab Sample ID: LCS 480-206295/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206395 — **Prep Batch: 206295**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00705		mg/L		106	80 - 120

Lab Sample ID: 480-68653-1 MS — **Client Sample ID: Sump 4-100614 MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206395 — **Prep Batch: 206295**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00667	0.00687		mg/L		103	80 - 120

Lab Sample ID: 480-68653-1 MSD — **Client Sample ID: Sump 4-100614 MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206395 — **Prep Batch: 206295**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00653		mg/L		98	80 - 120	5	20

GC/MS VOA

Analysis Batch: 206312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	8260C	
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	8260C	
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	8260C	
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	8260C	
LCS 480-206312/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-206312/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 206491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	3510C	
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	3510C	
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	3510C	
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	3510C	
LCS 480-206491/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-206491/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 207108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	8270D	206491
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	8270D	206491
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	8270D	206491
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	8270D	206491
LCS 480-206491/2-A	Lab Control Sample	Total/NA	Water	8270D	206491
MB 480-206491/1-A	Method Blank	Total/NA	Water	8270D	206491

Metals

Prep Batch: 206295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	7470A	
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	7470A	
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	7470A	
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	7470A	
LCS 480-206295/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-206295/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 206395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	7470A	206295
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	7470A	206295
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	7470A	206295
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	7470A	206295
LCS 480-206295/2-A	Lab Control Sample	Total/NA	Water	7470A	206295
MB 480-206295/1-A	Method Blank	Total/NA	Water	7470A	206295

Prep Batch: 206499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 206499 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	3005A	
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	3005A	
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	3005A	
LCS 480-206499/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-206499/1-A	Method Blank	Total/NA	Water	3005A	

Prep Batch: 206584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	3020A	
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	3020A	
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	3020A	
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	3020A	
LCS 480-206584/2-A	Lab Control Sample	Total/NA	Water	3020A	
MB 480-206584/1-A	Method Blank	Total/NA	Water	3020A	

Analysis Batch: 206893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	6020A	206584
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	6020A	206584
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	6020A	206584
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	6020A	206584
LCS 480-206584/2-A	Lab Control Sample	Total/NA	Water	6020A	206584
MB 480-206584/1-A	Method Blank	Total/NA	Water	6020A	206584

Analysis Batch: 206924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-68653-1	Sump 4-100614	Total/NA	Water	6010C	206499
480-68653-1 MS	Sump 4-100614 MS	Total/NA	Water	6010C	206499
480-68653-1 MSD	Sump 4-100614 MSD	Total/NA	Water	6010C	206499
480-68653-2	Sump 4 DUP-100614	Total/NA	Water	6010C	206499
LCS 480-206499/2-A	Lab Control Sample	Total/NA	Water	6010C	206499

Analysis Batch: 207036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-206499/1-A	Method Blank	Total/NA	Water	6010C	206499

Lab Chronicle

Client: Honeywell International Inc
Project/Site: Honeywell - Buffalo (Alltift) - 30130

TestAmerica Job ID: 480-68653-1

Client Sample ID: Sump 4-100614

Lab Sample ID: 480-68653-1

Date Collected: 10/06/14 07:40

Matrix: Water

Date Received: 10/06/14 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	206312	10/07/14 12:47	CDC	TAL BUF
Total/NA	Prep	3510C			206491	10/08/14 05:59	MRB	TAL BUF
Total/NA	Analysis	8270D		1	207108	10/10/14 16:22	DMR	TAL BUF
Total/NA	Prep	3005A			206499	10/08/14 08:55	SLB	TAL BUF
Total/NA	Analysis	6010C		1	206924	10/08/14 18:30	AMH	TAL BUF
Total/NA	Prep	3020A			206584	10/08/14 12:36	SLB	TAL BUF
Total/NA	Analysis	6020A		1	206893	10/09/14 07:38	MTM2	TAL BUF
Total/NA	Prep	7470A			206295	10/07/14 08:00	LRK	TAL BUF
Total/NA	Analysis	7470A		1	206395	10/07/14 13:05	LRK	TAL BUF

Client Sample ID: Sump 4 DUP-100614

Lab Sample ID: 480-68653-2

Date Collected: 10/06/14 07:55

Matrix: Water

Date Received: 10/06/14 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	206312	10/07/14 14:02	CDC	TAL BUF
Total/NA	Prep	3510C			206491	10/08/14 05:59	MRB	TAL BUF
Total/NA	Analysis	8270D		1	207108	10/10/14 16:49	DMR	TAL BUF
Total/NA	Prep	3005A			206499	10/08/14 08:55	SLB	TAL BUF
Total/NA	Analysis	6010C		1	206924	10/08/14 18:44	AMH	TAL BUF
Total/NA	Prep	3020A			206584	10/08/14 12:36	SLB	TAL BUF
Total/NA	Analysis	6020A		1	206893	10/09/14 08:11	MTM2	TAL BUF
Total/NA	Prep	7470A			206295	10/07/14 08:00	LRK	TAL BUF
Total/NA	Analysis	7470A		1	206395	10/07/14 13:11	LRK	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: Honeywell - Buffalo (Alltift) - 30130

