



engineering and constructing a better tomorrow

May 14, 2021

Ms. Megan Kuczka

New York State Department of Environmental Conservation

Division of Environmental Remediation, Region 9

270 Michigan Avenue

Buffalo, New York 14203-2999

Subject: **2020/2021 Periodic Review Report**
 Alltift Landfill Site - NYSDEC Site No. 915054
 MACTEC Engineering and Geology, P.C

Dear Ms. Kuczka:

MACTEC Engineering and Geology, P.C. (MACTEC), is submitting this Periodic Review Report (PRR) for the Alltift Landfill Site/Ramco Steel Site (site) for the period of April 21, 2020 through April 21, 2021 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 8, 2021.

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 Alltift 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 Alltift 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 (OM&M) Manual (also referred to as the Site Management 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).

On February 27, 2020, the NYSDEC accepted and approved a revised OM&M Manual which was amended to incorporate sampling of emergent contaminants as requested by the NYSDEC.

During the 2020/2021 reporting period, the following routine OM&M activities were completed in accordance with 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 #18-12-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 generally recorded on a quarterly basis; however, groundwater levels were not recorded during the fourth quarter of 2020 due to a combination of weather and COVID-19 restrictions. As such, there is not a corresponding groundwater contour figure in Appendix B.5.
 - The annual groundwater sampling event completed on September 28, 2020, September 29, 2020, and October 15, 2020 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, including those for emergent contaminants that were previously sampled and analyzed in 2018, and are presented in Attachment B.7.

- Landfill gas monitoring was conducted using a GEM 2000 (SN# GEM12691) on April 8, 2021, and the results are presented in Attachment B.8.
 - 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 September 9 and 10, 2020
 - o Groundwater collections system pump #2 was observed to be inoperative on February 10, 2021 and was subsequently replaced on February 12, 2021.
 - o The groundwater collection system piping was cleaned on July 24, 2020 and November 24, 2020.
 - o Sediment was removed from the low-lift station and containerized on March 10, 2021 for disposal as non-hazardous waste at the Chaffee Landfill, in Chaffee, New York under an existing waste profile with Waste Management (Profile No. 118384NY)
- 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: None.
- 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.

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. The BSA permit expires on November 30, 2021; a permit renewal application will be submitted to the BSA.
- Groundwater Monitoring – Annual groundwater monitoring will be completed in 2021 with groundwater monitoring results reported in the next annual PRR submittal.
- Water Level Measurements – Collection of water level measurements will be conducted on a quarterly basis.
- Landfill Gas Monitoring – Landfill gas monitoring will continue on an annual basis.
- Surface Water Level Measurements – in conjunction with the site inspections, surface water level measurements will continue to be collected using the top of the weir structure at the north end of Pond A as a reference.
- Site inspections will continue on a quarterly basis.

- OM&M activities will continue on a routine basis, with the frequency adjusted as needed based upon results of site inspections or in response to groundwater collection system autodialer callouts.
- The next PRR submittal should be completed and submitted to NYSDEC by the end of May 2022.

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 2022.

CLOSING

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

Respectfully,

MACTEC Engineering and Geology P.C.



Ryan Belcher
Associate Engineer



Mark Stelmack, P.E.
Associate Engineer

Attachments

Attachment A - IC/EC Controls Certification Form

Attachment B – Supporting Tables, Figures and Appendices

Attachment B.1 Site Figures

Attachment B.2 Quarterly Inspection Reports

Attachment B.3 Water Level Measurements

Attachment B.4 Quarterly Groundwater Elevations

Attachment B.5 Quarterly Groundwater Contour Maps

Attachment B.6 Discharge Monitoring Reports

Attachment B.7 Annual Groundwater Monitoring Data

Attachment B.8 Landfill Gas Monitoring Results

Electronic Copy to:

E. Christodoulatos (Honeywell)

J. Paananen (City of Buffalo)

K. Boland (CSX)

ATTACHMENT A

PRR NOTICE

IC/EC CONTROLS CERTIFICATION FORM



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



Site Details

Box 1

Site No. **915054**

Site Name Alltft Landfill

Site Address: 302 Abby Street Zip Code: 14202
City/Town: Buffalo
County: Erie
Site Acreage: 37.750

Reporting Period: April 21, 2020 to April 21, 2021

YES NO

1. Is the information above correct? ☒ ☐

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? ☐ ☒

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? ☐ ☒

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? ☐ ☒

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

5. Is the site currently undergoing development? ☐ ☒

Box 2

YES NO

6. Is the current site use consistent with the use(s) listed below? ☒ ☐
Closed Landfill

7. Are all ICs in place and functioning as designed? ☒ ☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
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.

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 Alltft 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.

133.09-1-17 Skyway Auto Parts Inc.

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 Engineering Control 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. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

- (a) The 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 Eric Christodoulatos at 115 Tabor Road, Morris Plains, NJ 07950,
print name print business address

am certifying as Remediation Manager for the Remedial Party (Owner or Remedial Party)

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



5/12/21

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 Geology, P.C.
511 Congress St, Suite 200, Portland Maine 04101
print name print business address

am certifying as a Professional Engineer for the Remedial Party
(Owner or Remedial Party)



Mark J. Stelmack

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

Stamp
(Required for PE)

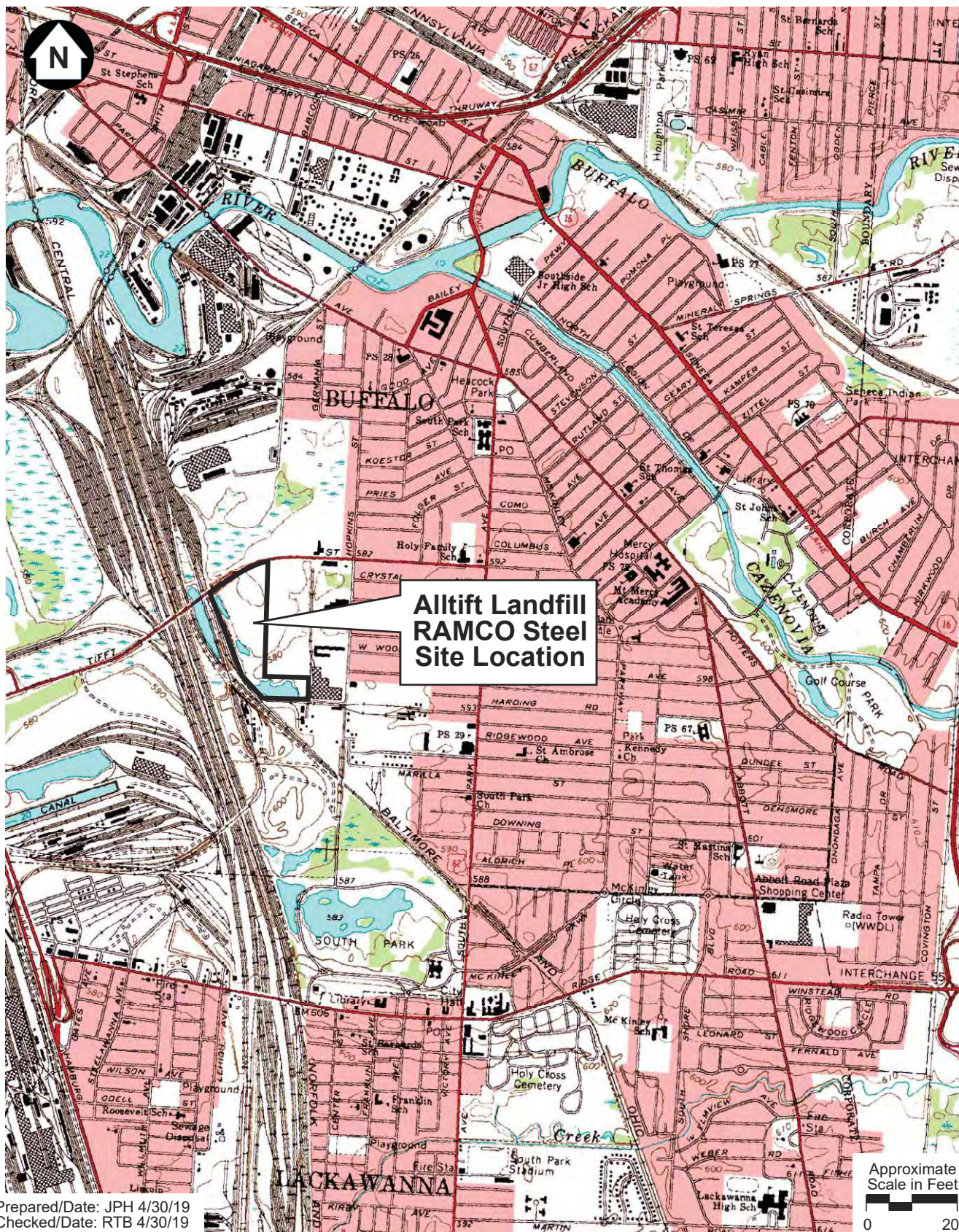
5/12/21
Date

ATTACHMENT B

SUPPORTING TABLES, FIGURES, AND APPENDICES

ATTACHMENT B.1

SITE FIGURES



Honeywell

MACTEC

Site Location Map
Alltiff Landfill/Ramco Steel Site
Project No. 3616206128
Figure 1

Document: P:\Projects\Honeywell\O.M and M Team\Allitt Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\Figures\May 2020\Figure 2 - Current Conditions Site Plan.pdf 05-19-2020 8:09 AM brian.peters



ATTACHMENT B.2

QUARTERLY INSPECTION REPORTS

Site Inspection Form

Site Name: Alltift
 Project Number: 30130
 Date: 7/24/2020

Weather: Sunny 80 degrees
 Assessment by: Damon Pugh

<u>Yes</u>	<u>No</u>	<u>N/A</u>
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

A. Security

- Does fence exist? _____
- Is there a breach in fence? _____
- Locks on gate? _____
- Posted signs? _____
- Signs of trespassers/vandalism? _____
- Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐

B. General Site Conditions

- Vegetation stress? _____
- Mowing required? _____
- Access road drivable? _____
- Odors? _____
- Other _____

☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐

C. Cap Inspection

- Exposed waste? _____
- Side slope stable? _____
- Erosion? _____
- Leachate seeps (discolored vegetation)? _____
- Synthetic liner exposed? _____
- Bare spots? _____
- Presence of burrowing animals? _____
- Deep rooted vegetation? _____
- Cracking? _____
- Ponding water? _____
- Evidence of methane seeps? _____
- Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☐	☒

D. Surface Water

- Obstruction of flow ditches? _____
- Erosion of ditches? _____
- Silt & erosion control? _____
- Culverts in good condition? _____
- Evidence of overflow or uncontrolled flow? _____
- Outfalls in good condition? _____
- Sedimentation basin/ponds secure? _____
- Other _____

E. Methane Gas Control

Site Inspection Form

☒	☐	☐
Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

- Does one exist? _____
- Is system active or passive? active
- Permanent methane gas probes? _____
- Locks on monitoring wells? _____
- Vents in working order? _____
- Well seals in place? _____
- Methane levels within LEL limits? _____
- Monitoring reports current? _____
- Other _____

F. Leachate Collection System

☒	☐	☐
☒	☐	☐
☐	☐	☒
☐	☐	☒
☐	☐	☒

- Does one exist? _____
- Collection method:
 - Sump? 2
 - Well point? _____
 - Earthen basin/pond? _____
 - Structure secured? _____
 - Other _____
- Pumping system:
 - Automatic? _____
 - Manual? _____
 - Mechanically operable? _____
 - Leaks/failures? _____
- Disposals:
 - Onsite pretreatment/treatment? _____
 - Surface discharge? (NPDES/SPDES) _____
 - POTW – hardpiped? _____
 - Quick disconnect caps in place? _____
- Transportation (if any):
 - Chemicals? _____
 - Filter cake? _____
- Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____
- Monitoring reports current? _____
- Other _____

☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

☐	☐	☒
☐	☐	☒
☒	☐	☐

☒	☐	☐

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

- Locks on wells? _____
- Wells in good condition? _____
- Well seals in good condition? _____
- Access to wells? _____
- Monitoring reports current? _____
- Other _____

Site Inspection Form

Yes	No	N/A
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

H. Treatment Plant

1. Building in good condition? (Doors, windows, wells, roof) _____
2. Visual tank inspection performed? _____
3. Visual inspection of pipes, valves, fittings etc.? _____
4. Pump operation/inspection performed? _____
5. Instruments operation/calibration? _____
6. Mixer operation/inspection? _____
7. Proper personal protection equipment? _____
8. Air compressor system functioning properly? _____
9. Filter press inspected? _____
10. Emergency generator functioning properly? _____

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

I. Polymeric Marine Mattress (PMM)

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

J. General Comments

None

No issues noted

Site Inspection Form



Site Inspection Form



Site Inspection Form

Site Name: Alltift
 Project Number: 30130
 Date: 10/15/2020

Weather: Cloudy 58 degrees
 Assessment by: Andrew Petrilli

Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

A. Security

- Does fence exist? _____
- Is there a breach in fence? _____
- Locks on gate? _____
- Posted signs? _____
- Signs of trespassers/vandalism? _____
- Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐

B. General Site Conditions

- Vegetation stress? _____
- Mowing required? Site mowed and maintained as of 9/9/2020
- Access road drivable? _____
- Odors? _____
- Other _____

☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐

C. Cap Inspection

- Exposed waste? _____
- Side slope stable? _____
- Erosion? _____
- Leachate seeps (discolored vegetation)? _____
- Synthetic liner exposed? _____
- Bare spots? _____
- Presence of burrowing animals? _____
- Deep rooted vegetation? _____
- Cracking? _____
- Ponding water? _____
- Evidence of methane seeps? _____
- Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☐	☒

D. Surface Water

- Obstruction of flow ditches? _____
- Erosion of ditches? _____
- Silt & erosion control? _____
- Culverts in good condition? _____
- Evidence of overflow or uncontrolled flow? _____
- Outfalls in good condition? _____
- Sedimentation basin/ponds secure? _____
- Other _____

E. Methane Gas Control

Site Inspection Form

☒	☐	☐
Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

- Does one exist? _____
- Is system active or passive? System is active
- Permanent methane gas probes? _____
- Locks on monitoring wells? _____
- Vents in working order?
- Well seals in place? _____
- Methane levels within LEL limits? Methane readings collected as of 9/9/2020
- Monitoring reports current?
- Other _____

F. Leachate Collection System

☒	☐	☐
☒	☐	☐
☐	☐	☒
☐	☐	☒
☐	☐	☒

- Does one exist? _____
- Collection method:
 - Sump? 2
 - Well point? _____
 - Earthen basin/pond? _____
 - Structure secured? _____
 - Other _____
- Pumping system:
 - Automatic? _____
 - Manual? _____
 - Mechanically operable? _____
 - Leaks/failures? _____
- Disposals:
 - Onsite pretreatment/treatment? _____
 - Surface discharge? (NPDES/SPDES) _____
 - POTW – hardpiped? _____
 - Quick disconnect caps in place? _____
- Transportation (if any):
 - Chemicals? _____
 - Filter cake? _____
- Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____
- Monitoring reports current? _____
- Other _____

☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

☐	☐	☒
☐	☐	☒
☒	☐	☐

☒	☐	☐

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

- Locks on wells? _____
- Wells in good condition? _____
- Well seals in good condition? _____
- Access to wells? _____
- Monitoring reports current? _____
- Other _____

Site Inspection Form

<u>Yes</u>	<u>No</u>	<u>N/A</u>
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

H. Treatment Plant

1. Building in good condition? (Doors, windows, wells, roof) _____
2. Visual tank inspection performed? _____
3. Visual inspection of pipes, valves, fittings etc.? _____
4. Pump operation/inspection performed? _____
5. Instruments operation/calibration? _____
6. Mixer operation/inspection? _____
7. Proper personal protection equipment? _____
8. Air compressor system functioning properly? _____
9. Filter press inspected? _____
10. Emergency generator functioning properly? _____

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

I. Polymeric Marine Mattress (PMM)

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

J. General Comments

Cap and surrounding access road look to be in good condition as area was mowed and maintained in early September. Sumps 1 and 2 (running wells) look to be functioning normally, as is the flowmeter situated in the wet well.



Site Inspection Form



Site Inspection Form

Site Name: Alltift
 Project Number: 30130
 Date: 02/10/2021

Weather: Cloudy; 23 degrees
 Assessment by: Andrew Petrilli

Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

A. Security

- Does fence exist? _____
- Is there a breach in fence? _____
- Locks on gate? _____
- Posted signs? _____
- Signs of trespassers/vandalism? _____
- Other All debris that previously existed outside shed prior to this visit has been removed entirely.

☐	☒	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐

B. General Site Conditions

- Vegetation stress? _____
- Mowing required? Site mowed and maintained by subcontractor prior to Autumn '20
- Access road drivable? _____
- Odors? _____
- Other Nothing of note during this inspection.

☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐

C. Cap Inspection

- Exposed waste? _____
- Side slope stable? _____
- Erosion? _____
- Leachate seeps (discolored vegetation)? _____
- Synthetic liner exposed? _____
- Bare spots? _____
- Presence of burrowing animals? _____
- Deep rooted vegetation? _____
- Cracking? _____
- Ponding water? _____
- Evidence of methane seeps? _____
- Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☐	☒

D. Surface Water

- Obstruction of flow ditches? _____
- Erosion of ditches? _____
- Silt & erosion control? _____
- Culverts in good condition? _____
- Evidence of overflow or uncontrolled flow? _____
- Outfalls in good condition? _____
- Sedimentation basin/ponds secure? _____
- Other Cold temps in the past have frozen over adjacent pond.

[illegible]

- ### **F. Leachate Collection System**

- G. Groundwater Monitoring & Recovery Wells (if any)**

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

Site Inspection Form

<u>Yes</u>	<u>No</u>	<u>N/A</u>
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

H. Treatment Plant

1. Building in good condition? (Doors, windows, wells, roof) _____
2. Visual tank inspection performed? _____
3. Visual inspection of pipes, valves, fittings etc.? _____
4. Pump operation/inspection performed? _____
5. Instruments operation/calibration? _____
6. Mixer operation/inspection? _____
7. Proper personal protection equipment? _____
8. Air compressor system functioning properly? _____
9. Filter press inspected? _____
10. Emergency generator functioning properly? _____

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

I. Polymeric Marine Mattress (PMM)

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

J. General Comments

Running well 2 (furthest down road from adjacent building) had inordinately high water level reading. Crew determined pump currently not running. Additional site work to be performed 2/12, with the likely possibility that pump will need to be replaced. Wet well level rather low due to just the one running well functioning at the time of initial visit.

Site Inspection Form



Site Inspection Form



Site Inspection Form



Site Inspection Form



Site Inspection Form

Site Name: Alltift
 Project Number: 30130
 Date: 04/08/2021

Weather: Sunny; 65-75 degrees
 Assessment by: Benjamin Hendry

Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

A. Security

- Does fence exist? _____
- Is there a breach in fence? _____
- Locks on gate? _____
- Posted signs? _____
- Signs of trespassers/vandalism? _____
- Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐

B. General Site Conditions

- Vegetation stress? _____
- Mowing required? Site mowed and maintained as of 9/9/2020
- Access road drivable? _____
- Odors? _____
- Other _____

☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐

C. Cap Inspection

- Exposed waste? _____
- Side slope stable? _____
- Erosion? _____
- Leachate seeps (discolored vegetation)? _____
- Synthetic liner exposed? _____
- Bare spots? _____
- Presence of burrowing animals? _____
- Deep rooted vegetation? _____
- Cracking? _____
- Ponding water? _____
- Evidence of methane seeps? _____
- Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☐	☒

D. Surface Water

- Obstruction of flow ditches? _____
- Erosion of ditches? _____
- Silt & erosion control? _____
- Culverts in good condition? _____
- Evidence of overflow or uncontrolled flow? _____
- Outfalls in good condition? _____
- Sedimentation basin/ponds secure? _____
- Other _____

Site Inspection Form

E. Methane Gas Control

☐	☒	☐
Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

- Does one exist? _____
- Is system active or passive? active
- Permanent methane gas probes? _____
- Locks on monitoring wells? _____
- Vents in working order?
- Well seals in place? _____
- Methane levels within LEL limits? Methane readings collected as of 04/08/2021
- Monitoring reports current?
- Other _____

F. Leachate Collection System

☒	☐	☐
☒	☐	☐
☐	☐	☒
☐	☐	☒
☐	☐	☒
☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☒	☐	☐

- Does one exist? _____
- Collection method:
 - Sump? 2
 - Well point? _____
 - Earthen basin/pond? _____
 - Structure secured? _____
 - Other _____
- Pumping system:
 - Automatic? _____
 - Manual? _____
 - Mechanically operable? _____
 - Leaks/failures? _____
- Disposals:
 - Onsite pretreatment/treatment? _____
 - Surface discharge? (NPDES/SPDES) _____
 - POTW – hardpiped? _____
 - Quick disconnect caps in place? _____
- Transportation (if any):
 - Chemicals? _____
 - Filter cake? _____
- Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, Instruments and etc.) _____
- Monitoring reports current? _____
- Other _____

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

- Locks on wells? _____
- Wells in good condition? _____
- Well seals in good condition? _____
- Access to wells? _____
- Monitoring reports current? _____
- Other _____

Site Inspection Form

<u>Yes</u>	<u>No</u>	<u>N/A</u>
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

H. Treatment Plant

1. Building in good condition? (Doors, windows, wells, roof) _____
2. Visual tank inspection performed? _____
3. Visual inspection of pipes, valves, fittings etc.? _____
4. Pump operation/inspection performed? _____
5. Instruments operation/calibration? _____
6. Mixer operation/inspection? _____
7. Proper personal protection equipment? _____
8. Air compressor system functioning properly? _____
9. Filter press inspected? _____
10. Emergency generator functioning properly? _____

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

I. Polymeric Marine Mattress (PMM)

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

J. General Comments

Site Inspection Form



Site Inspection Form



Site Inspection Form



ATTACHMENT B.3

WATER LEVEL MEASUREMENTS

**Alltift Landfill
Buffalo, New York**

Piezometer Readings (DTW, ft)	9-Sep-20	10-Feb-21	8-Apr-21
PZ-1	10.94	10.92	4.66
PZ-2	10.22	6.52	7.36
PZ-3	12.50	5.97	11.97
PZ-4	9.18	8.81	4.97
PZ-5	8.96	5.80	6.88
PZ-6	11.41	6.20	10.60
PZ-7	10.19	8.35	8.78
PZ-8	8.21	8.25	7.16
PZ-9	9.19	5.69	7.24
PZ-10	10.98	8.31	8.07
PZ-11	8.88	7.88	7.50
PZ-12	10.04	8.94	8.40
PZ-13	7.82	6.59	6.18
PZ-14	Abandoned	Abandoned	Abandoned
PZ-15	8.12	8.08	7.39
PZ-16	Abandoned	Abandoned	Abandoned

Groundwater Collection Trench Sumps (DTW, ft)

GWCT-1	12.70	13.25	5.32
GWCT-2	16.44	7.29	14.16
GWCT-3	10.98	8.30	10.40
GWCT-4	9.19	7.00	7.84

Relief Trench Sumps (DTW, ft)

GWR-1	7.84	7.38	7.70
GWR-2	7.81	7.10	7.62

Lift Station (DTW, ft)

Lift	8.83	8.42	8.75

Offsite Background Wells (DTW, ft)

MW-1	Removed	Removed	Removed
MW-2	NM	NM	NM

Overflow Weir (DTW, ft)	3" under	3" under	3" under

DTW - depth to water
ft - feet
NM - not measured

Prepared by: John Formoza 4/29/2021
Checked by: Ryan Belcher 4/29/2021

ATTACHMENT B.4

QUARTERLY GROUNDWATER ELEVATIONS

QUARTERLY GROUNDWATER ELEVATIONS

2020/2021 ANNUAL REPORT

ALLTIFT LANDFILL SITE

BUFFALO, NEW YORK

			9/9/2020		2/10/2021		4/8/2021	
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
PIEZOMETERS								
PZ-1	16.8	585.01	10.94	574.07	10.92	574.09	4.66	580.35
PZ-2	16.9	584.96	10.22	574.74	6.52	578.44	7.36	577.60
PZ-3	16.9	585.05	12.50	572.55	5.97	579.08	11.97	573.08
PZ-4	16.6	585.79	9.18	576.61	8.81	576.98	4.97	580.82
PZ-5	16.9	584.52	8.96	575.56	5.8	578.72	6.88	577.64
PZ-6	17.8	584.74	11.41	573.33	6.2	578.54	10.6	574.14
PZ-7	20.0	584.99	10.19	574.80	8.35	576.64	8.78	576.21
PZ-8	20.7	584.48	8.21	576.27	8.25	576.23	7.16	577.32
PZ-9	15.1	586.86	9.19	577.67	5.69	581.17	7.24	579.62
PZ-10	11.5	589.41	10.98	578.43	8.31	581.10	8.07	581.34
PZ-11	19.5	594.72	8.88	585.84	7.88	586.84	7.5	587.22
PZ-12	21.8	592.78	10.04	582.74	8.94	583.84	8.4	584.38
PZ-13	22.5	589.04	7.82	581.22	6.59	582.45	6.18	582.86
PZ-15	17.0	588.79	8.12	580.67	8.08	580.71	7.39	581.40
BACKGROUND WELLS								
MW-1	20.4	585.22	NM	***	NM	***	NM	***
MW-2	17.0	586.67	11.75	574.92	NM	NC	NM	NC
GROUNDWATER COLLECTION TRENCH SUMPS								
S1	17.2	585.19	12.70	572.49	13.25	571.94	5.32	579.87
S2	24.8	585.45	16.44	569.01	7.29	578.16	14.16	571.29
S3	17.3	585.25	10.98	574.27	8.30	576.95	10.40	574.85
S4	17.8	585.00	9.19	575.81	7.00	578.00	7.84	577.16

Notes

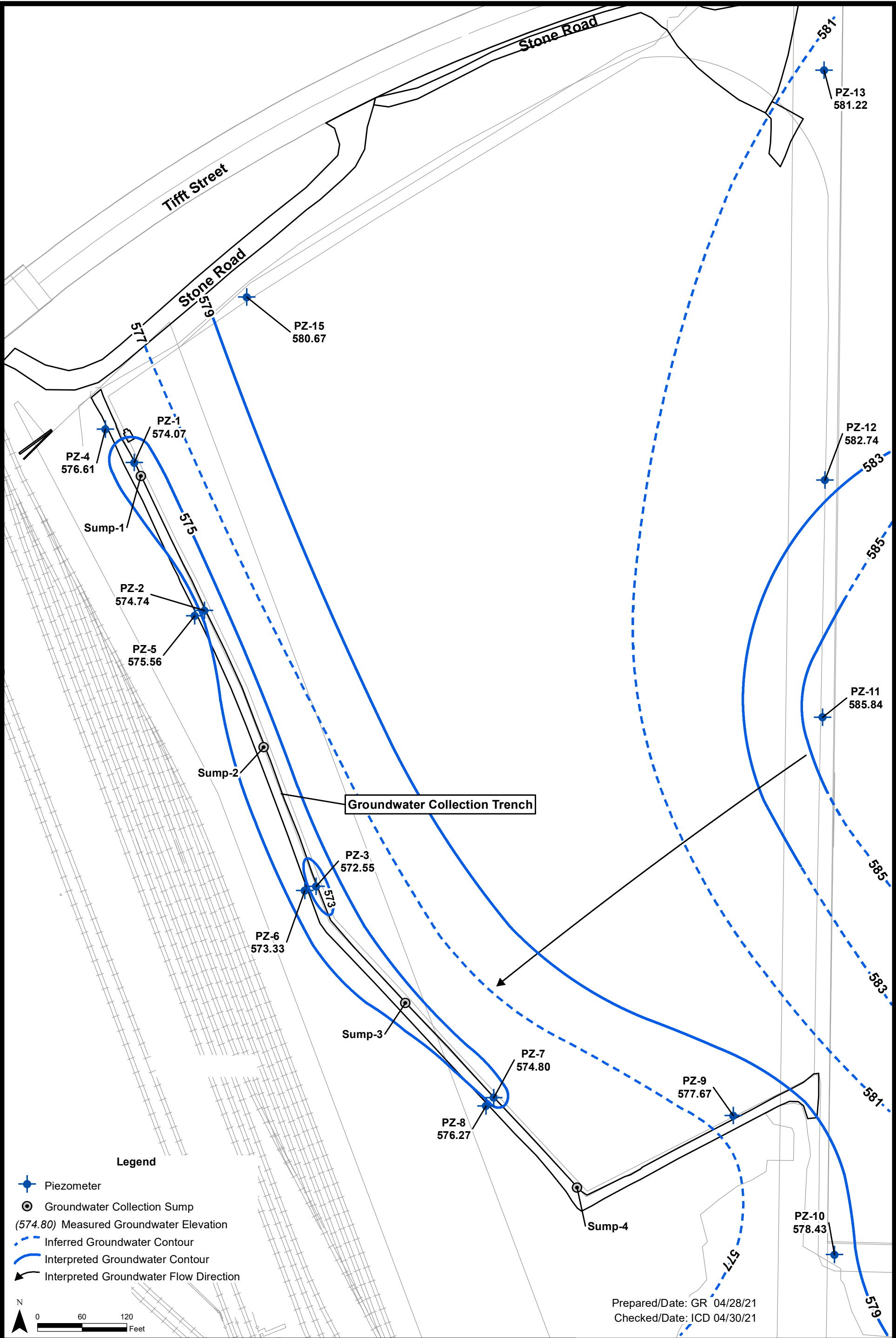
NC - Not calculable

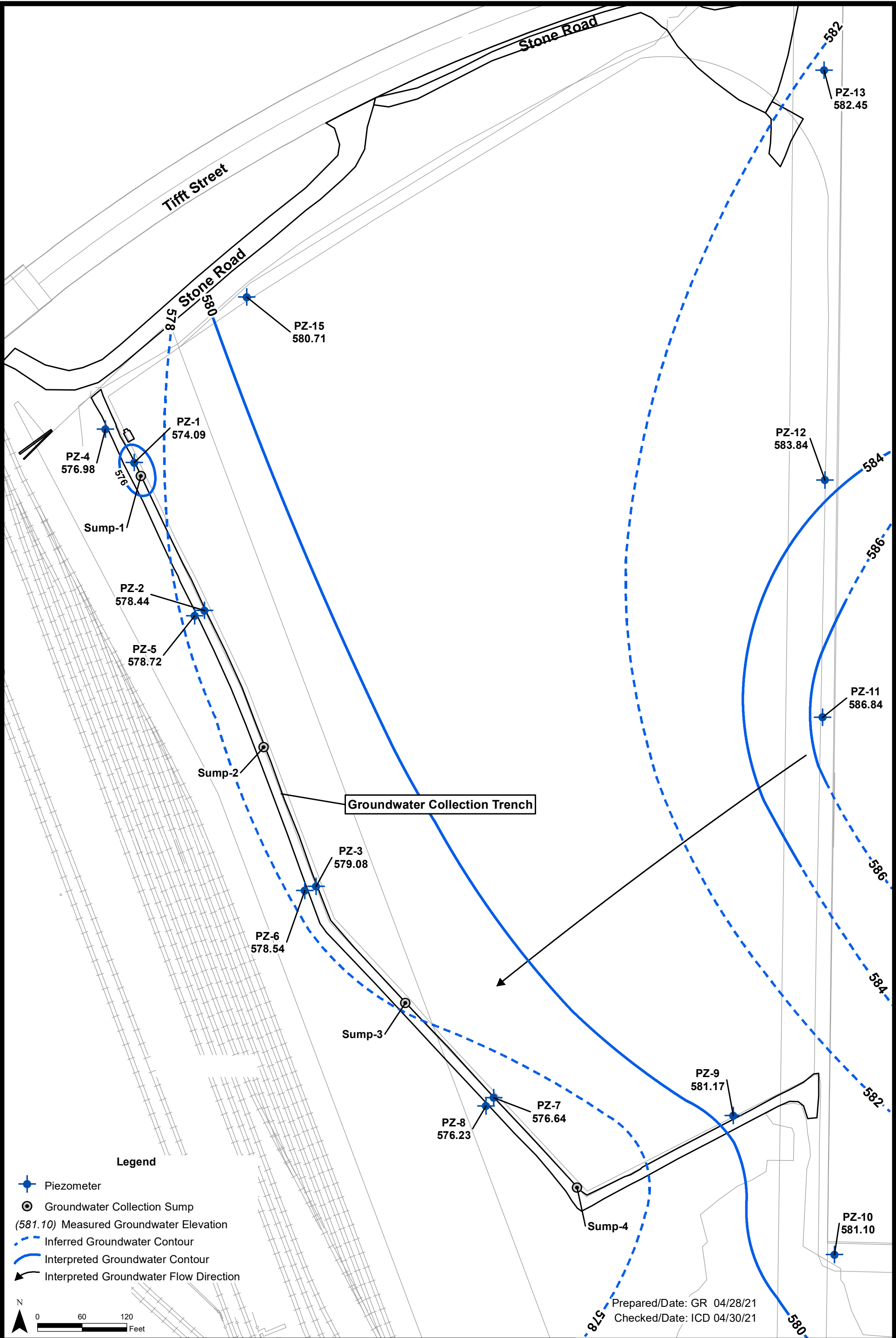
NM - Not measured

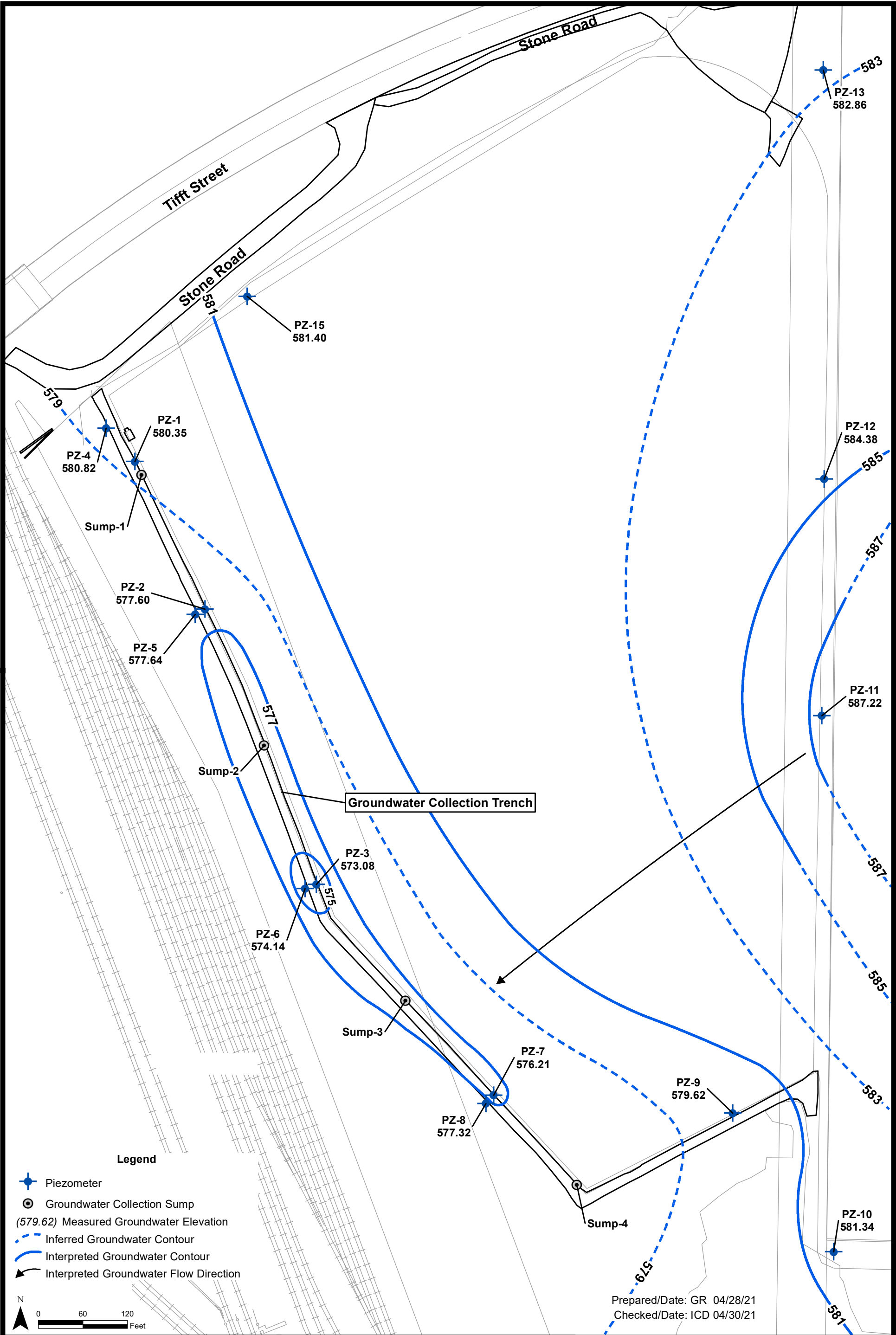
Depth to water for MW-2 measured on September 28, 2020.

ATTACHMENT B.5

QUARTERLY GROUNDWATER CONTOUR MAPS







ATTACHMENT B.6

DISCHARGE MONITORING REPORTS

JACOBS

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

May 4, 2020

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
2020 First Semi-Annual Report
BPDES Permit Number 18-12-BU098**

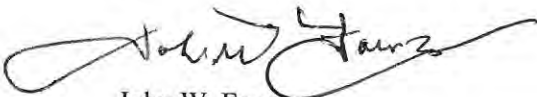
Dear Ms. Adams:

Enclosed please find the 2020 First Semi-Annual discharge monitoring report for the pumping facility located at the Alltift Landfill/Ramco Steel (Alltift) Site. The total flow to the Buffalo Sewer Authority (BSA) during this period was 3,029,992 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from September 25, 2019 through April 01, 2020 for a total of 189 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 01, 2020. 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, mercury and pH was collected as a composite sample. The pH reported on the discharge monitoring report is the pH reported on the laboratory report. A second pH was taken in the field and reported on the field sampling notes. 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. Eric Christodoulatos (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Jason Paananen (City of Buffalo)
Mr. Robert Gersh (Wood E&IS)

Table 1
Alltiff Landfill/Ramco Steel Site
First Semi-annual Report for 2020
Discharge Monitoring Report

BSA Permit No. 18-12-BU098	
Sample Date:	September 25, 2019
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	7.04		0.100	SU	7.04	SU	5.0 - 12.0	SU	Yes
Copper	ND		0.010	mg/L	ND	lbs/day	7.68	lbs/day	Yes
Mercury	ND		0.0002	mg/l	ND	mg/l	0.0008	mg/l	Yes
Zinc	ND		0.020	mg/L	ND	lbs/day	12	lbs/day	Yes
Total Suspended Solids	43.2		4.0	mg/L	43.2	mg/L	250	mg/L	Yes
Total Phosphorus	0.053		0.050	mg/L	0.05	mg/L	15.35	mg/L	Yes
USEPA Test Method 624	ND - 47			µg/L	Monitor Only				
USEPA Test Method 625	ND-20.1			µg/L					
Total Flow (average)	11.13			gpm	16,032	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)	2572500	9/25/2019
Final Reading (pump station)	2827092	10/29/2019
Initial Reading (pump station)	0	10/29/2019
Final Reading (pump station)	2775400	4/1/2020
Total Days in Period		189
Total Flow for Period	3,029,992	gallons
Average Flow for Period	11.13	gpm

Prepared by, Date: Aruna, 4/27/2020

Checked by, Date: John Formoza, 5/04/2020

Note: New flow meter installed on 10/29/19

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	Totalizer Reading (gallons)
9/25/2019	2,572,500
10/11/2019	2,625,700
10/29/2019	2,827,092
12/16/2019	689,000
1/20/2020	1,194,000
2/3/2020	1,544,000
2/21/2020	1,896,000
3/5/2020	2,097,100
4/1/2020	2,775,400

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."

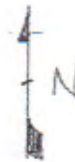


AREA MANAGER

John W. Formoza
Jacobs

MAY 4, 2020

Date



TIFFT ST.

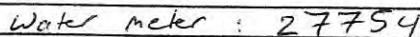
ALLTIFFT

LANDFILL

HOPKINS ST.

PRETREATMENT BUILDING
S.P. 001

READING



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-Alltft Landfill, 579 Tifft Street, Buffalo, NY

R35116 PO#A000572179

SGS Job Number: JD5669

Sampling Date: 04/01/20

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: 71



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.

Laura Degenhardt
General Manager

Client Service contact: Victoria Pushkova 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.



May 1, 2020

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

RE: SGS – Dayton, Job # JD5669 – Reissues

Dear Mr. Belcher,

The final report for SGS jobs number JD5669 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the ABN parameter list has been revised to meet client's request. 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!



Table of Contents

-1-

Section 1: Sample Summary	4
Section 2: Case Narrative/Conformance Summary	5
Section 3: Summary of Hits	8
Section 4: Sample Results	9
4.1: JD5669-1: GRAB 1 THRU 4-040120/BSA DISCHARGE	10
4.2: JD5669-2: COMP-040120/BSA DISCHARGE	14
4.3: JD5669-3: TB-	16
Section 5: Misc. Forms	18
5.1: Certification Exceptions	19
5.2: Chain of Custody	20
Section 6: MS Volatiles - QC Data Summaries	23
6.1: Method Blank Summary	24
6.2: Blank Spike Summary	28
6.3: Matrix Spike Summary	32
6.4: Matrix Spike/Matrix Spike Duplicate Summary	34
6.5: Duplicate Summary	36
6.6: Instrument Performance Checks (BFB)	38
6.7: Surrogate Recovery Summaries	42
Section 7: MS Semi-volatiles - QC Data Summaries	43
7.1: Method Blank Summary	44
7.2: Blank Spike/Blank Spike Duplicate Summary	46
7.3: Instrument Performance Checks (DFTPP)	48
7.4: Surrogate Recovery Summaries	52
Section 8: Metals Analysis - QC Data Summaries	53
8.1: Prep QC MP20636: Cu,Zn	54
8.2: Prep QC MP20647: Hg	64
Section 9: General Chemistry - QC Data Summaries	68
9.1: Method Blank and Spike Results Summary	69
9.2: Duplicate Results Summary	70
9.3: Matrix Spike Results Summary	71



Sample Summary

Honeywell International Inc. OMM work

Job No: JD5669

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116 PO#A000572179

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID

This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL
Metals ND = Not detected above the MDL
General Chemistry ND = Not detected above the MDL

JD5669-1	04/01/20	14:00 MS	04/06/20	AQ	Ground Water	GRAB 1 THRU 4-040120/BSA DISCHARGE
JD5669-2	04/01/20	14:05 MS	04/06/20	AQ	Ground Water	COMP-040120/BSA DISCHARGE
JD5669-3	04/01/20	14:05 MS	04/06/20	AQ	Trip Blank Water	TB-

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Honeywell International Inc. OMM work

Job No JD5669

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

Report Date 5/1/2020 2:10:32 PM

On 04/06/2020, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 5.5 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD5669 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: VT10095

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD5493-1MS, JD5573-1DUP, JD5493-1MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 1,1,1-Trichloroethane, 1,3-Dichlorobenzene, Bromodichloromethane, Bromoform, Carbon tetrachloride, Chlorobenzene, Dibromochloromethane, Trichloroethene, Trichlorofluoromethane are outside control limits. High percent recovery and no associated positive reported in the QC batch.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Outside control limits due to acid preservation.
- JD5669-3: (pH=6) Sample is not acid preserved per method/client criteria. Sample received and analyzed outside 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.
- JD5669-3 for Chlorobenzene: This compound in blank spike is outside in house QC limits bias high.
- JD5669-3 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD5669-3 for Bromoform: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD5669-3 for Bromodichloromethane: This compound in blank spike is outside in house QC limits bias high.
- JD5669-3 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD5669-3 for Dibromochloromethane: This compound in blank spike is outside in house QC limits bias high.
- JD5669-3 for Trichloroethene: This compound in blank spike is outside in house QC limits bias high.
- JD5669-3 for Trichlorofluoromethane: This compound in blank spike is outside in house QC limits bias high.
- JD5669-3 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD5669-3 for 1,3-Dichlorobenzene: This compound in blank spike is outside in house QC limits bias high.

Matrix: AQ

Batch ID: VT10104

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD5536-1MS, JD5536-1MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Trichlorofluoromethane are outside control limits. High percent recovery and no associated positive reported in the QC batch.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Toluene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JD5669-1: (pH=2.5) Sample pH did not satisfy field preservation criteria.
- JD5669-1 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

Friday, May 01, 2020

Page 1 of 3

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ

Batch ID: OP26904

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD5669-1 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD5669-1 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD5669-1 for 4-Chloro-3-methyl phenol: Associated CCV outside of control limits high, sample was ND.
- JD5669-1 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD5669-1 for bis(2-Ethylhexyl)phthalate: Associated CCV outside of control limits high, sample was ND.

Metals Analysis By Method EPA 200.7

Matrix: AQ

Batch ID: MP20636

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD5627-3MS, JD5627-3MSD, JD5627-3SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Coppe are outside control limits for sample MP20636-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP20636-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals Analysis By Method EPA 245.1

Matrix: AQ

Batch ID: MP20647

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD5751-9AMS, JD5751-9AMSD were used as the QC samples for metals.

General Chemistry By Method EPA 365.3

Matrix: AQ

Batch ID: GP27714

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD5749-1DUP, JD5749-1MS were used as the QC samples for Phosphorus, Total.

General Chemistry By Method SM2540 D-11

Matrix: AQ

Batch ID: GN7037

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD5546-1DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ

Batch ID: R184820

- The data for SM4500H+ B-11 meets quality control requirements.
- JD5669-2 for pH: Sample received out of holding time for pH analysis. Temp of pH Reading: 15.6 Deg. C

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: JD5669
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY
Collected: 04/01/20

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

JD5669-1 GRAB 1 THRU 4-040120/BSA DISCHARGE

Benzene ^a	2.7	1.0	0.34	ug/l	EPA 624.1
Chlorobenzene ^a	47.0	1.0	0.33	ug/l	EPA 624.1
Chloroethane ^a	2.4	1.0	0.54	ug/l	EPA 624.1
1,2-Dichlorobenzene ^a	0.47 J	1.0	0.30	ug/l	EPA 624.1
cis-1,2-Dichloroethene ^a	12.6	1.0	0.51	ug/l	EPA 624.1
trans-1,2-Dichloroethene ^a	7.1	1.0	0.46	ug/l	EPA 624.1
Trichloroethene ^a	0.78 J	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride ^a	6.4	1.0	0.79	ug/l	EPA 624.1
4-Chloroaniline	20.1	4.8	0.32	ug/l	EPA 625.1
1,2-Dichlorobenzene	0.26 J	0.95	0.16	ug/l	EPA 625.1

JD5669-2 COMP-040120/BSA DISCHARGE

Phosphorus, Total	0.053	0.050	0.027	mg/l	EPA 365.3
Solids, Total Suspended	43.2	4.0	1.5	mg/l	SM2540 D-11
pH ^b	7.04			su	SM4500H+ B-11

JD5669-3 TB-

No hits reported in this sample.

(a) (pH= 2.5)Sample pH did not satisfy field preservation criteria.

