



engineering and constructing a better tomorrow

May 15, 2019

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: 2018/2019 Periodic Review Report
Alltft Landfill Site
NYSDEC Site No. 915054

Dear Mr. Szymanski:

MACTEC Engineering and Consulting, P.C. (MACTEC), is submitting this Periodic Review Report (PRR) for the Alltft 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. Supporting Tables, Figures, and Appendices are 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 7, 2019.

I. Introduction

A. Site Summary:

The primary remedial action 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 Attachment B.1)
- groundwater monitoring
- restoration of ponds and wetlands.

The Alltft Landfill Site is located at 302 Abby 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 Alltft Landfill (see figures included in Attachment B.1).

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

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

During the 2018/2019 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 are 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.
- D. Recommendations: Implementation of the activities specified in the OM&M Manual will continue, as described in Section VI E of this letter.

II. Site Overview

- A. Site Location: The site plan is illustrated on the figures included in Attachment B.1. 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 at the site containing contaminant concentrations exceeding relevant NYSDEC standards were identified.

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 are 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 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 in Attachment B.2).
 - 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 from site monitoring wells, piezometers, and sumps are used to establish quarterly groundwater elevations at the site (water level measurements and calculated groundwater elevations are included in Attachment B.3 and B.4, respectively). 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 (quarterly groundwater contour maps are included in Attachment B.5).

- Ensuring that the wetlands area is successfully functioning as designed: In its letter addressed to Honeywell, dated October 24, 2012, the USACE indicated that the terms and conditions of Permit No. 98-976-0162(0) had been met and that no further actions are required.
- IV. IC/EC Plan Compliance Report – An IC/EC Plan was submitted to the NYSDEC on December 13, 2012. The IC/EC Plan has been adopted, and a description of the status of institutional and engineering controls is included in Attachment A of this PRR.
- V. Monitoring Plan Compliance Report – A separate Monitoring Plan Compliance Report is not required for this site. Monitoring requirements are addressed in the OM&M Manual.
- VI. Operations and Maintenance Plan Compliance Report
- A. Components of the OM&M Manual – Requirements of the OM&M Manual include the following:
- BSA Discharge Monitoring
 - Groundwater Monitoring and Annual Groundwater Sampling
 - Landfill Gas Monitoring
 - Surface Water Level Measurements
 - Quarterly Site Inspections
 - Maintenance Activities (including annual mowing of cap, repair of access roads and areas without vegetative cover, repair of areas showing erosion or subsidence, and maintenance of the surface drainage and groundwater collection systems).

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

- BSA discharge monitoring was conducted on a semi-annual basis in accordance with the BPDES Permit in effect (Permit #15-12-BU098). Collected samples were submitted to SGS in Dayton, New Jersey for analyses of the required parameters. Honeywell's OM&M Contractor - Jacobs (formerly CH2M) - 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 (refer to Attachment B.6).
- Groundwater levels for site piezometers, wells and groundwater collection trench sumps were recorded on a quarterly basis.
- The annual groundwater sampling event completed on October 4, 2018 included collection of aqueous samples from background monitoring well MW-2 and collection system sumps; the samples were analyzed for parameters described in the OM&M Manual. The results are consistent with historical results and are presented in Attachment B.7.
- Landfill gas monitoring was conducted using a GEM 2000 (SN# GEM12691) on April 25, 2018 and the results are presented in Attachment B.8. Results indicated no detection of methane, with exception of Gas Vent 3 (GV-3), where elevated concentrations of methane and carbon dioxide were detected.
- 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:
 - o Periodic inspection and cleaning, or replacement as needed, of the lift station flow meter
 - o Periodic inspection/maintenance of sump pumps
 - o Plowing of snow from the entrance road as necessary
 - o Mowing of landfill cover on October 4, 2018
- Due to obstructions and/or damage to PZ-14 and PZ-16 preventing the collection of water levels, these two piezometers were decommissioned on June 28, 2018 consistent with the guidance provided in CP-43: Groundwater Monitoring Well Decommissioning Policy and as directed by the NYSDEC. Decommissioning consisted of removing the protective casing, removing concrete

surface pads, and grouting in-place. Photographs of the decommissioning are included as Attachment B.9.

- At the request of the NYSDEC, emerging contaminant sampling was conducted on behalf of Honeywell International Inc. (Honeywell), by Wood Environment & Infrastructure Solutions, Inc., (Wood E&IS) in October 2018. Results of the emerging contaminants sampling were reported to the NYSDEC under separate cover.

C. Evaluation of Remedial Systems: During the reporting period, the remedial systems appeared to be effectively achieving the objectives of the remedial action.

D. OM&M Deficiencies: Most of the monitoring wells are fully functional; however, PZ-14 and PZ-16 were decommissioned in 2018 as described above, and MW-1 will be removed in 2019. MW-1 was originally scheduled to be removed in 2018; however, a large landscaping berm had been constructed over the well and the well was not located in sufficient time for the work to be completed.

E. Conclusions and Recommendations:

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

- Based on the results of the quarterly inspection reports, which verify that the integrity of the cap is satisfactory, and vegetation is established, the remedy remains protective in its ability to eliminate the potential for direct contact with waste and impacted soils and sediments.
- Based on the evaluation of the collected groundwater elevation data, which indicates that impacted groundwater is flowing into the groundwater collection trench as designed, the remedy is eliminating the potential for impacted groundwater to discharge to the adjacent wetlands.
- Based on the analytical results from BSA discharge monitoring, concentrations of effluent parameters are within the BSA permit limits.
- Landfill gas monitoring results were generally consistent with historical results, with exception of elevated concentrations of methane and carbon dioxide detected at GV-3, and low oxygen concentrations at GV-1 and GV-3.

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 2019 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 – The 2019 landfill gas monitoring is scheduled to occur in May 2019. The results of the 2019 monitoring will be evaluated to determine the need for further actions.
- 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.
- OM&M activities will continue on a routine basis, with the frequency adjusted as needed based upon results of site inspections or to respond to groundwater collection system autodialer callouts.
- The next PRR submittal should be completed and submitted to NYSDEC by the end of May 2020.

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 2020.

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

Mr. David Szymanski
May 15, 2019
Page 8 of 8

Attachments

cc: J. Morris (Honeywell)
J. Paananen (City of Buffalo)
K. Boland (CSX)

ATTACHMENT A

PRR NOTICE

IC/EC CONTROLS CERTIFICATION FORM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation

625 Broadway, 11th Floor, Albany, NY 12233-7020

P: (518)402-9543 | F: (518)402-9547

www.dec.ny.gov

3/7/2019

Mark A. Sweitzer
Remediation Manager
Honeywell International Inc.
6100 Philadelphia Pike
Claymont, DE 19703

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal

Site Name: Alltitt Landfill

Site No.: 915054

Site Address: 302 Abby Street
Buffalo, NY 14202

Dear Mark A. Sweitzer:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at <http://www.dec.ny.gov/regulations/67386.html>) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **May 21, 2019**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.



Department of
Environmental
Conservation

All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

<https://www.dec.ny.gov/chemical/62440.html>

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

<https://fts.dec.state.ny.us/fts/>

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact David Szymanski, the Project Manager, at 716-851-7220 or david.szymanski@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation
270 Michigan Ave
Buffalo, NY 14203-2915

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

ec: w/ enclosures

David Szymanski, Project Manager

Chad Staniszewski, Hazardous Waste Remediation Supervisor, Region 9

Wood Environment & Infrastructure Solutions, Inc. - Mark Stelmack, P.E. -
mark.stelmack@woodplc.com

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
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 requirment of the ROD dated 3/27/1995 for the Alltiff 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 sucessors 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 requirment of the ROD.

Deed Restriction - 637 Tiftt 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 sucessors and assigns;and,
any deed of conveyance shall recite the covenants and restrictions.

Description of Engineering Controls

Parcel
132.12-1-21

Engineering Control

Leachate Collection
Cover System
Fencing/Access Control

Engineering Controls:

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

Box 5

Periodic Review Report (PRR) Certification Statements

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

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

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 John J. Morris at 115 Tabor Road, Morris Plains, NJ 07950,
print name print business address

am certifying as Global Remediation Director (Owner or Remedial Party)

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

DocuSigned by:

John J. Morris

13-May-2019

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

Date

IC/EC CERTIFICATIONS

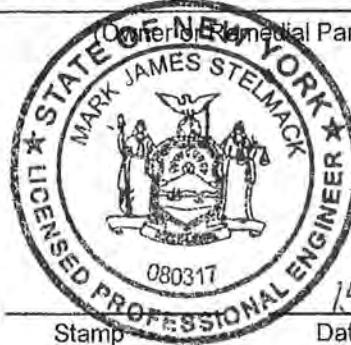
Box 7

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 at MACTEC ENGINEERING and CONSULTING, P.C.
print name print business address
511 Congress St., Suite 200, Portland, ME
04101

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



Mark J. Stelmack
Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification

Stamp
(Required for PE)

15-May-2019
Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

- I. Executive Summary: (1/2-page or less)
 - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
 - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
 1. progress made during the reporting period toward meeting the remedial objectives for the site
 2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
 - C. Compliance
 1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
 2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
 - D. Recommendations
 1. recommend whether any changes to the SMP are needed
 2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
 3. recommend whether the requirements for discontinuing site management have been met.
- II. Site Overview (one page or less)
 - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
 - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations should be presented simply and concisely.
- IV. IC/EC Plan Compliance Report (if applicable)
 - A. IC/EC Requirements and Compliance
 1. Describe each control, its objective, and how performance of the control is evaluated.
 2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
 3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
 4. Conclusions and recommendations for changes.
 - B. IC/EC Certification
 1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
- V. Monitoring Plan Compliance Report (if applicable)
 - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
 - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
 - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
 - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
 - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
 - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
 - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
 - C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

- D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
 - 1. whether all requirements of each plan were met during the reporting period
 - 2. any requirements not met
 - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
 - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
 - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

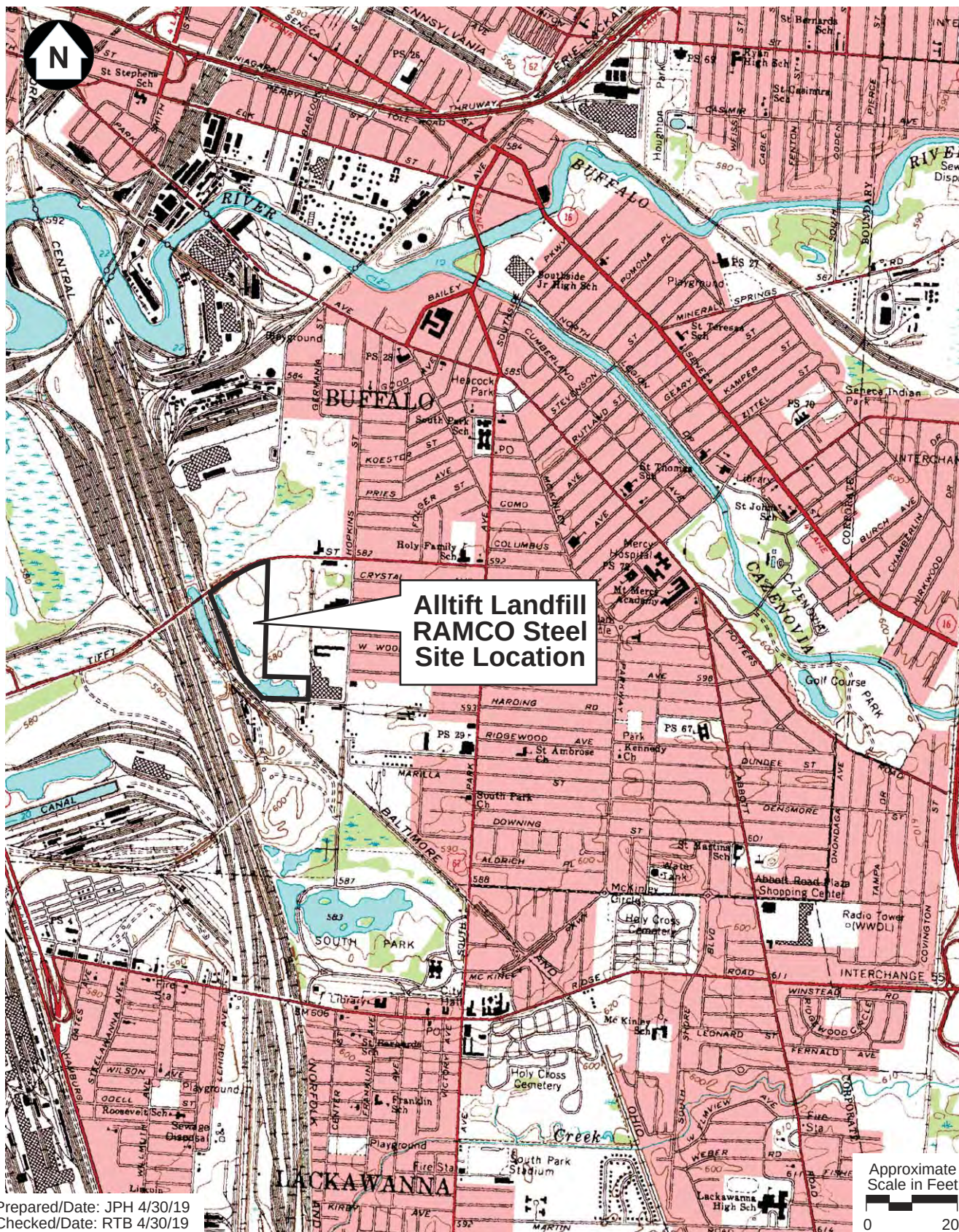
VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

ATTACHMENT B

SUPPORTING TABLES, FIGURES, AND APPENDICES

Attachment B.1 Site Figures



Honeywell

MACTEC

Site Location Map
Alltiff Landfill/Ramco Steel Site
Project No. 3612182397
Figure 1

Document: P:\Projects\Honeywell\O.M and M Team\Allitt Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\MapDocuments\Site_Conditions_2019_11x17P.mxd PDF: P:\Projects\Honeywell\O.M and M Team\Allitt Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\Figures\Figure 2 - Current Conditions Site Plan.pdf 05/01/2019 9:01 AM brian.peters



Honeywell

MACTEC

Current Conditions
Site Plan
Project 3612182397

Figure 2

Attachment B.2 Quarterly Inspection Reports



Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 6/13/18

Weather: Sunny and clear
Assessment by: Michael 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 _____

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B. General Site Conditions

1. Vegetation stress? _____
2. Mowing required? _____
3. Access road drivable? _____
4. Odors? _____
5. Other _____

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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 _____

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D. Surface Water

1. Obstruction of flow ditches? _____
2. Erosion of ditches? _____
3. Silt & erosion control? _____
4. Culverts in good condition? _____
5. Evidence of overflow or uncontrolled flow? _____
6. Outfalls in good condition? _____
7. Sedimentation basin/ponds secure? _____
8. Other _____

E. Methane Gas Control

**Site Inspection Form**

☒	☐	☐
Yes	No	N/A
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1. Does one exist? _____
2. Is system active or passive? active
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order? _____
6. Well seals in place? _____
7. Methane levels within LEL limits? _____
8. Monitoring reports current? _____
9. Other _____

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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 – hardpipel? _____
 - 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 _____

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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
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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? _____

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I. Polymeric Marine Mattress (PMM)

1. Damage due to burrowing animals? _____
2. Damage due ice and/or ice flowages? _____
3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
4. Impacts or damage due to navigation activities in the Buffalo River? _____
5. Establishment of woody plant growth causing displacement or stress on the system? _____
6. Areas of settlement or displacement of the system? _____
7. Erosion at the upstream and downstream limits of the system? _____
8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
9. Damage to the stone infill within the marine mattresses? _____
10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

None

No issues noted



Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 8/7/18

Weather: Sunny and clear
Assessment by: Michael Stout

Yes	No	N/A
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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 _____

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B. General Site Conditions

1. Vegetation stress? _____
2. Mowing required? _____
3. Access road drivable? _____
4. Odors? _____
5. Other _____

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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 _____

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D. Surface Water

1. Obstruction of flow ditches? _____
2. Erosion of ditches? _____
3. Silt & erosion control? _____
4. Culverts in good condition? _____
5. Evidence of overflow or uncontrolled flow? _____
6. Outfalls in good condition? _____
7. Sedimentation basin/ponds secure? _____
8. Other _____

E. Methane Gas Control



Site Inspection Form

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Yes	No	N/A
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1. Does one exist? _____
2. Is system active or passive? active
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order?
6. Well seals in place? _____
7. Methane levels within LEL limits?
8. Monitoring reports current?
9. Other _____

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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 _____

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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
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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? _____

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I. Polymeric Marine Mattress (PMM)

1. Damage due to burrowing animals? _____
2. Damage due ice and/or ice flowages? _____
3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
4. Impacts or damage due to navigation activities in the Buffalo River? _____
5. Establishment of woody plant growth causing displacement or stress on the system? _____
6. Areas of settlement or displacement of the system? _____
7. Erosion at the upstream and downstream limits of the system? _____
8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
9. Damage to the stone infill within the marine mattresses? _____
10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

None

No issues noted



Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 10/5/18

Weather: Sunny and clear
Assessment by: Michael Stout

Yes	No	N/A
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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 _____

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B. General Site Conditions

1. Vegetation stress? _____
2. Mowing required? _____
3. Access road drivable? _____
4. Odors? _____
5. Other _____

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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 _____

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D. Surface Water

1. Obstruction of flow ditches? _____
2. Erosion of ditches? _____
3. Silt & erosion control? _____
4. Culverts in good condition? _____
5. Evidence of overflow or uncontrolled flow? _____
6. Outfalls in good condition? _____
7. Sedimentation basin/ponds secure? _____
8. Other _____

E. Methane Gas Control

**Site Inspection Form**

☒	☐	☐
Yes	No	N/A
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1. Does one exist? _____
2. Is system active or passive? active
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order? _____
6. Well seals in place? _____
7. Methane levels within LEL limits? _____
8. Monitoring reports current? _____
9. Other _____

F. Leachate Collection System

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1. Does one exist? _____
2. Collection method:
 - a. Sump? 2
 - b. Well point? _____
 - c. Earthen basin/pond? _____
 - d. Structure secured? _____
 - e. Other _____

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3. Pumping system:
 - a. Automatic? _____
 - b. Manual? _____
 - c. Mechanically operable? _____
 - d. Leaks/failures? _____

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4. Disposals:
 - a. Onsite pretreatment/treatment? _____
 - b. Surface discharge? (NPDES/SPDES) _____
 - c. POTW – hardpiped? _____
 - d. Quick disconnect caps in place? _____

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5. Transportation (if any):
 - a. Chemicals? _____
 - b. Filter cake? _____
6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____

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7. Monitoring reports current? _____
8. Other _____

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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

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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? _____

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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)? _____

None

No issues noted

J. General Comments

Site Inspection Form

Site Name: Alltift
 Project Number: 30130
 Date: 1/17/19

Weather: Sunny and clear
 Assessment by: Michael Stout

<u>Yes</u>	<u>No</u>	<u>N/A</u>
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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 _____

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B. General Site Conditions

1. Vegetation stress? _____
2. Mowing required? _____
3. Access road drivable? _____
4. Odors? _____
5. Other _____

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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 _____

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D. Surface Water

1. Obstruction of flow ditches? _____
2. Erosion of ditches? _____
3. Silt & erosion control? _____
4. Culverts in good condition? _____
5. Evidence of overflow or uncontrolled flow? _____
6. Outfalls in good condition? _____
7. Sedimentation basin/ponds secure? _____
8. Other _____

E. Methane Gas Control

Site Inspection Form

☒	☐	☐
Yes	No	N/A
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1. Does one exist? _____
2. Is system active or passive? active
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order? _____
6. Well seals in place? _____
7. Methane levels within LEL limits? _____
8. Monitoring reports current? _____
9. Other _____

F. Leachate Collection System

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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 _____

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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

<u>Yes</u>	<u>No</u>	<u>N/A</u>
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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? _____

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I. Polymeric Marine Mattress (PMM)

1. Damage due to burrowing animals? _____
2. Damage due ice and/or ice flowages? _____
3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
4. Impacts or damage due to navigation activities in the Buffalo River? _____
5. Establishment of woody plant growth causing displacement or stress on the system? _____
6. Areas of settlement or displacement of the system? _____
7. Erosion at the upstream and downstream limits of the system? _____
8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
9. Damage to the stone infill within the marine mattresses? _____
10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

None

No issues noted



Site Inspection Form



Attachment B.3 Water Level Measurements

Alltift Landfill
Buffalo, New York

Piezometer Readings (DTW, ft)	25-Apr-18	7-Aug-18	5-Oct-18	15-Mar-19
PZ-1	6.27	5.80	6.77	6.31
PZ-2	4.93	7.70	6.14	4.80
PZ-3	4.24	10.50	6.18	4.75
PZ-4	5.66	6.10	6.46	7.32
PZ-5	3.92	6.90	5.30	3.30
PZ-6	3.68	9.50	5.60	4.20
PZ-7	3.68	8.40	5.70	4.40
PZ-8	3.29	6.80	4.77	4.00
PZ-9	5.24	8.50	7.70	5.72
PZ-10	7.72	11.40	10.97	7.60
PZ-11	6.46	8.70	9.00	6.65
PZ-12	7.41	10.00	9.85	7.80
PZ-13	5.20	8.30	6.63	5.00
PZ-14	dry	Abandoned	Abandoned	Abandoned
PZ-15	6.55	7.50	7.57	7.10
PZ-16	dry	Abandoned	Abandoned	Abandoned

Groundwater Collection Trench Sumps (DTW, ft)

GWCT-1	7.43	6.50	7.60	7.70
GWCT-2	6.70	7.70	7.82	7.50
GWCT-3	3.95	9.40	5.90	4.70
GWCT-4	3.50	7.80	5.60	4.35

Relief Trench Sumps (DTW, ft)

GWR-1	6.20	8.20	7.10	8.40
GWR-2	6.16	8.20	8.10	9.00

Lift Station (DTW, ft)

Lift	7.22	9.40	9.40	9.52

Offsite Background Wells (DTW, ft)

MW-1			n/a	
MW-2			9.0	

Overflow Weir (DTW, ft)	1.5" over	2" over	1" over	3" over

Attachment B.4 Quarterly Groundwater Elevations

QUARTERLY GROUNDWATER ELEVATIONS

2018/2019 ANNUAL REPORT

ALLTIFT LANDFILL SITE

BUFFALO, NEW YORK

			4/25/2018		8/7/2018		10/5/2018		3/15/2019	
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
PIEZOMETERS										
PZ-1	16.8	585.01	6.27	578.74	5.80	579.21	6.77	578.24	6.31	578.70
PZ-2	16.9	584.96	4.93	580.03	7.70	577.26	6.14	578.82	4.80	580.16
PZ-3	16.9	585.05	4.24	580.81	10.50	574.55	6.18	578.87	4.75	580.30
PZ-4	16.6	585.79	5.66	580.13	6.10	579.69	6.46	579.33	7.32	578.47
PZ-5	16.9	584.52	3.92	580.60	6.90	577.62	5.30	579.22	3.30	581.22
PZ-6	17.8	584.74	3.68	581.06	9.50	575.24	5.60	579.14	4.20	580.54
PZ-7	20.0	584.99	3.68	581.31	8.40	576.59	5.70	579.29	4.40	580.59
PZ-8	20.7	584.48	3.29	581.19	6.80	577.68	4.77	579.71	4.00	580.48
PZ-9	15.1	586.86	5.24	581.62	8.50	578.36	7.70	579.16	5.72	581.14
PZ-10	11.5	589.41	7.72	581.69	11.40	578.01	10.97	578.44	7.60	581.81
PZ-11	19.5	594.72	6.46	588.26	8.70	586.02	9.00	585.72	6.65	588.07
PZ-12	21.8	592.78	7.41	585.37	10.00	582.78	9.85	582.93	7.80	584.98
PZ-13	22.5	589.04	5.20	583.84	8.30	580.74	6.63	582.41	5.00	584.04
PZ-14	55.0	619.11	dry	*	Abandoned	*	Abandoned	*	Abandoned	*
PZ-15	17.0	588.79	6.55	582.24	7.50	581.29	7.57	581.22	7.10	581.69
PZ-16	66.5	629.30	dry	**	Abandoned	**	Abandoned	**	Abandoned	**
BACKGROUND WELLS										
MW-1	20.4	585.22	***	NC	***	NC	***	NC	***	NC
MW-2	17.0	586.67	NM	NC	NM	NC	9.00	NC	NM	NC
GROUNDWATER COLLECTION TRENCH SUMPS										
S1	17.2	585.19	7.43	577.76	6.50	578.69	7.60	577.59	7.70	577.49
S2	24.8	585.45	6.70	578.75	7.70	577.75	7.82	577.63	7.50	577.95
S3	17.3	585.25	3.95	581.30	9.40	575.85	5.90	579.35	4.70	580.55
S4	17.8	585.00	3.50	581.50	7.80	577.20	5.60	579.40	4.35	580.65

*PZ-14: decommissioned in June 2018 due to riser pipe damage.

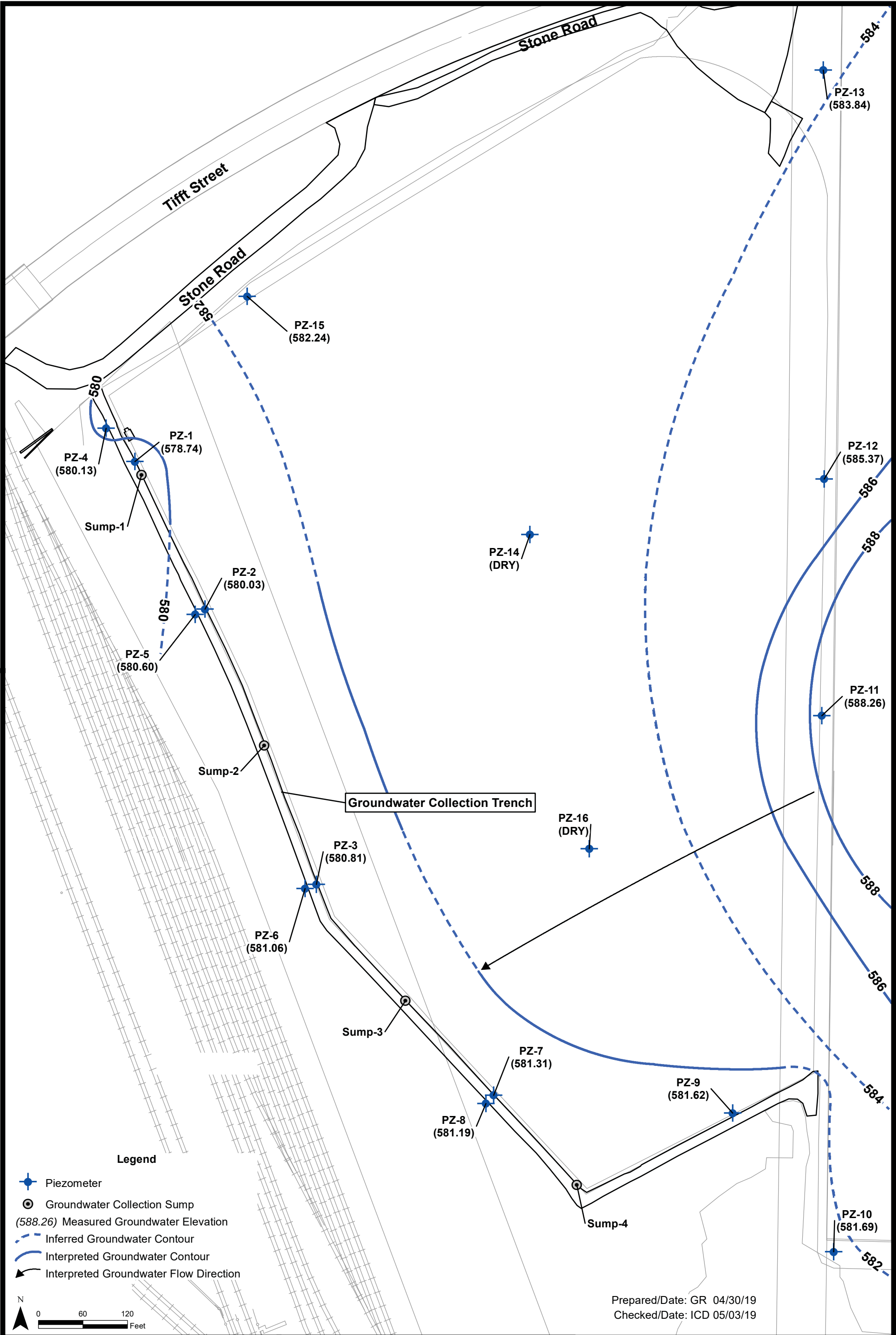
**PZ-16: decommissioned in June 2018 due to riser pipe damage.

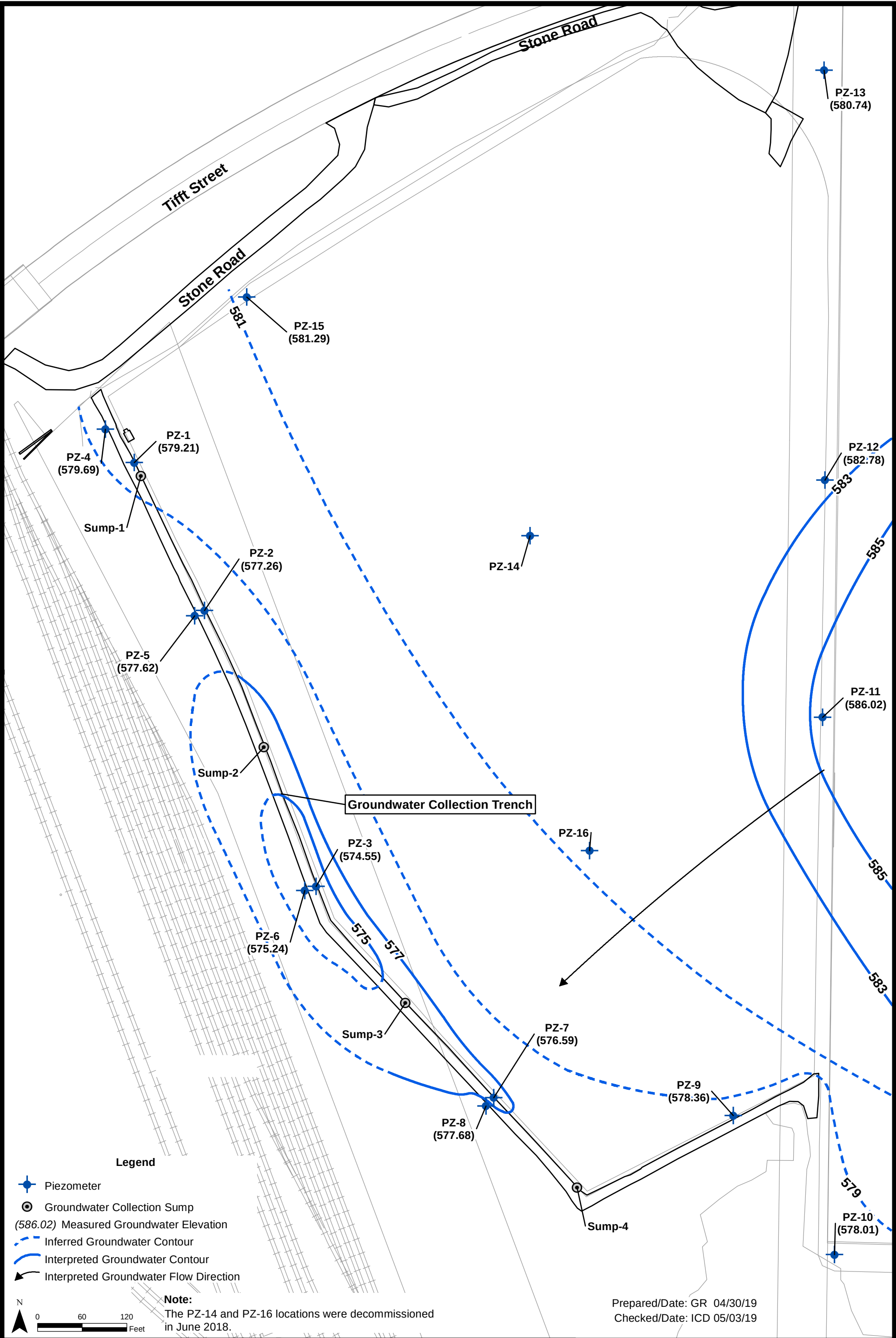
***Background well MW-1 riser pipe damaged; no depth to water level measurement possible.

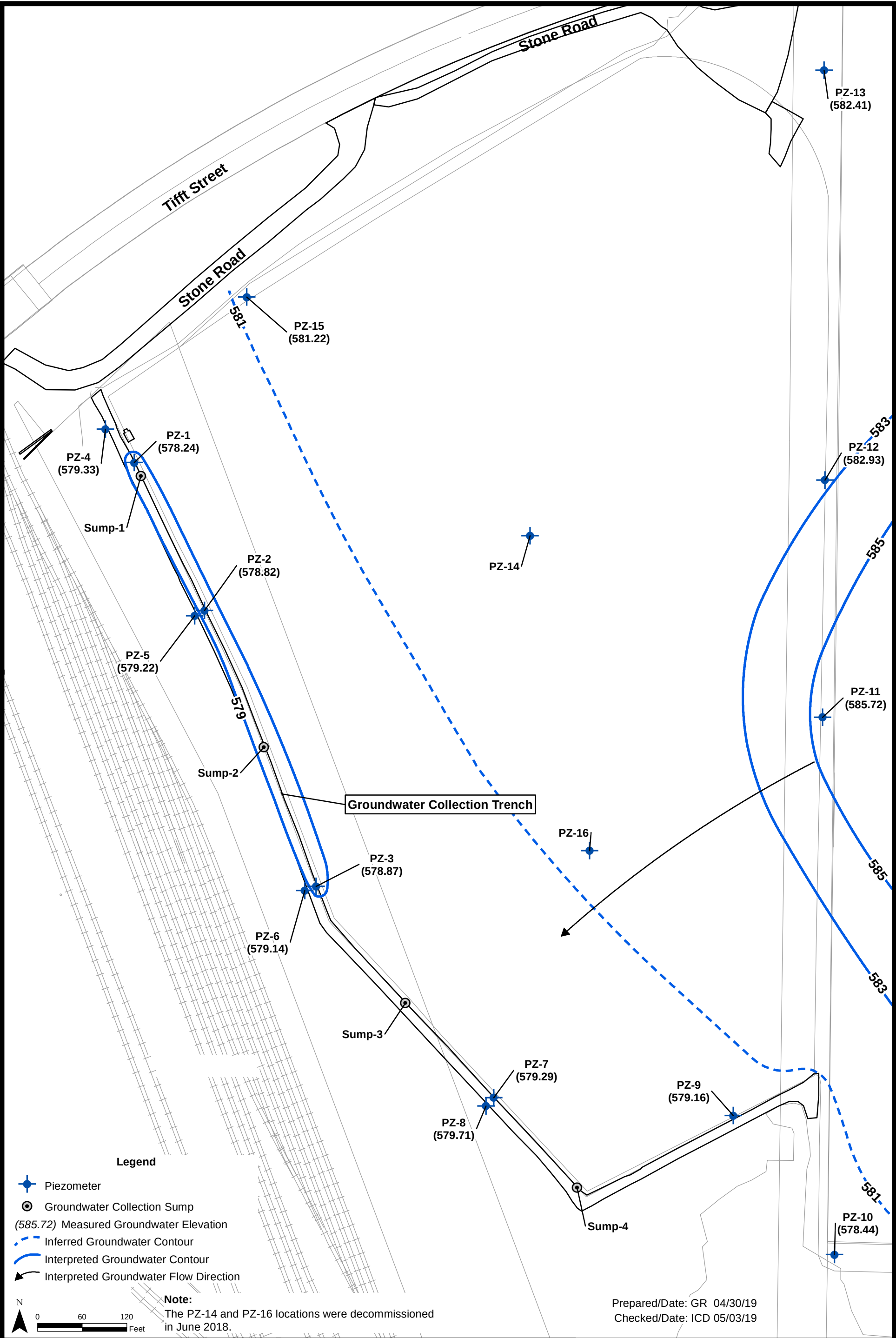
NC - Not calculable

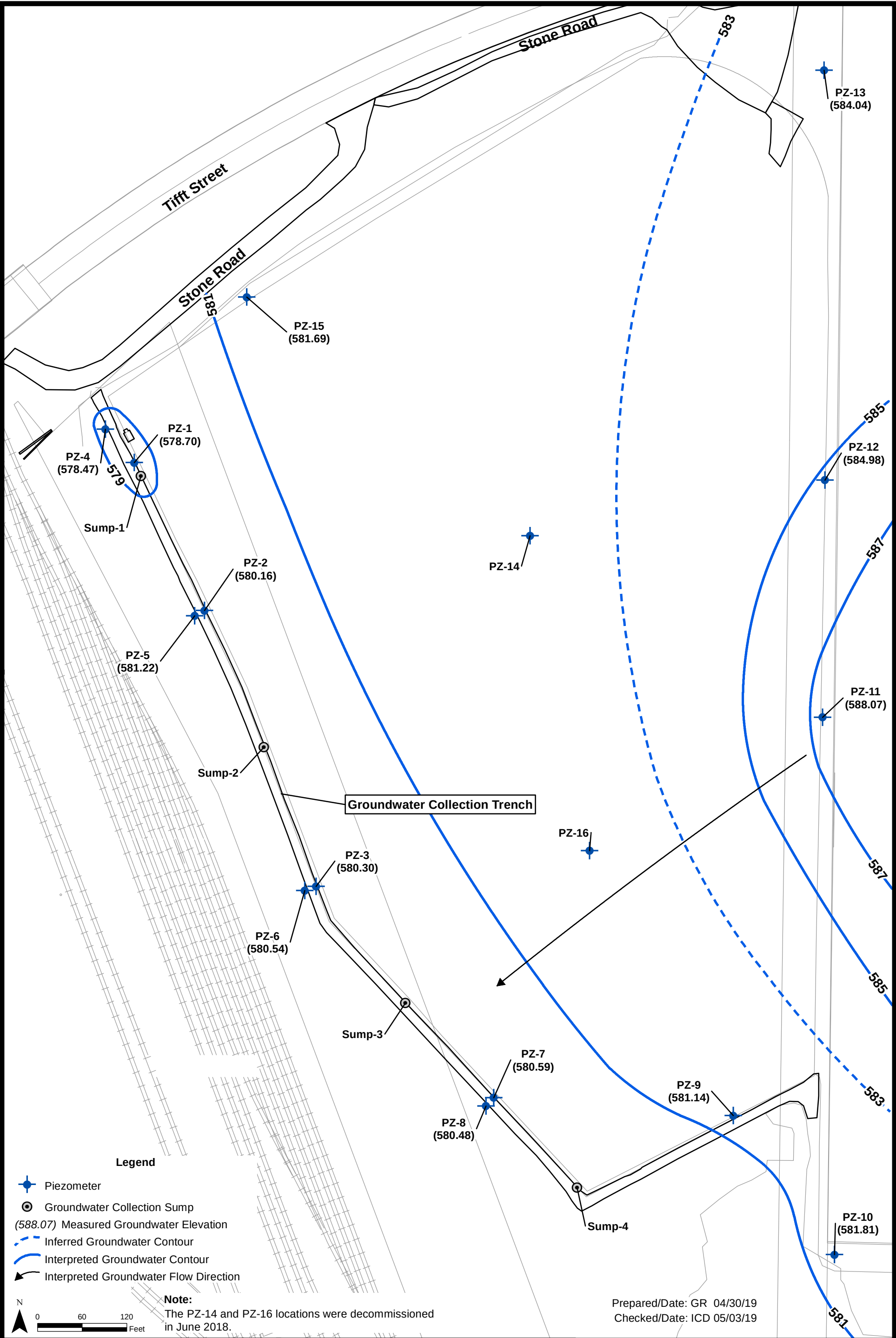
NM - Not measured

Attachment B.5 Quarterly Groundwater Contour Maps









Attachment B.6 Discharge Monitoring Reports

Jacobs

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Syracuse, New York 13204
O +1 315 468 1663
F +1 315 468-1664
www.jacobs.com

June 1, 2018

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
2018 First Semi-Annual Report
BPDES Permit Number 15-12-BU098**

Dear Ms. Adams:

Enclosed please find the 2018 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 1,676,700 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from October 10, 2017 through April 25, 2018 for a total of 197 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 25, 2018. Four samples were collected over an evenly-spaced work day period for VOCs and SVOCs, with the four samples composited in the laboratory per permit requirements. The sample for metals, total suspended solids, total phosphorus, and pH was collected as a composite sample. Due to the laboratory only analyzing the base-neutral SVOC parameters, an additional composite sample was collected on May 22, 2018 and analyzed for acid extractable parameters. 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 reports are provided as Attachment 2. If you have any questions or require additional information, please contact me at (315) 468-1663.

