



engineering and constructing a better tomorrow

June 6, 2022

Ms. Taylor J. Monnin
New York State Department of Environmental Conservation
700 Delaware Avenue
Buffalo, New York 14209

Subject: **2021/2022 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, 2021 through April 21, 2022 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, 2022.

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 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 2021/2022 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 Tift Street, approximately 1,300 feet west of Hopkins Street, and 5,000 feet east of the intersection of Tift Street and Route 5. It is bounded on the north by Tift 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 - 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 and groundwater collection trench sumps were recorded on a quarterly basis. The static groundwater level for background monitoring well MW-2 was recorded during the annual groundwater sampling event. Groundwater level is not measured in monitoring well MW-2 during quarterly events because the well is located offsite and not within the extent of the water level contour maps presented in this report.
- The annual groundwater sampling event completed on September 29, 2021 included collection of aqueous samples from background monitoring well MW-2 and the collection system sumps; the samples were analyzed for parameters described in the OM&M Manual. The results, presented in **Attachment B.7**, are consistent with historical results. Trend graphs providing comparison to historical data are provided in **Attachment B.8**.

- Landfill gas monitoring was last conducted using a GEM 2000 (SN# GEM12691) on April 8, 2021, outside of this reporting period, and the results are presented in **Attachment B.9**. Landfill gas monitoring is conducted annually, with the next round anticipated during the summer of 2022.
- Quarterly site inspections were conducted as outlined in the OM&M Manual. During the October 2021 inspection, a section of the synthetic liner was observed to be exposed along the access road between Sumps 2 and 3, and it was noted that J-plugs for several of the monitoring wells should be replaced. During the March 2022 inspection, several locations of the fencing were observed to have been cut. Repairs to address these findings are scheduled for late spring 2022, outside of this reporting period, and will be reported in the next Periodic Review Report.
- Routine and non-routine maintenance activities completed during the reporting period included the following:
 - Periodic inspection and cleaning, or replacement as needed, of the lift station flow meter
 - Periodic inspection/maintenance of sump pumps
 - Plowing of snow from the entrance road as necessary
 - Mowing of landfill cover on September 17, 2021
 - Groundwater collection system pump #2 was observed to not have adequate voltage to operate on December 7, 2021. On December 10, 2021, the breaker for pump #2 was replaced; however, the pump still did not get sufficient power to operate. On January 12, 2022, an electrician determined that there were one or more electrical shorts located somewhere in the underground electrical conduit that were causing the issue and it was recommended that the wiring be replaced. Due to subcontractor delays and additional delays due to winter weather, the replacement of four damaged wires was completed on March 1, 2022; however, subsequent testing indicated that pump would only operate in Hand mode, not Auto, and was therefore turned off. On March 24, 2022, a ground short in the electrical system was discovered and repaired, which did not address the issue; on the same day the control board was

replaced, which did address the issue, and pump #2 was restored to full operation.

- Sediment removed from the low-lift station and containerized on March 10, 2021 was shipped from the site on June 8, 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 that 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 evaluation of the collected groundwater elevation data, which indicates that impacted groundwater is flowing into the groundwater collection trench as designed, the remedy is eliminating the potential for impacted groundwater to discharge to the adjacent wetlands.
- Based on the analytical results from BSA discharge monitoring, concentrations of effluent parameters are within the BSA permit limits.

The following recommendations have been 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. A new BSA permit 21-12-BU098 was issued on November 10, 2021, with an effective date of December 1, 2021 and expiration date of November 30, 2024.

- Groundwater Monitoring – Annual groundwater monitoring will be completed in 2022 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.
- During the October 2021 inspection a section of the synthetic liner was observed to be exposed along the access road between Sumps 2 and 3, and it was noted that J-plugs for several of the monitoring wells should be replaced. During the March 2022 inspection, several locations of the fencing were observed to have been cut. Repairs to address these findings are scheduled for late spring 2022, outside of this reporting period, and will be reported in the next Periodic Review Report.
- The next PRR submittal should be completed and submitted to NYSDEC by the end of May 2023.

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 2023.

CLOSING

Please contact Ryan Belcher at (207) 289-4213 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 Groundwater Trend Graphs
Attachment B.9 Landfill Gas Monitoring Results

Electronic Copy to:

S. Jazic (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, 2021 to April 21, 2022

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 Tifft Street

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

Description of Engineering ControlsParcelEngineering Control**132.12-1-21**

Leachate Collection
Cover System
Fencing/Access Control

Engineering Controls:

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

132.12-1-22

Cover System
Leachate Collection
Fencing/Access Control

Engineering Controls:

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

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

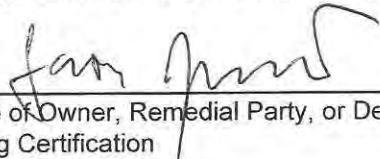
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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 Sasa Jazic at 14 Columbia Circle, Suite 103, Albany, NY 12203
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.


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

5/4/2022

Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

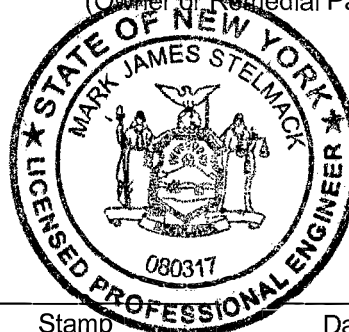
I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Mark Stelmack at MACTEC Engineering and Geology, P.C., Portland, Maine,
print name print business address

am certifying as a Professional Engineer for the

Remedial Party

(Owner of Remedial Party)



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

Stamp
(Required for PE)

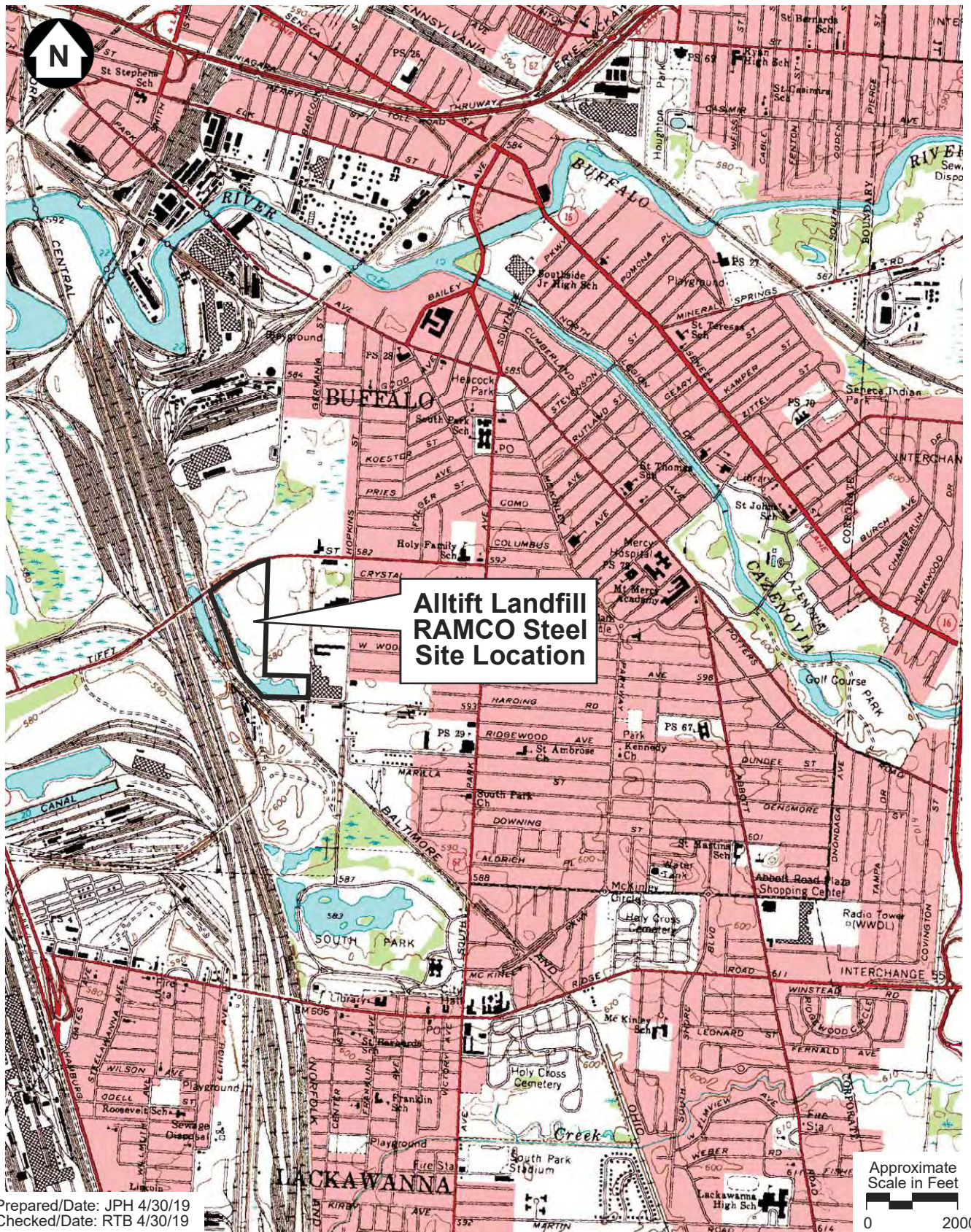
MAY 4, 2022
Date

ATTACHMENT B

SUPPORTING TABLES, FIGURES, AND APPENDICES

ATTACHMENT B.1

SITE FIGURES

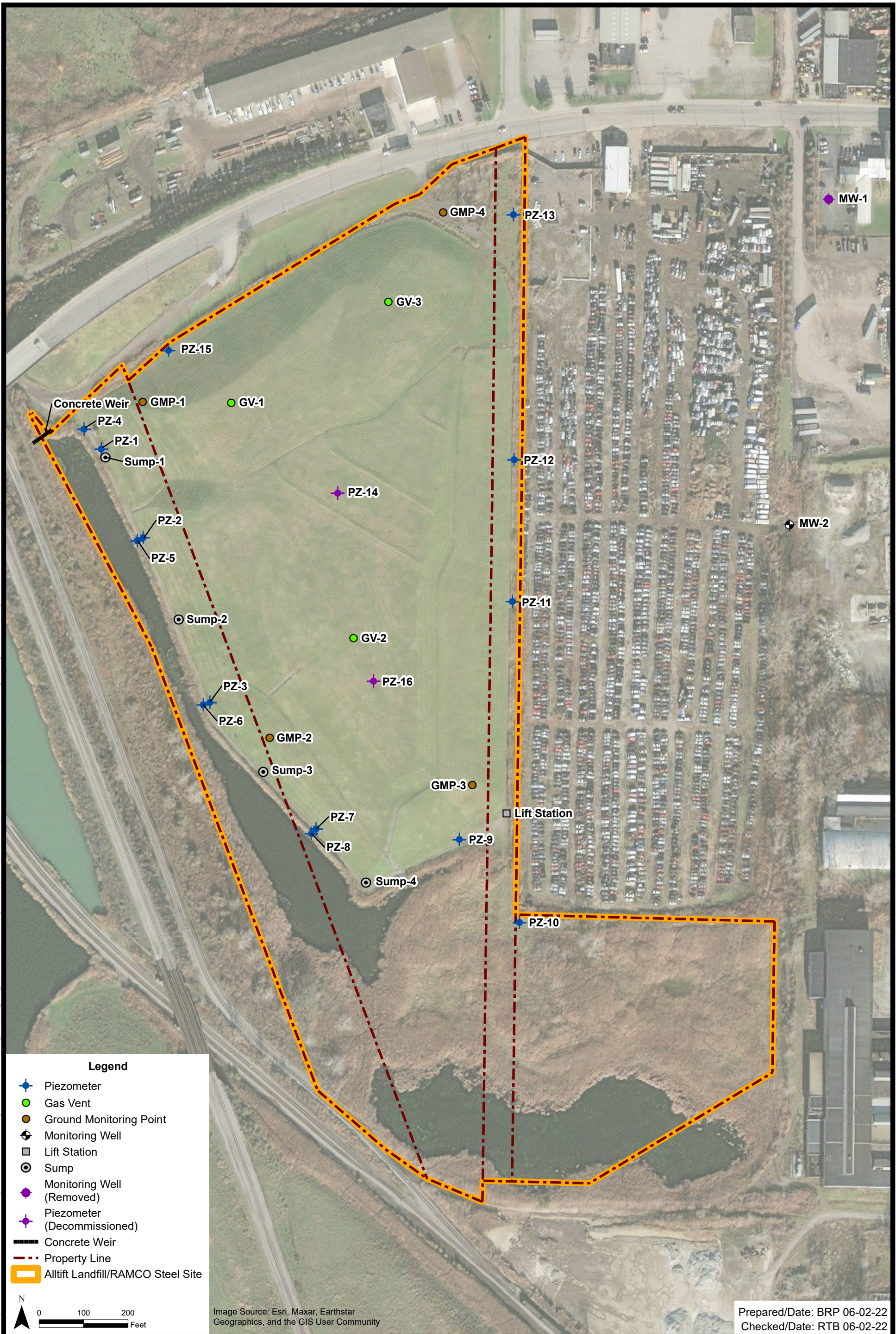


Honeywell

MACTEC

Site Location Map
Alltiff Landfill/Ramco Steel Site
Project No. 3616216168
Figure 1

Document: P:\Projects\Honeywell\O.M and M Team\Alltiff Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\MapDocuments\Site_Conditions_2021_11x17P.mxd PDF: P:\Projects\Honeywell\O.M and M Team\Alltiff Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\Figures\June 2022\Figure 2 - Current Conditions Site Plan.pdf 06-02-2022 10:33 AM brian.peters



ATTACHMENT B.2

QUARTERLY INSPECTION REPORTS

Site Inspection Form

Site Name: Alltift
 Project Number: 30130
 Date: 07/15/2021

Weather: Sunny; 85-90 degrees
 Assessment by: Benjamin Hendry

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

A. Security

1. Does fence exist? _____
2. Is there a breach in fence? _____
3. Locks on gate? _____
4. Posted signs? _____
5. Signs of trespassers/vandalism? _____
6. Other _____

☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

B. General Site Conditions

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

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

C. Cap Inspection

1. Exposed waste? _____
2. Side slope stable? _____
3. Erosion? _____
4. Leachate seeps (discolored vegetation)? _____
5. Synthetic liner exposed? _____
6. Bare spots? _____
7. Presence of burrowing animals? _____
8. Deep rooted vegetation? _____
9. Cracking? _____
10. Ponding water? _____
11. Evidence of methane seeps?
12. Other _____

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

D. Surface Water

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

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

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 Inspection Form



Site Inspection Form



Site Inspection Form



Site Inspection Form

Site Name: Alltift
 Project Number: 30130
 Date: 10/14/2021

Weather: Sunny; 70-75 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 _____

☐	☒	☐
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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? Strip where liner is exposed on stone road between Sumps 2

and 3

☐	☒	☐
☐	☒	☐
☐	☒	☐
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☐	☒	☐
☐	☒	☐

- 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
☒	☐	☒
☐	☒	☐
☒	☐	☐
☒	☐	☐
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☐	☐	☒
☒	☐	☐

- 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 level last checked on 4-8-21**
- Monitoring reports current? _____
- Other _____

F. Leachate Collection System

☒	☐	☐
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☒	☐	☐

- 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)

☒	☐	☐
☒	☐	☐
☒	☐	☐
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- Locks on wells? _____
- Wells in good condition? _____
- Well seals in good condition? _____
- Access to wells? _____
- Monitoring reports current? _____
- Other: **Some wells require replacement J-plugs.**

Site Inspection Form



Yes No N/A

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☐	☐	☒

H. Treatment Plant

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

☐	☐	☒
☐	☐	☒
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☐	☐	☒

I. Polymeric Marine Mattress (PMM)

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

☐	☐	☒
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J. General Comments

Sumps 1 & 2 functioning. Sump 1 still has leaking pitless adapter. Site mowed last month, appears to be in good condition except for some strips where liner is exposed on the East side of access road. All yearly monitoring events have been completed for 2021 as of 10-14-2021.