(b) Sample received out of holding time for pH analysis. Temp of pH Reading: 15.6 Deg. C



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-040120/BSA DISCHARGE	Date Sampled:	04/01/20
Lab Sample ID:	JD5669-1	Date Received:	04/06/20
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	T244298.D	1	04/14/20 20:29	CSF	n/a	n/a	VT10104
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	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	2.7	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	47.0	1.0	0.33	ug/l	
75-00-3	Chloroethane	2.4	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	0.47	1.0	0.30	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	12.6	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	7.1	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	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 THRU 4-040120/BSA DISCHARGE	Date Sampled:	04/01/20
Lab Sample ID:	JD5669-1	Date Received:	04/06/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 624.1		
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	0.78	1.0	0.43	ug/l	J
75-69-4	Trichlorofluoromethane ^b	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	6.4	1.0	0.79	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)	114%		76-122%
2037-26-5	Toluene-D8 (SUR)	92%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%		80-120%
1868-53-7	Dibromofluoromethane (S)	99%		80-120%

(a) (pH= 2.5)Sample pH did not satisfy field preservation criteria.

(b) Associated CCV outside of control limits high, sample was ND. This compound in blank spike 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 THRU 4-040120/BSA DISCHARGE	Date Sampled:	04/01/20
Lab Sample ID:	JD5669-1	Date Received:	04/06/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 625.1 EPA 608		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M165215.D	1	04/10/20 08:02	CS	04/08/20 08:00	OP26904	EM6992
Run #2							

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

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.8	0.78	ug/l	
59-50-7	4-Chloro-3-methyl phenol ^a	ND	4.8	0.85	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 ^a	ND	9.5	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	0.91	ug/l	
100-02-7	4-Nitrophenol ^a	ND	9.5	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	4.8	1.3	ug/l	
108-95-2	Phenol	ND	1.9	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.88	ug/l	
83-32-9	Acenaphthene	ND	0.95	0.18	ug/l	
208-96-8	Acenaphthylene	ND	0.95	0.13	ug/l	
120-12-7	Anthracene	ND	0.95	0.20	ug/l	
92-87-5	Benzidine	ND	9.5	0.86	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.95	0.19	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.95	0.20	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.95	0.20	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.95	0.32	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.95	0.20	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.38	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.44	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.22	ug/l	
106-47-8	4-Chloroaniline	20.1	4.8	0.32	ug/l	
218-01-9	Chrysene	ND	0.95	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.26	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	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.35	ug/l	
95-50-1	1,2-Dichlorobenzene	0.26	0.95	0.16	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	0.95	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	0.95	0.18	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 THRU 4-040120/BSA DISCHARGE	Date Sampled:	04/01/20
Lab Sample ID:	JD5669-1	Date Received:	04/06/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 625.1 EPA 608		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	0.95	0.16	ug/l	
121-14-2	2,4-Dinitrotoluene ^a	ND	0.95	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.95	0.45	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	0.48	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.95	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.47	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 ^a	ND	1.9	1.6	ug/l	
206-44-0	Fluoranthene	ND	0.95	0.16	ug/l	
86-73-7	Fluorene	ND	0.95	0.16	ug/l	
118-74-1	Hexachlorobenzene	ND	0.95	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.95	0.47	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.5	2.6	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.37	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.95	0.32	ug/l	
78-59-1	Isophorone	ND	1.9	0.26	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.61	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	ND	4.8	0.21	ug/l	
85-01-8	Phenanthrene	ND	0.95	0.17	ug/l	
129-00-0	Pyrene	ND	0.95	0.21	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		10-110%
4165-62-2	Phenol-d5	40%		10-110%
118-79-6	2,4,6-Tribromophenol	92%		35-147%
4165-60-0	Nitrobenzene-d5	89%		32-132%
321-60-8	2-Fluorobiphenyl	84%		40-117%
1718-51-0	Terphenyl-d14	83%		33-126%

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

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-040120/BSA DISCHARGE	Date Sampled:	04/01/20
Lab Sample ID:	JD5669-2	Date Received:	04/06/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Copper	ND	10	4.1	ug/l	1	04/08/20	04/14/20	ND	EPA 200.7 ² EPA 200.7 ³
Mercury	ND	0.20	0.092	ug/l	1	04/09/20	04/09/20	CH	EPA 245.1 ¹ EPA 245.1 ⁴
Zinc	ND	20	8.5	ug/l	1	04/08/20	04/14/20	ND	EPA 200.7 ² EPA 200.7 ³

- (1) Instrument QC Batch: MA48525
- (2) Instrument QC Batch: MA48547
- (3) Prep QC Batch: MP20636
- (4) Prep QC Batch: MP20647

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	COMP-040120/BSA DISCHARGE	Date Sampled:	04/01/20
Lab Sample ID:	JD5669-2	Date Received:	04/06/20
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	0.053	0.050	0.027	mg/l	1	04/18/20 11:40 AM	EPA	365.3
Solids, Total Suspended	43.2	4.0	1.5	mg/l	1	04/07/20 19:44 EB	SM2540 D-11	
pH ^a	7.04			su	1	04/06/20 13:56 AS	SM4500H+	B-11

(a) Sample received out of holding time for pH analysis. Temp of pH Reading: 15.6 Deg. C

RL = Reporting Limit
MDL = Method Detection Limit

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

4.2
4

Report of Analysis

Client Sample ID:	TB-	Date Sampled:	04/01/20
Lab Sample ID:	JD5669-3	Date Received:	04/06/20
Matrix:	AQ - Trip Blank 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	T244129.D	1	04/06/20 16:44	CSF	n/a	n/a	VT10095
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	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane ^b	ND	1.0	0.35	ug/l	
75-25-2	Bromoform ^c	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane ^d	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride ^c	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene ^b	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane ^b	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene ^b	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane ^c	ND	1.0	0.54	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: TB-		Date Sampled: 04/01/20
Lab Sample ID: JD5669-3		Date Received: 04/06/20
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: EPA 624.1		
Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene ^b	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane ^b	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	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)	114%		76-122%
2037-26-5	Toluene-D8 (SUR)	90%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%		80-120%
1868-53-7	Dibromofluoromethane (S)	103%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample received and analyzed outside 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.
- (b) This compound in blank spike is outside in house QC limits bias high.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (d) Associated CCV outside of control limits high, sample was ND.

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

5

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft 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
1,4-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.

5.1
5

SGS

ACCUTEST

CHAIN OF CUSTODY

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

PAGE 1 OF 1

COMP

FED-EX Tracking # 34552012534		Bottle Order Control # 345520-112	
SGS Accutest Quote # HWINCJOM73508		SGS Accutest Job # JD5669	
Client / Reporting Information		Project Information	
Company Name Honeywell International Inc		Project Name 30130 - Alltiff OM Phase/ Semi Annual - Project # HWINCJOM73507	
Street Address 1563 Willis Ave 13204		Street 579 Tift Street	
City State Zip Syracuse, New York 13204		Billing Information (if different from Report to) Honeywell International Inc	
Project Contact John Formoza John.formoza@jacobs.com		Street Address 115 Tabor Road	
Phone # 315-532-5608		City State Zip Morris Plains, NJ 07950	
Sample(s) Name(s) Michael Stout 315-558-4018		Attention: HTS-RES-LAB@Honeywell.com	
SGS Accutest Sample #		Collection	
Field ID / Point of Collection		MEOH/ID Vial #	
1 Grab 1- 040120 /BSA Discharge		4/1/20 0800 MS GW 5 3	
2 Grab 2- 040120 /BSA Discharge		4/1/20 1000 MS GW 5 3	
3 Grab 3- 040120 /BSA Discharge		4/1/20 1200 MS GW 5 3	
4 Grab 4- 040120 /BSA Discharge		4/1/20 1400 MS GW 5 3	
5 COMP- 040120 /BSA Discharge		4/1/20 1405 MS GW 5 1 2 3	
6 TB -		TB 2 2	
Turnaround Time (Business days)		Data Deliverable Information	
[X] Std. 10 Business Days		[] Commercial "A" (Level 1)	
[] 5 Day RUSH		[X] Commercial "B" (Level 2)	
[] 3 Day RUSH		[] FULLT1 (Level 3+4)	
[] 2 Day RUSH		[] NJ Reduced	
[] 1 Day RUSH		[] Commercial "C"	
[] other		[] NJ Data of Known Quality Protocol Reporting	
Emergency & Rush T/A data available VIA Lablink		Commercial "A" = Results Only, Commercial "B" = Results + QC Summary	
Initial Assessment		NJ Reduced = Results + QC Summary + Partial Raw data	
Label Verification		Prior to analysis grab samples to be composited by lab	
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 Sampler: Andrew Petrelli		Received By: FOLGA	
Date Time: 4/1/20 1445		Date Time: 4-6-2010	
Relinquished by Sampler: 3		Received By: 2	
Date Time:		Date Time:	
Relinquished by: 5		Received By: 4	
Date Time:		Date Time:	
Custody Seal #		On Ice	
[] Intact		Cooler Temp:	
[] Not intact		7 5.8	

JD5669: Chain of Custody

Page 1 of 3

SGS

20 of 71

JD5669

SGS Sample Receipt Summary

Job Number: JD5669

Client: AMEC FOSTER WHEELER

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

Date / Time Received: 4/6/2020 11:00:00 AM

Delivery Method: FedEx

Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (5.8);

Cooler Temps (Corrected) °C: Cooler 1: (5.5);

Cooler Security
Y or N
Y or N

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

Cooler Temperature
Y or N

1. Temp criteria achieved: ☒ Y ☐ N	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: ☒ Y ☐ N	N/A
2. Trip Blank listed on COC: ☒ Y ☐ N	
3. Samples preserved properly: ☒ Y ☐ N	
4. VOCs headspace free: ☒ Y ☐ N	

Sample Integrity - Documentation
Y or N

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

Sample Integrity - Condition
Y or N

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

Sample Integrity - Instructions
Y or N
N/A

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

Test Strip Lot #s:

pH 1-12: 229517

pH 12+: 208717

Other: (Specify)

Comments

-3 COC notes TB vials are preserved but they are unpreserved vials.

SM089-02 Rev. Date 12/1/16

JD5669: Chain of Custody
Page 2 of 3

Responded to by: VP

Response Date: 4/6

OK to proceed as noted

5.2

5

JD5669: 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: JD5669**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
VT10095-MB	T244119.D	1	04/06/20	CSF	n/a	n/a	VT10095

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

JD5669-3

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VT10095-MB	T244119.D	1	04/06/20	CSF	n/a	n/a	VT10095

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

JD5669-3

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	109% 76-122%
2037-26-5	Toluene-D8 (SUR)	92% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98% 80-120%
1868-53-7	Dibromofluoromethane (S)	100% 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 2

Job Number: JD5669**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
VT10104-MB	T244280.D	1	04/14/20	CSF	n/a	n/a	VT10104

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

JD5669-1

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VT10104-MB	T244280.D	1	04/14/20	CSF	n/a	n/a	VT10104

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

JD5669-1

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	108% 76-122%
2037-26-5	Toluene-D8 (SUR)	93% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	107% 80-120%
1868-53-7	Dibromofluoromethane (S)	98% 80-120%

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

Blank Spike Summary

Page 1 of 2

Job Number: JD5669**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
VT10095-BS	T244117.D	1	04/06/20	CSF	n/a	n/a	VT10095

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

JD5669-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	15.2	76	60-140
107-13-1	Acrylonitrile	20	21.8	109	64-137
71-43-2	Benzene	20	22.0	110	78-118
75-27-4	Bromodichloromethane	20	24.1	121* a	77-119
75-25-2	Bromoform	20	27.4	137* a	70-128
74-83-9	Bromomethane	20	26.6	133	59-141
56-23-5	Carbon tetrachloride	20	27.1	136* a	69-130
108-90-7	Chlorobenzene	20	23.3	117* a	78-116
75-00-3	Chloroethane	20	19.4	97	63-136
110-75-8	2-Chloroethyl vinyl ether	100	108	108	55-147
67-66-3	Chloroform	20	22.7	114	78-122
74-87-3	Chloromethane	20	16.2	81	49-125
124-48-1	Dibromochloromethane	20	23.9	120* a	75-117
95-50-1	1,2-Dichlorobenzene	20	22.4	112	76-115
541-73-1	1,3-Dichlorobenzene	20	23.0	115* a	75-114
106-46-7	1,4-Dichlorobenzene	20	22.2	111	75-113
75-71-8	Dichlorodifluoromethane	20	19.1	96	48-129
75-34-3	1,1-Dichloroethane	20	21.7	109	73-124
107-06-2	1,2-Dichloroethane	20	24.1	121	74-127
75-35-4	1,1-Dichloroethene	20	20.1	101	54-122
156-59-2	cis-1,2-Dichloroethene	20	20.9	105	72-115
156-60-5	trans-1,2-Dichloroethene	20	22.4	112	70-121
78-87-5	1,2-Dichloropropane	20	21.7	109	75-118
10061-01-5	cis-1,3-Dichloropropene	20	22.9	115	76-118
10061-02-6	trans-1,3-Dichloropropene	20	22.4	112	70-122
100-41-4	Ethylbenzene	20	22.6	113	76-118
75-09-2	Methylene chloride	20	19.8	99	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	18.7	94	66-119
127-18-4	Tetrachloroethene	20	24.9	125	70-130
108-88-3	Toluene	20	21.1	106	78-119
71-55-6	1,1,1-Trichloroethane	20	26.2	131* a	74-130
79-00-5	1,1,2-Trichloroethane	20	20.5	103	74-121
79-01-6	Trichloroethene	20	24.3	122* a	78-117
75-69-4	Trichlorofluoromethane	20	25.9	130* a	66-126
75-01-4	Vinyl chloride	20	18.7	94	54-125
1330-20-7	Xylenes (total)	60	69.4	116	76-120

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD5669

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
VT10095-BS	T244117.D	1	04/06/20	CSF	n/a	n/a	VT10095

The QC reported here applies to the following samples:

Method: EPA 624.1

JD5669-3

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	111%	76-122%
2037-26-5	Toluene-D8 (SUR)	92%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	100%	80-120%
1868-53-7	Dibromofluoromethane (S)	98%	80-120%

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: JD5669**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
VT10104-BS	T244278.D	1	04/14/20	CSF	n/a	n/a	VT10104

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

JD5669-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	17.6	88	60-140
107-13-1	Acrylonitrile	20	18.8	94	64-137
71-43-2	Benzene	20	18.4	92	78-118
75-27-4	Bromodichloromethane	20	20.3	102	77-119
75-25-2	Bromoform	20	23.9	120	70-128
74-83-9	Bromomethane	20	25.7	129	59-141
56-23-5	Carbon tetrachloride	20	23.4	117	69-130
108-90-7	Chlorobenzene	20	20.1	101	78-116
75-00-3	Chloroethane	20	18.5	93	63-136
110-75-8	2-Chloroethyl vinyl ether	100	95.6	96	55-147
67-66-3	Chloroform	20	19.8	99	78-122
74-87-3	Chloromethane	20	16.1	81	49-125
124-48-1	Dibromochloromethane	20	20.6	103	75-117
95-50-1	1,2-Dichlorobenzene	20	19.1	96	76-115
541-73-1	1,3-Dichlorobenzene	20	19.7	99	75-114
106-46-7	1,4-Dichlorobenzene	20	18.6	93	75-113
75-71-8	Dichlorodifluoromethane	20	19.3	97	48-129
75-34-3	1,1-Dichloroethane	20	18.1	91	73-124
107-06-2	1,2-Dichloroethane	20	20.0	100	74-127
75-35-4	1,1-Dichloroethene	20	16.4	82	54-122
156-59-2	cis-1,2-Dichloroethene	20	17.4	87	72-115
156-60-5	trans-1,2-Dichloroethene	20	18.5	93	70-121
78-87-5	1,2-Dichloropropane	20	18.8	94	75-118
10061-01-5	cis-1,3-Dichloropropene	20	19.6	98	76-118
10061-02-6	trans-1,3-Dichloropropene	20	19.0	95	70-122
100-41-4	Ethylbenzene	20	18.8	94	76-118
75-09-2	Methylene chloride	20	17.1	86	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	15.9	80	66-119
127-18-4	Tetrachloroethene	20	21.4	107	70-130
108-88-3	Toluene	20	18.0	90	78-119
71-55-6	1,1,1-Trichloroethane	20	22.1	111	74-130
79-00-5	1,1,2-Trichloroethane	20	17.7	89	74-121
79-01-6	Trichloroethene	20	20.6	103	78-117
75-69-4	Trichlorofluoromethane	20	25.3	127* a	66-126
75-01-4	Vinyl chloride	20	18.8	94	54-125
1330-20-7	Xylenes (total)	60	57.6	96	76-120

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD5669

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
VT10104-BS	T244278.D	1	04/14/20	CSF	n/a	n/a	VT10104

The QC reported here applies to the following samples:

Method: EPA 624.1

JD5669-1

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	110%	76-122%
2037-26-5	Toluene-D8 (SUR)	92%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	100%	80-120%
1868-53-7	Dibromofluoromethane (S)	100%	80-120%

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

* = Outside of Control Limits.

Matrix Spike Summary

Page 1 of 2

Job Number: JD5669

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
JD5493-1MS	T244125.D	1	04/06/20	CSF	n/a	n/a	VT10095
JD5493-1	T244121.D	1	04/06/20	CSF	n/a	n/a	VT10095

The QC reported here applies to the following samples:

Method: EPA 624.1

JD5669-3

CAS No.	Compound	JD5493-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
107-02-8	Acrolein	ND		20	16.6	83	40-154
107-13-1	Acrylonitrile	ND		20	19.2	96	60-142
71-43-2	Benzene	0.35	J	20	21.4	105	59-136
75-27-4	Bromodichloromethane	ND		20	22.8	114	73-125
75-25-2	Bromoform	ND		20	25.3	127	62-134
74-83-9	Bromomethane	ND		20	26.3	132	54-149
56-23-5	Carbon tetrachloride	ND		20	27.7	139	70-140
108-90-7	Chlorobenzene	ND		20	21.4	107	69-128
75-00-3	Chloroethane	ND		20	19.0	95	58-145
110-75-8	2-Chloroethyl vinyl ether	ND		100	8.6	9* a	10-179
67-66-3	Chloroform	ND		20	21.1	106	71-131
74-87-3	Chloromethane	ND		20	15.8	79	44-136
124-48-1	Dibromochloromethane	ND		20	22.3	112	72-123
95-50-1	1,2-Dichlorobenzene	ND		20	20.1	101	69-123
541-73-1	1,3-Dichlorobenzene	ND		20	20.7	104	71-122
106-46-7	1,4-Dichlorobenzene	ND		20	20.2	101	69-121
75-71-8	Dichlorodifluoromethane	ND		20	20.4	102	42-138
75-34-3	1,1-Dichloroethane	ND		20	20.8	104	66-132
107-06-2	1,2-Dichloroethane	ND		20	21.9	110	68-140
75-35-4	1,1-Dichloroethene	ND		20	20.1	101	49-127
156-59-2	cis-1,2-Dichloroethene	ND		20	19.5	98	50-134
156-60-5	trans-1,2-Dichloroethene	ND		20	21.6	108	63-129
78-87-5	1,2-Dichloropropane	ND		20	20.5	103	73-123
10061-01-5	cis-1,3-Dichloropropene	ND		20	21.9	110	71-124
10061-02-6	trans-1,3-Dichloropropene	ND		20	20.8	104	66-127
100-41-4	Ethylbenzene	ND		20	21.0	105	65-130
75-09-2	Methylene chloride	ND		20	20.0	100	65-127
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	17.4	87	62-126
127-18-4	Tetrachloroethene	ND		20	22.8	114	51-145
108-88-3	Toluene	ND		20	19.9	100	66-132
71-55-6	1,1,1-Trichloroethane	ND		20	26.1	131	63-143
79-00-5	1,1,2-Trichloroethane	ND		20	19.4	97	71-127
79-01-6	Trichloroethene	ND		20	24.2	121	46-145
75-69-4	Trichlorofluoromethane	ND		20	27.5	138	57-139
75-01-4	Vinyl chloride	ND		20	20.0	100	45-136
1330-20-7	Xylenes (total)	ND		60	63.8	106	66-131

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD5493-1MS	T244125.D	1	04/06/20	CSF	n/a	n/a	VT10095
JD5493-1	T244121.D	1	04/06/20	CSF	n/a	n/a	VT10095

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

JD5669-3

CAS No.	Surrogate Recoveries	MS	JD5493-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	110%	107%	76-122%
2037-26-5	Toluene-D8 (SUR)	91%	90%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	99%	97%	80-120%
1868-53-7	Dibromofluoromethane (S)	100%	98%	80-120%

(a) Outside control limits due to acid preservation.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD5669

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
JD5536-1MS	T244287.D	10	04/14/20	CSF	n/a	n/a	VT10104
JD5536-1MSD	T244288.D	10	04/14/20	CSF	n/a	n/a	VT10104
JD5536-1 ^a	T244282.D	10	04/14/20	CSF	n/a	n/a	VT10104

The QC reported here applies to the following samples:

Method: EPA 624.1

JD5669-1

CAS No.	Compound	JD5536-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
107-02-8	Acrolein	ND	200	129	65	200	121	61	6	40-154/18
107-13-1	Acrylonitrile	ND	200	172	86	200	164	82	5	60-142/19
71-43-2	Benzene	1030	200	1040	5* ^b	200	1040	5* ^b	0	59-136/13
75-27-4	Bromodichloromethane	ND	200	191	96	200	197	99	3	73-125/13
75-25-2	Bromoform	ND	200	204	102	200	207	104	1	62-134/12
74-83-9	Bromomethane	ND	200	239	120	200	222	111	7	54-149/19
56-23-5	Carbon tetrachloride	ND	200	229	115	200	223	112	3	70-140/14
108-90-7	Chlorobenzene	5440	E 200	4920	-260* ^b	200	4810	-315* ^b	2	69-128/11
75-00-3	Chloroethane	ND	200	157	79	200	149	75	5	58-145/19
110-75-8	2-Chloroethyl vinyl ether	ND	1000	456	46	1000	328	33	33	10-179/37
67-66-3	Chloroform	8.7	J 200	203	97	200	194	93	5	71-131/15
74-87-3	Chloromethane	ND	200	141	71	200	143	72	1	44-136/21
124-48-1	Dibromochloromethane	ND	200	193	97	200	194	97	1	72-123/12
95-50-1	1,2-Dichlorobenzene	107	200	285	89	200	297	95	4	69-123/11
541-73-1	1,3-Dichlorobenzene	20.2	200	221	100	200	219	99	1	71-122/11
106-46-7	1,4-Dichlorobenzene	530	200	662	66* ^b	200	662	66* ^b	0	69-121/10
75-71-8	Dichlorodifluoromethane	ND	200	168	84	200	166	83	1	42-138/19
75-34-3	1,1-Dichloroethane	ND	200	187	94	200	181	91	3	66-132/18
107-06-2	1,2-Dichloroethane	ND	200	220	110	200	217	109	1	68-140/13
75-35-4	1,1-Dichloroethene	ND	200	173	87	200	164	82	5	49-127/18
156-59-2	cis-1,2-Dichloroethene	ND	200	179	90	200	171	86	5	50-134/14
156-60-5	trans-1,2-Dichloroethene	ND	200	187	94	200	180	90	4	63-129/18
78-87-5	1,2-Dichloropropane	ND	200	184	92	200	188	94	2	73-123/14
10061-01-5	cis-1,3-Dichloropropene	ND	200	197	99	200	199	100	1	71-124/13
10061-02-6	trans-1,3-Dichloropropene	ND	200	190	95	200	186	93	2	66-127/14
100-41-4	Ethylbenzene	56.9	200	241	92	200	234	89	3	65-130/13
75-09-2	Methylene chloride	ND	200	180	90	200	172	86	5	65-127/15
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	158	79	200	167	84	6	62-126/14
127-18-4	Tetrachloroethene	ND	200	227	114	200	215	108	5	51-145/13
108-88-3	Toluene	1030	200	1040	5* ^b	200	1010	-10* ^b	3	66-132/12
71-55-6	1,1,1-Trichloroethane	ND	200	221	111	200	212	106	4	63-143/15
79-00-5	1,1,2-Trichloroethane	ND	200	173	87	200	172	86	1	71-127/13
79-01-6	Trichloroethene	ND	200	204	102	200	202	101	1	46-145/12
75-69-4	Trichlorofluoromethane	ND	200	227	114	200	215	108	5	57-139/17
75-01-4	Vinyl chloride	ND	200	163	82	200	162	81	1	45-136/20
1330-20-7	Xylenes (total)	92.1	600	658	94	600	647	92	2	66-131/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JD5669

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
JD5536-1MS	T244287.D	10	04/14/20	CSF	n/a	n/a	VT10104
JD5536-1MSD	T244288.D	10	04/14/20	CSF	n/a	n/a	VT10104
JD5536-1 ^a	T244282.D	10	04/14/20	CSF	n/a	n/a	VT10104

The QC reported here applies to the following samples:

Method: EPA 624.1

JD5669-1

CAS No.	Surrogate Recoveries	MS	MSD	JD5536-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	109%	108%	109%	76-122%
2037-26-5	Toluene-D8 (SUR)	96%	94%	95%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	100%	104%	104%	80-120%
1868-53-7	Dibromofluoromethane (S)	101%	99%	102%	80-120%

(a) Dilution required due to high concentration of target compound.

(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 2

Job Number: JD5669

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
JD5573-1DUP	T244124.D	1	04/06/20	CSF	n/a	n/a	VT10095
JD5573-1	T244120.D	1	04/06/20	CSF	n/a	n/a	VT10095

The QC reported here applies to the following samples:

Method: EPA 624.1

JD5669-3

CAS No.	Compound	JD5573-1 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

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD5573-1DUP	T244124.D	1	04/06/20	CSF	n/a	n/a	VT10095
JD5573-1	T244120.D	1	04/06/20	CSF	n/a	n/a	VT10095

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

JD5669-3

CAS No.	Surrogate Recoveries	DUP	JD5573-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	111%	108%	76-122%
2037-26-5	Toluene-D8 (SUR)	89%	90%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	100%	102%	80-120%
1868-53-7	Dibromofluoromethane (S)	100%	99%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD5669

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VT10040-BFB

Injection Date: 01/30/20

Lab File ID: T242984.D

Injection Time: 16:16

Instrument ID: GCMST

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	9437	18.6	Pass
75	30.0 - 60.0% of mass 95	25882	51.0	Pass
95	Base peak, 100% relative abundance	50786	100.0	Pass
96	5.0 - 9.0% of mass 95	3301	6.50	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	36565	72.0	Pass
175	5.0 - 9.0% of mass 174	2681	5.28 (7.33) ^a	Pass
176	95.0 - 101.0% of mass 174	36101	71.1 (98.7) ^a	Pass
177	5.0 - 9.0% of mass 176	2546	5.01 (7.05) ^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
VT10040-IC10040	T242985.D	01/30/20	16:48	00:32	Initial cal 0.5
VT10040-IC10040	T242986.D	01/30/20	17:18	01:02	Initial cal 1
VT10040-IC10040	T242987.D	01/30/20	17:49	01:33	Initial cal 2
VT10040-IC10040	T242988.D	01/30/20	18:19	02:03	Initial cal 4
VT10040-IC10040	T242989.D	01/30/20	18:49	02:33	Initial cal 8
VT10040-ICC10040	T242990.D	01/30/20	19:20	03:04	Initial cal 20
VT10040-IC10040	T242991.D	01/30/20	19:50	03:34	Initial cal 50
VT10040-IC10040	T242992.D	01/30/20	20:21	04:05	Initial cal 100
VT10040-IC10040	T242993.D	01/30/20	20:51	04:35	Initial cal 200
VT10040-ICV10040	T242996.D	01/30/20	22:22	06:06	Initial cal verification 20
VT10040-ICV10040	T242997.D	01/30/20	22:52	06:36	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD5669**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY**Sample:** VT10040-BFB2**Injection Date:** 01/31/20**Lab File ID:** T243000.D**Injection Time:** 10:50**Instrument ID:** GCMST

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	16138	18.1	Pass
75	30.0 - 60.0% of mass 95	45469	51.0	Pass
95	Base peak, 100% relative abundance	89242	100.0	Pass
96	5.0 - 9.0% of mass 95	5587	6.26	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	63570	71.2	Pass
175	5.0 - 9.0% of mass 174	4883	5.47 (7.68) ^a	Pass
176	95.0 - 101.0% of mass 174	62928	70.5 (99.0) ^a	Pass
177	5.0 - 9.0% of mass 176	4156	4.66 (6.60) ^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
VT10040-ICV10040	T243001.D	01/31/20	12:01	01:11	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD5669

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VT10095-BFB

Injection Date: 04/06/20

Lab File ID: T244115.D

Injection Time: 09:04

Instrument ID: GCMST

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	17020	17.7	Pass
75	30.0 - 60.0% of mass 95	48565	50.5	Pass
95	Base peak, 100% relative abundance	96187	100.0	Pass
96	5.0 - 9.0% of mass 95	6097	6.34	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	72131	75.0	Pass
175	5.0 - 9.0% of mass 174	5415	5.63 (7.51) ^a	Pass
176	95.0 - 101.0% of mass 174	70821	73.6 (98.2) ^a	Pass
177	5.0 - 9.0% of mass 176	4755	4.94 (6.71) ^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
VT10095-BS	T244117.D	04/06/20	10:25	01:21	Blank Spike
VT10095-CC10040	T244117.D	04/06/20	10:25	01:21	Continuing cal 20
VT10095-MB	T244119.D	04/06/20	11:29	02:25	Method Blank
JD5573-1	T244120.D	04/06/20	12:07	03:03	(used for QC only; not part of job JD5669)
JD5493-1	T244121.D	04/06/20	12:38	03:34	(used for QC only; not part of job JD5669)
JD5538-1	T244122.D	04/06/20	13:08	04:04	(used for QC only; not part of job JD5669)
ZZZZZZ	T244123.D	04/06/20	13:39	04:35	(unrelated sample)
JD5573-1DUP	T244124.D	04/06/20	14:12	05:08	Duplicate
JD5493-1MS	T244125.D	04/06/20	14:42	05:38	Matrix Spike
JD5538-1MS	T244126.D	04/06/20	15:12	06:08	Matrix Spike
JD5538-1MSD	T244127.D	04/06/20	15:43	06:39	Matrix Spike Duplicate
ZZZZZZ	T244128.D	04/06/20	16:14	07:10	(unrelated sample)
JD5669-3	T244129.D	04/06/20	16:44	07:40	TB-
ZZZZZZ	T244130.D	04/06/20	17:14	08:10	(unrelated sample)
ZZZZZZ	T244131.D	04/06/20	17:44	08:40	(unrelated sample)
ZZZZZZ	T244132.D	04/06/20	18:15	09:11	(unrelated sample)
ZZZZZZ	T244133.D	04/06/20	18:45	09:41	(unrelated sample)

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: VT10104-BFB	Injection Date: 04/14/20
Lab File ID: T244276.D	Injection Time: 08:54
Instrument ID: GCMST	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	16410	17.9	Pass
75	30.0 - 60.0% of mass 95	48741	53.2	Pass
95	Base peak, 100% relative abundance	91691	100.0	Pass
96	5.0 - 9.0% of mass 95	5859	6.39	Pass
173	Less than 2.0% of mass 174	251	0.27 (0.36) ^a	Pass
174	50.0 - 120.0% of mass 95	69805	76.1	Pass
175	5.0 - 9.0% of mass 174	5366	5.85 (7.69) ^a	Pass
176	95.0 - 101.0% of mass 174	67915	74.1 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	4594	5.01 (6.76) ^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
VT10104-BS	T244278.D	04/14/20	10:17	01:23	Blank Spike
VT10104-CC10040	T244278.D	04/14/20	10:17	01:23	Continuing cal 20
VT10104-MB	T244280.D	04/14/20	11:22	02:28	Method Blank
ZZZZZZ	T244281.D	04/14/20	11:52	02:58	(unrelated sample)
JD5536-1	T244282.D	04/14/20	12:23	03:29	(used for QC only; not part of job JD5669)
ZZZZZZ	T244283.D	04/14/20	12:53	03:59	(unrelated sample)
ZZZZZZ	T244284.D	04/14/20	13:23	04:29	(unrelated sample)
ZZZZZZ	T244285.D	04/14/20	13:54	05:00	(unrelated sample)
ZZZZZZ	T244286.D	04/14/20	14:24	05:30	(unrelated sample)
JD5536-1MS	T244287.D	04/14/20	14:54	06:00	Matrix Spike
JD5536-1MSD	T244288.D	04/14/20	15:24	06:30	Matrix Spike Duplicate
ZZZZZZ	T244289.D	04/14/20	15:54	07:00	(unrelated sample)
ZZZZZZ	T244290.D	04/14/20	16:25	07:31	(unrelated sample)
ZZZZZZ	T244291.D	04/14/20	16:55	08:01	(unrelated sample)
ZZZZZZ	T244292.D	04/14/20	17:26	08:32	(unrelated sample)
ZZZZZZ	T244293.D	04/14/20	17:56	09:02	(unrelated sample)
ZZZZZZ	T244294.D	04/14/20	18:27	09:33	(unrelated sample)
ZZZZZZ	T244295.D	04/14/20	18:57	10:03	(unrelated sample)
ZZZZZZ	T244296.D	04/14/20	19:28	10:34	(unrelated sample)
JD5669-1	T244298.D	04/14/20	20:29	11:35	GRAB 1 THRU 4-040120/BSA DISCHARGE

Surrogate Recovery Summary

Job Number: JD5669
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
JD5669-1	T244298.D	114	92	102	99
JD5669-3	T244129.D	114	90	102	103
JD5493-1MS	T244125.D	110	91	99	100
JD5536-1MS	T244287.D	109	96	100	101
JD5536-1MSD	T244288.D	108	94	104	99
JD5573-1DUP	T244124.D	111	89	100	100
VT10095-BS	T244117.D	111	92	100	98
VT10095-MB	T244119.D	109	92	98	100
VT10104-BS	T244278.D	110	92	100	100
VT10104-MB	T244280.D	108	93	107	98

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: JD5669**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
OP26904-MB1	M165202.D	1	04/10/20	CS	04/08/20	OP26904	EM6992

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

JD5669-1

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	
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	

Method Blank Summary

Page 2 of 2

Job Number: JD5669

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
OP26904-MB1	M165202.D	1	04/10/20	CS	04/08/20	OP26904	EM6992

The QC reported here applies to the following samples:

Method: EPA 625.1

JD5669-1

CAS No.	Compound	Result	RL	MDL	Units	Q
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	0.19	1.0	0.17	ug/l	J
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	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	0.22	1.0	0.18	ug/l	J
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	41% 10-110%
4165-62-2	Phenol-d5	33% 10-110%
118-79-6	2,4,6-Tribromophenol	78% 35-147%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: JD5669

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
OP26904-BS1	M165203.D	1	04/10/20	CS	04/08/20	OP26904	EM6992
OP26904-BSD	M165204.D	1	04/10/20	CS	04/08/20	OP26904	EM6992

The QC reported here applies to the following samples:

Method: EPA 625.1

JD5669-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	37.9	76	38.8	78	2	43-100/22
59-50-7	4-Chloro-3-methyl phenol	50	44.9	90	45.9	92	2	46-110/21
120-83-2	2,4-Dichlorophenol	50	40.1	80	40.6	81	1	44-109/21
105-67-9	2,4-Dimethylphenol	50	42.5	85	43.5	87	2	42-116/20
51-28-5	2,4-Dinitrophenol	100	105	105	101	101	4	38-131/27
534-52-1	4,6-Dinitro-o-cresol	50	47.8	96	47.0	94	2	50-124/26
88-75-5	2-Nitrophenol	50	42.0	84	42.4	85	1	44-109/21
100-02-7	4-Nitrophenol	50	30.1	60	30.3	61	1	14-110/23
87-86-5	Pentachlorophenol	50	31.4	63	30.4	61	3	25-128/25
108-95-2	Phenol	50	22.6	45	23.0	46	2	20-110/22
88-06-2	2,4,6-Trichlorophenol	50	39.9	80	41.1	82	3	52-118/24
83-32-9	Acenaphthene	50	44.1	88	45.1	90	2	47-110/24
208-96-8	Acenaphthylene	50	40.1	80	40.5	81	1	45-110/24
120-12-7	Anthracene	50	40.6	81	40.6	81	0	52-110/24
92-87-5	Benzidine	100	10.7	11	14.6	15	31	10-110/65
56-55-3	Benzo(a)anthracene	50	45.9	92	46.4	93	1	53-110/20
50-32-8	Benzo(a)pyrene	50	44.0	88	44.7	89	2	55-110/23
205-99-2	Benzo(b)fluoranthene	50	43.6	87	43.5	87	0	57-110/23
191-24-2	Benzo(g,h,i)perylene	50	45.8	92	45.5	91	1	51-110/23
207-08-9	Benzo(k)fluoranthene	50	41.7	83	42.5	85	2	56-110/22
101-55-3	4-Bromophenyl phenyl ether	50	38.9	78	38.7	77	1	51-112/23
85-68-7	Butyl benzyl phthalate	50	48.0	96	48.3	97	1	50-122/23
91-58-7	2-Chloronaphthalene	50	38.9	78	39.8	80	2	41-110/26
106-47-8	4-Chloroaniline	50	23.8	48	18.9	38	23	10-110/44
218-01-9	Chrysene	50	44.3	89	44.9	90	1	52-110/20
111-91-1	bis(2-Chloroethoxy)methane	50	43.9	88	44.5	89	1	36-110/21
111-44-4	bis(2-Chloroethyl)ether	50	41.4	83	41.8	84	1	40-111/21
108-60-1	2,2'-Oxybis(1-chloropropane)	50	49.3	99	47.9	96	3	37-110/25
7005-72-3	4-Chlorophenyl phenyl ether	50	41.4	83	41.5	83	0	48-110/25
95-50-1	1,2-Dichlorobenzene	50	34.9	70	35.4	71	1	35-110/28
122-66-7	1,2-Diphenylhydrazine	50	42.4	85	42.7	85	1	39-128/23
541-73-1	1,3-Dichlorobenzene	50	31.4	63	31.1	62	1	32-110/28
106-46-7	1,4-Dichlorobenzene	50	33.6	67	33.4	67	1	33-110/27
121-14-2	2,4-Dinitrotoluene	50	49.2	98	49.3	99	0	61-117/25
606-20-2	2,6-Dinitrotoluene	50	48.4	97	48.2	96	0	61-119/23
91-94-1	3,3'-Dichlorobenzidine	100	58.9	59	49.4	49	18	20-110/33

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 2

Job Number: JD5669

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
OP26904-BS1	M165203.D	1	04/10/20	CS	04/08/20	OP26904	EM6992
OP26904-BSD	M165204.D	1	04/10/20	CS	04/08/20	OP26904	EM6992

The QC reported here applies to the following samples:

Method: EPA 625.1

JD5669-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
53-70-3	Dibenzo(a,h)anthracene	50	46.6	93	46.3	93	1	55-110/25
84-74-2	Di-n-butyl phthalate	50	43.9	88	44.0	88	0	55-118/25
117-84-0	Di-n-octyl phthalate	50	50.2	100	50.5	101	1	49-124/26
84-66-2	Diethyl phthalate	50	44.8	90	45.0	90	0	54-113/23
131-11-3	Dimethyl phthalate	50	42.6	85	42.8	86	0	56-110/23
117-81-7	bis(2-Ethylhexyl)phthalate	50	52.3	105	51.8	104	1	50-120/22
206-44-0	Fluoranthene	50	43.1	86	43.1	86	0	55-111/23
86-73-7	Fluorene	50	44.4	89	44.7	89	1	51-110/25
118-74-1	Hexachlorobenzene	50	36.8	74	36.8	74	0	47-116/23
87-68-3	Hexachlorobutadiene	50	30.4	61	30.9	62	2	24-110/34
77-47-4	Hexachlorocyclopentadiene	100	61.9	62	60.1	60	3	10-110/39
67-72-1	Hexachloroethane	50	28.8	58	29.2	58	1	28-110/34
193-39-5	Indeno(1,2,3-cd)pyrene	50	47.6	95	48.5	97	2	51-112/24
78-59-1	Isophorone	50	39.3	79	38.8	78	1	42-111/20
91-20-3	Naphthalene	50	38.5	77	38.8	78	1	34-110/25
98-95-3	Nitrobenzene	50	39.5	79	39.5	79	0	39-110/21
62-75-9	n-Nitrosodimethylamine	50	21.0	42	21.4	43	2	15-110/19
621-64-7	N-Nitroso-di-n-propylamine	50	44.7	89	44.1	88	1	33-117/21
86-30-6	N-Nitrosodiphenylamine	50	38.7	77	39.2	78	1	54-110/24
85-01-8	Phenanthrene	50	43.4	87	43.7	87	1	53-110/23
129-00-0	Pyrene	50	43.3	87	43.8	88	1	52-110/22
120-82-1	1,2,4-Trichlorobenzene	50	31.3	63	31.4	63	0	30-110/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	56%	55%	10-110%
4165-62-2	Phenol-d5	41%	41%	10-110%
118-79-6	2,4,6-Tribromophenol	76%	76%	35-147%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EM6957-DFTPP
Lab File ID: M164355.D
Instrument ID: GCMSM
Injection Date: 03/09/20
Injection Time: 15:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	49075	37.2	Pass
68	Less than 2.0% of mass 69	804	0.61 (1.37) ^a	Pass
69	Mass 69 relative abundance	58856	44.6	Pass
70	Less than 2.0% of mass 69	341	0.26 (0.58) ^a	Pass
127	40.0 - 60.0% of mass 198	61610	46.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	131872	100.0	Pass
199	5.0 - 9.0% of mass 198	9349	7.09	Pass
275	10.0 - 30.0% of mass 198	33602	25.5	Pass
365	1.0 - 100.0% of mass 198	4243	3.22	Pass
441	Present, but less than mass 443	12007	9.11 (74.1) ^b	Pass
442	40.0 - 100.0% of mass 198	81629	61.9	Pass
443	17.0 - 23.0% of mass 442	16214	12.3 (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
EM6957-IC6957	M164356.D	03/09/20	15:18	00:14	Initial cal 100
EM6957-IC6957	M164357.D	03/09/20	15:46	00:42	Initial cal 80
EM6957-ICC6957	M164358B.D	03/09/20	17:03	01:59	Initial cal 50
EM6957-IC6957	M164359.D	03/09/20	17:50	02:46	Initial cal 25
EM6957-IC6957	M164360.D	03/09/20	18:17	03:13	Initial cal 10
EM6957-IC6957	M164361.D	03/09/20	18:45	03:41	Initial cal 5
EM6957-IC6957	M164362.D	03/09/20	19:12	04:08	Initial cal 2
EM6957-IC6957	M164363.D	03/09/20	19:40	04:36	Initial cal 1
EM6957-ICV6957	M164364.D	03/09/20	20:08	05:04	Initial cal verification 50
EM6957-ICV6957	M164365.D	03/09/20	20:36	05:32	Initial cal verification 50
EM6957-ICV6957	M164366.D	03/09/20	21:04	06:00	Initial cal verification 50
EM6957-ICV6957	M164367.D	03/09/20	21:31	06:27	Initial cal verification 50
EM6957-ICV6957	M164368.D	03/09/20	21:59	06:55	Initial cal verification 50
EM6957-ICV6957	M164369.D	03/09/20	22:27	07:23	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD5669

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EM6959-DFTPP

Injection Date: 03/10/20

Lab File ID: M164380.D

Injection Time: 03:52

Instrument ID: GCMSM

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	49920	31.4	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	62518	39.4	Pass
70	Less than 2.0% of mass 69	410	0.26 (0.66) ^a	Pass
127	40.0 - 60.0% of mass 198	71405	45.0	Pass
197	Less than 1.0% of mass 198	593	0.37	Pass
198	Base peak, 100% relative abundance	158778	100.0	Pass
199	5.0 - 9.0% of mass 198	11711	7.38	Pass
275	10.0 - 30.0% of mass 198	44157	27.8	Pass
365	1.0 - 100.0% of mass 198	5473	3.45	Pass
441	Present, but less than mass 443	13411	8.45 (74.2) ^b	Pass
442	40.0 - 100.0% of mass 198	88773	55.9	Pass
443	17.0 - 23.0% of mass 442	18068	11.4 (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
EM6959-IC6959	M164381.D	03/10/20	04:05	00:13	Initial cal 100
EM6959-IC6959	M164382B.D	03/10/20	08:11	04:19	Initial cal 80
EM6959-ICC6959	M164383.D	03/10/20	08:38	04:46	Initial cal 50
EM6959-IC6959	M164384.D	03/10/20	09:06	05:14	Initial cal 25
EM6959-IC6959	M164385.D	03/10/20	09:33	05:41	Initial cal 10
EM6959-IC6959	M164386.D	03/10/20	10:01	06:09	Initial cal 5
EM6959-IC6959	M164387.D	03/10/20	10:28	06:36	Initial cal 2
EM6959-IC6959	M164388.D	03/10/20	10:56	07:04	Initial cal 1
EM6959-ICV6959	M164389.D	03/10/20	11:24	07:32	Initial cal verification 50
EM6959-ICV6959	M164390.D	03/10/20	11:52	08:00	Initial cal verification 50
EM6959-ICV6959	M164391.D	03/10/20	12:19	08:27	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD5669

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EM6961-DFTPP

Injection Date: 03/11/20

Lab File ID: M164410.D

Injection Time: 11:17

Instrument ID: GCMSM

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	73276	32.4	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	90344	39.9	Pass
70	Less than 2.0% of mass 69	338	0.15 (0.37) ^a	Pass
127	40.0 - 60.0% of mass 198	103029	45.5	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	226325	100.0	Pass
199	5.0 - 9.0% of mass 198	14630	6.46	Pass
275	10.0 - 30.0% of mass 198	58768	26.0	Pass
365	1.0 - 100.0% of mass 198	6685	2.95	Pass
441	Present, but less than mass 443	18805	8.31 (71.0) ^b	Pass
442	40.0 - 100.0% of mass 198	130410	57.6	Pass
443	17.0 - 23.0% of mass 442	26500	11.7 (20.3) ^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
EM6961-IC6961	M164414.D	03/11/20	12:51	01:34	Initial cal 100
EM6961-IC6961	M164415.D	03/11/20	13:18	02:01	Initial cal 80
EM6961-ICC6961	M164416.D	03/11/20	13:46	02:29	Initial cal 50
EM6961-IC6961	M164417.D	03/11/20	14:14	02:57	Initial cal 25
EM6961-IC6961	M164418.D	03/11/20	14:41	03:24	Initial cal 10
EM6961-IC6961	M164419A.D	03/11/20	15:14	03:57	Initial cal 5
EM6961-IC6961	M164420.D	03/11/20	15:38	04:21	Initial cal 2
EM6961-IC6961	M164421.D	03/11/20	16:05	04:48	Initial cal 1
EM6961-ICV6961	M164422.D	03/11/20	16:33	05:16	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EM6992-DFTPP
Lab File ID: M165197.D
Instrument ID: GCMSM
Injection Date: 04/09/20
Injection Time: 23:43