Sincerely,

Jacobs,



John W. Formoza
Area Manager

QC Review By: Ryan Belcher (Wood Environment & Infrastructure Solutions)

cc.: Mr. Mark Sweitzer (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Jason Paananen (City of Buffalo)
Mr. Robert Gersh (Wood E&IS)

Table 1
Alltitt Landfill/Ramco Steel Site
First Semi-annual Report for 2018
Discharge Monitoring Report

BSA Permit No. 15-12-BU098 Sample Date: Sample Location:	04/25/2018 and 05/22/2018 Onsite Pump Station to BSA

BSA Permit Parameter	Input			Converted		BSA Daily Max		Permit Compliance
	Quantity	Qualifier	Reporting Limit	Quantity	Unit	Quantity	Unit	
pH	7.13		0.100	7.13	SU	5.0 - 12.0	SU	Yes
Copper	ND		0.010	ND	lbs/day	7.68	lbs/day	Yes
Zinc	ND		0.020	ND	lbs/day	12	lbs/day	Yes
Total Suspended Solids	33		4.0	33.0	mg/L	250	mg/L	Yes
Total Phosphorus	ND		0.050	ND	mg/L	15.35	mg/L	Yes
USEPA Test Method 624	ND - 29.4			Monitor Only				
USEPA Test Method 625	ND - 9.0							
Total Flow (average)	5.91			8,511	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

Prepared by, Date: Aditya G. 06/01/2018
 Checked by, Date: Ryan Belcher, 06/01/2018

Flow Calculations		Meter	
Initial Reading (pump station)		7074300	10/10/2017
Final Reading (pump station)		8751000	4/25/2018
Total Days in Period			197
Total Flow for Period		1,676,700	gallons
Average Flow for Period		5.91	gpm

Attachment 1 - Flow Meter Readings

Buffalo Alltiff Lift Station	
Date	Totalizer Reading (gallons)
10/10/2017	7,074,300
2/15/2018	7,905,500
4/25/2018	8,751,000

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

AREA MANAGER

6/1/18

(Print your name & title here)

Date

(Print your company name here)

JACOBS



TIFFT ST.

ALLTIFFT

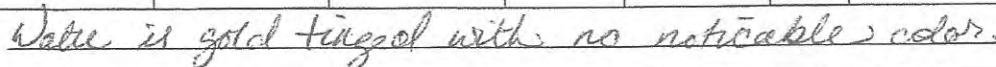
LANDFILL

HOPKINS ST.

READING

RETREATMENT BUILDING
S.P. 001





Remarks:

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Honeywell International Inc. OMM work

HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

R35116

SGS Job Number: JC64963

Sampling Date: 04/25/18

Report to:

AMEC Foster Wheeler
511 Congress Street
Portland, ME 04112
HTS-RES-LAB@Honeywell.com; Ryan.Belcher@amecfw.com
ATTN: Ryan Belcher

Total number of pages in report: **60**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Nancy Cole
Laboratory Director

Client Service contact: Rocus Peters 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Summary of Hits	6
Section 4: Sample Results	7
4.1: JC64963-1: GRAB 1-042518/BSA DISCHARGE	8
4.2: JC64963-2: COMP-042518/BSA DISCHARGE	12
Section 5: Misc. Forms	14
5.1: Certification Exceptions	15
5.2: Chain of Custody	16
Section 6: MS Volatiles - QC Data Summaries	19
6.1: Method Blank Summary	20
6.2: Blank Spike Summary	22
6.3: Matrix Spike Summary	24
6.4: Duplicate Summary	26
6.5: Instrument Performance Checks (BFB)	28
6.6: Surrogate Recovery Summaries	30
Section 7: MS Semi-volatiles - QC Data Summaries	31
7.1: Method Blank Summary	32
7.2: Blank Spike/Blank Spike Duplicate Summary	34
7.3: Instrument Performance Checks (DFTPP)	36
7.4: Surrogate Recovery Summaries	45
Section 8: Metals Analysis - QC Data Summaries	46
8.1: Prep QC MP6839: Cu,Zn	47
Section 9: General Chemistry - QC Data Summaries	57
9.1: Method Blank and Spike Results Summary	58
9.2: Duplicate Results Summary	59
9.3: Matrix Spike Results Summary	60



Sample Summary

Honeywell International Inc. OMM work

Job No: JC64963

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC64963-1	04/25/18	13:30 BM	04/26/18	AQ	Ground Water	GRAB 1-042518/BSA DISCHARGE
JC64963-2	04/25/18	13:35 BM	04/26/18	AQ	Ground Water	COMP-042518/BSA DISCHARGE

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: Honeywell International Inc. OMM work

Job No JC64963

Site: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

Report Date 5/16/2018 1:10:34 PM

On 04/26/2018, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 5 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC64963 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Please refer to certification exceptions summary for additional certification information.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method EPA 624

Matrix: AQ

Batch ID: VN11346

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC64857-1DUP, JC64857-2MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Bromoform, Dichlorodifluoromethane, Trichlorofluoromethane are outside control limits. Outside control limits due to matrix interference.
- JC64963-1: (pH=7) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether outside control limits due to acid preservation.

MS Semi-volatiles By Method EPA 625

Matrix: AQ

Batch ID: OP11663

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC64963-1 for Benzidine: Associated CCV and BS outside of control limits low.
- JC64963-1 for bis(2-Chloroethyl)ether: Associated CCV outside of control limits high, sample was ND.
- JC64963-1 for bis(2-Ethylhexyl)phthalate: Associated CCV outside of control limits high, sample was ND.
- JC64963-1 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JC64963-1 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- OP11663-BS1 for Benzidine: Outside of in house control limits.
- JC64963-1 for n-Nitrosodimethylamine: Associated CCV outside of control limits high, sample was ND.
- JC64963-1 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JC64963-1 for Terphenyl-d14: Outside of in house control limits.

Matrix: AQ

Batch ID: OP11994

- The data for EPA 625 meets quality control requirements.
- JC64963-1: Confirmation run.

Wednesday, May 16, 2018

Page 1 of 2

Metals Analysis By Method EPA 200.7

Matrix: AQ

Batch ID: MP6839

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC65023-1MS, JC65023-1MSD, JC65023-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Copper are outside control limits for sample MP6839-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP6839-SD1 for Zinc: Serial dilution indicates possible matrix interference.

General Chemistry By Method EPA 365.3

Matrix: AQ

Batch ID: GP12770

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC65085-2DUP, JC65085-2MS were used as the QC samples for Phosphorus, Total.

General Chemistry By Method SM2540 D-11

Matrix: AQ

Batch ID: GN79258

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64968-1DUP were used as the QC samples for Solids, Total Suspended.
- JC64963-2 for Solids, Total Suspended: Reported sample aliquot obtained from filtration of 100 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ

Batch ID: R169839

- The data for SM4500H+ B-11 meets quality control requirements.
- JC64963-2 for pH: Sample received out of holding time for pH analysis.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Page 1 of 1

Job Number: JC64963

Account: Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Collected: 04/25/18



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

JC64963-1 GRAB 1-042518/BSA DISCHARGE

Benzene ^a	2.5	1.0	0.23	ug/l	EPA 624
Chlorobenzene ^a	29.4	1.0	0.23	ug/l	EPA 624
Chloroethane ^a	1.5	1.0	0.63	ug/l	EPA 624
1,2-Dichlorobenzene ^a	0.32 J	1.0	0.21	ug/l	EPA 624
1,4-Dichlorobenzene ^a	0.50 J	1.0	0.24	ug/l	EPA 624
cis-1,2-Dichloroethene ^a	18.6	1.0	0.54	ug/l	EPA 624
trans-1,2-Dichloroethene ^a	7.7	1.0	0.40	ug/l	EPA 624
Trichloroethene ^a	1.1	1.0	0.24	ug/l	EPA 624
Vinyl chloride ^a	14.0	1.0	0.29	ug/l	EPA 624
4-Chloroaniline	9.0	5.0	0.34	ug/l	EPA 625
1,2-Dichlorobenzene	0.22 J	1.0	0.17	ug/l	EPA 625
1,4-Dichlorobenzene	0.30 J	1.0	0.17	ug/l	EPA 625

JC64963-2 COMP-042518/BSA DISCHARGE

Solids, Total Suspended ^b	33.0	4.0	mg/l	SM2540 D-11
pH ^c	7.13		su	SM4500H+ B-11

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.

(b) Reported sample aliquot obtained from filtration of 100 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

(c) Sample received out of holding time for pH analysis.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1-042518/BSA DISCHARGE	Date Sampled:	04/25/18
Lab Sample ID:	JC64963-1	Date Received:	04/26/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 624		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	N269355.D	1	04/27/18 16:54	CSF	n/a	n/a	VN11346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	6.2	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	2.5	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.19	ug/l	
75-25-2	Bromoform	ND	1.0	0.44	ug/l	
74-83-9	Bromomethane	ND	1.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
108-90-7	Chlorobenzene	29.4	1.0	0.23	ug/l	
75-00-3	Chloroethane	1.5	1.0	0.63	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.30	ug/l	
95-50-1	1,2-Dichlorobenzene	0.32	1.0	0.21	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50	1.0	0.24	ug/l	J
75-71-8	Dichlorodifluoromethane	ND	2.0	0.67	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.32	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.57	ug/l	
156-59-2	cis-1,2-Dichloroethene	18.6	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	7.7	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.36	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.59	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.55	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.82	ug/l	
108-88-3	Toluene	ND	1.0	0.24	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.36	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAB 1-042518/BSA DISCHARGE		
Lab Sample ID:	JC64963-1	Date Sampled:	04/25/18
Matrix:	AQ - Ground Water	Date Received:	04/26/18
Method:	EPA 624	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	1.1	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.89	ug/l	
75-01-4	Vinyl chloride	14.0	1.0	0.29	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	104%		76-122%
2037-26-5	Toluene-D8 (SUR)	91%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	89%		80-120%
1868-53-7	Dibromofluoromethane (S)	105%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAB 1-042518/BSA DISCHARGE			Date Sampled:	04/25/18
Lab Sample ID:	JC64963-1			Date Received:	04/26/18
Matrix:	AQ - Ground Water			Percent Solids:	n/a
Method:	EPA 625 EPA 625				
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P122309.D	1	05/02/18 10:42	GS	05/01/18 08:05	OP11663	EP5490
Run #2 ^a	Z130717A.D	1	05/16/18 08:44	CS	05/15/18 07:00	OP11994	EZ6446

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

BN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine ^b	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate ^c	ND	2.0	0.46	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	9.0	5.0	0.34	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether ^c	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	0.22	1.0	0.17	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	0.30	1.0	0.17	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate ^c	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate ^c	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAB 1-042518/BSA DISCHARGE	Date Sampled:	04/25/18
Lab Sample ID:	JC64963-1	Date Received:	04/26/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 625 EPA 625		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

BN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine ^c	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine ^c	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%	90%	32-132%
321-60-8	2-Fluorobiphenyl	60%	77%	40-117%
1718-51-0	Terphenyl-d14	31% ^d	70%	33-126%

(a) Confirmation run.

(b) Associated CCV and BS outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND.

(d) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMP-042518/BSA DISCHARGE			Date Sampled:	04/25/18
Lab Sample ID:	JC64963-2			Date Received:	04/26/18
Matrix:	AQ - Ground Water			Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY				

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method	Prep Method
Copper	< 10	10	ug/l	1	04/28/18	04/29/18	GT	EPA 200.7 ¹	EPA 200.7 ²
Zinc	< 20	20	ug/l	1	04/28/18	04/29/18	GT	EPA 200.7 ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA44304
(2) Prep QC Batch: MP6839

RL = Reporting Limit

4.2
4

Report of Analysis

Client Sample ID:	COMP-042518/BSA DISCHARGE	Date Sampled:	04/25/18
Lab Sample ID:	JC64963-2	Date Received:	04/26/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Phosphorus, Total	< 0.050	0.050	mg/l	1	05/03/18 17:37	MP	EPA 365.3
Solids, Total Suspended ^a	33.0	4.0	mg/l	1	04/27/18 12:08	RI	SM2540 D-11
pH ^b	7.13		su	1	04/26/18 15:08	SUB	SM4500H+ B-11

- (a) Reported sample aliquot obtained from filtration of 100 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.
- (b) Sample received out of holding time for pH analysis.

RL = Reporting Limit

4.2
4

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC64963
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
1,2-Dichlorobenzene	95-50-1	EPA 625	AQ	SGS is not certified for this parameter. ^a
1,3-Dichlorobenzene	541-73-1	EPA 625	AQ	SGS is not certified for this parameter. ^a
1,4-Dichlorobenzene	106-46-7	EPA 625	AQ	SGS is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.



ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE ___ OF ___

FED-EX Tracking #
SGS Accutest Quote # **HWJNOM73008**
Bottle Order Control # **SN-031218-134**
SGS Accutest Job # **5164963**

Client Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes													
Company Name Honeywell International Inc		Project Name 30130 - Alltiff OM Phase/ Semi Annual - Project # HWJNOM73507																											
Street Address 1563 Willis Ave 13204		Street 579 Tift Street																											
City Syracuse, New York 13204		City Buffalo, New York 14220																											
Project Contact John Formoza John.formoza@ch2m.com		Project # R35116 - Honeywell OM&M Program																											
Phone # 315-532-5608		Client Purchase Order # A000001653																											
Sampler(s) Name(s) BETHANY MYKELA 315 532 3161		Project Manager Chuck Geadelmann																											
Field ID / Point of Collection		Collection																											
MECH/ID Vial #		Date		Time		Sampled by		Matrix		# of bottles		HCl		NaOH		HNO3		H2SO4		NONE		DI Water		MEOH		EMCORE		LAB USE ONLY	
Grab 1- 042518 /BSA Discharge		4/25/2008		0930		PM		GW		5																		E56	
Grab 2- 042518 /BSA Discharge		4/25/2008		0930		PM		GW		5																		V291	
Grab 3- 042518 /BSA Discharge		4/25/2008		1130		PM		GW		5																		COMP	
Grab 4- 042518 /BSA Discharge		4/25/2008		1330		PM		GW		5																		A26	
COMP- 042518 /BSA Discharge		4/25/2008		1335		PM		GW		5		1		1		3												649	
TB -								TB		1																			
Turnaround Time (Business days)		Data Deliverable Information																											
☒ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day RUSH ☐ 2 Day RUSH ☐ 1 Day RUSH ☐ other		Approved By (SGS Accutest PM): / Date:		☐ Commercial "A" (Level 1) ☒ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" ☐ NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data												☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☐ Other		Prior to analysis grab samples to be composited by lab											
Emergency & Rush TIA data available VIA Lablink		Sample Custody must be documented below each time samples change possession, including courier delivery		Sample inventory is verified upon receipt in the Laboratory																									
Relinquished by: [Signature]		Date Time: 4/26/08 1:53 PM		Received By: [Signature]		Date Time: 4/26/08 10:20 AM		Received By: [Signature]																					
Relinquished by: [Signature]		Date Time: 4/26/08 1305		Received By: [Signature]		Date Time:		Received By:																					
Relinquished by: [Signature]		Date Time:		Received By:		Custody Seal #		Preserved where applicable																					

JC64963: Chain of Custody

Page 1 of 3



SGS Sample Receipt Summary

Job Number: JC64963

Client: AMEC FOSTER WHEELER

Project: HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 4/26/2018 1:05:00 PM

Delivery Method: Accutest Courier

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.5);

Cooler Temps (Corrected) °C: Cooler 1: (5.0);

Cooler Security

Y or N

Y or N

1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature

Y or N

1. Temp criteria achieved: ☒ ☐	IR Gun
2. Cooler temp verification: _____	
3. Cooler media: _____	Ice (Bag)
4. No. Coolers: _____	1

Quality Control Preservation

Y or N

N/A

1. Trip Blank present / cooler: ☒ ☐ ☐	2. Trip Blank listed on COC: ☐ ☒ ☐
3. Samples preserved properly: ☒ ☐ ☐	4. VOCs headspace free: ☒ ☐ ☐

Sample Integrity - Documentation

Y or N

1. Sample labels present on bottles: ☒ ☐	2. Container labeling complete: ☒ ☐
3. Sample container label / COC agree: ☒ ☐	

Sample Integrity - Condition

Y or N

1. Sample recvd within HT: ☒ ☐	2. All containers accounted for: ☒ ☐
3. Condition of sample: _____ Intact	

Sample Integrity - Instructions

Y or N N/A

1. Analysis requested is clear: ☒ ☐	2. Bottles received for unspecified tests: ☐ ☒
3. Sufficient volume recvd for analysis: ☒ ☐	4. Compositing instructions clear: ☐ ☐ ☒
5. Filtering instructions clear: ☐ ☐ ☒	

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify) _____

Comments

Did not receive TB.

SM089-02 Rev. Date 12/1/16

JC64963: Chain of Custody

Page 2 of 3

Responded to by:

proceed without TB.

Per client

Response Date:



MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: JC64963**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11346-MB	N269342.D	1	04/27/18	CSF	n/a	n/a	VN11346

The QC reported here applies to the following samples:**Method:** EPA 624

JC64963-1

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	6.2	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.19	ug/l	
75-25-2	Bromoform	ND	1.0	0.44	ug/l	
74-83-9	Bromomethane	ND	1.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.63	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.30	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.67	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.32	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.57	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.36	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.59	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.55	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.82	ug/l	
108-88-3	Toluene	ND	1.0	0.24	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.36	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.35	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.89	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: JC64963
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11346-MB	N269342.D	1	04/27/18	CSF	n/a	n/a	VN11346

The QC reported here applies to the following samples: Method: EPA 624

JC64963-1

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	104% 76-122%
2037-26-5	Toluene-D8 (SUR)	93% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	91% 80-120%
1868-53-7	Dibromofluoromethane (S)	105% 80-120%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.39	52	ug/l	J
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Page 1 of 2

Job Number: JC64963**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11346-BS	N269340.D	1	04/27/18	CSF	n/a	n/a	VN11346

The QC reported here applies to the following samples:**Method:** EPA 624

JC64963-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	15.1	76	48-145
107-13-1	Acrylonitrile	20	16.9	85	64-137
71-43-2	Benzene	20	16.8	84	78-118
75-27-4	Bromodichloromethane	20	18.8	94	77-119
75-25-2	Bromoform	20	24.9	125	66-128
74-83-9	Bromomethane	20	20.4	102	59-141
56-23-5	Carbon tetrachloride	20	21.3	107	69-137
108-90-7	Chlorobenzene	20	18.2	91	78-116
75-00-3	Chloroethane	20	21.7	109	63-136
110-75-8	2-Chloroethyl vinyl ether	100	76.4	76	55-147
67-66-3	Chloroform	20	16.5	83	78-122
74-87-3	Chloromethane	20	19.2	96	49-125
124-48-1	Dibromochloromethane	20	21.7	109	75-117
95-50-1	1,2-Dichlorobenzene	20	17.6	88	76-115
541-73-1	1,3-Dichlorobenzene	20	18.6	93	75-114
106-46-7	1,4-Dichlorobenzene	20	18.4	92	75-113
75-71-8	Dichlorodifluoromethane	20	24.2	121	48-129
75-34-3	1,1-Dichloroethane	20	15.8	79	73-124
107-06-2	1,2-Dichloroethane	20	16.6	83	74-127
75-35-4	1,1-Dichloroethene	20	13.6	68	54-122
156-59-2	cis-1,2-Dichloroethene	20	15.3	77	72-115
156-60-5	trans-1,2-Dichloroethene	20	15.4	77	70-121
78-87-5	1,2-Dichloropropane	20	15.3	77	75-118
10061-01-5	cis-1,3-Dichloropropene	20	17.2	86	76-118
10061-02-6	trans-1,3-Dichloropropene	20	15.7	79	70-122
100-41-4	Ethylbenzene	20	17.9	90	76-118
75-09-2	Methylene chloride	20	16.2	81	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	15.3	77	66-119
127-18-4	Tetrachloroethene	20	19.5	98	66-131
108-88-3	Toluene	20	17.3	87	78-119
71-55-6	1,1,1-Trichloroethane	20	18.3	92	74-130
79-00-5	1,1,2-Trichloroethane	20	15.6	78	74-121
79-01-6	Trichloroethene	20	17.4	87	78-117
75-69-4	Trichlorofluoromethane	20	22.2	111	66-126
75-01-4	Vinyl chloride	20	19.0	95	54-125
1330-20-7	Xylenes (total)	60	52.7	88	76-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC64963
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11346-BS	N269340.D	1	04/27/18	CSF	n/a	n/a	VN11346

The QC reported here applies to the following samples: Method: EPA 624

JC64963-1

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	98%	76-122%
2037-26-5	Toluene-D8 (SUR)	96%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	91%	80-120%
1868-53-7	Dibromofluoromethane (S)	99%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

Page 1 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC64857-2MS	N269352.D	1	04/27/18	CSF	n/a	n/a	VN11346
JC64857-2 ^a	N269344.D	1	04/27/18	CSF	n/a	n/a	VN11346

The QC reported here applies to the following samples:

Method: EPA 624

JC64963-1

CAS No.	Compound	JC64857-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
107-02-8	Acrolein	ND		20	15.4	77	40-154
107-13-1	Acrylonitrile	ND		20	18.3	92	60-142
71-43-2	Benzene	ND		20	20.0	100	59-136
75-27-4	Bromodichloromethane	ND		20	21.7	109	73-125
75-25-2	Bromoform	ND		20	28.2	141* ^b	62-134
74-83-9	Bromomethane	ND		20	24.2	121	54-149
56-23-5	Carbon tetrachloride	ND		20	26.5	133	62-147
108-90-7	Chlorobenzene	ND		20	22.1	111	69-128
75-00-3	Chloroethane	ND		20	22.1	111	58-145
110-75-8	2-Chloroethyl vinyl ether	ND		100	ND	0* ^c	10-179
67-66-3	Chloroform	ND		20	20.1	101	71-131
74-87-3	Chloromethane	ND		20	25.5	128	44-136
124-48-1	Dibromochloromethane	ND		20	24.5	123	72-123
95-50-1	1,2-Dichlorobenzene	ND		20	20.1	101	69-123
541-73-1	1,3-Dichlorobenzene	ND		20	21.8	109	71-122
106-46-7	1,4-Dichlorobenzene	ND		20	21.1	106	69-121
75-71-8	Dichlorodifluoromethane	ND		20	35.2	176* ^b	42-138
75-34-3	1,1-Dichloroethane	ND		20	18.9	95	66-132
107-06-2	1,2-Dichloroethane	ND		20	18.9	95	68-140
75-35-4	1,1-Dichloroethene	ND		20	16.6	83	49-127
156-59-2	cis-1,2-Dichloroethene	ND		20	18.1	91	50-134
156-60-5	trans-1,2-Dichloroethene	ND		20	18.4	92	63-129
78-87-5	1,2-Dichloropropane	ND		20	18.1	91	73-123
10061-01-5	cis-1,3-Dichloropropene	ND		20	18.4	92	71-124
10061-02-6	trans-1,3-Dichloropropene	ND		20	17.3	87	66-127
100-41-4	Ethylbenzene	ND		20	21.0	105	65-130
75-09-2	Methylene chloride	ND		20	18.9	95	65-127
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	16.4	82	62-126
127-18-4	Tetrachloroethene	ND		20	23.3	117	51-145
108-88-3	Toluene	ND		20	20.1	101	66-132
71-55-6	1,1,1-Trichloroethane	ND		20	21.9	110	63-143
79-00-5	1,1,2-Trichloroethane	ND		20	17.7	89	71-127
79-01-6	Trichloroethene	ND		20	20.5	103	46-145
75-69-4	Trichlorofluoromethane	ND		20	29.2	146* ^b	57-139
75-01-4	Vinyl chloride	ND		20	24.9	125	45-136
1330-20-7	Xylenes (total)	ND		60	61.9	103	66-131

* = Outside of Control Limits.

Matrix Spike Summary

Page 2 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC64857-2MS	N269352.D	1	04/27/18	CSF	n/a	n/a	VN11346
JC64857-2 ^a	N269344.D	1	04/27/18	CSF	n/a	n/a	VN11346

The QC reported here applies to the following samples:

Method: EPA 624

JC64963-1

CAS No.	Surrogate Recoveries	MS	JC64857-2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	97%	103%	76-122%
2037-26-5	Toluene-D8 (SUR)	97%	92%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	93%	93%	80-120%
1868-53-7	Dibromofluoromethane (S)	101%	103%	80-120%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

(b) Outside control limits due to matrix interference.

(c) Outside control limits due to acid preservation.

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC64857-1DUP	N269354.D	1	04/27/18	CSF	n/a	n/a	VN11346
JC64857-1 ^a	N269343.D	1	04/27/18	CSF	n/a	n/a	VN11346

The QC reported here applies to the following samples:

Method: EPA 624

JC64963-1

CAS No.	Compound	JC64857-1 ug/l	DUP Q ug/l	Q	RPD	Limits
107-02-8	Acrolein	ND	ND		nc	10
107-13-1	Acrylonitrile	ND	ND		nc	10
71-43-2	Benzene	ND	ND		nc	12
75-27-4	Bromodichloromethane	ND	ND		nc	10
75-25-2	Bromoform	ND	ND		nc	10
74-83-9	Bromomethane	ND	ND		nc	10
56-23-5	Carbon tetrachloride	ND	ND		nc	10
108-90-7	Chlorobenzene	ND	ND		nc	10
75-00-3	Chloroethane	ND	ND		nc	10
110-75-8	2-Chloroethyl vinyl ether	ND	ND		nc	10
67-66-3	Chloroform	ND	ND		nc	20
74-87-3	Chloromethane	ND	ND		nc	10
124-48-1	Dibromochloromethane	ND	ND		nc	10
95-50-1	1,2-Dichlorobenzene	ND	ND		nc	10
541-73-1	1,3-Dichlorobenzene	ND	ND		nc	10
106-46-7	1,4-Dichlorobenzene	ND	ND		nc	10
75-71-8	Dichlorodifluoromethane	ND	ND		nc	10
75-34-3	1,1-Dichloroethane	ND	ND		nc	13
107-06-2	1,2-Dichloroethane	ND	ND		nc	11
75-35-4	1,1-Dichloroethene	ND	ND		nc	14
156-59-2	cis-1,2-Dichloroethene	ND	ND		nc	22
156-60-5	trans-1,2-Dichloroethene	ND	ND		nc	14
78-87-5	1,2-Dichloropropane	ND	ND		nc	10
10061-01-5	cis-1,3-Dichloropropene	ND	ND		nc	10
10061-02-6	trans-1,3-Dichloropropene	ND	ND		nc	10
100-41-4	Ethylbenzene	ND	ND		nc	10
75-09-2	Methylene chloride	ND	ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	ND		nc	10
127-18-4	Tetrachloroethene	ND	ND		nc	16
108-88-3	Toluene	ND	ND		nc	13
71-55-6	1,1,1-Trichloroethane	ND	ND		nc	10
79-00-5	1,1,2-Trichloroethane	ND	ND		nc	10
79-01-6	Trichloroethene	ND	ND		nc	18
75-69-4	Trichlorofluoromethane	ND	ND		nc	10
75-01-4	Vinyl chloride	ND	ND		nc	14
1330-20-7	Xylenes (total)	ND	ND		nc	14

* = Outside of Control Limits.

Duplicate Summary

Page 2 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC64857-1DUP	N269354.D	1	04/27/18	CSF	n/a	n/a	VN11346
JC64857-1 ^a	N269343.D	1	04/27/18	CSF	n/a	n/a	VN11346

The QC reported here applies to the following samples:

Method: EPA 624

JC64963-1

CAS No.	Surrogate Recoveries	DUP	JC64857-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%	101%	76-122%
2037-26-5	Toluene-D8 (SUR)	91%	90%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	91%	92%	80-120%
1868-53-7	Dibromofluoromethane (S)	105%	104%	80-120%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: VN11324-BFB

Injection Date: 04/05/18

Lab File ID: N268785.D

Injection Time: 16:12

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	16396	17.1	Pass
75	30.0 - 60.0% of mass 95	45602	47.5	Pass
95	Base peak, 100% relative abundance	96101	100.0	Pass
96	5.0 - 9.0% of mass 95	6422	6.68	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	72349	75.3	Pass
175	5.0 - 9.0% of mass 174	5421	5.64 (7.49) ^a	Pass
176	95.0 - 101.0% of mass 174	71656	74.6 (99.0) ^a	Pass
177	5.0 - 9.0% of mass 176	4588	4.77 (6.40) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VN11324-IC11324	N268786.D	04/05/18	17:35	01:23	Initial cal 0.2
VN11324-IC11324	N268787.D	04/05/18	18:04	01:52	Initial cal 0.5
VN11324-IC11324	N268788.D	04/05/18	18:33	02:21	Initial cal 1
VN11324-IC11324	N268789.D	04/05/18	19:02	02:50	Initial cal 2
VN11324-IC11324	N268790.D	04/05/18	19:31	03:19	Initial cal 5
VN11324-ICC11324	N268791.D	04/05/18	20:01	03:49	Initial cal 20
VN11324-IC11324	N268792.D	04/05/18	20:30	04:18	Initial cal 50
VN11324-IC11324	N268793.D	04/05/18	20:59	04:47	Initial cal 100
VN11324-IC11324	N268794.D	04/05/18	21:28	05:16	Initial cal 200
VN11324-ICV11324	N268797.D	04/05/18	22:56	06:44	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample: VN11346-BFB

Injection Date: 04/27/18

Lab File ID: N269337.D

Injection Time: 07:18

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	10585	16.1	Pass
75	30.0 - 60.0% of mass 95	31642	48.1	Pass
95	Base peak, 100% relative abundance	65738	100.0	Pass
96	5.0 - 9.0% of mass 95	4032	6.13	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	55088	83.8	Pass
175	5.0 - 9.0% of mass 174	4385	6.67 (7.96) ^a	Pass
176	95.0 - 101.0% of mass 174	53872	81.9 (97.8) ^a	Pass
177	5.0 - 9.0% of mass 176	3645	5.54 (6.77) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VN11346-CC11324	N269339.D	04/27/18	08:42	01:24	Continuing cal 20
VN11346-BS	N269340.D	04/27/18	09:34	02:16	Blank Spike
VN11346-MB	N269342.D	04/27/18	10:33	03:15	Method Blank
JC64857-1	N269343.D	04/27/18	11:02	03:44	(used for QC only; not part of job JC64963)
JC64857-2	N269344.D	04/27/18	11:32	04:14	(used for QC only; not part of job JC64963)
ZZZZZZ	N269345.D	04/27/18	12:01	04:43	(unrelated sample)
ZZZZZZ	N269346.D	04/27/18	12:30	05:12	(unrelated sample)
ZZZZZZ	N269347.D	04/27/18	13:00	05:42	(unrelated sample)
ZZZZZZ	N269348.D	04/27/18	13:29	06:11	(unrelated sample)
ZZZZZZ	N269349.D	04/27/18	13:58	06:40	(unrelated sample)
ZZZZZZ	N269350.D	04/27/18	14:27	07:09	(unrelated sample)
ZZZZZZ	N269351.D	04/27/18	14:57	07:39	(unrelated sample)
JC64857-2MS	N269352.D	04/27/18	15:26	08:08	Matrix Spike
JC64857-1DUP	N269354.D	04/27/18	16:25	09:07	Duplicate
JC64963-1	N269355.D	04/27/18	16:54	09:36	GRAB 1-042518/BSA DISCHARGE
ZZZZZZ	N269357.D	04/27/18	17:52	10:34	(unrelated sample)
ZZZZZZ	N269358.D	04/27/18	18:22	11:04	(unrelated sample)
ZZZZZZ	N269359.D	04/27/18	18:51	11:33	(unrelated sample)

Surrogate Recovery Summary

Job Number: JC64963
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: EPA 624	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC64963-1	N269355.D	104	91	89	105
JC64857-1DUP	N269354.D	103	91	91	105
JC64857-2MS	N269352.D	97	97	93	101
VN11346-BS	N269340.D	98	96	91	99
VN11346-MB	N269342.D	104	93	91	105

Surrogate Compounds	Recovery Limits
S1 = 1,2-Dichloroethane-D4 (SUR)	76-122%
S2 = Toluene-D8 (SUR)	80-120%
S3 = 4-Bromofluorobenzene (SUR)	80-120%
S4 = Dibromofluoromethane (S)	80-120%



MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: JC64963**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11663-MB1	P122300.D	1	05/01/18	GS	05/01/18	OP11663	EP5490

The QC reported here applies to the following samples:**Method:** EPA 625

JC64963-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	

Method Blank Summary

Page 2 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11663-MB1	P122300.D	1	05/01/18	GS	05/01/18	OP11663	EP5490

The QC reported here applies to the following samples:

Method: EPA 625

JC64963-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	45% 10-110%
4165-62-2	Phenol-d5	33% 10-110%
118-79-6	2,4,6-Tribromophenol	63% 35-147%
4165-60-0	Nitrobenzene-d5	70% 32-132%
321-60-8	2-Fluorobiphenyl	54% 40-117%
1718-51-0	Terphenyl-d14	66% 33-126%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11663-BS1	P122301.D	1	05/02/18	GS	05/01/18	OP11663	EP5490
OP11663-BSD	P122302.D	1	05/02/18	GS	05/01/18	OP11663	EP5490

The QC reported here applies to the following samples:

Method: EPA 625

JC64963-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	50	30.6	61	31.4	63	3	47-110/24
208-96-8	Acenaphthylene	50	28.7	57	29.6	59	3	45-110/24
120-12-7	Anthracene	50	35.3	71	36.7	73	4	52-110/24
92-87-5	Benidine	100	ND	0* a	ND	0* a	nc	10-110/65
56-55-3	Benzo(a)anthracene	50	35.0	70	37.3	75	6	53-110/20
50-32-8	Benzo(a)pyrene	50	38.6	77	41.3	83	7	55-110/23
205-99-2	Benzo(b)fluoranthene	50	37.6	75	39.8	80	6	57-110/23
191-24-2	Benzo(g,h,i)perylene	50	35.7	71	39.1	78	9	51-110/23
207-08-9	Benzo(k)fluoranthene	50	35.7	71	38.3	77	7	56-110/22
101-55-3	4-Bromophenyl phenyl ether	50	28.9	58	30.0	60	4	51-112/23
85-68-7	Butyl benzyl phthalate	50	42.3	85	44.4	89	5	50-122/23
91-58-7	2-Chloronaphthalene	50	24.9	50	26.0	52	4	41-110/26
106-47-8	4-Chloroaniline	50	20.3	41	25.3	51	22	10-110/44
218-01-9	Chrysene	50	32.6	65	34.1	68	4	52-110/20
111-91-1	bis(2-Chloroethoxy)methane	50	34.0	68	37.8	76	11	36-110/21
111-44-4	bis(2-Chloroethyl)ether	50	42.7	85	45.0	90	5	40-111/21
108-60-1	2,2'-Oxybis(1-chloropropane)	50	31.3	63	32.8	66	5	37-110/25
7005-72-3	4-Chlorophenyl phenyl ether	50	28.5	57	29.2	58	2	48-110/25
95-50-1	1,2-Dichlorobenzene	50	23.9	48	24.8	50	4	35-110/28
122-66-7	1,2-Diphenylhydrazine	50	38.9	78	40.6	81	4	39-128/23
541-73-1	1,3-Dichlorobenzene	50	20.5	41	21.3	43	4	32-110/28
106-46-7	1,4-Dichlorobenzene	50	23.3	47	24.3	49	4	33-110/27
121-14-2	2,4-Dinitrotoluene	50	37.4	75	39.3	79	5	61-117/25
606-20-2	2,6-Dinitrotoluene	50	37.4	75	39.6	79	6	61-119/23
91-94-1	3,3'-Dichlorobenzidine	100	52.1	52	60.9	61	16	20-110/33
53-70-3	Dibenzo(a,h)anthracene	50	34.0	68	37.2	74	9	55-110/25
84-74-2	Di-n-butyl phthalate	50	38.8	78	40.8	82	5	55-118/25
117-84-0	Di-n-octyl phthalate	50	48.3	97	50.2	100	4	49-124/26
84-66-2	Diethyl phthalate	50	36.1	72	38.4	77	6	54-113/23
131-11-3	Dimethyl phthalate	50	34.3	69	35.8	72	4	56-110/23
117-81-7	bis(2-Ethylhexyl)phthalate	50	41.3	83	43.5	87	5	50-120/22
206-44-0	Fluoranthene	50	34.8	70	37.1	74	6	55-111/23
86-73-7	Fluorene	50	31.2	62	32.0	64	3	51-110/25
118-74-1	Hexachlorobenzene	50	28.2	56	30.1	60	7	47-116/23
87-68-3	Hexachlorobutadiene	50	15.8	32	17.9	36	12	24-110/34
77-47-4	Hexachlorocyclopentadiene	100	35.6	36	38.2	38	7	10-110/39