Site Inspection Form



Site Inspection Form



Site Inspection Form

JACOBS



Site Inspection Form

JACOBS



Site Inspection Form



Site Inspection Form

JACOBS



Site Inspection Form

JACOBS



Site Inspection Form

Site Name: Alltift
 Project Number: 30130
 Date: 03/28/2022

Weather: Overcast; 10-19 degrees
 Assessment by: Benjamin Hendry

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

A. Security

- Does fence exist? _____
- Is there a breach in fence? 3 breaches in fence will be patched next visit
- Locks on gate? All gates have new masterlocks
- Posted signs? _____
- Signs of trespassers/vandalism? _____
- Other _____

☐	☒	☐
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☒	☐	☐
☐	☒	☐

B. General Site Conditions

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

☐	☒	☐
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☐	☒	☐
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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 _____

☐	☒	☐
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☐	☐	☒

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

1. Does one exist? _____
2. Is system active or passive? **Active**
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order? _____
6. Well seals in place? _____
7. Methane levels within LEL limits? Methane readings for 2022 not yet measured
8. Monitoring reports current? _____
9. Other _____

F. Leachate Collection System

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

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

1. Locks on wells? _____
2. Wells in good condition? _____
3. Well seals in good condition? _____
4. Access to wells? _____
5. Monitoring reports current? _____
6. Other: Some wells missing j-plugs

Site Inspection Form

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

H. Treatment Plant

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

☐	☐	☒
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☐	☐	☒
☐	☐	☒

I. Polymeric Marine Mattress (PMM)

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

J. General Comments

Cap in good condition, some exposed spots in liner near roadside. 3 breaches in fence observed, one near PZ-11, one near Tifft street gate, one between PZ-12 and PZ-13. Road in good condition. Both pumps operational, good flow at wet well. New flow meter installed in wet well.

Site Inspection Form

☼ 327°NW (T) • 42.842254, -78.838369 ±17ft ▲ 419ft



☼ 150°SE (T) • 42.844949, -78.840645 ±14ft ▲ 398ft



Site Inspection Form

☉ 334°NW (T) • 42.843961, -78.840072 ±17ft ▲ 438ft



☉ 108°E (T) • 42.845007, -78.840697 ±21ft ▲ 441ft



Site Inspection Form

☉ 153°SE (T) ● 42.844943, -78.84063 ±21ft ▲ 457ft



Site Inspection Form

☉ 61°NE (T) • 42.845199, -78.840883 ±17ft ▲ 496ft



☉ 155°SE (T) • 42.845229, -78.840893 ±14ft ▲ 516ft



Site Inspection Form

☼ 206°S (T) • 42.845714, -78.839892 ±17ft ▲ 444ft



☼ 52°NE (T) • 42.845744, -78.839915 ±38ft ▲ 439ft



Site Inspection Form

☉ 331°NW (T) ● 42.846736, -78.837577 ±35ft ▲ 481ft



28 Mar 2022, 11:31:40

Site Inspection Form

☉ 343°NW (T) • 42.84587, -78.837229 ±17ft ▲ 515ft



☉ 191°S (T) • 42.84587, -78.837229 ±17ft ▲ 515ft



Site Inspection Form

☉ 263°W (T) • 42.845868, -78.837223 ±17ft ▲ 524ft



☉ 81°E (T) • 42.845828, -78.837223 ±24ft ▲ 478ft



Site Inspection Form

☉ 90°E (T) ☉ 42.845208, -78.837207 ±24ft ▲ 480ft



28 Mar 2022, 11:24:18

Site Inspection Form

☼ 124°SE (T) • 42.842226, -78.837263 ±21ft ▲ 488ft



☼ 59°NE (T) • 42.842245, -78.8384 ±17ft ▲ 448ft



ATTACHMENT B.3

WATER LEVEL MEASUREMENTS

Alltift Landfill
Buffalo, New York

Piezometer Readings (DTW, ft)	15-Jul-21	14-Oct-21	28-Mar-22
PZ-1	4.52	8.33	10.34
PZ-2	7.52	9.17	9.62
PZ-3	12.69	11.36	10.44
PZ-4	4.84	9.18	8.23
PZ-5	6.48	8.12	8.56
PZ-6	11.21	10.30	9.16
PZ-7	9.30	8.73	7.71
PZ-8	7.28	7.14	5.96
PZ-9	7.36	7.32	6.68
PZ-10	8.06	8.26	7.74
PZ-11	7.99	7.34	6.77
PZ-12	8.81	8.14	7.61
PZ-13	5.13	5.53	5.20
PZ-14	Abandoned	Abandoned	Abandoned
PZ-15	7.39	7.62	7.32
PZ-16	Abandoned	Abandoned	Abandoned
Groundwater Collection Trench Sumps (DTW, ft)			
GWCT-1	3.15	10.35	13.08
GWCT-2	18.70	8.81	13.80
GWCT-3	10.66	9.86	8.82
GWCT-4	8.29	7.90	7.87
Relief Trench Sumps (DTW, ft)			
GWR-1	7.38	7.63	6.10
GWR-2	7.57	7.38	5.99
Lift Station (DTW, ft)			
Lift	8.61	8.50	8.50
Offsite Background Wells (DTW, ft)			
MW-1	Removed	Removed	Removed
MW-2	NM	NM	NM
Overflow Weir (DTW)			
	4" over	4" over	4" over

DTW - depth to water

ft - feet

NM - not measured

MW-2 not measured during quarterly events. A static depth to water of 7.09 feet was recorded on 29-Sept-21 prior to the annual sampling.

Prepared by: John Formoza 4/8/2022

Checked by: Ryan Belcher 4/8/2022

ATTACHMENT B.4

QUARTERLY GROUNDWATER ELEVATIONS

QUARTERLY GROUNDWATER ELEVATIONS
2021/2022 ANNUAL REPORT
ALLTIFT LANDFILL SITE
BUFFALO, NEW YORK

			7/15/2021		10/14/2021		3/28/2022	
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	4.52	580.49	8.33	576.68	10.34	574.67
PZ-2	16.9	584.96	7.52	577.44	9.17	575.79	9.62	575.34
PZ-3	16.9	585.05	12.69	572.36	11.36	573.69	10.44	574.61
PZ-4	16.6	585.79	4.84	580.95	9.18	576.61	8.23	577.56
PZ-5	16.9	584.52	6.48	578.04	8.12	576.40	8.56	575.96
PZ-6	17.8	584.74	11.21	573.53	10.3	574.44	9.16	575.58
PZ-7	20.0	584.99	9.3	575.69	8.73	576.26	7.71	577.28
PZ-8	20.7	584.48	7.28	577.20	7.14	577.34	5.96	578.52
PZ-9	15.1	586.86	7.36	579.50	7.32	579.54	6.68	580.18
PZ-10	11.5	589.41	8.06	581.35	8.26	581.15	7.74	581.67
PZ-11	19.5	594.72	7.99	586.73	7.34	587.38	6.77	587.95
PZ-12	21.8	592.78	8.81	583.97	8.14	584.64	7.61	585.17
PZ-13	22.5	589.04	5.13	583.91	5.53	583.51	5.2	583.84
PZ-15	17.0	588.79	7.39	581.40	7.62	581.17	7.32	581.47
BACKGROUND WELLS								
MW-1	20.4	585.22	NM	***	NM	***	NM	***
MW-2	17.0	586.67	NM	NC	NM	NC	NM	NC
GROUNDWATER COLLECTION TRENCH SUMPS								
S1	17.2	585.19	3.15	582.04	10.35	574.84	13.08	572.11
S2	24.8	585.45	18.7	566.75	8.81	576.64	13.8	571.65
S3	17.3	585.25	10.66	574.59	9.86	575.39	8.82	576.43
S4	17.8	585.00	8.29	576.71	7.9	577.10	7.87	577.13