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	44135	32.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	57664	42.9	Pass
70	Less than 2.0% of mass 69	142	0.11 (0.25) ^a	Pass
127	40.0 - 60.0% of mass 198	62727	46.6	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	134523	100.0	Pass
199	5.0 - 9.0% of mass 198	8915	6.63	Pass
275	10.0 - 30.0% of mass 198	35528	26.4	Pass
365	1.0 - 100.0% of mass 198	4201	3.12	Pass
441	Present, but less than mass 443	12740	9.47 (76.1) ^b	Pass
442	40.0 - 100.0% of mass 198	84309	62.7	Pass
443	17.0 - 23.0% of mass 442	16752	12.5 (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
EM6992-CC6957	M165198.D	04/09/20	23:57	00:14	Continuing cal 25
EM6992-CC6961	M165199.D	04/10/20	00:25	00:42	Continuing cal 25
EM6992-CC6959	M165200.D	04/10/20	00:53	01:10	Continuing cal 25
EM6992-CC6957	M165201.D	04/10/20	01:21	01:38	Continuing cal 5
OP26904-MB1	M165202.D	04/10/20	02:01	02:18	Method Blank
OP26904-BS1	M165203.D	04/10/20	02:29	02:46	Blank Spike
OP26904-BSD	M165204.D	04/10/20	02:57	03:14	Blank Spike Duplicate
OP26887-MB1	M165205.D	04/10/20	03:25	03:42	Method Blank
OP26887-BS1	M165206.D	04/10/20	03:53	04:10	Blank Spike
OP26887-BSD	M165207.D	04/10/20	04:20	04:37	Blank Spike Duplicate
ZZZZZZ	M165208.D	04/10/20	04:48	05:05	(unrelated sample)
ZZZZZZ	M165209.D	04/10/20	05:16	05:33	(unrelated sample)
ZZZZZZ	M165210.D	04/10/20	05:44	06:01	(unrelated sample)
ZZZZZZ	M165211.D	04/10/20	06:11	06:28	(unrelated sample)
ZZZZZZ	M165212.D	04/10/20	06:39	06:56	(unrelated sample)
ZZZZZZ	M165213.D	04/10/20	07:06	07:23	(unrelated sample)
JD5669-1	M165215.D	04/10/20	08:02	08:19	GRAB 1 THRU 4-040120/BSA DISCHARGE
ZZZZZZ	M165218.D	04/10/20	09:25	09:42	(unrelated sample)
ZZZZZZ	M165219.D	04/10/20	09:53	10:10	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD5669
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	S4	S5	S6
JD5669-1	M165215.D	48	40	92	89	84	83
OP26904-BS1	M165203.D	56	41	76			
OP26904-BSD	M165204.D	55	41	76			
OP26904-MB1	M165202.D	41	33	78			

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	35-147%
S4 = Nitrobenzene-d5	32-132%
S5 = 2-Fluorobiphenyl	40-117%
S6 = 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: JD5669

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	18	77		
Antimony	6.0	1.5	4.1		
Arsenic	3.0	1.9	2.5		
Barium	200	.5	17		
Beryllium	1.0	.1	.5		
Bismuth	20	2.5	4.8		
Boron	100	2	85		
Cadmium	3.0	.2	1.2		
Calcium	5000	4.2	130		
Cerium	100				
Chromium	10	.3	1.5		
Cobalt	50	.3	2.5		
Copper	10	1.8	4.1	2.9	<10
Iron	100	2.6	30		
Lead	3.0	1.5	2.4		
Lithium	50	2.7	9.1		
Magnesium	5000	25	200		
Manganese	15	.1	2		
Molybdenum	20	.3	4.5		
Nickel	10	.3	1.8		
Phosphorus	50	2.1	14		
Potassium	10000	71	200		
Selenium	10	1.7	5.5		
Silicon	200	1.3	130		
Silver	10	.9	2.4		
Sodium	10000	38	900		
Strontium	10	.1	1.6		
Sulfur	50	2.6	18		
Thallium	10	.9	1.9		
Tin	50	.5	4.7		
Titanium	10	.4	1.9		
Tungsten	50	.9	19		
Vanadium	50	.4	2.3		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD5669

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	RL	IDL	MDL	MB raw	final
Zinc	20	.1	8.5	0.40	<20
Zirconium	10	.3	4.9		

Associated samples MP20636: JD5669-2

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: JD5669
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP20636
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3 Original MS	SpikeLot MPEPA200.7% Rec	QC Limits
Aluminum			
Antimony			
Arsenic	anr		
Barium			
Beryllium			
Bismuth			
Boron			
Cadmium			
Calcium	anr		
Cerium			
Chromium	anr		
Cobalt			
Copper	3.1	2060	2000
Iron			102.8
Lead	anr		70-130
Lithium			
Magnesium			
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Phosphorus			
Potassium			
Selenium	anr		
Silicon			
Silver			
Sodium			
Strontium			
Sulfur			
Thallium			
Tin			
Titanium			
Tungsten			
Vanadium			

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD5669

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3 Original MS	Spikelot MPEPA200.7% Rec	QC Limits

Zinc 8.2 2160 2000 107.6 70-130

Zirconium

Associated samples MP20636: JD5669-2

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

8.1.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD5669
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP20636
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3 Original	MSD	SpikeLot MPEPA200.7% Rec	MSD RPD	QC Limit
Aluminum					
Antimony					
Arsenic	anr				
Barium					
Beryllium					
Bismuth					
Boron					
Cadmium					
Calcium	anr				
Cerium					
Chromium	anr				
Cobalt					
Copper	3.1	2050	2000	102.3	0.5 10
Iron					
Lead	anr				
Lithium					
Magnesium					
Manganese	anr				
Molybdenum	anr				
Nickel	anr				
Phosphorus					
Potassium					
Selenium	anr				
Silicon					
Silver					
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD5669

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3 Original	MSD	Spike lot MPEPA200.7% Rec	MSD RPD	QC Limit

Zinc	8.2	2170	2000	108.1	0.5	10

Zirconium

Associated samples MP20636: JD5669-2

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

8.1.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD5669

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	BSP Result	Spike lot MPEPA200.7% Rec	QC Limits
Aluminum			
Antimony			
Arsenic	anr		
Barium			
Beryllium			
Bismuth			
Boron			
Cadmium			
Calcium	anr		
Cerium			
Chromium	anr		
Cobalt			
Copper	2050	2000	102.5 85-115
Iron			
Lead	anr		
Lithium			
Magnesium			
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Phosphorus			
Potassium			
Selenium	anr		
Silicon			
Silver			
Sodium			
Strontium			
Sulfur			
Thallium			
Tin			
Titanium			
Tungsten			
Vanadium			

8.1.3
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD5669

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	BSP Result	Spike lot MPEPA200.7% Rec	QC Limits

Zinc	2130	2000	106.5	85-115

Zirconium

Associated samples MP20636: JD5669-2

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

8.1.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD5669
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP20636
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium				
Calcium	anr			
Cerium				
Chromium	anr			
Cobalt				
Copper	3.10	12.7	309.7(a)	0-10
Iron				
Lead	anr			
Lithium				
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver				
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				

8.1.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD5669
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP20636
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3		%DIF	QC Limits
	Original	SDL 1:5		

Zinc	8.20	9.80	19.5*(b)	0-10

Zirconium

Associated samples MP20636: JD5669-2

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD5669

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

QC Batch ID: MP20647
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/09/20

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.052	.092	-0.016	<0.20

Associated samples MP20647: JD5669-2

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

82.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD5669

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

QC Batch ID: MP20647
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/09/20

Metal	JD5751-9A Original MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	1.8	2	90.0 70-130

Associated samples MP20647: JD5669-2

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

8.2.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD5669
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP20647
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/09/20

Metal	JD5751-9A Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	1.8	2	90.0	0.0

Associated samples MP20647: JD5669-2

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

8.2.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD5669

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

QC Batch ID: MP20647
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/09/20

Metal	BSP Result	Spike lot HGPW3	% Rec	QC Limits
Mercury	1.9	2	95.0	85-115

Associated samples MP20647: JD5669-2

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

82.3

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: JD5669

Account: HWINJOMM - Honeywell International Inc. OMM work

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

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Phosphorus, Total	GP27714/GN7346	0.050	0.0	mg/l	0.40	0.37	92.5	80-120%
Solids, Total Suspended	GN7037	4.0	0.0	mg/l				

Associated Samples:

Batch GN7037: JD5669-2

Batch GP27714: JD5669-2

(*) Outside of QC limits

9.1

6

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD5669

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	GP27714/GN7346	JD5749-1	mg/l	0.012	0.0	0.0	0-38%
Solids, Total Suspended	GN7037	JD5546-1	mg/l	0.0	0.0	0.0	0-17%

Associated Samples:

Batch GN7037: JD5669-2

Batch GP27714: JD5669-2

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD5669
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	GP27714/GN7346	JD5749-1	mg/l	0.012	0.40	0.40	100.0	35-137%

Associated Samples:

Batch GP27714: JD5669-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

6.3

6



Jacobs
1563 Willis Avenue
Syracuse, New York 13204
O +1 315 468 1663
F +1 315 468-1664
www.jacobs.com

October 6, 2020

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
2020 Second Semi-Annual Report
BPDES Permit Number 18-12-BU098**

Dear Ms. Adams:

Enclosed please find the 2020 Second Semi-Annual discharge monitoring report for the pumping facility located at the Alltift Landfill/Ramco Steel (Alltift) Site. The total flow to the Buffalo Sewer Authority (BSA) during this period was 1,160,500 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from April 01, 2020 through September 15, 2020 for a total of 167 days. Flow metering readings collected during the reporting period are included as Attachment 1.

A time composite discharge sample was collected from within the pump station on September 15, 2020. 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, mercury and pH was collected as a composite sample. The pH reported on the discharge monitoring report is the pH reported on the laboratory report. A second pH was taken in the field and reported on the field sampling notes. 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

cc.: Mr. Eric Christodoulatos (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Jason Paananen (City of Buffalo)
Mr. Ryan Belcher (Wood E&IS)
Mr. Robert Gersh (Wood E&IS)

Table 1
Altift Landfill/Ramco Steel Site
Second Semi-annual Report for 2020
Discharge Monitoring Report

BSA Permit No. 18-12-BU098	September 15, 2020
Sample Date:	Onsite Pump Station to BSA
Sample Location:	

BSA Permit Parameter	Input Analytical Results		Converted Analytical Results		BSA Daily Max Discharge Limit		Permit Compliance
	Quantity	Qualifier	Reporting Limit	Unit	Quantity	Unit	
pH	6.92		0.100	SU	5.0 - 12.0	SU	Yes
Copper	0.0795		0.05	mg/L	7.68	lbs/day	Yes
Mercury	ND		0.0002	mg/l	0.0008	mg/l	Yes
Zinc	0.119		0.1	mg/L	12	lbs/day	Yes
Total Suspended Solids	100		4.0	mg/L	250	mg/L	Yes
Total Phosphorus	3.1		0.050	mg/L	15.35	mg/L	Yes
USEPA Test Method 624	ND - 71			µg/L	Monitor Only		Yes
USEPA Test Method 625	ND-4.0			µg/L			
Total Flow (average)	4.83			gpm	57,600	gpd	

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: Aruna, 9/25/2020
Checked by, Date: John Formoza, 10/6/2020

Flow Calculations		Meter	
Initial Reading (pump station)		2775400	4/1/2020
Final Reading (pump station)		3083700	4/28/2020
Initial Reading (pump station)		0	4/28/2020
Final Reading (pump station)		459500	6/30/2020
Initial Reading (pump station)		0	6/30/2020
Final Reading (pump station)		161600	8/5/2020
Initial Reading (pump station)		0	8/5/2020
Final Reading (pump station)		231100	9/15/2020
Total Days in Period			167
Total Flow for Period		1,160,500	gallons
Average Flow for Period		4.83	gpm

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	Totalizer Reading (gallons)
4/1/2020	2775400
4/28/2020	3083700
4/28/2020	0
6/30/2020	459500
6/30/2020	0
7/24/2020	144000
8/5/2020	161600
8/5/2020	0
8/18/2020	71600
9/15/2020	231100

final reading
new flow meter installed
final reading
new flow meter installed

final reading
new flow meter installed

Sampling

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."



John W. Formoza
Jacobs

10/6/2020

Date



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 PO#A000572179

SGS Job Number: JD13158

Sampling Date: 09/15/20

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: 74



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.



Caitlin Brice, M.S.
General Manager

Client Service contact: Kristin Degraw 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	7
Section 4: Sample Results	8
4.1: JD13158-1: GRAB 1 THRU 4-091520/BSA DISCHARGE	9
4.2: JD13158-2: COMP-091520/BSA DISCHARGE	13
4.3: JD13158-3: TB-	15
Section 5: Misc. Forms	17
5.1: Certification Exceptions	18
5.2: Chain of Custody	19
Section 6: MS Volatiles - QC Data Summaries	21
6.1: Method Blank Summary	22
6.2: Blank Spike Summary	27
6.3: Matrix Spike/Matrix Spike Duplicate Summary	32
6.4: Instrument Performance Checks (BFB)	37
6.5: Surrogate Recovery Summaries	43
Section 7: MS Semi-volatiles - QC Data Summaries	44
7.1: Method Blank Summary	45
7.2: Blank Spike/Blank Spike Duplicate Summary	48
7.3: Instrument Performance Checks (DFTPP)	50
7.4: Surrogate Recovery Summaries	55
Section 8: Metals Analysis - QC Data Summaries	56
8.1: Prep QC MP22804: Cu,Zn	57
8.2: Prep QC MP22857: Hg	67
Section 9: General Chemistry - QC Data Summaries	71
9.1: Method Blank and Spike Results Summary	72
9.2: Duplicate Results Summary	73
9.3: Matrix Spike Results Summary	74



Sample Summary

Honeywell International Inc. OMM work

Job No: JD13158

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116 PO#A000572179

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID

This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL
Metals ND = Not detected above the MDL
General Chemistry ND = Not detected above the MDL

JD13158-1	09/15/20	14:00 AP	09/16/20	AQ	Ground Water	GRAB 1 THRU 4-091520/BSA DISCHARGE
JD13158-2	09/15/20	14:05 AP	09/16/20	AQ	Ground Water	COMP-091520/BSA DISCHARGE
JD13158-3	09/15/20	14:05 AP	09/16/20	AQ	Trip Blank Water	TB-

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: Honeywell International Inc. OMM work

Job No JD13158

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

Report Date 9/23/2020 12:07:05 P

On 09/16/2020, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD13158 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: V1A8823

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13346-4MS, JD13346-4MSD were used as the QC samples indicated.
- JD13158-1: (pH=6)Sample pH did not satisfy field preservation criteria. Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

Matrix: AQ

Batch ID: VN12017

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD13205-1MS, JD13205-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Chloromethane, Vinyl chloride are outside control limits. High percent recovery and no associated positive reported in the QC batch.
- JD13158-3: Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
- JD13158-3 for Chloromethane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD13158-3 for Acrylonitrile: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ

Batch ID: VN12019

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13190-1MS, JD13190-1MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Chloromethane are outside control limits. High percent recovery and no associated positive reported in the QC batch.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Carbon tetrachloride, Chloroform are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JD13158-1: (pH=5)Sample pH did not satisfy field preservation criteria. Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
- JD13158-1 for Chloromethane: This compound in blank spike is outside in house QC limits bias high.

Wednesday, September 23, 2020

Page 1 of 3

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ

Batch ID: OP29589

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 2,2'-Oxybis(1-chloropropane) are outside control limits. Outside of in house control limits, but within reasonable method recovery limits.
- JD13158-1 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.

Metals Analysis By Method EPA 200.7

Matrix: AQ

Batch ID: MP22804

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13129-2MS, JD13129-2MSD, JD13129-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Copper are outside control limits for sample MP22804-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals Analysis By Method EPA 245.1

Matrix: AQ

Batch ID: MP22857

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13190-3MS, JD13190-3MSD were used as the QC samples for metals.

General Chemistry By Method EPA 365.3

Matrix: AQ

Batch ID: GP29957

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13125-1MS, JD13125-1DUP were used as the QC samples for Phosphorus, Total.
- RPD(s) for Duplicate for Phosphorus, Total are outside control limits for sample GP29957-D1. RPD acceptable due to low duplicate and sample concentrations.

General Chemistry By Method SM2540 D-11

Matrix: AQ

Batch ID: GN11451

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13195-8DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ

Batch ID: R187300

- The data for SM4500H+ B-11 meets quality control requirements.
- JD13158-2 for pH: Sample received out of holding time for pH analysis. Temp of pH Reading: 14. Deg. C

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: JD13158

Account: Honeywell International Inc. OMM work

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

Collected: 09/15/20

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

JD13158-1 GRAB 1 THRU 4-091520/BSA DISCHARGE

Benzene ^a	6.9	1.0	0.34	ug/l	EPA 624.1
Chlorobenzene ^a	71.0	1.0	0.33	ug/l	EPA 624.1
1,2-Dichlorobenzene ^a	0.86 J	1.0	0.30	ug/l	EPA 624.1
1,4-Dichlorobenzene ^a	1.7	1.0	0.63	ug/l	EPA 624.1
cis-1,2-Dichloroethene ^a	2.6	1.0	0.51	ug/l	EPA 624.1
Vinyl chloride ^b	0.90 J	1.0	0.79	ug/l	EPA 624.1
4-Chloroaniline	4.0 J	5.0	0.34	ug/l	EPA 625.1
1,2-Dichlorobenzene	0.54 J	1.0	0.17	ug/l	EPA 625.1
1,3-Dichlorobenzene	0.22 J	1.0	0.19	ug/l	EPA 625.1
1,4-Dichlorobenzene	1.1	1.0	0.17	ug/l	EPA 625.1
N-Nitrosodiphenylamine	0.63 J	5.0	0.22	ug/l	EPA 625.1

JD13158-2 COMP-091520/BSA DISCHARGE

Copper	79.5	50	21	ug/l	EPA 200.7
Zinc	119	100	43	ug/l	EPA 200.7
Phosphorus, Total	3.1	0.50	0.27	mg/l	EPA 365.3
Solids, Total Suspended	100	4.0	1.5	mg/l	SM2540 D-11
pH ^c	6.92			su	SM4500H+ B-11

JD13158-3 TB-

No hits reported in this sample.

(a) (pH= 5)Sample pH did not satisfy field preservation criteria. Results reported from the HCl preserved sample.

The reported result for acrolein is for screening only and cannot be used for compliance purposes.

(b) (pH= 6)Sample pH did not satisfy field preservation criteria. Results reported from the HCl preserved sample.

The reported result for acrolein is for screening only and cannot be used for compliance purposes.

(c) Sample received out of holding time for pH analysis. Temp of pH Reading: 14. Deg. C



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-091520/BSA DISCHARGE	Date Sampled:	09/15/20
Lab Sample ID:	JD13158-1	Date Received:	09/16/20
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	N283611.D	1	09/18/20 18:33	KC	n/a	n/a	VN12019
Run #2 ^b	1A204213.D	1	09/22/20 12:30	ED	n/a	n/a	V1A8823

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

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	6.9	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	71.0	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane ^c	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	0.86	1.0	0.30	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	1.7	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.6	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	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 THRU 4-091520/BSA DISCHARGE	Date Sampled:	09/15/20
Lab Sample ID:	JD13158-1	Date Received:	09/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 624.1		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	0.90 ^d	1.0	0.79	ug/l	J
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)	87%	96%	76-122%
2037-26-5	Toluene-D8 (SUR)	97%	91%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%	99%	80-120%
1868-53-7	Dibromofluoromethane (S)	101%	111%	80-120%

(a) (pH= 5)Sample pH did not satisfy field preservation criteria. Results reported from the HCl preserved sample.

The reported result for acrolein is for screening only and cannot be used for compliance purposes.

(b) (pH= 6)Sample pH did not satisfy field preservation criteria. Results reported from the HCl preserved sample.

The reported result for acrolein is for screening only and cannot be used for compliance purposes.

(c) This compound in blank spike is outside in house QC limits bias high.

(d) Result is from Run# 2

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 THRU 4-091520/BSA DISCHARGE			Date Sampled:	09/15/20
Lab Sample ID:	JD13158-1			Date Received:	09/16/20
Matrix:	AQ - Ground Water			Percent Solids:	n/a
Method:	EPA 625.1 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	5P71423.D	1	09/23/20 01:07	HSS	09/22/20 07:00	OP29589	E5P3367
Run #2							

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

ABN PPL List

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	
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	4.0	5.0	0.34	ug/l	J
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	0.54	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	0.22	1.0	0.19	ug/l	J

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 THRU 4-091520/BSA DISCHARGE	Date Sampled:	09/15/20
Lab Sample ID:	JD13158-1	Date Received:	09/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 625.1 SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	1.1	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 ^a	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	
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	0.63	5.0	0.22	ug/l	J
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
367-12-4	2-Fluorophenol	39%		10-110%
4165-62-2	Phenol-d5	25%		10-110%
118-79-6	2,4,6-Tribromophenol	70%		35-147%
4165-60-0	Nitrobenzene-d5	88%		32-132%
321-60-8	2-Fluorobiphenyl	81%		40-117%
1718-51-0	Terphenyl-d14	53%		33-126%

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

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-091520/BSA DISCHARGE			
Lab Sample ID:	JD13158-2	Date Sampled:	09/15/20	
Matrix:	AQ - Ground Water	Date Received:	09/16/20	
		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
Copper	79.5	50	21	ug/l	1	09/17/20	09/18/20 GT	EPA 200.7 ¹	EPA 200.7 ³
Mercury	ND	0.20	0.092	ug/l	1	09/21/20	09/21/20 LL	EPA 245.1 ²	EPA 245.1 ⁴
Zinc	119	100	43	ug/l	1	09/17/20	09/18/20 GT	EPA 200.7 ¹	EPA 200.7 ³

- (1) Instrument QC Batch: MA49313
- (2) Instrument QC Batch: MA49324
- (3) Prep QC Batch: MP22804
- (4) Prep QC Batch: MP22857

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	COMP-091520/BSA DISCHARGE	Date Sampled:	09/15/20
Lab Sample ID:	JD13158-2	Date Received:	09/16/20
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	3.1	0.50	0.27	mg/l	10	09/20/20 10:06 MP	EPA 365.3	
Solids, Total Suspended	100	4.0	1.5	mg/l	1	09/17/20 22:51 TB	SM2540 D-11	
pH ^a	6.92			su	1	09/16/20 14:16 RS	SM4500H+ B-11	

(a) Sample received out of holding time for pH analysis. Temp of pH Reading: 14. Deg. C

RL = Reporting Limit
MDL = Method Detection Limit

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

4.2
4

Report of Analysis

Client Sample ID:	TB-	Date Sampled:	09/15/20
Lab Sample ID:	JD13158-3	Date Received:	09/16/20
Matrix:	AQ - Trip Blank 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	N283579.D	1	09/17/20 16:06	KC	n/a	n/a	VN12017
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	3.7	ug/l	
107-13-1	Acrylonitrile ^b	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane ^c	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	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:	TB-	Date Sampled:	09/15/20
Lab Sample ID:	JD13158-3	Date Received:	09/16/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 624.1		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^d	ND	1.0	0.79	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)	91%		76-122%
2037-26-5	Toluene-D8 (SUR)	100%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%		80-120%
1868-53-7	Dibromofluoromethane (S)	106%		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) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (d) This compound in blank spike 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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JD13158
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft 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
1,4-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.

5.1
5



ACCUTEST

CHAIN OF CUSTODY

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

PAGE 1 OF 1

Comp

FED-EX Tracking # 1215 6631 8581		Bottle Order Control #	
SGS Accutest Quote # HWNJ00M73509		SGS Accutest Job # JD 13158	

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 #HWINCJPM73507					
Street Address 1563 Willis Ave		Street 1563 Willis Ave					
City State Zip Syracuse, New York 13204		City State Syracuse, New York 13204					
Project Contact John Formoza John.formoza@ch2m.com		Project # R35116 - Honeywell OM&M Program					
E-mail John.formoza@ch2m.com		Street Address 115 Tabor Road					
Phone # 315-532-5608		Client Purchase Order # A000572179					
Fax # 949-303-9184		City State Zip Morris Plains, NJ 07950					
Samples (Name(s)) Andrew Petrilli		Project Manager Shalini Williams					
Phone # 949-303-9184		Attention HTS-RES-LAB@Honeywell.com					

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Val #	Date	Time	Sampled by	Matrix	# of bottles	HC	NOH	RNO3	H2SO4	NONE	D Water	MEOH	ENCORE	TP04 - Phosphorus Total (EPA305.3)	EPA 200.7 MTAL - Cu, Zn, SV7804A total Hg	TSS - Total Suspended Solids (2540 C)	pH - SM20-4520 H	V624 PPL - EPA 624 - VOA	625 Priority Pollutant List SVCC - 4 chloroaniline	SW7470A - Total Hg	LAB USE ONLY	
1	Grab 1- 091520 /BSA Discharge		9/15/20	8:00	AP	GW	5	3																
2	Grab 2- 091520 /BSA Discharge		9/15/20	10:00	AP	GW	5	3																
3	Grab 3- 091520 /BSA Discharge		9/15/20	12:00	AP	GW	5	3																
4	Grab 4- 091520 /BSA Discharge		9/15/20	14:00	AP	GW	5	3																
5	COMP- 091520 /BSA Discharge		9/15/20	14:05	AP	GW	5	1	1	3						1	1	2	1			1		
6	TB -					TB	2	2																
																Initial Assessment 2A/2B								
																Label Verification								
Turnaround Time (Business days)																Comments / Special Instructions								

Approved By (SGS Accutest PM): / Date:		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 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 Sampler	Date Time	Received By	Relinquished by	Date Time	Received By
1 Andrew J. Petrilli	9/15/2020 1450	1 Feiler	2 Feiler	9/15/20 11:15	2 JSP
3		3	4		4
5		5			

Custody Seal # 423	Intact ☒ Not intact ☐	Preserved where applicable ☒	On Ice ☒	Cooler Temp. 3.2°C

JD 13158

JD13158: Chain of Custody

Page 1 of 2



SGS Sample Receipt Summary

Job Number: JD13158

Client: _____

Project: _____

Date / Time Received: 9/16/2020 11:15:00 AM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

Cooler Security

Y or N

1. Custody Seals Present: ☒ ☐

2. Custody Seals Intact: ☒ ☐

3. COC Present: ☒ ☐

4. Smpl Dates/Time OK ☒ ☐

Y or N

Cooler Temperature

Y or N

1. Temp criteria achieved: ☒ ☐

2. Cooler temp verification: IR Gun

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: 229517

pH 12+: 208717

Other: (Specify)

Comments

SM089-03

Rev. Date 12/7/17

JD13158: Chain of Custody

Page 2 of 2



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: JD13158**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
VN12017-MB	N283570.D	1	09/17/20	KC	n/a	n/a	VN12017

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

JD13158-3

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

Job Number: JD13158
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
VN12017-MB	N283570.D	1	09/17/20	KC	n/a	n/a	VN12017

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

JD13158-3

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	90% 76-122%
2037-26-5	Toluene-D8 (SUR)	102% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	99% 80-120%
1868-53-7	Dibromofluoromethane (S)	107% 80-120%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.52	59	ug/l	J
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Page 1 of 2

Job Number: JD13158**Account:** HWINJOMM Honeywell International Inc. OMM work**Project:** HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN12019-MB	N283595.D	1	09/18/20	KC	n/a	n/a	VN12019

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

JD13158-1

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

Job Number: JD13158
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
VN12019-MB	N283595.D	1	09/18/20	KC	n/a	n/a	VN12019

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

JD13158-1

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	88% 76-122%
2037-26-5	Toluene-D8 (SUR)	100% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98% 80-120%
1868-53-7	Dibromofluoromethane (S)	105% 80-120%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.52	56	ug/l	J
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JD13158
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
V1A8823-MB	1A204209.D	1	09/22/20	ED	n/a	n/a	V1A8823

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

JD13158-1

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	93% 76-122%
2037-26-5	Toluene-D8 (SUR)	93% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	100% 80-120%
1868-53-7	Dibromofluoromethane (S)	110% 80-120%

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

Blank Spike Summary

Page 1 of 2

Job Number: JD13158**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
VN12017-BS	N283568.D	1	09/17/20	KC	n/a	n/a	VN12017

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

JD13158-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	16.1	81	60-140
107-13-1	Acrylonitrile	20	26.4	132	64-137
71-43-2	Benzene	20	21.2	106	78-118
75-27-4	Bromodichloromethane	20	17.4	87	77-119
75-25-2	Bromoform	20	18.0	90	70-128
74-83-9	Bromomethane	20	24.4	122	59-141
56-23-5	Carbon tetrachloride	20	18.1	91	69-130
108-90-7	Chlorobenzene	20	20.1	101	78-116
75-00-3	Chloroethane	20	23.4	117	63-136
110-75-8	2-Chloroethyl vinyl ether	100	96.2	96	55-147
67-66-3	Chloroform	20	20.2	101	78-122
74-87-3	Chloromethane	20	26.4	132* a	49-125
124-48-1	Dibromochloromethane	20	17.9	90	75-117
95-50-1	1,2-Dichlorobenzene	20	21.6	108	76-115
541-73-1	1,3-Dichlorobenzene	20	21.0	105	75-114
106-46-7	1,4-Dichlorobenzene	20	20.6	103	75-113
75-71-8	Dichlorodifluoromethane	20	18.7	94	48-129
75-34-3	1,1-Dichloroethane	20	23.1	116	73-124
107-06-2	1,2-Dichloroethane	20	16.6	83	74-127
75-35-4	1,1-Dichloroethene	20	17.6	88	54-122
156-59-2	cis-1,2-Dichloroethene	20	21.6	108	72-115
156-60-5	trans-1,2-Dichloroethene	20	20.8	104	70-121
78-87-5	1,2-Dichloropropane	20	22.1	111	75-118
10061-01-5	cis-1,3-Dichloropropene	20	18.8	94	76-118
10061-02-6	trans-1,3-Dichloropropene	20	19.2	96	70-122
100-41-4	Ethylbenzene	20	21.0	105	76-118
75-09-2	Methylene chloride	20	22.3	112	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	23.1	116	66-119
127-18-4	Tetrachloroethene	20	17.9	90	70-130
108-88-3	Toluene	20	20.4	102	78-119
71-55-6	1,1,1-Trichloroethane	20	18.2	91	74-130
79-00-5	1,1,2-Trichloroethane	20	20.1	101	74-121
79-01-6	Trichloroethene	20	18.5	93	78-117
75-69-4	Trichlorofluoromethane	20	16.5	83	66-126
75-01-4	Vinyl chloride	20	25.6	128* a	54-125
1330-20-7	Xylenes (total)	60	62.5	104	76-120

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD13158

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
VN12017-BS	N283568.D	1	09/17/20	KC	n/a	n/a	VN12017

The QC reported here applies to the following samples:

Method: EPA 624.1

JD13158-3

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	86%	76-122%
2037-26-5	Toluene-D8 (SUR)	103%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	103%	80-120%
1868-53-7	Dibromofluoromethane (S)	101%	80-120%

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: JD13158**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
VN12019-BS	N283593.D	1	09/18/20	KC	n/a	n/a	VN12019

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

JD13158-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	23.4	117	60-140
107-13-1	Acrylonitrile	20	24.8	124	64-137
71-43-2	Benzene	20	20.5	103	78-118
75-27-4	Bromodichloromethane	20	16.8	84	77-119
75-25-2	Bromoform	20	17.9	90	70-128
74-83-9	Bromomethane	20	24.7	124	59-141
56-23-5	Carbon tetrachloride	20	17.9	90	69-130
108-90-7	Chlorobenzene	20	20.1	101	78-116
75-00-3	Chloroethane	20	24.1	121	63-136
110-75-8	2-Chloroethyl vinyl ether	100	97.4	97	55-147
67-66-3	Chloroform	20	19.8	99	78-122
74-87-3	Chloromethane	20	25.7	129* a	49-125
124-48-1	Dibromochloromethane	20	17.5	88	75-117
95-50-1	1,2-Dichlorobenzene	20	20.5	103	76-115
541-73-1	1,3-Dichlorobenzene	20	20.2	101	75-114
106-46-7	1,4-Dichlorobenzene	20	19.9	100	75-113
75-71-8	Dichlorodifluoromethane	20	19.4	97	48-129
75-34-3	1,1-Dichloroethane	20	22.2	111	73-124
107-06-2	1,2-Dichloroethane	20	15.8	79	74-127
75-35-4	1,1-Dichloroethene	20	18.2	91	54-122
156-59-2	cis-1,2-Dichloroethene	20	20.8	104	72-115
156-60-5	trans-1,2-Dichloroethene	20	20.2	101	70-121
78-87-5	1,2-Dichloropropane	20	21.3	107	75-118
10061-01-5	cis-1,3-Dichloropropene	20	19.1	96	76-118
10061-02-6	trans-1,3-Dichloropropene	20	19.4	97	70-122
100-41-4	Ethylbenzene	20	20.4	102	76-118
75-09-2	Methylene chloride	20	21.4	107	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	21.6	108	66-119
127-18-4	Tetrachloroethene	20	19.0	95	70-130
108-88-3	Toluene	20	20.2	101	78-119
71-55-6	1,1,1-Trichloroethane	20	17.7	89	74-130
79-00-5	1,1,2-Trichloroethane	20	20.0	100	74-121
79-01-6	Trichloroethene	20	18.3	92	78-117
75-69-4	Trichlorofluoromethane	20	17.3	87	66-126
1330-20-7	Xylenes (total)	60	61.2	102	76-120

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD13158

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
VN12019-BS	N283593.D	1	09/18/20	KC	n/a	n/a	VN12019

The QC reported here applies to the following samples:

Method: EPA 624.1

JD13158-1

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	86%	76-122%
2037-26-5	Toluene-D8 (SUR)	103%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	99%	80-120%
1868-53-7	Dibromofluoromethane (S)	101%	80-120%

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD13158
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
V1A8823-BS	1A204207.D	1	09/22/20	ED	n/a	n/a	V1A8823

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

JD13158-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
75-01-4	Vinyl chloride	20	23.6	118	54-125

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	96%	76-122%
2037-26-5	Toluene-D8 (SUR)	93%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	101%	80-120%
1868-53-7	Dibromofluoromethane (S)	109%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD13158

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
JD13205-1MS	N283575.D	25	09/17/20	KC	n/a	n/a	VN12017
JD13205-1MSD	N283576.D	25	09/17/20	KC	n/a	n/a	VN12017
JD13205-1	N283578.D	25	09/17/20	KC	n/a	n/a	VN12017

The QC reported here applies to the following samples:

Method: EPA 624.1

JD13158-3

CAS No.	Compound	JD13205-1	Spike	MS	MS	Spike	MSD	MSD	RPD	Limits	
		ug/l	Q	ug/l	ug/l	%	ug/l	ug/l		%	Rec/RPD
107-02-8	Acrolein	ND		500	430	86	500	457	91	6	40-154/18
107-13-1	Acrylonitrile	ND		500	686	137	500	664	133	3	60-142/19
71-43-2	Benzene	ND		500	530	106	500	530	106	0	59-136/13
75-27-4	Bromodichloromethane	ND		500	437	87	500	424	85	3	73-125/13
75-25-2	Bromoform	ND		500	470	94	500	443	89	6	62-134/12
74-83-9	Bromomethane	ND		500	618	124	500	604	121	2	54-149/19
56-23-5	Carbon tetrachloride	ND		500	479	96	500	452	90	6	70-140/14
108-90-7	Chlorobenzene	ND		500	526	105	500	496	99	6	69-128/11
75-00-3	Chloroethane	ND		500	611	122	500	622	124	2	58-145/19
110-75-8	2-Chloroethyl vinyl ether	ND		2500	1030	41	2500	730	29	34	10-179/37
67-66-3	Chloroform	ND		500	523	105	500	512	102	2	71-131/15
74-87-3	Chloromethane	ND		500	668	134	500	641	128	4	44-136/21
124-48-1	Dibromochloromethane	ND		500	444	89	500	430	86	3	72-123/12
95-50-1	1,2-Dichlorobenzene	ND		500	543	109	500	540	108	1	69-123/11
541-73-1	1,3-Dichlorobenzene	ND		500	531	106	500	539	108	1	71-122/11
106-46-7	1,4-Dichlorobenzene	ND		500	517	103	500	521	104	1	69-121/10
75-71-8	Dichlorodifluoromethane	ND		500	491	98	500	497	99	1	42-138/19
75-34-3	1,1-Dichloroethane	ND		500	610	122	500	594	119	3	66-132/18
107-06-2	1,2-Dichloroethane	ND		500	419	84	500	416	83	1	68-140/13
75-35-4	1,1-Dichloroethene	ND		500	498	100	500	476	95	5	49-127/18
156-59-2	cis-1,2-Dichloroethene	ND		500	545	109	500	540	108	1	50-134/14
156-60-5	trans-1,2-Dichloroethene	ND		500	548	110	500	548	110	0	63-129/18
78-87-5	1,2-Dichloropropane	ND		500	552	110	500	551	110	0	73-123/14
10061-01-5	cis-1,3-Dichloropropene	ND		500	490	98	500	453	91	8	71-124/13
10061-02-6	trans-1,3-Dichloropropene	ND		500	508	102	500	477	95	6	66-127/14
100-41-4	Ethylbenzene	ND		500	528	106	500	520	104	2	65-130/13
75-09-2	Methylene chloride	ND		500	594	119	500	568	114	4	65-127/15
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	601	120	500	591	118	2	62-126/14
127-18-4	Tetrachloroethene	ND		500	459	92	500	460	92	0	51-145/13
108-88-3	Toluene	ND		500	515	103	500	510	102	1	66-132/12
71-55-6	1,1,1-Trichloroethane	ND		500	474	95	500	455	91	4	63-143/15
79-00-5	1,1,2-Trichloroethane	ND		500	522	104	500	509	102	3	71-127/13
79-01-6	Trichloroethene	ND		500	467	93	500	459	92	2	46-145/12
75-69-4	Trichlorofluoromethane	ND		500	445	89	500	444	89	0	57-139/17
75-01-4	Vinyl chloride	ND		500	654	131	500	644	129	2	45-136/20
1330-20-7	Xylenes (total)	ND		1500	1560	104	1500	1550	103	1	66-131/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD13158
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
JD13205-1MS	N283575.D	25	09/17/20	KC	n/a	n/a	VN12017
JD13205-1MSD	N283576.D	25	09/17/20	KC	n/a	n/a	VN12017
JD13205-1	N283578.D	25	09/17/20	KC	n/a	n/a	VN12017

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

JD13158-3

CAS No.	Surrogate Recoveries	MS	MSD	JD13205-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	87%	88%	90%	76-122%
2037-26-5	Toluene-D8 (SUR)	104%	104%	100%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	104%	104%	101%	80-120%
1868-53-7	Dibromofluoromethane (S)	102%	104%	105%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD13158

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
JD13190-1MS	N283600.D	20	09/18/20	KC	n/a	n/a	VN12019
JD13190-1MSD	N283601.D	20	09/18/20	KC	n/a	n/a	VN12019
JD13190-1 ^a	N283603.D	20	09/18/20	KC	n/a	n/a	VN12019
JD13190-1	N283602.D	200	09/18/20	KC	n/a	n/a	VN12019

The QC reported here applies to the following samples:

Method: EPA 624.1

JD13158-1

CAS No.	Compound	JD13190-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
107-02-8	Acrolein	ND	400	435	109	400	475	119	9	40-154/18
107-13-1	Acrylonitrile	ND	400	499	125	400	518	130	4	60-142/19
71-43-2	Benzene	ND	400	422	106	400	442	111	5	59-136/13
75-27-4	Bromodichloromethane	46.5	400	375	82	400	380	83	1	73-125/13
75-25-2	Bromoform	ND	400	354	89	400	366	92	3	62-134/12
74-83-9	Bromomethane	ND	400	469	117	400	485	121	3	54-149/19
56-23-5	Carbon tetrachloride	1730	400	1710	-5* ^b	400	1750	5* ^b	2	70-140/14
108-90-7	Chlorobenzene	ND	400	399	100	400	414	104	4	69-128/11
75-00-3	Chloroethane	ND	400	468	117	400	484	121	3	58-145/19
110-75-8	2-Chloroethyl vinyl ether	ND	2000	1470	74	2000	1110	56	28	10-179/37
67-66-3	Chloroform	10800 ^c	400	9240	-290* ^b	400	9530	-218* ^b	3	71-131/15
74-87-3	Chloromethane	ND	400	503	126	400	500	125	1	44-136/21
124-48-1	Dibromochloromethane	ND	400	341	85	400	362	91	6	72-123/12
95-50-1	1,2-Dichlorobenzene	11.1	J 400	428	104	400	448	109	5	69-123/11
541-73-1	1,3-Dichlorobenzene	ND	400	409	102	400	426	107	4	71-122/11
106-46-7	1,4-Dichlorobenzene	ND	400	401	100	400	423	106	5	69-121/10
75-71-8	Dichlorodifluoromethane	ND	400	368	92	400	374	94	2	42-138/19
75-34-3	1,1-Dichloroethane	20.3	400	466	111	400	485	116	4	66-132/18
107-06-2	1,2-Dichloroethane	29.5	400	349	80	400	361	83	3	68-140/13
75-35-4	1,1-Dichloroethene	ND	400	353	88	400	384	96	8	49-127/18
156-59-2	cis-1,2-Dichloroethene	41.4	400	464	106	400	483	110	4	50-134/14
156-60-5	trans-1,2-Dichloroethene	ND	400	410	103	400	437	109	6	63-129/18
78-87-5	1,2-Dichloropropane	ND	400	425	106	400	439	110	3	73-123/14
10061-01-5	cis-1,3-Dichloropropene	ND	400	368	92	400	381	95	3	71-124/13
10061-02-6	trans-1,3-Dichloropropene	ND	400	388	97	400	394	99	2	66-127/14
100-41-4	Ethylbenzene	ND	400	410	103	400	422	106	3	65-130/13
75-09-2	Methylene chloride	385	400	767	96	400	791	102	3	65-127/15
79-34-5	1,1,2,2-Tetrachloroethane	284	400	705	105	400	731	112	4	62-126/14
127-18-4	Tetrachloroethene	1240	400	1470	58	400	1480	60	1	51-145/13
108-88-3	Toluene	ND	400	396	99	400	414	104	4	66-132/12
71-55-6	1,1,1-Trichloroethane	ND	400	358	90	400	369	92	3	63-143/15
79-00-5	1,1,2-Trichloroethane	894	400	1220	82	400	1230	84	1	71-127/13
79-01-6	Trichloroethene	685	400	1020	84	400	1040	89	2	46-145/12
75-69-4	Trichlorofluoromethane	ND	400	332	83	400	337	84	1	57-139/17
1330-20-7	Xylenes (total)	ND	1200	1210	101	1200	1260	105	4	66-131/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JD13158

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
JD13190-1MS	N283600.D	20	09/18/20	KC	n/a	n/a	VN12019
JD13190-1MSD	N283601.D	20	09/18/20	KC	n/a	n/a	VN12019
JD13190-1 ^a	N283603.D	20	09/18/20	KC	n/a	n/a	VN12019
JD13190-1	N283602.D	200	09/18/20	KC	n/a	n/a	VN12019

The QC reported here applies to the following samples:

Method: EPA 624.1

JD13158-1

CAS No.	Surrogate Recoveries	MS	MSD	JD13190-1	JD13190-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	86%	87%	89%	89%	76-122%
2037-26-5	Toluene-D8 (SUR)	104%	104%	101%	101%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	101%	102%	100%	101%	80-120%
1868-53-7	Dibromofluoromethane (S)	100%	103%	104%	104%	80-120%

(a) Dilution required due to high concentration of target compound.

(b) Outside control limits due to high level in sample relative to spike amount.