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11663-BS1	P122301.D	1	05/02/18	GS	05/01/18	OP11663	EP5490
OP11663-BSD	P122302.D	1	05/02/18	GS	05/01/18	OP11663	EP5490

The QC reported here applies to the following samples:

Method: EPA 625

JC64963-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-72-1	Hexachloroethane	50	18.2	36	19.8	40	8	28-110/34
193-39-5	Indeno(1,2,3-cd)pyrene	50	36.2	72	38.8	78	7	51-112/24
78-59-1	Isophorone	50	34.9	70	39.0	78	11	42-111/20
91-20-3	Naphthalene	50	22.0	44	24.9	50	12	34-110/25
98-95-3	Nitrobenzene	50	30.9	62	33.9	68	9	39-110/21
62-75-9	n-Nitrosodimethylamine	50	19.7	39	20.7	41	5	15-110/19
621-64-7	N-Nitroso-di-n-propylamine	50	37.6	75	38.1	76	1	33-117/21
86-30-6	N-Nitrosodiphenylamine	50	35.6	71	37.9	76	6	54-110/24
85-01-8	Phenanthrene	50	34.9	70	37.1	74	6	53-110/23
129-00-0	Pyrene	50	35.3	71	37.2	74	5	52-110/22
120-82-1	1,2,4-Trichlorobenzene	50	18.9	38	21.8	44	14	30-110/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	50%	50%	10-110%
4165-62-2	Phenol-d5	36%	37%	10-110%
118-79-6	2,4,6-Tribromophenol	69%	72%	35-147%
4165-60-0	Nitrobenzene-d5	58%	65%	32-132%
321-60-8	2-Fluorobiphenyl	53%	54%	40-117%
1718-51-0	Terphenyl-d14	67%	70%	33-126%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC64963
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EP5484-DFTPP
Lab File ID: P122194.D
Instrument ID: GCMSP
Injection Date: 04/26/18
Injection Time: 23:09

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	44469	33.0	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	69224	51.4	Pass
70	Less than 2.0% of mass 69	499	0.37 (0.72) ^a	Pass
127	40.0 - 60.0% of mass 198	66909	49.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	134581	100.0	Pass
199	5.0 - 9.0% of mass 198	10122	7.52	Pass
275	10.0 - 30.0% of mass 198	38768	28.8	Pass
365	1.0 - 100.0% of mass 198	5381	4.00	Pass
441	Present, but less than mass 443	16597	12.3 (86.0) ^b	Pass
442	40.0 - 100.0% of mass 198	98117	72.9	Pass
443	17.0 - 23.0% of mass 442	19289	14.3 (19.7) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5484-IC5484	P122195.D	04/26/18	23:32	00:23	Initial cal 100
EP5484-IC5484	P122196.D	04/27/18	00:00	00:51	Initial cal 80
EP5484-ICC5484	P122197.D	04/27/18	00:28	01:19	Initial cal 50
EP5484-IC5484	P122198.D	04/27/18	00:56	01:47	Initial cal 25
EP5484-IC5484	P122199.D	04/27/18	01:24	02:15	Initial cal 10
EP5484-IC5484	P122200.D	04/27/18	01:52	02:43	Initial cal 5
EP5484-IC5484	P122201.D	04/27/18	02:20	03:11	Initial cal 2
EP5484-IC5484	P122202.D	04/27/18	02:48	03:39	Initial cal 1
EP5484-ICV5484	P122203.D	04/27/18	03:16	04:07	Initial cal verification 50
EP5484-ICV5484	P122204.D	04/27/18	03:44	04:35	Initial cal verification 50
EP5484-ICV5484	P122205.D	04/27/18	04:12	05:03	Initial cal verification 50
EP5484-ICV5484	P122206.D	04/27/18	04:40	05:31	Initial cal verification 50
EP5484-ICV5484	P122207.D	04/27/18	05:08	05:59	Initial cal verification 50
EP5484-ICV5484	P122208.D	04/27/18	05:36	06:27	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5486-DFTPP

Injection Date: 04/27/18

Lab File ID: P122229.D

Injection Time: 21:39

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	35659	31.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	56605	49.7	Pass
70	Less than 2.0% of mass 69	251	0.22 (0.44) ^a	Pass
127	40.0 - 60.0% of mass 198	56746	49.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	113976	100.0	Pass
199	5.0 - 9.0% of mass 198	8050	7.06	Pass
275	10.0 - 30.0% of mass 198	32565	28.6	Pass
365	1.0 - 100.0% of mass 198	4584	4.02	Pass
441	Present, but less than mass 443	12600	11.1 (78.4) ^b	Pass
442	40.0 - 100.0% of mass 198	78794	69.1	Pass
443	17.0 - 23.0% of mass 442	16080	14.1 (20.4) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5486-IC5486	P122230.D	04/27/18	22:05	00:26	Initial cal 100
EP5486-IC5486	P122231.D	04/27/18	22:33	00:54	Initial cal 80
EP5486-ICC5486	P122232.D	04/27/18	23:01	01:22	Initial cal 50
EP5486-IC5486	P122233.D	04/27/18	23:29	01:50	Initial cal 25
EP5486-IC5486	P122234.D	04/27/18	23:57	02:18	Initial cal 10
EP5486-IC5486	P122235.D	04/28/18	00:25	02:46	Initial cal 5
EP5486-IC5486	P122236.D	04/28/18	00:53	03:14	Initial cal 2
EP5486-IC5486	P122237.D	04/28/18	01:21	03:42	Initial cal 1
EP5486-ICV5486	P122238.D	04/28/18	01:49	04:10	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5487-DFTPP

Injection Date: 04/30/18

Lab File ID: P122240.D

Injection Time: 12:46

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	46512	31.4	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	77818	52.5	Pass
70	Less than 2.0% of mass 69	466	0.31 (0.60) ^a	Pass
127	40.0 - 60.0% of mass 198	74173	50.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	148218	100.0	Pass
199	5.0 - 9.0% of mass 198	10072	6.80	Pass
275	10.0 - 30.0% of mass 198	41682	28.1	Pass
365	1.0 - 100.0% of mass 198	5742	3.87	Pass
441	Present, but less than mass 443	15392	10.4 (78.5) ^b	Pass
442	40.0 - 100.0% of mass 198	94853	64.0	Pass
443	17.0 - 23.0% of mass 442	19603	13.2 (20.7) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5487-ICV5484	P122241.D	04/30/18	12:57	00:11	Initial cal verification 50
EP5487-ICV5486	P122242.D	04/30/18	13:25	00:39	Initial cal verification 50
EP5487-ICV5486	P122243.D	04/30/18	13:53	01:07	Initial cal verification 50
EP5487-ICV5486	P122244.D	04/30/18	14:20	01:34	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC64963
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5490-DFTPP
Lab File ID: P122281.D
Instrument ID: GCMSP
Injection Date: 05/01/18
Injection Time: 19:57

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	40745	36.6	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	65074	58.4	Pass
70	Less than 2.0% of mass 69	396	0.36 (0.61) ^a	Pass
127	40.0 - 60.0% of mass 198	51705	46.4	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	111405	100.0	Pass
199	5.0 - 9.0% of mass 198	7836	7.03	Pass
275	10.0 - 30.0% of mass 198	32768	29.4	Pass
365	1.0 - 100.0% of mass 198	4343	3.90	Pass
441	Present, but less than mass 443	14609	13.1 (87.7) ^b	Pass
442	40.0 - 100.0% of mass 198	89442	80.3	Pass
443	17.0 - 23.0% of mass 442	16649	14.9 (18.6) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5490-CC5484	P122282.D	05/01/18	20:11	00:14	Continuing cal 50
EP5490-CC5486	P122283.D	05/01/18	20:39	00:42	Continuing cal 50
EP5490-CC5484	P122286.D	05/01/18	22:04	02:07	Continuing cal 5
OP11505-MB1	P122287.D	05/01/18	22:32	02:35	Method Blank
ZZZZZZ	P122288.D	05/01/18	23:01	03:04	(unrelated sample)
OP11663-MB1	P122300.D	05/01/18	23:55	03:58	Method Blank
OP11663-BS1	P122301.D	05/02/18	00:23	04:26	Blank Spike
OP11663-BSD	P122302.D	05/02/18	00:52	04:55	Blank Spike Duplicate
OP11610-MB1	P122313.D	05/02/18	01:20	05:23	Method Blank
OP11610-BS1	P122314.D	05/02/18	01:48	05:51	Blank Spike
OP11610-BSD	P122315.D	05/02/18	02:16	06:19	Blank Spike Duplicate
ZZZZZZ	P122289.D	05/02/18	02:44	06:47	(unrelated sample)
ZZZZZZ	P122290.D	05/02/18	03:12	07:15	(unrelated sample)
ZZZZZZ	P122291.D	05/02/18	03:40	07:43	(unrelated sample)
ZZZZZZ	P122292.D	05/02/18	04:09	08:12	(unrelated sample)
ZZZZZZ	P122293.D	05/02/18	04:37	08:40	(unrelated sample)
ZZZZZZ	P122294.D	05/02/18	05:05	09:08	(unrelated sample)
ZZZZZZ	P122295.D	05/02/18	05:33	09:36	(unrelated sample)
ZZZZZZ	P122296.D	05/02/18	06:01	10:04	(unrelated sample)

Instrument Performance Check (DFTPP)

Page 2 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5490-DFTPP

Injection Date: 05/01/18

Lab File ID: P122281.D

Injection Time: 19:57

Instrument ID: GCMSP

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P122297.D	05/02/18	06:29	10:32	(unrelated sample)
ZZZZZZ	P122298.D	05/02/18	06:57	11:00	(unrelated sample)
ZZZZZZ	P122299.D	05/02/18	07:25	11:28	(unrelated sample)
ZZZZZZ	P122303.D	05/02/18	07:53	11:56	(unrelated sample)
ZZZZZZ	P122304.D	05/02/18	08:21	12:24	(unrelated sample)
ZZZZZZ	P122305.D	05/02/18	08:49	12:52	(unrelated sample)
ZZZZZZ	P122306.D	05/02/18	09:17	13:20	(unrelated sample)
ZZZZZZ	P122307.D	05/02/18	09:46	13:49	(unrelated sample)
ZZZZZZ	P122308.D	05/02/18	10:14	14:17	(unrelated sample)
JC64963-1	P122309.D	05/02/18	10:42	14:45	GRAB 1-042518/BSA DISCHARGE
ZZZZZZ	P122310.D	05/02/18	11:10	15:13	(unrelated sample)
ZZZZZZ	P122311.D	05/02/18	11:38	15:41	(unrelated sample)
ZZZZZZ	P122312.D	05/02/18	12:07	16:10	(unrelated sample)
ZZZZZZ	P122316.D	05/02/18	12:35	16:38	(unrelated sample)
ZZZZZZ	P122317.D	05/02/18	13:03	17:06	(unrelated sample)
ZZZZZZ	P122318.D	05/02/18	13:31	17:34	(unrelated sample)
ZZZZZZ	P122319.D	05/02/18	14:00	18:03	(unrelated sample)
ZZZZZZ	P122320.D	05/02/18	14:28	18:31	(unrelated sample)
ZZZZZZ	P122321.D	05/02/18	15:25	19:28	(unrelated sample)
ZZZZZZ	P122322.D	05/02/18	15:53	19:56	(unrelated sample)
ZZZZZZ	P122323.D	05/02/18	16:22	20:25	(unrelated sample)
ZZZZZZ	P122326.D	05/02/18	16:50	20:53	(unrelated sample)
ZZZZZZ	P122327.D	05/02/18	17:19	21:22	(unrelated sample)
ZZZZZZ	P122324.D	05/02/18	17:47	21:50	(unrelated sample)

7.3.4

7

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EZ6436-DFTPP

Injection Date: 05/04/18

Lab File ID: Z130440.D

Injection Time: 18:48

Instrument ID: GCMSZ

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	57058	36.6	Pass
68	Less than 2.0% of mass 69	1013	0.65 (1.64) ^a	Pass
69	Mass 69 relative abundance	61632	39.5	Pass
70	Less than 2.0% of mass 69	376	0.24 (0.61) ^a	Pass
127	40.0 - 60.0% of mass 198	84122	54.0	Pass
197	Less than 1.0% of mass 198	707	0.45	Pass
198	Base peak, 100% relative abundance	155912	100.0	Pass
199	5.0 - 9.0% of mass 198	10520	6.75	Pass
275	10.0 - 30.0% of mass 198	43853	28.1	Pass
365	1.0 - 100.0% of mass 198	6467	4.15	Pass
441	Present, but less than mass 443	22304	14.3 (83.3) ^b	Pass
442	40.0 - 100.0% of mass 198	146432	93.9	Pass
443	17.0 - 23.0% of mass 442	26784	17.2 (18.3) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ6436-IC6436	Z130441.D	05/04/18	19:14	00:26	Initial cal 100
EZ6436-IC6436	Z130442.D	05/04/18	19:41	00:53	Initial cal 80
EZ6436-ICC6436	Z130443.D	05/04/18	20:08	01:20	Initial cal 50
EZ6436-IC6436	Z130444.D	05/04/18	20:35	01:47	Initial cal 25
EZ6436-IC6436	Z130445.D	05/04/18	21:02	02:14	Initial cal 10
EZ6436-IC6436	Z130446.D	05/04/18	21:30	02:42	Initial cal 5
EZ6436-IC6436	Z130447.D	05/04/18	21:57	03:09	Initial cal 2
EZ6436-IC6436	Z130448.D	05/04/18	22:24	03:36	Initial cal 1
EZ6436-ICV6436	Z130449.D	05/04/18	22:51	04:03	Initial cal verification 50
EZ6436-ICV6436	Z130450.D	05/04/18	23:18	04:30	Initial cal verification 50
EZ6436-ICV6436	Z130451.D	05/04/18	23:44	04:56	Initial cal verification 50
EZ6436-ICV6436	Z130452.D	05/05/18	00:11	05:23	Initial cal verification 50
EZ6436-ICV6436	Z130453.D	05/05/18	00:38	05:50	Initial cal verification 50
EZ6436-ICV6436	Z130454.D	05/05/18	01:05	06:17	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EZ6437-DFTPP

Injection Date: 05/09/18

Lab File ID: Z130457.D

Injection Time: 13:19

Instrument ID: GCMSZ

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	56786	31.7	Pass
68	Less than 2.0% of mass 69	1148	0.64 (1.78) ^a	Pass
69	Mass 69 relative abundance	64605	36.1	Pass
70	Less than 2.0% of mass 69	293	0.16 (0.45) ^a	Pass
127	40.0 - 60.0% of mass 198	90496	50.6	Pass
197	Less than 1.0% of mass 198	511	0.29	Pass
198	Base peak, 100% relative abundance	178973	100.0	Pass
199	5.0 - 9.0% of mass 198	11982	6.69	Pass
275	10.0 - 30.0% of mass 198	51293	28.7	Pass
365	1.0 - 100.0% of mass 198	7589	4.24	Pass
441	Present, but less than mass 443	25773	14.4 (79.7) ^b	Pass
442	40.0 - 100.0% of mass 198	175018	97.8	Pass
443	17.0 - 23.0% of mass 442	32322	18.1 (18.5) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ6437-IC6437	Z130458.D	05/09/18	13:34	00:15	Initial cal 100
EZ6437-IC6437	Z130459.D	05/09/18	14:01	00:42	Initial cal 80
EZ6437-ICC6437	Z130460.D	05/09/18	14:28	01:09	Initial cal 50
EZ6437-IC6437	Z130461.D	05/09/18	14:56	01:37	Initial cal 25
EZ6437-IC6437	Z130462.D	05/09/18	15:23	02:04	Initial cal 10
EZ6437-IC6437	Z130463.D	05/09/18	15:50	02:31	Initial cal 5
EZ6437-IC6437	Z130464.D	05/09/18	16:17	02:58	Initial cal 2
EZ6437-IC6437	Z130465.D	05/09/18	16:44	03:25	Initial cal 1
EZ6437-ICV6437	Z130466.D	05/09/18	17:11	03:52	Initial cal verification 50
EZ6437-ICV6437	Z130467.D	05/09/18	17:39	04:20	Initial cal verification 50
EZ6437-ICV6436	Z130468A.D	05/09/18	18:05	04:46	Initial cal verification 50
EZ6437-ICV6437	Z130468.D	05/09/18	18:05	04:46	Initial cal verification 50
EZ6437-ICV6437	Z130470.D	05/09/18	19:00	05:41	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC64963

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EZ6446-DFTPP

Injection Date: 05/15/18

Lab File ID: Z130697.D

Injection Time: 23:43

Instrument ID: GCMSZ

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	38354	34.5	Pass
68	Less than 2.0% of mass 69	816	0.73 (1.83) ^a	Pass
69	Mass 69 relative abundance	44695	40.2	Pass
70	Less than 2.0% of mass 69	285	0.26 (0.64) ^a	Pass
127	40.0 - 60.0% of mass 198	61117	54.9	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	111272	100.0	Pass
199	5.0 - 9.0% of mass 198	7579	6.81	Pass
275	10.0 - 30.0% of mass 198	31205	28.0	Pass
365	1.0 - 100.0% of mass 198	5342	4.80	Pass
441	Present, but less than mass 443	12709	11.4 (81.2) ^b	Pass
442	40.0 - 100.0% of mass 198	85573	76.9	Pass
443	17.0 - 23.0% of mass 442	15661	14.1 (18.3) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ6446-CC6436	Z130698.D	05/15/18	23:58	00:15	Continuing cal 50
EZ6446-CC6437	Z130699.D	05/16/18	00:25	00:42	Continuing cal 50
OP11994-MB1	Z130700.D	05/16/18	01:02	01:19	Method Blank
OP11994-BS1	Z130701.D	05/16/18	01:29	01:46	Blank Spike
OP11994-BSD	Z130702.D	05/16/18	01:56	02:13	Blank Spike Duplicate
ZZZZZZ	Z130703.D	05/16/18	02:23	02:40	(unrelated sample)
ZZZZZZ	Z130704.D	05/16/18	02:50	03:07	(unrelated sample)
ZZZZZZ	Z130705.D	05/16/18	03:17	03:34	(unrelated sample)
ZZZZZZ	Z130706.D	05/16/18	03:44	04:01	(unrelated sample)
ZZZZZZ	Z130707.D	05/16/18	04:11	04:28	(unrelated sample)
ZZZZZZ	Z130708.D	05/16/18	04:38	04:55	(unrelated sample)
ZZZZZZ	Z130709.D	05/16/18	05:04	05:21	(unrelated sample)
ZZZZZZ	Z130710.D	05/16/18	05:32	05:49	(unrelated sample)
ZZZZZZ	Z130711.D	05/16/18	05:58	06:15	(unrelated sample)
ZZZZZZ	Z130712.D	05/16/18	06:25	06:42	(unrelated sample)
ZZZZZZ	Z130713.D	05/16/18	06:52	07:09	(unrelated sample)
ZZZZZZ	Z130714.D	05/16/18	07:19	07:36	(unrelated sample)
ZZZZZZ	Z130715.D	05/16/18	07:46	08:03	(unrelated sample)
ZZZZZZ	Z130716.D	05/16/18	08:13	08:30	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC64963
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample:	EZ6446-DFTPP	Injection Date:	05/15/18
Lab File ID:	Z130697.D	Injection Time:	23:43
Instrument ID:	GCMSZ		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JC64963-1	Z130717A.D	05/16/18	08:44	09:01	GRAB 1-042518/BSA DISCHARGE
ZZZZZZ	Z130718.D	05/16/18	09:11	09:28	(unrelated sample)
ZZZZZZ	Z130719.D	05/16/18	09:38	09:55	(unrelated sample)
ZZZZZZ	Z130720.D	05/16/18	10:05	10:22	(unrelated sample)
ZZZZZZ	Z130721.D	05/16/18	10:32	10:49	(unrelated sample)
ZZZZZZ	Z130722.D	05/16/18	10:59	11:16	(unrelated sample)

7.3.7
7

Surrogate Recovery Summary

Job Number: JC64963
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: EPA 625	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JC64963-1	P122309.D	78	60	31* a
JC64963-1	Z130717A.D	90	77	70
OP11663-BS1	P122301.D	58	53	67
OP11663-BSD	P122302.D	65	54	70
OP11663-MB1	P122300.D	70	54	66

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	32-132%
S2 = 2-Fluorobiphenyl	40-117%
S3 = Terphenyl-d14	33-126%

(a) Outside of in house control limits.

Metals Analysis

QC Data Summaries



Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC64963
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP6839
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/28/18 04/28/18

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	34	32				
Antimony	6.0	1.4	3				
Arsenic	3.0	1.4	2.6				
Barium	200	.5	1				
Beryllium	1.0	.2	.31				
Bismuth	20	2.5	5.5				
Boron	100	1.9	7.8				
Cadmium	3.0	.3	.69				
Calcium	5000	8.7	48				
Chromium	10	.6	1.6				
Cobalt	50	.5	.7				
Copper	10	1.2	6.5	0.50	<10 (a)	0.30	<10
Iron	100	4.6	20				
Lead	3.0	1.4	2.6				
Lithium	50	2.8	11				
Magnesium	5000	33	59				
Manganese	15	.1	.78				
Molybdenum	20	.4	5.7				
Nickel	10	.5	5.2				
Phosphorus	50	1.7	14				
Potassium	10000	68	290				
Selenium	10	3.8	7.2				
Silicon	200	2.1	32				
Silver	10	.5	3				
Sodium	10000	15	170				
Strontium	10	.2	.3				
Sulfur	50	20	14				
Thallium	2.0	1.6	1.5				
Tin	50	1	7.6				
Titanium	10	.7	1.3				
Tungsten	50	1.8	7.8				
Vanadium	50	.4	.95				
Zinc	20	.3	2.2	0.30	<20 (a)	0.70	<20

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC64963
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP6839
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/28/18 04/28/18

Metal	RL	IDL	MDL	MB raw	final	MB raw	final

Zirconium 10 .3 1.2

Associated samples MP6839: JC64963-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Lab filtered.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64963

Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP6839
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/28/18

Metal	JC65023-1 Original MS	SpikeLot MP200.7A % Rec		QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	7.8	2130	2000	106.1 70-130
Iron	anr			
Lead	anr			
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	17.9	2080	2000	103.1 70-130

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64963
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP6839
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/28/18

Metal	JC65023-1 Original MS	Spike lot MP200.7A % Rec	QC Limits

Zirconium

Associated samples MP6839: JC64963-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64963
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP6839
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/28/18

Metal	JC65023-1 Original MSD	Spike lot MP200.7A % Rec			MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Bismuth						
Boron						
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	7.8	2100	2000	104.6	1.4	10
Iron	anr					
Lead	anr					
Lithium						
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium	anr					
Selenium	anr					
Silicon						
Silver	anr					
Sodium	anr					
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					
Zinc	17.9	2060	2000	102.1	1.0	10

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64963
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP6839
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/28/18

Metal	JC65023-1 Original MSD	Spikelet MP200.7A % Rec	MSD RPD	QC Limit

Zirconium

Associated samples MP6839: JC64963-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC64963
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP6839
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/28/18 04/28/18

Metal	BSP Result	SpikeLot MPSPK2	% Rec	QC Limits	BSP Result	SpikeLot MP200.7A	% Rec	QC Limits
Aluminum	anr							
Antimony	anr							
Arsenic	anr							
Barium	anr							
Beryllium	anr							
Bismuth								
Boron								
Cadmium	anr							
Calcium	anr							
Chromium	anr							
Cobalt	anr							
Copper	2050 (a) 2000		102.5	85-115	2000	2000	100.0	85-115
Iron	anr							
Lead	anr							
Lithium								
Magnesium	anr							
Manganese	anr							
Molybdenum								
Nickel	anr							
Phosphorus								
Potassium	anr							
Selenium	anr							
Silicon								
Silver	anr							
Sodium	anr							
Strontium								
Sulfur								
Thallium	anr							
Tin								
Titanium								
Tungsten								
Vanadium	anr							
Zinc	2070 (a) 2000		103.5	85-115	2040	2000	102.0	85-115

8.1.3
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC64963
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP6839
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/28/18 04/28/18

Metal	BSP Result	Spike lot MPSPK2	% Rec	QC Limits	BSP Result	Spike lot MP200.7A	% Rec	QC Limits

Zirconium

Associated samples MP6839: JC64963-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested
 (a) Lab filtered.

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC64963
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP6839
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/28/18

Metal	JC65023-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	7.80	12.0	53.8 (a)	0-10
Iron	anr			
Lead	anr			
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	17.9	22.1	23.5*(b)	0-10

8.1.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC64963
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP6839
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/28/18

Metal	JC65023-1 Original SDL 1:5	%DIF	QC Limits

Zirconium

Associated samples MP6839: JC64963-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

8.1.4

8

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC64963
Account: HWINJ0MM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Phosphorus, Total	GP12770/GN79543	0.050	0.0	mg/l	0.40	0.37	92.5	80-120%
Solids, Total Suspended	GN79258	4.0	0.0	mg/l				

Associated Samples:
Batch GN79258: JC64963-2
Batch GP12770: JC64963-2
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC64963

Account: HWINJOMM - Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Phosphorus, Total	GP12770/GN79623	JC65085-2	mg/l	0.21	0.19	10.0	0-38%
Solids, Total Suspended	GN79258	JC64968-1	mg/l	0.57 U	0.0	0.0	0-17%

Associated Samples:

Batch GN79258: JC64963-2

Batch GP12770: JC64963-2

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC64963
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Phosphorus, Total	GP12770/GN79623	JC65085-2	mg/l	0.21	.4	0.58	92.5	35-137%

Associated Samples:

Batch GP12770: JC64963-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Honeywell International Inc. OMM work

HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

R35116

SGS Job Number: JC66611

Sampling Date: 05/22/18

Report to:

AMEC Foster Wheeler
511 Congress Street
Portland, ME 04112
HTS-RES-LAB@Honeywell.com; Ryan.Belcher@amecfw.com

ATTN: Ryan Belcher

Total number of pages in report: **20**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Nancy Cole
Laboratory Director

Client Service contact: Rocus Peters 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary 3

Section 2: Case Narrative/Conformance Summary 4

Section 3: Summary of Hits 5

Section 4: Sample Results 6

4.1: JC66611-1: GRAB 1 THU 4-0522118 DISCHARGE COMPOSITE 7

Section 5: Misc. Forms 8

5.1: Chain of Custody 9

Section 6: MS Semi-volatiles - QC Data Summaries 11

6.1: Method Blank Summary 12

6.2: Blank Spike/Blank Spike Duplicate Summary 13

6.3: Instrument Performance Checks (DFTPP) 14

6.4: Surrogate Recovery Summaries 20



Sample Summary

Honeywell International Inc. OMM work

Job No: JC66611

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JC66611-1	05/22/18	13:00 MS	05/23/18	AQ	Ground Water	GRAB 1 THU 4-0522118 DISCHARGE COMPOSITE

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Honeywell International Inc. OMM work

Job No JC66611

Site: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY

Report Date 5/24/2018 3:36:51 PM

On 05/23/2018, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC66611 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Semi-volatiles By Method EPA 625

Matrix: AQ

Batch ID: OP12173

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Thursday, May 24, 2018

Page 1 of 1

Summary of Hits

Job Number: JC66611
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Collected: 05/22/18



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

JC66611-1 GRAB 1 THU 4-0522118 DISCHARGE COMPOSITE

No hits reported in this sample.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1 THU 4-0522118 DISCHARGE COMPOSITE					Date Sampled:	05/22/18
Lab Sample ID:	JC66611-1					Date Received:	05/23/18
Matrix:	AQ - Ground Water					Percent Solids:	n/a
Method:	EPA 625 EPA 625						
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F177010.D	1	05/24/18 12:15	CS	05/23/18 16:05	OP12173	EF7530
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

AE PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.8	0.79	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.86	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	1.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	2.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	9.6	1.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.8	1.2	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.92	ug/l	
100-02-7	4-Nitrophenol	ND	9.6	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	4.8	1.3	ug/l	
108-95-2	Phenol	ND	1.9	0.38	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.89	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		10-110%
4165-62-2	Phenol-d5	28%		10-110%
118-79-6	2,4,6-Tribromophenol	76%		35-147%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

JC66611: Chain of Custody

Page 1 of 2

SGS Sample Receipt Summary

Job Number: JC66611

Client: AMEC FOSTER WHEELER

Project: HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 5/23/2018 9:20:00 AM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (1.4);

Cooler Temps (Corrected) °C: Cooler 1: (1.4);

Cooler Security
Y or N
Y or N

1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature
Y or N

1. Temp criteria achieved: ☒ ☐	
2. Cooler temp verification: _____	
3. Cooler media: _____	Ice (Bag)
4. No. Coolers: _____	1

Quality Control Preservation
Y or N
N/A

1. Trip Blank present / cooler: ☐ ☐	✓
2. Trip Blank listed on COC: ☐ ☐	✓
3. Samples preserved properly: ☒ ☐	
4. VOCs headspace free: ☐ ☐	✓

Sample Integrity - Documentation
Y or N

1. Sample labels present on bottles: ☒ ☐	
2. Container labeling complete: ☒ ☐	
3. Sample container label / COC agree: ☒ ☐	

Sample Integrity - Condition
Y or N

1. Sample recvd within HT: ☒ ☐	
2. All containers accounted for: ☒ ☐	
3. Condition of sample: _____	Intact

Sample Integrity - Instructions
Y or N
N/A

1. Analysis requested is clear: ☒ ☐	
2. Bottles received for unspecified tests: ☐ ☒	
3. Sufficient volume recvd for analysis: ☒ ☐	
4. Compositing instructions clear: ☐ ☐	✓
5. Filtering instructions clear: ☐ ☐	✓

Test Strip Lot #s:

pH 1-12: 216017

pH 12+: 208717

Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JC66611: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: JC66611

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12173-MB1	F177007.D	1	05/24/18	CS	05/23/18	OP12173	EF7530

The QC reported here applies to the following samples:

Method: EPA 625

JC66611-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	64% 10-110%
4165-62-2	Phenol-d5	37% 10-110%
118-79-6	2,4,6-Tribromophenol	93% 35-147%
4165-60-0	Nitrobenzene-d5	92% 32-132%
321-60-8	2-Fluorobiphenyl	97% 40-117%
1718-51-0	Terphenyl-d14	112% 33-126%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: JC66611

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12173-BS1	F177008.D	1	05/24/18	CS	05/23/18	OP12173	EF7530
OP12173-BSD	F177009.D	1	05/24/18	CS	05/23/18	OP12173	EF7530

The QC reported here applies to the following samples:

Method: EPA 625

JC66611-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	41.0	82	42.0	84	2	43-100/22
59-50-7	4-Chloro-3-methyl phenol	50	45.3	91	41.9	84	8	46-110/21
120-83-2	2,4-Dichlorophenol	50	43.9	88	43.0	86	2	44-109/21
105-67-9	2,4-Dimethylphenol	50	48.3	97	45.5	91	6	42-116/20
51-28-5	2,4-Dinitrophenol	100	78.4	78	73.6	74	6	38-131/27
534-52-1	4,6-Dinitro-o-cresol	50	39.0	78	38.1	76	2	50-124/26
88-75-5	2-Nitrophenol	50	41.7	83	41.8	84	0	44-109/21
100-02-7	4-Nitrophenol	50	27.8	56	24.8	50	11	14-110/23
87-86-5	Pentachlorophenol	50	40.9	82	40.8	82	0	25-128/25
108-95-2	Phenol	50	21.1	42	20.6	41	2	20-110/22
88-06-2	2,4,6-Trichlorophenol	50	46.8	94	44.8	90	4	52-118/24

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	64%	61%	10-110%
4165-62-2	Phenol-d5	43%	41%	10-110%
118-79-6	2,4,6-Tribromophenol	93%	84%	35-147%
4165-60-0	Nitrobenzene-d5	91%	86%	32-132%
321-60-8	2-Fluorobiphenyl	93%	86%	40-117%
1718-51-0	Terphenyl-d14	99%	93%	33-126%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC66611

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EF7486-DFTPP

Injection Date: 04/19/18

Lab File ID: F175765.D

Injection Time: 20:24

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	30188	38.6	Pass
68	Less than 2.0% of mass 69	64	0.08 (0.19) ^a	Pass
69	Mass 69 relative abundance	34420	44.0	Pass
70	Less than 2.0% of mass 69	156	0.20 (0.45) ^a	Pass
127	40.0 - 60.0% of mass 198	41176	52.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	78184	100.0	Pass
199	5.0 - 9.0% of mass 198	5380	6.88	Pass
275	10.0 - 30.0% of mass 198	20884	26.7	Pass
365	1.0 - 100.0% of mass 198	2798	3.58	Pass
441	Present, but less than mass 443	8685	11.1 (72.3) ^b	Pass
442	40.0 - 100.0% of mass 198	60800	77.8	Pass
443	17.0 - 23.0% of mass 442	12012	15.4 (19.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF7486-IC7486	F175766.D	04/19/18	20:49	00:25	Initial cal 100
EF7486-IC7486	F175767.D	04/19/18	21:17	00:53	Initial cal 80
EF7486-ICC7486	F175768.D	04/19/18	21:45	01:21	Initial cal 50
EF7486-IC7486	F175769.D	04/19/18	22:13	01:49	Initial cal 25
EF7486-IC7486	F175770.D	04/19/18	22:40	02:16	Initial cal 10
EF7486-IC7486	F175771.D	04/19/18	23:08	02:44	Initial cal 5
EF7486-IC7486	F175772.D	04/19/18	23:36	03:12	Initial cal 2
EF7486-IC7486	F175773.D	04/20/18	00:04	03:40	Initial cal 1
EF7486-ICV7486	F175774.D	04/20/18	00:32	04:08	Initial cal verification 50
EF7486-ICV7486	F175775.D	04/20/18	01:00	04:36	Initial cal verification 50
EF7486-ICV7486	F175776.D	04/20/18	01:50	05:26	Initial cal verification 50
EF7486-ICV7486	F175777.D	04/20/18	02:17	05:53	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC66611

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EF7513-DFTPP

Injection Date: 05/10/18

Lab File ID: F176362.D

Injection Time: 01:47

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	29915	42.1	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	33604	47.3	Pass
70	Less than 2.0% of mass 69	188	0.26 (0.56) ^a	Pass
127	40.0 - 60.0% of mass 198	37701	53.0	Pass
197	Less than 1.0% of mass 198	86	0.12	Pass
198	Base peak, 100% relative abundance	71069	100.0	Pass
199	5.0 - 9.0% of mass 198	5072	7.14	Pass
275	10.0 - 30.0% of mass 198	19040	26.8	Pass
365	1.0 - 100.0% of mass 198	2874	4.04	Pass
441	Present, but less than mass 443	5630	7.92 (75.9) ^b	Pass
442	40.0 - 100.0% of mass 198	39051	54.9	Pass
443	17.0 - 23.0% of mass 442	7416	10.4 (19.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF7513-IC7513	F176363.D	05/10/18	02:17	00:30	Initial cal 100
EF7513-IC7513	F176364.D	05/10/18	02:49	01:02	Initial cal 80
EF7513-ICC7513	F176365.D	05/10/18	03:21	01:34	Initial cal 50
EF7513-IC7513	F176366.D	05/10/18	03:53	02:06	Initial cal 25
EF7513-IC7513	F176367.D	05/10/18	04:26	02:39	Initial cal 10
EF7513-IC7513	F176368.D	05/10/18	04:59	03:12	Initial cal 5
EF7513-IC7513	F176369.D	05/10/18	05:32	03:45	Initial cal 2
EF7513-IC7513	F176370.D	05/10/18	06:04	04:17	Initial cal 1
EF7513-ICV7513	F176374.D	05/10/18	06:37	04:50	Initial cal verification 50
EF7513-ICV7513	F176375.D	05/10/18	08:00	06:13	Initial cal verification 50
EF7513-ICV7513	F176377.D	05/10/18	09:06	07:19	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC66611

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EF7519-DFTPP

Injection Date: 05/14/18

Lab File ID: F176765.D

Injection Time: 09:23

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	32129	47.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	35260	52.4	Pass
70	Less than 2.0% of mass 69	138	0.21 (0.39) ^a	Pass
127	40.0 - 60.0% of mass 198	36933	54.9	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	67272	100.0	Pass
199	5.0 - 9.0% of mass 198	4749	7.06	Pass
275	10.0 - 30.0% of mass 198	16929	25.2	Pass
365	1.0 - 100.0% of mass 198	2557	3.80	Pass
441	Present, but less than mass 443	4765	7.08 (79.0) ^b	Pass
442	40.0 - 100.0% of mass 198	32882	48.9	Pass
443	17.0 - 23.0% of mass 442	6029	8.96 (18.3) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF7519-IC7519	F176766.D	05/14/18	09:44	00:21	Initial cal 2
EF7519-IC7519	F176767.D	05/14/18	10:23	01:00	Initial cal 1
EF7519-IC7519	F176768.D	05/14/18	10:59	01:36	Initial cal 100
EF7519-IC7519	F176769.D	05/14/18	11:34	02:11	Initial cal 80
EF7519-ICC7519	F176770.D	05/14/18	12:10	02:47	Initial cal 50
EF7519-IC7519	F176771.D	05/14/18	12:46	03:23	Initial cal 25
EF7519-IC7519	F176772.D	05/14/18	13:23	04:00	Initial cal 10
EF7519-IC7519	F176773.D	05/14/18	13:59	04:36	Initial cal 5
EF7519-ICV7519	F176774.D	05/14/18	14:35	05:12	Initial cal verification 50
EF7519-ICV7519	F176775.D	05/14/18	15:12	05:49	Initial cal verification 50
EF7519-ICV7519	F176776.D	05/14/18	15:48	06:25	Initial cal verification 50
EF7519-ICV7519	F176777.D	05/14/18	16:25	07:02	Initial cal verification 50
EF7519-ICV7519	F176778.D	05/14/18	17:02	07:39	Initial cal verification 50
EF7519-ICV7519	F176779.D	05/14/18	17:39	08:16	Initial cal verification 50
EF7519-ICV7518	F176780.D	05/14/18	18:15	08:52	Initial cal verification 50
EF7519-ICV7518	F176782.D	05/14/18	19:28	10:05	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC66611