Notes

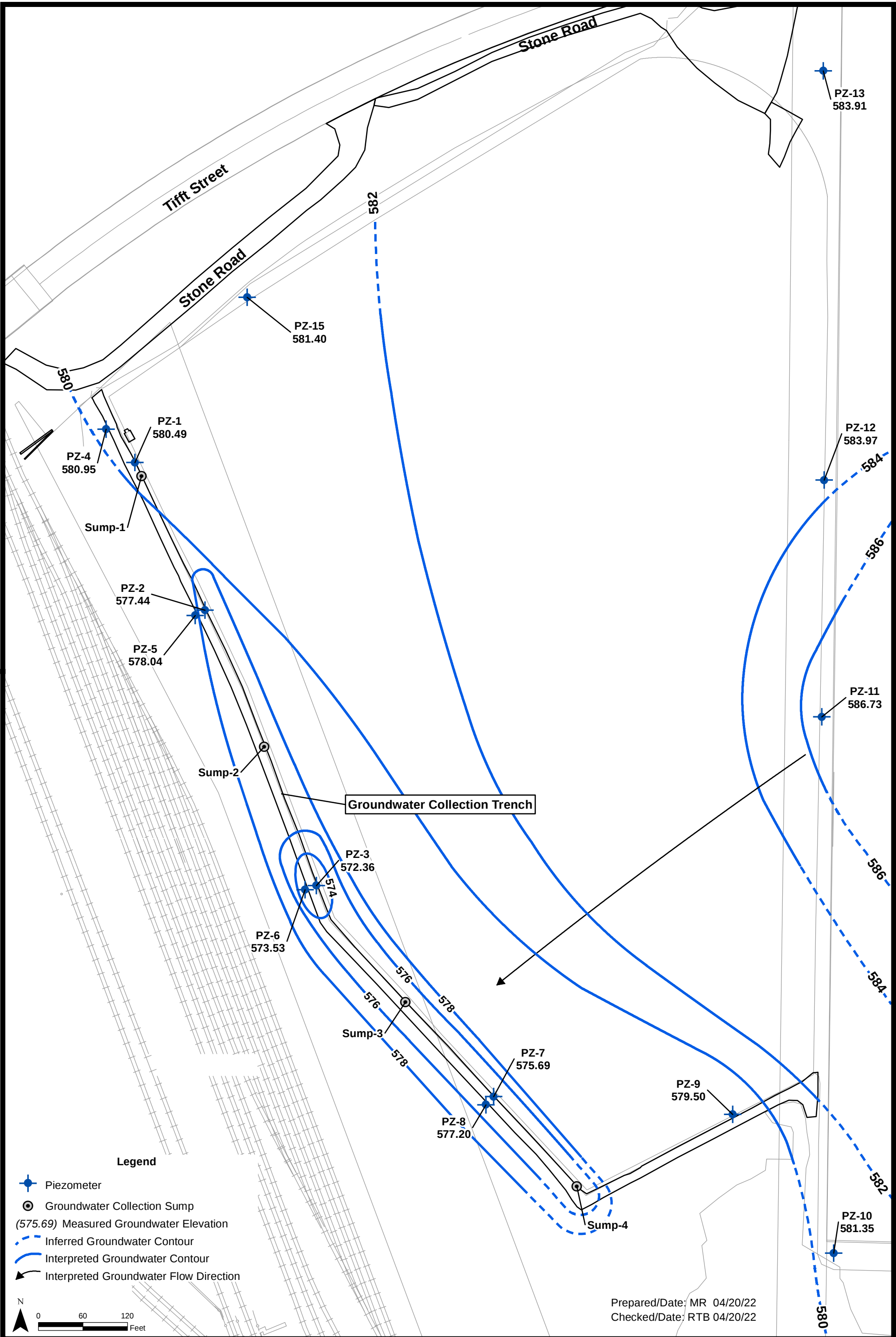
NC - Not calculable

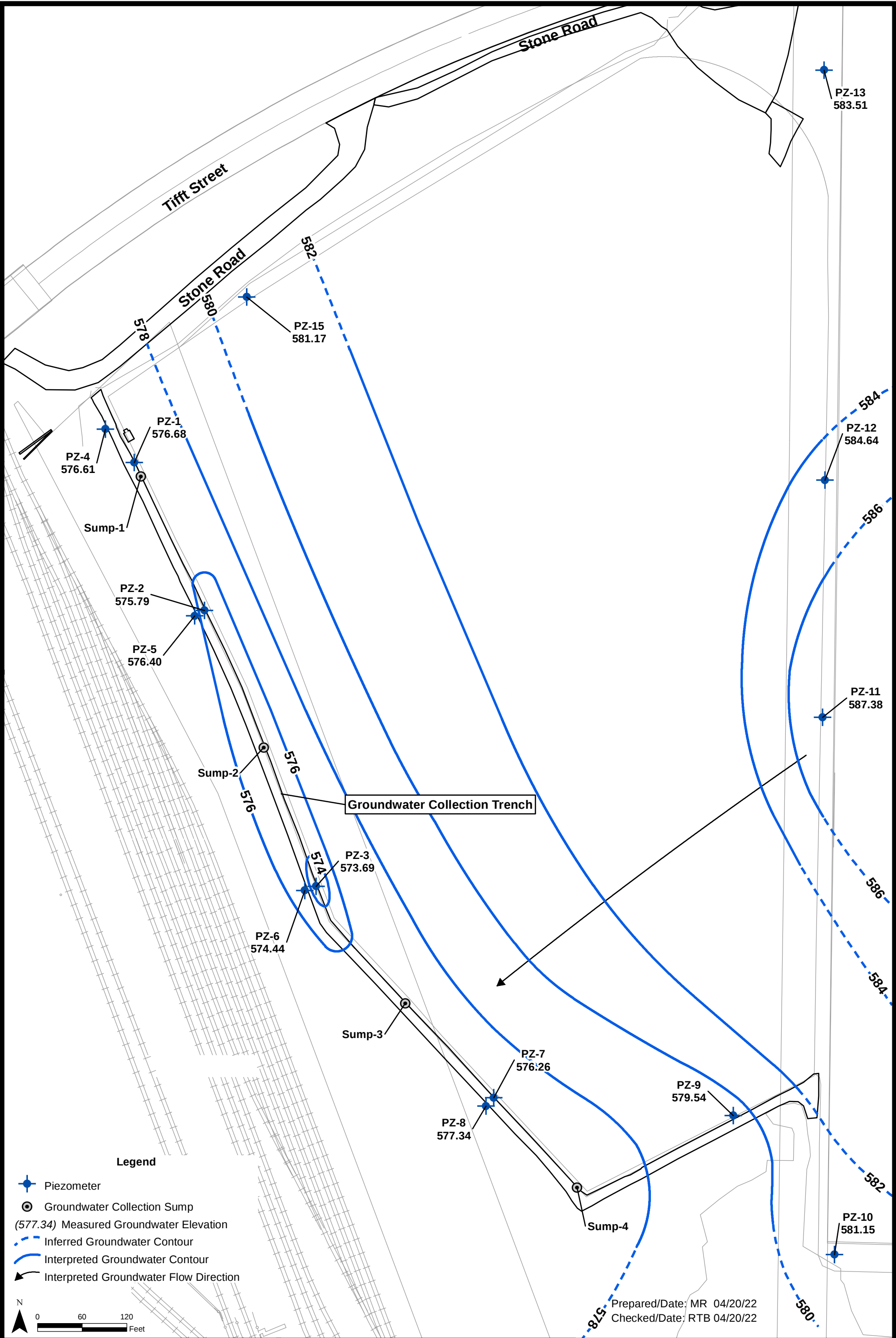
NM - Not measured

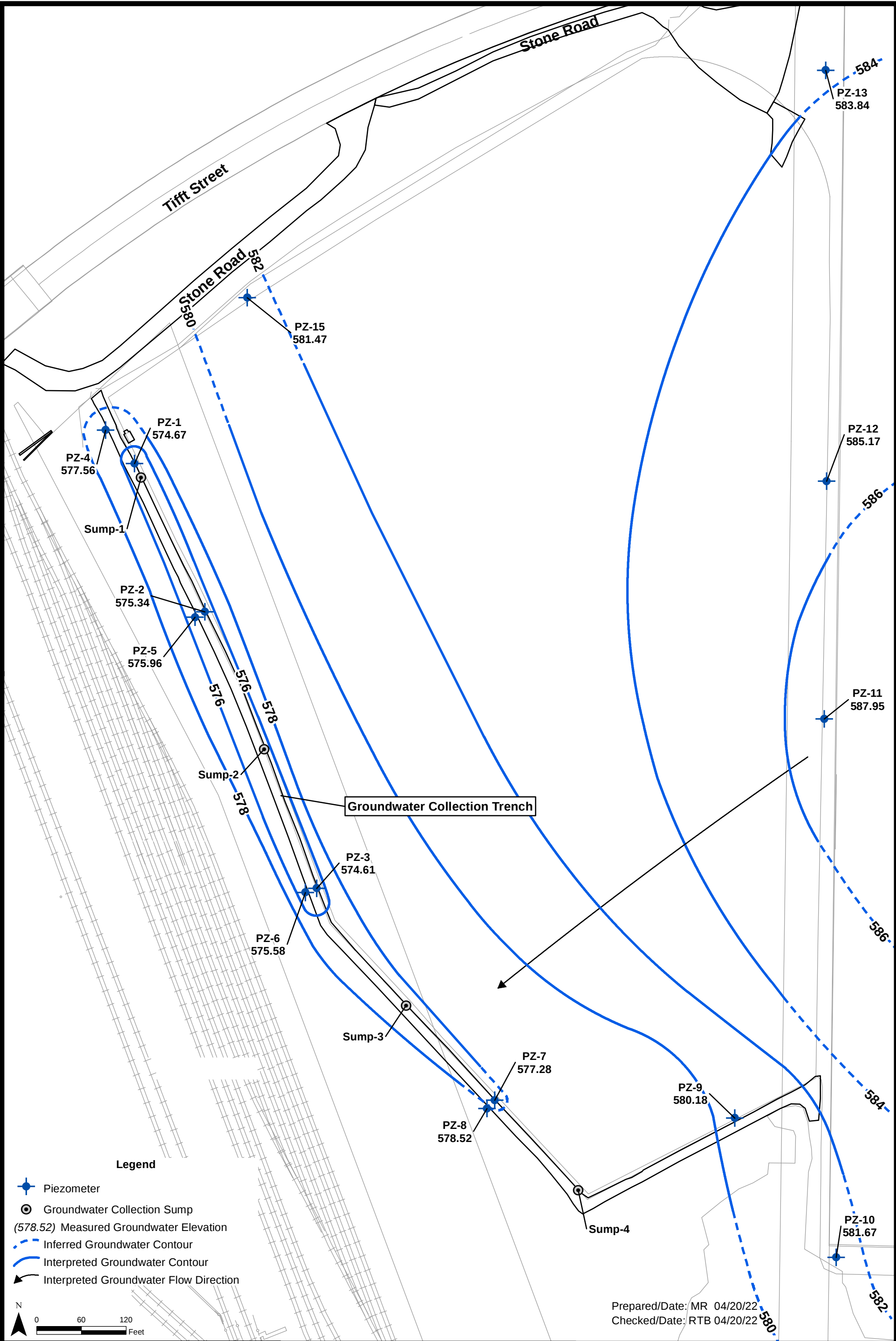
MW-2 not measured during quarterly events. A static depth to water of 7.09 feet was recorded on 29-Sept-21 prior to the annual sampling.

ATTACHMENT B.5

QUARTERLY GROUNDWATER CONTOUR MAPS







ATTACHMENT B.6

DISCHARGE MONITORING REPORTS



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Syracuse, New York 13204
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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	
Sample Date:	April 8, 2021
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	6.85		0.100	SU	6.85	SU	5.0 - 12.0	SU	Yes
Copper	ND		0.05	mg/L	ND	lbs/day	7.68	lbs/day	Yes
Mercury	0.00038	J	0.0006	mg/l	0.00038	mg/l	0.0008	mg/l	Yes
Zinc	0.0475	J	0.1	mg/L	0.0022	lbs/day	12	lbs/day	Yes
Total Suspended Solids	20		4.0	mg/L	20.0	mg/L	250	mg/L	Yes
Total Phosphorus	0.120		0.050	mg/L	0.12	mg/L	15.35	mg/L	Yes
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	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)	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

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

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)

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Test results relate only to samples analyzed.

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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		Matrix Received	Code	Type	Client Sample ID
	Date	Time By				

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 Tifft 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



Dayton, NJ

Section 4

4

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 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	0.33	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 Tifft 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

5

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.

5.1
5

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

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JD23118: Chain of Custody

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5.2

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) _____
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Comments

SM089-03
Rev. Date 12/7/17

JD23118: Chain of Custody

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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 Tifft 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 Tifft 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 Tifft 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-Alltft 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 Tifft 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-Alltiff Landfill, 579 Tiff 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 Tift 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 Tifft 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-Alltft Landfill, 579 Tiftt 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
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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 Tifft 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

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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-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:

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

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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

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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)

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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)

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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)

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

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

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 Tift Street, Buffalo, NY

Sample: EF8592-DFTPP
Lab File ID: F197437.D
Instrument ID: GCMSF
Injection Date: 02/08/21
Injection Time: 20:13

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 Tiftt 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-Alltft 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
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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 Tiffitt 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

8.1.1

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: MP25950
 Matrix Type: AQUEOUS

Methods: EPA 200.7
 Units: ug/l

Prep Date: 04/13/21

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

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

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	Spike lot MP200.7A % Rec	MSD RPD	QC Limit
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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

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

Methods: EPA 200.7

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 04/13/21

Metal	BSP Result	SpikeLot 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				

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	SpikeLot MP200.7A	% Rec	QC Limits
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Zinc	2050	2000	102.5	85-115
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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		SpikeLot 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
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/15/21

Metal	BSP Result	SpikeLot 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 Tiffitt 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-Alltift Landfill, 579 Tifft 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

November 01, 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 Second Semi-Annual Report
BPDES Permit Number 18-12-BU098**

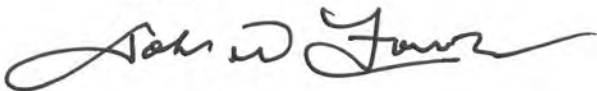
Dear Ms. Adams:

Enclosed please find the 2021 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 655,309 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from April 08, 2021 through September 23, 2021 for a total of 168 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 23, 2021. Four samples were collected over an evenly-spaced work day period, and the four samples were 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. It should be noted that the VOC sample collected on September 23, 2021 was inadvertently shipped without the trip blanks required for VOC analysis. This analysis was cancelled, and resampling for VOC analysis only was completed on September 29, 2021. 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. Sasa Jazic (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Jason Paananen (City of Buffalo)
Mr. Robert Gersh (Wood E&IS)

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

BSA Permit No. 18-12-BU098	
Sample Date:	September 23 & 29, 2021
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	6.81		0.100	SU	6.81	SU	5.0 - 12.0	SU	Yes
Copper	0.0359		0.01	mg/L	0.0012	lbs/day	7.68	lbs/day	Yes
Mercury	ND		0.0002	mg/l	ND	mg/l	0.0008	mg/l	Yes
Zinc	0.0152	J	0.020	mg/L	0.0005	lbs/day	12	lbs/day	Yes
Total Suspended Solids	113		4.0	mg/L	113.0	mg/L	250	mg/L	Yes
Total Phosphorus	0.11	J	0.20	mg/L	0.11	mg/L	15.35	mg/L	Yes
USEPA Test Method 624	ND - 44.2			µg/L	Monitor Only				
USEPA Test Method 625	ND - 8.0			µg/L					
Total Flow (average)	2.71			gpm	3,901	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)	131600	4/8/2021
Final Reading (pump station)	461094	7/15/2021
Initial Reading (pump station)	0	8/17/2021
Final Reading (pump station)	325815	9/23/2021
Total Days in Period		168
Total Flow for Period	655,309	gallons
Average Flow for Period	2.71	gpm

Note: New flow meter installed on 07/15/2021

Prepared by, Date: Aruna, 10/18/2021

Checked by, Date: John Formoza, 11/01/2021

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	Totalizer Reading (gallons)
4/8/2021	131,600
5/26/2021	341,900
6/8/2021	395,700
7/15/2021	461,094
7/15/2021	0
8/17/2021	144,200
9/23/2021	325,815

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."



ARES MANAGER

11-1-2021

John W. Formoza
Jacobs

Date

Document: P:\Projects\Honeywell\O, M and M Team\Alltiff Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\MapDocuments\Permit_Site_Map_8.5x11P.mxd
PDF: P:\Projects\Honeywell\O, M and M Team\Alltiff Landfill\4.0 Project Deliverables\4.3 Drawings\GIS\Figures\Figure 1 - Permit Sample Location.pdf 07-27-2021 11:25 AM brian.peters



wood.



Prepared/Date: BRP 07-27-21 | Checked/Date: RTB 07-27-21

Figure 1
Permit Sample Location

Alltiff Landfill
Buffalo, New York

Project Name Hennepin Aft-GT Landfill
Sampling Event BSA Discharge Semi-annual
Job # HWCM 508

Date 09-23-2021
Field Team B. Henbury
Field Conditions 60s, rain

Well / Sample # <u>BSA Discharge</u>	Start Time _____	End Time _____
Initial DTW: <u>N/A</u>		
Purge Method (circle): Geopump Ded. Pump Other: <u>Grab</u>	Measure Point (circle): PVC Steel Other: _____	
Sample Method: <u>Boiler</u>		
Sample ID <u>BSA Discharge</u>	Sample Time: _____	
Dup. Sample ID _____	Dup. Time: _____	
Split Sample ID _____	Split Time: _____	
Depth to Bottom (from meas. pt., ft.): _____	Min. Purge Vol. (gal. or L): _____	Purge Rate (gpm or mLpm): _____
WQ Parameter Measurement Technique (circle): Flow-thru cell In-situ Open container		

Time	Volume Purged gal / L	pH SU (+/- 0.1)	Conductivity mS/cm (+/- 3%)	Turbidity NTU (+/- 10% if > 10 NTU)	DO mg/L (+/- 10%)	Temperature °C (+/- 3%)	Eh / ORP mv (+/- 10 mV)	DTW ft.
0930 -	Collect sample Grab 1 - 092321 - BSA Discharge. (3) 40 mL HCl p. VOA's for 624 (2) 1L Amber non-p for 625. 1 gal. for composite in cankey							
1130 -	Collect sample Grab 2 - 092321 - BSA Discharge (3) 40 mL HCl p. VOA's for 624, (2) 1L non-p Ambers for 625, 1 gal. for composite							
1330 -	Collect sample Grab 3 - 092321 - BSA Discharge (3) 40 mL HCl p. VOA's for 624, (2) 1L non-p Ambers for 625, 1 gal. for composite.							
1530 -	Collect sample Grab 4 - 092321 - BSA Discharge (3) 40 mL HCl p. VOA's for 624, (2) 1L non-p Ambers for 625, 1 gal. for composite							
1540 -	Collect sample Comp - 092321 - BSA Discharge. - (2) 1L non-p poly bottles for TSS (25402) - (1) 20 mL H2O2 poly for TSS; 365.5 - (1) 500 mL HNO3 poly for 245; total Hg - (1) 500 mL non-p poly for pH-SiM20 4500H - (1) 500 mL HNO3 poly for 200.7							

Sample Collection Information

Parameter	Bottle Type	Volume	Field Filtered (Y/N)	Preservative	pH	Notes
See Above			Not Filtered			

Notes

COC Attached, samples shipped on 09-24-2021. Tracking # 9251 0906 5922.
Samples stored on ice, then refrigerated prior to shipping.

FM reading at 0930 = 320267.9
FM reading at departure = 325815.8

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#A000804776

SGS Job Number: JD32272

Sampling Date: 09/23/21

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: 53



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.



Mike Earp
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 15, 2021

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

RE: SGS – Dayton, Job # JD32272 – Reissues

Dear Mr. Belcher,

The final report for SGS job number JD32272 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, the V624PPL has been omitted from JD32272-1 per Mr. Mike Fay's request on 10/13/2021. 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!



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Sample Summary

Honeywell International Inc. OMM work

Job No: JD32272

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

JD32272-1	09/23/21	15:30 BH	09/25/21	AQ	Ground Water	GRAB 1 THRU 4-092321/-BSA DISCHARGE
JD32272-2	09/23/21	15:40 BH	09/25/21	AQ	Ground Water	COMP-092321-BSA DISCHARGE

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: Honeywell International Inc. OMM work

Job No: JD32272

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

Report Date 10/15/2021 12:37:50 P

On 09/25/2021, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD32272 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

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

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

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ

Batch ID: OP35676

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP35676-BSD for 2-Chlorophenol: Analytical precision exceeds in-house control limits.
- OP35676-BSD for n-Nitrosodimethylamine: Analytical precision exceeds in-house control limits.
- JD32272-1 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD32272-1 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high.