(c) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD13158
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD13346-4MS	1A204217.D	1	09/22/20	ED	n/a	n/a	V1A8823
JD13346-4MSD	1A204218.D	1	09/22/20	ED	n/a	n/a	V1A8823
JD13346-4	1A204214.D	1	09/22/20	ED	n/a	n/a	V1A8823

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

JD13158-1

CAS No.	Compound	JD13346-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-01-4	Vinyl chloride	ND	20	24.0	120	20	22.7	114	6	45-136/20

CAS No.	Surrogate Recoveries	MS	MSD	JD13346-4	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	89%	93%	93%	76-122%
2037-26-5	Toluene-D8 (SUR)	92%	92%	93%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%	98%	99%	80-120%
1868-53-7	Dibromofluoromethane (S)	108%	108%	109%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD13158

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: V1A8794-BFB

Injection Date: 08/25/20

Lab File ID: 1A203675.D

Injection Time: 20:46

Instrument ID: GCMS1A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	12151	18.9	Pass
75	30.0 - 60.0% of mass 95	31947	49.6	Pass
95	Base peak, 100% relative abundance	64355	100.0	Pass
96	5.0 - 9.0% of mass 95	4450	6.91	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	55899	86.9	Pass
175	5.0 - 9.0% of mass 174	4340	6.74 (7.76) ^a	Pass
176	95.0 - 101.0% of mass 174	54523	84.7 (97.5) ^a	Pass
177	5.0 - 9.0% of mass 176	3272	5.08 (6.00) ^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
V1A8794-IC8794	1A203676.D	08/25/20	21:11	00:25	Initial cal 0.2
V1A8794-IC8794	1A203677.D	08/25/20	21:36	00:50	Initial cal 0.5
V1A8794-IC8794	1A203678.D	08/25/20	22:01	01:15	Initial cal 1
V1A8794-IC8794	1A203679.D	08/25/20	22:27	01:41	Initial cal 2
V1A8794-IC8794	1A203680.D	08/25/20	22:52	02:06	Initial cal 4
V1A8794-IC8794	1A203681.D	08/25/20	23:17	02:31	Initial cal 8
V1A8794-IC8794	1A203682.D	08/25/20	23:42	02:56	Initial cal 20
V1A8794-ICC8794	1A203683.D	08/26/20	00:07	03:21	Initial cal 50
V1A8794-IC8794	1A203684.D	08/26/20	00:32	03:46	Initial cal 100
V1A8794-IC8794	1A203685.D	08/26/20	00:57	04:11	Initial cal 200
V1A8794-ICV8794	1A203688.D	08/26/20	02:12	05:26	Initial cal verification 50
V1A8794-ICV8794	1A203689.D	08/26/20	02:37	05:51	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD13158

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: V1A8794-BFB2

Injection Date: 08/27/20

Lab File ID: 1A203691.D

Injection Time: 16:16

Instrument ID: GCMS1A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	11636	18.7	Pass
75	30.0 - 60.0% of mass 95	31472	50.5	Pass
95	Base peak, 100% relative abundance	62368	100.0	Pass
96	5.0 - 9.0% of mass 95	4314	6.92	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	53867	86.4	Pass
175	5.0 - 9.0% of mass 174	4530	7.26 (8.41) ^a	Pass
176	95.0 - 101.0% of mass 174	53731	86.2 (99.7) ^a	Pass
177	5.0 - 9.0% of mass 176	3290	5.28 (6.12) ^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
V1A8794-ICV8794	1A203692.D	08/27/20	16:47	00:31	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD13158
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: V1A8823-BFB **Injection Date:** 09/22/20
Lab File ID: 1A204206.D **Injection Time:** 09:22
Instrument ID: GCMS1A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	15302	19.9	Pass
75	30.0 - 60.0% of mass 95	37709	49.0	Pass
95	Base peak, 100% relative abundance	76947	100.0	Pass
96	5.0 - 9.0% of mass 95	5217	6.78	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	63960	83.1	Pass
175	5.0 - 9.0% of mass 174	4945	6.43 (7.73) ^a	Pass
176	95.0 - 101.0% of mass 174	61045	79.3 (95.4) ^a	Pass
177	5.0 - 9.0% of mass 176	4083	5.31 (6.69) ^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
V1A8823-BS	1A204207.D	09/22/20	09:51	00:29	Blank Spike
V1A8823-CC8794	1A204207.D	09/22/20	09:51	00:29	Continuing cal 20
V1A8823-MB	1A204209.D	09/22/20	10:47	01:25	Method Blank
ZZZZZZ	1A204212.D	09/22/20	12:05	02:43	(unrelated sample)
JD13158-1	1A204213.D	09/22/20	12:30	03:08	GRAB 1 THRU 4-091520/BSA DISCHARGE
JD13346-4	1A204214.D	09/22/20	12:54	03:32	(used for QC only; not part of job JD13158)
ZZZZZZ	1A204215.D	09/22/20	13:19	03:57	(unrelated sample)
ZZZZZZ	1A204216.D	09/22/20	13:44	04:22	(unrelated sample)
JD13346-4MS	1A204217.D	09/22/20	14:09	04:47	Matrix Spike
JD13346-4MSD	1A204218.D	09/22/20	14:33	05:11	Matrix Spike Duplicate
ZZZZZZ	1A204220.D	09/22/20	15:29	06:07	(unrelated sample)
ZZZZZZ	1A204221.D	09/22/20	16:01	06:39	(unrelated sample)
ZZZZZZ	1A204222.D	09/22/20	16:12	06:50	(unrelated sample)
ZZZZZZ	1A204223.D	09/22/20	16:37	07:15	(unrelated sample)
ZZZZZZ	1A204224.D	09/22/20	17:02	07:40	(unrelated sample)
ZZZZZZ	1A204225.D	09/22/20	17:27	08:05	(unrelated sample)
ZZZZZZ	1A204226.D	09/22/20	17:52	08:30	(unrelated sample)
ZZZZZZ	1A204227.D	09/22/20	18:17	08:55	(unrelated sample)
ZZZZZZ	1A204228.D	09/22/20	18:41	09:19	(unrelated sample)
ZZZZZZ	1A204229.D	09/22/20	19:06	09:44	(unrelated sample)
V1A8825-BS	1A204237.D	09/23/20	08:49	23:27	Blank Spike
V1A8825-BSD	1A204239.D	09/23/20	09:20	23:58	Blank Spike Duplicate

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD13158

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VN11937-BFB

Injection Date: 06/29/20

Lab File ID: N281943.D

Injection Time: 16:51

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	21338	17.8	Pass
75	30.0 - 60.0% of mass 95	58234	48.6	Pass
95	Base peak, 100% relative abundance	119733	100.0	Pass
96	5.0 - 9.0% of mass 95	8133	6.79	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	112970	94.4	Pass
175	5.0 - 9.0% of mass 174	9581	8.00 (8.48) ^a	Pass
176	95.0 - 101.0% of mass 174	110397	92.2 (97.7) ^a	Pass
177	5.0 - 9.0% of mass 176	7514	6.28 (6.81) ^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
VN11937-IC11937	N281944.D	06/29/20	17:31	00:40	Initial cal 0.2
VN11937-IC11937	N281945.D	06/29/20	18:00	01:09	Initial cal 0.5
VN11937-IC11937	N281946.D	06/29/20	18:30	01:39	Initial cal 1
VN11937-IC11937	N281947.D	06/29/20	19:00	02:09	Initial cal 2
VN11937-IC11937	N281948.D	06/29/20	19:29	02:38	Initial cal 4
VN11937-IC11937	N281949.D	06/29/20	19:59	03:08	Initial cal 8
VN11937-ICC11937	N281950.D	06/29/20	20:28	03:37	Initial cal 20
VN11937-IC11937	N281951.D	06/29/20	20:58	04:07	Initial cal 50
VN11937-IC11937	N281952.D	06/29/20	21:27	04:36	Initial cal 100
VN11937-IC11937	N281953.D	06/29/20	21:57	05:06	Initial cal 200
VN11937-ICV11937	N281956.D	06/29/20	23:25	06:34	Initial cal verification 20
VN11937-ICV11937	N281957.D	06/29/20	23:54	07:03	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD13158

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VN12017-BFB

Injection Date: 09/17/20

Lab File ID: N283567.D

Injection Time: 09:54

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	14864	17.6	Pass
75	30.0 - 60.0% of mass 95	40213	47.6	Pass
95	Base peak, 100% relative abundance	84563	100.0	Pass
96	5.0 - 9.0% of mass 95	5497	6.50	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	75384	89.1	Pass
175	5.0 - 9.0% of mass 174	6035	7.14 (8.01) ^a	Pass
176	95.0 - 101.0% of mass 174	72779	86.1 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	4907	5.80 (6.74) ^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
VN12017-CC11937	N283568.D	09/17/20	10:23	00:29	Continuing cal 20
VN12017-BS	N283568.D	09/17/20	10:23	00:29	Blank Spike
VN12017-MB	N283570.D	09/17/20	11:33	01:39	Method Blank
ZZZZZZ	N283571.D	09/17/20	12:10	02:16	(unrelated sample)
ZZZZZZ	N283572.D	09/17/20	12:40	02:46	(unrelated sample)
ZZZZZZ	N283573.D	09/17/20	13:09	03:15	(unrelated sample)
JD13205-1MS	N283575.D	09/17/20	14:08	04:14	Matrix Spike
JD13205-1MSD	N283576.D	09/17/20	14:37	04:43	Matrix Spike Duplicate
JD13205-1	N283578.D	09/17/20	15:37	05:43	(used for QC only; not part of job JD13158)
JD13158-3	N283579.D	09/17/20	16:06	06:12	TB-
VN12017-ECC11937	N283580.D	09/17/20	16:35	06:41	Ending cal 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD13158

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VN12019-BFB

Injection Date: 09/18/20

Lab File ID: N283592.D

Injection Time: 08:52

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	15967	16.5	Pass
75	30.0 - 60.0% of mass 95	44656	46.1	Pass
95	Base peak, 100% relative abundance	96843	100.0	Pass
96	5.0 - 9.0% of mass 95	6004	6.20	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	89141	92.0	Pass
175	5.0 - 9.0% of mass 174	6559	6.77 (7.36) ^a	Pass
176	95.0 - 101.0% of mass 174	87149	90.0 (97.8) ^a	Pass
177	5.0 - 9.0% of mass 176	5559	5.74 (6.38) ^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
VN12019-CC11937	N283593.D	09/18/20	09:22	00:30	Continuing cal 20
VN12019-BS	N283593.D	09/18/20	09:22	00:30	Blank Spike
VN12019-MB	N283595.D	09/18/20	10:33	01:41	Method Blank
ZZZZZZ	N283596.D	09/18/20	11:10	02:18	(unrelated sample)
ZZZZZZ	N283597.D	09/18/20	11:40	02:48	(unrelated sample)
ZZZZZZ	N283598.D	09/18/20	12:09	03:17	(unrelated sample)
JD13190-1MS	N283600.D	09/18/20	13:08	04:16	Matrix Spike
JD13190-1MSD	N283601.D	09/18/20	13:38	04:46	Matrix Spike Duplicate
JD13190-1	N283602.D	09/18/20	14:07	05:15	(used for QC only; not part of job JD13158)
JD13190-1	N283603.D	09/18/20	14:37	05:45	(used for QC only; not part of job JD13158)
ZZZZZZ	N283605.D	09/18/20	15:36	06:44	(unrelated sample)
ZZZZZZ	N283606.D	09/18/20	16:05	07:13	(unrelated sample)
ZZZZZZ	N283607.D	09/18/20	16:35	07:43	(unrelated sample)
ZZZZZZ	N283608.D	09/18/20	17:04	08:12	(unrelated sample)
ZZZZZZ	N283609.D	09/18/20	17:34	08:42	(unrelated sample)
ZZZZZZ	N283610.D	09/18/20	18:04	09:12	(unrelated sample)
JD13158-1	N283611.D	09/18/20	18:33	09:41	GRAB 1 THRU 4-091520/BSA DISCHARGE
ZZZZZZ	N283612.D	09/18/20	19:02	10:10	(unrelated sample)
ZZZZZZ	N283613.D	09/18/20	19:32	10:40	(unrelated sample)
ZZZZZZ	N283614.D	09/18/20	20:01	11:09	(unrelated sample)
ZZZZZZ	N283615.D	09/18/20	20:31	11:39	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD13158
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
JD13158-1	1A204213.D	96	91	99	111
JD13158-1	N283611.D	87	97	102	101
JD13158-3	N283579.D	91	100	102	106
JD13190-1MS	N283600.D	86	104	101	100
JD13190-1MSD	N283601.D	87	104	102	103
JD13205-1MS	N283575.D	87	104	104	102
JD13205-1MSD	N283576.D	88	104	104	104
JD13346-4MS	1A204217.D	89	92	97	108
JD13346-4MSD	1A204218.D	93	92	98	108
V1A8823-BS	1A204207.D	96	93	101	109
V1A8823-MB	1A204209.D	93	93	100	110
VN12017-BS	N283568.D	86	103	103	101
VN12017-MB	N283570.D	90	102	99	107
VN12019-BS	N283593.D	86	103	99	101
VN12019-MB	N283595.D	88	100	98	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

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 3

Job Number: JD13158**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
OP29589-MB1	5P71404.D	1	09/22/20	HSS	09/22/20	OP29589	E5P3367

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

JD13158-1

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	
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	

Method Blank Summary

Page 2 of 3

Job Number: JD13158

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
OP29589-MB1	5P71404.D	1	09/22/20	HSS	09/22/20	OP29589	E5P3367

The QC reported here applies to the following samples:

Method: EPA 625.1

JD13158-1

CAS No.	Compound	Result	RL	MDL	Units	Q
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	
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	34% 10-110%
4165-62-2	Phenol-d5	22% 10-110%
118-79-6	2,4,6-Tribromophenol	62% 35-147%
4165-60-0	Nitrobenzene-d5	78% 32-132%
321-60-8	2-Fluorobiphenyl	73% 40-117%
1718-51-0	Terphenyl-d14	76% 33-126%

Method Blank Summary

Job Number: JD13158
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29589-MB1	5P71404.D	1	09/22/20	HSS	09/22/20	OP29589	E5P3367

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

JD13158-1

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

7.1.1
7

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: JD13158

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
OP29589-BS1	5P71405.D	1	09/22/20	HSS	09/22/20	OP29589	E5P3367
OP29589-BSD	5P71406.D	1	09/22/20	HSS	09/22/20	OP29589	E5P3367

The QC reported here applies to the following samples:

Method: EPA 625.1

JD13158-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	36.0	72	35.5	71	1	43-100/22
59-50-7	4-Chloro-3-methyl phenol	50	39.7	79	41.3	83	4	46-110/21
120-83-2	2,4-Dichlorophenol	50	37.5	75	37.7	75	1	44-109/21
105-67-9	2,4-Dimethylphenol	50	38.5	77	39.8	80	3	42-116/20
51-28-5	2,4-Dinitrophenol	100	69.8	70	68.9	69	1	38-131/27
534-52-1	4,6-Dinitro-o-cresol	50	36.2	72	35.8	72	1	50-124/26
88-75-5	2-Nitrophenol	50	36.2	72	37.5	75	4	44-109/21
100-02-7	4-Nitrophenol	50	22.1	44	22.4	45	1	14-110/23
87-86-5	Pentachlorophenol	50	28.7	57	28.8	58	0	25-128/25
108-95-2	Phenol	50	14.2	28	14.6	29	3	20-110/22
88-06-2	2,4,6-Trichlorophenol	50	36.6	73	35.6	71	3	52-118/24
83-32-9	Acenaphthene	50	42.5	85	41.0	82	4	47-110/24
208-96-8	Acenaphthylene	50	38.5	77	38.1	76	1	45-110/24
120-12-7	Anthracene	50	41.7	83	40.1	80	4	52-110/24
92-87-5	Benzidine	100	35.7	36	48.7	49	31	10-110/65
56-55-3	Benzo(a)anthracene	50	43.0	86	42.9	86	0	53-110/20
50-32-8	Benzo(a)pyrene	50	41.5	83	40.1	80	3	55-110/23
205-99-2	Benzo(b)fluoranthene	50	43.6	87	43.0	86	1	57-110/23
191-24-2	Benzo(g,h,i)perylene	50	42.3	85	40.8	82	4	51-110/23
207-08-9	Benzo(k)fluoranthene	50	44.2	88	43.8	88	1	56-110/22
101-55-3	4-Bromophenyl phenyl ether	50	36.7	73	36.3	73	1	51-112/23
85-68-7	Butyl benzyl phthalate	50	46.5	93	45.8	92	2	50-122/23
91-58-7	2-Chloronaphthalene	50	39.1	78	37.9	76	3	41-110/26
106-47-8	4-Chloroaniline	50	28.7	57	32.7	65	13	10-110/44
218-01-9	Chrysene	50	42.5	85	42.7	85	0	52-110/20
111-91-1	bis(2-Chloroethoxy)methane	50	42.0	84	42.5	85	1	36-110/21
111-44-4	bis(2-Chloroethyl)ether	50	41.1	82	40.4	81	2	40-111/21
108-60-1	2,2'-Oxybis(1-chloropropane)	50	58.4	117* a	57.4	115* a	2	37-110/25
7005-72-3	4-Chlorophenyl phenyl ether	50	37.2	74	36.5	73	2	48-110/25
95-50-1	1,2-Dichlorobenzene	50	33.5	67	32.8	66	2	35-110/28
122-66-7	1,2-Diphenylhydrazine	50	48.4	97	48.0	96	1	39-128/23
541-73-1	1,3-Dichlorobenzene	50	33.0	66	31.3	63	5	32-110/28
106-46-7	1,4-Dichlorobenzene	50	34.0	68	32.3	65	5	33-110/27
121-14-2	2,4-Dinitrotoluene	50	42.9	86	41.9	84	2	61-117/25
606-20-2	2,6-Dinitrotoluene	50	40.3	81	39.4	79	2	61-119/23
91-94-1	3,3'-Dichlorobenzidine	100	58.6	59	68.6	69	16	20-110/33

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 2

Job Number: JD13158

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
OP29589-BS1	5P71405.D	1	09/22/20	HSS	09/22/20	OP29589	E5P3367
OP29589-BSD	5P71406.D	1	09/22/20	HSS	09/22/20	OP29589	E5P3367

The QC reported here applies to the following samples:

Method: EPA 625.1

JD13158-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
53-70-3	Dibenzo(a,h)anthracene	50	41.2	82	40.0	80	3	55-110/25
84-74-2	Di-n-butyl phthalate	50	43.8	88	42.3	85	3	55-118/25
117-84-0	Di-n-octyl phthalate	50	52.3	105	50.0	100	4	49-124/26
84-66-2	Diethyl phthalate	50	42.3	85	41.4	83	2	54-113/23
131-11-3	Dimethyl phthalate	50	39.3	79	38.9	78	1	56-110/23
117-81-7	bis(2-Ethylhexyl)phthalate	50	45.5	91	44.8	90	2	50-120/22
206-44-0	Fluoranthene	50	41.0	82	40.4	81	1	55-111/23
86-73-7	Fluorene	50	41.3	83	40.6	81	2	51-110/25
118-74-1	Hexachlorobenzene	50	38.9	78	38.4	77	1	47-116/23
87-68-3	Hexachlorobutadiene	50	30.6	61	29.6	59	3	24-110/34
77-47-4	Hexachlorocyclopentadiene	100	53.8	54	51.7	52	4	10-110/39
67-72-1	Hexachloroethane	50	26.4	53	24.9	50	6	28-110/34
193-39-5	Indeno(1,2,3-cd)pyrene	50	41.1	82	40.6	81	1	51-112/24
78-59-1	Isophorone	50	40.0	80	40.2	80	0	42-111/20
91-20-3	Naphthalene	50	39.1	78	38.3	77	2	34-110/25
98-95-3	Nitrobenzene	50	42.1	84	42.2	84	0	39-110/21
62-75-9	n-Nitrosodimethylamine	50	18.6	37	19.5	39	5	15-110/19
621-64-7	N-Nitroso-di-n-propylamine	50	42.6	85	42.4	85	0	33-117/21
86-30-6	N-Nitrosodiphenylamine	50	37.8	76	36.7	73	3	54-110/24
85-01-8	Phenanthrene	50	44.5	89	43.6	87	2	53-110/23
129-00-0	Pyrene	50	42.3	85	41.5	83	2	52-110/22
120-82-1	1,2,4-Trichlorobenzene	50	32.3	65	32.7	65	1	30-110/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	44%	46%	10-110%
4165-62-2	Phenol-d5	30%	30%	10-110%
118-79-6	2,4,6-Tribromophenol	71%	72%	35-147%
4165-60-0	Nitrobenzene-d5	89%	91%	32-132%
321-60-8	2-Fluorobiphenyl	82%	80%	40-117%
1718-51-0	Terphenyl-d14	89%	89%	33-126%

(a) Outside of in house control limits, but within reasonable method recovery limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD13158

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E5P3346-DFTPP

Injection Date: 09/01/20

Lab File ID: 5P71046.D

Injection Time: 22:13

Instrument ID: GCMS5P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	36356	30.0	Pass
68	Less than 2.0% of mass 69	4	0.00 (0.01) ^a	Pass
69	Mass 69 relative abundance	41250	34.1	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
127	40.0 - 60.0% of mass 198	55961	46.2	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	121021	100.0	Pass
199	5.0 - 9.0% of mass 198	8507	7.03	Pass
275	10.0 - 30.0% of mass 198	31216	25.8	Pass
365	1.0 - 100.0% of mass 198	4068	3.36	Pass
441	Present, but less than mass 443	11698	9.67 (80.3) ^b	Pass
442	40.0 - 100.0% of mass 198	74061	61.2	Pass
443	17.0 - 23.0% of mass 442	14570	12.0 (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
E5P3346-IC3346	5P71047.D	09/01/20	22:30	00:17	Initial cal 1
E5P3346-IC3346	5P71048.D	09/01/20	22:54	00:41	Initial cal 2
E5P3346-IC3346	5P71049.D	09/01/20	23:19	01:06	Initial cal 5
E5P3346-IC3346	5P71050.D	09/01/20	23:44	01:31	Initial cal 10
E5P3346-IC3346	5P71051.D	09/02/20	00:09	01:56	Initial cal 25
E5P3346-ICC3346	5P71052.D	09/02/20	00:34	02:21	Initial cal 50
E5P3346-IC3346	5P71053.D	09/02/20	01:33	03:20	Initial cal 80
E5P3346-IC3346	5P71054.D	09/02/20	01:58	03:45	Initial cal 100
E5P3346-ICV3346	5P71055.D	09/02/20	02:23	04:10	Initial cal verification 50
E5P3346-ICV3346	5P71056.D	09/02/20	02:48	04:35	Initial cal verification 50
E5P3346-ICV3346	5P71057.D	09/02/20	03:13	05:00	Initial cal verification 50
E5P3346-ICV3346	5P71058.D	09/02/20	03:38	05:25	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD13158

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E5P3351-DFTPP

Injection Date: 09/02/20

Lab File ID: 5P71108.D

Injection Time: 21:35

Instrument ID: GCMS5P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	31783	33.1	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	34213	35.7	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
127	40.0 - 60.0% of mass 198	46644	48.6	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	95890	100.0	Pass
199	5.0 - 9.0% of mass 198	6585	6.87	Pass
275	10.0 - 30.0% of mass 198	23373	24.4	Pass
365	1.0 - 100.0% of mass 198	2807	2.93	Pass
441	Present, but less than mass 443	10478	10.9 (86.1) ^b	Pass
442	40.0 - 100.0% of mass 198	64517	67.3	Pass
443	17.0 - 23.0% of mass 442	12165	12.7 (18.9) ^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
E5P3351-IC3351	5P71109.D	09/02/20	21:57	00:22	Initial cal 100
E5P3351-IC3351	5P71110.D	09/02/20	22:22	00:47	Initial cal 80
E5P3351-ICC3351	5P71111.D	09/02/20	22:47	01:12	Initial cal 50
E5P3351-IC3351	5P71112.D	09/02/20	23:13	01:38	Initial cal 25
E5P3351-IC3351	5P71113.D	09/02/20	23:38	02:03	Initial cal 10
E5P3351-IC3351	5P71114.D	09/03/20	00:03	02:28	Initial cal 5
E5P3351-IC3351	5P71115.D	09/03/20	00:28	02:53	Initial cal 2
E5P3351-IC3351	5P71116.D	09/03/20	00:54	03:19	Initial cal 1
E5P3351-ICV3351	5P71117.D	09/03/20	01:19	03:44	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD13158

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E5P3352-DFTPP

Injection Date: 09/03/20

Lab File ID: 5P71120.D

Injection Time: 02:15

Instrument ID: GCMS5P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	39013	33.9	Pass
68	Less than 2.0% of mass 69	125	0.11 (0.29) ^a	Pass
69	Mass 69 relative abundance	42447	36.9	Pass
70	Less than 2.0% of mass 69	113	0.10 (0.27) ^a	Pass
127	40.0 - 60.0% of mass 198	55986	48.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	114989	100.0	Pass
199	5.0 - 9.0% of mass 198	7847	6.82	Pass
275	10.0 - 30.0% of mass 198	26336	22.9	Pass
365	1.0 - 100.0% of mass 198	3055	2.66	Pass
441	Present, but less than mass 443	11178	9.72 (87.4) ^b	Pass
442	40.0 - 100.0% of mass 198	66552	57.9	Pass
443	17.0 - 23.0% of mass 442	12796	11.1 (19.2) ^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
E5P3352-IC3352	5P71121.D	09/03/20	02:30	00:15	Initial cal 100
E5P3352-IC3352	5P71122.D	09/03/20	02:55	00:40	Initial cal 80
E5P3352-ICC3352	5P71123.D	09/03/20	03:20	01:05	Initial cal 50
E5P3352-IC3352	5P71124.D	09/03/20	03:45	01:30	Initial cal 25
E5P3352-IC3352	5P71125.D	09/03/20	04:10	01:55	Initial cal 10
E5P3352-IC3352	5P71126.D	09/03/20	04:36	02:21	Initial cal 5
E5P3352-IC3352	5P71127.D	09/03/20	05:01	02:46	Initial cal 2
E5P3352-IC3352	5P71128.D	09/03/20	05:26	03:11	Initial cal 1
E5P3352-ICV3352	5P71129.D	09/03/20	05:51	03:36	Initial cal verification 50
E5P3352-ICV3352	5P71130.D	09/03/20	06:16	04:01	Initial cal verification 50
E5P3352-ICV3352	5P71131.D	09/03/20	06:41	04:26	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JD13158
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Sample: E5P3367-DFTPP
Lab File ID: 5P71397.D
Instrument ID: GCMS5P
Injection Date: 09/22/20
Injection Time: 14:15

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	20531	31.7	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	24438	37.7	Pass
70	Less than 2.0% of mass 69	232	0.36 (0.95) ^a	Pass
127	40.0 - 60.0% of mass 198	32325	49.9	Pass
197	Less than 1.0% of mass 198	79	0.12	Pass
198	Base peak, 100% relative abundance	64800	100.0	Pass
199	5.0 - 9.0% of mass 198	4333	6.69	Pass
275	10.0 - 30.0% of mass 198	16085	24.8	Pass
365	1.0 - 100.0% of mass 198	2181	3.37	Pass
441	Present, but less than mass 443	6768	10.4 (76.1) ^b	Pass
442	40.0 - 100.0% of mass 198	44573	68.8	Pass
443	17.0 - 23.0% of mass 442	8894	13.7 (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
E5P3367-CC3346	5P71398.D	09/22/20	14:26	00:11	Continuing cal 50
E5P3367-CC3351	5P71399.D	09/22/20	14:51	00:36	Continuing cal 50
E5P3367-CC3352	5P71400.D	09/22/20	15:15	01:00	Continuing cal 50
OP29588-MB1	5P71402.D	09/22/20	16:35	02:20	Method Blank
OP29588-LB9	5P71403A.D	09/22/20	16:58	02:43	Leachate Blank
OP29589-MB1	5P71404.D	09/22/20	17:24	03:09	Method Blank
OP29589-BS1	5P71405.D	09/22/20	17:47	03:32	Blank Spike
OP29589-BSD	5P71406.D	09/22/20	18:12	03:57	Blank Spike Duplicate
OP29588-BS1	5P71407.D	09/22/20	18:36	04:21	Blank Spike
OP29588-LS9	5P71408.D	09/22/20	19:01	04:46	Leachate Spike
OP29588-MS	5P71408.D	09/22/20	19:01	04:46	Matrix Spike
OP29588-MSD	5P71409.D	09/22/20	19:25	05:10	Matrix Spike Duplicate
ZZZZZZ	5P71410.D	09/22/20	19:50	05:35	(unrelated sample)
JD13254-1A	5P71411.D	09/22/20	20:14	05:59	(used for QC only; not part of job JD13158)
ZZZZZZ	5P71412.D	09/22/20	20:39	06:24	(unrelated sample)
ZZZZZZ	5P71413.D	09/22/20	21:03	06:48	(unrelated sample)
ZZZZZZ	5P71414.D	09/22/20	21:28	07:13	(unrelated sample)
ZZZZZZ	5P71415.D	09/22/20	21:52	07:37	(unrelated sample)
ZZZZZZ	5P71416.D	09/22/20	22:16	08:01	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD13158
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E5P3367-DFTPP	Injection Date:	09/22/20
Lab File ID:	5P71397.D	Injection Time:	14:15
Instrument ID:	GCMS5P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	5P71417.D	09/22/20	22:41	08:26	(unrelated sample)
ZZZZZZ	5P71418.D	09/22/20	23:05	08:50	(unrelated sample)
ZZZZZZ	5P71419.D	09/22/20	23:30	09:15	(unrelated sample)
ZZZZZZ	5P71420.D	09/22/20	23:54	09:39	(unrelated sample)
ZZZZZZ	5P71421.D	09/23/20	00:18	10:03	(unrelated sample)
ZZZZZZ	5P71422.D	09/23/20	00:43	10:28	(unrelated sample)
JD13158-1	5P71423.D	09/23/20	01:07	10:52	GRAB 1 THRU 4-091520/BSA DISCHARGE
ZZZZZZ	5P71424.D	09/23/20	01:32	11:17	(unrelated sample)

7.3.4
7

Surrogate Recovery Summary

Job Number: JD13158
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	S4	S5	S6
JD13158-1	5P71423.D	39	25	70	88	81	53
OP29589-BS1	5P71405.D	44	30	71	89	82	89
OP29589-BSD	5P71406.D	46	30	72	91	80	89
OP29589-MB1	5P71404.D	34	22	62	78	73	76

Surrogate Compounds	Recovery Limits

S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	35-147%
S4 = Nitrobenzene-d5	32-132%
S5 = 2-Fluorobiphenyl	40-117%
S6 = 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: JD13158
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP22804
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/17/20

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	16	77		
Antimony	6.0	1	4.1		
Arsenic	3.0	2	2.5		
Barium	200	.4	17		
Beryllium	1.0	.1	.5		
Bismuth	20	1.8	4.8		
Boron	100	1.9	85		
Cadmium	3.0	.4	1.2		
Calcium	5000	4.2	130		
Cerium	100				
Chromium	10	.3	1.5		
Cobalt	50	.3	2.5		
Copper	10	1	4.1	9.9	<10
Iron	100	3.3	30		
Lead	3.0	1.2	2.4		
Lithium	50	2	9.1		
Magnesium	5000	25	200		
Manganese	15	.1	2		
Molybdenum	20	.3	4.5		
Nickel	10	.3	1.8		
Phosphorus	50	1.7	14		
Potassium	10000	54	200		
Selenium	10	2.9	5.5		
Silicon	200	1.3	130		
Silver	10	1	2.4		
Sodium	10000	11	900		
Strontium	10	.1	1.6		
Sulfur	50	1.7	18		
Thallium	10	1.5	1.9		
Tin	50	.6	4.7		
Titanium	10	.4	1.9		
Tungsten	50	1.9	19		
Vanadium	50	.5	2.3		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD13158
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP22804
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/17/20

Metal	RL	IDL	MDL	MB raw	final
Zinc	20	.1	8.5	8.7	<20
Zirconium	10	.4	4.9		

Associated samples MP22804: JD13158-2

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: JD13158
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP22804
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 09/17/20

Metal	JD13129-2 Original MS	Spike lot MP200.7A % Rec	QC Limits
Aluminum	anr		
Antimony			
Arsenic	anr		
Barium			
Beryllium			
Bismuth			
Boron			
Cadmium	anr		
Calcium			
Cerium			
Chromium	anr		
Cobalt			
Copper	5.4	1850 2000	92.2 70-130
Iron			
Lead	anr		
Lithium			
Magnesium			
Manganese			
Molybdenum			
Nickel	anr		
Phosphorus			
Potassium			
Selenium			
Silicon			
Silver			
Sodium			
Strontium			
Sulfur			
Thallium			
Tin	anr		
Titanium			
Tungsten			
Vanadium			

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD13158
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP22804
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 09/17/20

Metal	JD13129-2 Original MS	Spike lot MP200.7A % Rec	QC Limits

Zinc 30.5 1920 2000 94.5 70-130

Zirconium

Associated samples MP22804: JD13158-2

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

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD13158
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP22804
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 09/17/20

Metal	JD13129-2 Original MSD	Spike lot MP200.7A % Rec	MSD RPD	QC Limit		
Aluminum	anr					
Antimony						
Arsenic	anr					
Barium						
Beryllium						
Bismuth						
Boron						
Cadmium	anr					
Calcium						
Cerium						
Chromium	anr					
Cobalt						
Copper	5.4	1910	2000	95.2	3.2	10
Iron						
Lead	anr					
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium						
Selenium						
Silicon						
Silver						
Sodium						
Strontium						
Sulfur						
Thallium						
Tin	anr					
Titanium						
Tungsten						
Vanadium						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD13158
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP22804
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 09/17/20

Metal	JD13129-2 Original MSD	Spike lot MP200.7A % Rec	MSD RPD	QC Limit

Zinc	30.5	1980	2000	97.5	3.1	10

Zirconium

Associated samples MP22804: JD13158-2

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

8.1.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD13158

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

QC Batch ID: MP22804
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/17/20

Metal	BSP Result	Spike lot MP200.7A	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Cerium				
Chromium	anr			
Cobalt				
Copper	1900	2000	95.0	85-115
Iron				
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Sulfur				
Thallium				
Tin	anr			
Titanium				
Tungsten				
Vanadium				

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD13158

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP22804

Methods: EPA 200.7

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 09/17/20

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

Zinc	1980	2000	99.0	85-115

Zirconium

Associated samples MP22804: JD13158-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

8.1.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD13158
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP22804
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 09/17/20

Metal	JD13129-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Cerium				
Chromium	anr			
Cobalt				
Copper	5.40	0.00	100.0(a)	0-10
Iron				
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Sulfur				
Thallium				
Tin	anr			
Titanium				
Tungsten				
Vanadium				

8.1.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD13158
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP22804
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 09/17/20

Metal	JD13129-2		%DIF	QC Limits
	Original	SDL 1:5		

Zinc	30.5	33.3	9.2	0-10

Zirconium

Associated samples MP22804: JD13158-2

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD13158
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP22857
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 09/21/20

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.044	.092	-0.025	<0.20

Associated samples MP22857: JD13158-2

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: JD13158
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP22857
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 09/21/20

Metal	JD13190-3		Spike lot		QC
	Original	MS	HGPW3	% Rec	Limits
Mercury	0.28	2.7	2	121.0	70-130

Associated samples MP22857: JD13158-2

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

8.2.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD13158
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP22857
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 09/21/20

Metal	JD13190-3 Original MSD		Spike lot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.28	2.7	2	121.0	0.0	19

Associated samples MP22857: JD13158-2

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

8.2.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD13158

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP22857

Methods: EPA 245.1

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 09/21/20

Metal	BSP Result	Spike lot HGPW3	% Rec	QC Limits
Mercury	1.9	2	95.0	85-115

Associated samples MP22857: JD13158-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

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: JD13158
Account: HWINJOMM - 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	GP29957/GN11507	0.050	0.0	mg/l	0.40	0.37	92.5	80-120%
Solids, Total Suspended	GN11451	4.0	0.0	mg/l				

Associated Samples:
Batch GN11451: JD13158-2
Batch GP29957: JD13158-2
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD13158

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	DUP Result	RPD	QC Limits
Phosphorus, Total	GP29957/GN11507	JD13125-1	mg/l	0.028	0.0	200.0(a)	0-38%
Solids, Total Suspended	GN11451	JD13195-8	mg/l	5.2	5.4	3.8	0-17%

Associated Samples:

Batch GN11451: JD13158-2

Batch GP29957: JD13158-2

(*) Outside of QC limits

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

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD13158
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	GP29957/GN11507	JD13125-1	mg/l	0.028	0.40	0.37	85.5	35-137%

Associated Samples:

Batch GP29957: JD13158-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



Jacobs
1563 Willis Avenue
Syracuse, New York 13204
O +1 315 468 1663
F +1 315 468-1664
www.jacobs.com

April 27, 2021

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
2021 First Semi-Annual Report
BPDES Permit Number 18-12-BU098**

Dear Ms. Adams:

Enclosed please find the 2021 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 1,167,300 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from September 09, 2020 through April 08, 2021 for a total of 211 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 08, 2021. 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, mercury and pH was collected as a composite sample. The pH reported on the discharge monitoring report is the pH reported on the laboratory report. A second pH was taken in the field and reported on the field sampling notes. 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. Eric Christodoulatos (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Jason Paananen (City of Buffalo)
Mr. Robert Gersh (Wood E&IS)

Table 1
Alltiff Landfill/Ramco Steel Site
First Semi-annual Report for 2021
Discharge Monitoring Report

BSA Permit No. 18-12-BU098	April 8, 2021
Sample Date:	Onsite Pump Station to BSA
Sample Location:	

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	6.85		0.100	SU	6.85	SU	5.0 - 12.0	SU
Copper	ND		0.05	mg/L	ND	lbs/day	7.68	lbs/day
Mercury	0.00038	J	0.0006	mg/l	0.00038	mg/l	0.0008	mg/l
Zinc	0.0475	J	0.1	mg/L	0.0022	lbs/day	12	lbs/day
Total Suspended Solids	20		4.0	mg/L	20.0	mg/L	250	mg/L
Total Phosphorus	0.120		0.050	mg/L	0.12	mg/L	15.35	mg/L
USEPA Test Method 624	ND - 429	J		µg/L	Monitor Only			
USEPA Test Method 625	ND-2.3			µg/L				
Total Flow (average)	3.84			gpm	5,532	gpd	57,600	gpd

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: Aruna, 4/22/2021
Checked by, Date: John Formoza, 4/26/2021

Flow Calculations		Meter	
Initial Reading (pump station)	219100		9/9/2020
Final Reading (pump station)	1152800		2/4/2021
Initial Reading (pump station)	0		2/4/2021
Final Reading (pump station)	102000		3/10/2021
Initial Reading (pump station)	0		3/10/2021
Final Reading (pump station)	131600		4/8/2021
Total Days in Period			211
Total Flow for Period		1,167,300	gallons
Average Flow for Period		3.84	gpm

Note: New flow meter installed on 02/04/2021 and 03/10/2021

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	Totalizer Reading (gallons)
9/9/2020	219,100
10/30/2020	410,300
11/12/2020	442,800
11/24/2020	520,600
1/6/2021	874,300
2/4/2021	1,152,800
2/4/2021	0
3/2/2021	97,100
3/10/2021	102,000
3/10/2021	0
3/16/2021	35,800
4/8/2021	131,600

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."

 AREA MANAGER 04/27/2021

John W. Formoza
Jacobs

Date



Project Name Honeywell - ~~CGS~~ ~~Swag~~ ~~use~~ Alltiff (Semi-Annual)
 Job Number HWIHCJPM73507
 Field Team A. Petrilli; B. Hendry
 Field Conditions 48°F; Sunny

Sampling Event OM Phase (Semi Annual)
 Date 4/18/2021
 Page 1 of 1

Well/Sample Number BSA Discharge / Outfall

Start Time _____ Finish Time _____

Initial Depth to Water _____

Measure Point: P.O.

Site Code _____

Notes Edge of metal grate cover

Purge Method:

Overhead _____ Dea. Pump _____ Other N/A

Sample Method: Bailer

Sample ID

Duplicate Sample ID

Split Sample ID

Grab 1 - 040821

Grab 2 - 040821

Grab 3 - 040821

Grab 4 - 040821

Comp 040821

Sample Time

Dupl. Time

Split Time

Depth to Bottom (from meas. pt): _____

Min. Purge Volume (gal)/(L) N/A

Purge Rate (gpm)/(mL/min) N/A

Water Quality Parameter Measurement Technique:

Flow-through

In situ

Open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10 NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	En / ORP mv +/-10 mV	DTW ft
0930	-	Grab collect sample Grab 1 - 040821 Collect (3) 40 mL vials w/ HCL preserve for VOCs Collect (2) 1L non-P amber jars for SVOCs						-
1130	-	Grab collect sample Grab 2 - 040821 Collect (3) 40 mL vials w/ HCL preserve for VOCs Collect (2) 1L non-P amber jars for SVOCs						-
1330	-	Grab collect sample Grab 3 - 040821 Collect (3) 40 mL vials w/ HCL preserve for VOCs Collect (2) 1L non-P amber jars for SVOCs						-
1530	-	Grab collect sample Grab 4 - 040821 Collect (3) 40 mL vials w/ HCL preserve for VOCs Collect (2) 1L non-P amber jars for SVOCs						-
1545	-	Collect sample COMP - 040821 Collect (2) 1L non-p poly containers for TSS Collect (1) 500 mL poly w/ HNO3 for total Hg Collect (1) 500 mL poly w/ HNO3 for metals Collect (1) Collect (1)						-

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
see above			Non-Field Filtered			Samples used down prior to sending to lab

Remarks:

Lab generated trip blank included with shipment.
 All samples collected shipped via FedEx overnight service;
 TRACKING NO. 15 1215 0025 4110
 9251 0897 3995

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

PO# A000804776

SGS Job Number: JD23118

Sampling Date: 04/08/21



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: **69**



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.



Caitlin Brice, M.S.
General Manager

Client Service contact: Kristin Degraw 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: JD23118-1: GRAB 1 THRU 4-040821/BSA DISCHARGE	8
4.2: JD23118-2: COMP-040821/BSA DISCHARGE	12
4.3: JD23118-3: TRIP BLANK	14
Section 5: Misc. Forms	16
5.1: Certification Exceptions	17
5.2: Chain of Custody	18
Section 6: MS Volatiles - QC Data Summaries	20
6.1: Method Blank Summary	21
6.2: Blank Spike Summary	23
6.3: Matrix Spike Summary	25
6.4: Duplicate Summary	27
6.5: Instrument Performance Checks (BFB)	29
6.6: Surrogate Recovery Summaries	32
Section 7: MS Semi-volatiles - QC Data Summaries	33
7.1: Method Blank Summary	34
7.2: Blank Spike/Blank Spike Duplicate Summary	40
7.3: Instrument Performance Checks (DFTPP)	42
7.4: Surrogate Recovery Summaries	50
Section 8: Metals Analysis - QC Data Summaries	51
8.1: Prep QC MP25950: Cu,Zn	52
8.2: Prep QC MP25996: Hg	62
Section 9: General Chemistry - QC Data Summaries	66
9.1: Method Blank and Spike Results Summary	67
9.2: Duplicate Results Summary	68
9.3: Matrix Spike Results Summary	69



Sample Summary

Honeywell International Inc. OMM work

Job No: JD23118

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: PO# A000804776

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID

This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL
Metals ND = Not detected above the MDL
General Chemistry ND = Not detected above the MDL

JD23118-1	04/08/21	15:30	BH	04/09/21	AQ	Ground Water	GRAB 1 THRU 4-040821/BSA DISCHARGE
JD23118-2	04/08/21	15:45	BH	04/09/21	AQ	Ground Water	COMP-040821/BSA DISCHARGE
JD23118-3	04/08/21	15:45	BH	04/09/21	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Honeywell International Inc. OMM work

Job No JD23118

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

Report Date 4/16/2021 4:01:38 PM

On 04/09/2021, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.1 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD23118 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: VN12192

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD23045-1MS, JD23045-2DUP, JD23045-1MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Chloromethane, Vinyl chloride are outside control limits. High percent recovery and no associated positive reported in the QC batch.
- Matrix Spike Recovery(s) for Chloromethane, Dichlorodifluoromethane, Vinyl chloride are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for cis-1,2-Dichloroethene, Trichloroethene are outside control limits for sample JD23045-2DUP. Outside control limits due to vial differences.
- JD23118-1: Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
- JD23118-3: (pH=3)Sample pH did not satisfy field preservation criteria.Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
- JD23118-1 for Chloroform: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD23118-3 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD23118-3 for Chloroform: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD23118-1 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD23045-2DUP for Trichloroethene: RPD acceptable due to low DUP and sample concentrations.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Outside control limits due to acid preservation.

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ

Batch ID: OP32765

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Benzidine are outside control limits.
- JD23118-1 for Benzidine: The percent recovery for this compound in the associated BS,BSD is below in-house control limits indicating potential low bias.

Friday, April 16, 2021

Page 1 of 2

Metals Analysis By Method EPA 200.7

Matrix: AQ

Batch ID: MP25950

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD22961-3MS, JD22961-3MSD, JD22961-3SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Copper are outside control limits for sample MP25950-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD23118-2 for Zinc: Elevated sample detection limit due to difficult sample matrix.
- JD23118-2 for Copper: Elevated sample detection limit due to difficult sample matrix.

Metals Analysis By Method EPA 245.1

Matrix: AQ

Batch ID: MP25996

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD23099-1MS, JD23099-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 365.3

Matrix: AQ

Batch ID: GP33178

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD22974-2DUP, JD22974-2MS were used as the QC samples for Phosphorus, Total.

General Chemistry By Method SM2540 D-11

Matrix: AQ

Batch ID: GN17159

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD23157-1DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ

Batch ID: R190304

- The data for SM4500H+ B-11 meets quality control requirements.
- JD23118-2 for pH: Sample received out of holding time for pH analysis. Temp of pH Reading: 13.4 Deg. C

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: JD23118

Account: Honeywell International Inc. OMM work

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

Collected: 04/08/21



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

JD23118-1 GRAB 1 THRU 4-040821/BSA DISCHARGE

Benzene ^a	66.9	1.0	0.34	ug/l	EPA 624.1
Chlorobenzene ^a	81.0	1.0	0.33	ug/l	EPA 624.1
1,2-Dichlorobenzene ^a	0.56 J	1.0	0.30	ug/l	EPA 624.1
1,4-Dichlorobenzene ^a	1.3	1.0	0.63	ug/l	EPA 624.1
Ethylbenzene ^a	157	1.0	0.30	ug/l	EPA 624.1
Toluene ^a	95.1	1.0	0.36	ug/l	EPA 624.1
Xylenes (total) ^a	429	1.0	0.35	ug/l	EPA 624.1
Phenol	0.69 J	1.9	0.37	ug/l	EPA 625.1
4-Chloroaniline	2.3 J	4.8	0.32	ug/l	EPA 625.1
1,2-Dichlorobenzene	0.39 J	0.95	0.16	ug/l	EPA 625.1
1,3-Dichlorobenzene	0.22 J	0.95	0.18	ug/l	EPA 625.1
1,4-Dichlorobenzene	0.84 J	0.95	0.16	ug/l	EPA 625.1
Naphthalene	1.6	0.95	0.22	ug/l	EPA 625.1
N-Nitrosodiphenylamine	0.43 J	4.8	0.21	ug/l	EPA 625.1

JD23118-2 COMP-040821/BSA DISCHARGE

Mercury	0.38 J	0.60	0.27	ug/l	EPA 245.1
Zinc ^b	47.5 J	100	43	ug/l	EPA 200.7
Phosphorus, Total	0.12	0.050	0.027	mg/l	EPA 365.3
Solids, Total Suspended	20.0	4.0	1.5	mg/l	SM2540 D-11
pH ^c	6.85			su	SM4500H+ B-11

JD23118-3 TRIP BLANK

No hits reported in this sample.

(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) Elevated sample detection limit due to difficult sample matrix.

(c) Sample received out of holding time for pH analysis. Temp of pH Reading: 13.4 Deg. C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-040821/BSA DISCHARGE			Date Sampled:	04/08/21
Lab Sample ID:	JD23118-1			Date Received:	04/09/21
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	N287279.D	1	04/12/21 17:31	KC	n/a	n/a	VN12192
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	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	2.5	ug/l	
71-43-2	Benzene	66.9	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane ^b	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	81.0	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform ^c	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane ^b	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	0.56	1.0	0.30	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	1.3	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	157	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	95.1	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	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 THRU 4-040821/BSA DISCHARGE		
Lab Sample ID:	JD23118-1	Date Sampled:	04/08/21
Matrix:	AQ - Ground Water	Date Received:	04/09/21
Method:	EPA 624.1	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.33	ug/l	
75-01-4	Vinyl chloride ^c	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	429	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	116%		76-122%
2037-26-5	Toluene-D8 (SUR)	94%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98%		80-120%
1868-53-7	Dibromofluoromethane (S)	109%		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) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike 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 THRU 4-040821/BSA DISCHARGE			Date Sampled:	04/08/21
Lab Sample ID:	JD23118-1			Date Received:	04/09/21
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	3E113021.D	1	04/15/21 07:48	CS	04/13/21 19:40	OP32765	E3E5133
Run #2							

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

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.8	0.78	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.85	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	9.5	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	0.91	ug/l	
100-02-7	4-Nitrophenol	ND	9.5	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	4.8	1.3	ug/l	
108-95-2	Phenol	0.69	1.9	0.37	ug/l	J
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.88	ug/l	
83-32-9	Acenaphthene	ND	0.95	0.18	ug/l	
208-96-8	Acenaphthylene	ND	0.95	0.13	ug/l	
120-12-7	Anthracene	ND	0.95	0.20	ug/l	
92-87-5	Benzidine ^a	ND	9.5	0.86	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.95	0.19	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.95	0.20	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.95	0.20	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.95	0.32	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.95	0.20	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.38	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.44	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.22	ug/l	
106-47-8	4-Chloroaniline	2.3	4.8	0.32	ug/l	J
218-01-9	Chrysene	ND	0.95	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.26	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	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.35	ug/l	
95-50-1	1,2-Dichlorobenzene	0.39	0.95	0.16	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	0.95	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	0.22	0.95	0.18	ug/l	J

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 THRU 4-040821/BSA DISCHARGE	Date Sampled:	04/08/21
Lab Sample ID:	JD23118-1	Date Received:	04/09/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 625.1 EPA 625		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	0.84	0.95	0.16	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	0.95	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.95	0.45	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	0.48	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.95	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.47	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	0.95	0.16	ug/l	
86-73-7	Fluorene	ND	0.95	0.16	ug/l	
118-74-1	Hexachlorobenzene	ND	0.95	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.95	0.47	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.5	2.6	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.37	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.95	0.32	ug/l	
78-59-1	Isophorone	ND	1.9	0.26	ug/l	
91-20-3	Naphthalene	1.6	0.95	0.22	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.61	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	0.43	4.8	0.21	ug/l	J
85-01-8	Phenanthrene	ND	0.95	0.17	ug/l	
129-00-0	Pyrene	ND	0.95	0.21	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		10-110%
4165-62-2	Phenol-d5	18%		10-110%
118-79-6	2,4,6-Tribromophenol	78%		35-147%
4165-60-0	Nitrobenzene-d5	73%		32-132%
321-60-8	2-Fluorobiphenyl	73%		40-117%
1718-51-0	Terphenyl-d14	78%		33-126%

(a) The percent recovery for this compound in the associated BS,BSD is below in-house control limits indicating potential low bias.