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EF7524-DFTPP

Injection Date: 05/18/18

Lab File ID: F176842.D

Injection Time: 00:43

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	26087	41.3	Pass
68	Less than 2.0% of mass 69	104	0.16 (0.35) ^a	Pass
69	Mass 69 relative abundance	29354	46.5	Pass
70	Less than 2.0% of mass 69	207	0.33 (0.71) ^a	Pass
127	40.0 - 60.0% of mass 198	32852	52.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	63170	100.0	Pass
199	5.0 - 9.0% of mass 198	4420	7.00	Pass
275	10.0 - 30.0% of mass 198	17189	27.2	Pass
365	1.0 - 100.0% of mass 198	2803	4.44	Pass
441	Present, but less than mass 443	5337	8.45 (72.5) ^b	Pass
442	40.0 - 100.0% of mass 198	38784	61.4	Pass
443	17.0 - 23.0% of mass 442	7357	11.6 (19.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF7524-IC7524	F176843.D	05/18/18	01:11	00:28	Initial cal 100
EF7524-IC7524	F176844.D	05/18/18	01:45	01:02	Initial cal 80
EF7524-ICC7524	F176845.D	05/18/18	02:19	01:36	Initial cal 50
EF7524-IC7524	F176846.D	05/18/18	02:54	02:11	Initial cal 25
EF7524-IC7524	F176847.D	05/18/18	03:29	02:46	Initial cal 10
EF7524-IC7524	F176848.D	05/18/18	04:04	03:21	Initial cal 5
EF7524-IC7524	F176849.D	05/18/18	04:39	03:56	Initial cal 2
EF7524-IC7524	F176850.D	05/18/18	05:13	04:30	Initial cal 1
EF7524-ICV7524	F176851.D	05/18/18	05:48	05:05	Initial cal verification 50
EF7524-ICV7486	F176852.D	05/18/18	06:21	05:38	Initial cal verification 50
EF7524-ICV7486	F176853.D	05/18/18	10:08	09:25	Initial cal verification 50
EF7524-ICV7486	F176854.D	05/18/18	10:40	09:57	Initial cal verification 50
EF7524-ICV7486	F176855.D	05/18/18	11:13	10:30	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC66611

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EF7530-DFTPP

Injection Date: 05/23/18

Lab File ID: F176982.D

Injection Time: 22:23

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	31742	46.2	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	35100	51.1	Pass
70	Less than 2.0% of mass 69	232	0.34 (0.66) ^a	Pass
127	40.0 - 60.0% of mass 198	37327	54.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	68685	100.0	Pass
199	5.0 - 9.0% of mass 198	4653	6.77	Pass
275	10.0 - 30.0% of mass 198	18382	26.8	Pass
365	1.0 - 100.0% of mass 198	3213	4.68	Pass
441	Present, but less than mass 443	5635	8.20 (77.8) ^b	Pass
442	40.0 - 100.0% of mass 198	37834	55.1	Pass
443	17.0 - 23.0% of mass 442	7245	10.5 (19.1) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF7530-CC7519	F176984.D	05/23/18	22:44	00:21	Continuing cal 25
EF7530-CC7513	F176985.D	05/23/18	23:19	00:56	Continuing cal 25
EF7530-CC7486	F176986.D	05/23/18	23:54	01:31	Continuing cal 25
EF7530-CC7524	F176988.D	05/24/18	00:34	02:11	Continuing cal 25
OP12009-MB1	F176992.D	05/24/18	02:50	04:27	Method Blank
OP12009-BS1	F176993.D	05/24/18	03:24	05:01	Blank Spike
OP12009-BSD	F176994.D	05/24/18	03:58	05:35	Blank Spike Duplicate
OP12009-BS13	F176995.D	05/24/18	04:32	06:09	Blank Spike
OP12212-MB1	F176996B.D	05/24/18	08:36	10:13	Method Blank
ZZZZZZ	F177001.D	05/24/18	09:12	10:49	(unrelated sample)
ZZZZZZ	F177003.D	05/24/18	09:48	11:25	(unrelated sample)
OP12173-MB1	F177007.D	05/24/18	10:23	12:00	Method Blank
OP12173-BS1	F177008.D	05/24/18	11:00	12:37	Blank Spike
OP12173-BSD	F177009.D	05/24/18	11:38	13:15	Blank Spike Duplicate
JC66611-1	F177010.D	05/24/18	12:15	13:52	GRAB 1 THU 4-0522118 DISCHARGE COMPOSITE
ZZZZZZ	F177011.D	05/24/18	12:55	14:32	(unrelated sample)
ZZZZZZ	F177012.D	05/24/18	13:33	15:10	(unrelated sample)
ZZZZZZ	F177013.D	05/24/18	14:11	15:48	(unrelated sample)
ZZZZZZ	F177014.D	05/24/18	14:50	16:27	(unrelated sample)

Instrument Performance Check (DFTPP)

Page 2 of 2

Job Number: JC66611

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EF7530-DFTPP

Injection Date: 05/23/18

Lab File ID: F176982.D

Injection Time: 22:23

Instrument ID: GCMSF

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	F177015.D	05/24/18	15:29	17:06	(unrelated sample)
ZZZZZZ	F177016.D	05/24/18	16:08	17:45	(unrelated sample)
ZZZZZZ	F177017.D	05/24/18	16:46	18:23	(unrelated sample)
OP12267-MB1	F177018.D	05/24/18	18:11	19:48	Method Blank
OP12267-BS1	F177019.D	05/24/18	18:48	20:25	Blank Spike
OP12267-BSD	F177020.D	05/24/18	19:26	21:03	Blank Spike Duplicate
OP12267-BS13	F177021.D	05/24/18	20:02	21:39	Blank Spike
OP12267-BS14	F177022.D	05/24/18	20:40	22:17	Blank Spike
ZZZZZZ	F177023.D	05/24/18	21:17	22:54	(unrelated sample)

6.3.5

6

Surrogate Recovery Summary

Job Number: JC66611
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: EPA 625	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JC66611-1	F177010.D	42	28	76
OP12173-BS1	F177008.D	64	43	93
OP12173-BSD	F177009.D	61	41	84
OP12173-MB1	F177007.D	64	37	93

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	35-147%

6.4.1
6



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November 09, 2018

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
2018 Second Semi-Annual Report
BPDES Permit Number 15-12-BU098**

Dear Ms. Adams:

Enclosed please find the 2018 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 833,100 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from April 25, 2018 through October 5, 2018 for a total of 163 days. Flow metering readings collected during the reporting period are included as Attachment 1.

A time composite discharge sample was collected from within the pump station on October 5, 2018. Four samples were collected over an evenly-spaced work day period for VOCs and SVOCs, with the four samples composited in the laboratory per permit requirements. The sample for metals, total suspended solids, total phosphorus, and pH was collected as a composite sample. A summary of the analytical results, compared to permit limits, is provided in Table 1. All parameters were in compliance with permit limits. The laboratory analytical report is provided as Attachment 2. If you have any questions or require additional information, please contact me at (315) 468-1663.

Sincerely,

Jacobs,

John W. Formoza
Area Manager

QC Review By: Ryan Belcher (Wood E&IS)

cc.: Mr. Mark Sweitzer (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Jason Paananen (City of Buffalo)
Mr. Robert Gersh (Wood E&IS)

Table 1
Alltift Landfill/Ramco Steel Site
Second Semi-annual Report for 2018
Discharge Monitoring Report

BSA Permit No. 15-12-BU098	
Sample Date:	October 5, 2018
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	7.23		0.100	SU	7.23	SU	5.0 - 12.0	SU	Yes
Copper	0.0068		0.010	mg/L	0.0003	lbs/day	7.68	lbs/day	Yes
Zinc	0.0159		0.020	mg/L	0.0007	lbs/day	12	lbs/day	Yes
Total Suspended Solids	26		4.0	mg/L	26.0	mg/L	250	mg/L	Yes
Total Phosphorus	0.130		0.050	mg/L	0.130	mg/L	15.35	mg/L	Yes
USEPA Test Method 624	ND - 15.8			µg/L	Monitor Only				
USEPA Test Method 625	ND - 1.9			µg/L					
Total Flow (average)	3.55			gpm	5,111	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)	0	4/25/2018
Final Reading (pump station)	833100	10/5/2018
Total Days in Period		163
Total Flow for Period	833,100	gallons
Average Flow for Period	3.55	gpm

Prepared by, Date: Adithya G, 11/09/2018
 Checked by, Date: Ryan Belcher, 11/09/2018

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	Totalizer Reading (gallons)
4/25/2018	0
6/6/2018	432,500
6/28/2018	556,800
8/7/2018	748,100
10/5/2018	833,100

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

(Print your name & title here)

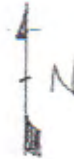
(Print your company name here)

AREA MANAGER

JACOBS

11/14/18

Date



TIFFT ST.

ALLTIFFT

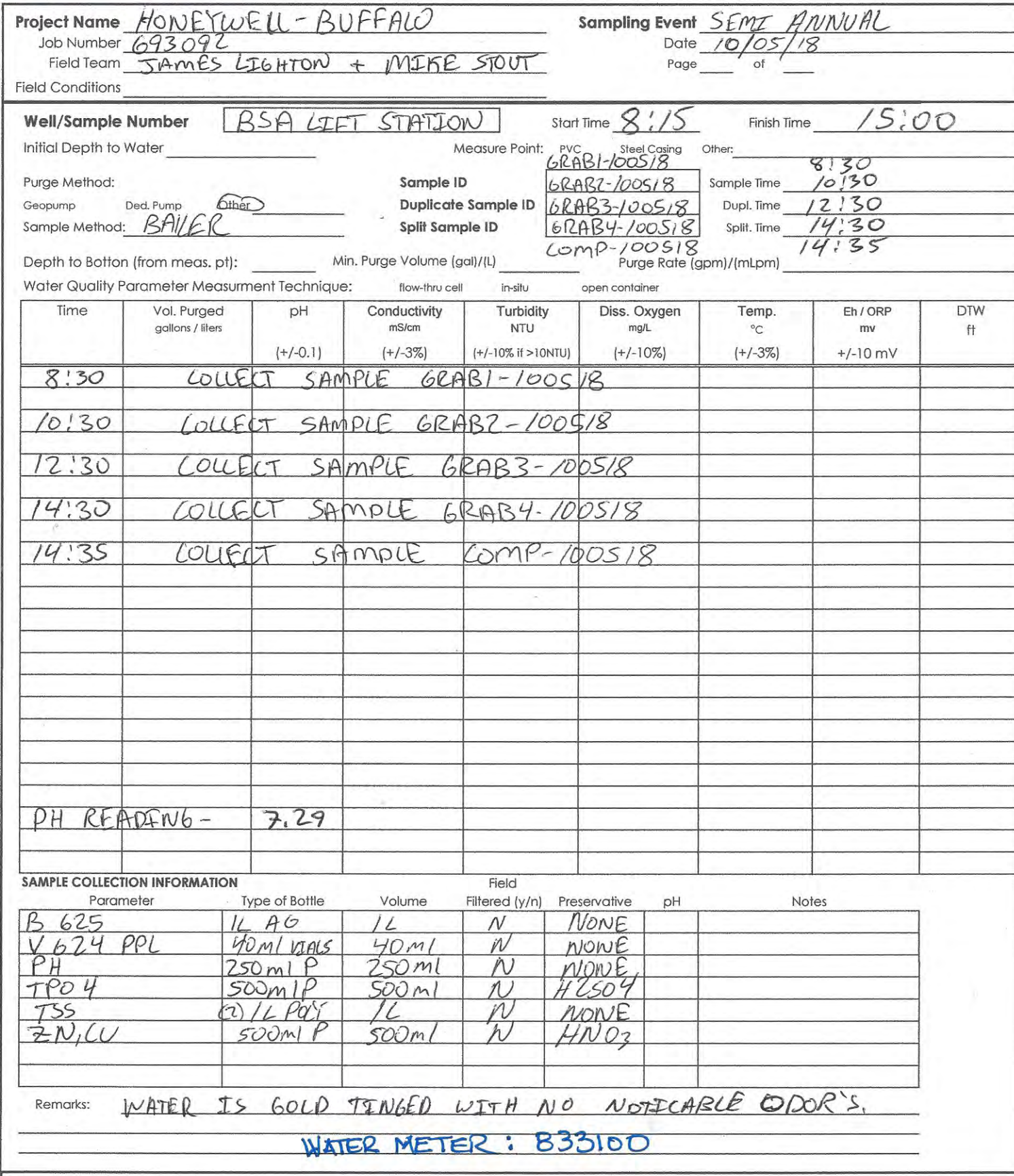
LANDFILL

HOPKINS ST.

READING

PRETREATMENT BUILDING
S.P. 001





The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Honeywell International Inc. OMM work

HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

R35116

SGS Job Number: JC75495

Sampling Date: 10/05/18

Report to:

Wood Environment & Infrastructure Solut.
511 Congress Street
Portland, ME 04112
HTS-RES-LAB@Honeywell.com; Ryan.Belcher@amecfw.com
ATTN: Ryan Belcher

Total number of pages in report: **70**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



A. Paul Ioannidis
General Manager

Client Service contact: Rocus Peters 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Summary of Hits	6
Section 4: Sample Results	7
4.1: JC75495-1: GRAB 1-100518/BSA DISCHARGE	8
4.2: JC75495-2: COMP-100518/BSA DISCHARGE	12
Section 5: Misc. Forms	14
5.1: Certification Exceptions	15
5.2: Chain of Custody	16
Section 6: MS Volatiles - QC Data Summaries	19
6.1: Method Blank Summary	20
6.2: Blank Spike Summary	22
6.3: Matrix Spike Summary	24
6.4: Duplicate Summary	26
6.5: Instrument Performance Checks (BFB)	28
6.6: Surrogate Recovery Summaries	30
Section 7: MS Semi-volatiles - QC Data Summaries	31
7.1: Method Blank Summary	32
7.2: Blank Spike/Blank Spike Duplicate Summary	38
7.3: Instrument Performance Checks (DFTPP)	40
7.4: Surrogate Recovery Summaries	55
Section 8: Metals Analysis - QC Data Summaries	56
8.1: Prep QC MP9583: Cu,Zn	57
Section 9: General Chemistry - QC Data Summaries	67
9.1: Method Blank and Spike Results Summary	68
9.2: Duplicate Results Summary	69
9.3: Matrix Spike Results Summary	70



Sample Summary

Honeywell International Inc. OMM work

Job No: JC75495

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116

Sample Number	Collected		Matrix Code	Type	Client	
	Date	Time By	Received		Sample ID	
JC75495-1	10/05/18	14:30 JL	10/06/18	AQ	Ground Water	GRAB 1-100518/BSA DISCHARGE
JC75495-2	10/05/18	14:35 JL	10/06/18	AQ	Ground Water	COMP-100518/BSA DISCHARGE

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Honeywell International Inc. OMM work

Job No JC75495

Site: HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

Report Date 10/23/2018 10:11:55 A

On 10/06/2018, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.3 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC75495 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method EPA 624.1

Matrix: AQ

Batch ID: VN11477

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC75315-1DUP, JC75315-2MS were used as the QC samples indicated.
- Blank Spike Recovery(s) for Bromoform, Dibromochloromethane are outside control limits. High percent recoveries and no associated positive reported in the QC batch.
- Matrix Spike Recovery(s) for 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Carbon tetrachloride, Chlorobenzene, Ethylbenzene, Tetrachloroethene, Xylenes (total) are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for Vinyl chloride are outside control limits for sample JC75315-1DUP. Outside control limits due to vial differences.
- JC75495-1: (pH=7) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.
- JC75495-1 for Dibromochloromethane: This compound in BS is outside in house QC limits bias high.
- JC75495-1 for Bromoform: Associated CCV and BS outside of control limits high, sample was ND.
- JC75315-2MS for Bromoform: Outside control limits.
- JC75315-2MS for Dibromochloromethane: Outside control limits.
- JC75315-2MS for 2-Chloroethyl vinyl ether: Outside control limits due to acid preservation.

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ

Batch ID: OP15770

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP15770-BSD for Isophorone: Analytical precision exceeds in-house control limits.
- OP15770-BSD for bis(2-Chloroethyl)ether: Analytical precision exceeds in-house control limits.
- OP15770-BSD for Nitrobenzene: Analytical precision exceeds in-house control limits.
- OP15770-BSD for bis(2-Chloroethoxy)methane: Analytical precision exceeds in-house control limits.
- OP15770-BSD for N-Nitroso-di-n-propylamine: Analytical precision exceeds in-house control limits.
- OP15770-BSD for n-Nitrosodimethylamine: Analytical precision exceeds in-house control limits.

Tuesday, October 23, 2018

Page 1 of 2

Metals Analysis By Method EPA 200.7

Matrix: AQ

Batch ID: MP9583

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC75435-1MS, JC75435-1MSD, JC75435-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Zinc are outside control limits for sample MP9583-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

General Chemistry By Method EPA 365.3

Matrix: AQ

Batch ID: GP16629

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC75433-1MS, JC75433-1DUP were used as the QC samples for Phosphorus, Total.
- RPD(s) for Duplicate for Phosphorus, Total are outside control limits for sample GP16629-D1. RPD acceptable due to low duplicate and sample concentrations.

General Chemistry By Method SM2540 D-11

Matrix: AQ

Batch ID: GN86834

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC75456-4DUP were used as the QC samples for Solids, Total Suspended.
- JC75495-2 for Solids, Total Suspended: Reported sample aliquot obtained from filtration of 100 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ

Batch ID: R173355

- The data for SM4500H+ B-11 meets quality control requirements.
- JC75495-2 for pH: Sample received out of holding time for pH analysis.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Page 1 of 1

Job Number: JC75495

Account: Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Collected: 10/05/18



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

JC75495-1 GRAB 1-100518/BSA DISCHARGE

Benzene ^a	0.47 J	1.0	0.34	ug/l	EPA 624.1
Chlorobenzene ^a	15.8	1.0	0.30	ug/l	EPA 624.1
Chloroform ^a	2.2	1.0	0.35	ug/l	EPA 624.1
1,2-Dichlorobenzene ^a	0.88 J	1.0	0.26	ug/l	EPA 624.1
1,4-Dichlorobenzene ^a	1.4	1.0	0.78	ug/l	EPA 624.1
cis-1,2-Dichloroethene ^a	5.7	1.0	0.32	ug/l	EPA 624.1
Vinyl chloride ^a	12.7	1.0	0.53	ug/l	EPA 624.1
4-Chloroaniline	1.9 J	4.8	0.33	ug/l	EPA 625.1
1,2-Dichlorobenzene	0.45 J	0.96	0.16	ug/l	EPA 625.1
1,4-Dichlorobenzene	0.61 J	0.96	0.17	ug/l	EPA 625.1
Naphthalene	0.35 J	0.96	0.22	ug/l	EPA 625.1
N-Nitrosodiphenylamine	0.37 J	4.8	0.21	ug/l	EPA 625.1

JC75495-2 COMP-100518/BSA DISCHARGE

Copper	6.8 J	10	4.1	ug/l	EPA 200.7
Zinc	15.9 J	20	8.5	ug/l	EPA 200.7
Phosphorus, Total	0.13	0.050	0.027	mg/l	EPA 365.3
Solids, Total Suspended ^b	26.0	4.0	1.5	mg/l	SM2540 D-11
pH ^c	7.23			su	SM4500H+ B-11

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.

(b) Reported sample aliquot obtained from filtration of 100 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

(c) Sample received out of holding time for pH analysis.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1-100518/BSA DISCHARGE	Date Sampled:	10/05/18
Lab Sample ID:	JC75495-1	Date Received:	10/06/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 624.1		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	N272284.D	1	10/08/18 19:49	CSF	n/a	n/a	VN11477
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	1.1	ug/l	
107-13-1	Acrylonitrile	ND	10	0.48	ug/l	
71-43-2	Benzene	0.47	1.0	0.34	ug/l	J
75-27-4	Bromodichloromethane	ND	1.0	0.28	ug/l	
75-25-2	Bromoform ^b	ND	1.0	0.32	ug/l	
74-83-9	Bromomethane	ND	1.0	0.59	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.33	ug/l	
108-90-7	Chlorobenzene	15.8	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.4	ug/l	
67-66-3	Chloroform	2.2	1.0	0.35	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane ^c	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	0.88	1.0	0.26	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.83	ug/l	
106-46-7	1,4-Dichlorobenzene	1.4	1.0	0.78	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.80	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	5.7	1.0	0.32	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.27	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.75	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.33	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.29	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAB 1-100518/BSA DISCHARGE		
Lab Sample ID:	JC75495-1	Date Sampled:	10/05/18
Matrix:	AQ - Ground Water	Date Received:	10/06/18
Method:	EPA 624.1	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.66	ug/l	
75-01-4	Vinyl chloride	12.7	1.0	0.53	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	96%		76-122%
2037-26-5	Toluene-D8 (SUR)	95%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	85%		80-120%
1868-53-7	Dibromofluoromethane (S)	95%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.
- (b) Associated CCV and BS outside of control limits high, sample was ND.
- (c) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAB 1-100518/BSA DISCHARGE	Date Sampled:	10/05/18
Lab Sample ID:	JC75495-1	Date Received:	10/06/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 625.1 EPA 625		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M107678A.D	1	10/22/18 12:29	YC	10/11/18 07:10	OP15770	E2M4789
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.96	0.18	ug/l	
208-96-8	Acenaphthylene	ND	0.96	0.13	ug/l	
120-12-7	Anthracene	ND	0.96	0.20	ug/l	
92-87-5	Benzidine	ND	9.6	0.87	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.96	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.96	0.20	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.96	0.20	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.96	0.33	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.96	0.20	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.39	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.44	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.23	ug/l	
106-47-8	4-Chloroaniline	1.9	4.8	0.33	ug/l	J
218-01-9	Chrysene	ND	0.96	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.27	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.24	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	1.9	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.35	ug/l	
95-50-1	1,2-Dichlorobenzene	0.45	0.96	0.16	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	0.96	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	0.96	0.18	ug/l	
106-46-7	1,4-Dichlorobenzene	0.61	0.96	0.17	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.46	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	0.49	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.96	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.48	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.9	0.22	ug/l	
84-66-2	Diethyl phthalate	ND	1.9	0.25	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.21	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.6	ug/l	
206-44-0	Fluoranthene	ND	0.96	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAB 1-100518/BSA DISCHARGE		
Lab Sample ID:	JC75495-1	Date Sampled:	10/05/18
Matrix:	AQ - Ground Water	Date Received:	10/06/18
Method:	EPA 625.1 EPA 625	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

BN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
86-73-7	Fluorene	ND	0.96	0.16	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.47	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.6	2.7	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.37	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.96	0.32	ug/l	
78-59-1	Isophorone	ND	1.9	0.27	ug/l	
91-20-3	Naphthalene	0.35	0.96	0.22	ug/l	J
98-95-3	Nitrobenzene	ND	1.9	0.62	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.78	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	0.37	4.8	0.21	ug/l	J
85-01-8	Phenanthrene	ND	0.96	0.17	ug/l	
129-00-0	Pyrene	ND	0.96	0.21	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		32-132%
321-60-8	2-Fluorobiphenyl	62%		40-117%
1718-51-0	Terphenyl-d14	57%		33-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMP-100518/BSA DISCHARGE	Date Sampled:	10/05/18
Lab Sample ID:	JC75495-2	Date Received:	10/06/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Copper	6.8 J	10	4.1	ug/l	1	10/10/18	10/11/18 ND	EPA 200.7 ¹	EPA 200.7 ²
Zinc	15.9 J	20	8.5	ug/l	1	10/10/18	10/11/18 ND	EPA 200.7 ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA45438
(2) Prep QC Batch: MP9583

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	COMP-100518/BSA DISCHARGE	Date Sampled:	10/05/18
Lab Sample ID:	JC75495-2	Date Received:	10/06/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Phosphorus, Total	0.13	0.050	0.027	mg/l	1	10/18/18 12:57 MP	EPA	365.3
Solids, Total Suspended ^a	26.0	4.0	1.5	mg/l	1	10/10/18 13:14 RI	SM2540 D-11	
pH ^b	7.23			su	1	10/08/18 15:57 SUB	SM4500H+	B-11

- (a) Reported sample aliquot obtained from filtration of 100 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.
- (b) Sample received out of holding time for pH analysis.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC75495
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
1,2-Dichlorobenzene	95-50-1	EPA 625.1	AQ	SGS is not certified for this parameter. ^a
1,3-Dichlorobenzene	541-73-1	EPA 625.1	AQ	SGS is not certified for this parameter. ^a
1,4-Dichlorobenzene	106-46-7	EPA 625.1	AQ	SGS is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

[illegible]

SGS Sample Receipt Summary

Job Number: JC75495

Client: AMEC FOSTER WHEELER

Project: HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 10/6/2018 9:30:00 AM

Delivery Method: FedEx

Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (3.9);

Cooler Temps (Corrected) °C: Cooler 1: (3.3);

Cooler Security
Y or N
Y or N

1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature
Y or N

1. Temp criteria achieved: ☒ ☐	IR Gun
2. Cooler temp verification:	
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

Quality Control Preservation
Y or N
N/A

1. Trip Blank present / cooler: ☐ ☒ ☐	
2. Trip Blank listed on COC: ☐ ☒ ☐	
3. Samples preserved properly: ☒ ☐ ☐	
4. VOCs headspace free: ☒ ☐ ☐	

Sample Integrity - Documentation
Y or N

1. Sample labels present on bottles: ☒ ☐	
2. Container labeling complete: ☒ ☐	
3. Sample container label / COC agree: ☒ ☐	

Sample Integrity - Condition
Y or N

1. Sample recvd within HT: ☒ ☐	
2. All containers accounted for: ☒ ☐	
3. Condition of sample: ☐ ☐	Intact

Sample Integrity - Instructions
Y or N
N/A

1. Analysis requested is clear: ☒ ☐	
2. Bottles received for unspecified tests: ☐ ☒	
3. Sufficient volume recvd for analysis: ☒ ☐	
4. Compositing instructions clear: ☐ ☐	☒
5. Filtering instructions clear: ☐ ☐	☒

Test Strip Lot #s:
pH 1-12: 216017

pH 12+: 208717

Other: (Specify)
Comments

- 1) Did not receive TB.
- 2) -1 for VOA 624 UNPR, samples rec'd within hold, processed out of hold. VOA to be composited by lab prior to analysis.

SM089-02 Rev. Date 12/1/16

JC75495: Chain of Custody

Page 2 of 3



-1 proceed as stated

-2 proceed out of hold

5.2

5

JC75495: Chain of Custody
Page 3 of 3



MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: JC75495**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11477-MB	N272266.D	1	10/08/18	CSF	n/a	n/a	VN11477

The QC reported here applies to the following samples:**Method:** EPA 624.1

JC75495-1

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	1.1	ug/l	
107-13-1	Acrylonitrile	ND	10	0.48	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.28	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
74-83-9	Bromomethane	ND	1.0	0.59	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.33	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.4	ug/l	
67-66-3	Chloroform	ND	1.0	0.35	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.83	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.78	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.80	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.32	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.27	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.75	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.33	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.29	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.66	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.53	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

Job Number: JC75495
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11477-MB	N272266.D	1	10/08/18	CSF	n/a	n/a	VN11477

The QC reported here applies to the following samples: Method: EPA 624.1

JC75495-1

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	93% 76-122%
2037-26-5	Toluene-D8 (SUR)	97% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	91% 80-120%
1868-53-7	Dibromofluoromethane (S)	94% 80-120%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.40	26	ug/l	J
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Page 1 of 2

Job Number: JC75495**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11477-BS	N272264.D	1	10/08/18	CSF	n/a	n/a	VN11477

The QC reported here applies to the following samples:**Method:** EPA 624.1

JC75495-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	15.3	77	60-140
107-13-1	Acrylonitrile	20	21.3	107	64-137
71-43-2	Benzene	20	21.0	105	78-118
75-27-4	Bromodichloromethane	20	20.2	101	77-119
75-25-2	Bromoform	20	27.2	136* a	70-128
74-83-9	Bromomethane	20	21.6	108	59-141
56-23-5	Carbon tetrachloride	20	23.1	116	69-130
108-90-7	Chlorobenzene	20	21.8	109	78-116
75-00-3	Chloroethane	20	18.4	92	63-136
110-75-8	2-Chloroethyl vinyl ether	100	89.5	90	55-147
67-66-3	Chloroform	20	18.2	91	78-122
74-87-3	Chloromethane	20	16.4	82	49-125
124-48-1	Dibromochloromethane	20	24.9	125* a	75-117
95-50-1	1,2-Dichlorobenzene	20	22.0	110	76-115
541-73-1	1,3-Dichlorobenzene	20	21.5	108	75-114
106-46-7	1,4-Dichlorobenzene	20	20.9	105	75-113
75-71-8	Dichlorodifluoromethane	20	21.2	106	48-129
75-34-3	1,1-Dichloroethane	20	18.5	93	73-124
107-06-2	1,2-Dichloroethane	20	17.3	87	74-127
75-35-4	1,1-Dichloroethene	20	19.4	97	54-122
156-59-2	cis-1,2-Dichloroethene	20	20.0	100	72-115
156-60-5	trans-1,2-Dichloroethene	20	19.3	97	70-121
78-87-5	1,2-Dichloropropane	20	19.7	99	75-118
10061-01-5	cis-1,3-Dichloropropene	20	20.0	100	76-118
10061-02-6	trans-1,3-Dichloropropene	20	20.4	102	70-122
100-41-4	Ethylbenzene	20	22.0	110	76-118
75-09-2	Methylene chloride	20	19.0	95	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	20.9	105	66-119
127-18-4	Tetrachloroethene	20	24.6	123	70-130
108-88-3	Toluene	20	22.1	111	78-119
71-55-6	1,1,1-Trichloroethane	20	19.6	98	74-130
79-00-5	1,1,2-Trichloroethane	20	21.1	106	74-121
79-01-6	Trichloroethene	20	20.9	105	78-117
75-69-4	Trichlorofluoromethane	20	20.5	103	66-126
75-01-4	Vinyl chloride	20	17.6	88	54-125
1330-20-7	Xylenes (total)	60	67.7	113	76-120

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11477-BS	N272264.D	1	10/08/18	CSF	n/a	n/a	VN11477

The QC reported here applies to the following samples:

Method: EPA 624.1

JC75495-1

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	89%	76-122%
2037-26-5	Toluene-D8 (SUR)	102%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	96%	80-120%
1868-53-7	Dibromofluoromethane (S)	92%	80-120%

(a) High percent recoveries and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike Summary

Page 1 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC75315-2MS	N272275.D	1	10/08/18	CSF	n/a	n/a	VN11477
JC75315-2	N272268.D	1	10/08/18	CSF	n/a	n/a	VN11477

The QC reported here applies to the following samples:

Method: EPA 624.1

JC75495-1

CAS No.	Compound	JC75315-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
107-02-8	Acrolein	ND		20	22.3	112	40-154
107-13-1	Acrylonitrile	ND		20	25.1	126	60-142
71-43-2	Benzene	ND		20	26.3	132	59-136
75-27-4	Bromodichloromethane	ND		20	24.9	125	73-125
75-25-2	Bromoform	ND		20	32.6	163* a	62-134
74-83-9	Bromomethane	ND		20	22.5	113	54-149
56-23-5	Carbon tetrachloride	ND		20	29.6	148* b	70-140
108-90-7	Chlorobenzene	ND		20	26.6	133* b	69-128
75-00-3	Chloroethane	ND		20	19.1	96	58-145
110-75-8	2-Chloroethyl vinyl ether	ND		100	ND	0* c	10-179
67-66-3	Chloroform	ND		20	22.5	113	71-131
74-87-3	Chloromethane	ND		20	15.8	79	44-136
124-48-1	Dibromochloromethane	ND		20	30.0	150* a	72-123
95-50-1	1,2-Dichlorobenzene	ND		20	26.3	132* b	69-123
541-73-1	1,3-Dichlorobenzene	ND		20	26.4	132* b	71-122
106-46-7	1,4-Dichlorobenzene	ND		20	25.5	128* b	69-121
75-71-8	Dichlorodifluoromethane	ND		20	17.6	88	42-138
75-34-3	1,1-Dichloroethane	ND		20	23.2	116	66-132
107-06-2	1,2-Dichloroethane	ND		20	20.9	105	68-140
75-35-4	1,1-Dichloroethene	ND		20	25.3	127	49-127
156-59-2	cis-1,2-Dichloroethene	9.7		20	34.1	122	50-134
156-60-5	trans-1,2-Dichloroethene	ND		20	25.3	127	63-129
78-87-5	1,2-Dichloropropane	ND		20	24.1	121	73-123
10061-01-5	cis-1,3-Dichloropropene	ND		20	22.8	114	71-124
10061-02-6	trans-1,3-Dichloropropene	ND		20	23.8	119	66-127
100-41-4	Ethylbenzene	ND		20	26.6	133* b	65-130
75-09-2	Methylene chloride	ND		20	23.2	116	65-127
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	23.8	119	62-126
127-18-4	Tetrachloroethene	ND		20	33.0	165* b	51-145
108-88-3	Toluene	ND		20	26.3	132	66-132
71-55-6	1,1,1-Trichloroethane	ND		20	25.0	125	63-143
79-00-5	1,1,2-Trichloroethane	ND		20	24.8	124	71-127
79-01-6	Trichloroethene	18.5		20	46.8	142	46-145
75-69-4	Trichlorofluoromethane	ND		20	21.9	110	57-139
75-01-4	Vinyl chloride	ND		20	17.4	87	45-136
1330-20-7	Xylenes (total)	ND		60	80.8	135* b	66-131

* = Outside of Control Limits.

Matrix Spike Summary

Page 2 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC75315-2MS	N272275.D	1	10/08/18	CSF	n/a	n/a	VN11477
JC75315-2	N272268.D	1	10/08/18	CSF	n/a	n/a	VN11477

The QC reported here applies to the following samples:

Method: EPA 624.1

JC75495-1

CAS No.	Surrogate Recoveries	MS	JC75315-2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	91%	93%	76-122%
2037-26-5	Toluene-D8 (SUR)	102%	95%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	93%	91%	80-120%
1868-53-7	Dibromofluoromethane (S)	93%	94%	80-120%

(a) Outside control limits.

(b) Outside control limits due to matrix interference.

(c) Outside control limits due to acid preservation.

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC75315-1DUP	N272277.D	1	10/08/18	CSF	n/a	n/a	VN11477
JC75315-1	N272267.D	1	10/08/18	CSF	n/a	n/a	VN11477

The QC reported here applies to the following samples:

Method: EPA 624.1

JC75495-1

CAS No.	Compound	JC75315-1 ug/l	DUP Q ug/l	Q	RPD	Limits
107-02-8	Acrolein	ND	ND		nc	10
107-13-1	Acrylonitrile	ND	ND		nc	10
71-43-2	Benzene	ND	ND		nc	12
75-27-4	Bromodichloromethane	ND	ND		nc	10
75-25-2	Bromoform	ND	ND		nc	10
74-83-9	Bromomethane	ND	ND		nc	10
56-23-5	Carbon tetrachloride	ND	ND		nc	10
108-90-7	Chlorobenzene	ND	ND		nc	10
75-00-3	Chloroethane	ND	ND		nc	10
110-75-8	2-Chloroethyl vinyl ether	ND	ND		nc	10
67-66-3	Chloroform	ND	ND		nc	20
74-87-3	Chloromethane	ND	ND		nc	10
124-48-1	Dibromochloromethane	ND	ND		nc	10
95-50-1	1,2-Dichlorobenzene	ND	ND		nc	10
541-73-1	1,3-Dichlorobenzene	ND	ND		nc	10
106-46-7	1,4-Dichlorobenzene	ND	ND		nc	10
75-71-8	Dichlorodifluoromethane	ND	ND		nc	10
75-34-3	1,1-Dichloroethane	ND	ND		nc	13
107-06-2	1,2-Dichloroethane	ND	ND		nc	11
75-35-4	1,1-Dichloroethene	ND	ND		nc	14
156-59-2	cis-1,2-Dichloroethene	29.7	27.9		6	22
156-60-5	trans-1,2-Dichloroethene	ND	ND		nc	14
78-87-5	1,2-Dichloropropane	ND	ND		nc	10
10061-01-5	cis-1,3-Dichloropropene	ND	ND		nc	10
10061-02-6	trans-1,3-Dichloropropene	ND	ND		nc	10
100-41-4	Ethylbenzene	ND	ND		nc	10
75-09-2	Methylene chloride	ND	ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	ND		nc	10
127-18-4	Tetrachloroethene	ND	ND		nc	16
108-88-3	Toluene	ND	ND		nc	13
71-55-6	1,1,1-Trichloroethane	ND	ND		nc	10
79-00-5	1,1,2-Trichloroethane	ND	ND		nc	10
79-01-6	Trichloroethene	67.7	71.4		5	18
75-69-4	Trichlorofluoromethane	ND	ND		nc	10
75-01-4	Vinyl chloride	2.2	1.9		15* a	14
1330-20-7	Xylenes (total)	ND	ND		nc	14

* = Outside of Control Limits.