Metals Analysis By Method EPA 200.7

Matrix: AQ

Batch ID: MP28938

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD32236-11MS, JD32236-11MSD, JD32236-11SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Copper are outside control limits for sample MP28938-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals Analysis By Method EPA 245.1

Matrix: AQ

Batch ID: MP28973

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD32310-2MS, JD32310-2MSD were used as the QC samples for metals.

General Chemistry By Method EPA 365.3

Matrix: AQ

Batch ID: GP36109

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD32182-1DUP, JD32182-1MS were used as the QC samples for Phosphorus, Total.

Friday, October 15, 2021

Page 1 of 2

General Chemistry By Method SM2540 D-11

Matrix: AQ**Batch ID:** GN22202

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD32245-1ADUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ**Batch ID:** R193204

- The data for SM4500H+ B-11 meets quality control requirements.
- JD32272-2 for pH: Sample received out of holding time for pH analysis. Temp of pH Reading: 17.3 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: JD32272

Account: Honeywell International Inc. OMM work

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

Collected: 09/23/21



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

JD32272-1 GRAB 1 THRU 4-092321/-BSA DISCHARGE

4-Chloroaniline	8.0	4.9	0.33	ug/l	EPA 625.1
1,2-Dichlorobenzene	0.32 J	0.98	0.16	ug/l	EPA 625.1
1,4-Dichlorobenzene	0.67 J	0.98	0.17	ug/l	EPA 625.1
Naphthalene	2.1	0.98	0.23	ug/l	EPA 625.1
N-Nitrosodiphenylamine	0.36 J	4.9	0.22	ug/l	EPA 625.1

JD32272-2 COMP-092321-BSA DISCHARGE

Copper	35.9	10	4.1	ug/l	EPA 200.7
Zinc	15.2 J	20	8.5	ug/l	EPA 200.7
Phosphorus, Total	0.11 J	0.20	0.11	mg/l	EPA 365.3
Solids, Total Suspended	113	4.0	1.5	mg/l	SM2540 D-11
pH ^a	6.81			su	SM4500H+ B-11

(a) Sample received out of holding time for pH analysis. Temp of pH Reading: 17.3 Deg. C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-092321/-BSA DISCHARGE			Date Sampled:	09/23/21
Lab Sample ID:	JD32272-1			Date Received:	09/25/21
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	M175347.D	1	10/01/21 05:20	KLS	09/30/21 09:15	OP35676	EM7538
Run #2	F202466.D	1	10/04/21 13:28	KLS	09/30/21 09:15	OP35676	EF8867

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2	1020 ml	1.0 ml

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.9	0.80	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.87	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.9	2.4	ug/l	
51-28-5	2,4-Dinitrophenol ^a	ND	9.8	1.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol ^b	ND	4.9	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.94	ug/l	
100-02-7	4-Nitrophenol	ND	9.8	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	4.9	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.38	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.91	ug/l	
83-32-9	Acenaphthene	ND	0.98	0.19	ug/l	
208-96-8	Acenaphthylene	ND	0.98	0.13	ug/l	
120-12-7	Anthracene	ND	0.98	0.21	ug/l	
92-87-5	Benzidine	ND	9.8	0.88	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.98	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.98	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.98	0.20	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.98	0.33	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.98	0.20	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	0.45	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.23	ug/l	
106-47-8	4-Chloroaniline	8.0	4.9	0.33	ug/l	
218-01-9	Chrysene	ND	0.98	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.27	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.24	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	0.36	ug/l	
95-50-1	1,2-Dichlorobenzene	0.32	0.98	0.16	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	0.98	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	0.98	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 4-092321/-BSA DISCHARGE	Date Sampled:	09/23/21
Lab Sample ID:	JD32272-1	Date Received:	09/25/21
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	0.67	0.98	0.17	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	0.98	0.54	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.98	0.47	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.50	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.98	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.49	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	0.21	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.6	ug/l	
206-44-0	Fluoranthene	ND	0.98	0.17	ug/l	
86-73-7	Fluorene	ND	0.98	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	0.98	0.32	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.98	0.48	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.8	2.7	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.38	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.98	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	2.1	0.98	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.63	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.80	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	0.36 ^c	4.9	0.22	ug/l	J
85-01-8	Phenanthrene	ND	0.98	0.17	ug/l	
129-00-0	Pyrene	ND	0.98	0.21	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.98	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%	36%	10-110%
4165-62-2	Phenol-d5	22%	25%	10-110%
118-79-6	2,4,6-Tribromophenol	123%	109%	35-147%
4165-60-0	Nitrobenzene-d5	75%	71%	32-132%
321-60-8	2-Fluorobiphenyl	74%	77%	40-117%
1718-51-0	Terphenyl-d14	36%	39%	33-126%

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

(b) Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high.

(c) 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:	COMP-092321-BSA DISCHARGE	Date Sampled:	09/23/21
Lab Sample ID:	JD32272-2	Date Received:	09/25/21
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	35.9	10	4.1	ug/l	1	10/01/21	10/01/21 ND	EPA 200.7 ¹	EPA 200.7 ³
Mercury	ND	0.20	0.092	ug/l	1	10/04/21	10/04/21 LM	EPA 245.1 ²	EPA 245.1 ⁴
Zinc	15.2 J	20	8.5	ug/l	1	10/01/21	10/01/21 ND	EPA 200.7 ¹	EPA 200.7 ³

- (1) Instrument QC Batch: MA51216
- (2) Instrument QC Batch: MA51222
- (3) Prep QC Batch: MP28938
- (4) Prep QC Batch: MP28973

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

Report of Analysis

Client Sample ID:	COMP-092321-BSA DISCHARGE	Date Sampled:	09/23/21
Lab Sample ID:	JD32272-2	Date Received:	09/25/21
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	0.11 J	0.20	0.11	mg/l	1	10/01/21 10:36	JOO	EPA 365.3
Solids, Total Suspended	113	4.0	1.5	mg/l	1	09/28/21 16:01	MB	SM2540 D-11
pH ^a	6.81			su	1	09/30/21 14:52	RS	SM4500H+ B-11

(a) Sample received out of holding time for pH analysis. Temp of pH Reading: 17.3 Deg. C

RL = Reporting Limit
MDL = Method Detection Limit

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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JD32272
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

PN
Comp

5.2

Label Verification

SGS Sample Receipt Summary

Job Number: JD32272

Client: HONEYWELL INTERNATIONAL

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

Date / Time Received: 9/25/2021 9:50:00 AM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

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

Cooler Security

Y or N

Y or N

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

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | ☒ | ☐ |
| 2. Cooler temp verification: | 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: 231619 pH 12+: 203117A Other: (Specify)

Comments

1.) Did not received trip blank 40ml HCL vials. Please verify.

SM089-02 Rev. Date 12/1/16

JD32272: Chain of Custody

Page 2 of 4

Responded to by: Kristin DeGraw

Response Date: 9/27/2021

Client notified - please proceed as noted.

5.2

5

JD32272: Chain of Custody
Page 3 of 4

Job Change Order: JD32272

Requested Date:	10/13/2021	Received Date:	9/25/2021
Account Name:	Honeywell International Inc. OMM	Due Date:	10/13/2021
Project Description:	HLAME: 30130-Altift Landfill, 579 Tifft Street, Bu	Deliverable:	COMMBN
C/O Initiated By:	KRISTIN.DE	PM:	KD
		TAT (Days):	7

=====

Sample #:	JD32272-1	Change:	
Dept:			Please NO OUT V624PPL data and reissue report and EDD.
TAT:	7		

GRAB 1 THRU 4-092321/-BSA DISCHARG

=====

Above Changes Per: Client / Mike Fay

Date/Time: 10/13/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD32272: Chain of Custody
Page 4 of 4



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: JD32272**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
OP35676-MB1	M175330.D	1	09/30/21	KLS	09/30/21	OP35676	EM7538

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

JD32272-1

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: JD32272

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
OP35676-MB1	M175330.D	1	09/30/21	KLS	09/30/21	OP35676	EM7538

The QC reported here applies to the following samples:

Method: EPA 625.1

JD32272-1

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	41% 10-110%
4165-62-2	Phenol-d5	28% 10-110%
118-79-6	2,4,6-Tribromophenol	117% 35-147%
4165-60-0	Nitrobenzene-d5	92% 32-132%
321-60-8	2-Fluorobiphenyl	86% 40-117%
1718-51-0	Terphenyl-d14	87% 33-126%

Method Blank Summary

Page 1 of 2

Job Number: JD32272**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
OP35676-MB1	F202465.D	1	10/04/21	KLS	09/30/21	OP35676	EF8867

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

JD32272-1

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: JD32272

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
OP35676-MB1	F202465.D	1	10/04/21	KLS	09/30/21	OP35676	EF8867

The QC reported here applies to the following samples:

Method: EPA 625.1

JD32272-1

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	47%
4165-62-2	Phenol-d5	31%
118-79-6	2,4,6-Tribromophenol	110%
4165-60-0	Nitrobenzene-d5	91%
321-60-8	2-Fluorobiphenyl	90%
1718-51-0	Terphenyl-d14	93%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: JD32272

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
OP35676-BS1	M175331.D	1	09/30/21	KLS	09/30/21	OP35676	EM7538
OP35676-BSD	M175332.D	1	09/30/21	KLS	09/30/21	OP35676	EM7538

The QC reported here applies to the following samples:

Method: EPA 625.1

JD32272-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	30.5	61	38.5	77	23* a	43-100/22
59-50-7	4-Chloro-3-methyl phenol	50	36.0	72	43.6	87	19	46-110/21
120-83-2	2,4-Dichlorophenol	50	37.3	75	45.1	90	19	44-109/21
105-67-9	2,4-Dimethylphenol	50	34.0	68	39.9	80	16	42-116/20
51-28-5	2,4-Dinitrophenol	100	107	107	131	131	20	38-131/27
534-52-1	4,6-Dinitro-o-cresol	50	60.8	122	70.7	141* b	15	50-124/26
88-75-5	2-Nitrophenol	50	43.7	87	51.7	103	17	44-109/21
100-02-7	4-Nitrophenol	50	20.8	42	25.7	51	21	14-110/23
87-86-5	Pentachlorophenol	100	85.6	86	91.4	91	7	25-128/25
108-95-2	Phenol	50	16.7	33	18.9	38	12	20-110/22
88-06-2	2,4,6-Trichlorophenol	50	39.7	79	46.3	93	15	52-118/24
83-32-9	Acenaphthene	50	44.6	89	43.9	88	2	47-110/24
208-96-8	Acenaphthylene	50	37.6	75	37.1	74	1	45-110/24
120-12-7	Anthracene	50	47.3	95	46.7	93	1	52-110/24
92-87-5	Benzidine	50	11.1	22	11.9	24	7	10-110/65
56-55-3	Benzo(a)anthracene	50	47.7	95	46.7	93	2	53-110/20
50-32-8	Benzo(a)pyrene	50	46.4	93	45.0	90	3	55-110/23
205-99-2	Benzo(b)fluoranthene	50	48.7	97	47.4	95	3	57-110/23
191-24-2	Benzo(g,h,i)perylene	50	46.0	92	44.0	88	4	51-110/23
207-08-9	Benzo(k)fluoranthene	50	43.9	88	43.4	87	1	56-110/22
101-55-3	4-Bromophenyl phenyl ether	50	50.6	101	49.5	99	2	51-112/23
85-68-7	Butyl benzyl phthalate	50	51.1	102	49.5	99	3	50-122/23
91-58-7	2-Chloronaphthalene	50	41.1	82	40.3	81	2	41-110/26
106-47-8	4-Chloroaniline	50	35.7	71	35.1	70	2	10-110/44
218-01-9	Chrysene	50	45.7	91	44.2	88	3	52-110/20
111-91-1	bis(2-Chloroethoxy)methane	50	41.8	84	41.7	83	0	36-110/21
111-44-4	bis(2-Chloroethyl)ether	50	40.2	80	40.1	80	0	40-111/21
108-60-1	2,2'-Oxybis(1-chloropropane)	50	42.2	84	41.1	82	3	37-110/25
7005-72-3	4-Chlorophenyl phenyl ether	50	43.1	86	42.0	84	3	48-110/25
95-50-1	1,2-Dichlorobenzene	50	41.1	82	40.5	81	1	35-110/28
122-66-7	1,2-Diphenylhydrazine	50	42.8	86	42.2	84	1	39-128/23
541-73-1	1,3-Dichlorobenzene	50	39.3	79	39.6	79	1	32-110/28
106-46-7	1,4-Dichlorobenzene	50	40.9	82	41.3	83	1	33-110/27
121-14-2	2,4-Dinitrotoluene	50	48.7	97	49.0	98	1	61-117/25
606-20-2	2,6-Dinitrotoluene	50	48.3	97	48.3	97	0	61-119/23
91-94-1	3,3'-Dichlorobenzidine	50	43.8	88	40.9	82	7	20-110/33

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JD32272

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
OP35676-BS1	M175331.D	1	09/30/21	KLS	09/30/21	OP35676	EM7538
OP35676-BSD	M175332.D	1	09/30/21	KLS	09/30/21	OP35676	EM7538

The QC reported here applies to the following samples:

Method: EPA 625.1

JD32272-1

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	46.7	93	45.1	90	3	55-110/25
84-74-2	Di-n-butyl phthalate	50	51.9	104	50.1	100	4	55-118/25
117-84-0	Di-n-octyl phthalate	50	48.5	97	48.2	96	1	49-124/26
84-66-2	Diethyl phthalate	50	45.3	91	44.9	90	1	54-113/23
131-11-3	Dimethyl phthalate	50	43.0	86	44.6	89	4	56-110/23
117-81-7	bis(2-Ethylhexyl)phthalate	50	46.7	93	45.7	91	2	50-120/22
206-44-0	Fluoranthene	50	50.1	100	48.4	97	3	55-111/23
86-73-7	Fluorene	50	44.1	88	43.4	87	2	51-110/25
118-74-1	Hexachlorobenzene	50	48.0	96	46.5	93	3	47-116/23
87-68-3	Hexachlorobutadiene	50	41.7	83	42.7	85	2	24-110/34
77-47-4	Hexachlorocyclopentadiene	100	52.7	53	56.8	57	7	10-110/39
67-72-1	Hexachloroethane	50	40.4	81	41.6	83	3	28-110/34
193-39-5	Indeno(1,2,3-cd)pyrene	50	46.7	93	44.3	89	5	51-112/24
78-59-1	Isophorone	50	42.1	84	41.2	82	2	42-111/20
91-20-3	Naphthalene	50	43.1	86	43.0	86	0	34-110/25
98-95-3	Nitrobenzene	50	42.0	84	42.1	84	0	39-110/21
62-75-9	n-Nitrosodimethylamine	50	25.1	50	32.4	65	25* a	15-110/19
621-64-7	N-Nitroso-di-n-propylamine	50	38.2	76	36.2	72	5	33-117/21
86-30-6	N-Nitrosodiphenylamine	50	46.6	93	45.3	91	3	54-110/24
85-01-8	Phenanthrene	50	47.3	95	45.7	91	3	53-110/23
129-00-0	Pyrene	50	49.9	100	48.0	96	4	52-110/22
120-82-1	1,2,4-Trichlorobenzene	50	40.8	82	40.1	80	2	30-110/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	46%	57%	10-110%
4165-62-2	Phenol-d5	29%	35%	10-110%
118-79-6	2,4,6-Tribromophenol	106%	116%	35-147%
4165-60-0	Nitrobenzene-d5	86%	86%	32-132%
321-60-8	2-Fluorobiphenyl	85%	83%	40-117%
1718-51-0	Terphenyl-d14	98%	101%	33-126%