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-040821/BSA DISCHARGE	Date Sampled:	04/08/21
Lab Sample ID:	JD23118-2	Date Received:	04/09/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By		Method	Prep Method
Copper ^a	ND	50	21	ug/l	1	04/13/21	04/14/21	LL	EPA 200.7 ¹	EPA 200.7 ³
Mercury	0.38 J	0.60	0.27	ug/l	1	04/15/21	04/16/21	LL	EPA 245.1 ²	EPA 245.1 ⁴
Zinc ^a	47.5 J	100	43	ug/l	1	04/13/21	04/14/21	LL	EPA 200.7 ¹	EPA 200.7 ³

- (1) Instrument QC Batch: MA50379
- (2) Instrument QC Batch: MA50382
- (3) Prep QC Batch: MP25950
- (4) Prep QC Batch: MP25996

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	COMP-040821/BSA DISCHARGE	Date Sampled:	04/08/21
Lab Sample ID:	JD23118-2	Date Received:	04/09/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Phosphorus, Total	0.12	0.050	0.027	mg/l	1	04/14/21 12:05 MP	EPA	365.3
Solids, Total Suspended	20.0	4.0	1.5	mg/l	1	04/12/21 22:03 TB	SM2540 D-11	
pH ^a	6.85			su	1	04/12/21 14:34 KG	SM4500H+	B-11

(a) Sample received out of holding time for pH analysis. Temp of pH Reading: 13.4 Deg. C

RL = Reporting Limit
MDL = Method Detection Limit

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

4.2
4

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/08/21
Lab Sample ID:	JD23118-3	Date Received:	04/09/21
Matrix:	AQ - Trip Blank 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	N287278.D	1	04/12/21 17:01	KC	n/a	n/a	VN12192
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	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane ^b	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform ^c	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane ^b	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	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:	TRIP BLANK	Date Sampled:	04/08/21
Lab Sample ID:	JD23118-3	Date Received:	04/09/21
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 624.1		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.33	ug/l	
75-01-4	Vinyl chloride ^c	ND	1.0	0.79	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)	118%		76-122%
2037-26-5	Toluene-D8 (SUR)	90%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	92%		80-120%
1868-53-7	Dibromofluoromethane (S)	114%		80-120%

(a) (pH= 3)Sample pH did not satisfy field preservation criteria. Results reported from the HCl preserved sample.

The reported result for acrolein is for screening only and cannot be used for compliance purposes.

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

(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike 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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JD23118
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft 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
1,4-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.

AW
TVB

CHAIN OF CUSTODY

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

THIS COOLER CONTAINS
ALL POLY CONTAINERS

PAGE 1 OF 1

Copy

SGS

ACCUTEST

SGS Accutest - Dayton

2235 Route 130, Dayton, NJ 08810

TEL: 732-329-0200 FAX: 732-329-1499/3480

www.accutest.com

FEDEX Tracking #

625 4025 410

SGS Accutest Quote #

HWBLJOMM73509

Bottle Order Control #

NONE

SGS Accutest Job #

JD23118

Client / Reporting Information

Company Name

Honeywell International Inc

Street Address

1563 Willis Ave 13204

City State Zip

Syracuse, New York 13204

Project Contact

John Formoza John.formoza@jacobs.com

Phone # Fax #

315-532-5608

Samplers (Names)

Ben Hendry 315-806-4029

Project Information

Project Name

30130 - Alltft OM Phase/ Semi Annual - Project # HWINCJOMM73507

Street

579 Tiftt Street

Billing Information (if different from Report to)

Company Name

Honeywell International Inc

Street Address

115 Tabor Road

City State Zip

Morris Plains, NJ 07950

Project Manager

Chuck Geadelmann

Attention:

HTS-RES.LAB@Honeywell.com

Requested Analysis (see TEST CODE sheet)

TP04 - Phosphorus Total (EPA86.3)

EPA 200.7 MTAL - Cu, Zn, SW7900A Total Hg

TSS - Total Suspended Solids (2540 C)

pH - SM20 4500 H

V624 PPL - EPA 624 - VOA

625 Priority Pollutant List SVOC - 4 chloroaniline

SW74/0A - Total Hg

Matrix Codes

DW - Drinking Water

GW - Ground Water

WW - Water

SW - Surface Water

SO - Soil

SL - Sludge

SED - Sediment

LIQ - Other Liquid

AIR - Air

SOL - Other Solid

WP - Wipe

FB Field Blank

EQ Equipment Blank

RB Rinse Blank

TB TB

Blank

SGS Accutest Sample #

Field ID / Point of Collection

MEGHDI Vial #

Date

Time

Sampled by

Matrix

of bottles

VC

NICH

HN03

HN04

NCNE

23 Water

MECH

ENCORE

Number of preserved Bottles

1

1

2

1

2

1

1

2

1

2

LAB USE ONLY

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

Turnaround Time (Business days)

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

Std. 10 Business Days

5 Day RUSH

3 Day RUSH

2 Day RUSH

1 Day RUSH

other

Emergency & Rush T.A data available: VIA Lablink

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:

4/18/21

Received By:

4/19/21

Relinquished by Sampler:

4/19/21

Received By:

4/19/21

Relinquished by:

4/19/21

Received By:

4/19/21

Custody Seal #

4402

Intact

Not intact

Preserved where applicable

On Ice

Cooler Temp.

4.4°C

Prior to analysis grab samples to be composited by lab

Sample inventory is verified upon receipt in the Laboratory

JD23118: Chain of Custody

Page 1 of 2

SGS

18 of 69

JD23118

SGS Sample Receipt Summary

Job Number: JD23118

Client: HONEYWELL INTERNATIONAL

Project: 30130-ALTIFT OM PHASE/SEMI ANNUAL

Date / Time Received: 4/9/2021 10:00:00 AM

Delivery Method: Fed Ex

Airbill #s: 1215 6025 4110

Cooler Temps (Raw Measured) °C: Cooler 1: (4.4);

Cooler Temps (Corrected) °C: Cooler 1: (3.1);

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: 212820	pH 12+: 203117A	Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JD23118: Chain of Custody

Page 2 of 2



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: JD23118**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
VN12192-MB	N287266.D	1	04/12/21	KC	n/a	n/a	VN12192

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

JD23118-1, JD23118-3

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	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	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.33	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

Job Number: JD23118
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
VN12192-MB	N287266.D	1	04/12/21	KC	n/a	n/a	VN12192

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

JD23118-1, JD23118-3

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	115% 76-122%
2037-26-5	Toluene-D8 (SUR)	91% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	93% 80-120%
1868-53-7	Dibromofluoromethane (S)	112% 80-120%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.52	79	ug/l	J
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Page 1 of 2

Job Number: JD23118**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
VN12192-BS	N287264.D	1	04/12/21	KC	n/a	n/a	VN12192

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

JD23118-1, JD23118-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	15.4	77	60-140
107-13-1	Acrylonitrile	20	24.2	121	64-137
71-43-2	Benzene	20	19.8	99	78-118
75-27-4	Bromodichloromethane	20	20.2	101	77-119
75-25-2	Bromoform	20	20.5	103	70-128
74-83-9	Bromomethane	20	27.7	139	59-141
56-23-5	Carbon tetrachloride	20	20.6	103	69-130
108-90-7	Chlorobenzene	20	18.6	93	78-116
75-00-3	Chloroethane	20	24.5	123	63-136
110-75-8	2-Chloroethyl vinyl ether	100	107	107	55-147
67-66-3	Chloroform	20	18.6	93	78-122
74-87-3	Chloromethane	20	27.9	140* a	49-125
124-48-1	Dibromochloromethane	20	19.1	96	75-117
95-50-1	1,2-Dichlorobenzene	20	18.6	93	76-115
541-73-1	1,3-Dichlorobenzene	20	18.4	92	75-114
106-46-7	1,4-Dichlorobenzene	20	18.0	90	75-113
75-71-8	Dichlorodifluoromethane	20	24.4	122	48-129
75-34-3	1,1-Dichloroethane	20	21.6	108	73-124
107-06-2	1,2-Dichloroethane	20	19.7	99	74-127
75-35-4	1,1-Dichloroethene	20	19.1	96	54-122
156-59-2	cis-1,2-Dichloroethene	20	18.6	93	72-115
156-60-5	trans-1,2-Dichloroethene	20	19.4	97	70-121
78-87-5	1,2-Dichloropropane	20	20.4	102	75-118
10061-01-5	cis-1,3-Dichloropropene	20	19.0	95	76-118
10061-02-6	trans-1,3-Dichloropropene	20	18.7	94	70-122
100-41-4	Ethylbenzene	20	19.0	95	76-118
75-09-2	Methylene chloride	20	20.2	101	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	18.0	90	66-119
127-18-4	Tetrachloroethene	20	17.2	86	70-130
108-88-3	Toluene	20	17.5	88	78-119
71-55-6	1,1,1-Trichloroethane	20	20.6	103	74-130
79-00-5	1,1,2-Trichloroethane	20	18.5	93	74-121
79-01-6	Trichloroethene	20	18.9	95	78-117
75-69-4	Trichlorofluoromethane	20	23.0	115	66-126
75-01-4	Vinyl chloride	20	28.7	144* a	54-125
1330-20-7	Xylenes (total)	60	57.1	95	76-120

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD23118

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
VN12192-BS	N287264.D	1	04/12/21	KC	n/a	n/a	VN12192

The QC reported here applies to the following samples:

Method: EPA 624.1

JD23118-1, JD23118-3

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	115%	76-122%
2037-26-5	Toluene-D8 (SUR)	95%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	93%	80-120%
1868-53-7	Dibromofluoromethane (S)	105%	80-120%

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

* = Outside of Control Limits.

Matrix Spike Summary

Page 1 of 2

Job Number: JD23118

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
JD23045-1MS	N287274.D	1	04/12/21	KC	n/a	n/a	VN12192
JD23045-1	N287269.D	1	04/12/21	KC	n/a	n/a	VN12192

The QC reported here applies to the following samples:

Method: EPA 624.1

JD23118-1, JD23118-3

CAS No.	Compound	JD23045-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
107-02-8	Acrolein	ND		20	15.5	78	40-154
107-13-1	Acrylonitrile	ND		20	22.1	111	60-142
71-43-2	Benzene	ND		20	19.5	98	59-136
75-27-4	Bromodichloromethane	ND		20	19.3	97	73-125
75-25-2	Bromoform	ND		20	19.5	98	62-134
74-83-9	Bromomethane	ND		20	27.6	138	54-149
56-23-5	Carbon tetrachloride	ND		20	22.0	110	70-140
108-90-7	Chlorobenzene	ND		20	17.9	90	69-128
75-00-3	Chloroethane	ND		20	26.0	130	58-145
110-75-8	2-Chloroethyl vinyl ether	ND		100	ND	0* a	10-179
67-66-3	Chloroform	ND		20	18.2	91	71-131
74-87-3	Chloromethane	ND		20	28.9	145* b	44-136
124-48-1	Dibromochloromethane	ND		20	18.2	91	72-123
95-50-1	1,2-Dichlorobenzene	ND		20	17.4	87	69-123
541-73-1	1,3-Dichlorobenzene	ND		20	17.6	88	71-122
106-46-7	1,4-Dichlorobenzene	ND		20	17.5	88	69-121
75-71-8	Dichlorodifluoromethane	ND		20	29.1	146* b	42-138
75-34-3	1,1-Dichloroethane	ND		20	21.7	109	66-132
107-06-2	1,2-Dichloroethane	ND		20	19.4	97	68-140
75-35-4	1,1-Dichloroethene	ND		20	20.1	101	49-127
156-59-2	cis-1,2-Dichloroethene	0.61	J	20	18.7	90	50-134
156-60-5	trans-1,2-Dichloroethene	ND		20	20.1	101	63-129
78-87-5	1,2-Dichloropropane	ND		20	19.5	98	73-123
10061-01-5	cis-1,3-Dichloropropene	ND		20	17.5	88	71-124
10061-02-6	trans-1,3-Dichloropropene	ND		20	18.7	94	66-127
100-41-4	Ethylbenzene	ND		20	18.8	94	65-130
75-09-2	Methylene chloride	ND		20	19.3	97	65-127
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	17.2	86	62-126
127-18-4	Tetrachloroethene	ND		20	17.9	90	51-145
108-88-3	Toluene	ND		20	17.3	87	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	18.6	93	46-145
75-69-4	Trichlorofluoromethane	ND		20	26.2	131	57-139
75-01-4	Vinyl chloride	ND		20	32.1	161* b	45-136
1330-20-7	Xylenes (total)	ND		60	56.4	94	66-131

* = Outside of Control Limits.

Matrix Spike Summary

Page 2 of 2

Job Number: JD23118

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
JD23045-1MS	N287274.D	1	04/12/21	KC	n/a	n/a	VN12192
JD23045-1	N287269.D	1	04/12/21	KC	n/a	n/a	VN12192

The QC reported here applies to the following samples:

Method: EPA 624.1

JD23118-1, JD23118-3

CAS No.	Surrogate Recoveries	MS	JD23045-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	115%	121%	76-122%
2037-26-5	Toluene-D8 (SUR)	97%	92%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	94%	92%	80-120%
1868-53-7	Dibromofluoromethane (S)	107%	113%	80-120%

(a) Outside control limits due to acid preservation.

(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 2

Job Number: JD23118

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
JD23045-2DUP	N287276.D	1	04/12/21	KC	n/a	n/a	VN12192
JD23045-2	N287270.D	1	04/12/21	KC	n/a	n/a	VN12192

The QC reported here applies to the following samples:

Method: EPA 624.1

JD23118-1, JD23118-3

CAS No.	Compound	JD23045-2 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	2.6	4.9		61* a	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	0.71	J	200* b	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: JD23118

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
JD23045-2DUP	N287276.D	1	04/12/21	KC	n/a	n/a	VN12192
JD23045-2	N287270.D	1	04/12/21	KC	n/a	n/a	VN12192

The QC reported here applies to the following samples:

Method: EPA 624.1

JD23118-1, JD23118-3

CAS No.	Surrogate Recoveries	DUP	JD23045-2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	117%	108%	76-122%
2037-26-5	Toluene-D8 (SUR)	92%	93%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	93%	96%	80-120%
1868-53-7	Dibromofluoromethane (S)	113%	106%	80-120%

(a) Outside control limits due to vial differences.

(b) RPD acceptable due to low DUP and sample concentrations.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VN12135-BFB

Injection Date: 02/13/21

Lab File ID: N285928.D

Injection Time: 12:53

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	22968	17.5	Pass
75	30.0 - 60.0% of mass 95	66544	50.7	Pass
95	Base peak, 100% relative abundance	131178	100.0	Pass
96	5.0 - 9.0% of mass 95	9169	6.99	Pass
173	Less than 2.0% of mass 174	548	0.42 (0.43) ^a	Pass
174	50.0 - 120.0% of mass 95	126410	96.4	Pass
175	5.0 - 9.0% of mass 174	9808	7.48 (7.76) ^a	Pass
176	95.0 - 101.0% of mass 174	124562	95.0 (98.5) ^a	Pass
177	5.0 - 9.0% of mass 176	8161	6.22 (6.55) ^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
VN12135-IC12135	N285929.D	02/13/21	13:34	00:41	Initial cal 0.2
VN12135-IC12135	N285930.D	02/13/21	14:04	01:11	Initial cal 0.5
VN12135-IC12135	N285931.D	02/13/21	14:33	01:40	Initial cal 1
VN12135-IC12135	N285932.D	02/13/21	15:02	02:09	Initial cal 2
VN12135-IC12135	N285933.D	02/13/21	15:32	02:39	Initial cal 4
VN12135-IC12135	N285934.D	02/13/21	16:01	03:08	Initial cal 8
VN12135-ICC12135	N285935.D	02/13/21	16:30	03:37	Initial cal 20
VN12135-IC12135	N285936.D	02/13/21	17:00	04:07	Initial cal 50
VN12135-IC12135	N285937.D	02/13/21	17:29	04:36	Initial cal 100
VN12135-IC12135	N285938.D	02/13/21	17:58	05:05	Initial cal 200
VN12135-ICV12135	N285941.D	02/13/21	19:26	06:33	Initial cal verification 20
VN12135-ICV12135	N285942.D	02/13/21	19:55	07:02	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VN12135-BFB2

Injection Date: 02/15/21

Lab File ID: N285946.D

Injection Time: 10:40

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	22570	16.1	Pass
75	30.0 - 60.0% of mass 95	66944	47.8	Pass
95	Base peak, 100% relative abundance	140040	100.0	Pass
96	5.0 - 9.0% of mass 95	9154	6.54	Pass
173	Less than 2.0% of mass 174	343	0.24 (0.25) ^a	Pass
174	50.0 - 120.0% of mass 95	138173	98.7	Pass
175	5.0 - 9.0% of mass 174	10240	7.31 (7.41) ^a	Pass
176	95.0 - 101.0% of mass 174	134648	96.1 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	9207	6.57 (6.84) ^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
VN12135-ICV12135	N285947.D	02/15/21	11:12	00:32	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VN12192-BFB

Injection Date: 04/12/21

Lab File ID: N287263.D

Injection Time: 09:20

Instrument ID: GCMSN

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	19414	19.0	Pass
75	30.0 - 60.0% of mass 95	52445	51.3	Pass
95	Base peak, 100% relative abundance	102293	100.0	Pass
96	5.0 - 9.0% of mass 95	6642	6.49	Pass
173	Less than 2.0% of mass 174	597	0.58 (0.58) ^a	Pass
174	50.0 - 120.0% of mass 95	102720	100.4	Pass
175	5.0 - 9.0% of mass 174	8003	7.82 (7.79) ^a	Pass
176	95.0 - 101.0% of mass 174	99898	97.7 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	6772	6.62 (6.78) ^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
VN12192-CC12135	N287264.D	04/12/21	09:50	00:30	Continuing cal 20
VN12192-BS	N287264.D	04/12/21	09:50	00:30	Blank Spike
VN12192-MB	N287266.D	04/12/21	10:58	01:38	Method Blank
ZZZZZZ	N287267.D	04/12/21	11:34	02:14	(unrelated sample)
JD23045-1	N287269.D	04/12/21	12:33	03:13	(used for QC only; not part of job JD23118)
JD23045-2	N287270.D	04/12/21	13:03	03:43	(used for QC only; not part of job JD23118)
ZZZZZZ	N287271.D	04/12/21	13:33	04:13	(unrelated sample)
ZZZZZZ	N287272.D	04/12/21	14:03	04:43	(unrelated sample)
JD23045-1MS	N287274.D	04/12/21	15:02	05:42	Matrix Spike
JD23045-2DUP	N287276.D	04/12/21	16:02	06:42	Duplicate
ZZZZZZ	N287277.D	04/12/21	16:32	07:12	(unrelated sample)
JD23118-3	N287278.D	04/12/21	17:01	07:41	TRIP BLANK
JD23118-1	N287279.D	04/12/21	17:31	08:11	GRAB 1 THRU 4-040821/BSA DISCHARGE
ZZZZZZ	N287280.D	04/12/21	18:01	08:41	(unrelated sample)
ZZZZZZ	N287282.D	04/12/21	19:00	09:40	(unrelated sample)
ZZZZZZ	N287283.D	04/12/21	19:30	10:10	(unrelated sample)
ZZZZZZ	N287284.D	04/12/21	19:59	10:39	(unrelated sample)
ZZZZZZ	N287285.D	04/12/21	20:29	11:09	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD23118
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
JD23118-1	N287279.D	116	94	98	109
JD23118-3	N287278.D	118	90	92	114
JD23045-1MS	N287274.D	115	97	94	107
JD23045-2DUP	N287276.D	117	92	93	113
VN12192-BS	N287264.D	115	95	93	105
VN12192-MB	N287266.D	115	91	93	112

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 3

Job Number: JD23118**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
OP32765-MB1	3E113001.D	1	04/14/21	CS	04/13/21	OP32765	E3E5133

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

JD23118-1

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	
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	

Method Blank Summary

Page 2 of 3

Job Number: JD23118

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
OP32765-MB1	3E113001.D	1	04/14/21	CS	04/13/21	OP32765	E3E5133

The QC reported here applies to the following samples:

Method: EPA 625.1

JD23118-1

CAS No.	Compound	Result	RL	MDL	Units	Q
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	
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	57% 10-110%
4165-62-2	Phenol-d5	35% 10-110%
118-79-6	2,4,6-Tribromophenol	83% 35-147%
4165-60-0	Nitrobenzene-d5	88% 32-132%
321-60-8	2-Fluorobiphenyl	88% 40-117%
1718-51-0	Terphenyl-d14	101% 33-126%

Method Blank Summary

Job Number: JD23118
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP32765-MB1	3E113001.D	1	04/14/21	CS	04/13/21	OP32765	E3E5133

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

JD23118-1

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Page 1 of 3

Job Number: JD23118**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
OP32765-MB1	F198707.D	1	04/15/21	HSS	04/13/21	OP32765	EF8663

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

JD23118-1

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	
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	

Method Blank Summary

Page 2 of 3

Job Number: JD23118

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
OP32765-MB1	F198707.D	1	04/15/21	HSS	04/13/21	OP32765	EF8663

The QC reported here applies to the following samples:

Method: EPA 625.1

JD23118-1

CAS No.	Compound	Result	RL	MDL	Units	Q
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	
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	52% 10-110%
4165-62-2	Phenol-d5	32% 10-110%
118-79-6	2,4,6-Tribromophenol	92% 35-147%
4165-60-0	Nitrobenzene-d5	76% 32-132%
321-60-8	2-Fluorobiphenyl	80% 40-117%
1718-51-0	Terphenyl-d14	90% 33-126%

Method Blank Summary

Job Number: JD23118
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tift Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP32765-MB1	F198707.D	1	04/15/21	HSS	04/13/21	OP32765	EF8663

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

JD23118-1

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: JD23118

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
OP32765-BS1	3E113002.D	1	04/14/21	CS	04/13/21	OP32765	E3E5133
OP32765-BSD	3E113003.D	1	04/15/21	CS	04/13/21	OP32765	E3E5133

The QC reported here applies to the following samples:

Method: EPA 625.1

JD23118-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	43.9	88	45.6	91	4	43-100/22
59-50-7	4-Chloro-3-methyl phenol	50	46.5	93	46.7	93	0	46-110/21
120-83-2	2,4-Dichlorophenol	50	47.9	96	47.7	95	0	44-109/21
105-67-9	2,4-Dimethylphenol	50	42.4	85	40.8	82	4	42-116/20
51-28-5	2,4-Dinitrophenol	100	89.3	89	92.6	93	4	38-131/27
534-52-1	4,6-Dinitro-o-cresol	50	50.6	101	53.3	107	5	50-124/26
88-75-5	2-Nitrophenol	50	48.8	98	49.9	100	2	44-109/21
100-02-7	4-Nitrophenol	50	31.9	64	31.9	64	0	14-110/23
87-86-5	Pentachlorophenol	100	92.9	93	95.1	95	2	25-128/25
108-95-2	Phenol	50	20.4	41	21.5	43	5	20-110/22
88-06-2	2,4,6-Trichlorophenol	50	49.3	99	49.9	100	1	52-118/24
83-32-9	Acenaphthene	50	42.0	84	43.5	87	4	47-110/24
208-96-8	Acenaphthylene	50	41.9	84	42.2	84	1	45-110/24
120-12-7	Anthracene	50	45.4	91	47.2	94	4	52-110/24
92-87-5	Benzidine	50	ND	0* a	ND	0* a	nc	10-110/65
56-55-3	Benzo(a)anthracene	50	45.1	90	46.1	92	2	53-110/20
50-32-8	Benzo(a)pyrene	50	47.2	94	48.2	96	2	55-110/23
205-99-2	Benzo(b)fluoranthene	50	46.8	94	46.3	93	1	57-110/23
191-24-2	Benzo(g,h,i)perylene	50	44.0	88	44.1	88	0	51-110/23
207-08-9	Benzo(k)fluoranthene	50	45.4	91	49.6	99	9	56-110/22
101-55-3	4-Bromophenyl phenyl ether	50	45.3	91	48.0	96	6	51-112/23
85-68-7	Butyl benzyl phthalate	50	49.4	99	51.4	103	4	50-122/23
91-58-7	2-Chloronaphthalene	50	41.2	82	42.1	84	2	41-110/26
106-47-8	4-Chloroaniline	50	31.0	62	30.5	61	2	10-110/44
218-01-9	Chrysene	50	43.8	88	45.5	91	4	52-110/20
111-91-1	bis(2-Chloroethoxy)methane	50	45.0	90	45.7	91	2	36-110/21
111-44-4	bis(2-Chloroethyl)ether	50	41.8	84	42.8	86	2	40-111/21
108-60-1	2,2'-Oxybis(1-chloropropane)	50	42.6	85	43.5	87	2	37-110/25
7005-72-3	4-Chlorophenyl phenyl ether	50	41.4	83	42.7	85	3	48-110/25
95-50-1	1,2-Dichlorobenzene	50	35.2	70	36.2	72	3	35-110/28
122-66-7	1,2-Diphenylhydrazine	50	44.8	90	46.5	93	4	39-128/23
541-73-1	1,3-Dichlorobenzene	50	33.6	67	34.5	69	3	32-110/28
106-46-7	1,4-Dichlorobenzene	50	33.1	66	34.6	69	4	33-110/27
121-14-2	2,4-Dinitrotoluene	50	51.8	104	51.4	103	1	61-117/25
606-20-2	2,6-Dinitrotoluene	50	51.3	103	51.1	102	0	61-119/23
91-94-1	3,3'-Dichlorobenzidine	50	38.3	76	37.4	74	2	20-110/33

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 2

Job Number: JD23118

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
OP32765-BS1	3E113002.D	1	04/14/21	CS	04/13/21	OP32765	E3E5133
OP32765-BSD	3E113003.D	1	04/15/21	CS	04/13/21	OP32765	E3E5133

The QC reported here applies to the following samples:

Method: EPA 625.1

JD23118-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
53-70-3	Dibenzo(a,h)anthracene	50	45.0	90	46.2	92	3	55-110/25
84-74-2	Di-n-butyl phthalate	50	48.4	97	50.1	100	3	55-118/25
117-84-0	Di-n-octyl phthalate	50	45.4	91	46.6	93	3	49-124/26
84-66-2	Diethyl phthalate	50	49.5	99	49.1	98	1	54-113/23
131-11-3	Dimethyl phthalate	50	48.2	96	48.3	97	0	56-110/23
117-81-7	bis(2-Ethylhexyl)phthalate	50	48.9	98	49.9	100	2	50-120/22
206-44-0	Fluoranthene	50	46.5	93	48.7	97	5	55-111/23
86-73-7	Fluorene	50	44.1	88	45.1	90	2	51-110/25
118-74-1	Hexachlorobenzene	50	42.5	85	45.7	91	7	47-116/23
87-68-3	Hexachlorobutadiene	50	31.1	62	33.4	67	7	24-110/34
77-47-4	Hexachlorocyclopentadiene	100	65.8	66	69.2	69	5	10-110/39
67-72-1	Hexachloroethane	50	30.7	61	32.8	66	7	28-110/34
193-39-5	Indeno(1,2,3-cd)pyrene	50	45.4	91	45.4	91	0	51-112/24
78-59-1	Isophorone	50	46.5	93	46.7	93	0	42-111/20
91-20-3	Naphthalene	50	40.4	81	40.6	81	0	34-110/25
98-95-3	Nitrobenzene	50	44.7	89	45.7	91	2	39-110/21
62-75-9	n-Nitrosodimethylamine	50	25.2	50	25.3	51	0	15-110/19
621-64-7	N-Nitroso-di-n-propylamine	50	44.5	89	45.3	91	2	33-117/21
86-30-6	N-Nitrosodiphenylamine	50	48.1	96	50.1	100	4	54-110/24
85-01-8	Phenanthrene	50	44.2	88	45.9	92	4	53-110/23
129-00-0	Pyrene	50	45.9	92	47.1	94	3	52-110/22
120-82-1	1,2,4-Trichlorobenzene	50	35.2	70	37.1	74	5	30-110/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	61%	64%	10-110%
4165-62-2	Phenol-d5	38%	40%	10-110%
118-79-6	2,4,6-Tribromophenol	95%	99%	35-147%
4165-60-0	Nitrobenzene-d5	92%	92%	32-132%
321-60-8	2-Fluorobiphenyl	87%	88%	40-117%
1718-51-0	Terphenyl-d14	97%	101%	33-126%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E3E5113-DFTPP

Injection Date: 02/16/21

Lab File ID: 3E112748.D

Injection Time: 02:38

Instrument ID: GCMS3E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	111992	42.2	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	137462	51.8	Pass
70	Less than 2.0% of mass 69	548	0.21 (0.40) ^a	Pass
127	40.0 - 60.0% of mass 198	143544	54.1	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	265536	100.0	Pass
199	5.0 - 9.0% of mass 198	17291	6.51	Pass
275	10.0 - 30.0% of mass 198	58813	22.1	Pass
365	1.0 - 100.0% of mass 198	6778	2.55	Pass
441	Present, but less than mass 443	22154	8.34 (74.6) ^b	Pass
442	40.0 - 100.0% of mass 198	153640	57.9	Pass
443	17.0 - 23.0% of mass 442	29699	11.2 (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
E3E5113-IC5113	3E112749.D	02/16/21	03:12	00:34	Initial cal 1
E3E5113-IC5113	3E112750.D	02/16/21	03:37	00:59	Initial cal 2
E3E5113-IC5113	3E112751.D	02/16/21	04:02	01:24	Initial cal 5
E3E5113-IC5113	3E112752.D	02/16/21	04:27	01:49	Initial cal 10
E3E5113-IC5113	3E112753.D	02/16/21	04:53	02:15	Initial cal 25
E3E5113-ICC5113	3E112754.D	02/16/21	05:18	02:40	Initial cal 50
E3E5113-IC5113	3E112755.D	02/16/21	05:43	03:05	Initial cal 80
E3E5113-IC5113	3E112756.D	02/16/21	06:08	03:30	Initial cal 100

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E3E5114-DFTPP

Injection Date: 02/16/21

Lab File ID: 3E112758.D

Injection Time: 06:55

Instrument ID: GCMS3E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	97706	38.7	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	119717	47.4	Pass
70	Less than 2.0% of mass 69	576	0.23 (0.48) ^a	Pass
127	40.0 - 60.0% of mass 198	136224	53.9	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	252674	100.0	Pass
199	5.0 - 9.0% of mass 198	17126	6.78	Pass
275	10.0 - 30.0% of mass 198	63821	25.3	Pass
365	1.0 - 100.0% of mass 198	7143	2.83	Pass
441	Present, but less than mass 443	24789	9.81 (79.0) ^b	Pass
442	40.0 - 100.0% of mass 198	162730	64.4	Pass
443	17.0 - 23.0% of mass 442	31384	12.4 (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
E3E5114-IC5114	3E112759.D	02/16/21	07:08	00:13	Initial cal 100
E3E5114-IC5114	3E112760.D	02/16/21	07:33	00:38	Initial cal 80
E3E5114-ICC5114	3E112761.D	02/16/21	07:58	01:03	Initial cal 50
E3E5114-IC5114	3E112762.D	02/16/21	08:23	01:28	Initial cal 25
E3E5114-IC5114	3E112763.D	02/16/21	08:48	01:53	Initial cal 10
E3E5114-IC5114	3E112764.D	02/16/21	09:13	02:18	Initial cal 5
E3E5114-IC5114	3E112765.D	02/16/21	09:38	02:43	Initial cal 2
E3E5114-IC5114	3E112766.D	02/16/21	10:03	03:08	Initial cal 1
E3E5114-ICV5113	3E112768.D	02/16/21	10:54	03:59	Initial cal verification 50
E3E5114-ICV5113	3E112769.D	02/16/21	12:01	05:06	Initial cal verification 50
E3E5114-ICV5114	3E112770.D	02/16/21	13:04	06:09	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 2

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E3E5133-DFTPP

Injection Date: 04/14/21

Lab File ID: 3E112996.D

Injection Time: 21:12

Instrument ID: GCMS3E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	108646	45.5	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	130662	54.8	Pass
70	Less than 2.0% of mass 69	702	0.29 (0.54) ^a	Pass
127	40.0 - 60.0% of mass 198	135677	56.9	Pass
197	Less than 1.0% of mass 198	726	0.30	Pass
198	Base peak, 100% relative abundance	238584	100.0	Pass
199	5.0 - 9.0% of mass 198	16577	6.95	Pass
275	10.0 - 30.0% of mass 198	52811	22.1	Pass
365	1.0 - 100.0% of mass 198	6250	2.62	Pass
441	Present, but less than mass 443	17141	7.18 (77.8) ^b	Pass
442	40.0 - 100.0% of mass 198	114219	47.9	Pass
443	17.0 - 23.0% of mass 442	22026	9.23 (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
E3E5133-CC5113	3E112997.D	04/14/21	21:30	00:18	Continuing cal 50
E3E5133-CC5114	3E112998.D	04/14/21	21:56	00:44	Continuing cal 50
E3E5133-CC5113	3E112999.D	04/14/21	22:21	01:09	Continuing cal 5
OP32765-MB1	3E113001.D	04/14/21	23:13	02:01	Method Blank
OP32765-BS1	3E113002.D	04/14/21	23:39	02:27	Blank Spike
OP32765-BSD	3E113003.D	04/15/21	00:04	02:52	Blank Spike Duplicate
ZZZZZZ	3E113004.D	04/15/21	00:30	03:18	(unrelated sample)
ZZZZZZ	3E113005.D	04/15/21	00:56	03:44	(unrelated sample)
ZZZZZZ	3E113006.D	04/15/21	01:22	04:10	(unrelated sample)
ZZZZZZ	3E113007.D	04/15/21	01:48	04:36	(unrelated sample)
ZZZZZZ	3E113008.D	04/15/21	02:14	05:02	(unrelated sample)
ZZZZZZ	3E113009.D	04/15/21	02:40	05:28	(unrelated sample)
ZZZZZZ	3E113010.D	04/15/21	03:05	05:53	(unrelated sample)
ZZZZZZ	3E113011.D	04/15/21	03:31	06:19	(unrelated sample)
ZZZZZZ	3E113012.D	04/15/21	03:57	06:45	(unrelated sample)
ZZZZZZ	3E113013.D	04/15/21	04:23	07:11	(unrelated sample)
ZZZZZZ	3E113014.D	04/15/21	04:49	07:37	(unrelated sample)
ZZZZZZ	3E113015.D	04/15/21	05:14	08:02	(unrelated sample)
ZZZZZZ	3E113016.D	04/15/21	05:40	08:28	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD23118
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample:	E3E5133-DFTPP	Injection Date:	04/14/21
Lab File ID:	3E112996.D	Injection Time:	21:12
Instrument ID:	GCMS3E		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	3E113017.D	04/15/21	06:06	08:54	(unrelated sample)
ZZZZZZ	3E113018.D	04/15/21	06:31	09:19	(unrelated sample)
ZZZZZZ	3E113019.D	04/15/21	06:57	09:45	(unrelated sample)
ZZZZZZ	3E113020.D	04/15/21	07:22	10:10	(unrelated sample)
JD23118-1	3E113021.D	04/15/21	07:48	10:36	GRAB 1 THRU 4-040821/BSA DISCHARGE

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EF8592-DFTPP

Injection Date: 02/08/21

Lab File ID: F197437.D

Injection Time: 20:13

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	142685	32.6	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	203080	46.4	Pass
70	Less than 2.0% of mass 69	258	0.06 (0.13) ^a	Pass
127	40.0 - 60.0% of mass 198	206329	47.2	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	437504	100.0	Pass
199	5.0 - 9.0% of mass 198	29673	6.78	Pass
275	10.0 - 30.0% of mass 198	122901	28.1	Pass
365	1.0 - 100.0% of mass 198	14781	3.38	Pass
441	Present, but less than mass 443	38334	8.76 (76.3) ^b	Pass
442	40.0 - 100.0% of mass 198	266088	60.8	Pass
443	17.0 - 23.0% of mass 442	50241	11.5 (18.9) ^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
EF8592-IC8592	F197438.D	02/08/21	20:31	00:18	Initial cal 1
EF8592-IC8592	F197439.D	02/08/21	20:57	00:44	Initial cal 2
EF8592-IC8592	F197440.D	02/08/21	21:23	01:10	Initial cal 5
EF8592-IC8592	F197441.D	02/08/21	21:50	01:37	Initial cal 10
EF8592-IC8592	F197442.D	02/08/21	22:16	02:03	Initial cal 25
EF8592-ICC8592	F197443.D	02/08/21	22:42	02:29	Initial cal 50
EF8592-IC8592	F197444.D	02/08/21	23:08	02:55	Initial cal 80
EF8592-IC8592	F197445.D	02/08/21	23:35	03:22	Initial cal 100
EF8592-ICV8592	F197446.D	02/09/21	00:01	03:48	Initial cal verification 50
EF8592-ICV8592	F197448.D	02/09/21	00:53	04:40	Initial cal verification 50
EF8592-ICV8592	F197449.D	02/09/21	01:19	05:06	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EF8593-DFTPP

Injection Date: 02/09/21

Lab File ID: F197450.D

Injection Time: 12:52

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	137996	34.4	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	188166	46.9	Pass
70	Less than 2.0% of mass 69	1299	0.32 (0.69) ^a	Pass
127	40.0 - 60.0% of mass 198	189728	47.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	400789	100.0	Pass
199	5.0 - 9.0% of mass 198	26368	6.58	Pass
275	10.0 - 30.0% of mass 198	114120	28.5	Pass
365	1.0 - 100.0% of mass 198	13960	3.48	Pass
441	Present, but less than mass 443	35441	8.84 (75.6) ^b	Pass
442	40.0 - 100.0% of mass 198	241538	60.3	Pass
443	17.0 - 23.0% of mass 442	46875	11.7 (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
EF8593-ICV8592	F197451.D	02/09/21	13:18	00:26	Initial cal verification 50
EF8593-IC8593	F197455.D	02/09/21	15:20	02:28	Initial cal 100
EF8593-IC8593	F197456.D	02/09/21	15:45	02:53	Initial cal 80
EF8593-ICC8593	F197457.D	02/09/21	16:12	03:20	Initial cal 50
EF8593-IC8593	F197458.D	02/09/21	16:39	03:47	Initial cal 25
EF8593-IC8593	F197459.D	02/09/21	17:05	04:13	Initial cal 10
EF8593-IC8593	F197460.D	02/09/21	17:32	04:40	Initial cal 5
EF8593-IC8593	F197461.D	02/09/21	17:58	05:06	Initial cal 2
EF8593-IC8593	F197462.D	02/09/21	18:25	05:33	Initial cal 1
EF8593-ICV8593	F197463.D	02/09/21	18:51	05:59	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD23118

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EF8594-DFTPP

Injection Date: 02/09/21

Lab File ID: F197464.D

Injection Time: 19:14

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	121180	32.5	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	168130	45.1	Pass
70	Less than 2.0% of mass 69	1115	0.30 (0.66) ^a	Pass
127	40.0 - 60.0% of mass 198	167368	44.9	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	373056	100.0	Pass
199	5.0 - 9.0% of mass 198	25810	6.92	Pass
275	10.0 - 30.0% of mass 198	103717	27.8	Pass
365	1.0 - 100.0% of mass 198	12553	3.36	Pass
441	Present, but less than mass 443	31045	8.32 (77.8) ^b	Pass
442	40.0 - 100.0% of mass 198	210434	56.4	Pass
443	17.0 - 23.0% of mass 442	39903	10.7 (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
EF8594-IC8594	F197465.D	02/09/21	19:26	00:12	Initial cal 100
EF8594-IC8594	F197466.D	02/09/21	19:53	00:39	Initial cal 80
EF8594-ICC8594	F197467.D	02/09/21	20:19	01:05	Initial cal 50
EF8594-IC8594	F197468.D	02/09/21	20:45	01:31	Initial cal 25
EF8594-IC8594	F197469.D	02/09/21	21:12	01:58	Initial cal 10
EF8594-IC8594	F197470.D	02/09/21	21:38	02:24	Initial cal 5
EF8594-IC8594	F197471.D	02/09/21	22:05	02:51	Initial cal 2
EF8594-IC8594	F197472.D	02/09/21	22:31	03:17	Initial cal 1
EF8594-ICV8594	F197473.D	02/09/21	22:58	03:44	Initial cal verification 50
EF8594-ICV8594	F197474.D	02/09/21	23:24	04:10	Initial cal verification 50
EF8594-ICV8594	F197475.D	02/09/21	23:50	04:36	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD23118
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EF8663-DFTPP
Lab File ID: F198703.D
Instrument ID: GCMSF
Injection Date: 04/15/21
Injection Time: 11:46

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	98095	34.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	136152	47.5	Pass
70	Less than 2.0% of mass 69	798	0.28 (0.59) ^a	Pass
127	40.0 - 60.0% of mass 198	143125	50.0	Pass
197	Less than 1.0% of mass 198	1698	0.59	Pass
198	Base peak, 100% relative abundance	286357	100.0	Pass
199	5.0 - 9.0% of mass 198	18592	6.49	Pass
275	10.0 - 30.0% of mass 198	82549	28.8	Pass
365	1.0 - 100.0% of mass 198	9934	3.47	Pass
441	Present, but less than mass 443	33329	11.6 (79.7) ^b	Pass
442	40.0 - 100.0% of mass 198	209512	73.2	Pass
443	17.0 - 23.0% of mass 442	41812	14.6 (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
EF8663-CC8592	F198704.D	04/15/21	11:59	00:13	Continuing cal 50
EF8663-CC8593	F198705.D	04/15/21	12:26	00:40	Continuing cal 50
EF8663-CC8594	F198706.D	04/15/21	12:53	01:07	Continuing cal 50
OP32765-MB1	F198707.D	04/15/21	13:21	01:35	Method Blank
ZZZZZZ	F198708.D	04/15/21	13:48	02:02	(unrelated sample)
ZZZZZZ	F198709.D	04/15/21	14:16	02:30	(unrelated sample)
OP32792-BSD	F198719.D	04/15/21	14:43	02:57	Blank Spike Duplicate
ZZZZZZ	F198710.D	04/15/21	15:10	03:24	(unrelated sample)
ZZZZZZ	F198711.D	04/15/21	15:38	03:52	(unrelated sample)
ZZZZZZ	F198712.D	04/15/21	16:05	04:19	(unrelated sample)
ZZZZZZ	F198713.D	04/15/21	16:33	04:47	(unrelated sample)
ZZZZZZ	F198714.D	04/15/21	17:00	05:14	(unrelated sample)
ZZZZZZ	F198720.D	04/15/21	17:27	05:41	(unrelated sample)
ZZZZZZ	F198721.D	04/15/21	17:54	06:08	(unrelated sample)
ZZZZZZ	F198722.D	04/15/21	18:22	06:36	(unrelated sample)
ZZZZZZ	F198715.D	04/15/21	18:48	07:02	(unrelated sample)
ZZZZZZ	F198716.D	04/15/21	19:16	07:30	(unrelated sample)
ZZZZZZ	F198717.D	04/15/21	19:43	07:57	(unrelated sample)
ZZZZZZ	F198718.D	04/15/21	20:10	08:24	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD23118
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	S4	S5	S6
JD23118-1	3E113021.D	31	18	78	73	73	78
OP32765-BS1	3E113002.D	61	38	95	92	87	97
OP32765-BSD	3E113003.D	64	40	99	92	88	101
OP32765-MB1	3E113001.D	57	35	83	88	88	101
OP32765-MB1	F198707.D	52	32	92	76	80	90

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	35-147%
S4 = Nitrobenzene-d5	32-132%
S5 = 2-Fluorobiphenyl	40-117%
S6 = 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: JD23118
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP25950
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/13/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	16	77		
Antimony	6.0	2.5	4.1		
Arsenic	3.0	2	2.5		
Barium	200	.4	17		
Beryllium	1.0	.1	.5		
Bismuth	20	3.6	4.8		
Boron	100	1.9	85		
Cadmium	3.0	.4	1.2		
Calcium	5000	5.6	130		
Cerium	100				
Chromium	10	.5	1.5		
Cobalt	50	.5	2.5		
Copper	10	1	4.1	-0.60	<10
Iron	100	11	30		
Lead	3.0	1.2	2.4		
Lithium	50	2.3	9.1		
Magnesium	5000	65	200		
Manganese	15	.2	2		
Molybdenum	20	.4	4.5		
Nickel	10	.3	1.8		
Phosphorus	50	4.1	14		
Potassium	10000	55	200		
Selenium	10	3.5	5.5		
Silicon	200	1.6	130		
Silver	10	1.1	2.4		
Sodium	10000	11	900		
Strontium	10	.1	1.6		
Sulfur	50	4.4	18		
Thallium	10	2.5	1.9		
Tin	50	1	4.7		
Titanium	10	.4	1.9		
Tungsten	50	2.8	19		
Vanadium	50	.6	2.3		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD23118
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP25950
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/13/21

Metal	RL	IDL	MDL	MB raw	final
Zinc	20	.1	8.5	0.50	<20
Zirconium	10	.4	4.9		

Associated samples MP25950: JD23118-2

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: JD23118
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP25950
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/13/21

Metal	JD22961-3 Original MS	Spike lot MP200.7A % Rec		QC Limits
Aluminum	anr			
Antimony				
Arsenic				
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium				
Cerium				
Chromium	anr			
Cobalt				
Copper	2.3	1950	2000	97.4 70-130
Iron	anr			
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium				
Silicon				
Silver				
Sodium	anr			
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	5.0	2010	2000	100.3 70-130

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD23118
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP25950
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/13/21

Metal	JD22961-3 Original MS	Spike lot MP200.7A % Rec	QC Limits

Zirconium

Associated samples MP25950: JD23118-2

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: JD23118
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP25950
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/13/21

Metal	JD22961-3 Original MSD	SpikeLot MP200.7A % Rec			MSD RPD	QC Limit
Aluminum	anr					
Antimony						
Arsenic						
Barium						
Beryllium						
Bismuth						
Boron						
Cadmium						
Cerium						
Chromium	anr					
Cobalt						
Copper	2.3	1950	2000	97.4	0.0	10
Iron	anr					
Lead	anr					
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium	anr					
Selenium						
Silicon						
Silver						
Sodium	anr					
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium						
Zinc	5.0	2030	2000	101.3	1.0	10

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD23118
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP25950
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/13/21

Metal	JD22961-3 Original MSD	Spikelet MP200.7A % Rec	MSD RPD	QC Limit

Zirconium

Associated samples MP25950: JD23118-2

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

8.1.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD23118

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

QC Batch ID: MP25950
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/13/21

Metal	BSP Result	Spike lot MP200.7A	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic				
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium				
Calcium				
Cerium				
Chromium	anr			
Cobalt				
Copper	1900	2000	95.0	85-115
Iron	anr			
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium				
Silicon				
Silver				
Sodium	anr			
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				

8.1.3
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD23118

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

QC Batch ID: MP25950
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/13/21

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

Zinc	2050	2000	102.5	85-115

Zirconium

Associated samples MP25950: JD23118-2

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD23118
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP25950
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/13/21

Metal		JD22961-3 Original SDL 1:5		%DIF	QC Limits
Aluminum	anr				
Antimony					
Arsenic					
Barium					
Beryllium					
Bismuth					
Boron					
Cadmium					
Calcium					
Cerium					
Chromium	anr				
Cobalt					
Copper	2.30	0.00	100.0(a)	0-10	
Iron	anr				
Lead	anr				
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	anr				
Phosphorus					
Potassium	anr				
Selenium					
Silicon					
Silver					
Sodium	anr				
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium					

8.1.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD23118
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP25950
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/13/21

Metal	JD22961-3	QC	
	Original SDL 1:5	%DIF	Limits

Zirconium

Associated samples MP25950: JD23118-2

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD23118
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP25996
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/15/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.024	.092	0.049	<0.20

Associated samples MP25996: JD23118-2

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: JD23118
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP25996
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/15/21

Metal	JD23099-1 Original MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	2.3	2	115.0 70-130

Associated samples MP25996: JD23118-2

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

8.2.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD23118
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP25996
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/15/21

Metal	JD23099-1 Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.2	2	110.0	4.4 19

Associated samples MP25996: JD23118-2

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

8.2.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD23118

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP25996

Methods: EPA 245.1

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 04/15/21

Metal	BSP Result	Spike lot HGPW3	% Rec	QC Limits
Mercury	2.2	2	110.0	85-115

Associated samples MP25996: JD23118-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

8.2.3

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: JD23118
Account: HWINJOMM - 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	GP33178/GN17200	0.050	0.0	mg/l	0.4	0.37	92.5	80-120%
Solids, Total Suspended	GN17159	4.0	0.0	mg/l				

Associated Samples:
Batch GN17159: JD23118-2
Batch GP33178: JD23118-2
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD23118
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	GP33178/GN17200	JD22974-2	mg/l	0.65	0.66	1.5	0-38%
Solids, Total Suspended	GN17159	JD23157-1	mg/l	0.0	0.0	0.0	0-17%

Associated Samples:
Batch GN17159: JD23118-2
Batch GP33178: JD23118-2
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD23118
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	GP33178/GN17200	JD22974-2	mg/l	0.65	0.4	1.0	87.5	35-137%

Associated Samples:

Batch GP33178: JD23118-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

ATTACHMENT B.7

ANNUAL GROUNDWATER MONITORING DATA

Daily PFC Field Sampling Protocols Checklist

Date: 9/28/2020 Installation Name: ALLIETLANDFILL

Weather (temp./precipitation): 68°F, SUNNY Site Name: ALLIETLANDFILL BUFFALO, NY

Field Clothing and PPE:

- ☒ No clothing or boots containing Gore-Tex™
- ☒ All safety boots made from polyurethane and PVC
- ☒ No materials containing Tyvek®
- ☒ Field crew has not used fabric softener on clothing
- ☒ Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- ☒ Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- ☒ No Teflon® containing materials on-site
- ☒ All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- ☒ No waterproof field books on-site
- ☒ No plastic clipboards, binders, or spiral hard cover notebooks on-site
- ☒ No adhesives (Post-It Notes) on-site

- ☒ Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- ☒ All sample containers made of HDPE or polypropylene. Samples are not stored in containers made of LDPE
- ☒ Caps are lined or unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- ☐ Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- ☒ "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- ☒ Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- ☒ No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Manager shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance. Repeated failure to comply with PFC sample protocols will result in the permanent removal of worker(s) from the site.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Manager Name: KATIE AMANN

Field Manager Signature: [Signature]

Time: 0915



Daily PFC Field Sampling Protocols Checklist

Date: 9/29/2020

Installation Name: ALLTIPT LANDFILL BUFFALO, NY

Weather (temp./precipitation): 59°F, LIGHT RAIN Site Name: ALLTIPT LANDFILL BUFFALO, NY

Field Clothing and PPE:

- ☒ No clothing or boots containing Gore-Tex™
- ☒ All safety boots made from polyurethane and PVC
- ☒ No materials containing Tyvek®
- ☒ Field crew has not used fabric softener on clothing
- ☒ Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- ☒ Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- ☒ No Teflon® containing materials on-site
- ☒ All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- ☒ No waterproof field books on-site
- ☒ No plastic clipboards, binders, or spiral hard cover notebooks on-site
- ☒ No adhesives (Post-It Notes) on-site

- ☒ Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- ☒ All sample containers made of HDPE or polypropylene. Samples are not stored in containers made of LDPE
- ☒ Caps are lined or unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- ☐ Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- ☒ "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- ☒ Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- ☒ No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Manager shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance. Repeated failure to comply with PFC sample protocols will result in the permanent removal of worker(s) from the site.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Manager Name: KATIE AMANN

Field Manager Signature: [Signature]

Time: 0844

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

wood.