Duplicate Summary

Page 2 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC75315-1DUP	N272277.D	1	10/08/18	CSF	n/a	n/a	VN11477
JC75315-1	N272267.D	1	10/08/18	CSF	n/a	n/a	VN11477

The QC reported here applies to the following samples:

Method: EPA 624.1

JC75495-1

CAS No.	Surrogate Recoveries	DUP	JC75315-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	93%	93%	76-122%
2037-26-5	Toluene-D8 (SUR)	98%	99%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	89%	91%	80-120%
1868-53-7	Dibromofluoromethane (S)	94%	94%	80-120%

(a) Outside control limits due to vial differences.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: VN11448-BFB

Injection Date: 09/04/18

Lab File ID: N271624.D

Injection Time: 16:05

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	19197	17.6	Pass
75	30.0 - 60.0% of mass 95	53405	48.9	Pass
95	Base peak, 100% relative abundance	109272	100.0	Pass
96	5.0 - 9.0% of mass 95	7270	6.65	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	81040	74.2	Pass
175	5.0 - 9.0% of mass 174	6052	5.54 (7.47) ^a	Pass
176	95.0 - 101.0% of mass 174	78352	71.7 (96.7) ^a	Pass
177	5.0 - 9.0% of mass 176	5218	4.78 (6.66) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VN11448-IC11448	N271625.D	09/04/18	16:48	00:43	Initial cal 0.5
VN11448-IC11448	N271626.D	09/04/18	17:17	01:12	Initial cal 1
VN11448-IC11448	N271627.D	09/04/18	17:47	01:42	Initial cal 2
VN11448-IC11448	N271628.D	09/04/18	18:16	02:11	Initial cal 4
VN11448-IC11448	N271629.D	09/04/18	18:46	02:41	Initial cal 8
VN11448-ICC11448	N271630.D	09/04/18	19:16	03:11	Initial cal 20
VN11448-IC11448	N271631.D	09/04/18	19:45	03:40	Initial cal 50
VN11448-IC11448	N271632.D	09/04/18	20:15	04:10	Initial cal 100
VN11448-IC11448	N271633.D	09/04/18	20:44	04:39	Initial cal 200
VN11448-ICV11448	N271636.D	09/04/18	22:13	06:08	Initial cal verification 20
VN11448-ICV11448	N271637.D	09/04/18	22:42	06:37	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: VN11477-BFB

Injection Date: 10/08/18

Lab File ID: N272263.D

Injection Time: 09:32

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	20632	16.0	Pass
75	30.0 - 60.0% of mass 95	58581	45.3	Pass
95	Base peak, 100% relative abundance	129344	100.0	Pass
96	5.0 - 9.0% of mass 95	9024	6.98	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	103680	80.2	Pass
175	5.0 - 9.0% of mass 174	7711	5.96 (7.44) ^a	Pass
176	95.0 - 101.0% of mass 174	102051	78.9 (98.4) ^a	Pass
177	5.0 - 9.0% of mass 176	6433	4.97 (6.30) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VN11477-CC11448	N272264.D	10/08/18	10:04	00:32	Continuing cal 20
VN11477-BS	N272264.D	10/08/18	10:04	00:32	Blank Spike
VN11477-MB	N272266.D	10/08/18	11:02	01:30	Method Blank
JC75315-1	N272267.D	10/08/18	11:31	01:59	(used for QC only; not part of job JC75495)
JC75315-2	N272268.D	10/08/18	12:00	02:28	(used for QC only; not part of job JC75495)
ZZZZZZ	N272269.D	10/08/18	12:29	02:57	(unrelated sample)
ZZZZZZ	N272270.D	10/08/18	12:59	03:27	(unrelated sample)
ZZZZZZ	N272271.D	10/08/18	13:28	03:56	(unrelated sample)
ZZZZZZ	N272272.D	10/08/18	13:57	04:25	(unrelated sample)
ZZZZZZ	N272273.D	10/08/18	14:27	04:55	(unrelated sample)
ZZZZZZ	N272274.D	10/08/18	14:56	05:24	(unrelated sample)
JC75315-2MS	N272275.D	10/08/18	15:26	05:54	Matrix Spike
JC75315-1DUP	N272277.D	10/08/18	16:24	06:52	Duplicate
ZZZZZZ	N272278.D	10/08/18	16:53	07:21	(unrelated sample)
ZZZZZZ	N272279.D	10/08/18	17:23	07:51	(unrelated sample)
ZZZZZZ	N272280.D	10/08/18	17:52	08:20	(unrelated sample)
ZZZZZZ	N272281.D	10/08/18	18:21	08:49	(unrelated sample)
ZZZZZZ	N272282.D	10/08/18	18:50	09:18	(unrelated sample)
ZZZZZZ	N272283.D	10/08/18	19:20	09:48	(unrelated sample)
JC75495-1	N272284.D	10/08/18	19:49	10:17	GRAB 1-100518/BSA DISCHARGE
ZZZZZZ	N272285.D	10/08/18	20:18	10:46	(unrelated sample)
ZZZZZZ	N272286.D	10/08/18	20:47	11:15	(unrelated sample)
ZZZZZZ	N272287.D	10/08/18	21:17	11:45	(unrelated sample)

Surrogate Recovery Summary

Job Number: JC75495
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: EPA 624.1	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC75495-1	N272284.D	96	95	85	95
JC75315-1DUP	N272277.D	93	98	89	94
JC75315-2MS	N272275.D	91	102	93	93
VN11477-BS	N272264.D	89	102	96	92
VN11477-MB	N272266.D	93	97	91	94

Surrogate Compounds	Recovery Limits
S1 = 1,2-Dichloroethane-D4 (SUR)	76-122%
S2 = Toluene-D8 (SUR)	80-120%
S3 = 4-Bromofluorobenzene (SUR)	80-120%
S4 = Dibromofluoromethane (S)	80-120%

6.6.1
6



MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: JC75495**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15770-MB1	3E104646.D	1	10/12/18	SA	10/11/18	OP15770	E3E4654

The QC reported here applies to the following samples:**Method:** EPA 625.1

JC75495-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	

Method Blank Summary

Page 2 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15770-MB1	3E104646.D	1	10/12/18	SA	10/11/18	OP15770	E3E4654

The QC reported here applies to the following samples:

Method: EPA 625.1

JC75495-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	53%	10-110%
4165-62-2	Phenol-d5	35%	10-110%
118-79-6	2,4,6-Tribromophenol	120%	35-147%
4165-60-0	Nitrobenzene-d5	80%	32-132%
321-60-8	2-Fluorobiphenyl	83%	40-117%
1718-51-0	Terphenyl-d14	103%	33-126%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	1.85	4.7	ug/l	J
	unknown	15.08	11	ug/l	J
	Total TIC, Semi-Volatile		11	ug/l	J

Method Blank Summary

Page 1 of 2

Job Number: JC75495**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15770-MB1	P125927.D	1	10/17/18	CS	10/11/18	OP15770	EP5674

The QC reported here applies to the following samples:**Method:** EPA 625.1

JC75495-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	

Method Blank Summary

Page 2 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15770-MB1	P125927.D	1	10/17/18	CS	10/11/18	OP15770	EP5674

The QC reported here applies to the following samples:

Method: EPA 625.1

JC75495-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	53% 10-110%
4165-62-2	Phenol-d5	36% 10-110%
118-79-6	2,4,6-Tribromophenol	92% 35-147%
4165-60-0	Nitrobenzene-d5	82% 32-132%
321-60-8	2-Fluorobiphenyl	80% 40-117%
1718-51-0	Terphenyl-d14	103% 33-126%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	unknown	14.55	11	ug/l	J
	system artifact	16.99	4.1	ug/l	J
	system artifact	19.09	4.3	ug/l	J
	system artifact	19.73	4.2	ug/l	J
	system artifact	20.36	4.1	ug/l	J
	Total TIC, Semi-Volatile		11	ug/l	J

Method Blank Summary

Page 1 of 2

Job Number: JC75495**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15770-MB1	2M107675.D	1	10/22/18	YC	10/11/18	OP15770	E2M4789

The QC reported here applies to the following samples:**Method:** EPA 625.1

JC75495-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	

Method Blank Summary

Page 2 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15770-MB1	2M107675.D	1	10/22/18	YC	10/11/18	OP15770	E2M4789

The QC reported here applies to the following samples:

Method: EPA 625.1

JC75495-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	50%	10-110%
4165-62-2	Phenol-d5	34%	10-110%
118-79-6	2,4,6-Tribromophenol	90%	35-147%
4165-60-0	Nitrobenzene-d5	83%	32-132%
321-60-8	2-Fluorobiphenyl	82%	40-117%
1718-51-0	Terphenyl-d14	85%	33-126%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	1.54	9.8	ug/l	J
	system artifact	1.64	16	ug/l	J
	system artifact	1.98	6.3	ug/l	J
	unknown	15.29	13	ug/l	J
	Total TIC, Semi-Volatile		13	ug/l	J

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15770-BS1	3E104647.D	1	10/12/18	SA	10/11/18	OP15770	E3E4654
OP15770-BSD	3E104648.D	1	10/12/18	SA	10/11/18	OP15770	E3E4654

The QC reported here applies to the following samples:

Method: EPA 625.1

JC75495-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	50	34.5	69	41.8	84	19	47-110/24
208-96-8	Acenaphthylene	50	35.4	71	42.9	86	19	45-110/24
120-12-7	Anthracene	50	39.2	78	46.0	92	16	52-110/24
92-87-5	Benidine	100	15.0	15	10.2	10	38	10-110/65
56-55-3	Benzo(a)anthracene	50	39.9	80	46.0	92	14	53-110/20
50-32-8	Benzo(a)pyrene	50	40.8	82	48.7	97	18	55-110/23
205-99-2	Benzo(b)fluoranthene	50	40.1	80	47.7	95	17	57-110/23
191-24-2	Benzo(g,h,i)perylene	50	40.1	80	47.6	95	17	51-110/23
207-08-9	Benzo(k)fluoranthene	50	41.1	82	46.2	92	12	56-110/22
101-55-3	4-Bromophenyl phenyl ether	50	39.6	79	45.5	91	14	51-112/23
85-68-7	Butyl benzyl phthalate	50	44.4	89	51.8	104	15	50-122/23
91-58-7	2-Chloronaphthalene	50	33.5	67	40.7	81	19	41-110/26
106-47-8	4-Chloroaniline	50	24.1	48	33.1	66	31	10-110/44
218-01-9	Chrysene	50	37.1	74	41.2	82	10	52-110/20
111-91-1	bis(2-Chloroethoxy)methane	50	34.4	69	44.7	89	26* a	36-110/21
111-44-4	bis(2-Chloroethyl)ether	50	33.3	67	42.9	86	25* a	40-111/21
108-60-1	2,2'-Oxybis(1-chloropropane)	50	35.3	71	43.6	87	21	37-110/25
7005-72-3	4-Chlorophenyl phenyl ether	50	35.4	71	41.8	84	17	48-110/25
95-50-1	1,2-Dichlorobenzene	50	28.9	58	37.1	74	25	35-110/28
122-66-7	1,2-Diphenylhydrazine	50	38.8	78	47.7	95	21	39-128/23
541-73-1	1,3-Dichlorobenzene	50	28.2	56	36.3	73	25	32-110/28
106-46-7	1,4-Dichlorobenzene	50	28.2	56	36.3	73	25	33-110/27
121-14-2	2,4-Dinitrotoluene	50	40.9	82	47.6	95	15	61-117/25
606-20-2	2,6-Dinitrotoluene	50	40.8	82	47.2	94	15	61-119/23
91-94-1	3,3'-Dichlorobenzidine	100	67.0	67	83.0	83	21	20-110/33
53-70-3	Dibenzo(a,h)anthracene	50	39.0	78	47.0	94	19	55-110/25
84-74-2	Di-n-butyl phthalate	50	40.2	80	48.1	96	18	55-118/25
117-84-0	Di-n-octyl phthalate	50	39.7	79	46.9	94	17	49-124/26
84-66-2	Diethyl phthalate	50	37.8	76	44.8	90	17	54-113/23
131-11-3	Dimethyl phthalate	50	37.8	76	45.0	90	17	56-110/23
117-81-7	bis(2-Ethylhexyl)phthalate	50	45.1	90	52.6	105	15	50-120/22
206-44-0	Fluoranthene	50	38.3	77	45.7	91	18	55-111/23
86-73-7	Fluorene	50	36.3	73	43.3	87	18	51-110/25
118-74-1	Hexachlorobenzene	50	39.3	79	45.2	90	14	47-116/23
87-68-3	Hexachlorobutadiene	50	29.6	59	37.0	74	22	24-110/34
77-47-4	Hexachlorocyclopentadiene	100	67.9	68	81.6	82	18	10-110/39

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15770-BS1	3E104647.D	1	10/12/18	SA	10/11/18	OP15770	E3E4654
OP15770-BSD	3E104648.D	1	10/12/18	SA	10/11/18	OP15770	E3E4654

The QC reported here applies to the following samples:

Method: EPA 625.1

JC75495-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-72-1	Hexachloroethane	50	28.0	56	35.2	70	23	28-110/34
193-39-5	Indeno(1,2,3-cd)pyrene	50	39.9	80	47.8	96	18	51-112/24
78-59-1	Isophorone	50	34.7	69	44.1	88	24* a	42-111/20
91-20-3	Naphthalene	50	30.3	61	38.6	77	24	34-110/25
98-95-3	Nitrobenzene	50	30.9	62	39.9	80	25* a	39-110/21
62-75-9	n-Nitrosodimethylamine	50	16.6	33	22.6	45	31* a	15-110/19
621-64-7	N-Nitroso-di-n-propylamine	50	32.7	65	42.5	85	26* a	33-117/21
86-30-6	N-Nitrosodiphenylamine	50	37.4	75	43.6	87	15	54-110/24
85-01-8	Phenanthrene	50	37.9	76	44.0	88	15	53-110/23
129-00-0	Pyrene	50	39.6	79	45.5	91	14	52-110/22
120-82-1	1,2,4-Trichlorobenzene	50	30.0	60	37.5	75	22	30-110/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	47%	60%	10-110%
4165-62-2	Phenol-d5	32%	42%	10-110%
118-79-6	2,4,6-Tribromophenol	95%	102%	35-147%
4165-60-0	Nitrobenzene-d5	66%	81%	32-132%
321-60-8	2-Fluorobiphenyl	67%	80%	40-117%
1718-51-0	Terphenyl-d14	89%	98%	33-126%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E2M4785-DFTPP

Injection Date: 10/17/18

Lab File ID: 2M107597.D

Injection Time: 05:34

Instrument ID: GCMS2M

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	47542	48.4	Pass
68	Less than 2.0% of mass 69	793	0.81 (1.66) ^a	Pass
69	Mass 69 relative abundance	47789	48.7	Pass
70	Less than 2.0% of mass 69	523	0.53 (1.09) ^a	Pass
127	40.0 - 60.0% of mass 198	56421	57.5	Pass
197	Less than 1.0% of mass 198	672	0.68	Pass
198	Base peak, 100% relative abundance	98205	100.0	Pass
199	5.0 - 9.0% of mass 198	6089	6.20	Pass
275	10.0 - 30.0% of mass 198	23900	24.3	Pass
365	1.0 - 100.0% of mass 198	3660	3.73	Pass
441	Present, but less than mass 443	12049	12.3 (82.0) ^b	Pass
442	40.0 - 100.0% of mass 198	82026	83.5	Pass
443	17.0 - 23.0% of mass 442	14697	15.0 (17.9) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M4785-IC4785	2M107598.D	10/17/18	06:18	00:44	Initial cal 100
E2M4785-IC4785	2M107599.D	10/17/18	06:43	01:09	Initial cal 80
E2M4785-ICC4785	2M107600.D	10/17/18	07:07	01:33	Initial cal 50
E2M4785-IC4785	2M107601.D	10/17/18	07:32	01:58	Initial cal 25
E2M4785-IC4785	2M107602.D	10/17/18	07:57	02:23	Initial cal 10
E2M4785-IC4785	2M107603.D	10/17/18	08:22	02:48	Initial cal 5
E2M4785-IC4785	2M107604A.D	10/17/18	09:25	03:51	Initial cal 2
E2M4785-IC4785	2M107605.D	10/17/18	09:50	04:16	Initial cal 1
E2M4785-ICV4785	2M107606.D	10/17/18	10:15	04:41	Initial cal verification 50
E2M4785-ICV4785	2M107607A.D	10/17/18	11:39	06:05	Initial cal verification 50
E2M4785-ICV4785	2M107608.D	10/17/18	12:04	06:30	Initial cal verification 50
E2M4785-ICV4785	2M107609.D	10/17/18	12:28	06:54	Initial cal verification 50
E2M4785-ICV4785	2M107610.D	10/17/18	12:54	07:20	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E2M4786-DFTPP

Injection Date: 10/17/18

Lab File ID: 2M107612.D

Injection Time: 15:18

Instrument ID: GCMS2M

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	46693	48.3	Pass
68	Less than 2.0% of mass 69	607	0.63 (1.35) ^a	Pass
69	Mass 69 relative abundance	45028	46.6	Pass
70	Less than 2.0% of mass 69	104	0.11 (0.23) ^a	Pass
127	40.0 - 60.0% of mass 198	54053	55.9	Pass
197	Less than 1.0% of mass 198	563	0.58	Pass
198	Base peak, 100% relative abundance	96648	100.0	Pass
199	5.0 - 9.0% of mass 198	6554	6.78	Pass
275	10.0 - 30.0% of mass 198	24605	25.5	Pass
365	1.0 - 100.0% of mass 198	4497	4.65	Pass
441	Present, but less than mass 443	12658	13.1 (79.3) ^b	Pass
442	40.0 - 100.0% of mass 198	82581	85.4	Pass
443	17.0 - 23.0% of mass 442	15957	16.5 (19.3) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M4786-IC4786	2M107615.D	10/17/18	16:27	01:09	Initial cal 100
E2M4786-IC4786	2M107616.D	10/17/18	16:52	01:34	Initial cal 80
E2M4786-ICC4786	2M107617.D	10/17/18	17:17	01:59	Initial cal 50
E2M4786-IC4786	2M107618.D	10/17/18	17:42	02:24	Initial cal 25
E2M4786-IC4786	2M107619.D	10/17/18	18:07	02:49	Initial cal 10
E2M4786-IC4786	2M107620.D	10/17/18	18:32	03:14	Initial cal 5
E2M4786-IC4786	2M107621.D	10/17/18	18:58	03:40	Initial cal 2
E2M4786-IC4786	2M107622.D	10/17/18	19:23	04:05	Initial cal 1
E2M4786-ICV4786	2M107623.D	10/17/18	19:48	04:30	Initial cal verification 50
E2M4786-ICV4786	2M107624.D	10/17/18	20:13	04:55	Initial cal verification 50
E2M4786-ICV4786	2M107625.D	10/17/18	20:38	05:20	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E2M4789-DFTPP

Injection Date: 10/22/18

Lab File ID: 2M107672.D

Injection Time: 09:31

Instrument ID: GCMS2M

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	39197	47.0	Pass
68	Less than 2.0% of mass 69	639	0.77 (1.69) ^a	Pass
69	Mass 69 relative abundance	37865	45.4	Pass
70	Less than 2.0% of mass 69	299	0.36 (0.79) ^a	Pass
127	40.0 - 60.0% of mass 198	46735	56.0	Pass
197	Less than 1.0% of mass 198	471	0.56	Pass
198	Base peak, 100% relative abundance	83384	100.0	Pass
199	5.0 - 9.0% of mass 198	5127	6.15	Pass
275	10.0 - 30.0% of mass 198	21423	25.7	Pass
365	1.0 - 100.0% of mass 198	3469	4.16	Pass
441	Present, but less than mass 443	10230	12.3 (77.8) ^b	Pass
442	40.0 - 100.0% of mass 198	72819	87.3	Pass
443	17.0 - 23.0% of mass 442	13156	15.8 (18.1) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M4789-CC4785	2M107673.D	10/22/18	09:42	00:11	Continuing cal 50
E2M4789-CC4786	2M107674.D	10/22/18	10:12	00:41	Continuing cal 50
OP15770-MB1	2M107675.D	10/22/18	10:46	01:15	Method Blank
OP16001-MB1	2M107676.D	10/22/18	11:11	01:40	Method Blank
OP16001-BS1	2M107677.D	10/22/18	11:36	02:05	Blank Spike
JC75495-1	2M107678A.D	10/22/18	12:29	02:58	GRAB 1-100518/BSA DISCHARGE
OP16001-MS	2M107679.D	10/22/18	12:54	03:23	Matrix Spike
OP16001-MSD	2M107680.D	10/22/18	13:19	03:48	Matrix Spike Duplicate
JC75142-41	2M107681.D	10/22/18	13:44	04:13	(used for QC only; not part of job JC75495)
ZZZZZZ	2M107682.D	10/22/18	14:08	04:37	(unrelated sample)
ZZZZZZ	2M107683.D	10/22/18	14:33	05:02	(unrelated sample)
ZZZZZZ	2M107684.D	10/22/18	14:58	05:27	(unrelated sample)
ZZZZZZ	2M107685.D	10/22/18	15:23	05:52	(unrelated sample)
ZZZZZZ	2M107686.D	10/22/18	15:48	06:17	(unrelated sample)
ZZZZZZ	2M107687.D	10/22/18	16:13	06:42	(unrelated sample)
ZZZZZZ	2M107688.D	10/22/18	16:38	07:07	(unrelated sample)
ZZZZZZ	2M107689.D	10/22/18	17:03	07:32	(unrelated sample)
ZZZZZZ	2M107690.D	10/22/18	17:28	07:57	(unrelated sample)
ZZZZZZ	2M107691.D	10/22/18	17:53	08:22	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC75495
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample:	E2M4789-DFTPP	Injection Date:	10/22/18
Lab File ID:	2M107672.D	Injection Time:	09:31
Instrument ID:	GCMS2M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	2M107692.D	10/22/18	18:18	08:47	(unrelated sample)
ZZZZZZ	2M107693.D	10/22/18	18:43	09:12	(unrelated sample)
ZZZZZZ	2M107694.D	10/22/18	19:08	09:37	(unrelated sample)
ZZZZZZ	2M107695.D	10/22/18	19:33	10:02	(unrelated sample)
ZZZZZZ	2M107696.D	10/22/18	19:58	10:27	(unrelated sample)
ZZZZZZ	2M107697.D	10/22/18	20:22	10:51	(unrelated sample)

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E3E4649-DFTPP

Injection Date: 10/09/18

Lab File ID: 3E104569.D

Injection Time: 01:49

Instrument ID: GCMS3E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	65938	32.4	Pass
68	Less than 2.0% of mass 69	918	0.45 (1.31) ^a	Pass
69	Mass 69 relative abundance	70166	34.5	Pass
70	Less than 2.0% of mass 69	297	0.15 (0.42) ^a	Pass
127	40.0 - 60.0% of mass 198	95096	46.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	203322	100.0	Pass
199	5.0 - 9.0% of mass 198	13564	6.67	Pass
275	10.0 - 30.0% of mass 198	56933	28.0	Pass
365	1.0 - 100.0% of mass 198	6210	3.05	Pass
441	Present, but less than mass 443	22355	11.0 (75.2) ^b	Pass
442	40.0 - 100.0% of mass 198	152293	74.9	Pass
443	17.0 - 23.0% of mass 442	29710	14.6 (19.5) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3E4649-IC4649	3E104570.D	10/09/18	02:40	00:51	Initial cal 100
E3E4649-IC4649	3E104571.D	10/09/18	03:09	01:20	Initial cal 80
E3E4649-ICC4649	3E104572.D	10/09/18	03:37	01:48	Initial cal 50
E3E4649-IC4649	3E104573.D	10/09/18	04:06	02:17	Initial cal 25
E3E4649-IC4649	3E104574.D	10/09/18	04:34	02:45	Initial cal 10
E3E4649-IC4649	3E104575.D	10/09/18	05:03	03:14	Initial cal 5
E3E4649-IC4649	3E104576.D	10/09/18	05:31	03:42	Initial cal 2
E3E4649-IC4649	3E104577A.D	10/09/18	06:35	04:46	Initial cal 1
E3E4649-ICV4649	3E104578.D	10/09/18	07:03	05:14	Initial cal verification 50
E3E4649-ICV4649	3E104580.D	10/09/18	08:00	06:11	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E3E4651-DFTPP

Injection Date: 10/09/18

Lab File ID: 3E104597.D

Injection Time: 23:48

Instrument ID: GCMS3E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	30442	40.2	Pass
68	Less than 2.0% of mass 69	76	0.10 (0.25) ^a	Pass
69	Mass 69 relative abundance	30423	40.2	Pass
70	Less than 2.0% of mass 69	155	0.20 (0.51) ^a	Pass
127	40.0 - 60.0% of mass 198	40815	53.9	Pass
197	Less than 1.0% of mass 198	280	0.37	Pass
198	Base peak, 100% relative abundance	75717	100.0	Pass
199	5.0 - 9.0% of mass 198	5079	6.71	Pass
275	10.0 - 30.0% of mass 198	19285	25.5	Pass
365	1.0 - 100.0% of mass 198	2622	3.46	Pass
441	Present, but less than mass 443	9968	13.2 (81.4) ^b	Pass
442	40.0 - 100.0% of mass 198	62800	82.9	Pass
443	17.0 - 23.0% of mass 442	12252	16.2 (19.5) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3E4651-IC4651	3E104598.D	10/10/18	00:11	00:23	Initial cal 100
E3E4651-IC4651	3E104599.D	10/10/18	00:40	00:52	Initial cal 80
E3E4651-ICC4651	3E104600.D	10/10/18	01:09	01:21	Initial cal 50
E3E4651-IC4651	3E104601.D	10/10/18	01:37	01:49	Initial cal 25
E3E4651-IC4651	3E104602.D	10/10/18	02:06	02:18	Initial cal 10
E3E4651-IC4651	3E104603.D	10/10/18	02:35	02:47	Initial cal 5
E3E4651-IC4651	3E104604.D	10/10/18	03:03	03:15	Initial cal 2
E3E4651-IC4651	3E104605.D	10/10/18	03:32	03:44	Initial cal 1
E3E4651-ICV4651	3E104606.D	10/10/18	04:01	04:13	Initial cal verification 50
E3E4651-ICV4651	3E104607.D	10/10/18	04:29	04:41	Initial cal verification 50
E3E4651-ICV4651	3E104608.D	10/10/18	04:58	05:10	Initial cal verification 50
E3E4651-ICV4651	3E104609.D	10/10/18	05:27	05:39	Initial cal verification 50
E3E4651-ICV4651	3E104610.D	10/10/18	05:55	06:07	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E3E4654-DFTPP

Injection Date: 10/12/18

Lab File ID: 3E104641.D

Injection Time: 00:57

Instrument ID: GCMS3E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	83744	34.1	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	86415	35.2	Pass
70	Less than 2.0% of mass 69	550	0.22 (0.64) ^a	Pass
127	40.0 - 60.0% of mass 198	117449	47.9	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	245354	100.0	Pass
199	5.0 - 9.0% of mass 198	16283	6.64	Pass
275	10.0 - 30.0% of mass 198	68746	28.0	Pass
365	1.0 - 100.0% of mass 198	7918	3.23	Pass
441	Present, but less than mass 443	35120	14.3 (77.9) ^b	Pass
442	40.0 - 100.0% of mass 198	224909	91.7	Pass
443	17.0 - 23.0% of mass 442	45088	18.4 (20.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3E4654-CC4651	3E104642.D	10/12/18	01:14	00:17	Continuing cal 25
E3E4654-CC4649	3E104643.D	10/12/18	01:42	00:45	Continuing cal 25
E3E4654-CC4651	3E104644.D	10/12/18	02:11	01:14	Continuing cal 25
OP15770-MB1	3E104646.D	10/12/18	03:09	02:12	Method Blank
OP15770-BS1	3E104647.D	10/12/18	03:38	02:41	Blank Spike
OP15770-BSD	3E104648.D	10/12/18	04:07	03:10	Blank Spike Duplicate
OP15685-MB1	3E104649.D	10/12/18	04:35	03:38	Method Blank
OP15685-BS1	3E104650.D	10/12/18	05:04	04:07	Blank Spike
OP15685-BSD	3E104651.D	10/12/18	05:33	04:36	Blank Spike Duplicate
ZZZZZZ	3E104654.D	10/12/18	06:59	06:02	(unrelated sample)
ZZZZZZ	3E104655.D	10/12/18	07:27	06:30	(unrelated sample)
ZZZZZZ	3E104656.D	10/12/18	07:56	06:59	(unrelated sample)
ZZZZZZ	3E104657.D	10/12/18	08:24	07:27	(unrelated sample)
ZZZZZZ	3E104658.D	10/12/18	08:53	07:56	(unrelated sample)
ZZZZZZ	3E104659.D	10/12/18	09:22	08:25	(unrelated sample)
ZZZZZZ	3E104660.D	10/12/18	09:50	08:53	(unrelated sample)
ZZZZZZ	3E104661.D	10/12/18	10:19	09:22	(unrelated sample)
ZZZZZZ	3E104662.D	10/12/18	10:47	09:50	(unrelated sample)
ZZZZZZ	3E104663.D	10/12/18	11:15	10:18	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC75495
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample:	E3E4654-DFTPP	Injection Date:	10/12/18
Lab File ID:	3E104641.D	Injection Time:	00:57
Instrument ID:	GCMS3E		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	3E104664.D	10/12/18	11:44	10:47	(unrelated sample)
ZZZZZZ	3E104665.D	10/12/18	12:12	11:15	(unrelated sample)
ZZZZZZ	3E104666.D	10/12/18	12:41	11:44	(unrelated sample)

7.3.6
7

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5641-DFTPP

Injection Date: 09/13/18

Lab File ID: P125233.D

Injection Time: 22:14

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	56370	40.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	66112	47.2	Pass
70	Less than 2.0% of mass 69	248	0.18 (0.38) ^a	Pass
127	40.0 - 60.0% of mass 198	79538	56.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	139965	100.0	Pass
199	5.0 - 9.0% of mass 198	9752	6.97	Pass
275	10.0 - 30.0% of mass 198	38200	27.3	Pass
365	1.0 - 100.0% of mass 198	5516	3.94	Pass
441	Present, but less than mass 443	15026	10.7 (81.8) ^b	Pass
442	40.0 - 100.0% of mass 198	94994	67.9	Pass
443	17.0 - 23.0% of mass 442	18359	13.1 (19.3) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5641-IC5641	P125234.D	09/13/18	23:04	00:50	Initial cal 100
EP5641-IC5641	P125235.D	09/13/18	23:31	01:17	Initial cal 80
EP5641-ICC5641	P125236.D	09/13/18	23:59	01:45	Initial cal 50
EP5641-IC5641	P125237.D	09/14/18	00:26	02:12	Initial cal 25
EP5641-IC5641	P125238.D	09/14/18	00:54	02:40	Initial cal 10
EP5641-IC5641	P125239.D	09/14/18	01:22	03:08	Initial cal 5
EP5641-IC5641	P125240.D	09/14/18	01:49	03:35	Initial cal 2
EP5641-IC5641	P125241.D	09/14/18	02:17	04:03	Initial cal 1
EP5641-ICV5641	P125242.D	09/14/18	02:44	04:30	Initial cal verification 50
EP5641-ICV5641	P125243.D	09/14/18	03:12	04:58	Initial cal verification 50
EP5641-ICV5641	P125244.D	09/14/18	03:40	05:26	Initial cal verification 50
EP5641-ICV5641	P125245.D	09/14/18	04:08	05:54	Initial cal verification 50
EP5641-ICV5641	P125246.D	09/14/18	04:35	06:21	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5642-DFTPP

Injection Date: 09/14/18

Lab File ID: P125247A.D

Injection Time: 05:49

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	52814	47.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	59152	52.9	Pass
70	Less than 2.0% of mass 69	287	0.26 (0.49) ^a	Pass
127	40.0 - 60.0% of mass 198	66848	59.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	111736	100.0	Pass
199	5.0 - 9.0% of mass 198	7930	7.10	Pass
275	10.0 - 30.0% of mass 198	29960	26.8	Pass
365	1.0 - 100.0% of mass 198	4593	4.11	Pass
441	Present, but less than mass 443	12252	11.0 (78.1) ^b	Pass
442	40.0 - 100.0% of mass 198	80944	72.4	Pass
443	17.0 - 23.0% of mass 442	15690	14.0 (19.4) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5642-IC5642	P125248A.D	09/14/18	06:03	00:14	Initial cal 100
EP5642-IC5642	P125249.D	09/14/18	06:30	00:41	Initial cal 80
EP5642-ICC5642	P125250.D	09/14/18	06:57	01:08	Initial cal 50
EP5642-IC5642	P125251A.D	09/14/18	08:39	02:50	Initial cal 25
EP5642-IC5642	P125252.D	09/14/18	09:06	03:17	Initial cal 10
EP5642-IC5642	P125253.D	09/14/18	09:33	03:44	Initial cal 5
EP5642-IC5642	P125254.D	09/14/18	10:00	04:11	Initial cal 2
EP5642-IC5642	P125255.D	09/14/18	10:28	04:39	Initial cal 1
EP5642-ICV5642	P125256.D	09/14/18	10:55	05:06	Initial cal verification 50
EP5642-ICV5642	P125257.D	09/14/18	11:23	05:34	Initial cal verification 50
EP5642-ICV5642	P125258.D	09/14/18	11:50	06:01	Initial cal verification 50
EP5642-ICV5642	P125259.D	09/14/18	12:18	06:29	Initial cal verification 50
EP5642-ICV5642	P125260.D	09/14/18	12:45	06:56	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5644-DFTPP

Injection Date: 09/15/18

Lab File ID: P125271.D

Injection Time: 00:55

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	46056	41.9	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	53258	48.4	Pass
70	Less than 2.0% of mass 69	164	0.15 (0.31) ^a	Pass
127	40.0 - 60.0% of mass 198	62656	57.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	109946	100.0	Pass
199	5.0 - 9.0% of mass 198	7478	6.80	Pass
275	10.0 - 30.0% of mass 198	29312	26.7	Pass
365	1.0 - 100.0% of mass 198	3842	3.49	Pass
441	Present, but less than mass 443	11399	10.4 (82.3) ^b	Pass
442	40.0 - 100.0% of mass 198	73082	66.5	Pass
443	17.0 - 23.0% of mass 442	13855	12.6 (19.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5644-ICV5641	P125276.D	09/15/18	01:36	00:41	Initial cal verification 50
EP5644-CC5616	P125277.D	09/15/18	02:03	01:08	Continuing cal 50
EP5644-CC5617	P125278.D	09/15/18	02:30	01:35	Continuing cal 50
EP5644-CC5641	P125279.D	09/15/18	02:58	02:03	Continuing cal 50
EP5644-CC5642	P125280.D	09/15/18	03:25	02:30	Continuing cal 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5646-DFTPP

Injection Date: 09/18/18

Lab File ID: P125311.D

Injection Time: 10:13

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	41903	36.7	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	49576	43.4	Pass
70	Less than 2.0% of mass 69	365	0.32 (0.74) ^a	Pass
127	40.0 - 60.0% of mass 198	60258	52.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	114133	100.0	Pass
199	5.0 - 9.0% of mass 198	7909	6.93	Pass
275	10.0 - 30.0% of mass 198	30544	26.8	Pass
365	1.0 - 100.0% of mass 198	4366	3.83	Pass
441	Present, but less than mass 443	13216	11.6 (81.1) ^b	Pass
442	40.0 - 100.0% of mass 198	86608	75.9	Pass
443	17.0 - 23.0% of mass 442	16296	14.3 (18.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5646-IC5646	P125312.D	09/18/18	10:30	00:17	Initial cal 100
EP5646-IC5646	P125313.D	09/18/18	10:58	00:45	Initial cal 80
EP5646-ICC5646	P125314.D	09/18/18	11:25	01:12	Initial cal 50
EP5646-IC5646	P125315.D	09/18/18	11:53	01:40	Initial cal 25
EP5646-IC5646	P125316.D	09/18/18	12:20	02:07	Initial cal 10
EP5646-IC5646	P125317.D	09/18/18	12:49	02:36	Initial cal 5
EP5646-IC5646	P125318.D	09/18/18	13:17	03:04	Initial cal 2
EP5646-IC5646	P125319.D	09/18/18	13:44	03:31	Initial cal 1
EP5646-ICV5646	P125320.D	09/18/18	14:12	03:59	Initial cal verification 50
EP5646-ICV5646	P125321.D	09/18/18	14:40	04:27	Initial cal verification 50
EP5646-ICV5646	P125322.D	09/18/18	15:08	04:55	Initial cal verification 50
EP5646-ICV5646	P125323.D	09/18/18	15:36	05:23	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5647-DFTPP

Injection Date: 09/18/18

Lab File ID: P125324.D

Injection Time: 22:54

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	51774	38.5	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	61986	46.0	Pass
70	Less than 2.0% of mass 69	241	0.18 (0.39) ^a	Pass
127	40.0 - 60.0% of mass 198	72034	53.5	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	134608	100.0	Pass
199	5.0 - 9.0% of mass 198	9484	7.05	Pass
275	10.0 - 30.0% of mass 198	36392	27.0	Pass
365	1.0 - 100.0% of mass 198	5027	3.73	Pass
441	Present, but less than mass 443	15510	11.5 (79.3) ^b	Pass
442	40.0 - 100.0% of mass 198	98984	73.5	Pass
443	17.0 - 23.0% of mass 442	19559	14.5 (19.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5647-IC5647	P125325.D	09/18/18	23:47	00:53	Initial cal 100
EP5647-IC5647	P125326.D	09/19/18	00:14	01:20	Initial cal 80
EP5647-ICC5647	P125327.D	09/19/18	00:42	01:48	Initial cal 50
EP5647-IC5647	P125328.D	09/19/18	01:09	02:15	Initial cal 25
EP5647-IC5647	P125329.D	09/19/18	01:37	02:43	Initial cal 10
EP5647-IC5647	P125330.D	09/19/18	02:04	03:10	Initial cal 5
EP5647-IC5647	P125331.D	09/19/18	02:32	03:38	Initial cal 2
EP5647-IC5647	P125332.D	09/19/18	02:59	04:05	Initial cal 1
EP5647-ICV5647	P125335.D	09/19/18	04:23	05:29	Initial cal verification 50
EP5647-ICV5647	P125336.D	09/19/18	04:51	05:57	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC75495