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

(b) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD32272

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EF8822-DFTPP

Injection Date: 08/30/21

Lab File ID: F201587.D

Injection Time: 18:32

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	137678	35.2	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	185778	47.5	Pass
70	Less than 2.0% of mass 69	150	0.04 (0.08) ^a	Pass
127	40.0 - 60.0% of mass 198	191072	48.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	391338	100.0	Pass
199	5.0 - 9.0% of mass 198	26616	6.80	Pass
275	10.0 - 30.0% of mass 198	105861	27.1	Pass
365	1.0 - 100.0% of mass 198	13219	3.38	Pass
441	Present, but less than mass 443	43917	11.2 (84.0) ^b	Pass
442	40.0 - 100.0% of mass 198	271168	69.3	Pass
443	17.0 - 23.0% of mass 442	52280	13.4 (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
EF8822-IC8822	F201588.D	08/30/21	18:47	00:15	Initial cal 1
EF8822-IC8822	F201589.D	08/30/21	19:14	00:42	Initial cal 2
EF8822-IC8822	F201590.D	08/30/21	19:42	01:10	Initial cal 5
EF8822-IC8822	F201591.D	08/30/21	20:10	01:38	Initial cal 10
EF8822-ICC8822	F201592.D	08/30/21	20:46	02:14	Initial cal 50
EF8822-IC8822	F201593.D	08/30/21	21:14	02:42	Initial cal 25
EF8822-IC8822	F201594.D	08/30/21	21:41	03:09	Initial cal 80
EF8822-IC8822	F201595.D	08/30/21	22:09	03:37	Initial cal 100
EF8822-ICV8822	F201596.D	08/30/21	22:37	04:05	Initial cal verification 50
EF8822-ICV8822	F201597.D	08/30/21	23:05	04:33	Initial cal verification 50
EF8822-ICV8822	F201598.D	08/30/21	23:32	05:00	Initial cal verification 50
EF8822-ICV8822	F201599.D	08/31/21	00:00	05:28	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD32272

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EF8823-DFTPP

Injection Date: 08/31/21

Lab File ID: F201600.D

Injection Time: 00:23

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	126739	31.5	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	176316	43.8	Pass
70	Less than 2.0% of mass 69	497	0.12 (0.28) ^a	Pass
127	40.0 - 60.0% of mass 198	185260	46.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	402560	100.0	Pass
199	5.0 - 9.0% of mass 198	26687	6.63	Pass
275	10.0 - 30.0% of mass 198	112213	27.9	Pass
365	1.0 - 100.0% of mass 198	14149	3.51	Pass
441	Present, but less than mass 443	48738	12.1 (86.9) ^b	Pass
442	40.0 - 100.0% of mass 198	299946	74.5	Pass
443	17.0 - 23.0% of mass 442	56109	13.9 (18.7) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8823-IC8823	F201601.D	08/31/21	00:39	00:16	Initial cal 100
EF8823-IC8823	F201602.D	08/31/21	01:06	00:43	Initial cal 80
EF8823-ICC8823	F201603.D	08/31/21	01:34	01:11	Initial cal 50
EF8823-IC8823	F201604.D	08/31/21	02:02	01:39	Initial cal 25
EF8823-IC8823	F201605.D	08/31/21	02:29	02:06	Initial cal 10
EF8823-IC8823	F201606.D	08/31/21	02:57	02:34	Initial cal 5
EF8823-IC8823	F201607.D	08/31/21	03:25	03:02	Initial cal 2
EF8823-IC8823	F201608.D	08/31/21	03:52	03:29	Initial cal 1
EF8823-ICV8823	F201609.D	08/31/21	04:20	03:57	Initial cal verification 50

Instrument Performance Check (DFTPP)

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Job Number: JD32272

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EF8867-DFTPP

Injection Date: 10/04/21

Lab File ID: F202458.D

Injection Time: 10:09

Instrument ID: GCMSF

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	148854	33.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	198902	45.2	Pass
70	Less than 2.0% of mass 69	813	0.18 (0.41) ^a	Pass
127	40.0 - 60.0% of mass 198	207902	47.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	440000	100.0	Pass
199	5.0 - 9.0% of mass 198	30573	6.95	Pass
275	10.0 - 30.0% of mass 198	125160	28.4	Pass
365	1.0 - 100.0% of mass 198	13735	3.12	Pass
441	Present, but less than mass 443	50000	11.4 (82.0) ^b	Pass
442	40.0 - 100.0% of mass 198	311264	70.7	Pass
443	17.0 - 23.0% of mass 442	60941	13.9 (19.6) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8867-CC8822	F202459.D	10/04/21	10:29	00:20	Continuing cal 50
EF8867-CC8823	F202460.D	10/04/21	10:54	00:45	Continuing cal 50
OP35638-MB1	F202462.D	10/04/21	11:48	01:39	Method Blank
OP35638-LB20	F202463.D	10/04/21	12:13	02:04	Leachate Blank
OP35638-BS1	F202464.D	10/04/21	12:38	02:29	Blank Spike
OP35676-MB1	F202465.D	10/04/21	13:03	02:54	Method Blank
JD32272-1	F202466.D	10/04/21	13:28	03:19	GRAB 1 THRU 4-092321/-BSA DISCHARGE
ZZZZZZ	F202467A.D	10/04/21	14:15	04:06	(unrelated sample)
ZZZZZZ	F202468.D	10/04/21	14:40	04:31	(unrelated sample)
ZZZZZZ	F202469.D	10/04/21	15:05	04:56	(unrelated sample)
ZZZZZZ	F202470.D	10/04/21	15:31	05:22	(unrelated sample)
ZZZZZZ	F202471.D	10/04/21	15:56	05:47	(unrelated sample)
JD31743-1	F202472.D	10/04/21	16:21	06:12	(used for QC only; not part of job JD32272)
ZZZZZZ	F202473.D	10/04/21	16:46	06:37	(unrelated sample)
ZZZZZZ	F202474.D	10/04/21	17:11	07:02	(unrelated sample)
ZZZZZZ	F202475.D	10/04/21	17:36	07:27	(unrelated sample)
ZZZZZZ	F202476.D	10/04/21	18:01	07:52	(unrelated sample)
OP35638-LS20	F202477.D	10/04/21	18:26	08:17	Leachate Spike
OP35638-MS	F202477.D	10/04/21	18:26	08:17	Matrix Spike

Instrument Performance Check (DFTPP)

Job Number: JD32272
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EF8867-DFTPP	Injection Date:	10/04/21
Lab File ID:	F202458.D	Injection Time:	10:09
Instrument ID:	GCMSF		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP35638-MSD	F202478.D	10/04/21	18:51	08:42	Matrix Spike Duplicate
ZZZZZZ	F202479.D	10/04/21	19:16	09:07	(unrelated sample)
ZZZZZZ	F202480.D	10/04/21	19:41	09:32	(unrelated sample)
ZZZZZZ	F202481.D	10/04/21	20:06	09:57	(unrelated sample)

Instrument Performance Check (DFTPP)

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Job Number: JD32272

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EM7525-DFTPP

Injection Date: 09/21/21

Lab File ID: M175056.D

Injection Time: 18:37

Instrument ID: GCMSM

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	55048	36.4	Pass
68	Less than 2.0% of mass 69	222	0.15 (0.31) ^a	Pass
69	Mass 69 relative abundance	72202	47.7	Pass
70	Less than 2.0% of mass 69	238	0.16 (0.33) ^a	Pass
127	40.0 - 60.0% of mass 198	90576	59.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	151381	100.0	Pass
199	5.0 - 9.0% of mass 198	10497	6.93	Pass
275	10.0 - 30.0% of mass 198	38794	25.6	Pass
365	1.0 - 100.0% of mass 198	5830	3.85	Pass
441	Present, but less than mass 443	18722	12.4 (72.2) ^b	Pass
442	40.0 - 100.0% of mass 198	133669	88.3	Pass
443	17.0 - 23.0% of mass 442	25917	17.1 (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
EM7525-IC7525	M175057.D	09/21/21	18:49	00:12	Initial cal 1
EM7525-IC7525	M175058.D	09/21/21	19:17	00:40	Initial cal 2
EM7525-IC7525	M175059.D	09/21/21	19:46	01:09	Initial cal 5
EM7525-IC7525	M175060.D	09/21/21	20:15	01:38	Initial cal 10
EM7525-IC7525	M175061.D	09/21/21	20:43	02:06	Initial cal 25
EM7525-ICC7525	M175062.D	09/21/21	21:12	02:35	Initial cal 50
EM7525-IC7525	M175063A.D	09/21/21	22:42	04:05	Initial cal 80
EM7525-IC7525	M175064.D	09/21/21	23:10	04:33	Initial cal 100
EM7525-ICV7525	M175065.D	09/21/21	23:39	05:02	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD32272

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: EM7526-DFTPP

Injection Date: 09/22/21

Lab File ID: M175070.D

Injection Time: 14:01

Instrument ID: GCMSM

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	59523	33.7	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	82293	46.6	Pass
70	Less than 2.0% of mass 69	338	0.19 (0.41) ^a	Pass
127	40.0 - 60.0% of mass 198	103112	58.4	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	176544	100.0	Pass
199	5.0 - 9.0% of mass 198	12565	7.12	Pass
275	10.0 - 30.0% of mass 198	48477	27.5	Pass
365	1.0 - 100.0% of mass 198	7144	4.05	Pass
441	Present, but less than mass 443	23299	13.2 (75.9) ^b	Pass
442	40.0 - 100.0% of mass 198	157978	89.5	Pass
443	17.0 - 23.0% of mass 442	30685	17.4 (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
EM7526-IC7526	M175071.D	09/22/21	14:18	00:17	Initial cal 100
EM7526-IC7526	M175072.D	09/22/21	14:47	00:46	Initial cal 1
EM7526-IC7526	M175073.D	09/22/21	15:16	01:15	Initial cal 80
EM7526-IC7526	M175074.D	09/22/21	15:45	01:44	Initial cal 2
EM7526-ICC7526	M175075.D	09/22/21	16:14	02:13	Initial cal 50
EM7526-IC7526	M175076.D	09/22/21	16:43	02:42	Initial cal 5
EM7526-IC7526	M175077.D	09/22/21	17:12	03:11	Initial cal 25
EM7526-IC7526	M175078.D	09/22/21	17:41	03:40	Initial cal 10
EM7526-ICV7526	M175079.D	09/22/21	18:10	04:09	Initial cal verification 50
EM7526-ICV7526	M175080.D	09/22/21	18:39	04:38	Initial cal verification 50
EM7526-ICV7526	M175081.D	09/22/21	19:08	05:07	Initial cal verification 50
EM7526-ICV7526	M175082.D	09/22/21	19:37	05:36	Initial cal verification 50

Instrument Performance Check (DFTPP)

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Job Number: JD32272
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample: EM7538-DFTPP
Lab File ID: M175327.D
Instrument ID: GCMSM
Injection Date: 09/30/21
Injection Time: 18:10

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	42117	32.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	58130	44.6	Pass
70	Less than 2.0% of mass 69	288	0.22 (0.50) ^a	Pass
127	40.0 - 60.0% of mass 198	77307	59.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	130280	100.0	Pass
199	5.0 - 9.0% of mass 198	8744	6.71	Pass
275	10.0 - 30.0% of mass 198	34229	26.3	Pass
365	1.0 - 100.0% of mass 198	4649	3.57	Pass
441	Present, but less than mass 443	17720	13.6 (73.0) ^b	Pass
442	40.0 - 100.0% of mass 198	123192	94.6	Pass
443	17.0 - 23.0% of mass 442	24286	18.6 (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
EM7538-CC7526	M175328.D	09/30/21	18:23	00:13	Continuing cal 25
EM7538-CC7525	M175329.D	09/30/21	18:52	00:42	Continuing cal 25
OP35676-MB1	M175330.D	09/30/21	19:37	01:27	Method Blank
OP35676-BS1	M175331.D	09/30/21	20:06	01:56	Blank Spike
OP35676-BSD	M175332.D	09/30/21	20:35	02:25	Blank Spike Duplicate
ZZZZZZ	M175333A.D	09/30/21	21:58	03:48	(unrelated sample)
ZZZZZZ	M175334.D	09/30/21	22:27	04:17	(unrelated sample)
ZZZZZZ	M175335.D	09/30/21	22:56	04:46	(unrelated sample)
ZZZZZZ	M175336.D	09/30/21	23:41	05:31	(unrelated sample)
ZZZZZZ	M175337.D	10/01/21	00:10	06:00	(unrelated sample)
ZZZZZZ	M175338.D	10/01/21	00:39	06:29	(unrelated sample)
ZZZZZZ	M175339.D	10/01/21	01:07	06:57	(unrelated sample)
ZZZZZZ	M175340.D	10/01/21	01:36	07:26	(unrelated sample)
ZZZZZZ	M175341.D	10/01/21	02:04	07:54	(unrelated sample)
ZZZZZZ	M175342.D	10/01/21	02:58	08:48	(unrelated sample)
ZZZZZZ	M175343.D	10/01/21	03:26	09:16	(unrelated sample)
ZZZZZZ	M175344.D	10/01/21	03:55	09:45	(unrelated sample)
ZZZZZZ	M175345.D	10/01/21	04:23	10:13	(unrelated sample)
ZZZZZZ	M175346.D	10/01/21	04:51	10:41	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD32272
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample:	EM7538-DFTPP	Injection Date:	09/30/21
Lab File ID:	M175327.D	Injection Time:	18:10
Instrument ID:	GCMSM		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD32272-1	M175347.D	10/01/21	05:20	11:10	GRAB 1 THRU 4-092321/-BSA DISCHARGE
ZZZZZZ	M175348.D	10/01/21	05:48	11:38	(unrelated sample)

6.3.6
6

Surrogate Recovery Summary

Job Number: JD32272
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
JD32272-1	M175347.D	31	22	123	75	74	36
JD32272-1	F202466.D	36	25	109	71	77	39
OP35676-BS1	M175331.D	46	29	106	86	85	98
OP35676-BSD	M175332.D	57	35	116	86	83	101
OP35676-MB1	M175330.D	41	28	117	92	86	87
OP35676-MB1	F202465.D	47	31	110	91	90	93

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%



Metals Analysis

QC Data Summaries

7

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: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

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: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