TestAmerica Job ID: 480-68653-1

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	03-31-15

Method Summary

Client: Honeywell International Inc
Project/Site: Honeywell - Buffalo (Alltift) - 30130

TestAmerica Job ID: 480-68653-1

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: Honeywell - Buffalo (Alltift) - 30130

TestAmerica Job ID: 480-68653-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-68653-1	Sump 4-100614	Water	10/06/14 07:40	10/06/14 13:30
480-68653-2	Sump 4 DUP-100614	Water	10/06/14 07:55	10/06/14 13:30

TestAmerica Syracuse
118 Boss Rd
Syracuse, NY 13211
Phone (315) 431-0171 Fax (315) xxx-xxxx

Chain of Custody Record

480-68653 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Pat Higgins	Lab PM: Schove, John F	COC No: 480-55640-14684.1
Client Contact: Mr. Patrick Higgins	Phone: (315) 4681663	E-Mail: john.schove@testamericainc.com	Page: Page 1 of 1
Company: CH2M Hill OMI.			Job #:
Address: 1563 Willis Avenue	Due Date Requested:	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)
City: Syracuse	TAT Requested (days): 48 Hour		
State, Zip: NY, 13209			
Phone: 973-455-4682(Tel)	PO #: 4500073922		
Email: patrick.higgins@ch2m.com	WO #: 30130 - Alltift Landfill		
Project Name: Honeywell - Buffalo (Alltift) - 30130	Project #: 48004175		
Site: New York	SSOW#:		Other:

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)	8270D - Semi-volatiles - Naph. & 4-Chloroanaline	6010C, 6020A, 7470A	8260C - Volatiles - Custom List														Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	A															
Sump 4 - 100614	10/6/14	0740	G	Water	N	Y	2	1	3														6	
Sump 4 MS - 100614	10/6/14	0745	G	Water	N	Y	2	1	3														6	
Sump 4 MSD - 100614	10/6/14	0750	G	Water	N	Y	2	1	3														6	
Sump 4 DUP- 100614	10/6/14	0755	G	Water	N		2	1	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:	Company	Received by:	Date/Time:	Company
Patrick C Higgins	10/6/14 @ 13:30	OMI		10/6/14 1330	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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: 2.1 #1

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-68653-1

Login Number: 68653

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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.	True	
Chlorine Residual checked.	True	

APPENDIX G

SITE INSPECTION FORMS

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 6/3/2014

Weather: Warm morning 70 degrees There was a ten minute heavy rain.
Assessment by: Patrick Higgins

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? NO Tresspassing
☐	☒	☐	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
☒	☐	☐	1. Does one exist? _____

Site Inspection Form

Yes	No	N/A	
☒	☐	☐	2. Is system active or passive? Passive
☐	☒	☐	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.) Refer to general Comments
☒	☐	☐	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? Refer To general comments
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

J. General Comments

The force main was lanced on May29th and May 30th. We properly installed plug and end caps on the inch and half man made cleanouts. We Contacted OP Tech to remove sediment from lift station on June 3rd On June 3rd, 2014, We met with Op-Tech to muck out lift station. Visually and physically verified that all the cleanouts on the force main were tightly sealed, as depicted below. The wetland Level at 2.4 feet.

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 8/21/2014

Weather: Sunny and 75 degrees
Assessment by: John Formoza

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? NO Tresspassing
☐	☒	☐	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
☒	☐	☐	1. Does one exist? _____

Site Inspection Form

Yes	No	N/A	
☒	☐	☐	2. Is system active or passive? Passive
☐	☒	☐	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