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5674-DFTPP

Injection Date: 10/17/18

Lab File ID: P125920.D

Injection Time: 00:48

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	40380	37.1	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	47614	43.8	Pass
70	Less than 2.0% of mass 69	44	0.04 (0.09) ^a	Pass
127	40.0 - 60.0% of mass 198	58330	53.6	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	108800	100.0	Pass
199	5.0 - 9.0% of mass 198	7221	6.64	Pass
275	10.0 - 30.0% of mass 198	29762	27.4	Pass
365	1.0 - 100.0% of mass 198	3862	3.55	Pass
441	Present, but less than mass 443	12899	11.9 (83.6) ^b	Pass
442	40.0 - 100.0% of mass 198	82074	75.4	Pass
443	17.0 - 23.0% of mass 442	15425	14.2 (18.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5674-CC5646	P125921.D	10/17/18	01:09	00:21	Continuing cal 50
EP5674-CC5647	P125922.D	10/17/18	01:36	00:48	Continuing cal 50
EP5674-CC5646	P125923.D	10/17/18	02:02	01:14	Continuing cal 50
EP5674-CC5641	P125924.D	10/17/18	02:29	01:41	Continuing cal 50
EP5674-CC5642	P125925.D	10/17/18	02:56	02:08	Continuing cal 50
EP5674-CC5646	P125926.D	10/17/18	03:22	02:34	Continuing cal 5
OP15770-MB1	P125927.D	10/17/18	03:50	03:02	Method Blank
OP15770-BS13	P125930.D	10/17/18	05:10	04:22	Blank Spike
OP15772-MB1	P125931.D	10/17/18	05:36	04:48	Method Blank
OP15772-BS13	P125932.D	10/17/18	06:03	05:15	Blank Spike
OP15772-MS2	P125933.D	10/17/18	06:29	05:41	Matrix Spike
OP15772-MSD2	P125934.D	10/17/18	06:56	06:08	Matrix Spike Duplicate
JC74793-1	P125935.D	10/17/18	07:22	06:34	(used for QC only; not part of job JC75495)
ZZZZZZ	P125936.D	10/17/18	07:49	07:01	(unrelated sample)
ZZZZZZ	P125937.D	10/17/18	08:15	07:27	(unrelated sample)
ZZZZZZ	P125938.D	10/17/18	08:42	07:54	(unrelated sample)
ZZZZZZ	P125939.D	10/17/18	09:08	08:20	(unrelated sample)
ZZZZZZ	P125940.D	10/17/18	09:35	08:47	(unrelated sample)
ZZZZZZ	P125941.D	10/17/18	10:02	09:14	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC75495
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EP5674-DFTPP	Injection Date:	10/17/18
Lab File ID:	P125920.D	Injection Time:	00:48
Instrument ID:	GCMSP		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P125942.D	10/17/18	10:28	09:40	(unrelated sample)
ZZZZZZ	P125943.D	10/17/18	10:55	10:07	(unrelated sample)
ZZZZZZ	P125944.D	10/17/18	11:22	10:34	(unrelated sample)
OP15772-MS	P125945.D	10/17/18	11:49	11:01	Matrix Spike
OP15772-MSD	P125946.D	10/17/18	12:16	11:28	Matrix Spike Duplicate
JC75333-1	P125947.D	10/17/18	12:43	11:55	(used for QC only; not part of job JC75495)

7.3.12
7

Surrogate Recovery Summary

Job Number: JC75495
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: EPA 625.1	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JC75495-1	2M107678A.D	65	62	57
OP15770-BS1	3E104647.D	66	67	89
OP15770-BS13	P125930.D	79	79	97
OP15770-BSD	3E104648.D	81	80	98
OP15770-MB1	3E104646.D	80	83	103
OP15770-MB1	P125927.D	82	80	103
OP15770-MB1	2M107675.D	83	82	85

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	32-132%
S2 = 2-Fluorobiphenyl	40-117%
S3 = Terphenyl-d14	33-126%

7.4.1
7

Metals Analysis

QC Data Summaries



Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC75495
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9583
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/10/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	8.8	77		
Antimony	6.0	1	4.1		
Arsenic	3.0	1.5	2.5		
Barium	200	.2	17		
Beryllium	1.0	.1	.5		
Bismuth	20	1.2	4.8		
Boron	100	1.8	85		
Cadmium	3.0	.1	1.2		
Calcium	5000	3.2	130		
Chromium	10	.3	1.5		
Cobalt	50	.2	2.5		
Copper	10	1.2	4.1	-1.5	<10
Iron	100	1.9	30		
Lead	3.0	1.2	2.4		
Lithium	50	.8	9.1		
Magnesium	5000	16	200		
Manganese	15	.1	2		
Molybdenum	20	.4	4.5		
Nickel	10	.3	1.8		
Phosphorus	50	1	14		
Potassium	10000	46	200		
Selenium	10	3.2	5.5		
Silicon	200	1.7	130		
Silver	10	.9	2.4		
Sodium	10000	9.8	900		
Strontium	10	.1	1.6		
Sulfur	50	3	18		
Thallium	10	1.4	1.9		
Tin	50	.9	4.7		
Titanium	10	.1	1.9		
Tungsten	50	.9	19		
Vanadium	50	.2	2.3		
Zinc	20	.1	8.5	0.60	<20

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC75495
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9583
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/10/18

Metal	RL	IDL	MDL	MB raw	final

Zirconium 10 .2 4.9

Associated samples MP9583: JC75495-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.1.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75495

Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9583
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/10/18

Metal	JC75435-1 Original MS	Spikelot MPEPA200.7% Rec	QC Limits
Aluminum			
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Bismuth			
Boron			
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	0.0 2050	2000	102.5 70-130
Iron	anr		
Lead	anr		
Lithium			
Magnesium			
Manganese	anr		
Molybdenum			
Nickel	anr		
Phosphorus			
Potassium			
Selenium	anr		
Silicon			
Silver	anr		
Sodium	anr		
Strontium			
Sulfur			
Thallium	anr		
Tin	anr		
Titanium			
Tungsten			
Vanadium			
Zinc	3.6 2190	2000	109.3 70-130

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75495
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9583
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 10/10/18

Metal	JC75435-1 Original MS	Spikelet MPEPA200.7% Rec	QC Limits

Zirconium

Associated samples MP9583: JC75495-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75495
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9583
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 10/10/18

Metal	JC75435-1 Original MSD	SpikeLot MPEPA200.7% Rec	MSD RPD	QC Limit		
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Bismuth						
Boron						
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	0.0	2030	2000	101.5	1.0	10
Iron	anr					
Lead	anr					
Lithium						
Magnesium						
Manganese	anr					
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium	anr					
Strontium						
Sulfur						
Thallium	anr					
Tin	anr					
Titanium						
Tungsten						
Vanadium						
Zinc	3.6	2190	2000	109.3	0.0	10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75495
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9583
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 10/10/18

Metal	JC75435-1 Original MSD	SpikeLot MPEPA200.7% Rec	MSD RPD	QC Limit

Zirconium

Associated samples MP9583: JC75495-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC75495

Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9583
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/10/18 10/10/18

Metal	BSP Result	Spikelot MPEPA200.7% Rec	QC Limits	BSD Result	Spikelot MPEPA200.7% Rec	BSD RPD	QC Limit		
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	2030	2000	101.5	85-115	2040	2000	102.0	0.5	20
Iron	anr								
Lead	anr								
Lithium									
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium									
Zinc	2250	2000	112.5	85-115	2210	2000	110.5	1.8	20

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC75495
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9583
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 10/10/18 10/10/18

Metal	BSP Result	SpikeLot MPEPA200.7% Rec	QC Limits	BSD Result	SpikeLot MPEPA200.7% Rec	BSD RPD	QC Limit

Zirconium

Associated samples MP9583: JC75495-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC75495
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9583
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 10/10/18

Metal	JC75435-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	0.00	0.00	NC	0-10
Iron	anr			
Lead	anr			
Lithium				
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin	anr			
Titanium				
Tungsten				
Vanadium				
Zinc	3.60	6.40	77.8 (a)	0-10

8.1.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC75495
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9583
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 10/10/18

Metal	JC75435-1	QC	
	Original SDL 1:5	%DIF	Limits

Zirconium

Associated samples MP9583: JC75495-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

8.1.4

8

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC75495

Account: HWINJOMM - Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Phosphorus, Total	GP16629/GN87180	0.050	0.0	mg/l	0.40	0.38	95.0	80-120%
Solids, Total Suspended	GN86834	4.0	0.0	mg/l				

Associated Samples:

Batch GN86834: JC75495-2

Batch GP16629: JC75495-2

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC75495

Account: HWINJOMM - Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Phosphorus, Total	GP16629/GN87180	JC75433-1	mg/l	0.030 B	0.0	200.0(a)	0-38%
Solids, Total Suspended	GN86834	JC75456-4	mg/l	48.0	50.0	4.1	0-17%

Associated Samples:

Batch GN86834: JC75495-2

Batch GP16629: JC75495-2

(*) Outside of QC limits

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC75495
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Phosphorus, Total	GP16629/GN87180	JC75433-1	mg/l	0.030 B	0.40	0.40	92.5	35-137%

Associated Samples:

Batch GP16629: JC75495-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



Job #: JC75495

Date of Request: 10/8/2018

Composite Request Form

Client Name: HONEYWELL

Rcv'd in lab by: _____

Sample Number: JC75495-1

Composite the following Client ID's to form one Sample:

GRAB #1, #2, #3, #4

Comments: 10 DAY TAT

Composite By: ☐ Weight ☒ Volume

Analyses requested: VOA624 UNPR

Sample Number: JC75495-1

Composite the following Client ID's to form one Sample:

GRAB #1, #2, #3, #4

Comments: 10 DAY TAT

Composite By: ☐ Weight ☒ Volume

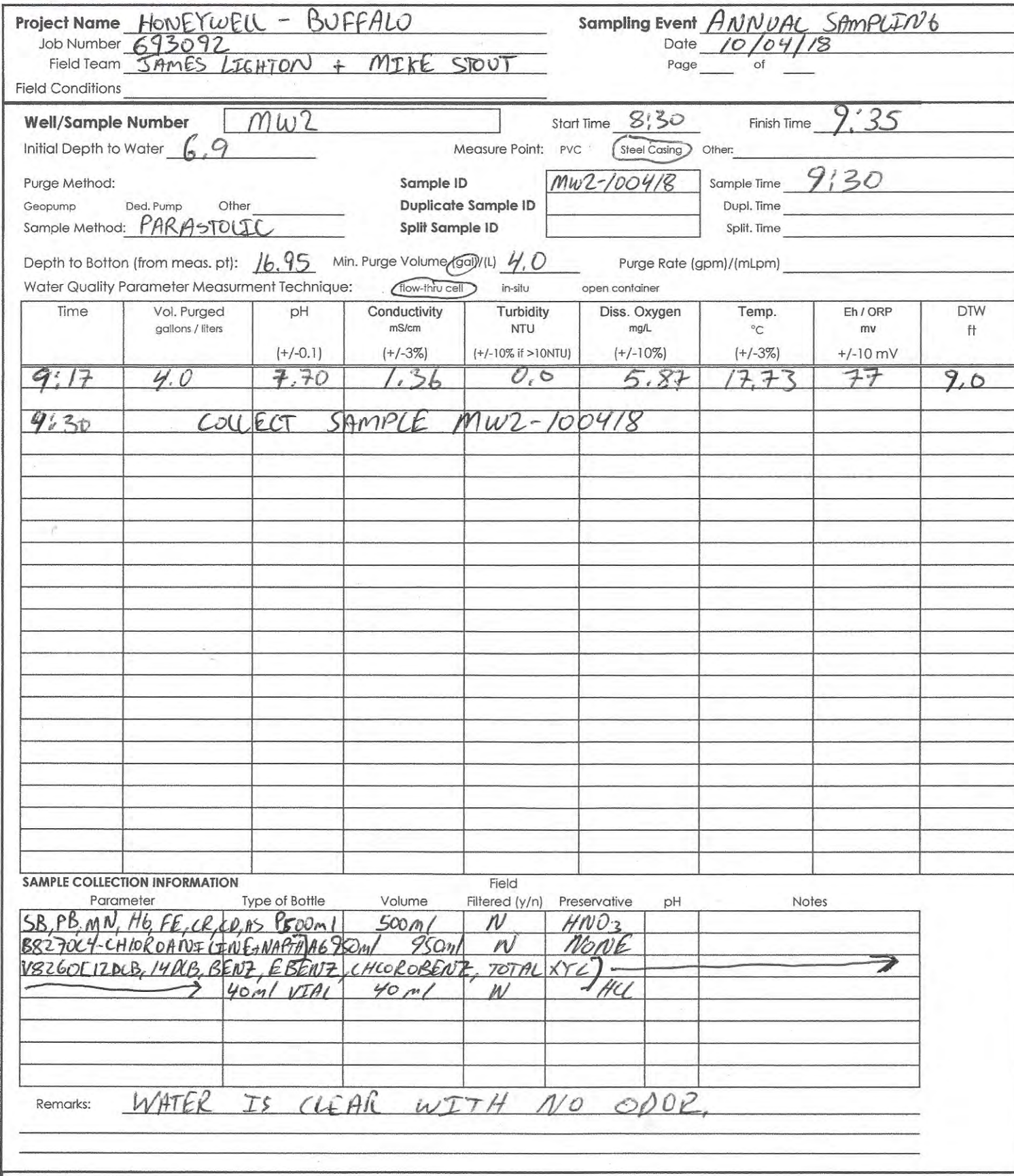
Analyses requested: 625

Attachment B.7 Annual Groundwater Monitoring Data

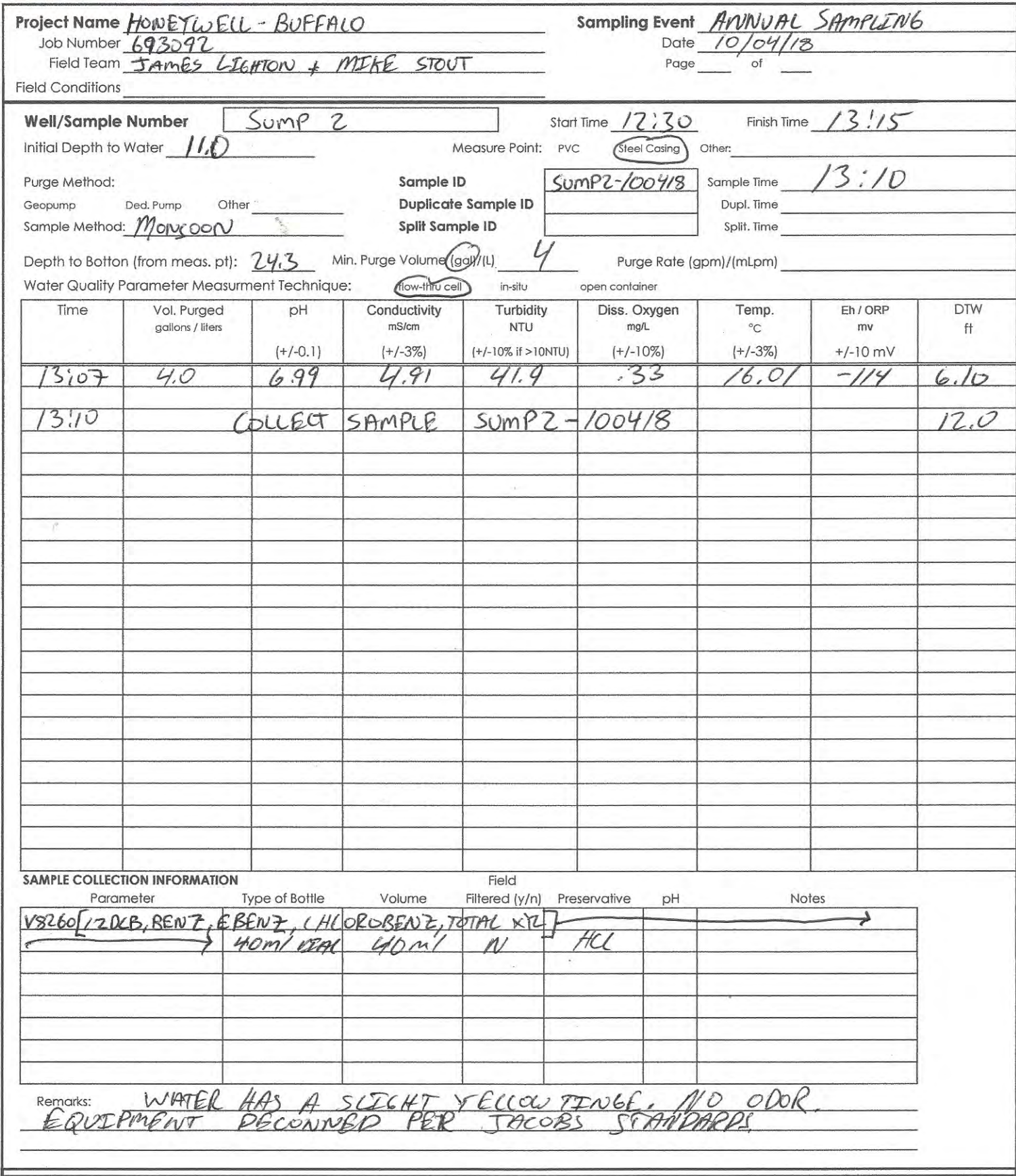
TABLE 1
Summary of Groundwater Analytical Results - 2018
2018/2019 Annual OM&M Report
Alltift Landfill /Ramco Steel Site

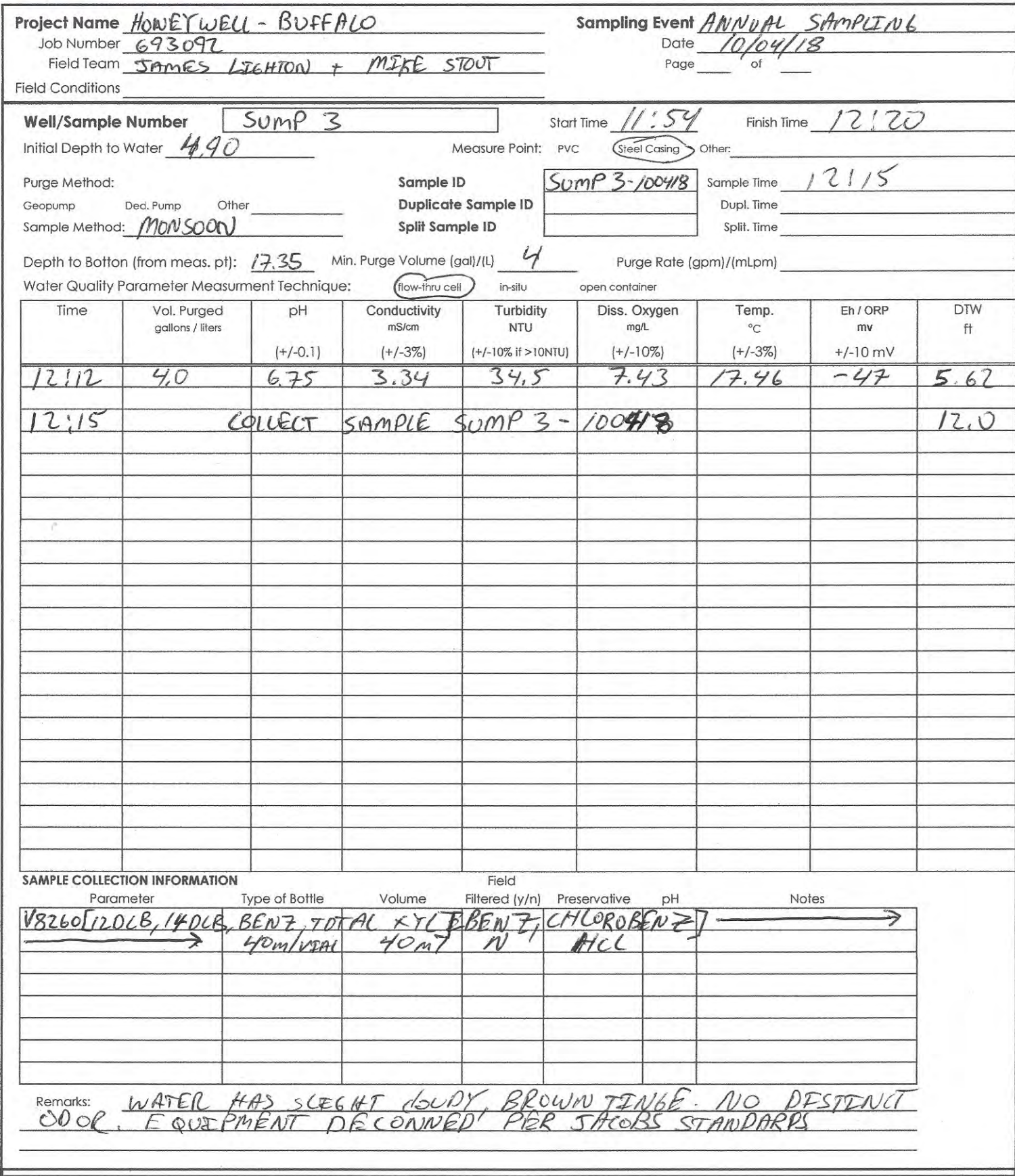
Parameter Name	Units	NYSDEC Class GA Standards	MW2-100418	SUMP 1-100418	SUMP 2-100418	SUMP 3-100418	SUMP 4-100418	SUMP 4-100418-FDUP	SUMP COMP-100418
			10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018
Metals (Dissolved)									
ANTIMONY	mg/L	0.003	0.006 U	-- --	-- --	-- --	0.006 U	0.006 U	0.006 U
ARSENIC	mg/L	0.025	0.003 U	-- --	-- --	-- --	0.0135	0.0101	0.0151
CADMIUM	mg/L	0.005	0.003 U	-- --	-- --	-- --	0.003 U	0.003 U	0.003 U
CHROMIUM	mg/L	0.05	0.002 J	-- --	-- --	-- --	0.002 J	0.01 U	0.0421
IRON	mg/L	0.3	0.0543 J	-- --	-- --	-- --	44.3	38.1	21.6
LEAD	mg/L	0.025	0.003 U	-- --	-- --	-- --	0.003 U	0.003 U	0.0053
MANGANESE	mg/L	0.3	0.0123 J	-- --	-- --	-- --	0.929	1.02	2.2
MERCURY	mg/L	0.0007	0.0002 U	-- --	-- --	-- --	0.0002 U	0.0002 U	0.0002 U
VOCs									
BENZENE	ug/L	1	0.5 U	4.6	10	0.5 U	0.5 U	0.5 U	-- --
CHLOROBENZENE	ug/L	5	1.0 U	50.2	132	1.0 U	17.5	21.6	-- --
ETHYLBENZENE	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-- --
XYLENES, TOTAL	ug/L	5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
1,2-DICHLOROBENZENE	ug/L	3	1.0 U	1.0 U	0.91 J	1.0 U	1.0 U	1.0 U	-- --
1,4-DICHLOROBENZENE	ug/L	3	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	-- --
SVOCs									
4-CHLOROANILINE	ug/L	5	4.8 U	-- --	-- --	-- --	4.8 U	4.8 U	9.2
NAPHTHALENE	ug/L	10	0.95 U	-- --	-- --	-- --	0.95 U	0.95 U	0.95 U

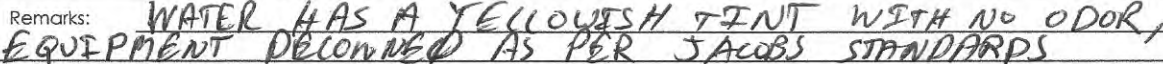
Note:
Bold - Detected during Laboratory Analysis
J - Analyte Detected Below Reporting Limit
U - Analyte not detected
-- - Not Analyzed
Shading indicates exceedance of NYSDEC Class GA Standard



Remarks: WATER IS CLOUDY w/ NO ODOR. EQUIP. RECONNED PER JACOBS STANDARDS.







Remarks: SAMPLE TAKEN FROM COMPOSITE

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Honeywell International Inc. OMM work

HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY

R35116

SGS Job Number: JC75333

Sampling Date: 10/04/18

Report to:

Wood Environment & Infrastructure Soln.
511 Congress Street
Portland, ME 04112
HTS-RES-LAB@Honeywell.com; Ryan.Belcher@amecfw.com
ATTN: Ryan Belcher

Total number of pages in report: 92



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Brian McGuire
General Manager

Client Service contact: Rocus Peters 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.



April 23, 2019

Mr. Ryan Belcher
Wood Environment & Infrastructure Solution
511 Congress Street
Portland, ME 04112

Re: SGS North America – Dayton, NJ Jobs # JC75333 – Reissues

Dear Mr. Belcher,

The final reports for SGS jobs number JC75333 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, remove results of 1,3-Dichlorobenzene from samples JC75333-2 thru -8, -5S, -5D and retrieved 1,2-Dichlorobenzene on original samples per your request on 4/22/2019. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.



CONTINUOUS SERVICE IMPROVEMENT!

Our goal is to continuously improve our service to you. Please share your ideas about how we can serve you better at EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!



SGS North America Inc. Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200

Member of the SGS Group (SGS SA)

Table of Contents

-1-

Section 1: Sample Summary	4
Section 2: Case Narrative/Conformance Summary	6
Section 3: Summary of Hits	8
Section 4: Sample Results	10
4.1: JC75333-1: SUMP COMP-100418	11
4.2: JC75333-2: SUMP 1-100418	13
4.3: JC75333-2R: SUMP 1-100418	14
4.4: JC75333-3: SUMP 2-100418	15
4.5: JC75333-3R: SUMP 2-100418	16
4.6: JC75333-4: SUMP 3-100418	17
4.7: JC75333-4R: SUMP 3-100418	18
4.8: JC75333-5: SUMP 4-100418	19
4.9: JC75333-5R: SUMP 4-100418	22
4.10: JC75333-6: MW2-100418	23
4.11: JC75333-6R: MW2-100418	26
4.12: JC75333-7: SUMP 4-100418-FDUP	27
4.13: JC75333-7R: SUMP 4-100418-FDUP	30
4.14: JC75333-8: TB-100418	31
4.15: JC75333-8R: TB-100418	32
Section 5: Misc. Forms	33
5.1: Chain of Custody	34
Section 6: MS Volatiles - QC Data Summaries	38
6.1: Method Blank Summary	39
6.2: Blank Spike Summary	41
6.3: Matrix Spike/Matrix Spike Duplicate Summary	43
6.4: Instrument Performance Checks (BFB)	45
6.5: Surrogate Recovery Summaries	50
Section 7: MS Semi-volatiles - QC Data Summaries	51
7.1: Method Blank Summary	52
7.2: Blank Spike Summary	55
7.3: Matrix Spike/Matrix Spike Duplicate Summary	57
7.4: Instrument Performance Checks (DFTPP)	59
7.5: Surrogate Recovery Summaries	77
Section 8: Metals Analysis - QC Data Summaries	78
8.1: Prep QC MP9568: Hg	79
8.2: Prep QC MP9569: Sb,As,Cd,Cr,Fe,Pb,Mn	83

Sample Summary

Honeywell International Inc. OMM work

Job No: JC75333

HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC75333-1	10/04/18	14:00 JL	10/05/18	AQ	Ground Water	SUMP COMP-100418
JC75333-2	10/04/18	13:50 JL	10/05/18	AQ	Ground Water	SUMP 1-100418
JC75333-2R	10/04/18	13:50 JL	10/05/18	AQ	Ground Water	SUMP 1-100418
JC75333-3	10/04/18	13:10 JL	10/05/18	AQ	Ground Water	SUMP 2-100418
JC75333-3R	10/04/18	13:10 JL	10/05/18	AQ	Ground Water	SUMP 2-100418
JC75333-4	10/04/18	12:15 JL	10/05/18	AQ	Ground Water	SUMP 3-100418
JC75333-4R	10/04/18	12:15 JL	10/05/18	AQ	Ground Water	SUMP 3-100418
JC75333-5	10/04/18	10:45 JL	10/05/18	AQ	Ground Water	SUMP 4-100418
JC75333-5D	10/04/18	10:55 JL	10/05/18	AQ	Water Dup/MSD	SUMP 4-100418-MSD
JC75333-5DR	10/04/18	10:55 JL	10/05/18	AQ	Water Dup/MSD	SUMP 4-100418-MSD
JC75333-5R	10/04/18	10:45 JL	10/05/18	AQ	Ground Water	SUMP 4-100418
JC75333-5S	10/04/18	10:50 JL	10/05/18	AQ	Water Matrix Spike	SUMP 4-100418-MS
JC75333-5SR	10/04/18	10:50 JL	10/05/18	AQ	Water Matrix Spike	SUMP 4-100418-MS



Sample Summary
(continued)

Honeywell International Inc. OMM work

Job No: JC75333

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
JC75333-6	10/04/18	09:30	JL	10/05/18	AQ	Ground Water	MW2-100418
JC75333-6R	10/04/18	09:30	JL	10/05/18	AQ	Ground Water	MW2-100418
JC75333-7	10/04/18	11:00	JL	10/05/18	AQ	Ground Water	SUMP 4-100418-FDUP
JC75333-7R	10/04/18	11:00	JL	10/05/18	AQ	Ground Water	SUMP 4-100418-FDUP
JC75333-8	10/04/18	14:00	JL	10/05/18	AQ	Trip Blank Water	TB-100418
JC75333-8R	10/04/18	14:00	JL	10/05/18	AQ	Trip Blank Water	TB-100418

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: Honeywell International Inc. OMM work

Job No JC75333

Site: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

Report Date 4/23/2019 3:09:31 PM

On 10/05/2018, 7 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.5 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC75333 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V1A7933

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC75689-15MS, JC75689-15MSD were used as the QC samples indicated.

Matrix: AQ

Batch ID: V3D6046

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC75333-5MS, JC75333-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC75333-8R: (pH=6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
- JC75333-8: (pH=6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

MS Semi-volatiles By Method SW846 8270D

Matrix: AQ

Batch ID: OP15772

- All samples were extracted within the recommended method holding time.
- Sample(s) JC75333-1MS, JC75333-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC75333-5: Confirmation run.

Matrix: AQ

Batch ID: OP16224

- Sample(s) JC75333-5MS, JC75333-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The following samples were extracted outside of holding time for method SW846 8270D: JC75333-5 Sample extracted outside the holding time.
- JC75333-5: Sample extracted outside the holding time.

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP9569

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC75333-5MS, JC75333-5MSD, JC75333-5SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Chromium are outside control limits for sample MP9569-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Tuesday, April 23, 2019

Page 1 of 2

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP9568

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC75333-5MS, JC75333-5MSD were used as the QC samples for metals.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Tuesday, April 23, 2019

Page 2 of 2

Summary of Hits

Page 1 of 2

Job Number: JC75333

Account: Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Collected: 10/04/18



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC75333-1 SUMP COMP-100418						
4-Chloroaniline		9.2	4.8	0.32	ug/l	SW846 8270D
Arsenic		15.1	3.0	2.8	ug/l	SW846 6010D
Chromium		42.1	10	2.0	ug/l	SW846 6010D
Iron		21600	100	32	ug/l	SW846 6010D
Lead		5.3	3.0	1.8	ug/l	SW846 6010D
Manganese		2200	15	1.4	ug/l	SW846 6010D
JC75333-2 SUMP 1-100418						
Benzene		4.6	0.50	0.43	ug/l	SW846 8260C
Chlorobenzene		50.2	1.0	0.56	ug/l	SW846 8260C
JC75333-2R SUMP 1-100418						
No hits reported in this sample.						
JC75333-3 SUMP 2-100418						
Benzene		10	0.50	0.43	ug/l	SW846 8260C
Chlorobenzene		132	1.0	0.56	ug/l	SW846 8260C
1,4-Dichlorobenzene		1.2	1.0	0.51	ug/l	SW846 8260C
JC75333-3R SUMP 2-100418						
1,2-Dichlorobenzene		0.91 J	1.0	0.53	ug/l	SW846 8260C
JC75333-4 SUMP 3-100418						
No hits reported in this sample.						
JC75333-4R SUMP 3-100418						
No hits reported in this sample.						
JC75333-5 SUMP 4-100418						
Chlorobenzene		17.5	1.0	0.56	ug/l	SW846 8260C
Arsenic		13.5	3.0	2.8	ug/l	SW846 6010D
Chromium		2.0 J	10	2.0	ug/l	SW846 6010D
Iron		44300	100	32	ug/l	SW846 6010D
Manganese		929	15	1.4	ug/l	SW846 6010D

Summary of Hits

Page 2 of 2

Job Number: JC75333

Account: Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Collected: 10/04/18



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

JC75333-5R SUMP 4-100418

No hits reported in this sample.

JC75333-6 MW2-100418

Chromium	2.0 J	10	2.0	ug/l	SW846 6010D
Iron	54.3 J	100	32	ug/l	SW846 6010D
Manganese	12.3 J	15	1.4	ug/l	SW846 6010D

JC75333-6R MW2-100418

No hits reported in this sample.

JC75333-7 SUMP 4-100418-FDUP

Chlorobenzene	21.6	1.0	0.56	ug/l	SW846 8260C
Arsenic	10.1	3.0	2.8	ug/l	SW846 6010D
Iron	38100	100	32	ug/l	SW846 6010D
Manganese	1020	15	1.4	ug/l	SW846 6010D

JC75333-7R SUMP 4-100418-FDUP

No hits reported in this sample.

JC75333-8 TB-100418

No hits reported in this sample.

JC75333-8R TB-100418

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SUMP COMP-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-1	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P125947.D	1	10/17/18 12:43	CS	10/11/18 17:35	OP15772	EP5674
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	9.2	4.8	0.32	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%		34-128%
321-60-8	2-Fluorobiphenyl	61%		38-119%
1718-51-0	Terphenyl-d14	53%		26-129%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP COMP-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-1	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	ND	6.0	4.7	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁵
Arsenic	15.1	3.0	2.8	ug/l	1	10/09/18	10/10/18	ND	SW846 6010D ³ SW846 3010A ⁵
Cadmium	ND	3.0	1.0	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁵
Chromium	42.1	10	2.0	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁵
Iron	21600	100	32	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁵
Lead	5.3	3.0	1.8	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁵
Manganese	2200	15	1.4	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁵
Mercury	< 0.20	0.20	0.095	ug/l	1	10/08/18	10/08/18	EAL	SW846 7470A ¹ SW846 7470A ⁴

- (1) Instrument QC Batch: MA45426
- (2) Instrument QC Batch: MA45429
- (3) Instrument QC Batch: MA45439
- (4) Prep QC Batch: MP9568
- (5) Prep QC Batch: MP9569

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

4.1
4

Report of Analysis

Client Sample ID:	SUMP 1-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-2	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A185630.D	1	10/12/18 16:31	JP	n/a	n/a	V1A7933
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	4.6	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	50.2	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	106%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 1-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-2R	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A185630R.D	1	10/12/18 16:31	JP	n/a	n/a	V1A7933
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	106%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP 2-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-3	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A185631.D	1	10/12/18 16:55	JP	n/a	n/a	V1A7933
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	10	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	132	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	1.2	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	106%		80-120%
460-00-4	4-Bromofluorobenzene	106%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP 2-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-3R	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A185631R.D	1	10/12/18 16:55	JP	n/a	n/a	V1A7933
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	0.91	1.0	0.53	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	106%		80-120%
460-00-4	4-Bromofluorobenzene	106%		80-120%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

Client Sample ID:	SUMP 3-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-4	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D141821.D	1	10/10/18 21:50	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	107%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 3-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-4R	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D141821R.D	1	10/10/18 21:50	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	107%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP 4-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-5	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D141815.D	1	10/10/18 19:18	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	17.5	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	105%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP 4-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-5	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	M149930.D	1	10/30/18 11:57	NA	10/29/18 17:55	OP16224	EM6396
Run #2 ^b	5P54601.D	1	10/18/18 12:59	AR	10/11/18 17:35	OP15772	E5P2591

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2	1050 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	ND	4.8	0.32	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		10-110%
4165-62-2	Phenol-d5	25%		10-110%
118-79-6	2,4,6-Tribromophenol	93%		36-151%
4165-60-0	Nitrobenzene-d5	66%	90%	34-128%
321-60-8	2-Fluorobiphenyl	69%	77%	38-119%
1718-51-0	Terphenyl-d14	73%	77%	26-129%

(a) Sample extracted outside the holding time.