PROJECT NAME ALLTET LANDFILL BUFFALO, NYWELL ID MW-2PROJECT NUMBER 3616206091SAMPLE ID MW-2DATE 9/28/2020 9/29TIME START 1010 (9/28/20) END 1200 (9/29/20)QC SAMPLE ID N/ASAMPLE TIME 0940

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT: ☒ TOP OF WELL RISER (TOR)☐ TOP OF PROTECTIVE CASING (TOC)☐ OTHERINITIAL DEPTH TO WATER 11.75 (9/28/20) ft.TOTAL VOLUME PURGED 2.50 (9/28/20) gallonsPROTECTIVE CASING STICKUP 2.90 ft. AGS15.05 (9/29/20)(purge rate (ml/min) x time duration (min) x 0.00026 gal/ml) RA 9/28/20FINAL DEPTH TO WATER 16.95 (9/28/20) ft.DRAWDOWN/ VOL. PURGED 0.33 (9/28/20)TOC/TOR DIFFERENCE 0.00 ft.WATER COLUMN 5.20 (9/28/20) ft.WELL DIAMETER 2 in.WELL INTEGRITY YES ☒ NO ☒ N/A ☒1.90 (9/29/20)2 in.CAP? ☒ CASING? ☒ LOCKED? ☒ COLLAR? ☒DRAWDOWN VOLUME 0.83 (9/28/20) gallonsWELL DEPTH 16.95 ft.

(final - initial) x (0.16 (2-in.), 0.65 (4-in.), 1.47 (6-in.))

WELL INTEGRITY YES ☒ NO ☒ N/A ☒ (PROTECTIVE CASING HAS ALD)

PURGE DATA

TIME	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (°C) (3%)	SP. COND. (µS/cm) (3%)	pH (pH units) (+/- 0.1)	DISS. O2 (mg/L) (10% > 0.5)	TURBIDITY (NTU) (10% if > 5)*	ORP/Eh (mV) (+/- 10)	SAMPLE DEPTH (ft.)	COMMENTS
1031	STARTED PUMP								≈ 16.5	
1040	12.30	130	16.83	1.201	6.78	0.72	3.92	119.8		
1045	12.57	115	17.14	1.193	6.86	0.46	3.26	109.7		
1050	12.76	115	17.22	1.191	6.89	0.52	2.93	135.0		
1055	13.01	115	17.42	1.187	6.92	0.59	3.09	140.2		
1100	13.24	115	17.31	1.182	6.95	0.76	2.42	132.3		
1105	13.49	115	17.54	1.177	6.98	0.94	2.46	120.3		
1110	13.70	115	17.38	1.171	6.99	1.39	3.85	105.0		
1115	13.93	125	17.55	1.170	7.01	1.85	7.82	90.9		
1120	14.16	125	17.47	1.173	7.04	2.07	3.77	75.5		
1125	14.40	125	17.35	1.172	7.03	1.98	2.44	48.3		
1130	14.63	125	17.54	1.171	7.04	1.44	1.58	64.8		

EQUIPMENT DOCUMENTATION

TYPE OF PUMP

- ☒ PERISTALTIC
☐ SUBMERSIBLE
☐ BLADDER
☐ OTHER

TYPE OF TUBING

- ☒ HDPE
☐ LDPE
☒ SILICON
☐ OTHER

EQUIPMENT USED

- ☒ WATER LEVEL METER
☒ TURBIDITY METER
☒ WATER QUALITY METER
☒ PUMP

HERON DIPPER-T ID: M200-79

HACH 2100Q ID: M024-40

YSI 550 MPS ID: M015-08

GEOPUMP S008-41

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
☒ VOCs	EPA 8260	4°C, HCl	3 x 40 mL VIAL	☒
☒ SVOCs	EPA 8270	4°C	2 x 1 L AMBER GLASS	☐
☒ 1,4-DIOXANE	EPA 8270 SIM	4°C	2 x 1 L AMBER GLASS	☐
☒ METALS	EPA 6010, 6020, 7470	4°C, HNO3	1 x 500 mL POLY	☐
☒ PFAS	EPA 537M	4 ± 2°C	2 x 250 mL HDPE PFAS	☒

NOTES

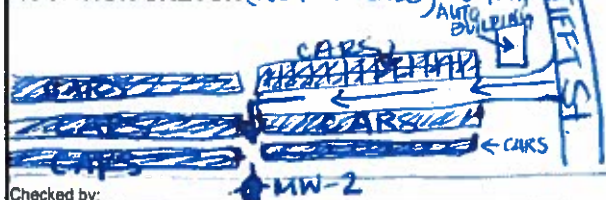
* = If 3 turbidity readings are < 5 NTU, then parameter is stable

Purge water containerized? NO

PURGE WATER DESCRIPTION: COLORLESS, ODORLESS, CLEAR
 WELL PURGED DRY AFTER APPROXIMATELY 1.5 HOURS, WILL RETURN
 NEXT DAY TO CHECK RECHARGE AND COLLECT SAMPLES.

Sampled by: KATIE AMANNSampler Signature: K. Amann

LOCATION SKETCH (NOT TO SCALE)

Checked by: MW-2

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

wood.

PROJECT NAME: ALLIANT LANDFILL BUFFALO, NY WELL ID: MW-2

PROJECT NUMBER: 3616200091 SAMPLE ID: MW-2

TIME START: 1010 (9/28/20) END: 1200 (9/29/20) QC: N/A SAMPLE ID: N/A

DATE: 9/28/20-9/29/20

SAMPLE TIME: 0940

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT: ☒ TOP OF WELL RISER (TOR) ☐ TOP OF PROTECTIVE CASING (TOC) ☐ OTHER _____

INITIAL DEPTH TO WATER: 11.75 (9/28/20) ft. TOTAL VOLUME PURGED: 2.50 (9/28/20) gallons
(purge rate (ml/min) x time duration (min) x 0.00026 gal/ml)

PROTECTIVE CASING STICKUP: 2.90 ft. AGS

FINAL DEPTH TO WATER: 16.95 (9/28/20) ft. DRAWDOWN/ VOL. PURGED: 0.33 (9/28/20)

TOC/TOR DIFFERENCE: 0.00 ft.

WATER COLUMN: 5.20 (9/28/20) ft. WELL DIAMETER: 2 in.

WELL INTEGRITY: YES ☒ NO ☒ N/A ☒ (PROTECTIVE CASING HAS A LID)

DRAWDOWN VOLUME: 0.83 (9/28/20) gallons WELL DEPTH: 16.95 ft.

(final - initial) x (0.16 (2-in.), 0.65 (4-in.), 1.47 (6-in.))

CAP? ☒ CASING? ☒ LOCKED? ☒ COLLAR? ☒

PURGE DATA

TIME	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (°C) (3%)	SP. COND. (mS/cm) (3%)	pH (pH units) (+/- 0.1)	DISS. O2 (mg/L) (10% > 0.5)	TURBIDITY (NTU) (10% if > 5)*	ORP/Eh (mV) (+/- 10)	SAMPLE DEPTH (ft.)	COMMENTS	
1135	14.90	100	17.22	1.178	7.06	1.93	14.5	74.6	~16.5		
1140	15.19	100	17.12	1.180	7.08	1.83	4.16	82.3	1		
1145	15.71	100	17.17	1.178	7.09	1.73	8.77	86.2	1		
1150	16.14	100	17.23	1.179	7.10	1.64	6.61	88.0	1		
1155	WELL PURGED DRY										
0917	15.05	WILL COLLECT SAMPLES OF RECHARGE WATER IN WELL									
0940	COLLECTED SAMPLES FOR PFAS AND VOC ANALYSES THEN WELL WENT DRY.										
1200	16.65	(NOT ENOUGH WATER TO COLLECT REMAINING SAMPLES)									
KIA 9/29/2020											

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☒ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ OTHER _____

TYPE OF TUBING: ☒ HDPE ☐ LDPE ☒ SILICON ☐ OTHER _____

EQUIPMENT USED: ☒ WATER LEVEL METER ☒ TURBIDITY METER ☒ WATER QUALITY METER ☒ PUMP

HERON DIPPER-T ID: M200-79
HACH 2100Q ID: M024-40
YSI 5516 MPS ID: M015-08
GEOPUMP ID: S008-41

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
☒ VOCs	EPA 8260	4°C, HCl	3 x 40 mL VIAL	☒
☒ SVOCs	EPA 8270	4°C	2 x 1 L AMBER GLASS	☐
☒ 1,4-DIOXANE	EPA 8270 SIM	4°C	2 x 1 L AMBER GLASS	☐
☒ METALS	EPA 6010, 6020, 7470	4°C, HNO3	1 x 500 mL POLY	☐
☒ PFAS	EPA 537M	4 ± 2°C	2 x 250 mL HDPE PFAS	☒
☐				☐

NOTES

* = If 3 turbidity readings are < 5 NTU, then parameter is stable

Purge water containerized? No

9/29/20: APPROXIMATELY 0.3 GALLONS WATER RECHARGED IN WELL. COLLECTED SAMPLES FOR PFAS AND VOC ANALYSES. SAMPLES FOR SVOCs, 1,4-DIOXANE, AND METALS WILL NEED TO BE COLLECTED AT A FUTURE DATE. EMPTY BOTTLES GIVEN TO JACOBS.

Sampled by: KATIE AMANNSampler Signature: K Amann

LOCATION SKETCH

N/A

SEE PAGE 1 OF 2.

Checked by: _____

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

wood.

PROJECT NAME ALLTIFT LANDFILL BUFFALO, NY

WELL ID SUMP 1

PROJECT NUMBER 3616206091

SAMPLE ID SUMP 1

DATE 9/28/2020

TIME START 1315 END 1442

QC SAMPLE ID N/A

SAMPLE TIME 1415

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT: ☒ TOP OF WELL RISER (TOR) ☒ TOP OF PROTECTIVE CASING (TOC) ☐ OTHER _____

INITIAL DEPTH TO WATER 5.99 ft.

TOTAL VOLUME PURGED 5 gallons

PROTECTIVE CASING STICKUP DID NOT MEASURE ft. AGS

FINAL DEPTH TO WATER 10.97 ft. 6.12 ft.

DRAWDOWN/ VOL. PURGED N/A

TOC/TOR DIFFERENCE NA ft.

WATER COLUMN 10.97 ft.

WELL DIAMETER 6 in.

WELL INTEGRITY

YES NO N/A
CAP? ☒ ☐ ☐
CASING? ☒ ☐ ☐
LOCKED? ☒ ☐ ☐
COLLAR? ☒ ☐ ☐

DRAWDOWN VOLUME N/A gallons

WELL DEPTH 16.96 ft.

(final - initial) x (0.16 (2-in.), 0.65 (4-in.), 1.47 (6-in.))

PURGE DATA

TIME	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (°C) (3%)	SP. COND. (µS/cm) (3%)	pH (pH units) (+/- 0.1)	DISS. O2 (mg/L) (10% > 0.5)	TURBIDITY (NTU) (10% if > 5)	ORP/Eh (mV) (+/- 10)	SAMPLE DEPTH (ft.)	COMMENTS
1325	5.99	STARTED PUMP							~12	
1340	6.07	500	16.27	1.258	6.83	0.54	7.08	-72.9		2 GALLONS PURGED
1348	6.09	500	16.14	1.261	6.87	0.50	5.13	-77.7		3 GALLONS PURGED
1353	6.10	500	16.06	1.269	6.87	0.58	5.96	-85.7		
1402	6.12	500	16.08	1.306	6.92	0.80	5.51	-79.9		APPROXIMATELY 4.75 GALLONS PURGED
1415	COLLECTED SAMPLES									
(crossed out section)										

EQUIPMENT DOCUMENTATION

TYPE OF PUMP

☒ PERISTALTIC
☐ SUBMERSIBLE
☐ BLADDER
☐ OTHER _____

TYPE OF TUBING

☒ HDPE
☐ LDPE
☒ SILICON
☐ OTHER _____

EQUIPMENT USED

☒ WATER LEVEL METER
☒ TURBIDITY METER
☒ WATER QUALITY METER
☒ PUMP

HERON DIPPERT ID: M200-79
HACH 2100 Q ID: M024-40
V61551 MPS ID: M015-08
GEOPUMP ID: S008-41

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
☒ VOCs	EPA 8260	4°C, HCl	3 x 40 mL VIAL	☒
☐ SVOCs	EPA 8270	4°C	x 1 L AMBER GLASS	☐
☐ 1,4-DIOXANE	EPA 8270 SIM	4°C	x 1 L AMBER GLASS	☐
☐ METALS	EPA 6010, 6020, 7470	4°C, HNO3	x 500 mL POLY	☐
☒ PFAS	EPA 537M	4 ± 2°C	2 x 250 mL HDPE PFAS	☒
☐				☐

NOTES

* = If 3 turbidity readings are < 5 NTU, then parameter is stable
Purge water contained? YES

SUMP NOT PUMPING. PURGED 5 GALLONS PRIOR TO COLLECTING SAMPLES.

COLLECTED ADDITIONAL 1 GALLON TO BE INCLUDED IN SUMP COMPOSITE SAMPLE

Sampled by: TATIE AMANIN

Sampler Signature: [Signature]

PURGE WATER DESCRIPTION:
FAINT YELLOW, CLEAR,
ODOR

LOCATION SKETCH (NOT TO SCALE)

Sketch showing SUMP 1, ACCESS ROAD, CANAL, and WELL. Includes a north arrow pointing up.

Checked by: _____

wood.

DATE 9/28/2020
SAMPLE TIME 1900

MEASUREMENT POINT: ☐ TOP OF WELL RISER (TOR)		☐ TOP OF PROTECTIVE CASING (TOC)		☐ OTHER _____	
INITIAL DEPTH TO WATER	N/A ft.	TOTAL VOLUME PURGED [purge rate (ml/min) x time duration (min) x 0.00026 gal/ml]	N/A gallons	PROTECTIVE CASING STICKUP	N/A ft. AGS
FINAL DEPTH TO WATER	N/A ft.	DRAWDOWN/ VOL. PURGED	N/A	TOC/TOR DIFFERENCE	N/A ft.
WATER COLUMN	N/A ft.	WELL DIAMETER	N/A in.	WELL INTEGRITY YES NO N/A	
DRAWDOWN VOLUME (final - initial) x (0.16 (2-in.), 0.65 (4-in.), 1.47 (6-in.))	N/A gallons	WELL DEPTH	N/A ft.	CAP?	✓
				CASING?	✓
				LOCKED?	✓
				COLLAR?	✓

TIME	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (°C) (3%)	SP. COND. (μS/cm) (3%)	pH (pH units) (± 0.1)	DISS. O2 (mg/L) (10% > 0.5)	TURBIDITY (NTU) (10% if > 5)*	ORP/Eh (mV) (± 10)	SAMPLE DEPTH (ft.)	COMMENTS
KAI 9/28/2020										

TYPE OF PUMP	TYPE OF TUBING	EQUIPMENT USED	
☒ PERISTALTIC	☒ HDPE	☒ WATER LEVEL METER	HERON DIPPERT ID: M200-79
☐ SUBMERSIBLE	☐ LOPE	☒ TURBIDITY METER	HACH 2100Q ID: M024-40
☐ BLADDER	☒ SILICON	☒ WATER QUALITY METER	YSI 556 MFS ID: M015-00
☐ OTHER	☐ OTHER	☒ PUMP	SAND-41 GEOPUMP

PARAMETER	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
☐ VOCs	EPA 8260	4°C, HCl	x 40 mL VIAL	☐
☒ SVOCs	EPA 8270	4°C	2 x 1 L AMBER GLASS	☒
☒ 1,4-DIOXANE	EPA 8270 SIM	4°C	2 x 1 L AMBER GLASS	☒
☒ METALS	EPA 6010, 6020, 7470	4°C, HNO3	1 x 500 mL POLY	☒
☒ PFAS	EPA 537M	4 ± 2°C	2 x 250 mL HDPE PFAS	☒
☐				☐

Collected by: KATIE AMANN
Sampler Signature: [Signature]

N/A

Checked by: _____

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: ALLIANT LANDFILL BUFFALO, NY ANNUAL GWS SAMPLING
 PROJECT NUMBER: 36162016071
 PROJECT LOCATION: BUFFALO, NY
 WEATHER CONDITIONS (AM): 68°F, SUNNY, WIND TO NORTH @ 5-10 mph
 WEATHER CONDITIONS (PM): 75°F, CLEAR, WIND TO NNE @ 25 mph

TASK NO: 610003 DATE: 9/28/2020
 FIELD CREW: _____
 SAMPLER NAME: KATHLEEN MANN
 SAMPLER SIGNATURE: [Signature]
 CHECKED BY: _____ DATE: _____

MULTI-PARAMETER WATER QUALITY METER

METER TYPE		AM CALIBRATION	
MODEL NO. <u>YSI</u>		Start Time: <u>0918</u>	End Time: <u>0951</u>
UNIT ID NO. <u>M015-08</u>			
Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU 4.0	<u>4.00</u>	+/- 0.1 pH Units
pH (7)	SU 7.0	<u>7.06</u>	+/- 0.1 pH Units
pH (10)	SU 10.0	<u>10.00</u>	+/- 0.1 pH Units
Redox	+/- mV 240	<u>240.0</u>	+/- 10 mV
Sp. Conductivity	mS/cm 1413	<u>1.413</u>	+/- 3% of standard
DO (saturated)	% 100	<u>99.5</u>	+/- 2% of standard
DO (saturated) mg/L	¹ (see Chart 1) <u>8.65</u>	<u>8.66</u>	+/- 0.2 mg/L
DO (<0.1)	mg/L <0.1	<u>0.15</u>	< 0.5 mg/L
Temperature	°C	<u>22.22</u>	
Baro. Press.	mmHg	<u>750.7</u>	

PM CALIBRATION CHECK

Start Time: <u>1954</u>		End Time: <u>2015</u>	
Standard Value	Meter Value	*Acceptance Criteria (PM)	
7.0	<u>7.15</u>	+/- 0.3 pH Units	
240	<u>230.5</u>	+/- 10 mV	
1413	<u>1.430</u>	+/- 5% of standard	
	<u>89.9</u>	%	
<u>8.49</u>	<u>7.81</u>	+/- 0.5 mg/L of sat. value	
DO (<0.1)	<u>0.5</u>	mg/L	
	<u>23.42</u>	°C	
	<u>752.9</u>	mmHg	

TURBIDITY METER

METER TYPE	Units	Standard Value	Meter Value
MODEL NO. <u>HACH</u>			
UNIT ID NO. <u>M024-40</u>			
	Standard NTU	10	<u>9.41</u>
	Standard NTU	20	<u>20.2</u>
	Standard NTU	100	<u>99.5</u>
	Standard NTU	800	<u>795</u>

Standard Value	Meter Value	*Acceptance Criteria (PM)
10	<u>9.90</u>	+/- 5% of standard
20	<u>19.9</u>	
100	<u>99.7</u>	
800	<u>788</u>	

PHOTOIONIZATION DETECTOR

METER TYPE	Background	ppmv	<0.1
MODEL NO.			
UNIT ID NO.	Span Gas	ppmv	100

<0.1	within .5 ppmv of BG
100	+/- 10% of standard

O₂-LEL 4 GAS METER

METER TYPE	Methane	%	50
MODEL NO.	O ₂	%	20.9
UNIT ID NO.	H ₂ S	ppmv	25
	CO	ppmv	50

50	+/- 10% of standard
20.9	
25	
50	

OTHER METER

METER TYPE	<u>HERON WATER-LEVEL METER</u>		
MODEL NO.	<u>DIPPER-T</u>		
UNIT ID NO.	<u>M024-40</u>		

See Notes Below for Additional Information

- ☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:

Lot#/Date Produced: _____

Trip Blank Source: _____ Lab _____

Sample Preservatives Source: _____ Lab _____

Disposable Filter Type: _____ 0.45µm

Calibration Fluids / Standard Source:

- DO Calibration Fluid (<0.1 mg/L) _____
- Other _____
- Other _____
- Other _____

Cal. Standard Lot Number	Exp. Date
pH (4) <u>02GF965</u>	<u>6/22</u>
pH (7) <u>02GGB15</u>	<u>7/22</u>
pH (10) _____	_____
ORP <u>02GE9026</u>	<u>1/21</u>
Conductivity <u>02GD741</u>	<u>4/21</u>
10 Turb. Stan. <u>A9270</u>	<u>Jan-21</u>
20 Turb. Stan. <u>A9257</u>	<u>Jan-21</u>
100 Turb. Stan. <u>A9277</u>	<u>Jan-21</u>
800 Turb. Stan. <u>A9275</u>	<u>Jan-21</u>
PID Span Gas _____	_____
O ₂ -LEL Span Gas _____	_____
DO _____	_____

NOTES:

wood.

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: ALLIANT LANDFILL BUFFALO, NY
 PROJECT NUMBER: 3616206091
 PROJECT LOCATION: TIFF ST. BUFFALO, NY
 WEATHER CONDITIONS (AM): 59°F, LIGHT RAIN
 WEATHER CONDITIONS (PM): 62°F, OVERCAST, WIND 10 mph TO NE.

TASK NO: 610003 DATE: 9/29/2020
 FIELD CREW: _____
 SAMPLER NAME: KATIE AMANN
 SAMPLER SIGNATURE: K Am
 CHECKED BY: _____ DATE: _____

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
 MODEL NO.: 550 MPS
 UNIT ID NO.: MD15-08

AM CALIBRATION

Start Time: 0822 End Time: 0857

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	<u>4.00</u>	+/- 0.1 pH Units
pH (7)	SU	7.0	<u>7.00</u>	+/- 0.1 pH Units
pH (10)	SU	10.0	<u>10.00</u>	+/- 0.1 pH Units
Redox	+/- mV	240	<u>240.0</u>	+/- 10 mV
Sp. Conductivity	µS/cm	1413	<u>1.413</u>	+/- 3% of standard
DO (saturated)	%	100	<u>99.6</u>	+/- 2% of standard
DO (saturated)	mg/L ¹ (see Chart 1)	<u>9.57</u>	<u>9.54</u>	+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1	<u>17.41</u>	< 0.5 mg/L
Temperature	°C		<u>17.41</u>	
Baro. Press.	mmHg		<u>757.4</u>	

PM CALIBRATION CHECK

Start Time: 1235 End Time: 1250

	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH	7.0	<u>6.92</u>	+/- 0.3 pH Units
Redox	240	<u>238.2</u>	+/- 10 mV
Sp. Conductivity	1413	<u>1.414</u>	+/- 5% of standard
DO (saturated)		<u>94.2</u>	%
DO (<0.1)	<u>8.88</u>	<u>8.43</u>	+/- 0.5 mg/L of sat. value
Temperature		<u>20.83</u>	< 0.5 mg/L
Baro. Press.		<u>757.9</u>	°C

TURBIDITY METER

METER TYPE: HACH
 MODEL NO.: 2100Q
 UNIT ID NO.: M024-40

Units	Standard Value	Meter Value
NTU	10	<u>9.36</u>
NTU	20	<u>20.3</u>
NTU	100	<u>101</u>
NTU	800	<u>808</u>

Standard Value	Meter Value	*Acceptance Criteria (PM)
10	<u>9.45</u>	+/- 5% of standard
20	<u>19.6</u>	
100	<u>99.2</u>	
800	<u>798</u>	

PHOTOIONIZATION DETECTOR

METER TYPE: _____ Background ppmv <0.1
 MODEL NO.: _____
 UNIT ID NO.: _____ Span Gas ppmv 100

<0.1 within 5 ppmv of BG
 100 +/- 10% of standard

O₂-LEL 4 GAS METER

METER TYPE: _____ Methane %
 MODEL NO.: _____ O₂ %
 UNIT ID NO.: _____ H₂S ppmv
 CO ppmv 50

50 +/- 10% of standard
 20.9
 25
 50

OTHER METER

METER TYPE: HERON
 MODEL NO.: DIPPER-T
 UNIT ID NO.: M200-FI

See Notes Below for Additional Information

- ☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:

Lot#/Date Produced: _____

Trip Blank Source:

Lab CA 9/29/20

Sample Preservatives Source:

Lab _____

Disposable Filter Type:

0.45µm CA 9/24/20

Calibration Fluids / Standard Source:

- DO Calibration Fluid (<0.1 mg/L) _____
- Other _____
- Other _____
- Other _____

	Cal. Standard Lot Number	Exp. Date
pH (4)	<u>06F905</u>	<u>6/22</u>
pH (7)	<u>06G815</u>	<u>7/22</u>
pH (10)	_____	_____
ORP	<u>06E906</u>	<u>1/21</u>
Conductivity	<u>06D744</u>	<u>4/21</u>
10 Turb. Stan.	<u>A9270</u>	<u>Jan-21</u>
20 Turb. Stan.	<u>A9287</u>	<u>Jan-21</u>
100 Turb. Stan.	<u>A9277</u>	<u>Jan-21</u>
800 Turb. Stan.	<u>A9275</u>	<u>Jan-21</u>
PID Span Gas	_____	_____
O ₂ -LEL Span Gas	_____	_____
DO	_____	_____

NOTES:

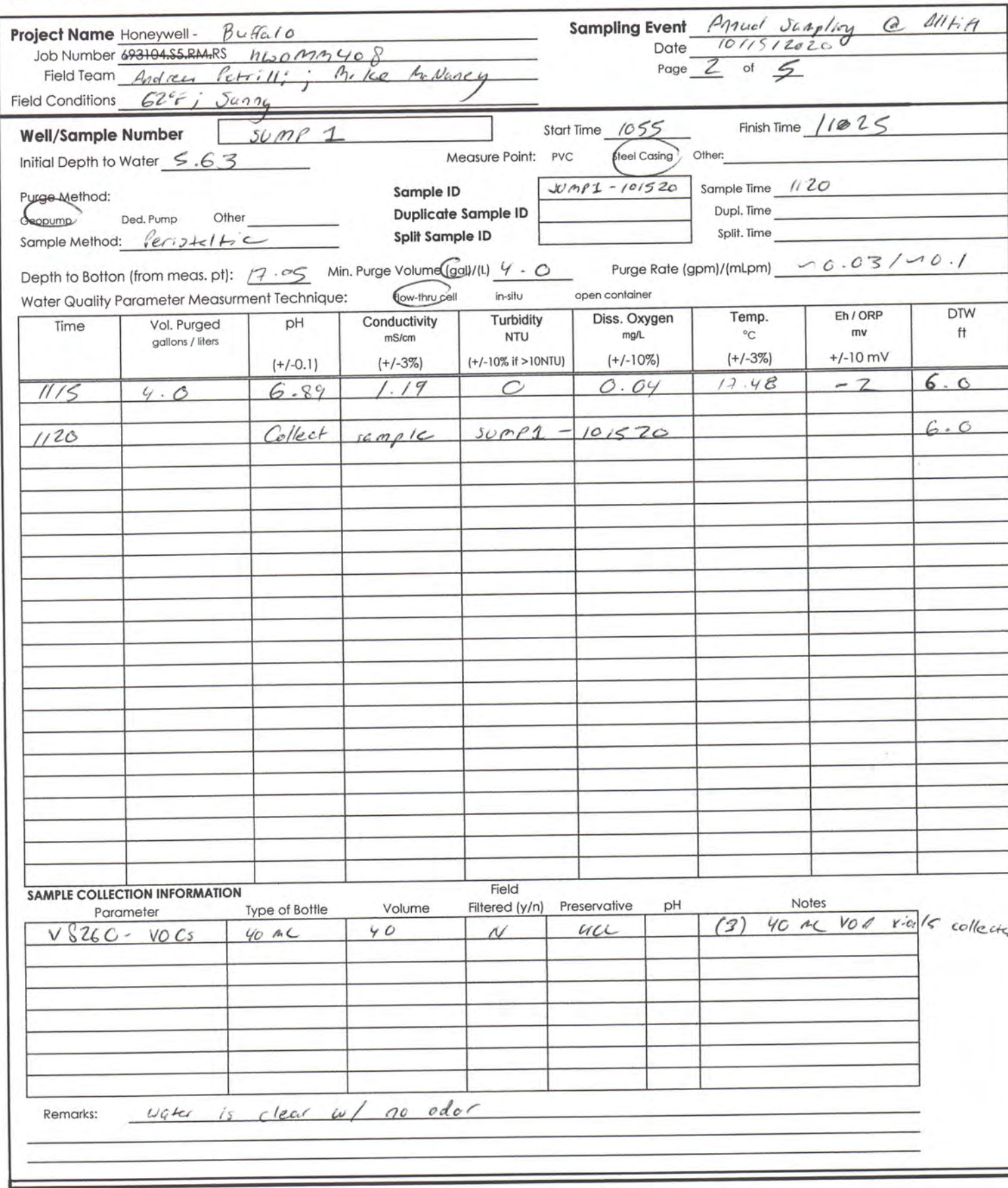
wood.

* Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations

** If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

Remarks: Water is clear w/ no odor.





Project Name	Honeywell - Buffalo	Sampling Event	Annual sampling @ Altia
Job Number	693104.SS.RM.RS hwoM7408	Date	10/15/2020
Field Team	Andrew Petrelli; Mike McNaney	Page	3 of 5
Field Conditions	62°F; Partly cloudy		

Well/Sample Number SUMP 2 **Start Time** 1130 **Finish Time** 1215

Initial Depth to Water 10.55 **Measure Point:** PVC Steel Casing **Other:** _____

Purge Method: Geopump **Ded. Pump** _____ **Other** _____

Sample Method: Peristaltic **Sample ID** SUMP2 - 1015 20 **Sample Time** 1205

Duplicate Sample ID _____ **Dupl. Time** _____

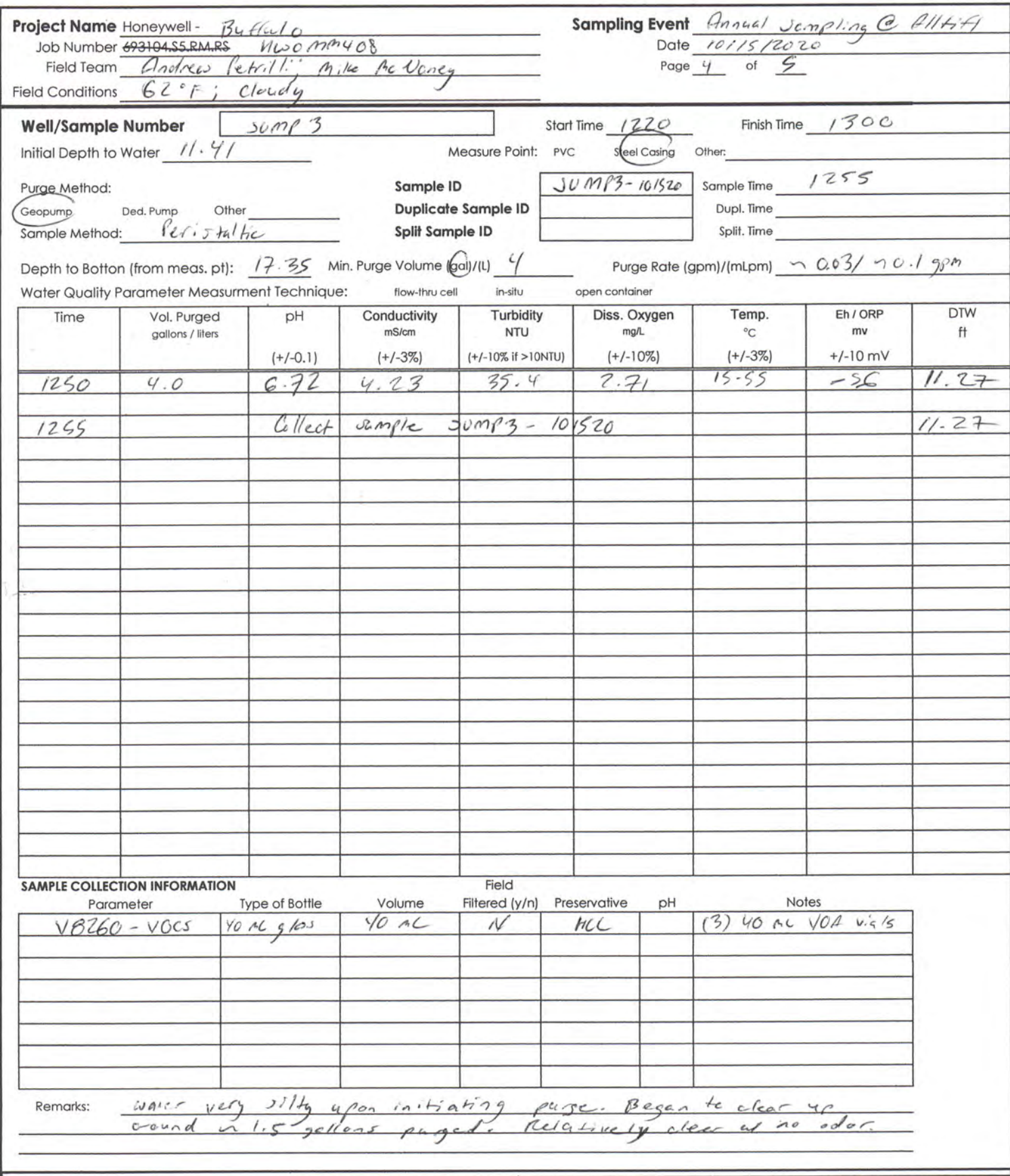
Split Sample ID _____ **Split. Time** _____

Depth to Bottom (from meas. pt): 24.3 **Min. Purge Volume (gal)/(L)** 4 **Purge Rate (gpm)/(mLpm)** 70.07/110.1

Water Quality Parameter Measurement Technique: flow-thru cell ☒ in-situ ☐ open container ☐

[illegible][illegible]

Remarks: Water is clear w/ no odor. Well very silty upon beginning
purge. Cleared up after repeatedly surging tubing.





Project Name Honeywell - Buffalo
Job Number 692104.55.RM.RS 4WOMM408
Field Team Andrew Petrill; Mike McNaney
Field Conditions 60°F; Cloudy

Sampling Event Annual sampling @ Alltiff
Date 10/15/2020
Page 5 of 5

Well/Sample Number SUMP 4

Start Time 1305 Finish Time 1350

Initial Depth to Water 8.90

Measure Point: PVC Steel Casing Other:

Purge Method:

Geopump	Ded. Pump	Other
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		

Sample Method: *Peristaltic*

Sample ID

Duplicate Sample ID

Split Sample ID

50784-101520

Sample Time 1340

FDUP - Jumpy -

0152 Dupl. Time 134 0

50mPy-101520-

Split. Time 134

20MP4-101520

Purge Rate (gpm)/(mLpm) ✓ 0.03 / 26.1

Depth to Bottom (from meas. pt): 17.83 Min. Purge Volume (gal)/(L) 4

Water Quality Parameter Measurement Technique:

flow-thru cell

in-situ

open container

[illegible]

SAMPLE COLLECTION INFORMATION

[illegible]

Remarks: Water looks to have a slightly yellow tint. No discernable odor.

TABLE 1
Summary of Groundwater Analytical Results - 2020
2020/2021 Annual OM&M Report
Alltiff Landfill /Ramco Steel Site

Parameter Name	Units	NYSDEC Class GA Standards	MW-2-092920	MW2-101520	SUMP1-092820	SUMP 1-101520	SUMP2-092820	SUMP 2-101520	SUMP3-092820	SUMP 3-101520	SUMP4-092820	SUMP 4-101520	SUMP4 FIELD DUPLICATE-092820	FDUP-SUMP 4-101520	SUMP COMP-092820
			9/29/2020	10/15/2020	9/28/2020	10/15/2020	9/28/2020	10/15/2020	9/28/2020	10/15/2020	9/28/2020	10/15/2020	9/28/2020	10/15/2020	9/28/2020
Metals (Dissolved)															
ANTIMONY	mg/L	0.003	-- --	0.006 U	-- --	-- --	-- --	-- --	-- --	-- --	0.006 U	-- --	0.006 U	-- --	0.006 U
ARSENIC	mg/L	0.025	-- --	0.0028 J	-- --	-- --	-- --	-- --	-- --	-- --	0.0111	-- --	0.0122	-- --	0.0114
CADMIUM	mg/L	0.005	-- --	0.003 U	-- --	-- --	-- --	-- --	-- --	-- --	0.003 U	-- --	0.003 U	-- --	0.003 U
CHROMIUM	mg/L	0.05	-- --	0.01 U	-- --	-- --	-- --	-- --	-- --	-- --	0.01 U	-- --	0.0021 J	-- --	0.0079 J
IRON	mg/L	0.3	-- --	0.316	-- --	-- --	-- --	-- --	-- --	-- --	40.5	-- --	41.4	-- --	23.6
LEAD	mg/L	0.025	-- --	0.003 U	-- --	-- --	-- --	-- --	-- --	-- --	0.003 U	-- --	0.003 U	-- --	0.003 U
MANGANESE	mg/L	0.3	-- --	0.167	-- --	-- --	-- --	-- --	-- --	-- --	0.649	-- --	0.651	-- --	1.06
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	-- --	0.5 U	-- --	3.5	-- --	2.1	-- --	10.6	-- --	10.7	-- --
CHLORO BENZENE	ug/L	5	-- --	1 U	-- --	1	-- --	49.9	-- --	12.1	-- --	147	-- --	144	-- --
ETHYLBENZENE	ug/L	5	-- --	1 U	-- --	1 U	-- --	1 U	-- --	1 U	-- --	1 U	-- --	1 U	-- --
XYLENES, TOTAL	ug/L	5	-- --	1 U	-- --	1 U	-- --	1 U	-- --	1 U	-- --	1 U	-- --	1 U	-- --
1,2-DICHLORO BENZENE	ug/L	3	-- --	1 U	-- --	1 U	-- --	0.54 J	-- --	1 U	-- --	0.75 J	-- --	0.79 J	-- --
1,4-DICHLORO BENZENE	ug/L	3	-- --	1 U	-- --	1 U	-- --	0.77 J	-- --	1 U	-- --	1.9	-- --	1.8	-- --
SVOCs															
4-CHLOROANILINE	ug/L	5	-- --	5 U	-- --	-- --	-- --	-- --	-- --	-- --	0.42 J	-- --	0.6 J	-- --	0.5 J
NAPHTHALENE	ug/L	10	-- --	1 U	-- --	-- --	-- --	-- --	-- --	-- --	0.24 J	-- --	0.27 J	-- --	0.56 J
1,4-Dioxane	ug/L	1	-- --	0.1 U	-- --	-- --	-- --	-- --	-- --	-- --	20.2 B	-- --	20.5 B	-- --	15.1 B
PFAs															
Perfluorooctanesulfonic Acid (PFOS)	ng/L	10	4	-- --	4.2	-- --	71.2	-- --	15.4	-- --	25.6	-- --	25.7	-- --	29.1
Perfluoroundecanoic Acid (PfundA)	ng/L	NS	2 U	-- --	2 U	-- --	2 U	-- --	2 U	-- --	2 U	-- --	2.2 U	-- --	2 U
n-Methyl Perfluorooctanesulfonamidoacetic Acid (n-MeFOSAA)	ng/L	NS	4 U	-- --	4 U	-- --	4 U	-- --	4 U	-- --	4 U	-- --	4.3 U	-- --	4 U
Perfluoropentanoic Acid (PFPeA)	ng/L	NS	1.4 J	-- --	1.7 J	-- --	35.1	-- --	15.9	-- --	19.3	-- --	16.3	-- --	19
6:2 Fluorotelomer Sulfonate (6:2 FTS)	ng/L	NS	8 U	-- --	8 U	-- --	3.5 J	-- --	8 U	-- --	8 U	-- --	8.7 U	-- --	8 U
n-Ethyl Perfluorooctanesulfonamidoacetic Acid (n-ETFOSAA)	ng/L	NS	4 U	-- --	4 U	-- --	4 U	-- --	4 U	-- --	4 U	-- --	4.3 U	-- --	4 U
Perfluorohexanoic Acid (PFHxA)	ng/L	NS	1 J	-- --	3.4	-- --	57.6	-- --	19.4	-- --	14.5	-- --	13.7	-- --	19.1
Perfluorododecanoic Acid (PFDoA)	ng/L	NS	2 U	-- --	2 U	-- --	2 U	-- --	2 U	-- --	2 U	-- --	2.2 U	-- --	2 U
Perfluorooctanoic Acid (PFOA)	ng/L	10	1.9 J	-- --	285	-- --	334	-- --	48.4	-- --	49.8	-- --	48.9	-- --	183
Perfluorodecanoic acid (PFDA)	ng/L	NS	2 U	-- --	2 U	-- --	2 U	-- --	2 U	-- --	2 U	-- --	2.2 U	-- --	2 U
Perfluorodecanesulfonic acid (PFDS)	ng/L	NS	2 U	-- --	2 U	-- --	2 U	-- --	2 U	-- --	2 U	-- --	2.2 U	-- --	2 U
Perfluorohexanesulfonic Acid (PFHxS)	ng/L	NS	2 U	-- --	1.9 J	-- --	25.5	-- --	5.5	-- --	12.4	-- --	6.7	-- --	8.9
Perfluorobutanoic Acid (PFBA)	ng/L	NS	3.8 J	-- --	18.1	-- --	894	-- --	102	-- --	75	-- --	71.1	-- --	227
Perfluorobutanesulfonic Acid (PFBS)	ng/L	NS	1 J	-- --	3.4	-- --	10 U	-- --	47.7	-- --	2 U	-- --	2.2 U	-- --	2 U
Perfluoroheptanoic Acid (PFHpA)	ng/L	NS	2 U	-- --	6.9	-- --	52.2	-- --	9.7	-- --	12.7	-- --	13.8	-- --	23.8
Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	NS	2 U	-- --	2 U	-- --	2 U	-- --	1.7 J	-- --	1.4 J	-- --	1.6 J	-- --	2 U
Perfluorononanoic Acid (PFNA)	ng/L	NS	2 U	-- --	2 U	-- --	3.7	-- --	2 U	-- --	2 U	-- --	2.2 U	-- --	2 U
Perfluorotetradecanoic Acid (PFTeDA)	ng/L	NS	2 U	-- --	10 U	-- --	10 U	-- --	10 U	-- --	2 U	-- --	11 U	-- --	2 U
8:2 Fluorotelomer Sulfonate (8:2 FTS)	ng/L	NS	8 U	-- --	8 U	-- --	8 U	-- --	8 U	-- --	8 U	-- --	8.7 U	-- --	8 U
Perfluorotridecanoic Acid (PftRda)	ng/L	NS	2 U	-- --	10 U	-- --	10 U	-- --	10 U	-- --	2 U	-- --	11 U	-- --	2 U
Perfluorooctane Sulfonamide (FOSA)	ng/L	NS	4 U	-- --	20 U	-- --	20 U	-- --	20 U	-- --	20 U	-- --	22 U	-- --	20 U

Note:
Bold - Detected during Laboratory Analysis
B - Analyte Detected in Associated Method Blank
J - Analyte Detected Below Reporting Limit
U - Analyte not detected
Shading indicates exceedance of NYSDEC Class GA Standard
mg/L - milligrams per liter
ng/L - nanograms per liter
ug/L - micrograms per liter
NS - No Standard

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 Tiffitt Street, Buffalo, NY

3616206091

SGS Job Number: JD13917

Sampling Dates: 09/28/20 - 10/15/20

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: 1967



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.