Metal	RL	IDL	MDL	MB raw	final
Zinc	20	.1	8.5	-0.90	<20
Zirconium	10	.4	4.9		

Associated samples MP28938: JD32272-2

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: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

Metal	JD32236-11 Original MS	SpikeLot MP200.7A % Rec	QC Limits
Aluminum	anr		
Antimony			
Arsenic	anr		
Barium			
Beryllium	anr		
Bismuth			
Boron			
Cadmium	anr		
Calcium			
Cerium			
Chromium	anr		
Cobalt			
Copper	3.8	1890 2000	94.3 70-130
Iron	anr		
Lead	anr		
Lithium			
Magnesium			
Manganese			
Molybdenum			
Nickel	anr		
Phosphorus			
Potassium			
Selenium	anr		
Silicon			
Silver	anr		
Sodium			
Strontium			
Sulfur			
Thallium	anr		
Tin			
Titanium			
Tungsten			
Vanadium	anr		

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

Metal	JD32236-11 Original MS	SpikeLot MP200.7A % Rec	QC Limits
-------	---------------------------	----------------------------	--------------

Zinc 106 2110 2000 100.2 70-130

Zirconium

Associated samples MP28938: JD32272-2

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: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

Metal	JD32236-11 Original MSD	SpikeLot MP200.7A % Rec			MSD RPD	QC Limit
Aluminum	anr					
Antimony						
Arsenic	anr					
Barium						
Beryllium	anr					
Bismuth						
Boron						
Cadmium	anr					
Calcium						
Cerium						
Chromium	anr					
Cobalt						
Copper	3.8	1900	2000	94.8	0.5	10
Iron	anr					
Lead	anr					
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32272

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP28938

Methods: EPA 200.7

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/01/21

Metal	JD32236-11 Original MSD	SpikeLot MP200.7A % Rec	MSD RPD	QC Limit
-------	----------------------------	----------------------------	------------	-------------

Zinc	106	2070	2000	98.2	1.9	10
------	-----	------	------	------	-----	----

Zirconium

Associated samples MP28938: JD32272-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

Metal	BSP Result	SpikeLot MP200.7A	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium				
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Cerium				
Chromium	anr			
Cobalt				
Copper	1910	2000	95.5	85-115
Iron	anr			
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

Metal	BSP Result	SpikeLot MP200.7A	% Rec	QC Limits
-------	---------------	----------------------	-------	--------------

Zinc	2040	2000	102.0	85-115
------	------	------	-------	--------

Zirconium

Associated samples MP28938: JD32272-2

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

Metal	JD32236-11 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium				
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Cerium				
Chromium	anr			
Cobalt				
Copper	3.80	0.00	100.0(a)	0-10
Iron	anr			
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD32272

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

QC Batch ID: MP28938
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/21

Metal	JD32236-11	Original	SDL 1:5	%DIF	QC Limits
-------	------------	----------	---------	------	-----------

Zinc	106	104	1.8	0-10
------	-----	-----	-----	------

Zirconium

Associated samples MP28938: JD32272-2

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).

7.1.4

7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD32272

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

QC Batch ID: MP28973
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 10/04/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.092	-0.066	<0.20

Associated samples MP28973: JD32272-2

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

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32272

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP28973

Methods: EPA 245.1

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/04/21

Metal	JD32310-2 Original MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	1.9	2	95.0 70-130

Associated samples MP28973: JD32272-2

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: JD32272

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP28973

Methods: EPA 245.1

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/04/21

Metal	JD32310-2 Original	MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	1.9	2	95.0	0.0	19

Associated samples MP28973: JD32272-2

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

7.2.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD32272

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP28973

Methods: EPA 245.1

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/04/21

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

Associated samples MP28973: JD32272-2

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: JD32272
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	GP36109/GN22324	0.050	0.0	mg/l	.4	0.40	100.0	80-120%
Solids, Total Suspended	GN22202	4.0	0.0	mg/l				

Associated Samples:
Batch GN22202: JD32272-2
Batch GP36109: JD32272-2
(*) Outside of QC limits

8.1
8

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD32272

Account: HWINJOMM - Honeywell International Inc. OMM work

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

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Phosphorus, Total	GP36109/GN22324	JD32182-1	mg/l	0.81	0.80	1.2	0-38%
Solids, Total Suspended	GN22202	JD32245-1A	mg/l	12.8	12.0	6.5	0-17%

Associated Samples:

Batch GN22202: JD32272-2

Batch GP36109: JD32272-2

(*) Outside of QC limits

8.2

8

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD32272
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Phosphorus, Total	GP36109/GN22324	JD32182-1	mg/l	0.81	.4	1.2	97.5	35-137%

Associated Samples:

Batch GP36109: JD32272-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.3

8

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#A000804776

SGS Job Number: JD32614

Sampling Date: 09/29/21

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: **34**



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.



Mike Earp
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)

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Test results relate only to samples analyzed.

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Sample Summary

Honeywell International Inc. OMM work

Job No: JD32614

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

JD32614-1	09/29/21	15:15 BH	10/01/21	AQ	Ground Water	GRAB 1 THRU 4-092921/-BSA DISCHARGE
JD32614-2	09/29/21	15:15 BH	10/01/21	AQ	Trip Blank Water	TB

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Honeywell International Inc. OMM work

Job No: JD32614

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

Report Date 10/14/2021 4:47:34 P

On 10/01/2021, 1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.5 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD32614 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: VT10470

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD32961-2MS, JD32961-3DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethene, Acrylonitrile, Bromoform, Dibromochloromethane are outside control limits. Outside control limits due to matrix interference.
- JD32614-1: (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.
- JD32614-1 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.
- JD32614-1 for Acrolein, Acrylonitrile: Associated CCV outside of control limits high, sample was ND.
- VT10470-BS for Bromoform: High percent recovery and no associated positive reported in the QC batch.

Matrix: AQ

Batch ID: VT10473

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD32690-4MS, JD32690-4MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Bromoform are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Bromoform, Dibromochloromethane are outside control limits. Outside control limits due to matrix interference.
- JD32614-2: Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
- JD32614-2 for Acrolein: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD32614-2 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.
- VT10473-BS for Acrolein: High percent recovery and no associated positive reported in the QC batch.
- VT10473-BS for Bromoform: High percent recovery and no associated positive reported in the QC batch.
- VT10473-BSD for Chloromethane: Outside in house control limits.
- VT10473-BSD for Trichlorofluoromethane: Outside in house control limits.
- JD32690-4MS/MSD for 2-Chloroethyl vinyl ether: Outside control limits due to acid preservation.
- JD32614-2 for Dibromochloromethane: This compound in blank spike is outside in house QC limits bias high.

Thursday, October 14, 2021

Page 1 of 2

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: JD32614

Account: Honeywell International Inc. OMM work

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

Collected: 09/29/21

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

JD32614-1 GRAB 1 THRU 4-092921/-BSA DISCHARGE

Benzene ^a	2.7	1.0	0.34	ug/l	EPA 624.1
Chlorobenzene ^a	44.2	1.0	0.33	ug/l	EPA 624.1
1,2-Dichlorobenzene ^a	0.62 J	1.0	0.30	ug/l	EPA 624.1
1,4-Dichlorobenzene ^a	0.95 J	1.0	0.50	ug/l	EPA 624.1
cis-1,2-Dichloroethene ^a	8.0	1.0	0.51	ug/l	EPA 624.1
Trichloroethene ^a	0.48 J	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride ^a	2.4	1.0	0.79	ug/l	EPA 624.1

JD32614-2 TB

No hits reported in this sample.

(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.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-092921/-BSA DISCHARGE			Date Sampled:	09/29/21
Lab Sample ID:	JD32614-1			Date Received:	10/01/21
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	T252031.D	1	10/11/21 10:32	ED	n/a	n/a	VT10470
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 ^b	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile ^b	ND	10	2.5	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 ^c	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	44.2	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	0.62	1.0	0.30	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.95	1.0	0.50	ug/l	J
75-71-8	Dichlorodifluoromethane	ND	2.0	0.69	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	8.0	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	0.37	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:	GRAB 1 THRU 4-092921/-BSA DISCHARGE	Date Sampled:	09/29/21
Lab Sample ID:	JD32614-1	Date Received:	10/01/21
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	0.48	1.0	0.43	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.33	ug/l	
75-01-4	Vinyl chloride	2.4	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)	112%		76-122%
2037-26-5	Toluene-D8 (SUR)	102%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98%		80-120%
1868-53-7	Dibromofluoromethane (S)	108%		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

Report of Analysis

Client Sample ID:	TB	Date Sampled:	09/29/21
Lab Sample ID:	JD32614-2	Date Received:	10/01/21
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	T252121.D	1	10/13/21 20:47	ED	n/a	n/a	VT10473
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 ^b	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 ^c	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 ^d	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	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.69	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	0.37	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:	TB	Date Sampled:	09/29/21
Lab Sample ID:	JD32614-2	Date Received:	10/01/21
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	0.33	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	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	109%		76-122%
2037-26-5	Toluene-D8 (SUR)	103%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%		80-120%
1868-53-7	Dibromofluoromethane (S)	104%		80-120%

- (a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
- (b) Associated CCV outside of control limits high, sample was ND. 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) 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:

- Chain of Custody

Comp

GW TB

B.No: none

SGS Laboratories 2235 Route 130 Dayton, NJ 08810 (p) 732-239-0200										Chain Of Custody/Analysis Request Project Name: Buffalo Altift Landfill Lab Project Name: IIIAME: 30130-Altift Landfill, 579 Tift Street, Buffalo, NY										AESI Ref: 38609.59145 COC #: 20210929-Altift-Semi																																																	
Facility Name: Acme Corp Location of Site: Buffalo, New York Site Code: 30130										Lab Use Only Lab_SDC Lab ID																																																											
Client Contact: (name, co., address) Eric Christodoulatos Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212 (eric.christodoulatos@honeywell.com)										Sample: Benjamin Hendry Sampling Company: Jacobs P.D.#: LAB00004776 Analysis Turnaround Time: Standard: Y Rush Charges Authorized for: N Turn Around Time Requested: 7 Day										Preservation <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>1</td><td>0</td><td>0</td><td>2</td><td>3</td><td>0</td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td colspan="20"> 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) </td> </tr> </table>										1	0	0	2	3	0	0														1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL) 1021 PPT (WV) Analysis Method (HPL)																			
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Hardcopy Report To: Do Not Send Hardcopy Unless Requested Invoice To:										Sample Identification <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample Date</th><th>Sample Time</th><th>Matrix Code</th><th>Medium Code</th><th>Sample Type</th><th># of Cont.</th><th>Units</th><th>Lab Sample Numbers</th></tr> </thead> <tbody> <tr> <td>9/29/2021</td><td>9:15</td><td>GW</td><td>WATER</td><td>REG</td><td>3</td><td>N N 3</td><td></td></tr> <tr> <td>9/29/2021</td><td>11:15</td><td>GW</td><td>WATER</td><td>REG</td><td>3</td><td>N N 3</td><td></td></tr> <tr> <td>9/29/2021</td><td>13:15</td><td>GW</td><td>WATER</td><td>REG</td><td>3</td><td>N N 3</td><td></td></tr> <tr> <td>9/29/2021</td><td>15:15</td><td>GW</td><td>WATER</td><td>REG</td><td>3</td><td>N N 3</td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td><td>2</td><td>2</td><td></td></tr> </tbody> </table>										Sample Date	Sample Time	Matrix Code	Medium Code	Sample Type	# of Cont.	Units	Lab Sample Numbers	9/29/2021	9:15	GW	WATER	REG	3	N N 3		9/29/2021	11:15	GW	WATER	REG	3	N N 3		9/29/2021	13:15	GW	WATER	REG	3	N N 3		9/29/2021	15:15	GW	WATER	REG	3	N N 3							2	2			
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9/29/2021	9:15	GW	WATER	REG	3	N N 3																																																															
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9/29/2021	15:15	GW	WATER	REG	3	N N 3																																																															
					2	2																																																															
Special Instructions:										Notes: For COC questions, contact - Benjamin Hendry / benjamin.hendry@jacobs.com 315-886-4929																																																											
Relinquished by: Ben Hendry Date/Time: 09-30-21/1630 Relinquished by: Fed ex Date/Time: 10/1/21 10:00										Received by: FEDEX Date/Time: 10/1/21 10:00 Received by: Ben A Date/Time:										Condition: white Cooler Temp: Condition: 3.5C Cooler Temp:																																																	

Initial Assessment 2B:85
Label Verification _____

Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD32614

Client: _____

Project: _____

Date / Time Received: 10/1/2021 10:00:00 AM

Delivery Method: _____

Airbill #'s: _____

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

Cooler Temps (Corrected) °C: Cooler 1: (3.5);

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: | _____ | |
| 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: 231619

pH 12+: 203117A

Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JD32614: 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: JD32614**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
VT10470-MB	T252030.D	1	10/11/21	ED	n/a	n/a	VT10470

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

JD32614-1

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	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	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.69	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	0.37	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: JD32614
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
VT10470-MB	T252030.D	1	10/11/21	ED	n/a	n/a	VT10470

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

JD32614-1

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	110% 76-122%
2037-26-5	Toluene-D8 (SUR)	103% 80-120%
460-00-4	4-Bromofluorobenzene (SUR)	96% 80-120%
1868-53-7	Dibromofluoromethane (S)	105% 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: JD32614**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
VT10473-MB	T252107.D	1	10/13/21	ED	n/a	n/a	VT10473

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

JD32614-2

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	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.69	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	0.37	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: JD32614
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
VT10473-MB	T252107.D	1	10/13/21	ED	n/a	n/a	VT10473

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

JD32614-2

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	111% 76-122%
2037-26-5	Toluene-D8 (SUR)	103% 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
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Page 1 of 2

Job Number: JD32614**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
VT10470-BS	T252028.D	1	10/11/21	ED	n/a	n/a	VT10470