(b) Confirmation run.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP 4-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-5	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	ND	6.0	4.7	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Arsenic	13.5	3.0	2.8	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Chromium	2.0 J	10	2.0	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Iron	44300	100	32	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Manganese	929	15	1.4	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Mercury	< 0.20	0.20	0.095	ug/l	1	10/08/18	10/08/18	EAL	SW846 7470A ¹ SW846 7470A ³

- (1) Instrument QC Batch: MA45426
- (2) Instrument QC Batch: MA45429
- (3) Prep QC Batch: MP9568
- (4) Prep QC Batch: MP9569

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SUMP 4-100418	
Lab Sample ID:	JC75333-5R	Date Sampled: 10/04/18
Matrix:	AQ - Ground Water	Date Received: 10/05/18
Method:	SW846 8260C	Percent Solids: n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D141815R.D	1	10/10/18 19:18	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	105%		80-120%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.9
4

Report of Analysis

Client Sample ID:	MW2-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-6	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D141822.D	1	10/10/18 22:15	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW2-100418		
Lab Sample ID:	JC75333-6	Date Sampled:	10/04/18
Matrix:	AQ - Ground Water	Date Received:	10/05/18
Method:	SW846 8270D SW846 3510C	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P54602.D	1	10/18/18 13:23	AR	10/11/18 17:35	OP15772	E5P2591
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	ND	4.8	0.32	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	109%		34-128%
321-60-8	2-Fluorobiphenyl	88%		38-119%
1718-51-0	Terphenyl-d14	80%		26-129%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW2-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-6	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	ND	6.0	4.7	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Arsenic	ND	3.0	2.8	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Chromium	2.0 J	10	2.0	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Iron	54.3 J	100	32	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Manganese	12.3 J	15	1.4	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Mercury	< 0.20	0.20	0.095	ug/l	1	10/08/18	10/08/18	EAL	SW846 7470A ¹ SW846 7470A ³

- (1) Instrument QC Batch: MA45426
- (2) Instrument QC Batch: MA45429
- (3) Prep QC Batch: MP9568
- (4) Prep QC Batch: MP9569

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

4.10
4

Report of Analysis

Client Sample ID:	MW2-100418	
Lab Sample ID:	JC75333-6R	Date Sampled: 10/04/18
Matrix:	AQ - Ground Water	Date Received: 10/05/18
Method:	SW846 8260C	Percent Solids: n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D141822R.D	1	10/10/18 22:15	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.11
4

Report of Analysis

Client Sample ID:	SUMP 4-100418-FDUP	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-7	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D141823.D	1	10/10/18 22:40	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	21.6	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 4-100418-FDUP	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-7	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P54603.D	1	10/18/18 13:47	AR	10/11/18 17:35	OP15772	E5P2591
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	ND	4.8	0.32	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	104%		34-128%
321-60-8	2-Fluorobiphenyl	81%		38-119%
1718-51-0	Terphenyl-d14	72%		26-129%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP 4-100418-FDUP	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-7	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	ND	6.0	4.7	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Arsenic	10.1	3.0	2.8	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Chromium	ND	10	2.0	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Iron	38100	100	32	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Manganese	1020	15	1.4	ug/l	1	10/09/18	10/09/18	ND	SW846 6010D ² SW846 3010A ⁴
Mercury	< 0.20	0.20	0.095	ug/l	1	10/08/18	10/08/18	EAL	SW846 7470A ¹ SW846 7470A ³

- (1) Instrument QC Batch: MA45426
- (2) Instrument QC Batch: MA45429
- (3) Prep QC Batch: MP9568
- (4) Prep QC Batch: MP9569

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

4.12
4

Report of Analysis

Client Sample ID:	SUMP 4-100418-FDUP	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-7R	Date Received:	10/05/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D141823R.D	1	10/10/18 22:40	DG	n/a	n/a	V3D6046
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.13
4

Report of Analysis

Client Sample ID:	TB-100418	Date Sampled:	10/04/18
Lab Sample ID:	JC75333-8	Date Received:	10/05/18
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D141814.D	1	10/10/18 18:53	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

(a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	TB-100418						
Lab Sample ID:	JC75333-8R					Date Sampled:	10/04/18
Matrix:	AQ - Trip Blank Water					Date Received:	10/05/18
Method:	SW846 8260C					Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D141814R.D	1	10/10/18 18:53	DG	n/a	n/a	V3D6046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

(a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS

ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2335 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #		Bottle Order Control #	
		JEM-4-081518-38	
SGS Accutest Quote #		SGS Accutest Job #	
HWNJ08173807		JL 75333	

Client / Reporting Information		Project Information		Requested Analysis (use TEST CODE sheet)		Matrix Codes	
Company Name Honeywell International Inc Street Address 1563 Willis Ave City State Zip Syracuse, New York 13204 Project Contact E-mail John Formoza John.formoza@ch2m.com Phone # Fax # 315-532-5608 Sampler(s) Name(s) Phone # Michael Stout 315-558-4018		Project Name 30130 - Altift OM Phase/ Annual Street 579 Tift Street City State Buffalo, New York 14220 Project # R35116 - Honeywell OM&M Program Client Purchase Order # A000001653 Project Manager Chuck Geadelmann Billing Information (if different from Report to) Company Name Honeywell International Inc Street Address 115 Tabor Road City State Zip Morris Plains, NJ 07950 Attention: HTS-RES-LAB@Honeywell.com		Requested Analysis (use TEST CODE sheet) SW 8010B060207470A - All Cd, Cr, Fe, Pb, Mn, Sb, Hg 8270D (4-chloroaniline and naphthalene only) 8200B (1,2-dichlorobenzene, 1,4 - dichlorobenzene, benzene, chlorobenzene, total xylene only)		Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank Blank	
Field ID / Point of Collection MECH/DI Val # Date Time Sampled by Matrix # of bottles 1 1 Sump Comp - 100418 10/4/18 14:00 JL GW 3 2 2 Sump 1 - 100418 10/4/18 13:50 JL GW 3 3 3 Sump 2 - 100418 10/4/18 13:10 JL GW 3 4 4 Sump 3 - 100418 10/4/18 12:15 JL GW 3 5 5 Sump 4 - 100418 10/4/18 10:45 JL GW 6 6 6 MWZ - 100418 10/4/18 9:30 JL GW 6 7 7 Sump 4 - 100418 - FDUP 10/4/18 11:00 JL GW 6 8 8 TB - 100418 10/4/18 WW 1 9 9 Sump 4 - 100418 - MS 10/4/18 10:50 JL GW 6 10 10 Sump 4 - 100418 - MSD 10/4/18 10:55 JL GW 6		LAB USE ONLY F12 A24 V553					

Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions	
☒ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day RUSH ☐ 2 Day RUSH ☐ 1 Day RUSH ☐ other		☐ Commercial "A" (Level 1) ☒ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" ☐ NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data		☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☐ Other	
Emergency & Rush T/A data available VIA Lablink		Sample inventory is verified upon receipt in the Laboratory		ACCUTEST 10/15/18	

Relinquished by Sampler		Received By		Relinquished By		Received By	
1 17:19 10/4/18		1		2 17:45		2	
Relinquished by Sampler		Received By		Relinquished By		Received By	
3 10/5/18 0940		3		4		4	
Relinquished by		Received By		Custody Seal #		On ice Cooler Temp	
5		5		1		18, 31°C	

JC75333: Chain of Custody

Page 1 of 4

SGS

SGS Sample Receipt Summary

Job Number: JC75333

Client: AMEC FOSTER WHEELER

Project: HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 10/5/2018 9:40:00 AM

Delivery Method: FedEx

Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (1.8); Cooler 2: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.2); Cooler 2: (2.5);

Cooler Security
Y or N
Y or N

1. Custody Seals Present: ☒ ☐	3. COC Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐	4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature
Y or N

1. Temp criteria achieved: ☒ ☐	IR Gun
2. Cooler temp verification:	
3. Cooler media:	Ice (Bag)
4. No. Coolers:	2

Quality Control Preservation
Y or N
N/A

1. Trip Blank present / cooler: ☒ ☐ ☐	
2. Trip Blank listed on COC: ☒ ☐ ☐	
3. Samples preserved properly: ☒ ☐ ☐	
4. VOCs headspace free: ☒ ☐ ☐	

Sample Integrity - Documentation
Y or N

1. Sample labels present on bottles: ☒ ☐	
2. Container labeling complete: ☒ ☐	
3. Sample container label / COC agree: ☒ ☐	

Sample Integrity - Condition
Y or N

1. Sample recvd within HT: ☒ ☐	
2. All containers accounted for: ☒ ☐	
3. Condition of sample:	Intact

Sample Integrity - Instructions
Y or N
N/A

1. Analysis requested is clear: ☒ ☐	
2. Bottles received for unspecified tests: ☐ ☒	
3. Sufficient volume recvd for analysis: ☒ ☐	
4. Compositing instructions clear: ☐ ☐ ☒	
5. Filtering instructions clear: ☐ ☐ ☒	

Test Strip Lot #s:

Other: (Specify)

Comments

-8: Received 2 - 40mL non-preserved TB vials. Each one is labeled with a different bottle order number.

SM089-02 Rev. Date 12/1/16

JC75333: Chain of Custody

Page 2 of 4

35 of 92

JC75333

-8 both bottles are the same and should be labelled TB-100418. Run for V8260SL

Job Change Order: JC75333

Requested Date: 4/22/2019 Received Date: 10/5/2018
Account Name: Honeywell International Inc. OMM Due Date: 10/19/2018
Project Description: HLAME: 30130-Altift Landfill, 579 Tift Street, Buffal Deliverable: COMMBN
C/O Initiated By: RP PM: RP TAT (Days): 2

Sample #: JC75333-2,3,4,5,6,7,8,5S,5D Change: Please no out 1,3-Dichlorobenzene and relog retrieve VR826012DCB
Dept: onoriginal and reissue.
TAT: 2

Above Changes Per: Ryan Belcher Date/Time: 4/22/2019 11:12:55 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.



MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D6046-MB	3D141813.D	1	10/10/18	DG	n/a	n/a	V3D6046

The QC reported here applies to the following samples:

Method: SW846 8260C

JC75333-4, JC75333-5, JC75333-6, JC75333-7, JC75333-8, JC75333-4R, JC75333-5R, JC75333-6R, JC75333-7R, JC75333-8R

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	95% 80-120%
17060-07-0	1,2-Dichloroethane-D4	107% 81-124%
2037-26-5	Toluene-D8	104% 80-120%
460-00-4	4-Bromofluorobenzene	103% 80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A7933-MB	1A185611.D	1	10/12/18	JP	n/a	n/a	V1A7933

The QC reported here applies to the following samples:

Method: SW846 8260C

JC75333-2, JC75333-3, JC75333-2R, JC75333-3R

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101%
17060-07-0	1,2-Dichloroethane-D4	99%
2037-26-5	Toluene-D8	106%
460-00-4	4-Bromofluorobenzene	104%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D6046-BS	3D141811.D	1	10/10/18	DG	n/a	n/a	V3D6046

The QC reported here applies to the following samples:

Method: SW846 8260C

JC75333-4, JC75333-5, JC75333-6, JC75333-7, JC75333-8, JC75333-4R, JC75333-5R, JC75333-6R, JC75333-7R, JC75333-8R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	45.6	91	80-120
108-90-7	Chlorobenzene	50	45.4	91	84-117
95-50-1	1,2-Dichlorobenzene	50	46.6	93	84-119
106-46-7	1,4-Dichlorobenzene	50	44.9	90	82-117
100-41-4	Ethylbenzene	50	46.3	93	80-120
1330-20-7	Xylene (total)	150	140	93	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	80-120%
17060-07-0	1,2-Dichloroethane-D4	106%	81-124%
2037-26-5	Toluene-D8	103%	80-120%
460-00-4	4-Bromofluorobenzene	102%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A7933-BS	1A185609.D	1	10/12/18	JP	n/a	n/a	V1A7933

The QC reported here applies to the following samples:

Method: SW846 8260C

JC75333-2, JC75333-3, JC75333-2R, JC75333-3R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	48.0	96	80-120
108-90-7	Chlorobenzene	50	47.9	96	84-117
95-50-1	1,2-Dichlorobenzene	50	47.8	96	84-119
106-46-7	1,4-Dichlorobenzene	50	46.8	94	82-117
100-41-4	Ethylbenzene	50	47.9	96	80-120
1330-20-7	Xylene (total)	150	143	95	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	96%	81-124%
2037-26-5	Toluene-D8	103%	80-120%
460-00-4	4-Bromofluorobenzene	103%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC75333-5MS	3D141816.D	1	10/10/18	DG	n/a	n/a	V3D6046
JC75333-5MSD	3D141817.D	1	10/10/18	DG	n/a	n/a	V3D6046
JC75333-5	3D141815.D	1	10/10/18	DG	n/a	n/a	V3D6046

The QC reported here applies to the following samples:

Method: SW846 8260C

JC75333-4, JC75333-5, JC75333-6, JC75333-7, JC75333-8, JC75333-4R, JC75333-5R, JC75333-6R, JC75333-7R, JC75333-8R

CAS No.	Compound	JC75333-5 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	50	50.0	100	50	48.6	97	3	54-136/10
108-90-7	Chlorobenzene	17.5	50	66.7	98	50	65.2	95	2	78-123/10
95-50-1	1,2-Dichlorobenzene	ND	50	51.7	103	50	48.9	98	6	77-123/11
106-46-7	1,4-Dichlorobenzene	ND	50	49.7	99	50	47.6	95	4	76-122/11
100-41-4	Ethylbenzene	ND	50	50.9	102	50	48.6	97	5	51-140/20
1330-20-7	Xylene (total)	ND	150	153	102	150	145	97	5	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC75333-5	Limits
1868-53-7	Dibromofluoromethane	97%	100%	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	114%	108%	108%	81-124%
2037-26-5	Toluene-D8	103%	101%	103%	80-120%
460-00-4	4-Bromofluorobenzene	103%	105%	105%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC75689-15MS	1A185627.D	1	10/12/18	JP	n/a	n/a	V1A7933
JC75689-15MSD	1A185628.D	1	10/12/18	JP	n/a	n/a	V1A7933
JC75689-15	1A185613.D	1	10/12/18	JP	n/a	n/a	V1A7933

The QC reported here applies to the following samples:

Method: SW846 8260C

JC75333-2, JC75333-3, JC75333-2R, JC75333-3R

CAS No.	Compound	JC75689-15 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	50	51.7	103	50	52.0	104	1	54-136/10
108-90-7	Chlorobenzene	ND	50	50.1	100	50	50.5	101	1	78-123/10
95-50-1	1,2-Dichlorobenzene	ND	50	50.3	101	50	50.6	101	1	77-123/11
106-46-7	1,4-Dichlorobenzene	ND	50	49.7	99	50	50.4	101	1	76-122/11
100-41-4	Ethylbenzene	ND	50	51.1	102	50	50.7	101	1	51-140/20
1330-20-7	Xylene (total)	ND	150	152	101	150	152	101	0	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC75689-15	Limits
1868-53-7	Dibromofluoromethane	102%	102%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	96%	97%	99%	81-124%
2037-26-5	Toluene-D8	104%	102%	106%	80-120%
460-00-4	4-Bromofluorobenzene	104%	104%	104%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: V1A7886-BFB

Injection Date: 09/13/18

Lab File ID: 1A184571.D

Injection Time: 18:55

Instrument ID: GCMS1A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	10830	19.0	Pass
75	30.0 - 60.0% of mass 95	26656	46.7	Pass
95	Base peak, 100% relative abundance	57029	100.0	Pass
96	5.0 - 9.0% of mass 95	3787	6.64	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	54629	95.8	Pass
175	5.0 - 9.0% of mass 174	4229	7.42 (7.74) ^a	Pass
176	95.0 - 101.0% of mass 174	53530	93.9 (98.0) ^a	Pass
177	5.0 - 9.0% of mass 176	3703	6.49 (6.92) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A7886-IC7886	1A184572.D	09/13/18	19:20	00:25	Initial cal 0.5
V1A7886-IC7886	1A184573.D	09/13/18	19:45	00:50	Initial cal 1
V1A7886-IC7886	1A184574.D	09/13/18	20:10	01:15	Initial cal 2
V1A7886-IC7886	1A184575.D	09/13/18	20:35	01:40	Initial cal 4
V1A7886-IC7886	1A184576.D	09/13/18	20:59	02:04	Initial cal 8
V1A7886-IC7886	1A184577.D	09/13/18	21:24	02:29	Initial cal 20
V1A7886-IC7886	1A184578.D	09/13/18	21:49	02:54	Initial cal 50
V1A7886-IC7886	1A184579.D	09/13/18	22:14	03:19	Initial cal 100
V1A7886-IC7886	1A184580.D	09/13/18	22:38	03:43	Initial cal 200
V1A7886-ICV7886	1A184583.D	09/13/18	23:53	04:58	Initial cal verification 50
V1A7886-ICV7886	1A184584.D	09/14/18	00:17	05:22	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: V1A7933-BFB

Injection Date: 10/12/18

Lab File ID: 1A185607.D

Injection Time: 06:18

Instrument ID: GCMS1A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	13067	18.2	Pass
75	30.0 - 60.0% of mass 95	33973	47.2	Pass
95	Base peak, 100% relative abundance	71949	100.0	Pass
96	5.0 - 9.0% of mass 95	4759	6.61	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	69965	97.2	Pass
175	5.0 - 9.0% of mass 174	5563	7.73 (7.95) ^a	Pass
176	95.0 - 101.0% of mass 174	67275	93.5 (96.2) ^a	Pass
177	5.0 - 9.0% of mass 176	4597	6.39 (6.83) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A7933-CC7886	1A185607.D	10/12/18	06:18	00:00	Continuing cal 20
V1A7933-BS	1A185609.D	10/12/18	07:12	00:54	Blank Spike
V1A7933-MB	1A185611.D	10/12/18	08:14	01:56	Method Blank
ZZZZZZ	1A185612.D	10/12/18	08:56	02:38	(unrelated sample)
JC75689-15	1A185613.D	10/12/18	09:20	03:02	(used for QC only; not part of job JC75333)
ZZZZZZ	1A185614.D	10/12/18	09:45	03:27	(unrelated sample)
ZZZZZZ	1A185615.D	10/12/18	10:10	03:52	(unrelated sample)
ZZZZZZ	1A185616.D	10/12/18	10:34	04:16	(unrelated sample)
ZZZZZZ	1A185617.D	10/12/18	10:59	04:41	(unrelated sample)
ZZZZZZ	1A185618.D	10/12/18	11:24	05:06	(unrelated sample)
ZZZZZZ	1A185619.D	10/12/18	11:59	05:41	(unrelated sample)
ZZZZZZ	1A185620.D	10/12/18	12:23	06:05	(unrelated sample)
ZZZZZZ	1A185621.D	10/12/18	12:48	06:30	(unrelated sample)
ZZZZZZ	1A185622.D	10/12/18	13:13	06:55	(unrelated sample)
ZZZZZZ	1A185623.D	10/12/18	13:38	07:20	(unrelated sample)
ZZZZZZ	1A185624.D	10/12/18	14:02	07:44	(unrelated sample)
ZZZZZZ	1A185626.D	10/12/18	14:52	08:34	(unrelated sample)
JC75689-15MS	1A185627.D	10/12/18	15:17	08:59	Matrix Spike
JC75689-15MSD	1A185628.D	10/12/18	15:41	09:23	Matrix Spike Duplicate
JC75333-2	1A185630.D	10/12/18	16:31	10:13	SUMP 1-100418
JC75333-2R	1A185630R.D	10/12/18	16:31	10:13	SUMP 1-100418
JC75333-3R	1A185631R.D	10/12/18	16:55	10:37	SUMP 2-100418
JC75333-3	1A185631.D	10/12/18	16:55	10:37	SUMP 2-100418

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: V3D6033-BFB

Injection Date: 10/01/18

Lab File ID: 3D141544.D

Injection Time: 19:35

Instrument ID: GCMS3D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	12028	18.6	Pass
75	30.0 - 60.0% of mass 95	31405	48.6	Pass
95	Base peak, 100% relative abundance	64565	100.0	Pass
96	5.0 - 9.0% of mass 95	4310	6.68	Pass
173	Less than 2.0% of mass 174	416	0.64 (0.66) ^a	Pass
174	50.0 - 120.0% of mass 95	63186	97.9	Pass
175	5.0 - 9.0% of mass 174	4849	7.51 (7.67) ^a	Pass
176	95.0 - 101.0% of mass 174	62082	96.2 (98.3) ^a	Pass
177	5.0 - 9.0% of mass 176	3920	6.07 (6.31) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D6033-IC6033	3D141545.D	10/01/18	20:00	00:25	Initial cal 0.2
V3D6033-IC6033	3D141546.D	10/01/18	20:26	00:51	Initial cal 0.5
V3D6033-IC6033	3D141547.D	10/01/18	20:51	01:16	Initial cal 1
V3D6033-IC6033	3D141548.D	10/01/18	21:16	01:41	Initial cal 2
V3D6033-IC6033	3D141549.D	10/01/18	21:41	02:06	Initial cal 4
V3D6033-IC6033	3D141550.D	10/01/18	22:06	02:31	Initial cal 8
V3D6033-IC6033	3D141551.D	10/01/18	22:31	02:56	Initial cal 20
V3D6033-ICC6033	3D141552.D	10/01/18	22:57	03:22	Initial cal 50
V3D6033-IC6033	3D141553.D	10/01/18	23:22	03:47	Initial cal 100
V3D6033-IC6033	3D141554.D	10/01/18	23:47	04:12	Initial cal 200
V3D6033-ICV6033	3D141557.D	10/02/18	01:02	05:27	Initial cal verification 50
V3D6033-ICV6033	3D141558.D	10/02/18	01:27	05:52	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: V3D6033-BFB3

Injection Date: 10/02/18

Lab File ID: 3D141563.D

Injection Time: 16:33

Instrument ID: GCMS3D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	13120	19.2	Pass
75	30.0 - 60.0% of mass 95	33408	49.0	Pass
95	Base peak, 100% relative abundance	68165	100.0	Pass
96	5.0 - 9.0% of mass 95	4398	6.45	Pass
173	Less than 2.0% of mass 174	507	0.74 (0.77) ^a	Pass
174	50.0 - 120.0% of mass 95	65557	96.2	Pass
175	5.0 - 9.0% of mass 174	4963	7.28 (7.57) ^a	Pass
176	95.0 - 101.0% of mass 174	63618	93.3 (97.0) ^a	Pass
177	5.0 - 9.0% of mass 176	4171	6.12 (6.56) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D6033-ICV6033	3D141564.D	10/02/18	17:13	00:40	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: V3D6046-BFB

Injection Date: 10/10/18

Lab File ID: 3D141809.D

Injection Time: 16:36

Instrument ID: GCMS3D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	15369	20.7	Pass
75	30.0 - 60.0% of mass 95	37133	50.1	Pass
95	Base peak, 100% relative abundance	74176	100.0	Pass
96	5.0 - 9.0% of mass 95	5136	6.92	Pass
173	Less than 2.0% of mass 174	894	1.21 (1.31) ^a	Pass
174	50.0 - 120.0% of mass 95	68461	92.3	Pass
175	5.0 - 9.0% of mass 174	5235	7.06 (7.65) ^a	Pass
176	95.0 - 101.0% of mass 174	65779	88.7 (96.1) ^a	Pass
177	5.0 - 9.0% of mass 176	4492	6.06 (6.83) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D6046-CC6033	3D141809.D	10/10/18	16:36	00:00	Continuing cal 50
V3D6046-BS	3D141811.D	10/10/18	17:37	01:01	Blank Spike
V3D6046-MB	3D141813.D	10/10/18	18:27	01:51	Method Blank
JC75333-8	3D141814.D	10/10/18	18:53	02:17	TB-100418
JC75333-8R	3D141814R.D	10/10/18	18:53	02:17	TB-100418
JC75333-5R	3D141815R.D	10/10/18	19:18	02:42	SUMP 4-100418
JC75333-5	3D141815.D	10/10/18	19:18	02:42	SUMP 4-100418
JC75333-5MS	3D141816.D	10/10/18	19:43	03:07	Matrix Spike
JC75333-5MSD	3D141817.D	10/10/18	20:09	03:33	Matrix Spike Duplicate
JC75333-4	3D141821.D	10/10/18	21:50	05:14	SUMP 3-100418
JC75333-4R	3D141821R.D	10/10/18	21:50	05:14	SUMP 3-100418
JC75333-6	3D141822.D	10/10/18	22:15	05:39	MW2-100418
JC75333-6R	3D141822R.D	10/10/18	22:15	05:39	MW2-100418
JC75333-7	3D141823.D	10/10/18	22:40	06:04	SUMP 4-100418-FDUP
JC75333-7R	3D141823R.D	10/10/18	22:40	06:04	SUMP 4-100418-FDUP
ZZZZZZ	3D141824.D	10/10/18	23:05	06:29	(unrelated sample)
ZZZZZZ	3D141825.D	10/10/18	23:31	06:55	(unrelated sample)
ZZZZZZ	3D141826.D	10/10/18	23:56	07:20	(unrelated sample)
ZZZZZZ	3D141827.D	10/11/18	00:21	07:45	(unrelated sample)
ZZZZZZ	3D141828.D	10/11/18	00:47	08:11	(unrelated sample)
ZZZZZZ	3D141829.D	10/11/18	01:12	08:36	(unrelated sample)

Surrogate Recovery Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Method: SW846 8260C

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC75333-2	1A185630.D	103	100	106	104
JC75333-3	1A185631.D	103	101	106	106
JC75333-4	3D141821.D	97	107	103	104
JC75333-5	3D141815.D	97	108	103	105
JC75333-6	3D141822.D	97	109	104	104
JC75333-7	3D141823.D	99	111	103	104
JC75333-8	3D141814.D	96	108	103	103
JC75333-2R	1A185630R.D	103	100	106	104
JC75333-3R	1A185631R.D	103	101	106	106
JC75333-4R	3D141821R.D	97	107	103	104
JC75333-5R	3D141815R.D	97	108	103	105
JC75333-6R	3D141822R.D	97	109	104	104
JC75333-7R	3D141823R.D	99	111	103	104
JC75333-8R	3D141814R.D	96	108	103	103
JC75333-5MS	3D141816.D	97	114	103	103
JC75333-5MSD	3D141817.D	100	108	101	105
JC75689-15MS	1A185627.D	102	96	104	104
JC75689-15MSD	1A185628.D	102	97	102	104
V1A7933-BS	1A185609.D	101	96	103	103
V1A7933-MB	1A185611.D	101	99	106	104
V3D6046-BS	3D141811.D	94	106	103	102
V3D6046-MB	3D141813.D	95	107	104	103

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

80-120%

S2 = 1,2-Dichloroethane-D4

81-124%

S3 = Toluene-D8

80-120%

S4 = 4-Bromofluorobenzene

80-120%

6.5.1

6



MS Semi-volatiles

QC Data Summaries

7

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15772-MB1	5P54439.D	1	10/12/18	AR	10/11/18	OP15772	E5P2584

The QC reported here applies to the following samples:

Method: SW846 8270D

JC75333-1, JC75333-6, JC75333-7

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	38% 10-110%
4165-62-2	Phenol-d5	28% 10-110%
118-79-6	2,4,6-Tribromophenol	86% 36-151%
4165-60-0	Nitrobenzene-d5	89% 34-128%
321-60-8	2-Fluorobiphenyl	75% 38-119%
1718-51-0	Terphenyl-d14	106% 26-129%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	unknown	13.36	31	ug/l	J
	Total TIC, Semi-Volatile		31	ug/l	J

Method Blank Summary

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15772-MB1	P125931.D	1	10/17/18	CS	10/11/18	OP15772	EP5674

The QC reported here applies to the following samples:

Method: SW846 8270D

JC75333-1, JC75333-6, JC75333-7

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	46% 10-110%
4165-62-2	Phenol-d5	33% 10-110%
118-79-6	2,4,6-Tribromophenol	85% 36-151%
4165-60-0	Nitrobenzene-d5	73% 34-128%
321-60-8	2-Fluorobiphenyl	71% 38-119%
1718-51-0	Terphenyl-d14	113% 26-129%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	unknown	14.55	26	ug/l	J
	Total TIC, Semi-Volatile		26	ug/l	J

Method Blank Summary

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP16224-MB1	M149928.D	1	10/30/18	NA	10/29/18	OP16224	EM6396

The QC reported here applies to the following samples: Method: SW846 8270D

JC75333-5

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	29% 10-110%
4165-62-2	Phenol-d5	21% 10-110%
118-79-6	2,4,6-Tribromophenol	76% 36-151%
4165-60-0	Nitrobenzene-d5	68% 34-128%
321-60-8	2-Fluorobiphenyl	70% 38-119%
1718-51-0	Terphenyl-d14	72% 26-129%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike Summary

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15772-BS1	5P54440.D	1	10/12/18	AR	10/11/18	OP15772	E5P2584

The QC reported here applies to the following samples: Method: SW846 8270D

JC75333-1, JC75333-6, JC75333-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-47-8	4-Chloroaniline	50	22.9	46	17-87
91-20-3	Naphthalene	50	41.3	83	29-110

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	56%	10-110%
4165-62-2	Phenol-d5	43%	10-110%
118-79-6	2,4,6-Tribromophenol	108%	36-151%
4165-60-0	Nitrobenzene-d5	112%	34-128%
321-60-8	2-Fluorobiphenyl	89%	38-119%
1718-51-0	Terphenyl-d14	111%	26-129%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP16224-BS1	M149929.D	1	10/30/18	NA	10/29/18	OP16224	EM6396

The QC reported here applies to the following samples: Method: SW846 8270D

JC75333-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-47-8	4-Chloroaniline	50	19.5	39	17-87
91-20-3	Naphthalene	50	32.9	66	29-110

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	42%	10-110%
4165-62-2	Phenol-d5	30%	10-110%
118-79-6	2,4,6-Tribromophenol	82%	36-151%
4165-60-0	Nitrobenzene-d5	68%	34-128%
321-60-8	2-Fluorobiphenyl	70%	38-119%
1718-51-0	Terphenyl-d14	85%	26-129%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15772-MS	P125945.D	1	10/17/18	CS	10/11/18	OP15772	EP5674
OP15772-MSD	P125946.D	1	10/17/18	CS	10/11/18	OP15772	EP5674
JC75333-1	P125947.D	1	10/17/18	CS	10/11/18	OP15772	EP5674

The QC reported here applies to the following samples: Method: SW846 8270D

JC75333-1, JC75333-6, JC75333-7

CAS No.	Compound	JC75333-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-47-8	4-Chloroaniline	9.2	95.2	41.7	34	95.2	60.8	54	37	10-110/49
91-20-3	Naphthalene	ND	95.2	69.3	73	95.2	72.8	76	5	24-119/33

CAS No.	Surrogate Recoveries	MS	MSD	JC75333-1	Limits
367-12-4	2-Fluorophenol	61%	69%		10-110%
4165-62-2	Phenol-d5	54%	61%		10-110%
118-79-6	2,4,6-Tribromophenol	98%	104%		36-151%
4165-60-0	Nitrobenzene-d5	76%	81%	70%	34-128%
321-60-8	2-Fluorobiphenyl	69%	73%	61%	38-119%
1718-51-0	Terphenyl-d14	86%	108%	53%	26-129%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP16224-MS	M149933.D	1	10/30/18	NA	10/29/18	OP16224	EM6396
OP16224-MSD	M149934.D	1	10/30/18	NA	10/29/18	OP16224	EM6396
JC75333-5 ^a	M149930.D	1	10/30/18	NA	10/29/18	OP16224	EM6396

The QC reported here applies to the following samples: Method: SW846 8270D

JC75333-5

CAS No.	Compound	JC75333-5 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-47-8	4-Chloroaniline	ND	47.6	27.4	58	47.6	29.4	62	7	10-110/49
91-20-3	Naphthalene	ND	47.6	29.2	61	47.6	29.8	63	2	24-119/33

CAS No.	Surrogate Recoveries	MS	MSD	JC75333-5	Limits
367-12-4	2-Fluorophenol	37%	42%	36%	10-110%
4165-62-2	Phenol-d5	28%	33%	25%	10-110%
118-79-6	2,4,6-Tribromophenol	85%	91%	93%	36-151%
4165-60-0	Nitrobenzene-d5	68%	68%	66%	34-128%
321-60-8	2-Fluorobiphenyl	70%	71%	69%	38-119%
1718-51-0	Terphenyl-d14	84%	73%	73%	26-129%

(a) Sample extracted outside the holding time.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E5P2557-DFTPP

Injection Date: 09/20/18

Lab File ID: 5P53847.D

Injection Time: 03:21

Instrument ID: GCMS5P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	39025	31.8	Pass
68	Less than 2.0% of mass 69	89	0.07 (0.16) ^a	Pass
69	Mass 69 relative abundance	54148	44.1	Pass
70	Less than 2.0% of mass 69	267	0.22 (0.49) ^a	Pass
127	40.0 - 60.0% of mass 198	69111	56.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	122658	100.0	Pass
199	5.0 - 9.0% of mass 198	8686	7.08	Pass
275	10.0 - 30.0% of mass 198	32651	26.6	Pass
365	1.0 - 100.0% of mass 198	3787	3.09	Pass
441	Present, but less than mass 443	9813	8.00 (70.6) ^b	Pass
442	40.0 - 100.0% of mass 198	69962	57.0	Pass
443	17.0 - 23.0% of mass 442	13909	11.3 (19.9) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P2557-IC2557	5P53848.D	09/20/18	04:42	01:21	Initial cal 100
E5P2557-IC2557	5P53849.D	09/20/18	05:08	01:47	Initial cal 80
E5P2557-ICC2557	5P53850.D	09/20/18	05:33	02:12	Initial cal 50
E5P2557-IC2557	5P53851.D	09/20/18	05:57	02:36	Initial cal 25
E5P2557-IC2557	5P53852.D	09/20/18	06:22	03:01	Initial cal 10
E5P2557-IC2557	5P53853.D	09/20/18	06:47	03:26	Initial cal 5
E5P2557-IC2557	5P53854.D	09/20/18	07:12	03:51	Initial cal 2
E5P2557-IC2557	5P53855.D	09/20/18	07:36	04:15	Initial cal 1
E5P2557-ICV2557	5P53856.D	09/20/18	08:01	04:40	Initial cal verification 50
E5P2557-ICV2557	5P53857.D	09/20/18	08:26	05:05	Initial cal verification 50
E5P2557-ICV2557	5P53858.D	09/20/18	08:51	05:30	Initial cal verification 50
E5P2557-ICV2557	5P53859.D	09/20/18	09:16	05:55	Initial cal verification 50
E5P2557-ICV2557	5P53860.D	09/20/18	09:41	06:20	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E5P2558-DFTPP

Injection Date: 09/20/18

Lab File ID: 5P53861.D

Injection Time: 10:02

Instrument ID: GCMS5P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	44960	31.6	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	62605	44.0	Pass
70	Less than 2.0% of mass 69	345	0.24 (0.55) ^a	Pass
127	40.0 - 60.0% of mass 198	80018	56.2	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	142349	100.0	Pass
199	5.0 - 9.0% of mass 198	9239	6.49	Pass
275	10.0 - 30.0% of mass 198	34653	24.3	Pass
365	1.0 - 100.0% of mass 198	3746	2.63	Pass
441	Present, but less than mass 443	8754	6.15 (70.8) ^b	Pass
442	40.0 - 100.0% of mass 198	62122	43.6	Pass
443	17.0 - 23.0% of mass 442	12367	8.69 (19.9) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P2558-IC2558	5P53862.D	09/20/18	10:15	00:13	Initial cal 100
E5P2558-IC2558	5P53863.D	09/20/18	10:39	00:37	Initial cal 80
E5P2558-ICC2558	5P53864.D	09/20/18	11:05	01:03	Initial cal 50
E5P2558-IC2558	5P53865.D	09/20/18	11:29	01:27	Initial cal 25
E5P2558-IC2558	5P53866.D	09/20/18	11:55	01:53	Initial cal 10
E5P2558-IC2558	5P53867.D	09/20/18	12:20	02:18	Initial cal 5
E5P2558-IC2558	5P53868.D	09/20/18	12:44	02:42	Initial cal 2
E5P2558-IC2558	5P53869.D	09/20/18	13:09	03:07	Initial cal 1
E5P2558-ICV2558	5P53870.D	09/20/18	13:34	03:32	Initial cal verification 50
E5P2558-ICV2558	5P53871A.D	09/20/18	14:16	04:14	Initial cal verification 50
E5P2558-ICV2558	5P53872.D	09/20/18	14:41	04:39	Initial cal verification 50
E5P2558-ICV2558	5P53873.D	09/20/18	15:06	05:04	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E5P2559-DFTPP

Injection Date: 09/20/18

Lab File ID: 5P53874.D

Injection Time: 15:26

Instrument ID: GCMS5P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	44200	31.4	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	60485	43.0	Pass
70	Less than 2.0% of mass 69	332	0.24 (0.55) ^a	Pass
127	40.0 - 60.0% of mass 198	77898	55.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	140797	100.0	Pass
199	5.0 - 9.0% of mass 198	9851	7.00	Pass
275	10.0 - 30.0% of mass 198	34730	24.7	Pass
365	1.0 - 100.0% of mass 198	3546	2.52	Pass
441	Present, but less than mass 443	9162	6.51 (69.7) ^b	Pass
442	40.0 - 100.0% of mass 198	62405	44.3	Pass
443	17.0 - 23.0% of mass 442	13150	9.34 (21.1) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P2559-IC2559	5P53875.D	09/20/18	15:40	00:14	Initial cal 100
E5P2559-IC2559	5P53876.D	09/20/18	16:05	00:39	Initial cal 80
E5P2559-ICC2559	5P53877.D	09/20/18	16:31	01:05	Initial cal 50
E5P2559-IC2559	5P53878.D	09/20/18	16:56	01:30	Initial cal 25
E5P2559-IC2559	5P53879.D	09/20/18	17:20	01:54	Initial cal 10
E5P2559-IC2559	5P53880.D	09/20/18	17:46	02:20	Initial cal 5
E5P2559-IC2559	5P53881.D	09/20/18	18:11	02:45	Initial cal 2
E5P2559-IC2559	5P53882.D	09/20/18	18:36	03:10	Initial cal 1
E5P2559-ICV2559	5P53883.D	09/20/18	19:01	03:35	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample: E5P2584-DFTPP

Injection Date: 10/12/18

Lab File ID: 5P54435.D

Injection Time: 09:03

Instrument ID: GCMS5P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	61162	35.7	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	86808	50.6	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
127	40.0 - 60.0% of mass 198	89968	52.5	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	171499	100.0	Pass
199	5.0 - 9.0% of mass 198	11743	6.85	Pass
275	10.0 - 30.0% of mass 198	49131	28.6	Pass
365	1.0 - 100.0% of mass 198	6598	3.85	Pass
441	Present, but less than mass 443	12968	7.56 (67.9) ^b	Pass
442	40.0 - 100.0% of mass 198	97227	56.7	Pass
443	17.0 - 23.0% of mass 442	19088	11.1 (19.6) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P2584-CC2557	5P54436.D	10/12/18	09:17	00:14	Continuing cal 25
E5P2584-CC2558	5P54437.D	10/12/18	09:42	00:39	Continuing cal 25
E5P2584-CC2559	5P54437A.D	10/12/18	09:42	00:39	Continuing cal 25
OP15597-MB1	5P54438.D	10/12/18	10:12	01:09	Method Blank
OP15772-MB1	5P54439.D	10/12/18	10:36	01:33	Method Blank
OP15772-BS1	5P54440.D	10/12/18	11:01	01:58	Blank Spike
OP15711-MB1	5P54441.D	10/12/18	11:27	02:24	Method Blank
OP15711-BS	5P54442.D	10/12/18	11:52	02:49	Blank Spike
ZZZZZZ	5P54444.D	10/12/18	12:42	03:39	(unrelated sample)
ZZZZZZ	5P54446.D	10/12/18	13:32	04:29	(unrelated sample)
ZZZZZZ	5P54447.D	10/12/18	13:57	04:54	(unrelated sample)
JC74881-1A	5P54448.D	10/12/18	14:22	05:19	(used for QC only; not part of job JC75333)
ZZZZZZ	5P54449.D	10/12/18	14:47	05:44	(unrelated sample)
ZZZZZZ	5P54450.D	10/12/18	15:12	06:09	(unrelated sample)
ZZZZZZ	5P54451.D	10/12/18	15:37	06:34	(unrelated sample)
ZZZZZZ	5P54452.D	10/12/18	16:02	06:59	(unrelated sample)
ZZZZZZ	5P54453.D	10/12/18	16:27	07:24	(unrelated sample)
OP15711-MS	5P54455.D	10/12/18	17:17	08:14	Matrix Spike
OP15711-MSD	5P54456.D	10/12/18	17:42	08:39	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tift Street, Buffalo, NY

Sample:	E5P2584-DFTPP	Injection Date:	10/12/18
Lab File ID:	5P54435.D	Injection Time:	09:03
Instrument ID:	GCMS5P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	5P54457.D	10/12/18	18:07	09:04	(unrelated sample)