Caitlin Brice
Caitlin Brice, M.S.
General Manager

Client Service contact: Kristin Degraw 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.



October 30, 2020

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

RE: SGS – Dayton, Job #JD13917 – Reissues

Dear Mr. Belcher:

The final report for SGS job number JD13917 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, additional samples received and analyzed for samples JD13917-10 thru -16. 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



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!





November 9, 2020

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

RE: SGS – Dayton, Job #JD13917 – Reissues #2

Dear Mr. Belcher:

The final report for SGS job number JD13917 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, the Ethylbenzene has been retrieved and reported for samples JD13917-10R -13R, -13DR, -13SR, and -16R per Ms. Aruna Chandrasekhar's request on 11/4/2020. 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



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 www.sgs.com

Member of the SGS Group (SGS SA)



3 of 1967

JD13917

Table of Contents

Sections:



Section 1: Sample Summary	7
Section 2: Case Narrative/Conformance Summary	10
Section 3: Summary of Hits	15
Section 4: Sample Results	19
4.1: JD13917-1: SUMP1	20
4.2: JD13917-2: SUMP2	22
4.3: JD13917-3: SUMP3	24
4.4: JD13917-4: SUMP4	26
4.5: JD13917-5: SUMP4 FIELD DUPLICATE	31
4.6: JD13917-6: SUMP COMP	36
4.7: JD13917-7: MW-2	41
4.8: JD13917-9: TRIP BLANK2	43
4.9: JD13917-10: SUMP 1-101520	45
4.10: JD13917-10R: SUMP 1-101520	46
4.11: JD13917-11: SUMP 2-101520	47
4.12: JD13917-11R: SUMP 2-101520	48
4.13: JD13917-12: SUMP 3-101520	49
4.14: JD13917-12R: SUMP 3-101520	50
4.15: JD13917-13: SUMP 4-101520	51
4.16: JD13917-13R: SUMP 4-101520	52
4.17: JD13917-14: MW2-101520	53
4.18: JD13917-14R: MW2-101520	57
4.19: JD13917-15: FDUP-SUMP 4-101520	58
4.20: JD13917-15R: FDUP-SUMP 4-101520	59
4.21: JD13917-16: TRIP BLANK	60
4.22: JD13917-16R: TRIP BLANK	61
Section 5: Misc. Forms	62
5.1: Chain of Custody	63
5.2: Sample Tracking Chronicle	70
5.3: Internal Chain of Custody	74
Section 6: MS Volatiles - QC Data Summaries	79
6.1: Method Blank Summary	80
6.2: Blank Spike Summary	82
6.3: Matrix Spike/Matrix Spike Duplicate Summary	84
6.4: Instrument Performance Checks (BFB)	86
6.5: Internal Standard Area Summaries	92
6.6: Surrogate Recovery Summaries	94
6.7: Initial and Continuing Calibration Summaries	95
6.8: Run Sequence Reports	126
Section 7: MS Volatiles - Raw Data	130
7.1: Samples	131
7.2: Method Blanks	173

Table of Contents

Sections:



-2-

7.3: Blank Spikes	182
7.4: Matrix Spike/Matrix Spike Duplicates	190
7.5: Instrument Performance Checks (BFB)	206
7.6: Initial and Continuing Calibrations	216
7.7: Instrument Run Logs	329
Section 8: MS Semi-volatiles - QC Data Summaries	337
8.1: Method Blank Summary	338
8.2: Blank Spike/Blank Spike Duplicate Summary	342
8.3: Matrix Spike/Matrix Spike Duplicate Summary	346
8.4: Instrument Performance Checks (DFTPP)	348
8.5: Injection/Internal Standard Area Summaries	363
8.6: Isotope Dilution Standard/Surrogate Recovery Summaries	368
8.7: Initial and Continuing Calibration Summaries	370
8.8: Run Sequence Reports	411
Section 9: MS Semi-volatiles - Raw Data	422
9.1: Samples	423
9.2: Method Blanks	465
9.3: Blank Spike/Blank Spike Duplicates	487
9.4: Matrix Spike/Matrix Spike Duplicates	523
9.5: Instrument Performance Checks (DFTPP)	535
9.6: Initial and Continuing Calibrations	603
9.7: Instrument Run Logs	814
9.8: Prep Logs	838
Section 10: Metals Analysis - QC Data Summaries	842
10.1: Inst QC MA49398: Hg	843
10.2: Inst QC MA49404: Sb,As,Cd,Cr,Fe,Pb,Mn	851
10.3: Inst QC MA49413: Mn	902
10.4: Inst QC MA49525: Hg	939
10.5: Inst QC MA49532: Sb,As,Cd,Cr,Fe,Pb,Mn	954
10.6: Inst QC MA49542: Sb,As,Cd,Cr,Fe,Pb,Mn	1001
10.7: Prep QC MP23076: Hg	1046
10.8: Prep QC MP23090: Sb,As,Cd,Cr,Fe,Pb,Mn	1050
10.9: Prep QC MP23401: Sb,As,Cd,Cr,Fe,Pb,Mn	1060
10.10: Prep QC MP23463: Hg	1070
10.11: IDL and Linear Range Summaries	1074
Section 11: Metals Analysis - Raw Data	1082
11.1: Raw Data MA49398	1083
11.2: Raw Data MA49404	1085
11.3: Raw Data MA49413	1189
11.4: Raw Data MA49525	1218
11.5: Raw Data MA49532	1221
11.6: Raw Data MA49542	1310

Table of Contents

Sections:

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

-3-

11.7: Prep Logs	1380
Section 12: Misc. Forms (SGS Orlando, FL)	1392
12.1: Chain of Custody	1393
12.2: Sample Tracking Chronicle	1395
Section 13: MS Semi-volatiles - QC Data (SGS Orlando, FL)	1397
13.1: Method Blank Summary	1398
13.2: Blank Spike Summary	1403
13.3: Matrix Spike/Matrix Spike Duplicate Summary	1405
13.4: Isotope Dilution Standard Recovery Summaries	1407
13.5: Initial and Continuing Calibration Summaries	1410
13.6: Run Sequence Reports	1437
Section 14: MS Semi-volatiles - Raw Data (SGS Orlando, FL)	1441
14.1: Samples	1442
14.2: Method Blanks	1590
14.3: Blank Spikes	1614
14.4: Matrix Spike/Matrix Spike Duplicates	1630
14.5: Initial and Continuing Calibrations	1662
14.6: Instrument Run Logs	1961
14.7: Prep Logs	1967



Sample Summary

Honeywell International Inc. OMM work

Job No: JD13917

HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY
Project No: 3616206091

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID

This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL

Metals ND = Not detected above the MDL

JD13917-1	09/28/20	14:15 KAA	09/30/20	AQ	Ground Water	SUMP1
JD13917-2	09/28/20	15:20 KAA	09/30/20	AQ	Ground Water	SUMP2
JD13917-3	09/28/20	16:40 KAA	09/30/20	AQ	Ground Water	SUMP3
JD13917-4	09/28/20	18:00 KAA	09/30/20	AQ	Ground Water	SUMP4
JD13917-4D	09/28/20	18:00 KAA	09/30/20	AQ	Water Dup/MSD	SUMP4 MSD
JD13917-4S	09/28/20	18:00 KAA	09/30/20	AQ	Water Matrix Spike	SUMP4 MS
JD13917-5	09/28/20	18:00 KAA	09/30/20	AQ	Ground Water	SUMP4 FIELD DUPLICATE
JD13917-6	09/28/20	19:00 KAA	09/30/20	AQ	Ground Water	SUMP COMP
JD13917-7	09/29/20	09:40 KAA	09/30/20	AQ	Ground Water	MW-2
JD13917-8	09/29/20	09:40 KAA	09/30/20	AQ	Trip Blank Water	TRIP BLANK
JD13917-9	09/29/20	09:40 KAA	09/30/20	AQ	Trip Blank Water	TRIP BLANK2
JD13917-10	10/15/20	11:20 KAA	10/16/20	AQ	Ground Water	SUMP 1-101520



SGS North America Inc.

Sample Summary
(continued)

Honeywell International Inc. OMM work

Job No: JD13917

HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY
Project No: 3616206091

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD13917-10R	10/15/20	11:20 KAA	10/16/20	AQ	Ground Water	SUMP 1-101520
JD13917-11	10/15/20	12:05 KAA	10/16/20	AQ	Ground Water	SUMP 2-101520
JD13917-11R	10/15/20	12:05 KAA	10/16/20	AQ	Ground Water	SUMP 2-101520
JD13917-12	10/15/20	12:55 KAA	10/16/20	AQ	Ground Water	SUMP 3-101520
JD13917-12R	10/15/20	12:55 KAA	10/16/20	AQ	Ground Water	SUMP 3-101520
JD13917-13	10/15/20	13:40 KAA	10/16/20	AQ	Ground Water	SUMP 4-101520
JD13917-13D	10/15/20	13:40 KAA	10/16/20	AQ	Water Dup/MSD	SUMP 4-101520-MSD
JD13917-13DR	10/15/20	13:40 KAA	10/16/20	AQ	Water Dup/MSD	SUMP 4-101520-MSD
JD13917-13R	10/15/20	13:40 KAA	10/16/20	AQ	Ground Water	SUMP 4-101520
JD13917-13S	10/15/20	13:40 KAA	10/16/20	AQ	Water Matrix Spike	SUMP 4-101520-MS
JD13917-13SR	10/15/20	13:40 KAA	10/16/20	AQ	Water Matrix Spike	SUMP 4-101520-MS
JD13917-14	10/15/20	10:40 KAA	10/16/20	AQ	Ground Water	MW2-101520
JD13917-14R	10/15/20	10:40 KAA	10/16/20	AQ	Ground Water	MW2-101520



SGS North America Inc.

Sample Summary
(continued)

Honeywell International Inc. OMM work

Job No: JD13917

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: 3616206091

Sample Number	Collected		Time By	Received	Matrix		Client Sample ID
	Date				Code	Type	
JD13917-15	10/15/20	13:40	KAA	10/16/20	AQ	Ground Water	FDUP-SUMP 4-101520
JD13917-15R	10/15/20	13:40	KAA	10/16/20	AQ	Ground Water	FDUP-SUMP 4-101520
JD13917-16	10/15/20	13:40	KAA	10/16/20	AQ	Trip Blank Water	TRIP BLANK
JD13917-16R	10/15/20	13:40	KAA	10/16/20	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: Honeywell International Inc. OMM work

Job No JD13917

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

Report Date 11/9/2020 9:46:02 AM

Between 09/30/2020 and 10/16/2020, 13 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD13917 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 8260D

Matrix: AQ

Batch ID: V4D4680

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD14942-1MS, JD14942-1MSD were used as the QC samples indicated.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Xylene (total), Ethylbenzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: AQ

Batch ID: VL9691

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13917-13MS, JD13917-13MSD were used as the QC samples indicated.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Chlorobenzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ **Batch ID:** F:OP82415

- The data for EPA 537M BY ID meets quality control requirements.
- JD13917-2: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD13917-6: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD13917-1: Analysis performed at SGS Orlando, FL.
- JD13917-1: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD13917-5: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD13917-6: Analysis performed at SGS Orlando, FL.
- JD13917-3: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD13917-4: Analysis performed at SGS Orlando, FL.
- JD13917-7: Analysis performed at SGS Orlando, FL.
- JD13917-5: Analysis performed at SGS Orlando, FL.
- JD13917-2: Analysis performed at SGS Orlando, FL.
- JD13917-4: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD13917-9: Analysis performed at SGS Orlando, FL.
- JD13917-3: Analysis performed at SGS Orlando, FL.
- JD13917-5 for PFOSA: Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.
- JD13917-6 for PFOSA: Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.
- JD13917-3 for Perfluorotetradecanoic acid: Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.
- JD13917-2 for Perfluorobutanoic acid: Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP29790

- All samples were extracted within the recommended method holding time.
- Sample(s) JD13917-4MS, JD13917-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** OP30124

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

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ **Batch ID:** OP29790A

- All samples were extracted within the recommended method holding time.
- Sample(s) JD13917-4MS, JD13917-4MSD were used as the QC samples indicated.
- Sample(s) JD13917-4, JD13917-5, JD13917-6 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: AQ **Batch ID:** OP30124A

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

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP23090

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13917-4MS, JD13917-4MSD, JD13917-4SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Chromium are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JD13917-4, JD13917-5, JD13917-6: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.

Matrix: AQ

Batch ID: MP23401

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13917-14MS, JD13917-14MSD, JD13917-14SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Chromium, Lead are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JD13917-14: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.
- MP23401-SD1 for Iron: Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP23076

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD13917-4MS, JD13917-4MSD were used as the QC samples for metals.

Matrix: AQ

Batch ID: MP23463

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD14712-1MS, JD14712-1MSD 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

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD13917

Site: HWINJOMM: HLAME: 30130-Alltft Landfill, 579 Tiftt Street,

Report Date 10/15/2020 11:31:49

7 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on between 09/28/2020 and 09/29/2020 and were received at SGS North America Inc - Orlando on 09/30/2020 properly preserved, at 1.7 Deg. C and intact. These Samples received an SGS Orlando job number of JD13917. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: OP82415

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JD13917-4MS, JD13917-4MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perfluorobutanesulfonic acid are outside control limits. Probable cause is due to matrix interference.

Sample(s) JD13917-1, JD13917-2, JD13917-3, JD13917-4, JD13917-5, JD13917-6 have surrogates outside control limits.

JD13917-1: Dilution required due to matrix interference (ID recovery standard failure).

JD13917-1 for 13C2-PFTeDA: Outside control limits.

JD13917-1 for 13C8-FOSA: Outside control limits.

JD13917-2 for 13C3-PFBS: Outside control limits.

JD13917-2 for 13C4-PFBA: Outside control limits.

JD13917-2 for 13C4-PFHpA: Outside control limits.

JD13917-2 for 13C5-PFHxA: Outside control limits.

JD13917-2 for 13C5-PFPeA: Outside control limits.

JD13917-2 for 13C8-FOSA: Outside control limits.

JD13917-2 for 13C8-PFOA: Outside control limits.

JD13917-2: Dilution required due to matrix interference (ID recovery standard failure).

JD13917-2 for Perfluorobutanoic acid: Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

JD13917-2 for 13C2-PFTeDA: Outside control limits.

JD13917-3: Dilution required due to matrix interference (ID recovery standard failure).

JD13917-3 for 13C2-PFTeDA: Outside control limits.

JD13917-3 for 13C4-PFBA: Outside control limits.

JD13917-3 for Perfluorotetradecanoic acid: Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

JD13917-3 for 13C5-PFHxA: Outside control limits.

JD13917-3 for 13C5-PFPeA: Outside control limits.

JD13917-3 for 13C8-FOSA: Outside control limits.

JD13917-4 for 13C8-FOSA: Outside control limits.

JD13917-4: Dilution required due to matrix interference (ID recovery standard failure).

JD13917-5 for 13C2-PFTeDA: Outside control limits.

JD13917-5 for 13C8-FOSA: Outside control limits.

JD13917-5 for PFOSA: Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

JD13917-5: Dilution required due to matrix interference (ID recovery standard failure).

JD13917-6 for 13C4-PFHpA: Outside control limits.

JD13917-6 for 13C5-PFHxA: Outside control limits.

JD13917-6 for 13C8-FOSA: Outside control limits.

JD13917-6 for PFOSA: Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

JD13917-6: Dilution required due to matrix interference (ID recovery standard failure).

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Ariel Hartney, Client Services (*Signature on File*)

Summary of Hits

Page 1 of 4

Job Number: JD13917

Account: Honeywell International Inc. OMM work

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

Collected: 09/28/20 thru 10/15/20



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD13917-1 SUMP1						
Perfluorobutanoic acid ^a		18.1	4.0	2.0	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a		1.7 J	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a		3.4	2.0	1.0	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a		6.9	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a		285	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a		3.4	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a		1.9 J	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		4.2	2.0	1.0	ng/l	EPA 537M BY ID
JD13917-2 SUMP2						
Perfluorobutanoic acid ^b		894	20	10	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^c		35.1	10	5.0	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^c		57.6	10	5.0	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^c		52.2	10	5.0	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^c		334	10	5.0	ng/l	EPA 537M BY ID
Perfluorononanoic acid ^a		3.7	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a		25.5	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		71.2	2.0	1.0	ng/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate ^a		3.5 J	8.0	2.0	ng/l	EPA 537M BY ID
JD13917-3 SUMP3						
Perfluorobutanoic acid ^c		102	20	10	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^c		15.9	10	5.0	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^c		19.4	10	5.0	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a		9.7	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a		48.4	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a		47.7	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a		5.5	2.0	1.0	ng/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid ^a		1.7 J	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		15.4	2.0	1.0	ng/l	EPA 537M BY ID
JD13917-4 SUMP4						
Perfluorobutanoic acid ^a		75.0	4.0	2.0	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a		19.3	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a		14.5	2.0	1.0	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a		12.7	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a		49.8	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a		12.4	2.0	1.0	ng/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid ^a		1.4 J	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		25.6	2.0	1.0	ng/l	EPA 537M BY ID

Summary of Hits

Page 2 of 4

Job Number: JD13917

Account: Honeywell International Inc. OMM work

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

Collected: 09/28/20 thru 10/15/20



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
4-Chloroaniline		0.42 J	5.0	0.34	ug/l	SW846 8270E
Naphthalene		0.24 J	1.0	0.23	ug/l	SW846 8270E
1,4-Dioxane		20.2 B	1.0	0.50	ug/l	SW846 8270E BY SIM
Arsenic		11.1	3.0	2.8	ug/l	SW846 6010D
Iron		40500	100	32	ug/l	SW846 6010D
Manganese		649	15	1.4	ug/l	SW846 6010D

JD13917-5 SUMP4 FIELD DUPLICATE

Perfluorobutanoic acid ^a	71.1	4.3	2.2	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a	16.3	2.2	1.1	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a	13.7	2.2	1.1	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a	13.8	2.2	1.1	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a	48.9	2.2	1.1	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a	6.7	2.2	1.1	ng/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid ^a	1.6 J	2.2	1.1	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	25.7	2.2	1.1	ng/l	EPA 537M BY ID
4-Chloroaniline	0.60 J	4.7	0.32	ug/l	SW846 8270E
Naphthalene	0.27 J	0.93	0.22	ug/l	SW846 8270E
1,4-Dioxane	20.5 B	0.93	0.47	ug/l	SW846 8270E BY SIM
Arsenic	12.2	3.0	2.8	ug/l	SW846 6010D
Chromium	2.1 J	10	2.0	ug/l	SW846 6010D
Iron	41400	100	32	ug/l	SW846 6010D
Manganese	651	15	1.4	ug/l	SW846 6010D

JD13917-6 SUMP COMP

Perfluorobutanoic acid ^a	227	4.0	2.0	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a	19.0	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^c	19.1	10	5.0	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^c	23.8	10	5.0	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a	183	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a	8.9	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	29.1	2.0	1.0	ng/l	EPA 537M BY ID
4-Chloroaniline	0.50 J	5.0	0.34	ug/l	SW846 8270E
Naphthalene	0.56 J	1.0	0.23	ug/l	SW846 8270E
1,4-Dioxane	15.1 B	1.0	0.50	ug/l	SW846 8270E BY SIM
Arsenic	11.4	3.0	2.8	ug/l	SW846 6010D
Chromium	7.9 J	10	2.0	ug/l	SW846 6010D
Iron	23600	100	32	ug/l	SW846 6010D
Manganese	1060	15	1.4	ug/l	SW846 6010D

JD13917-7 MW-2

Perfluorobutanoic acid ^a	3.8 J	4.0	2.0	ng/l	EPA 537M BY ID

Summary of Hits

Page 3 of 4

Job Number: JD13917

Account: Honeywell International Inc. OMM work

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

Collected: 09/28/20 thru 10/15/20



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluoropentanoic acid ^a		1.4 J	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a		1.0 J	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a		1.9 J	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a		1.0 J	2.0	1.0	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		4.0	2.0	1.0	ng/l	EPA 537M BY ID

JD13917-9 TRIP BLANK2

No hits reported in this sample.

JD13917-10 SUMP 1-101520

Chlorobenzene	1.0	1.0	0.56	ug/l	SW846 8260D

JD13917-10R SUMP 1-101520

No hits reported in this sample.

JD13917-11 SUMP 2-101520

Benzene	3.5	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene	49.9	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene	0.54 J	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene	0.77 J	1.0	0.51	ug/l	SW846 8260D

JD13917-11R SUMP 2-101520

No hits reported in this sample.

JD13917-12 SUMP 3-101520

Benzene	2.1	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene	12.1	1.0	0.56	ug/l	SW846 8260D

JD13917-12R SUMP 3-101520

No hits reported in this sample.

JD13917-13 SUMP 4-101520

Benzene	10.6	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene	147	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene	0.75 J	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene	1.9	1.0	0.51	ug/l	SW846 8260D

Summary of Hits

Page 4 of 4

Job Number: JD13917
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY
Collected: 09/28/20 thru 10/15/20



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

JD13917-13R SUMP 4-101520

No hits reported in this sample.

JD13917-14 MW2-101520

Arsenic	2.8 J	3.0	2.8	ug/l	SW846 6010D
Iron	316	100	32	ug/l	SW846 6010D
Manganese	167	15	1.4	ug/l	SW846 6010D

JD13917-14R MW2-101520

No hits reported in this sample.

JD13917-15 FDUP-SUMP 4-101520

Benzene	10.7	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene	144	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene	0.79 J	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene	1.8	1.0	0.51	ug/l	SW846 8260D

JD13917-15R FDUP-SUMP 4-101520

No hits reported in this sample.

JD13917-16 TRIP BLANK

No hits reported in this sample.

JD13917-16R TRIP BLANK

No hits reported in this sample.

- (a) Analysis performed at SGS Orlando, FL.
- (b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL. Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.
- (c) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID: SUMP1

Lab Sample ID: JD13917-1

Date Sampled: 09/28/20

Matrix: AQ - Ground Water

Date Received: 09/30/20

Method: EPA 537M BY ID EPA 537 MOD

Percent Solids: n/a

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

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q55976.D	1	10/11/20 20:40	AFL	10/09/20 09:00	F:OP82415	F:S2Q828
Run #2 ^b	2Q56046.D	5	10/13/20 09:20	AFL	10/09/20 09:00	F:OP82415	F:S2Q830

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2	250 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	18.1	4.0	2.0	ng/l	J
2706-90-3	Perfluoropentanoic acid	1.7	2.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	3.4	2.0	1.0	ng/l	
375-85-9	Perfluoroheptanoic acid	6.9	2.0	1.0	ng/l	
335-67-1	Perfluorooctanoic acid	285	2.0	1.0	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	1.0	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	1.0	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	1.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	1.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND ^c	10	5.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND ^c	10	5.0	ng/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	3.4	2.0	1.0	ng/l	J
355-46-4	Perfluorohexanesulfonic acid	1.9	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	4.2	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND ^c	20	10	ng/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	4.0	2.0	ng/l	
2991-50-6	EtFOSAA	ND	4.0	2.0	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	

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:	SUMP1	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-1	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltitt Landfill, 579 Tifft Street, Buffalo, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	75%	101%	35-135%
	13C5-PFPeA	76%	96%	50-150%
	13C5-PFHxA	73%	94%	50-150%
	13C4-PFHpA	71%	89%	50-150%
	13C8-PFOA	77%	95%	50-150%
	13C9-PFNA	83%	95%	50-150%
	13C6-PFDA	82%	94%	50-150%
	13C7-PFUnDA	81%	85%	40-140%
	13C2-PFDoDA	64%	74%	40-140%
	13C2-PFTeDA	17% ^d	40%	30-130%
	13C3-PFBS	80%	95%	50-150%
	13C3-PFHxS	79%	94%	50-150%
	13C8-PFOS	82%	91%	50-150%
	13C8-FOSA	24% ^d	47%	30-130%
	d3-MeFOSAA	96%	109%	50-150%
	d5-EtFOSAA	94%	102%	50-150%
	13C2-6:2FTS	83%	101%	50-150%
	13C2-8:2FTS	86%	93%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Result is from Run# 2

(d) Outside 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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID: SUMP2

Lab Sample ID: JD13917-2

Date Sampled: 09/28/20

Matrix: AQ - Ground Water

Date Received: 09/30/20

Method: EPA 537M BY ID EPA 537 MOD

Percent Solids: n/a

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

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q55977.D	1	10/11/20 20:55	AFL	10/09/20 09:00	F:OP82415	F:S2Q828
Run #2 ^b	2Q56047.D	5	10/13/20 09:35	AFL	10/09/20 09:00	F:OP82415	F:S2Q830

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2	250 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q

PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid ^c	894 ^d	20	10	ng/l	
2706-90-3	Perfluoropentanoic acid	35.1 ^d	10	5.0	ng/l	
307-24-4	Perfluorohexanoic acid	57.6 ^d	10	5.0	ng/l	
375-85-9	Perfluoroheptanoic acid	52.2 ^d	10	5.0	ng/l	
335-67-1	Perfluorooctanoic acid	334 ^d	10	5.0	ng/l	
375-95-1	Perfluorononanoic acid	3.7	2.0	1.0	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	1.0	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	1.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	1.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND ^d	10	5.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND ^d	10	5.0	ng/l	

PERFLUOROALKYLSULFONATES

375-73-5	Perfluorobutanesulfonic acid	ND ^d	10	5.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	25.5	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	71.2	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	

PERFLUOROOCTANESULFONAMIDES

754-91-6	PFOSA ^c	ND ^d	20	10	ng/l	

PERFLUOROOCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	4.0	2.0	ng/l	
2991-50-6	EtFOSAA	ND	4.0	2.0	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	3.5	8.0	2.0	ng/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	

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:	SUMP2	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-2	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltitt Landfill, 579 Tiftt Street, Buffalo, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11% ^f	21% ^e	35-135%
	13C5-PFPeA	34% ^f	65%	50-150%
	13C5-PFHxA	34% ^f	65%	50-150%
	13C4-PFHpA	30% ^f	63%	50-150%
	13C8-PFOA	42% ^f	71%	50-150%
	13C9-PFNA	54%	72%	50-150%
	13C6-PFDA	62%	73%	50-150%
	13C7-PFUnDA	70%	87%	40-140%
	13C2-PFDoDA	68%	83%	40-140%
	13C2-PFTeDA	20% ^f	63%	30-130%
	13C3-PFBS	49% ^f	77%	50-150%
	13C3-PFHxS	51%	74%	50-150%
	13C8-PFOS	61%	74%	50-150%
	13C8-FOSA	3% ^f	9% ^e	30-130%
	d3-MeFOSAA	80%	113%	50-150%
	d5-EtFOSAA	95%	122%	50-150%
	13C2-6:2FTS	53%	84%	50-150%
	13C2-8:2FTS	70%	85%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

(d) Result is from Run# 2

(e) Outside control limits due to matrix interference. Confirmed by reanalysis.

(f) Outside 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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	SUMP3	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-3	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q55978.D	1	10/11/20 21:09	AFL	10/09/20 09:00	F:OP82415	F:S2Q828
Run #2 ^b	2Q56048.D	5	10/13/20 09:50	AFL	10/09/20 09:00	F:OP82415	F:S2Q830

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2	250 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q

PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	102 ^c	20	10	ng/l	
2706-90-3	Perfluoropentanoic acid	15.9 ^c	10	5.0	ng/l	
307-24-4	Perfluorohexanoic acid	19.4 ^c	10	5.0	ng/l	
375-85-9	Perfluoroheptanoic acid	9.7	2.0	1.0	ng/l	
335-67-1	Perfluorooctanoic acid	48.4	2.0	1.0	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	1.0	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	1.0	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	1.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	1.0	ng/l	
72629-94-8	Perfluorotridecanoic acid ^d	ND ^c	10	5.0	ng/l	
376-06-7	Perfluorotetradecanoic acid ^d	ND ^c	10	5.0	ng/l	

PERFLUOROALKYLSULFONATES

375-73-5	Perfluorobutanesulfonic acid	47.7	2.0	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	5.5	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.7	2.0	1.0	ng/l	J
1763-23-1	Perfluorooctanesulfonic acid	15.4	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	

PERFLUOROOCTANESULFONAMIDES

754-91-6	PFOSA ^d	ND ^c	20	10	ng/l	

PERFLUOROOCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	4.0	2.0	ng/l	
2991-50-6	EtFOSAA	ND	4.0	2.0	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	

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:	SUMP3	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-3	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltitt Landfill, 579 Tiftt Street, Buffalo, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	34% ^e	71%	35-135%
	13C5-PFPeA	48% ^e	87%	50-150%
	13C5-PFHxA	47% ^e	85%	50-150%
	13C4-PFHpA	53%	81%	50-150%
	13C8-PFOA	71%	92%	50-150%
	13C9-PFNA	85%	93%	50-150%
	13C6-PFDA	89%	99%	50-150%
	13C7-PFUnDA	87%	94%	40-140%
	13C2-PFDoDA	55%	82%	40-140%
	13C2-PFTeDA	7% ^e	21% ^f	30-130%
	13C3-PFBS	64%	92%	50-150%
	13C3-PFHxS	80%	103%	50-150%
	13C8-PFOS	86%	92%	50-150%
	13C8-FOSA	6% ^e	12% ^f	30-130%
	d3-MeFOSAA	119%	121%	50-150%
	d5-EtFOSAA	107%	116%	50-150%
	13C2-6:2FTS	81%	101%	50-150%
	13C2-8:2FTS	97%	99%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Result is from Run# 2

(d) Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

(e) Outside control limits.

(f) Outside control limits due to matrix interference. Confirmed by reanalysis.

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP4	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-4	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F194696.D	1	10/02/20 05:25	CS	10/01/20 17:30	OP29790	EF8451
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	0.42	5.0	0.34	ug/l	J
91-20-3	Naphthalene	0.24	1.0	0.23	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		28-126%
321-60-8	2-Fluorobiphenyl	74%		26-114%
1718-51-0	Terphenyl-d14	75%		16-122%

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP4	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-4	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	HLAME: 30130-Alltitt Landfill, 579 Tiffitt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M95566.D	1	10/02/20 18:37	HSS	10/01/20 17:30	OP29790A	E4M4423
Run #2	4M95584.D	10	10/03/20 01:21	HSS	10/01/20 17:30	OP29790A	E4M4423

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

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	20.2 ^a	1.0	0.50	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%	72%	29-124%
321-60-8	2-Fluorobiphenyl	57%	68%	23-122%
1718-51-0	Terphenyl-d14	59%	71%	22-130%

(a) Result is from Run# 2

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID: SUMP4

Lab Sample ID: JD13917-4

Matrix: AQ - Ground Water

Method: EPA 537M BY ID EPA 537 MOD

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

Date Sampled: 09/28/20

Date Received: 09/30/20

Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q55979.D	1	10/11/20 21:24	AFL	10/09/20 09:00	F:OP82415	F:S2Q828
Run #2 ^b	2Q56049.D	5	10/13/20 10:04	AFL	10/09/20 09:00	F:OP82415	F:S2Q830

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2	250 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q

PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	75.0	4.0	2.0	ng/l	
2706-90-3	Perfluoropentanoic acid	19.3	2.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	14.5	2.0	1.0	ng/l	
375-85-9	Perfluoroheptanoic acid	12.7	2.0	1.0	ng/l	
335-67-1	Perfluorooctanoic acid	49.8	2.0	1.0	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	1.0	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	1.0	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	1.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	1.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	1.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	1.0	ng/l	

PERFLUOROALKYLSULFONATES

375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	12.4	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.4	2.0	1.0	ng/l	J
1763-23-1	Perfluorooctanesulfonic acid	25.6	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	

PERFLUOROOCTANESULFONAMIDES

754-91-6	PFOSA	ND ^c	20	10	ng/l	

PERFLUOROOCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	4.0	2.0	ng/l	
2991-50-6	EtFOSAA	ND	4.0	2.0	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	

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:	SUMP4	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-4	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltitt Landfill, 579 Tifft Street, Buffalo, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	41%	79%	35-135%
	13C5-PFPeA	55%	92%	50-150%
	13C5-PFHxA	55%	88%	50-150%
	13C4-PFHpA	59%	86%	50-150%
	13C8-PFOA	75%	95%	50-150%
	13C9-PFNA	83%	96%	50-150%
	13C6-PFDA	85%	102%	50-150%
	13C7-PFUnDA	97%	102%	40-140%
	13C2-PFDoDA	97%	94%	40-140%
	13C2-PFTeDA	81%	79%	30-130%
	13C3-PFBS	71%	95%	50-150%
	13C3-PFHxS	77%	95%	50-150%
	13C8-PFOS	85%	96%	50-150%
	13C8-FOSA	20% ^d	34%	30-130%
	d3-MeFOSAA	111%	124%	50-150%
	d5-EtFOSAA	116%	120%	50-150%
	13C2-6:2FTS	85%	107%	50-150%
	13C2-8:2FTS	93%	106%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Result is from Run# 2

(d) Outside 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: SUMP4	Date Sampled: 09/28/20
Lab Sample ID: JD13917-4	Date Received: 09/30/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff 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	10/02/20	10/03/20	ND	SW846 3010A ⁴
Arsenic	11.1	3.0	2.8	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Chromium	ND	10	2.0	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Iron	40500	100	32	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Manganese	649	15	1.4	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Mercury	ND	0.20	0.095	ug/l	1	10/02/20	10/02/20	LL	SW846 7470A ¹

(1) Instrument QC Batch: MA49398

(2) Instrument QC Batch: MA49404

(3) Prep QC Batch: MP23076

(4) Prep QC Batch: MP23090

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result $\geq$ MDL but $<$ RL

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: SUMP4 FIELD DUPLICATE

Lab Sample ID: JD13917-5

Date Sampled: 09/28/20

Matrix: AQ - Ground Water

Date Received: 09/30/20

Method: SW846 8270E SW846 3510C

Percent Solids: n/a

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

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F194697.D	1	10/02/20 05:51	CS	10/01/20 17:30	OP29790	EF8451
Run #2							

	Initial Volume	Final Volume
Run #1	1080 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	0.60	4.7	0.32	ug/l	J
91-20-3	Naphthalene	0.27	0.93	0.22	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		28-126%
321-60-8	2-Fluorobiphenyl	70%		26-114%
1718-51-0	Terphenyl-d14	58%		16-122%

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP4 FIELD DUPLICATE				
Lab Sample ID:	JD13917-5			Date Sampled:	09/28/20
Matrix:	AQ - Ground Water			Date Received:	09/30/20
Method:	SW846 8270E BY SIM SW846 3510C			Percent Solids:	n/a
Project:	HLAME: 30130-Alltitt Landfill, 579 Tiftt Street, Buffalo, NY				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M95567.D	1	10/02/20 18:57	HSS	10/01/20 17:30	OP29790A	E4M4423
Run #2	4M95585.D	10	10/03/20 01:42	HSS	10/01/20 17:30	OP29790A	E4M4423

	Initial Volume	Final Volume
Run #1	1080 ml	1.0 ml
Run #2	1080 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	20.5 ^a	0.93	0.47	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%	73%	29-124%
321-60-8	2-Fluorobiphenyl	53%	66%	23-122%
1718-51-0	Terphenyl-d14	49%	57%	22-130%

(a) Result is from Run# 2

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	SUMP4 FIELD DUPLICATE			Date Sampled:	09/28/20
Lab Sample ID:	JD13917-5			Date Received:	09/30/20
Matrix:	AQ - Ground Water			Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD				
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q55982.D	1	10/11/20 22:08	AFL	10/09/20 09:00	F:OP82415	F:S2Q828
Run #2 ^b	2Q56052.D	5	10/13/20 10:49	AFL	10/09/20 09:00	F:OP82415	F:S2Q830

	Initial Volume	Final Volume
Run #1	230 ml	1.0 ml
Run #2	230 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	71.1	4.3	2.2	ng/l	
2706-90-3	Perfluoropentanoic acid	16.3	2.2	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	13.7	2.2	1.1	ng/l	
375-85-9	Perfluoroheptanoic acid	13.8	2.2	1.1	ng/l	
335-67-1	Perfluorooctanoic acid	48.9	2.2	1.1	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	1.1	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	1.1	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	1.1	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	1.1	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND ^c	11	5.4	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND ^c	11	5.4	ng/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	6.7	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.6	2.2	1.1	ng/l	J
1763-23-1	Perfluorooctanesulfonic acid	25.7	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA ^d	ND ^c	22	11	ng/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	4.3	2.2	ng/l	
2991-50-6	EtFOSAA	ND	4.3	2.2	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.7	2.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.7	2.2	ng/l	

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:	SUMP4 FIELD DUPLICATE		
Lab Sample ID:	JD13917-5	Date Sampled:	09/28/20
Matrix:	AQ - Ground Water	Date Received:	09/30/20
Method:	EPA 537M BY ID EPA 537 MOD	Percent Solids:	n/a
Project:	HLAME: 30130-Alltitt Landfill, 579 Tift Street, Buffalo, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	47%	87%	35-135%
	13C5-PFPeA	55%	88%	50-150%
	13C5-PFHxA	55%	85%	50-150%
	13C4-PFHpA	58%	81%	50-150%
	13C8-PFOA	72%	88%	50-150%
	13C9-PFNA	77%	86%	50-150%
	13C6-PFDA	76%	88%	50-150%
	13C7-PFUnDA	79%	89%	40-140%
	13C2-PFDoDA	60%	80%	40-140%
	13C2-PFTeDA	12% ^e	40%	30-130%
	13C3-PFBS	69%	86%	50-150%
	13C3-PFHxS	74%	87%	50-150%
	13C8-PFOS	75%	81%	50-150%
	13C8-FOSA	11% ^e	17% ^f	30-130%
	d3-MeFOSAA	98%	109%	50-150%
	d5-EtFOSAA	95%	102%	50-150%
	13C2-6:2FTS	82%	97%	50-150%
	13C2-8:2FTS	84%	91%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Result is from Run# 2

(d) Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

(e) Outside control limits.

(f) Outside control limits due to matrix interference. Confirmed by reanalysis.

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:	SUMP4 FIELD DUPLICATE		
Lab Sample ID:	JD13917-5	Date Sampled:	09/28/20
Matrix:	AQ - Ground Water	Date Received:	09/30/20
		Percent Solids:	n/a
Project:	HLAME: 30130-Alltitt Landfill, 579 Tifft 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	10/02/20	10/03/20	ND	SW846 3010A ⁵
Arsenic	12.2	3.0	2.8	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁵
Cadmium	ND	3.0	1.0	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁵
Chromium	2.1 J	10	2.0	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁵
Iron	41400	100	32	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁵
Lead	ND	3.0	1.8	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁵
Manganese	651	15	1.4	ug/l	1	10/02/20	10/05/20	ND	SW846 3010A ⁵
Mercury	ND	0.20	0.095	ug/l	1	10/02/20	10/02/20	LL	SW846 7470A ¹

(1) Instrument QC Batch: MA49398

(2) Instrument QC Batch: MA49404

(3) Instrument QC Batch: MA49413

(4) Prep QC Batch: MP23076

(5) Prep QC Batch: MP23090

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result $\geq$ MDL but $<$ RL

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP COMP	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-6	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F194702.D	1	10/02/20 08:05	CS	10/01/20 17:30	OP29790	EF8451
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	0.50	5.0	0.34	ug/l	J
91-20-3	Naphthalene	0.56	1.0	0.23	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		28-126%
321-60-8	2-Fluorobiphenyl	74%		26-114%
1718-51-0	Terphenyl-d14	86%		16-122%

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP COMP	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-6	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	HLAME: 30130-Alltitt Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M95568.D	1	10/02/20 19:18	HSS	10/01/20 17:30	OP29790A	E4M4423
Run #2	4M95586.D	10	10/03/20 02:03	HSS	10/01/20 17:30	OP29790A	E4M4423

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

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	15.1 ^a	1.0	0.50	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%	67%	29-124%
321-60-8	2-Fluorobiphenyl	57%	68%	23-122%
1718-51-0	Terphenyl-d14	67%	80%	22-130%

(a) Result is from Run# 2

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID: SUMP COMP

Lab Sample ID: JD13917-6

Date Sampled: 09/28/20

Matrix: AQ - Ground Water

Date Received: 09/30/20

Method: EPA 537M BY ID EPA 537 MOD

Percent Solids: n/a

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

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q55983.D	1	10/11/20 22:23	AFL	10/09/20 09:00	F:OP82415	F:S2Q828
Run #2 ^b	2Q56053.D	5	10/13/20 11:03	AFL	10/09/20 09:00	F:OP82415	F:S2Q830

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2	250 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q

PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	227	4.0	2.0	ng/l	
2706-90-3	Perfluoropentanoic acid	19.0	2.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	19.1 ^c	10	5.0	ng/l	
375-85-9	Perfluoroheptanoic acid	23.8 ^c	10	5.0	ng/l	
335-67-1	Perfluorooctanoic acid	183	2.0	1.0	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	1.0	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	1.0	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	1.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	1.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	1.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	1.0	ng/l	

PERFLUOROALKYLSULFONATES

375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	8.9	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	29.1	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	

PERFLUOROOCTANESULFONAMIDES

754-91-6	PFOSA ^d	ND ^c	20	10	ng/l	

PERFLUOROOCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	4.0	2.0	ng/l	
2991-50-6	EtFOSAA	ND	4.0	2.0	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	

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	Date Sampled:	09/28/20
Lab Sample ID:	JD13917-6	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltitt Landfill, 579 Tift Street, Buffalo, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	38%	68%	35-135%
	13C5-PFPeA	50%	84%	50-150%
	13C5-PFHxA	48% ^e	80%	50-150%
	13C4-PFHpA	49% ^e	76%	50-150%
	13C8-PFOA	63%	82%	50-150%
	13C9-PFNA	71%	83%	50-150%
	13C6-PFDA	70%	85%	50-150%
	13C7-PFUnDA	78%	83%	40-140%
	13C2-PFDoDA	80%	81%	40-140%
	13C2-PFTeDA	66%	75%	30-130%
	13C3-PFBS	63%	85%	50-150%
	13C3-PFHxS	69%	86%	50-150%
	13C8-PFOS	72%	85%	50-150%
	13C8-FOSA	15% ^e	26% ^f	30-130%
	d3-MeFOSAA	96%	107%	50-150%
	d5-EtFOSAA	104%	107%	50-150%
	13C2-6:2FTS	73%	91%	50-150%
	13C2-8:2FTS	78%	88%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Result is from Run# 2

(d) Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.

(e) Outside control limits.

(f) Outside control limits due to matrix interference. Confirmed by reanalysis.