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

JD32614-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	26.6	133	60-140
107-13-1	Acrylonitrile	20	26.2	131	64-137
71-43-2	Benzene	20	18.6	93	78-118
75-27-4	Bromodichloromethane	20	19.6	98	77-119
75-25-2	Bromoform	20	26.8	134* a	70-128
74-83-9	Bromomethane	20	20.4	102	59-141
56-23-5	Carbon tetrachloride	20	21.8	109	69-130
108-90-7	Chlorobenzene	20	17.7	89	78-116
75-00-3	Chloroethane	20	21.0	105	63-136
110-75-8	2-Chloroethyl vinyl ether	100	104	104	55-147
67-66-3	Chloroform	20	18.8	94	78-122
74-87-3	Chloromethane	20	16.7	84	49-125
124-48-1	Dibromochloromethane	20	22.7	114	75-117
95-50-1	1,2-Dichlorobenzene	20	18.3	92	76-115
541-73-1	1,3-Dichlorobenzene	20	18.0	90	75-114
106-46-7	1,4-Dichlorobenzene	20	17.6	88	75-113
75-71-8	Dichlorodifluoromethane	20	14.8	74	48-129
75-34-3	1,1-Dichloroethane	20	19.0	95	73-124
107-06-2	1,2-Dichloroethane	20	19.5	98	74-127
75-35-4	1,1-Dichloroethene	20	23.0	115	54-122
156-59-2	cis-1,2-Dichloroethene	20	18.5	93	72-115
156-60-5	trans-1,2-Dichloroethene	20	18.6	93	70-121
78-87-5	1,2-Dichloropropane	20	18.4	92	75-118
10061-01-5	cis-1,3-Dichloropropene	20	18.0	90	76-118
10061-02-6	trans-1,3-Dichloropropene	20	18.9	95	70-122
100-41-4	Ethylbenzene	20	18.1	91	76-118
75-09-2	Methylene chloride	20	20.7	104	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	21.9	110	66-119
127-18-4	Tetrachloroethene	20	18.7	94	70-130
108-88-3	Toluene	20	17.9	90	78-119
71-55-6	1,1,1-Trichloroethane	20	19.2	96	74-130
79-00-5	1,1,2-Trichloroethane	20	19.7	99	74-121
79-01-6	Trichloroethene	20	18.2	91	78-117
75-69-4	Trichlorofluoromethane	20	20.6	103	66-126
75-01-4	Vinyl chloride	20	17.5	88	54-125
1330-20-7	Xylenes (total)	60	54.7	91	76-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD32614
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
VT10470-BS	T252028.D	1	10/11/21	ED	n/a	n/a	VT10470

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

JD32614-1

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	108%	76-122%
2037-26-5	Toluene-D8 (SUR)	101%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98%	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.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: JD32614

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
VT10473-BS	T252104.D	1	10/13/21	ED	n/a	n/a	VT10473
VT10473-BSD	T252105.D	1	10/13/21	ED	n/a	n/a	VT10473

The QC reported here applies to the following samples:

Method: EPA 624.1

JD32614-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
107-02-8	Acrolein	20	32.6	163* a	32.4	162* a	1	60-140/10
107-13-1	Acrylonitrile	20	25.9	130	24.9	125	4	64-137/10
71-43-2	Benzene	20	18.6	93	18.7	94	1	78-118/10
75-27-4	Bromodichloromethane	20	19.4	97	19.8	99	2	77-119/10
75-25-2	Bromoform	20	26.6	133* a	26.8	134* a	1	70-128/10
74-83-9	Bromomethane	20	19.2	96	20.8	104	8	59-141/10
56-23-5	Carbon tetrachloride	20	21.7	109	21.5	108	1	69-130/10
108-90-7	Chlorobenzene	20	17.8	89	18.3	92	3	78-116/10
75-00-3	Chloroethane	20	20.1	101	21.7	109	8	63-136/10
110-75-8	2-Chloroethyl vinyl ether	100	98.5	99	100	100	2	55-147/10
67-66-3	Chloroform	20	18.3	92	18.8	94	3	78-122/10
74-87-3	Chloromethane	20	15.1	76	17.1	86	12* b	49-125/10
124-48-1	Dibromochloromethane	20	22.7	114	23.5	118* a	3	75-117/10
95-50-1	1,2-Dichlorobenzene	20	18.9	95	18.8	94	1	76-115/10
541-73-1	1,3-Dichlorobenzene	20	18.3	92	18.4	92	1	75-114/10
106-46-7	1,4-Dichlorobenzene	20	18.4	92	17.9	90	3	75-113/10
75-71-8	Dichlorodifluoromethane	20	16.2	81	15.7	79	3	48-129/10
75-34-3	1,1-Dichloroethane	20	18.7	94	19.0	95	2	73-124/10
107-06-2	1,2-Dichloroethane	20	19.0	95	19.2	96	1	74-127/10
75-35-4	1,1-Dichloroethene	20	22.9	115	22.8	114	0	54-122/10
156-59-2	cis-1,2-Dichloroethene	20	18.1	91	18.1	91	0	72-115/10
156-60-5	trans-1,2-Dichloroethene	20	18.5	93	18.6	93	1	70-121/10
78-87-5	1,2-Dichloropropane	20	17.9	90	18.1	91	1	75-118/10
10061-01-5	cis-1,3-Dichloropropene	20	17.8	89	17.9	90	1	76-118/10
10061-02-6	trans-1,3-Dichloropropene	20	18.5	93	19.0	95	3	70-122/10
100-41-4	Ethylbenzene	20	18.4	92	18.8	94	2	76-118/10
75-09-2	Methylene chloride	20	20.8	104	21.2	106	2	69-120/10
79-34-5	1,1,2,2-Tetrachloroethane	20	21.4	107	21.7	109	1	66-119/10
127-18-4	Tetrachloroethene	20	19.6	98	19.5	98	1	70-130/10
108-88-3	Toluene	20	18.1	91	17.8	89	2	78-119/10
71-55-6	1,1,1-Trichloroethane	20	18.9	95	18.7	94	1	74-130/10
79-00-5	1,1,2-Trichloroethane	20	19.0	95	19.2	96	1	74-121/10
79-01-6	Trichloroethene	20	18.1	91	18.0	90	1	78-117/10
75-69-4	Trichlorofluoromethane	20	20.4	102	23.5	118	14* b	66-126/10
75-01-4	Vinyl chloride	20	16.5	83	18.1	91	9	54-125/10
1330-20-7	Xylenes (total)	60	56.5	94	56.5	94	0	76-120/10

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JD32614

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
VT10473-BS	T252104.D	1	10/13/21	ED	n/a	n/a	VT10473
VT10473-BSD	T252105.D	1	10/13/21	ED	n/a	n/a	VT10473

The QC reported here applies to the following samples:

Method: EPA 624.1

JD32614-2

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	110%	109%	76-122%
2037-26-5	Toluene-D8 (SUR)	102%	103%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%	97%	80-120%
1868-53-7	Dibromofluoromethane (S)	105%	106%	80-120%

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

(b) Outside in house control limits.

* = Outside of Control Limits.

Matrix Spike Summary

Page 1 of 2

Job Number: JD32614

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
JD32961-2MS	T252035.D	1	10/11/21	ED	n/a	n/a	VT10470
JD32961-2	T252032.D	1	10/11/21	ED	n/a	n/a	VT10470

The QC reported here applies to the following samples:

Method: EPA 624.1

JD32614-1

CAS No.	Compound	JD32961-2 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
107-02-8	Acrolein	ND	20	29.8	149		40-154
107-13-1	Acrylonitrile	ND	20	29.6	148* a		60-142
71-43-2	Benzene	ND	20	22.4	112		59-136
75-27-4	Bromodichloromethane	ND	20	23.3	117		73-125
75-25-2	Bromoform	ND	20	31.2	156* a		62-134
74-83-9	Bromomethane	ND	20	23.1	116		54-149
56-23-5	Carbon tetrachloride	ND	20	27.5	138		70-140
108-90-7	Chlorobenzene	ND	20	20.9	105		69-128
75-00-3	Chloroethane	ND	20	23.1	116		58-145
110-75-8	2-Chloroethyl vinyl ether	ND	100	19.8	20		10-179
67-66-3	Chloroform	ND	20	21.0	105		71-131
74-87-3	Chloromethane	ND	20	18.6	93		44-136
124-48-1	Dibromochloromethane	ND	20	27.1	136* a		72-123
95-50-1	1,2-Dichlorobenzene	ND	20	22.0	110		69-123
541-73-1	1,3-Dichlorobenzene	ND	20	21.8	109		71-122
106-46-7	1,4-Dichlorobenzene	ND	20	20.9	105		69-121
75-71-8	Dichlorodifluoromethane	ND	20	17.1	86		42-138
75-34-3	1,1-Dichloroethane	ND	20	22.8	114		66-132
107-06-2	1,2-Dichloroethane	ND	20	22.3	112		68-140
75-35-4	1,1-Dichloroethene	ND	20	29.2	146* a		49-127
156-59-2	cis-1,2-Dichloroethene	ND	20	21.7	109		50-134
156-60-5	trans-1,2-Dichloroethene	ND	20	23.1	116		63-129
78-87-5	1,2-Dichloropropane	ND	20	21.9	110		73-123
10061-01-5	cis-1,3-Dichloropropene	ND	20	21.3	107		71-124
10061-02-6	trans-1,3-Dichloropropene	ND	20	22.7	114		66-127
100-41-4	Ethylbenzene	ND	20	21.6	108		65-130
75-09-2	Methylene chloride	ND	20	24.0	120		65-127
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	26.1	131* a		62-126
127-18-4	Tetrachloroethene	ND	20	22.1	111		51-145
108-88-3	Toluene	ND	20	21.5	108		66-132
71-55-6	1,1,1-Trichloroethane	ND	20	23.5	118		63-143
79-00-5	1,1,2-Trichloroethane	ND	20	22.5	113		71-127
79-01-6	Trichloroethene	ND	20	21.9	110		46-145
75-69-4	Trichlorofluoromethane	ND	20	24.0	120		57-139
75-01-4	Vinyl chloride	ND	20	20.3	102		45-136
1330-20-7	Xylenes (total)	ND	60	65.3	109		66-131

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD32614
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
JD32961-2MS	T252035.D	1	10/11/21	ED	n/a	n/a	VT10470
JD32961-2	T252032.D	1	10/11/21	ED	n/a	n/a	VT10470

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

JD32614-1

CAS No.	Surrogate Recoveries	MS	JD32961-2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	109%	111%	76-122%
2037-26-5	Toluene-D8 (SUR)	100%	101%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	100%	96%	80-120%
1868-53-7	Dibromofluoromethane (S)	105%	104%	80-120%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD32614

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
JD32690-4MS	T252118.D	10	10/13/21	ED	n/a	n/a	VT10473
JD32690-4MSD	T252119.D	10	10/13/21	ED	n/a	n/a	VT10473
JD32690-4	T252116.D	10	10/13/21	ED	n/a	n/a	VT10473
JD32690-4	T252114.D	100	10/13/21	ED	n/a	n/a	VT10473

The QC reported here applies to the following samples:

Method: EPA 624.1

JD32614-2

CAS No.	Compound	JD32690-4 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
107-02-8	Acrolein	ND	200	279	140	200	286	143	2	40-154/18
107-13-1	Acrylonitrile	ND	200	268	134	200	267	134	0	60-142/19
71-43-2	Benzene	ND	200	187	94	200	192	96	3	59-136/13
75-27-4	Bromodichloromethane	ND	200	200	100	200	205	103	2	73-125/13
75-25-2	Bromoform	ND	200	270	135* a	200	271	136* a	0	62-134/12
74-83-9	Bromomethane	ND	200	167	84	200	164	82	2	54-149/19
56-23-5	Carbon tetrachloride	ND	200	225	113	200	230	115	2	70-140/14
108-90-7	Chlorobenzene	ND	200	191	96	200	188	94	2	69-128/11
75-00-3	Chloroethane	ND	200	174	87	200	177	89	2	58-145/19
110-75-8	2-Chloroethyl vinyl ether	ND	1000	ND	0* b	1000	ND	0* b	nc	10-179/37
67-66-3	Chloroform	ND	200	184	92	200	187	94	2	71-131/15
74-87-3	Chloromethane	ND	200	123	62	200	129	65	5	44-136/21
124-48-1	Dibromochloromethane	ND	200	240	120	200	248	124* a	3	72-123/12
95-50-1	1,2-Dichlorobenzene	ND	200	191	96	200	200	100	5	69-123/11
541-73-1	1,3-Dichlorobenzene	ND	200	187	94	200	192	96	3	71-122/11
106-46-7	1,4-Dichlorobenzene	ND	200	186	93	200	191	96	3	69-121/10
75-71-8	Dichlorodifluoromethane	ND	200	122	61	200	123	62	1	42-138/19
75-34-3	1,1-Dichloroethane	ND	200	197	99	200	195	98	1	66-132/18
107-06-2	1,2-Dichloroethane	ND	200	197	99	200	198	99	1	68-140/13
75-35-4	1,1-Dichloroethene	69.2	200	303	117	200	307	119	1	49-127/18
156-59-2	cis-1,2-Dichloroethene	ND	200	182	91	200	188	94	3	50-134/14
156-60-5	trans-1,2-Dichloroethene	ND	200	192	96	200	195	98	2	63-129/18
78-87-5	1,2-Dichloropropane	ND	200	186	93	200	191	96	3	73-123/14
10061-01-5	cis-1,3-Dichloropropene	ND	200	181	91	200	182	91	1	71-124/13
10061-02-6	trans-1,3-Dichloropropene	ND	200	204	102	200	195	98	5	66-127/14
100-41-4	Ethylbenzene	ND	200	193	97	200	196	98	2	65-130/13
75-09-2	Methylene chloride	ND	200	205	103	200	207	104	1	65-127/15
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	221	111	200	228	114	3	62-126/14
127-18-4	Tetrachloroethene	ND	200	197	99	200	201	101	2	51-145/13
108-88-3	Toluene	ND	200	192	96	200	191	96	1	66-132/12
71-55-6	1,1,1-Trichloroethane	531	200	675	72	200	685	77	1	63-143/15
79-00-5	1,1,2-Trichloroethane	ND	200	200	100	200	203	102	1	71-127/13
79-01-6	Trichloroethene	ND	200	193	97	200	189	95	2	46-145/12
75-69-4	Trichlorofluoromethane	ND	200	206	103	200	188	94	9	57-139/17
75-01-4	Vinyl chloride	ND	200	143	72	200	142	71	1	45-136/20
1330-20-7	Xylenes (total)	ND	600	584	97	600	597	100	2	66-131/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JD32614

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD32690-4MS	T252118.D	10	10/13/21	ED	n/a	n/a	VT10473
JD32690-4MSD	T252119.D	10	10/13/21	ED	n/a	n/a	VT10473
JD32690-4	T252116.D	10	10/13/21	ED	n/a	n/a	VT10473
JD32690-4	T252114.D	100	10/13/21	ED	n/a	n/a	VT10473

The QC reported here applies to the following samples:

Method: EPA 624.1

JD32614-2

CAS No.	Surrogate Recoveries	MS	MSD	JD32690-4	JD32690-4	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	110%	110%	113%	111%	76-122%
2037-26-5	Toluene-D8 (SUR)	103%	104%	104%	102%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%	98%	99%	97%	80-120%
1868-53-7	Dibromofluoromethane (S)	106%	106%	110%	105%	80-120%

(a) Outside control limits due to matrix interference.

(b) Outside control limits due to acid preservation.