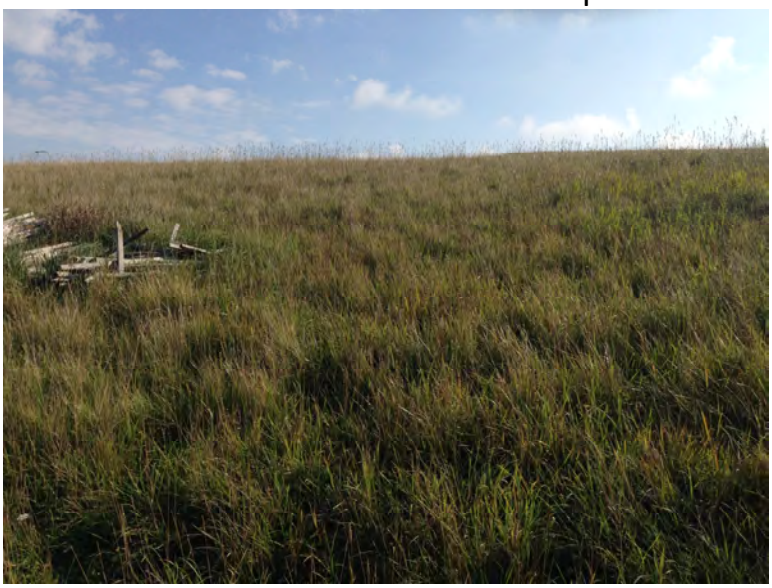
☒	☐	☐	1. Does one exist? _____
			2. Collection method:
☒	☐	☐	a. Sump? 2
☐	☐	☒	b. Well point? _____
☐	☐	☒	c. Earthen basin/pond? _____
☐	☐	☒	d. Structure secured? _____
			e. Other _____
			3. Pumping system:
☒	☐	☐	a. Automatic? _____
☐	☒	☐	b. Manual? _____
☒	☐	☐	c. Mechanically operable? _____
☐	☒	☐	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? Refer To general comments
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

J. General Comments

BSA onsite for annual site visit. Also Mark Sweitzer from Honeywell onsite for site visit.



Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 10/06/2014

Weather: Overcast cool morning giving way to sunshine temperature in the upper 50's.
Assessment Patrick Higgins 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? _____
☐	☒	☐	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
☒	☐	☐	1. Does one exist? _____

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? March 2014 noted in operation journal
☒	☐	☐	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 _____

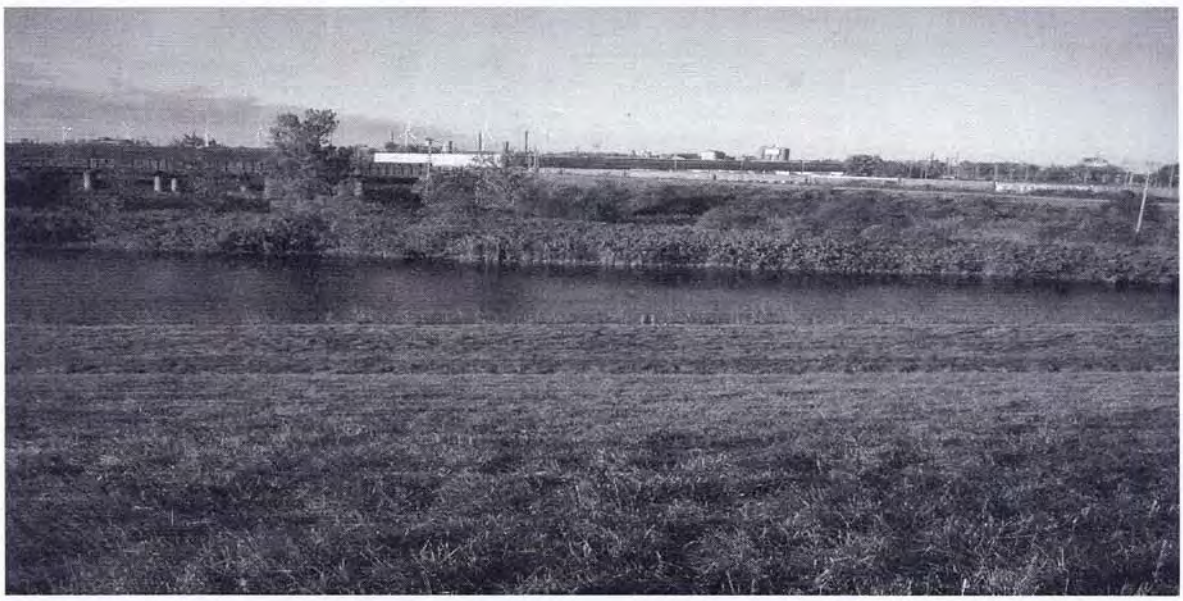
Site Inspection Form

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

October 6th, 2014: Mike Stout and Pat Higgins on site to sample Collection GWCT #4 and the BSA lift station. Manual measured water Levels of PZ wells and noted measurements in Alltifft operation journal. There are photographs on page 4.

Patrick C. Higgins 10/16/2014



CH2MHILL

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 1/20/2015

Weather: Overcast Cold 20 degrees Fahrenheit with breeze
Assessment by: James Haas and Robert Davies and Wisam Aljoher

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 January 20th, 2015, Robert Davies, Wisam Aljoher, and James Haas were on site. James Haas and Robert Davies manually measured the depths to water at pz wells, observation ports and collection sumps. Wisam, Robert, and James completed visual walk through and verified there were no mechanical issues.