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	Date Sampled: 09/28/20
Lab Sample ID: JD13917-6	Date Received: 09/30/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff 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	10/02/20	10/03/20	ND	SW846 3010A ⁴
Arsenic	11.4	3.0	2.8	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Chromium	7.9 J	10	2.0	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Iron	23600	100	32	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Manganese	1060	15	1.4	ug/l	1	10/02/20	10/03/20	ND	SW846 3010A ⁴
Mercury	ND	0.20	0.095	ug/l	1	10/02/20	10/02/20	LL	SW846 7470A ¹

(1) Instrument QC Batch: MA49398

(2) Instrument QC Batch: MA49404

(3) Prep QC Batch: MP23076

(4) Prep QC Batch: MP23090

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result $\geq$ MDL but $<$ RL

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-2	Date Sampled:	09/29/20
Lab Sample ID:	JD13917-7	Date Received:	09/30/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q55984.D	1	10/11/20 22:38	AFL	10/09/20 09:00	F:OP82415	F:S2Q828
Run #2							

Run #	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	3.8	4.0	2.0	ng/l	J
2706-90-3	Perfluoropentanoic acid	1.4	2.0	1.0	ng/l	J
307-24-4	Perfluorohexanoic acid	1.0	2.0	1.0	ng/l	J
375-85-9	Perfluoroheptanoic acid	ND	2.0	1.0	ng/l	
335-67-1	Perfluorooctanoic acid	1.9	2.0	1.0	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	1.0	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	1.0	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	1.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	1.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	1.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	1.0	ng/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	1.0	2.0	1.0	ng/l	J
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	4.0	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	4.0	2.0	ng/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	4.0	2.0	ng/l	
2991-50-6	EtFOSAA	ND	4.0	2.0	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	2.0	ng/l	

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: MW-2	Date Sampled: 09/29/20
Lab Sample ID: JD13917-7	Date Received: 09/30/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: EPA 537M BY ID EPA 537 MOD	
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY	

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	87%		35-135%
	13C5-PFPeA	86%		50-150%
	13C5-PFHxA	83%		50-150%
	13C4-PFHpA	78%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	87%		50-150%
	13C6-PFDA	84%		50-150%
	13C7-PFUnDA	76%		40-140%
	13C2-PFDoDA	80%		40-140%
	13C2-PFTeDA	59%		30-130%
	13C3-PFBS	86%		50-150%
	13C3-PFHxS	83%		50-150%
	13C8-PFOS	82%		50-150%
	13C8-FOSA	61%		30-130%
	d3-MeFOSAA	96%		50-150%
	d5-EtFOSAA	97%		50-150%
	13C2-6:2FTS	89%		50-150%
	13C2-8:2FTS	84%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	TRIP BLANK2	Date Sampled:	09/29/20
Lab Sample ID:	JD13917-9	Date Received:	09/30/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q55985.D	1	10/11/20 22:53	AFL	10/09/20 09:00	F:OP82415	F:S2Q828
Run #2							

Run #	Initial Volume	Final Volume
Run #1	200 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q

PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	5.0	2.5	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	2.5	1.3	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.5	1.3	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.5	1.3	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.5	1.3	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.5	1.3	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.5	1.3	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.5	1.3	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.5	1.3	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.5	1.3	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.5	1.3	ng/l	

PERFLUOROALKYLSULFONATES

375-73-5	Perfluorobutanesulfonic acid	ND	2.5	1.3	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.5	1.3	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.5	1.3	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.5	1.3	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.5	1.3	ng/l	

PERFLUOROOCTANESULFONAMIDES

754-91-6	PFOSA	ND	5.0	2.5	ng/l	

PERFLUOROOCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	5.0	2.5	ng/l	
2991-50-6	EtFOSAA	ND	5.0	2.5	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	10	2.5	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	10	2.5	ng/l	

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:	TRIP BLANK2	Date Sampled:	09/29/20
Lab Sample ID:	JD13917-9	Date Received:	09/30/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	101%		35-135%
	13C5-PFPeA	98%		50-150%
	13C5-PFHxA	98%		50-150%
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	98%		50-150%
	13C9-PFNA	97%		50-150%
	13C6-PFDA	97%		50-150%
	13C7-PFUnDA	96%		40-140%
	13C2-PFDoDA	92%		40-140%
	13C2-PFTeDA	84%		30-130%
	13C3-PFBS	99%		50-150%
	13C3-PFHxS	99%		50-150%
	13C8-PFOS	97%		50-150%
	13C8-FOSA	90%		30-130%
	d3-MeFOSAA	102%		50-150%
	d5-EtFOSAA	103%		50-150%
	13C2-6:2FTS	94%		50-150%
	13C2-8:2FTS	91%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 1-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-10	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D105319.D	1	10/27/20 12:09	ED	n/a	n/a	V4D4680
Run #2							

Run #	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	1.0	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	
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	86%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	97%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 1-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-10R	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D105319R.D	1	10/27/20 12:09	ED	n/a	n/a	V4D4680
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	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	86%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	97%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 2-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-11	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325621.D	1	10/24/20 14:20	MD	n/a	n/a	VL9691
Run #2							

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

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	3.5	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	49.9	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	0.54	1.0	0.53	ug/l	J
106-46-7	1,4-Dichlorobenzene	0.77	1.0	0.51	ug/l	J
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	91%		80-120%
17060-07-0	1,2-Dichloroethane-D4	93%		81-124%
2037-26-5	Toluene-D8	114%		80-120%
460-00-4	4-Bromofluorobenzene	103%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 2-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-11R	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325621R.D	1	10/24/20 14:20	MD	n/a	n/a	VL9691
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		80-120%
17060-07-0	1,2-Dichloroethane-D4	93%		81-124%
2037-26-5	Toluene-D8	114%		80-120%
460-00-4	4-Bromofluorobenzene	103%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 3-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-12	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325620.D	1	10/24/20 13:53	MD	n/a	n/a	VL9691
Run #2							

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

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.1	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	12.1	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	
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	89%		80-120%
17060-07-0	1,2-Dichloroethane-D4	92%		81-124%
2037-26-5	Toluene-D8	116%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 3-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-12R	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325620R.D	1	10/24/20 13:53	MD	n/a	n/a	VL9691
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		80-120%
17060-07-0	1,2-Dichloroethane-D4	92%		81-124%
2037-26-5	Toluene-D8	116%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 4-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-13	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325618.D	1	10/24/20 12:58	MD	n/a	n/a	VL9691
Run #2							

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

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	10.6	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	147	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75	1.0	0.53	ug/l	J
106-46-7	1,4-Dichlorobenzene	1.9	1.0	0.51	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	90%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	119%		80-120%
460-00-4	4-Bromofluorobenzene	101%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP 4-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-13R	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325618R.D	1	10/24/20 12:58	MD	n/a	n/a	VL9691
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	119%		80-120%
460-00-4	4-Bromofluorobenzene	101%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	MW2-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-14	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325619.D	1	10/24/20 13:25	MD	n/a	n/a	VL9691
Run #2							

Run #	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	
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	
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	92%		80-120%
17060-07-0	1,2-Dichloroethane-D4	98%		81-124%
2037-26-5	Toluene-D8	108%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	MW2-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-14	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F195122.D	1	10/21/20 08:07	CS	10/20/20 17:00	OP30124	EF8469
Run #2							

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

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	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	109%		28-126%
321-60-8	2-Fluorobiphenyl	89%		26-114%
1718-51-0	Terphenyl-d14	106%		16-122%

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	MW2-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-14	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P87919.D	1	10/22/20 03:38	CS	10/20/20 17:00	OP30124A	E3P4131
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		29-124%
321-60-8	2-Fluorobiphenyl	78%		23-122%
1718-51-0	Terphenyl-d14	91%		22-130%

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: MW2-101520	Date Sampled: 10/15/20
Lab Sample ID: JD13917-14	Date Received: 10/16/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff 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	10/22/20	10/24/20	ND	SW846 3010A ³
Arsenic	2.8 J	3.0	2.8	ug/l	1	10/22/20	10/24/20	ND	SW846 3010A ³
Cadmium	ND	3.0	1.0	ug/l	1	10/22/20	10/24/20	ND	SW846 3010A ³
Chromium	ND	10	2.0	ug/l	1	10/22/20	10/24/20	ND	SW846 3010A ³
Iron	316	100	32	ug/l	1	10/22/20	10/24/20	ND	SW846 3010A ³
Lead	ND	3.0	1.8	ug/l	1	10/22/20	10/24/20	ND	SW846 3010A ³
Manganese	167	15	1.4	ug/l	1	10/22/20	10/24/20	ND	SW846 3010A ³
Mercury	ND	0.20	0.095	ug/l	1	10/23/20	10/23/20	LL	SW846 7470A ¹

(1) Instrument QC Batch: MA49525

(2) Instrument QC Batch: MA49532

(3) Prep QC Batch: MP23401

(4) Prep QC Batch: MP23463

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result $\geq$ MDL but $<$ RL

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	MW2-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-14R	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325619R.D	1	10/24/20 13:25	MD	n/a	n/a	VL9691
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		80-120%
17060-07-0	1,2-Dichloroethane-D4	98%		81-124%
2037-26-5	Toluene-D8	108%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	FDUP-SUMP 4-101520	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-15	Date Received:	10/16/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325627.D	1	10/24/20 17:10	MD	n/a	n/a	VL9691
Run #2							

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

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	10.7	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	144	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	0.79	1.0	0.53	ug/l	J
106-46-7	1,4-Dichlorobenzene	1.8	1.0	0.51	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	91%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		81-124%
2037-26-5	Toluene-D8	117%		80-120%
460-00-4	4-Bromofluorobenzene	102%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: FDUP-SUMP 4-101520

Lab Sample ID: JD13917-15R

Date Sampled: 10/15/20

Matrix: AQ - Ground Water

Date Received: 10/16/20

Method: SW846 8260D

Percent Solids: n/a

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

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325627R.D	1	10/24/20 17:10	MD	n/a	n/a	VL9691
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		81-124%
2037-26-5	Toluene-D8	117%		80-120%
460-00-4	4-Bromofluorobenzene	102%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	TRIP BLANK	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-16	Date Received:	10/16/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325626.D	1	10/24/20 16:43	MD	n/a	n/a	VL9691
Run #2							

Run #	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	
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	
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	92%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		81-124%
2037-26-5	Toluene-D8	113%		80-120%
460-00-4	4-Bromofluorobenzene	101%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	TRIP BLANK	Date Sampled:	10/15/20
Lab Sample ID:	JD13917-16R	Date Received:	10/16/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L325626R.D	1	10/24/20 16:43	MD	n/a	n/a	VL9691
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		81-124%
2037-26-5	Toluene-D8	113%		80-120%
460-00-4	4-Bromofluorobenzene	101%		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



Dayton, NJ

Section 5

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

SGS

FW
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08410
TEL: 732-229-0298 FAX: 732-229-0299
www.sgs.com

1215 6032 5506

Page 1 of 1

PH

Client / Reporting Information				Project Information				Requester Analysis				Laboratory			
WOOD EGIS				ALLIANT WASTE											
511 CONGRESS ST. Ste 200				TIEFT ST.											
PORTLAND ME 04101				BUFFALO NY											
Project Contact: Ryan Beldier				Project # 310626091											
(207) 828-8530															
Customer Name: KATHIE AMANN (510) 412-0314				Project Name: ROBERT GERSH											
Item	Field ID / Point of Collection	Method	Date	Time	Sample ID	Unit	Matrix	24 hr	1 hr	15 min	10 min	5 min	1 min	15 sec	10 sec
1	SUMP 1		9/22/20	1415	KM	G	GW	5	3						
2	SUMP 2			1520				5	3						
3	SUMP 3			1640				5	3						
4	SUMP 4			1800				10	3						
5	SUMP 4 MS			1800				10	3						
6	SUMP 4 MSD			1800				10	3						
7	SUMP 4 FIELD SURFATE			1800				10	3						
8	SUMP COMP			1900				7							
9	MW-2		9/22/20	0940	L	G		5	3						
10	TRIP BLANK		9/22/20	1630			TR	2	2						
11	TRIP BLANK 2		9/22/20	1000	KM		TB	2							
☒ 10 Business Days ☐ 5 Business Days ☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day ☐ Other Approved by: <i>[Signature]</i> Date: <i>9/22/20</i> ☐ Comments "A" (Level 1) ☐ Comments "B" (Level 2) ☐ Full Test (Level 3) ☐ Comments "C" ☐ All EXGP ☒ MYAP Category A ☐ MYAP Category B ☐ NA RCP: Other ☐ CT RCP: Other ☐ RCP: Other ☐ EXGP Comments / Special Instructions: B2L2: Benzene, chlorobenzene, ethylbenzene, xylene, 1,2-dichlorobenzene, 1,4-dichlorobenzene. NUMBER OF COILERS IN SAMPLE SHIPMENT:															
☒ 10 Business Days ☐ 5 Business Days ☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day ☐ Other Approved by: <i>[Signature]</i> Date: <i>9/22/20</i> ☐ Comments "A" (Level 1) ☐ Comments "B" (Level 2) ☐ Full Test (Level 3) ☐ Comments "C" ☐ All EXGP ☒ MYAP Category A ☐ MYAP Category B ☐ NA RCP: Other ☐ CT RCP: Other ☐ RCP: Other ☐ EXGP Comments / Special Instructions: B2L2: Benzene, chlorobenzene, ethylbenzene, xylene, 1,2-dichlorobenzene, 1,4-dichlorobenzene. NUMBER OF COILERS IN SAMPLE SHIPMENT:															

Initial Assessment 1 Box
Label Verification _____

SGS

ACCTEST

CHA

Ref: SM-081619-53
Dep:

Date: 16Aug18
Wgt: 20.00 LBS

DV:

SHIPPING:
SPECIAL:
HANDLING:
TOTAL:

0.00
0.00
0.00
0.00

PAGE 1 OF 1

22

2235 Route 135, Dayton, NJ 08819
TEL: 732-229-0200 FAX: 732-229-3480

Boiler Control #	SW-09720-88
SGS Account Job #	JD13917

Client/Project Information		Project Name		Sample Information		Matrix Codes		ST CODE		Matrix Codes	
Company Name Honeywell International Inc Street Address 1583 Willis Ave City State Zip Syracuse, New York 13204 Project Contact John Formoza John.formoza@honeywell.com Phone # 315-632-6608 Fax # Andrew Petrilli (949) 303-8164		Project Name HLAME 30130 - Air Int Landfill - Annual Street 575 Tift Street City State Zip Buffalo, New York 14220 Project # R35116 - Honeywell O&M Program Client/Purchase Order # A000672179 Project Manager Shahid Williams		Billing Information (# different from Report to) Company Name Honeywell International Inc Street Address 116 Tabor Road City State Zip Morris Plains, NJ 07950 Attention HIS-RES-LAB@honeywell.com		Sample Information AS CH 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720,					

$\text{HNO}_3, \text{pH} < 2$

JD13917: Chain of Custody

Page 2 of 7

SGS

64 of 1967

JD13917

SGS Sample Receipt Summary

Job Number: JD13917

Client: WOOD ENVIRONMENT & INFRASTRUCT

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

Date / Time Received: 10/16/2020 10:00:00 AM

Delivery Method: FedEx

Airbill #s: 1019 2803 5652

Cooler Temps (Raw Measured) °C: Cooler 4: (2.9);

Cooler Temps (Corrected) °C: Cooler 4: (2.4);

Cooler Security

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:

IR Gun

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:

Broken / Leaking

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: 229517

pH 12+: 208717

Other: (Specify)

Comments Sample -15: Received 1 of 3, 40mL HCL vials broken. No screen designated.

SM089-03

Rev. Date 12/7/17

JD13917: Chain of Custody

Page 3 of 7



65 of 1967

JD13917

5.1
5

Responded to by: Kristin DeGraw

Response Date: 10/19/2020

Response:

Please proceed as noted - no screen.

5.1

5

JD13917: Chain of Custody

Page 4 of 7

SGS Sample Receipt Summary

Job Number: JD13917

Client: WOOD ENVIRONMENT & INFRASTRUCT

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

Date / Time Received: 9/30/2020 10:20:00 AM

Delivery Method:

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8); Cooler 2: (3.9); Cooler 3: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (3.5); Cooler 2: (3.6); Cooler 3: (3.7);

Cooler Security

Y or N

1. Custody Seals Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐

3. COC Present:

Y or N

- ☒ ☐
4. Smpl Dates/Time OK ☒ ☐

Cooler Temperature

Y or N

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

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: 229517 pH 12+: 208717 Other: (Specify)

Comments -1 thur -5, -7: Did not received volume for V8260, please verify

Revised 10/19/2020 15:12

Samples -1 thru -5 and -7: Received volume on 10/19/2020 for V8260 (MS/MSD volume for -4). For sample -4, also received extra 4 x 950mL unpreserved amber glass volumes for MS/MSD.

Sample volumes received on 10/19/2020 were received outside of temperature criteria at 19.6 degrees celsius.

SM089-03
Rev. Date 12/7/17

JD13917: Chain of Custody

Page 5 of 7



67 of 1967

JD13917

5.1
5

Responded to by: Kristin DeGraw

Response Date: 10/8/2020

Response:

Cooler with VOAs was never delivered to lab by Fed-Ex. Client will be resampling for VOA portion.

10/19/20 Revision - Do not analyze volumes received outside of temperature per client. EXT was able to perform MS/MSD on -4 using volume

5.1

5

JD13917: Chain of Custody
Page 6 of 7

Job Change Order: JD13917

Requested Date: 11/4/2020 Received Date: 9/30/2020
Account Name: Honeywell International Inc. OMM Due Date: 10/14/2020
Project Description: HLAME: 30130-Altift Landfill, 579 Tift Street, Buffal Deliverable: NYASPB
C/O Initiated By: SW PM: KD TAT (Days): 14

Sample #: JD13917-10 - 16, 13D, 13S Change:
Dept: Please RELOG/RETRIEVE- VR8260ETHBNZ
TAT: 14

Above Changes Per: Aruna Chandrasekhar Date/Time: 11/4/2020 2:36:36 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Internal Sample Tracking Chronicle

Honeywell International Inc. OMM work

Job No: JD13917

HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY
 Project No: 3616206091

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD13917-1 Collected: 28-SEP-20 14:15 By: KAA Received: 30-SEP-20 By: JP SUMP1						
JD13917-1	EPA 537M BY ID	11-OCT-20 20:40	AFL	09-OCT-20		LCID537NY21
JD13917-1	EPA 537M BY ID	13-OCT-20 09:20	AFL	09-OCT-20		LCID537NY21
JD13917-2 Collected: 28-SEP-20 15:20 By: KAA Received: 30-SEP-20 By: JP SUMP2						
JD13917-2	EPA 537M BY ID	11-OCT-20 20:55	AFL	09-OCT-20		LCID537NY21
JD13917-2	EPA 537M BY ID	13-OCT-20 09:35	AFL	09-OCT-20		LCID537NY21
JD13917-3 Collected: 28-SEP-20 16:40 By: KAA Received: 30-SEP-20 By: JP SUMP3						
JD13917-3	EPA 537M BY ID	11-OCT-20 21:09	AFL	09-OCT-20		LCID537NY21
JD13917-3	EPA 537M BY ID	13-OCT-20 09:50	AFL	09-OCT-20		LCID537NY21
JD13917-4 Collected: 28-SEP-20 18:00 By: KAA Received: 30-SEP-20 By: JP SUMP4						
JD13917-4	SW846 8270E	02-OCT-20 05:25	CS	01-OCT-20	AS	B8270NAP,BMS+4CANILINE
JD13917-4	SW846 7470A	02-OCT-20 09:55	LL	02-OCT-20	LL	HG
JD13917-4	SW846 8270E BY SIM	02-OCT-20 18:37	HSS	01-OCT-20		
JD13917-4	SW846 6010D	03-OCT-20 00:50	ND	02-OCT-20	TG	AS,CD,CR,FE,MN,PB,SB
JD13917-4	SW846 8270E BY SIM	03-OCT-20 01:21	HSS	01-OCT-20	AS	B8270SIM14DIOX
JD13917-4	EPA 537M BY ID	11-OCT-20 21:24	AFL	09-OCT-20		LCID537NY21
JD13917-4	EPA 537M BY ID	13-OCT-20 10:04	AFL	09-OCT-20		LCID537NY21
JD13917-5 Collected: 28-SEP-20 18:00 By: KAA Received: 30-SEP-20 By: JP SUMP4 FIELD DUPLICATE						
JD13917-5	SW846 8270E	02-OCT-20 05:51	CS	01-OCT-20	AS	B8270NAP,BMS+4CANILINE
JD13917-5	SW846 7470A	02-OCT-20 09:57	LL	02-OCT-20	LL	HG
JD13917-5	SW846 8270E BY SIM	02-OCT-20 18:57	HSS	01-OCT-20		
JD13917-5	SW846 6010D	03-OCT-20 01:00	ND	02-OCT-20	TG	AS,CD,CR,FE,PB,SB
JD13917-5	SW846 8270E BY SIM	03-OCT-20 01:42	HSS	01-OCT-20	AS	B8270SIM14DIOX
JD13917-5	SW846 6010D	05-OCT-20 14:29	ND	02-OCT-20	TG	MN
JD13917-5	EPA 537M BY ID	11-OCT-20 22:08	AFL	09-OCT-20		LCID537NY21
JD13917-5	EPA 537M BY ID	13-OCT-20 10:49	AFL	09-OCT-20		LCID537NY21

Internal Sample Tracking Chronicle

Honeywell International Inc. OMM work

Job No: JD13917

HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY
 Project No: 3616206091

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD13917-6 Collected: 28-SEP-20 19:00 By: KAA Received: 30-SEP-20 By: JP SUMP COMP						
JD13917-6	SW846 8270E	02-OCT-20 08:05	CS	01-OCT-20	AS	B8270NAP,BMS+4CANILINE
JD13917-6	SW846 7470A	02-OCT-20 09:58	LL	02-OCT-20	LL	HG
JD13917-6	SW846 8270E BY SIM	02-OCT-20 19:18	HSS	01-OCT-20		
JD13917-6	SW846 6010D	03-OCT-20 01:06	ND	02-OCT-20	TG	AS,CD,CR,FE,MN,PB,SB
JD13917-6	SW846 8270E BY SIM	03-OCT-20 02:03	HSS	01-OCT-20	AS	B8270SIM14DIOX
JD13917-6	EPA 537M BY ID	11-OCT-20 22:23	AFL	09-OCT-20		LCID537NY21
JD13917-6	EPA 537M BY ID	13-OCT-20 11:03	AFL	09-OCT-20		LCID537NY21
JD13917-7 Collected: 29-SEP-20 09:40 By: KAA Received: 30-SEP-20 By: JP MW-2						
JD13917-7	EPA 537M BY ID	11-OCT-20 22:38	AFL	09-OCT-20		LCID537NY21
JD13917-9 Collected: 29-SEP-20 09:40 By: KAA Received: 30-SEP-20 By: JP TRIP BLANK2						
JD13917-9	EPA 537M BY ID	11-OCT-20 22:53	AFL	09-OCT-20		LCID537NY21
JD13917-10 Collected: 15-OCT-20 11:20 By: KAA Received: 16-OCT-20 By: DG SUMP 1-101520						
JD13917-10	SW846 8260D	27-OCT-20 12:09	ED			V8260SL4
JD13917-11 Collected: 15-OCT-20 12:05 By: KAA Received: 16-OCT-20 By: DG SUMP 2-101520						
JD13917-11	SW846 8260D	24-OCT-20 14:20	MD			V8260SL4
JD13917-12 Collected: 15-OCT-20 12:55 By: KAA Received: 16-OCT-20 By: DG SUMP 3-101520						
JD13917-12	SW846 8260D	24-OCT-20 13:53	MD			V8260SL4
JD13917-13 Collected: 15-OCT-20 13:40 By: KAA Received: 16-OCT-20 By: DG SUMP 4-101520						

Internal Sample Tracking Chronicle

Honeywell International Inc. OMM work

Job No: JD13917

HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY
 Project No: 3616206091

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD13917-13	SW846 8260D	24-OCT-20 12:58	MD			V8260SL4
JD13917-14 Collected: 15-OCT-20 10:40 By: KAA Received: 16-OCT-20 By: DG MW2-101520						
JD13917-14	SW846 8270E	21-OCT-20 08:07	CS	20-OCT-20	AS	B8270NAP,BMS+4CANILINE
JD13917-14	SW846 8270E BY SIM	22-OCT-20 03:38	CS	20-OCT-20	AS	B8270SIM14DIOX
JD13917-14	SW846 7470A	23-OCT-20 11:22	LL	23-OCT-20	LL	HG
JD13917-14	SW846 6010D	24-OCT-20 01:35	ND	22-OCT-20	MS	AS,CD,CR,FE,MN,PB,SB
JD13917-14	SW846 8260D	24-OCT-20 13:25	MD			V8260SL4
JD13917-15 Collected: 15-OCT-20 13:40 By: KAA Received: 16-OCT-20 By: DG FDUP-SUMP 4-101520						
JD13917-15	SW846 8260D	24-OCT-20 17:10	MD			V8260SL4
JD13917-16 Collected: 15-OCT-20 13:40 By: KAA Received: 16-OCT-20 By: DG TRIP BLANK						
JD13917-16	SW846 8260D	24-OCT-20 16:43	MD			V8260SL4
JD13917-10 Collected: 15-OCT-20 11:20 By: KAA Received: 16-OCT-20 By: DG SUMP 1-101520						
JD13917-10	SW846 8260D	27-OCT-20 12:09	ED			VR8260ETHBNZ
JD13917-11 Collected: 15-OCT-20 12:05 By: KAA Received: 16-OCT-20 By: DG SUMP 2-101520						
JD13917-11	SW846 8260D	24-OCT-20 14:20	MD			VR8260ETHBNZ
JD13917-12 Collected: 15-OCT-20 12:55 By: KAA Received: 16-OCT-20 By: DG SUMP 3-101520						
JD13917-12	SW846 8260D	24-OCT-20 13:53	MD			VR8260ETHBNZ
JD13917-13 Collected: 15-OCT-20 13:40 By: KAA Received: 16-OCT-20 By: DG SUMP 4-101520						
JD13917-13	SW846 8260D	24-OCT-20 12:58	MD			VR8260ETHBNZ

Internal Sample Tracking Chronicle

Honeywell International Inc. OMM work

Job No: JD13917

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

Project No: 3616206091

5.2

5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD13917-14R Collected: 15-OCT-20 10:40 By: KAA Received: 16-OCT-20 By: DG MW2-101520						
JD13917-14R	SW846 8260D	24-OCT-20 13:25	MD			VR8260ETHBNZ
JD13917-15R Collected: 15-OCT-20 13:40 By: KAA Received: 16-OCT-20 By: DG FDUP-SUMP 4-101520						
JD13917-15R	SW846 8260D	24-OCT-20 17:10	MD			VR8260ETHBNZ
JD13917-16R Collected: 15-OCT-20 13:40 By: KAA Received: 16-OCT-20 By: DG TRIP BLANK						
JD13917-16R	SW846 8260D	24-OCT-20 16:43	MD			VR8260ETHBNZ

SGS Internal Chain of Custody

Page 1 of 5

Job Number: JD13917
 Account: HWINJOMM Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY
 Received: 09/30/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13917-1.1	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-1.2	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-2.1	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-2.2	Keith Gardner		10/01/20 16:36	Subcontract
JD13917-3.1	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-3.2	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-4.1	Secured Storage	Todd Shoemaker	10/01/20 14:31	Retrieve from Storage
JD13917-4.1	Todd Shoemaker	Secured Staging Area	10/01/20 14:32	Return to Storage
JD13917-4.1	Secured Staging Area	Nicholas Weigand	10/01/20 15:57	Retrieve from Storage
JD13917-4.1	Nicholas Weigand		10/01/20 22:59	Depleted
JD13917-4.1.1	Nicholas Weigand	Organics Prep	10/01/20 15:57	Extract from JD13917-4.1
JD13917-4.1.1	Organics Prep	Alexandra Silecchia	10/01/20 23:31	Extract from JD13917-4.1
JD13917-4.1.1	Alexandra Silecchia		10/01/20 23:32	Depleted
JD13917-4.2	Secured Storage	Todd Shoemaker	10/01/20 14:31	Retrieve from Storage
JD13917-4.2	Todd Shoemaker	Secured Staging Area	10/01/20 14:32	Return to Storage
JD13917-4.2	Secured Staging Area	Nicholas Weigand	10/01/20 15:57	Retrieve from Storage
JD13917-4.2	Nicholas Weigand		10/01/20 22:59	Depleted
JD13917-4.2.1	Nicholas Weigand	Organics Prep	10/01/20 15:57	Extract from JD13917-4.2
JD13917-4.2.1	Organics Prep	Alexandra Silecchia	10/01/20 23:31	Extract from JD13917-4.2
JD13917-4.2.1	Alexandra Silecchia		10/01/20 23:32	Depleted
JD13917-4.3	Secured Storage	Todd Shoemaker	10/01/20 14:31	Retrieve from Storage
JD13917-4.3	Todd Shoemaker	Secured Staging Area	10/01/20 14:32	Return to Storage
JD13917-4.3	Secured Staging Area	Nicholas Weigand	10/01/20 15:57	Retrieve from Storage
JD13917-4.3	Nicholas Weigand		10/01/20 22:59	Depleted
JD13917-4.3.1	Nicholas Weigand	Organics Prep	10/01/20 15:57	Extract from JD13917-4.3
JD13917-4.3.1	Organics Prep	Alexandra Silecchia	10/01/20 23:31	Extract from JD13917-4.3
JD13917-4.3.1	Alexandra Silecchia		10/01/20 23:32	Depleted
JD13917-4.7	Secured Storage	Todd Shoemaker	10/01/20 14:31	Retrieve from Storage
JD13917-4.7	Todd Shoemaker	Secured Staging Area	10/01/20 14:32	Return to Storage
JD13917-4.7	Secured Staging Area	Nicholas Weigand	10/01/20 15:57	Retrieve from Storage
JD13917-4.7	Nicholas Weigand		10/01/20 22:59	Depleted

5.3
5

SGS Internal Chain of Custody

Page 2 of 5

Job Number: JD13917
 Account: HWINJOMM Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY
 Received: 09/30/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13917-4.7.1	Nicholas Weigand	Organics Prep	10/01/20 15:57	Extract from JD13917-4.7
JD13917-4.7.1	Organics Prep	Alexandra Silecchia	10/01/20 23:31	Extract from JD13917-4.7
JD13917-4.7.1	Alexandra Silecchia		10/01/20 23:32	Depleted
JD13917-4.8	Secured Storage	Todd Shoemaker	10/01/20 14:31	Retrieve from Storage
JD13917-4.8	Todd Shoemaker	Secured Staging Area	10/01/20 14:32	Return to Storage
JD13917-4.8	Secured Staging Area	Nicholas Weigand	10/01/20 15:57	Retrieve from Storage
JD13917-4.8	Nicholas Weigand		10/01/20 22:59	Depleted
JD13917-4.8.1	Nicholas Weigand	Organics Prep	10/01/20 15:57	Extract from JD13917-4.8
JD13917-4.8.1	Organics Prep	Alexandra Silecchia	10/01/20 23:31	Extract from JD13917-4.8
JD13917-4.8.1	Alexandra Silecchia		10/01/20 23:32	Depleted
JD13917-4.9	Secured Storage	Taylor Gorman	10/02/20 09:07	Retrieve from Storage
JD13917-4.9	Taylor Gorman	Secured Storage	10/02/20 11:25	Return to Storage
JD13917-4.9.1	Taylor Gorman	Metals Digestion	10/02/20 11:17	Digestate from JD13917-4.9
JD13917-4.9.1	Metals Digestion	Taylor Gorman	10/02/20 11:18	Digestate from JD13917-4.9
JD13917-4.9.1	Taylor Gorman	Metals Digestate Storage	10/02/20 11:18	Return to Storage
JD13917-4.10	Secured Storage	Omar Khalid	10/01/20 16:55	Retrieve from Storage
JD13917-4.10	Omar Khalid	Secured Staging Area	10/01/20 16:55	Return to Storage
JD13917-4.10	Secured Staging Area	Lindsey Lee	10/02/20 06:20	Retrieve from Storage
JD13917-4.10	Lindsey Lee	Secured Storage	10/02/20 10:19	Return to Storage
JD13917-4.12	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-4.13	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-4.14	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-4.15	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-4.16	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-4.17	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-4.18	James Kwon	Secured Storage	10/19/20 17:04	Return to Storage
JD13917-4.19	James Kwon	Secured Storage	10/19/20 17:04	Return to Storage
JD13917-4.29	James Kwon	Secured Storage	10/19/20 17:04	Return to Storage
JD13917-4.30	James Kwon	Secured Storage	10/19/20 17:04	Return to Storage

5.3

5

SGS Internal Chain of Custody

Page 3 of 5

Job Number: JD13917
 Account: HWINJOMM Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY
 Received: 09/30/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13917-5.1	Secured Storage	Todd Shoemaker	10/01/20 14:31	Retrieve from Storage
JD13917-5.1	Todd Shoemaker	Secured Staging Area	10/01/20 14:32	Return to Storage
JD13917-5.1	Secured Staging Area	Nicholas Weigand	10/01/20 15:57	Retrieve from Storage
JD13917-5.1	Nicholas Weigand		10/01/20 22:59	Depleted
JD13917-5.1.1	Nicholas Weigand	Organics Prep	10/01/20 15:57	Extract from JD13917-5.1
JD13917-5.1.1	Organics Prep	Alexandra Silecchia	10/01/20 23:31	Extract from JD13917-5.1
JD13917-5.1.1	Alexandra Silecchia		10/01/20 23:32	Depleted
JD13917-5.6	Secured Storage	Omar Khalid	10/01/20 16:55	Retrieve from Storage
JD13917-5.6	Omar Khalid	Secured Staging Area	10/01/20 16:55	Return to Storage
JD13917-5.6	Secured Staging Area	Lindsey Lee	10/02/20 06:20	Retrieve from Storage
JD13917-5.6	Lindsey Lee	Taylor Gorman	10/02/20 09:09	Custody Transfer
JD13917-5.6	Taylor Gorman	Secured Storage	10/02/20 11:25	Return to Storage
JD13917-5.6.1	Taylor Gorman	Metals Digestion	10/02/20 11:17	Digestate from JD13917-5.6
JD13917-5.6.1	Metals Digestion	Taylor Gorman	10/02/20 11:18	Digestate from JD13917-5.6
JD13917-5.6.1	Taylor Gorman	Metals Digestate Storage	10/02/20 11:18	Return to Storage
JD13917-5.7	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-5.8	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-6.2	Secured Storage	Todd Shoemaker	10/01/20 14:31	Retrieve from Storage
JD13917-6.2	Todd Shoemaker	Secured Staging Area	10/01/20 14:32	Return to Storage
JD13917-6.2	Secured Staging Area	Nicholas Weigand	10/01/20 15:57	Retrieve from Storage
JD13917-6.2	Nicholas Weigand		10/01/20 22:59	Depleted
JD13917-6.2.1	Nicholas Weigand	Organics Prep	10/01/20 15:57	Extract from JD13917-6.2
JD13917-6.2.1	Organics Prep	Alexandra Silecchia	10/01/20 23:31	Extract from JD13917-6.2
JD13917-6.2.1	Alexandra Silecchia		10/01/20 23:32	Depleted
JD13917-6.6	Secured Storage	Omar Khalid	10/01/20 16:55	Retrieve from Storage
JD13917-6.6	Omar Khalid	Secured Staging Area	10/01/20 16:55	Return to Storage
JD13917-6.6	Secured Staging Area	Lindsey Lee	10/02/20 06:20	Retrieve from Storage
JD13917-6.6	Lindsey Lee	Taylor Gorman	10/02/20 09:09	Custody Transfer
JD13917-6.6	Taylor Gorman	Secured Storage	10/02/20 11:25	Return to Storage
JD13917-6.6.1	Taylor Gorman	Metals Digestion	10/02/20 11:17	Digestate from JD13917-6.6
JD13917-6.6.1	Metals Digestion	Taylor Gorman	10/02/20 11:18	Digestate from JD13917-6.6
JD13917-6.6.1	Taylor Gorman	Metals Digestate Storage	10/02/20 11:18	Return to Storage
JD13917-6.7	Keith Gardner		10/01/20 16:32	Subcontract

5.3

5

SGS Internal Chain of Custody

Page 4 of 5

Job Number: JD13917
 Account: HWINJOMM Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY
 Received: 09/30/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13917-6.8	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-7.1	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-7.2	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-9.1	Keith Gardner		10/01/20 16:36	Subcontract
JD13917-9.2	Keith Gardner		10/01/20 16:32	Subcontract
JD13917-10.1	Secured Storage	Maricela Delgaolillo	10/24/20 16:07	Retrieve from Storage
JD13917-10.1	Maricela Delgaolillo	Secured Storage	10/24/20 16:08	Return to Storage
JD13917-10.2	Secured Storage	Edward Durner	10/27/20 12:17	Retrieve from Storage
JD13917-10.2	Edward Durner	GCMS4D	10/27/20 12:18	Load on Instrument
JD13917-10.2	GCMS4D	Edward Durner	10/28/20 07:26	Unload from Instrument
JD13917-10.2	Edward Durner	Secured Storage	10/28/20 07:26	Return to Storage
JD13917-11.1	Secured Storage	Maricela Delgaolillo	10/24/20 15:27	Retrieve from Storage
JD13917-11.1	Maricela Delgaolillo	GCMSL	10/24/20 15:27	Load on Instrument
JD13917-11.1	GCMSL	Edward Durner	10/26/20 08:02	Unload from Instrument
JD13917-11.1	Edward Durner	Secured Storage	10/26/20 08:02	Return to Storage
JD13917-12.2	Secured Storage	Maricela Delgaolillo	10/24/20 15:27	Retrieve from Storage
JD13917-12.2	Maricela Delgaolillo	GCMSL	10/24/20 15:27	Load on Instrument
JD13917-12.2	GCMSL	Edward Durner	10/26/20 08:02	Unload from Instrument
JD13917-12.2	Edward Durner	Secured Storage	10/26/20 08:02	Return to Storage
JD13917-13.1	Secured Storage	Maricela Delgaolillo	10/24/20 15:27	Retrieve from Storage
JD13917-13.1	Maricela Delgaolillo	GCMSL	10/24/20 15:27	Load on Instrument
JD13917-13.1	GCMSL	Edward Durner	10/26/20 08:02	Unload from Instrument
JD13917-13.1	Edward Durner	Secured Storage	10/26/20 08:02	Return to Storage
JD13917-13.6	Secured Storage	Maricela Delgaolillo	10/24/20 15:27	Retrieve from Storage
JD13917-13.6	Maricela Delgaolillo	GCMSL	10/24/20 15:27	Load on Instrument
JD13917-13.6	GCMSL	Edward Durner	10/26/20 08:02	Unload from Instrument
JD13917-13.6	Edward Durner	Secured Storage	10/26/20 08:02	Return to Storage
JD13917-13.7	Secured Storage	Maricela Delgaolillo	10/24/20 15:27	Retrieve from Storage
JD13917-13.7	Maricela Delgaolillo	GCMSL	10/24/20 15:27	Load on Instrument
JD13917-13.7	GCMSL	Edward Durner	10/26/20 08:02	Unload from Instrument
JD13917-13.7	Edward Durner	Secured Storage	10/26/20 08:02	Return to Storage

5.3
5

SGS Internal Chain of Custody

Page 5 of 5

Job Number: JD13917
 Account: HWINJOMM Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY
 Received: 09/30/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13917-14.1	Dave Hunkele	Secured Storage	10/16/20 13:42	Return to Storage
JD13917-14.2	Dave Hunkele	Secured Storage	10/16/20 13:42	Return to Storage
JD13917-14.3	Dave Hunkele	Secured Storage	10/16/20 13:42	Return to Storage
JD13917-14.4	Dave Hunkele	Secured Storage	10/16/20 13:42	Return to Storage
JD13917-14.4	Secured Storage	Todd Shoemaker	10/20/20 13:54	Retrieve from Storage
JD13917-14.4	Todd Shoemaker	Secured Staging Area	10/20/20 13:54	Return to Storage
JD13917-14.4	Secured Staging Area	Alexandra Silecchia	10/20/20 16:02	Retrieve from Storage
JD13917-14.4	Alexandra Silecchia		10/20/20 23:39	Depleted
JD13917-14.4.1	Alexandra Silecchia	Organics Prep	10/20/20 16:02	Extract from JD13917-14.4
JD13917-14.4.1	Organics Prep	Alexandra Silecchia	10/20/20 23:38	Extract from JD13917-14.4
JD13917-14.4.1	Alexandra Silecchia		10/20/20 23:39	Depleted
JD13917-14.5	Dave Hunkele	Secured Storage	10/16/20 13:20	Return to Storage
JD13917-14.5	Secured Storage	Omar Khalid	10/21/20 16:09	Retrieve from Storage
JD13917-14.5	Omar Khalid	Secured Staging Area	10/21/20 16:09	Return to Storage
JD13917-14.5	Secured Staging Area	Madellyne Sanchez@sgs	10/22/20 07:26	Retrieve from Storage
JD13917-14.5	Madellyne Sanchez@sgs	Secured Storage	10/22/20 10:33	Return to Storage
JD13917-14.5	Secured Storage	Benjamin Gaines	10/22/20 15:44	Retrieve from Storage
JD13917-14.5	Benjamin Gaines	Secured Staging Area	10/22/20 15:44	Return to Storage
JD13917-14.5	Secured Staging Area	Lindsey Lee	10/23/20 07:47	Retrieve from Storage
JD13917-14.5	Lindsey Lee	Secured Storage	10/23/20 08:03	Return to Storage
JD13917-14.5.1	Madellyne Sanchez@sgs	Metals Digestion	10/22/20 10:30	Digestate from JD13917-14.5
JD13917-14.5.1	Metals Digestion	Madellyne Sanchez@sgs	10/22/20 10:30	Digestate from JD13917-14.5
JD13917-14.5.1	Madellyne Sanchez@sgs	Metals Digestate Storage	10/22/20 10:30	Return to Storage
JD13917-14.6	Secured Storage	Maricela Delgaolillo	10/24/20 15:27	Retrieve from Storage
JD13917-14.6	Maricela Delgaolillo	GCMSL	10/24/20 15:27	Load on Instrument
JD13917-14.6	GCMSL	Edward Durner	10/26/20 08:02	Unload from Instrument
JD13917-14.6	Edward Durner	Secured Storage	10/26/20 08:02	Return to Storage
JD13917-15.1	Secured Storage	Maricela Delgaolillo	10/24/20 15:27	Retrieve from Storage
JD13917-15.1	Maricela Delgaolillo	GCMSL	10/24/20 15:27	Load on Instrument
JD13917-15.1	GCMSL	Edward Durner	10/26/20 08:02	Unload from Instrument
JD13917-15.1	Edward Durner	Secured Storage	10/26/20 08:02	Return to Storage
JD13917-16.1	Secured Storage	Maricela Delgaolillo	10/24/20 15:27	Retrieve from Storage
JD13917-16.1	Maricela Delgaolillo	GCMSL	10/24/20 15:27	Load on Instrument
JD13917-16.1	GCMSL	Edward Durner	10/26/20 08:02	Unload from Instrument
JD13917-16.1	Edward Durner	Secured Storage	10/26/20 08:02	Return to Storage

5.3

5

ATTACHMENT B.8

LANDFILL GAS MONITORING RESULTS

TABLE 2
Landfill Gas Monitoring Data - 2013 through 2021
2020/2021 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			
	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄
GV-1	0.1%	0.0%	21.4%	3.0%	0.0%	0.0%	20.3%	0.0%	0.0%	0.0%	20.9%	1.0%	0.0%	0.0%	21.1%	1.0%	0.1%	0.1%	19.1%	1.0%	0.0%	0.1%	21.7%	1.0%
GV-2	0.1%	0.0%	21.3%	3.0%	0.0%	0.0%	20.2%	1.0%	0.0%	0.0%	20.4%	2.0%	0.0%	0.1%	20.8%	2.0%	0.1%	0.1%	18.9%	2.0%	0.0%	0.1%	21.6%	1.0%
GV-3	0.1%	0.0%	21.2%	4.0%	0.0%	0.0%	20.2%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.9%	20.1%	0.0%	0.1%	0.1%	19.2%	2.0%	0.1%	0.1%	21.9%	1.0%
Ground #1	0.2%	0.0%	21.5%	4.0%	0.1%	0.0%	20.4%	2.0%	0.1%	0.0%	20.4%	2.0%	0.0%	0.1%	20.9%	0.0%	0.3%	0.2%	18.5%	4.0%	0.0%	0.1%	20.8%	1.0%
Ground #2	0.2%	0.0%	21.3%	4.0%	0.1%	0.0%	20.3%	1.0%	0.0%	0.0%	20.6%	0.0%	0.0%	0.1%	20.9%	0.0%	0.2%	0.2%	18.7%	4.0%	0.0%	0.1%	21.8%	1.0%
Ground #3	0.2%	0.0%	21.3%	3.0%	0.0%	0.0%	20.3%	1.0%	0.0%	0.0%	20.4%	0.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.2%	18.6%	4.0%	0.0%	0.1%	21.7%	1.0%
Ground #4	0.2%	0.0%	21.3%	3.0%	0.0%	0.0%	20.3%	2.0%	0.0%	0.0%	20.7%	0.0%	0.0%	0.0%	21.0%	0.0%	0.0%	0.1%	19.6%	3.0%	0.0%	0.1%	21.8%	1.0%
Sump #1	0.2%	0.0%	21.4%	4.0%	0.0%	0.0%	20.4%	1.0%	0.0%	0.0%	21.2%	0.0%	0.0%	0.1%	20.9%	0.0%	0.0%	0.0%	20.4%	0.0%	0.1%	0.1%	20.9%	1.0%
Sump #2	0.2%	0.0%	21.3%	4.0%	0.2%	0.1%	20.2%	4.0%	0.7%	17.0%	0.6%	15.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.4%	18.7%	2.0%	0.0%	0.1%	21.4%	1.0%
Sump #3	0.2%	0.0%	21.2%	3.0%	0.1%	0.0%	20.3%	2.0%	0.0%	0.0%	20.4%	0.0%	0.0%	0.1%	20.9%	0.0%	0.1%	0.2%	18.9%	3.0%	0.0%	0.1%	21.8%	1.0%
Sump #4	0.1%	0.0%	21.1%	3.0%	0.0%	0.0%	20.3%	1.0%	0.1%	0.1%	19.9%	0.0%	0.0%	0.1%	20.8%	0.0%	0.2%	0.2%	18.7%	4.0%	0.0%	0.1%	21.8%	1.0%

Notes:

Ground 1 - Monitoring location in the Northwest corner of Landfill

Ground 2 - Monitoring location on the West side of Landfill

Ground 3 - Monitoring location in the Southeast corner of Landfill

Ground 4 - Monitoring location in the Northeast corner of Landfill

LEL - Lower Explosive Limit

CH₄ - Methane

CO₂ - Carbon Dioxide

O₂ - Oxygen

Landfill Gas Monitoring Frequency revised, as approved, to Annual starting in 2014.

TABLE 2
Landfill Gas Monitoring Data - 2013 through 2021
2020/2021 Annual OM&M Report
Alltift Landfill/Ramco Steel Site

Location:	2016 - 4/7/2016				2017 - 7/18/2017				2018 - 4/25/2018					2019 - 5/7/2019					2020 - 4/1/2020				
	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	Balance O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	Balance O ₂	LEL CH ₄	CH ₄	CO ₂	O ₂	Balance O ₂	LEL CH ₄
GV-1	0.0%	0.1%	21.0%	1.0%	0.0%	0.0%	20.2%	0.0%	0.0%	1.6%	14.4%	83.800%	0.0%	0.2%	0.0%	21.2%	78.600%	2.0%	0.0%	0.0%	21.4%	78.600%	1.0%
GV-2	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.2%	0.0%	0.0%	0.0%	21.0%	79.800%	0.0%	0.1%	0.0%	21.2%	78.500%	2.0%	0.0%	0.0%	21.4%	78.600%	1.0%
GV-3	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.3%	0.0%	16.7%	5.5%	5.4%	72.400%	0.0%	0.1%	0.0%	21.1%	78.600%	2.0%	0.0%	0.0%	21.4%	78.600%	1.0%
Ground #1	0.0%	0.1%	21.0%	1.0%	0.0%	0.0%	20.9%	0.0%	0.0%	0.0%	20.9%	79.100%	0.0%	0.0%	0.1%	21.0%	78.900%	2.0%	0.0%	0.0%	21.3%	78.700%	1.0%
Ground #2	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.7%	0.0%	0.0%	0.0%	20.9%	79.100%	0.0%	0.1%	0.0%	20.9%	78.900%	2.0%	0.0%	0.0%	21.3%	78.600%	1.0%
Ground #3	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.6%	0.0%	0.0%	0.0%	20.9%	79.100%	0.0%	0.1%	0.0%	20.9%	78.800%	2.0%	0.0%	0.0%	21.4%	78.600%	1.0%
Ground #4	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.4%	0.0%	0.0%	0.0%	20.8%	79.200%	0.0%	0.1%	0.0%	20.9%	78.800%	2.0%	0.0%	0.0%	21.5%	78.500%	1.0%
Sump #1	0.1%	0.1%	21.0%	1.0%	0.0%	0.0%	20.8%	0.0%	0.0%	0.0%	20.9%	79.100%	0.0%	0.1%	0.4%	20.8%	78.600%	7.0%	0.3%	0.0%	22.1%	78.500%	6.0%
Sump #2	0.0%	0.1%	21.0%	1.0%	0.0%	0.0%	20.6%	0.0%	0.0%	0.0%	20.9%	79.100%	0.0%	0.1%	0.1%	20.9%	78.900%	2.0%	0.0%	0.0%	21.4%	78.600%	1.0%
Sump #3	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.5%	0.0%	0.0%	0.0%	20.9%	79.100%	0.0%	0.1%	0.0%	21.0%	78.800%	2.0%	0.0%	0.0%	21.4%	78.600%	1.0%
Sump #4	0.0%	0.1%	21.1%	1.0%	0.0%	0.0%	20.3%	0.0%	0.0%	0.0%	20.8%	79.200%	0.0%	0.1%	0.0%	21.0%	78.800%	3.0%	0.0%	0.0%	21.4%	78.600%	1.0%

Notes: Notes:
Ground 1 - McGround 1 - Monitoring location in the Northwest corner of Landfill
Ground 2 - McGround 2 - Monitoring location on the West side of Landfill
Ground 3 - McGround 3 - Monitoring location in the Southeast corner of Landfill
Ground 4 - McGround 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 start

TABLE 2
Landfill Gas Monitoring Data - 2013 through 2021
2020/2021 Annual OM&M Report
Alltift Landfill/Ramco Steel Site

Location:	2021 - 4/8/2021				
	CH ₄	CO ₂	O ₂	Balance O ₂	LEL CH ₄
GV-1	0.0%	0.0%	21.4%	78.600%	1.0%
GV-2	0.0%	0.0%	21.4%	78.600%	1.0%
GV-3	0.0%	0.0%	21.4%	78.600%	1.0%
Ground #1	0.0%	0.0%	21.3%	78.700%	2.0%
Ground #2	0.0%	0.0%	21.3%	78.600%	0.0%
Ground #3	0.0%	0.0%	20.8%	79.000%	0.1%
Ground #4	0.0%	0.1%	22.0%	78.000%	1.0%
Sump #1	0.0%	0.1%	19.7%	80.200%	0.0%
Sump #2	0.0%	0.1%	19.0%	80.100%	0.0%
Sump #3	0.0%	0.1%	19.6%	80.100%	0.0%
Sump #4	0.0%	0.1%	19.8%	80.200%	0.0%

Notes: **Notes:**
Ground 1 - McGround 1 - Monitoring location in the Northwest corner of Landfill
Ground 2 - McGround 2 - Monitoring location on the West side of Landfill
Ground 3 - McGround 3 - Monitoring location in the Southeast corner of Landfill
Ground 4 - McGround 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.