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E5P2591-DFTPP

Injection Date: 10/18/18

Lab File ID: 5P54592.D

Injection Time: 09:20

Instrument ID: GCMS5P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	52161	38.1	Pass
68	Less than 2.0% of mass 69	170	0.12 (0.24) ^a	Pass
69	Mass 69 relative abundance	70050	51.1	Pass
70	Less than 2.0% of mass 69	109	0.08 (0.16) ^a	Pass
127	40.0 - 60.0% of mass 198	72074	52.6	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	136957	100.0	Pass
199	5.0 - 9.0% of mass 198	9256	6.76	Pass
275	10.0 - 30.0% of mass 198	36874	26.9	Pass
365	1.0 - 100.0% of mass 198	5055	3.69	Pass
441	Present, but less than mass 443	10422	7.61 (80.3) ^b	Pass
442	40.0 - 100.0% of mass 198	69464	50.7	Pass
443	17.0 - 23.0% of mass 442	12986	9.48 (18.7) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P2591-CC2557	5P54593.D	10/18/18	09:40	00:20	Continuing cal 25
E5P2591-CC2559	5P54594A.D	10/18/18	10:09	00:49	Continuing cal 25
E5P2591-CC2558	5P54594.D	10/18/18	10:09	00:49	Continuing cal 25
OP15690-MB1	5P54595.D	10/18/18	10:33	01:13	Method Blank
ZZZZZZ	5P54596.D	10/18/18	10:58	01:38	(unrelated sample)
ZZZZZZ	5P54597.D	10/18/18	11:22	02:02	(unrelated sample)
ZZZZZZ	5P54598.D	10/18/18	11:46	02:26	(unrelated sample)
ZZZZZZ	5P54598.D	10/18/18	11:46	02:26	(unrelated sample)
ZZZZZZ	5P54599.D	10/18/18	12:10	02:50	(unrelated sample)
ZZZZZZ	5P54600.D	10/18/18	12:34	03:14	(unrelated sample)
ZZZZZZ	5P54600.D	10/18/18	12:34	03:14	(unrelated sample)
JC75333-5	5P54601.D	10/18/18	12:59	03:39	SUMP 4-100418
JC75333-6	5P54602.D	10/18/18	13:23	04:03	MW2-100418
JC75333-7	5P54603.D	10/18/18	13:47	04:27	SUMP 4-100418-FDUP
ZZZZZZ	5P54604.D	10/18/18	14:11	04:51	(unrelated sample)
ZZZZZZ	5P54605.D	10/18/18	14:35	05:15	(unrelated sample)
ZZZZZZ	5P54606.D	10/18/18	14:59	05:39	(unrelated sample)
ZZZZZZ	5P54607.D	10/18/18	15:23	06:03	(unrelated sample)
ZZZZZZ	5P54608.D	10/18/18	15:48	06:28	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E5P2591-DFTPP	Injection Date:	10/18/18
Lab File ID:	5P54592.D	Injection Time:	09:20
Instrument ID:	GCMS5P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	5P54610.D	10/18/18	16:12	06:52	(unrelated sample)
ZZZZZZ	5P54610.D	10/18/18	16:12	06:52	(unrelated sample)
ZZZZZZ	5P54609.D	10/18/18	16:36	07:16	(unrelated sample)

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EM6387-DFTPP

Injection Date: 10/22/18

Lab File ID: M149728.D

Injection Time: 16:50

Instrument ID: GCMSM

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	18420	32.7	Pass
68	Less than 2.0% of mass 69	132	0.23 (0.54) ^a	Pass
69	Mass 69 relative abundance	24279	43.1	Pass
70	Less than 2.0% of mass 69	47	0.08 (0.19) ^a	Pass
127	40.0 - 60.0% of mass 198	31223	55.4	Pass
197	Less than 1.0% of mass 198	303	0.54	Pass
198	Base peak, 100% relative abundance	56376	100.0	Pass
199	5.0 - 9.0% of mass 198	4196	7.44	Pass
275	10.0 - 30.0% of mass 198	12896	22.9	Pass
365	1.0 - 100.0% of mass 198	2301	4.08	Pass
441	Present, but less than mass 443	6967	12.4 (84.6) ^b	Pass
442	40.0 - 100.0% of mass 198	43472	77.1	Pass
443	17.0 - 23.0% of mass 442	8239	14.6 (19.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6387-IC6387	M149729.D	10/22/18	17:02	00:12	Initial cal 100
EM6387-IC6387	M149730.D	10/22/18	17:31	00:41	Initial cal 80
EM6387-ICC6387	M149731.D	10/22/18	18:00	01:10	Initial cal 50
EM6387-IC6387	M149732.D	10/22/18	18:30	01:40	Initial cal 25
EM6387-IC6387	M149733.D	10/22/18	18:59	02:09	Initial cal 10
EM6387-IC6387	M149734.D	10/22/18	19:28	02:38	Initial cal 5
EM6387-IC6387	M149735.D	10/22/18	19:58	03:08	Initial cal 2
EM6387-IC6387	M149736.D	10/22/18	20:27	03:37	Initial cal 1
EM6387-ICV6387	M149737.D	10/22/18	20:56	04:06	Initial cal verification 50
EM6387-ICV6387	M149738.D	10/22/18	21:26	04:36	Initial cal verification 50
EM6387-ICV6387	M149739.D	10/22/18	21:55	05:05	Initial cal verification 50
EM6387-ICV6387	M149740.D	10/22/18	22:24	05:34	Initial cal verification 50
EM6387-ICV6387	M149741.D	10/22/18	22:53	06:03	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EM6388-DFTPP

Injection Date: 10/23/18

Lab File ID: M149743.D

Injection Time: 00:02

Instrument ID: GCMSM

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	24277	33.9	Pass
68	Less than 2.0% of mass 69	302	0.42 (0.92) ^a	Pass
69	Mass 69 relative abundance	32973	46.0	Pass
70	Less than 2.0% of mass 69	100	0.14 (0.30) ^a	Pass
127	40.0 - 60.0% of mass 198	39952	55.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	71640	100.0	Pass
199	5.0 - 9.0% of mass 198	4740	6.62	Pass
275	10.0 - 30.0% of mass 198	16042	22.4	Pass
365	1.0 - 100.0% of mass 198	2620	3.66	Pass
441	Present, but less than mass 443	8209	11.5 (83.1) ^b	Pass
442	40.0 - 100.0% of mass 198	52455	73.2	Pass
443	17.0 - 23.0% of mass 442	9878	13.8 (18.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6388-IC6388	M149744.D	10/23/18	00:27	00:25	Initial cal 1
EM6388-IC6388	M149745.D	10/23/18	00:56	00:54	Initial cal 2
EM6388-IC6388	M149746.D	10/23/18	01:25	01:23	Initial cal 5
EM6388-IC6388	M149747.D	10/23/18	01:54	01:52	Initial cal 10
EM6388-IC6388	M149748.D	10/23/18	02:24	02:22	Initial cal 25
EM6388-ICC6388	M149749.D	10/23/18	02:53	02:51	Initial cal 50
EM6388-IC6388	M149750.D	10/23/18	03:22	03:20	Initial cal 80
EM6388-IC6388	M149751.D	10/23/18	03:51	03:49	Initial cal 100
EM6388-ICV6388	M149752.D	10/23/18	04:21	04:19	Initial cal verification 50
EM6388-ICV6388	M149753.D	10/23/18	04:50	04:48	Initial cal verification 50
EM6388-ICV6388	M149754.D	10/23/18	05:19	05:17	Initial cal verification 50
EM6388-ICV6388	M149756.D	10/23/18	06:18	06:16	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EM6396-DFTPP

Injection Date: 10/30/18

Lab File ID: M149925.D

Injection Time: 09:10

Instrument ID: GCMSM

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	31593	36.2	Pass
68	Less than 2.0% of mass 69	529	0.61 (1.26) ^a	Pass
69	Mass 69 relative abundance	42036	48.2	Pass
70	Less than 2.0% of mass 69	111	0.13 (0.26) ^a	Pass
127	40.0 - 60.0% of mass 198	51685	59.2	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	87258	100.0	Pass
199	5.0 - 9.0% of mass 198	5939	6.81	Pass
275	10.0 - 30.0% of mass 198	20100	23.0	Pass
365	1.0 - 100.0% of mass 198	3513	4.03	Pass
441	Present, but less than mass 443	9603	11.0 (80.2) ^b	Pass
442	40.0 - 100.0% of mass 198	63018	72.2	Pass
443	17.0 - 23.0% of mass 442	11976	13.7 (19.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6396-CC6387	M149926A.D	10/30/18	09:26	00:16	Continuing cal 50
EM6396-CC6388	M149927.D	10/30/18	09:55	00:45	Continuing cal 50
OP16224-MB1	M149928.D	10/30/18	10:29	01:19	Method Blank
OP16224-BS1	M149929.D	10/30/18	10:58	01:48	Blank Spike
OP16050-MB1	M149948.D	10/30/18	11:27	02:17	Method Blank
JC75333-5	M149930.D	10/30/18	11:57	02:47	SUMP 4-100418
ZZZZZZ	M149931.D	10/30/18	12:26	03:16	(unrelated sample)
ZZZZZZ	M149949.D	10/30/18	12:55	03:45	(unrelated sample)
ZZZZZZ	M149950.D	10/30/18	13:24	04:14	(unrelated sample)
ZZZZZZ	M149932.D	10/30/18	13:54	04:44	(unrelated sample)
ZZZZZZ	M149935.D	10/30/18	14:23	05:13	(unrelated sample)
OP16224-MS	M149933.D	10/30/18	14:52	05:42	Matrix Spike
OP16224-MSD	M149934.D	10/30/18	15:22	06:12	Matrix Spike Duplicate
ZZZZZZ	M149936A.D	10/30/18	15:53	06:43	(unrelated sample)
ZZZZZZ	M149937.D	10/30/18	16:23	07:13	(unrelated sample)
ZZZZZZ	M149938.D	10/30/18	16:52	07:42	(unrelated sample)
ZZZZZZ	M149939.D	10/30/18	17:22	08:12	(unrelated sample)
ZZZZZZ	M149940.D	10/30/18	17:51	08:41	(unrelated sample)
ZZZZZZ	M149941.D	10/30/18	18:21	09:11	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample:	EM6396-DFTPP	Injection Date:	10/30/18
Lab File ID:	M149925.D	Injection Time:	09:10
Instrument ID:	GCMSM		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M149942.D	10/30/18	18:50	09:40	(unrelated sample)
ZZZZZZ	M149943.D	10/30/18	19:20	10:10	(unrelated sample)
ZZZZZZ	M149944.D	10/30/18	19:49	10:39	(unrelated sample)
ZZZZZZ	M149945.D	10/30/18	20:19	11:09	(unrelated sample)
ZZZZZZ	M149946.D	10/30/18	20:48	11:38	(unrelated sample)

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5641-DFTPP

Injection Date: 09/13/18

Lab File ID: P125233.D

Injection Time: 22:14

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	56370	40.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	66112	47.2	Pass
70	Less than 2.0% of mass 69	248	0.18 (0.38) ^a	Pass
127	40.0 - 60.0% of mass 198	79538	56.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	139965	100.0	Pass
199	5.0 - 9.0% of mass 198	9752	6.97	Pass
275	10.0 - 30.0% of mass 198	38200	27.3	Pass
365	1.0 - 100.0% of mass 198	5516	3.94	Pass
441	Present, but less than mass 443	15026	10.7 (81.8) ^b	Pass
442	40.0 - 100.0% of mass 198	94994	67.9	Pass
443	17.0 - 23.0% of mass 442	18359	13.1 (19.3) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5641-IC5641	P125234.D	09/13/18	23:04	00:50	Initial cal 100
EP5641-IC5641	P125235.D	09/13/18	23:31	01:17	Initial cal 80
EP5641-ICC5641	P125236.D	09/13/18	23:59	01:45	Initial cal 50
EP5641-IC5641	P125237.D	09/14/18	00:26	02:12	Initial cal 25
EP5641-IC5641	P125238.D	09/14/18	00:54	02:40	Initial cal 10
EP5641-IC5641	P125239.D	09/14/18	01:22	03:08	Initial cal 5
EP5641-IC5641	P125240.D	09/14/18	01:49	03:35	Initial cal 2
EP5641-IC5641	P125241.D	09/14/18	02:17	04:03	Initial cal 1
EP5641-ICV5641	P125242.D	09/14/18	02:44	04:30	Initial cal verification 50
EP5641-ICV5641	P125243.D	09/14/18	03:12	04:58	Initial cal verification 50
EP5641-ICV5641	P125244.D	09/14/18	03:40	05:26	Initial cal verification 50
EP5641-ICV5641	P125245.D	09/14/18	04:08	05:54	Initial cal verification 50
EP5641-ICV5641	P125246.D	09/14/18	04:35	06:21	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5642-DFTPP

Injection Date: 09/14/18

Lab File ID: P125247A.D

Injection Time: 05:49

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	52814	47.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	59152	52.9	Pass
70	Less than 2.0% of mass 69	287	0.26 (0.49) ^a	Pass
127	40.0 - 60.0% of mass 198	66848	59.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	111736	100.0	Pass
199	5.0 - 9.0% of mass 198	7930	7.10	Pass
275	10.0 - 30.0% of mass 198	29960	26.8	Pass
365	1.0 - 100.0% of mass 198	4593	4.11	Pass
441	Present, but less than mass 443	12252	11.0 (78.1) ^b	Pass
442	40.0 - 100.0% of mass 198	80944	72.4	Pass
443	17.0 - 23.0% of mass 442	15690	14.0 (19.4) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5642-IC5642	P125248A.D	09/14/18	06:03	00:14	Initial cal 100
EP5642-IC5642	P125249.D	09/14/18	06:30	00:41	Initial cal 80
EP5642-ICC5642	P125250.D	09/14/18	06:57	01:08	Initial cal 50
EP5642-IC5642	P125251A.D	09/14/18	08:39	02:50	Initial cal 25
EP5642-IC5642	P125252.D	09/14/18	09:06	03:17	Initial cal 10
EP5642-IC5642	P125253.D	09/14/18	09:33	03:44	Initial cal 5
EP5642-IC5642	P125254.D	09/14/18	10:00	04:11	Initial cal 2
EP5642-IC5642	P125255.D	09/14/18	10:28	04:39	Initial cal 1
EP5642-ICV5642	P125256.D	09/14/18	10:55	05:06	Initial cal verification 50
EP5642-ICV5642	P125257.D	09/14/18	11:23	05:34	Initial cal verification 50
EP5642-ICV5642	P125258.D	09/14/18	11:50	06:01	Initial cal verification 50
EP5642-ICV5642	P125259.D	09/14/18	12:18	06:29	Initial cal verification 50
EP5642-ICV5642	P125260.D	09/14/18	12:45	06:56	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5644-DFTPP

Injection Date: 09/15/18

Lab File ID: P125271.D

Injection Time: 00:55

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	46056	41.9	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	53258	48.4	Pass
70	Less than 2.0% of mass 69	164	0.15 (0.31) ^a	Pass
127	40.0 - 60.0% of mass 198	62656	57.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	109946	100.0	Pass
199	5.0 - 9.0% of mass 198	7478	6.80	Pass
275	10.0 - 30.0% of mass 198	29312	26.7	Pass
365	1.0 - 100.0% of mass 198	3842	3.49	Pass
441	Present, but less than mass 443	11399	10.4 (82.3) ^b	Pass
442	40.0 - 100.0% of mass 198	73082	66.5	Pass
443	17.0 - 23.0% of mass 442	13855	12.6 (19.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5644-ICV5641	P125276.D	09/15/18	01:36	00:41	Initial cal verification 50
EP5644-CC5616	P125277.D	09/15/18	02:03	01:08	Continuing cal 50
EP5644-CC5617	P125278.D	09/15/18	02:30	01:35	Continuing cal 50
EP5644-CC5641	P125279.D	09/15/18	02:58	02:03	Continuing cal 50
EP5644-CC5642	P125280.D	09/15/18	03:25	02:30	Continuing cal 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5646-DFTPP

Injection Date: 09/18/18

Lab File ID: P125311.D

Injection Time: 10:13

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	41903	36.7	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	49576	43.4	Pass
70	Less than 2.0% of mass 69	365	0.32 (0.74) ^a	Pass
127	40.0 - 60.0% of mass 198	60258	52.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	114133	100.0	Pass
199	5.0 - 9.0% of mass 198	7909	6.93	Pass
275	10.0 - 30.0% of mass 198	30544	26.8	Pass
365	1.0 - 100.0% of mass 198	4366	3.83	Pass
441	Present, but less than mass 443	13216	11.6 (81.1) ^b	Pass
442	40.0 - 100.0% of mass 198	86608	75.9	Pass
443	17.0 - 23.0% of mass 442	16296	14.3 (18.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5646-IC5646	P125312.D	09/18/18	10:30	00:17	Initial cal 100
EP5646-IC5646	P125313.D	09/18/18	10:58	00:45	Initial cal 80
EP5646-ICC5646	P125314.D	09/18/18	11:25	01:12	Initial cal 50
EP5646-IC5646	P125315.D	09/18/18	11:53	01:40	Initial cal 25
EP5646-IC5646	P125316.D	09/18/18	12:20	02:07	Initial cal 10
EP5646-IC5646	P125317.D	09/18/18	12:49	02:36	Initial cal 5
EP5646-IC5646	P125318.D	09/18/18	13:17	03:04	Initial cal 2
EP5646-IC5646	P125319.D	09/18/18	13:44	03:31	Initial cal 1
EP5646-ICV5646	P125320.D	09/18/18	14:12	03:59	Initial cal verification 50
EP5646-ICV5646	P125321.D	09/18/18	14:40	04:27	Initial cal verification 50
EP5646-ICV5646	P125322.D	09/18/18	15:08	04:55	Initial cal verification 50
EP5646-ICV5646	P125323.D	09/18/18	15:36	05:23	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5647-DFTPP

Injection Date: 09/18/18

Lab File ID: P125324.D

Injection Time: 22:54

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	51774	38.5	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	61986	46.0	Pass
70	Less than 2.0% of mass 69	241	0.18 (0.39) ^a	Pass
127	40.0 - 60.0% of mass 198	72034	53.5	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	134608	100.0	Pass
199	5.0 - 9.0% of mass 198	9484	7.05	Pass
275	10.0 - 30.0% of mass 198	36392	27.0	Pass
365	1.0 - 100.0% of mass 198	5027	3.73	Pass
441	Present, but less than mass 443	15510	11.5 (79.3) ^b	Pass
442	40.0 - 100.0% of mass 198	98984	73.5	Pass
443	17.0 - 23.0% of mass 442	19559	14.5 (19.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5647-IC5647	P125325.D	09/18/18	23:47	00:53	Initial cal 100
EP5647-IC5647	P125326.D	09/19/18	00:14	01:20	Initial cal 80
EP5647-ICC5647	P125327.D	09/19/18	00:42	01:48	Initial cal 50
EP5647-IC5647	P125328.D	09/19/18	01:09	02:15	Initial cal 25
EP5647-IC5647	P125329.D	09/19/18	01:37	02:43	Initial cal 10
EP5647-IC5647	P125330.D	09/19/18	02:04	03:10	Initial cal 5
EP5647-IC5647	P125331.D	09/19/18	02:32	03:38	Initial cal 2
EP5647-IC5647	P125332.D	09/19/18	02:59	04:05	Initial cal 1
EP5647-ICV5647	P125335.D	09/19/18	04:23	05:29	Initial cal verification 50
EP5647-ICV5647	P125336.D	09/19/18	04:51	05:57	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JC75333

Account: HWINJOMM Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: EP5674-DFTPP

Injection Date: 10/17/18

Lab File ID: P125920.D

Injection Time: 00:48

Instrument ID: GCMSP

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	40380	37.1	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	47614	43.8	Pass
70	Less than 2.0% of mass 69	44	0.04 (0.09) ^a	Pass
127	40.0 - 60.0% of mass 198	58330	53.6	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	108800	100.0	Pass
199	5.0 - 9.0% of mass 198	7221	6.64	Pass
275	10.0 - 30.0% of mass 198	29762	27.4	Pass
365	1.0 - 100.0% of mass 198	3862	3.55	Pass
441	Present, but less than mass 443	12899	11.9 (83.6) ^b	Pass
442	40.0 - 100.0% of mass 198	82074	75.4	Pass
443	17.0 - 23.0% of mass 442	15425	14.2 (18.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5674-CC5646	P125921.D	10/17/18	01:09	00:21	Continuing cal 50
EP5674-CC5647	P125922.D	10/17/18	01:36	00:48	Continuing cal 50
EP5674-CC5646	P125923.D	10/17/18	02:02	01:14	Continuing cal 50
EP5674-CC5641	P125924.D	10/17/18	02:29	01:41	Continuing cal 50
EP5674-CC5642	P125925.D	10/17/18	02:56	02:08	Continuing cal 50
EP5674-CC5646	P125926.D	10/17/18	03:22	02:34	Continuing cal 5
OP15770-MB1	P125927.D	10/17/18	03:50	03:02	Method Blank
OP15770-BS13	P125930.D	10/17/18	05:10	04:22	Blank Spike
OP15772-MB1	P125931.D	10/17/18	05:36	04:48	Method Blank
OP15772-BS13	P125932.D	10/17/18	06:03	05:15	Blank Spike
OP15772-MS2	P125933.D	10/17/18	06:29	05:41	Matrix Spike
OP15772-MSD2	P125934.D	10/17/18	06:56	06:08	Matrix Spike Duplicate
JC74793-1	P125935.D	10/17/18	07:22	06:34	(used for QC only; not part of job JC75333)
ZZZZZZ	P125936.D	10/17/18	07:49	07:01	(unrelated sample)
ZZZZZZ	P125937.D	10/17/18	08:15	07:27	(unrelated sample)
ZZZZZZ	P125938.D	10/17/18	08:42	07:54	(unrelated sample)
ZZZZZZ	P125939.D	10/17/18	09:08	08:20	(unrelated sample)
ZZZZZZ	P125940.D	10/17/18	09:35	08:47	(unrelated sample)
ZZZZZZ	P125941.D	10/17/18	10:02	09:14	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EP5674-DFTPP	Injection Date:	10/17/18
Lab File ID:	P125920.D	Injection Time:	00:48
Instrument ID:	GCMSP		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P125942.D	10/17/18	10:28	09:40	(unrelated sample)
ZZZZZZ	P125943.D	10/17/18	10:55	10:07	(unrelated sample)
OP15772-MS	P125945.D	10/17/18	11:49	11:01	Matrix Spike
OP15772-MSD	P125946.D	10/17/18	12:16	11:28	Matrix Spike Duplicate
JC75333-1	P125947.D	10/17/18	12:43	11:55	SUMP COMP-100418

7.4.14
7

Surrogate Recovery Summary

Job Number: JC75333
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: SW846 8270D	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JC75333-1	P125947.D				70	61	53
JC75333-5	M149930.D	36	25	93	66	69	73
JC75333-5	5P54601.D				90	77	77
JC75333-6	5P54602.D				109	88	80
JC75333-7	5P54603.D				104	81	72
OP15772-BS1	5P54440.D	56	43	108	112	89	111
OP15772-MB1	5P54439.D	38	28	86	89	75	106
OP15772-MB1	P125931.D	46	33	85	73	71	113
OP15772-MS	P125945.D	61	54	98	76	69	86
OP15772-MSD	P125946.D	69	61	104	81	73	108
OP16224-BS1	M149929.D	42	30	82	68	70	85
OP16224-MB1	M149928.D	29	21	76	68	70	72
OP16224-MS	M149933.D	37	28	85	68	70	84
OP16224-MSD	M149934.D	42	33	91	68	71	73

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	36-151%
S4 = Nitrobenzene-d5	34-128%
S5 = 2-Fluorobiphenyl	38-119%
S6 = Terphenyl-d14	26-129%

Metals Analysis

QC Data Summaries



Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC75333
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9568
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/08/18

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.052	.095	0.072	<0.20

Associated samples MP9568: JC75333-1, JC75333-5, JC75333-6, JC75333-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75333
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9568
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 10/08/18

Metal	JC75333-5		Spike lot		QC
	Original	MS	HGPW3	% Rec	Limits
Mercury	0.0	2.3	2	115.0	75-125

Associated samples MP9568: JC75333-1, JC75333-5, JC75333-6, JC75333-7

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75333
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9568
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 10/08/18

Metal	JC75333-5 Original MSD		Spike lot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.2	2	110.0	4.4	20

Associated samples MP9568: JC75333-1, JC75333-5, JC75333-6, JC75333-7

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC75333
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP9568
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 10/08/18

Metal	BSP Result	Spike lot HGPW3	% Rec	QC Limits
Mercury	1.9	2	95.0	80-120

Associated samples MP9568: JC75333-1, JC75333-5, JC75333-6, JC75333-7

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC75333
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9569
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/09/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	46		
Antimony	6.0	1.2	4.7	0.20	<6.0
Arsenic	3.0	1.5	2.8	0.10	<3.0
Barium	200	.7	13		
Beryllium	1.0	.1	.5		
Bismuth	20	2.1	4		
Boron	100	3.2	63		
Cadmium	3.0	.2	1	0.20	<3.0
Calcium	5000	11	99		
Chromium	10	.3	2	-0.10	<10
Cobalt	50	.2	2.6		
Copper	10	1.2	5.9		
Iron	100	5	32	2.5	<100
Lead	3.0	1.2	1.8	-0.10	<3.0
Lithium	50	3	7.3		
Magnesium	5000	31	140		
Manganese	15	.1	1.4	0.0	<15
Molybdenum	20	.4	3.6		
Nickel	10	.7	1.7		
Phosphorus	50	1	18		
Potassium	10000	60	200		
Selenium	10	3.2	4.9		
Silicon	200	1.9	100		
Silver	10	.9	1.9		
Sodium	10000	27	570		
Strontium	10	.2	1		
Sulfur	50	3	45		
Thallium	10	1.4	1.8		
Tin	10	.9	3.7		
Titanium	10	.4	2.5		
Tungsten	50	.9	40		
Vanadium	50	.6	1.8		
Zinc	20	.1	6.9		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC75333
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9569
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/09/18

Metal	RL	IDL	MDL	MB raw	final

Zirconium 10 .3 4.1

Associated samples MP9569: JC75333-1, JC75333-5, JC75333-6, JC75333-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.2.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75333

Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9569
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/09/18

Metal	JC75333-5 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0	2120	2000	106.0	75-125
Arsenic	13.5	2130	2000	105.8	75-125
Barium					
Beryllium					
Bismuth					
Boron					
Cadmium	0.0	2090	2000	104.5	75-125
Chromium	2.0	2040	2000	101.9	75-125
Cobalt					
Copper	anr				
Iron	44300	70100	25000	103.2	75-125
Lead	0.0	2060	2000	103.0	75-125
Lithium					
Magnesium					
Manganese	929	2950	2000	101.1	75-125
Molybdenum					
Nickel	anr				
Phosphorus					
Potassium					
Selenium	anr				
Silicon					
Silver					
Strontium					
Sulfur					
Thallium	anr				
Tin					
Titanium					
Tungsten					
Vanadium	anr				
Zinc	anr				
Zirconium					

Associated samples MP9569: JC75333-1, JC75333-5, JC75333-6, JC75333-7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75333

Account: HWINJOMM - Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9569

Methods: SW846 6010D

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/09/18

Metal	JC75333-5 Original MS	Spike lot MPSPK2	% Rec	QC Limits

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

8.2.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75333
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9569
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 10/09/18

Metal	JC75333-5 Original MSD		Spikelet MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	2140	2000	107.0	0.9	20
Arsenic	13.5	2140	2000	106.3	0.5	20
Barium						
Beryllium						
Bismuth						
Boron						
Cadmium	0.0	2110	2000	105.5	1.0	20
Chromium	2.0	2020	2000	100.9	1.0	20
Cobalt						
Copper	anr					
Iron	44300	69700	25000	101.6	0.6	20
Lead	0.0	2060	2000	103.0	0.0	20
Lithium						
Magnesium						
Manganese	929	2920	2000	99.6	1.0	20
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silicon						
Silver						
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					
Zinc	anr					
Zirconium						

Associated samples MP9569: JC75333-1, JC75333-5, JC75333-6, JC75333-7

8.2.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC75333
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9569
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 10/09/18

Metal	JC75333-5 Original MSD	Spikelet MPSPK2	% Rec	MSD RPD	QC Limit

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC75333

Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9569
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/09/18

Metal	BSP Result	Spike lot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	2050	2000	102.5	80-120
Arsenic	2010	2000	100.5	80-120
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium	2030	2000	101.5	80-120
Calcium				
Chromium	2050	2000	102.5	80-120
Cobalt				
Copper	anr			
Iron	26300	25000	105.2	80-120
Lead	2040	2000	102.0	80-120
Lithium				
Magnesium				
Manganese	2070	2000	103.5	80-120
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver				
Sodium				
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	anr			

8.2.3
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC75333

Account: HWINJOMM - Honeywell International Inc. OMM work

Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9569

Methods: SW846 6010D

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/09/18

Metal	BSP Result	Spike lot MPSPK2	% Rec	QC Limits

Zirconium

Associated samples MP9569: JC75333-1, JC75333-5, JC75333-6, JC75333-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

8.2.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC75333

Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP9569
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/09/18

Metal	JC75333-5 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	13.5	14.7	8.9	0-10
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	2.00	0.00	100.0(a)	0-10
Cobalt				
Copper	anr			
Iron	44300	43200	2.4	0-10
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese	929	897	3.5	0-10
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver				
Sodium				
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	anr			

8.2.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC75333
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP9569
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 10/09/18

Metal	JC75333-5	QC	
	Original SDL 1:5	%DIF	Limits

Zirconium

Associated samples MP9569: JC75333-1, JC75333-5, JC75333-6, JC75333-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

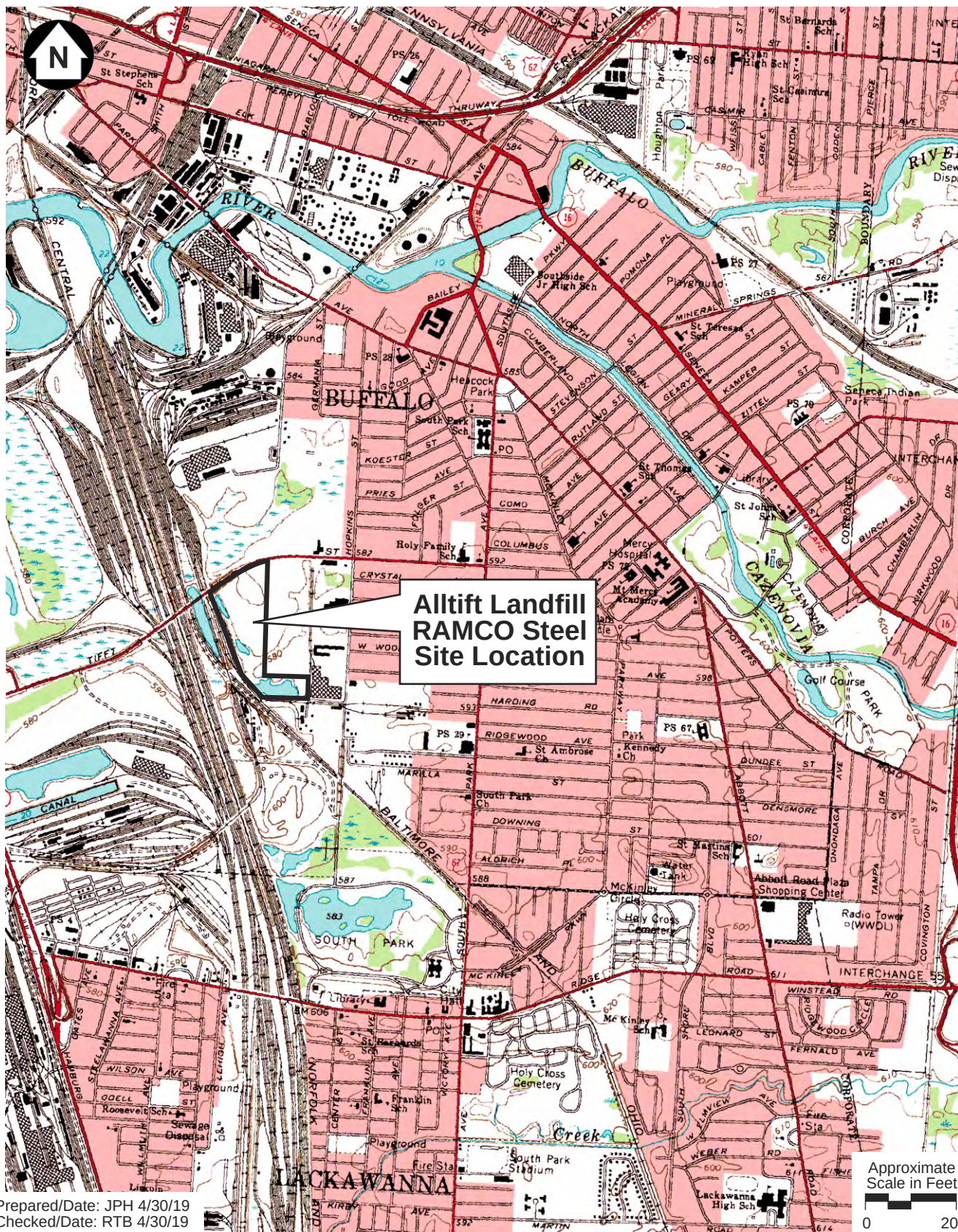
(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

8.2.4

8

Attachment B.8 Landfill Gas Monitoring Results



Honeywell

MACTEC

Site Location Map
Alltiff Landfill/Ramco Steel Site
Project No. 3612182397
Figure 1

TABLE 2
Landfill Gas Monitoring Data - 2013 through 2018
2018/2019 Annual OM&M Report
Alltift Landfill/Ramco Steel Site

Location:	First Quarter - 1/10/2013				Second Quarter - 5/21/2013				Third Quarter - 9/11/2013				Fourth Quarter - 10/24/2013				2014 - 3/18/2014				2015 - 3/12/2015				2016 - 4/7/2016				2017 - 7/18/2017				2018 - 4/25/2018			
	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄
GV-1	0.1%	0.0%	21.4%	3.0%	0.0%	0.0%	20.3%	0.0%	0.0%	0.0%	20.9%	1.0%	0.0%	0.0%	21.1%	1.0%	0.1%	0.1%	19.1%	1.0%	0.0%	0.1%	21.7%	1.0%	0.0%	0.1%	21.0%	1.0%	0.0%	0.0%	20.2%	0.0%	0.0%	1.6%	14.4%	0.0%
GV-2	0.1%	0.0%	21.3%	3.0%	0.0%	0.0%	20.2%	1.0%	0.0%	0.0%	20.4%	2.0%	0.0%	0.1%	20.8%	2.0%	0.1%	0.1%	18.9%	2.0%	0.0%	0.1%	21.6%	1.0%	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.2%	0.0%	0.0%	0.0%	21.0%	0.0%
GV-3	0.1%	0.0%	21.2%	4.0%	0.0%	0.0%	20.2%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.9%	20.1%	0.0%	0.1%	0.1%	19.2%	2.0%	0.1%	0.1%	21.9%	1.0%	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.3%	0.0%	16.7%	5.5%	5.4%	0.0%
Ground #1	0.2%	0.0%	21.5%	4.0%	0.1%	0.0%	20.4%	2.0%	0.1%	0.0%	20.4%	2.0%	0.0%	0.1%	20.9%	0.0%	0.3%	0.2%	18.5%	4.0%	0.0%	0.1%	20.8%	1.0%	0.0%	0.1%	21.0%	1.0%	0.0%	0.0%	20.9%	0.0%	0.0%	0.0%	20.9%	0.0%
Ground #2	0.2%	0.0%	21.3%	4.0%	0.1%	0.0%	20.3%	1.0%	0.0%	0.0%	20.6%	0.0%	0.0%	0.1%	20.9%	0.0%	0.2%	0.2%	18.7%	4.0%	0.0%	0.1%	21.8%	1.0%	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.7%	0.0%	0.0%	0.0%	20.9%	0.0%
Ground #3	0.2%	0.0%	21.3%	3.0%	0.0%	0.0%	20.3%	1.0%	0.0%	0.0%	20.4%	0.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.2%	18.6%	4.0%	0.0%	0.1%	21.7%	1.0%	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.6%	0.0%	0.0%	0.0%	20.9%	0.0%
Ground #4	0.2%	0.0%	21.3%	3.0%	0.0%	0.0%	20.3%	2.0%	0.0%	0.0%	20.7%	0.0%	0.0%	0.0%	21.0%	0.0%	0.0%	0.1%	19.6%	3.0%	0.0%	0.1%	21.8%	1.0%	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.4%	0.0%	0.0%	0.0%	20.8%	0.0%
Sump #1	0.2%	0.0%	21.4%	4.0%	0.0%	0.0%	20.4%	1.0%	0.0%	0.0%	21.2%	0.0%	0.0%	0.1%	20.9%	0.0%	0.0%	0.0%	20.4%	0.0%	0.1%	0.1%	20.9%	1.0%	0.1%	0.1%	21.0%	1.0%	0.0%	0.0%	20.8%	0.0%	0.0%	0.0%	20.9%	0.0%
Sump #2	0.2%	0.0%	21.3%	4.0%	0.2%	0.1%	20.2%	4.0%	0.7%	17.0%	0.6%	15.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.4%	18.7%	2.0%	0.0%	0.1%	21.4%	1.0%	0.0%	0.1%	21.0%	1.0%	0.0%	0.0%	20.6%	0.0%	0.0%	0.0%	20.9%	0.0%
Sump #3	0.2%	0.0%	21.2%	3.0%	0.1%	0.0%	20.3%	2.0%	0.0%	0.0%	20.4%	0.0%	0.0%	0.1%	20.9%	0.0%	0.1%	0.2%	18.9%	3.0%	0.0%	0.1%	21.8%	1.0%	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.5%	0.0%	0.0%	0.0%	20.9%	0.0%
Sump #4	0.1%	0.0%	21.1%	3.0%	0.0%	0.0%	20.3%	1.0%	0.1%	0.1%	19.9%	0.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.2%	18.7%	4.0%	0.0%	0.1%	21.8%	1.0%	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.3%	0.0%	0.0%	0.0%	20.8%	0.0%

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.

Attachment B.9 Monitoring Well Decommissioning Photos



PZ-16 prior to removal



PZ-16 : removal of concrete pad



PZ-16 : Concrete pad removed



PZ-16 : removal of concrete pad and well to 12" below grade



PZ-16 : PZ filled and abandoned



PZ-14 : prior to abandonment



PZ-14 : removal of concrete pad



PZ-14 : Concrete pad broken up



PZ-14 : Piezometer cut below grade



PZ-14 : Piezometer filled with concrete 12" below grade