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 2

Job Number: JD32614

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
JD32961-3DUP	T252037.D	1	10/11/21	ED	n/a	n/a	VT10470
JD32961-3	T252033.D	1	10/11/21	ED	n/a	n/a	VT10470

The QC reported here applies to the following samples:

Method: EPA 624.1

JD32614-1

CAS No.	Compound	JD32961-3 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	0.98	J	0.94	J	4	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	0.53	J	0.57	J	7	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: JD32614
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
JD32961-3DUP	T252037.D	1	10/11/21	ED	n/a	n/a	VT10470
JD32961-3	T252033.D	1	10/11/21	ED	n/a	n/a	VT10470

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

JD32614-1

CAS No.	Surrogate Recoveries	DUP	JD32961-3	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	113%	110%	76-122%
2037-26-5	Toluene-D8 (SUR)	100%	102%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	96%	97%	80-120%
1868-53-7	Dibromofluoromethane (S)	106%	106%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD32614

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VT10359-BFB

Injection Date: 02/13/21

Lab File ID: T249614.D

Injection Time: 12:58

Instrument ID: GCMST

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	12079	16.8	Pass
75	30.0 - 60.0% of mass 95	32685	45.4	Pass
95	Base peak, 100% relative abundance	72037	100.0	Pass
96	5.0 - 9.0% of mass 95	4840	6.72	Pass
173	Less than 2.0% of mass 174	285	0.40 (0.46) ^a	Pass
174	50.0 - 120.0% of mass 95	62410	86.6	Pass
175	5.0 - 9.0% of mass 174	4799	6.66 (7.69) ^a	Pass
176	95.0 - 101.0% of mass 174	60453	83.9 (96.9) ^a	Pass
177	5.0 - 9.0% of mass 176	3902	5.42 (6.45) ^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
VT10359-IC10359	T249615.D	02/13/21	13:32	00:34	Initial cal 0.2
VT10359-IC10359	T249616.D	02/13/21	14:02	01:04	Initial cal 0.5
VT10359-IC10359	T249617.D	02/13/21	14:32	01:34	Initial cal 1
VT10359-IC10359	T249618.D	02/13/21	15:02	02:04	Initial cal 2
VT10359-IC10359	T249619.D	02/13/21	15:32	02:34	Initial cal 4
VT10359-IC10359	T249620.D	02/13/21	16:02	03:04	Initial cal 8
VT10359-ICC10359	T249621.D	02/13/21	16:32	03:34	Initial cal 20
VT10359-IC10359	T249622.D	02/13/21	17:02	04:04	Initial cal 50
VT10359-IC10359	T249623.D	02/13/21	17:32	04:34	Initial cal 100
VT10359-IC10359	T249624.D	02/13/21	18:02	05:04	Initial cal 200
VT10359-ICV10359	T249627.D	02/13/21	19:32	06:34	Initial cal verification 20
VT10359-ICV10359	T249628.D	02/13/21	20:02	07:04	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD32614

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VT10359-BFB2

Injection Date: 02/15/21

Lab File ID: T249631.D

Injection Time: 16:29

Instrument ID: GCMST

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	15158	16.3	Pass
75	30.0 - 60.0% of mass 95	41861	45.0	Pass
95	Base peak, 100% relative abundance	93013	100.0	Pass
96	5.0 - 9.0% of mass 95	5827	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	80280	86.3	Pass
175	5.0 - 9.0% of mass 174	6136	6.60 (7.64) ^a	Pass
176	95.0 - 101.0% of mass 174	78837	84.8 (98.2) ^a	Pass
177	5.0 - 9.0% of mass 176	5301	5.70 (6.72) ^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
VT10359-ICV10359	T249632.D	02/15/21	17:00	00:31	Initial cal verification 20

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD32614

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: VT10470-BFB

Injection Date: 10/11/21

Lab File ID: T252027.D

Injection Time: 07:56

Instrument ID: GCMST

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	11860	17.8	Pass
75	30.0 - 60.0% of mass 95	30965	46.5	Pass
95	Base peak, 100% relative abundance	66584	100.0	Pass
96	5.0 - 9.0% of mass 95	4386	6.59	Pass
173	Less than 2.0% of mass 174	226	0.34 (0.37) ^a	Pass
174	50.0 - 120.0% of mass 95	60656	91.1	Pass
175	5.0 - 9.0% of mass 174	4482	6.73 (7.39) ^a	Pass
176	95.0 - 101.0% of mass 174	58872	88.4 (97.1) ^a	Pass
177	5.0 - 9.0% of mass 176	3657	5.49 (6.21) ^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
VT10470-CC10359	T252028.D	10/11/21	08:32	00:36	Continuing cal 20
VT10470-BS	T252028.D	10/11/21	08:32	00:36	Blank Spike
VT10470-MB	T252030.D	10/11/21	09:49	01:53	Method Blank
JD32614-1	T252031.D	10/11/21	10:32	02:36	GRAB 1 THRU 4-092921/-BSA DISCHARGE
JD32961-2	T252032.D	10/11/21	11:02	03:06	(used for QC only; not part of job JD32614)
JD32961-3	T252033.D	10/11/21	11:32	03:36	(used for QC only; not part of job JD32614)
ZZZZZZ	T252034.D	10/11/21	12:02	04:06	(unrelated sample)
JD32961-2MS	T252035.D	10/11/21	12:33	04:37	Matrix Spike
JD32961-3DUP	T252037.D	10/11/21	13:34	05:38	Duplicate
ZZZZZZ	T252038.D	10/11/21	14:04	06:08	(unrelated sample)
ZZZZZZ	T252039.D	10/11/21	14:35	06:39	(unrelated sample)
ZZZZZZ	T252040.D	10/11/21	15:05	07:09	(unrelated sample)
ZZZZZZ	T252041.D	10/11/21	15:36	07:40	(unrelated sample)
ZZZZZZ	T252042.D	10/11/21	16:06	08:10	(unrelated sample)
ZZZZZZ	T252043.D	10/11/21	16:37	08:41	(unrelated sample)
ZZZZZZ	T252044.D	10/11/21	17:07	09:11	(unrelated sample)
ZZZZZZ	T252045.D	10/11/21	17:38	09:42	(unrelated sample)
ZZZZZZ	T252046.D	10/11/21	18:08	10:12	(unrelated sample)
ZZZZZZ	T252047.D	10/11/21	18:39	10:43	(unrelated sample)
ZZZZZZ	T252048.D	10/11/21	19:09	11:13	(unrelated sample)

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD32614
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample: VT10473-BFB
Lab File ID: T252103.D
Instrument ID: GCMST
Injection Date: 10/13/21
Injection Time: 11:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	11307	17.6	Pass
75	30.0 - 60.0% of mass 95	29789	46.5	Pass
95	Base peak, 100% relative abundance	64080	100.0	Pass
96	5.0 - 9.0% of mass 95	4373	6.82	Pass
173	Less than 2.0% of mass 174	167	0.26 (0.29) ^a	Pass
174	50.0 - 120.0% of mass 95	57128	89.2	Pass
175	5.0 - 9.0% of mass 174	4329	6.76 (7.58) ^a	Pass
176	95.0 - 101.0% of mass 174	55896	87.2 (97.8) ^a	Pass
177	5.0 - 9.0% of mass 176	3738	5.83 (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
VT10473-CC10359	T252104.D	10/13/21	11:46	00:42	Continuing cal 20
VT10473-BS	T252104.D	10/13/21	11:46	00:42	Blank Spike
VT10473-BSD	T252105.D	10/13/21	12:22	01:18	Blank Spike Duplicate
VT10473-MB	T252107.D	10/13/21	13:31	02:27	Method Blank
ZZZZZZ	T252108.D	10/13/21	14:10	03:06	(unrelated sample)
ZZZZZZ	T252109.D	10/13/21	14:40	03:36	(unrelated sample)
ZZZZZZ	T252110.D	10/13/21	15:11	04:07	(unrelated sample)
ZZZZZZ	T252111.D	10/13/21	15:41	04:37	(unrelated sample)
ZZZZZZ	T252112.D	10/13/21	16:12	05:08	(unrelated sample)
ZZZZZZ	T252113.D	10/13/21	16:42	05:38	(unrelated sample)
JD32690-4	T252114.D	10/13/21	17:13	06:09	(used for QC only; not part of job JD32614)
ZZZZZZ	T252115.D	10/13/21	17:44	06:40	(unrelated sample)
JD32690-4	T252116.D	10/13/21	18:14	07:10	(used for QC only; not part of job JD32614)
ZZZZZZ	T252117.D	10/13/21	18:45	07:41	(unrelated sample)
JD32690-4MS	T252118.D	10/13/21	19:16	08:12	Matrix Spike
JD32690-4MSD	T252119.D	10/13/21	19:46	08:42	Matrix Spike Duplicate
JD32614-2	T252121.D	10/13/21	20:47	09:43	TB
ZZZZZZ	T252122.D	10/13/21	21:18	10:14	(unrelated sample)
ZZZZZZ	T252123.D	10/13/21	21:48	10:44	(unrelated sample)
ZZZZZZ	T252124.D	10/13/21	22:19	11:15	(unrelated sample)
VT10474-BS	T252129.D	10/14/21	08:35	21:31	Blank Spike

Surrogate Recovery Summary

Job Number: JD32614
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: EPA 624.1	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD32614-1	T252031.D	112	102	98	108
JD32614-2	T252121.D	109	103	97	104
JD32690-4MS	T252118.D	110	103	97	106
JD32690-4MSD	T252119.D	110	104	98	106
JD32961-2MS	T252035.D	109	100	100	105
JD32961-3DUP	T252037.D	113	100	96	106
VT10470-BS	T252028.D	108	101	98	105
VT10470-MB	T252030.D	110	103	96	105
VT10473-BS	T252104.D	110	102	97	105
VT10473-BSD	T252105.D	109	103	97	106
VT10473-MB	T252107.D	111	103	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%

**AUTHORIZATION TO DISCHARGE UNDER BUFFALO
POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NUMBER: 21-12-BU098

USEPA Category: 40 CFR 403

In accordance with the provisions of the Federal Water Pollution Control Act, as amended, the Sewer Regulations of the Buffalo Sewer Authority, authorization is hereby granted to:

HONEYWELL INTERNATIONAL, INC.

To discharge wastewater from a facility located at:

**ALLTIFT LANDFILL/RAMCO STEEL REMEDIATION SITES
579 TIFFT STREET
BUFFALO, NEW YORK 14220**

To the Buffalo Municipal Sewer System.

Issuance of this permit is based upon a permit application filed on **May 26, 2021** and analytical data. This permit is granted in accordance with discharge limitations, monitoring requirements and other conditions set forth in Part I and II hereof.

Effective this 1st day of December, 2021

To Expire the 30th day of November, 2024



General Manager, Buffalo Sewer Authority

Issued this 10th day of November, 2021

PART 1: SPECIFIC CONDITIONS

A. DISCHARGE LIMITATIONS & MONITORING REQUIREMENTS

During the period beginning the effective date of this permit and lasting until the expiration date, discharge from the permitted facility outfall(s) (see attached map) shall be limited and monitored **semi-annually** by the permittee as specified below:

Sampling for the pollutants below will be conducted at Sample Point 001.

Sample Point 001 is a Discharge Lift Station located at the southeast corner of the facility's main entrance on Tifft Street.

Sample Point 001: Footnotes found on pages 3 and 4

Regulation		Discharge Limit ⁽¹⁾	Discharge Limit	Discharge limit	Discharge Limit	M.A.I.D	Sampling Requirement	Sampling Requirement
40 CFR	Parameter	Daily	Daily	Monthly	Monthly		Time Period ⁽²⁾	Type ⁽³⁾
		Conc. (mg/L)	Mass (lbs)	Conc. (mg/L)	Mass (lbs)	Conc. (mg/L)		
403	pH (s.u.)	5.0-12.0	X	X	X	X	1 Day	Grab
403	Total Suspended Solids ⁽⁴⁾	250.0	X	X	X	X	1 Day	Composite
403	Total Phosphorus ⁽⁴⁾⁽⁶⁾	15.35	X	X	X	X	1 Day	Composite
403	Copper ⁽⁶⁾	X	7.68	X	X	X	1 Day	Composite
403	Mercury ⁽⁸⁾	0.0008	X	X	X	X	1 Day	Composite
403	Zinc ⁽⁶⁾	X	12.0	X	X	X	1 Day	Composite
403	USEPA Test Method 624 ⁽⁷⁾	To be monitored	X	X	X	X	1 Day	Grab
403	USEPA Test Method 625 ⁽⁷⁾	To be monitored	X	X	X	X	1 Day	Grab
403	Total Flow	57,600 gallons ⁽⁵⁾	X	X	X	X	1 Day	Discharge Meter Reading

PART 1: SPECIFIC CONDITIONS

B. FOOTNOTES:

1. Mass limits based on an average discharge of 57,600 gpd, based on historical data.
2. Sampling Requirement, Time Period: One (1) day shall mean 1 consecutive 24 hour day.
3. Sampling Requirement, Sampling Type:
 - a. Grab sample: A single discrete sample collected over a period that is not to exceed 15 minutes.
 - b. Composite sample: The two methods of obtaining a composite sample are flow-proportional composite sampling or time-proportional composite sampling. Please indicate the sampling method utilized.
4. The Discharge Limitation for these parameters are local discharge limits that the Buffalo Sewer Authority has developed to protect the Bird Island Treatment Plant. If the parameter is over the stated limit, then that parameter is surchargeable.
5. Flow is an action level only. If the permittee exceeds this level, the BSA must be notified so that this permit can be modified. Flow meter readings for the previous six months must be submitted with each monitoring report.
6. These parameters are to be monitored and results submitted with the initial monitoring report, due December 31, 2021. If parameters are below detection limit, then monitoring will not be required for those parameters in subsequent monitoring reports. If parameters are detected at the Method Detection Limit (MDL) of the test method or higher, then any compound detected may, at the discretion of the Buffalo Sewer Authority, be specifically limited and incorporated into this permit. For EPA Test Method 608, if parameters are detected at the Practical Quantitation Limit (PQL) of the test method or higher, then any compound detected may, at the discretion of the Buffalo Sewer Authority, be specifically limited and incorporated into this permit.
7. The permittee must report any compound whose concentration is greater than 0.01 mg/L. The permittee is not authorized to discharge any of the parameters evaluated by this test procedure which may cause or contribute to a violation of water quality standards or harm the sewerage system. Any parameter detected may, at the discretion of the BSA, be specifically limited and incorporated into the permit. When submitting self-monitoring reports to the BSA, the laboratory's complete analytical report must also be submitted. A summary page is acceptable as long as the laboratory's analytical report is also included.

PART I: SPECIFIC CONDITIONS

B. FOOTNOTES - CONTINUED:

8. This limit is the compliance level for the BSA's Industrial Pretreatment Program approved local limits. When testing for Mercury, EPA Test Method 245 is acceptable. However, the BSA may occasionally request EPA Test Method 1631, Low Level Mercury analysis and EPA Test Method 1669. EPA Test Method 1669 is the required sampling method for EPA Test Method 1631 when it is believed that Mercury may be present in the manufacturing process or analytical results consistently show the presence of Mercury.

PART 1: SPECIFIC CONDITIONS

C. DISCHARGE MONITORING REPORTING REQUIREMENTS

1. During the period beginning the effective date of this permit lasting until the expiration date, discharge monitoring results shall be summarized and reported semi-annually by the permittee on the days specified below:

Sample Point	Parameter	Initial Report	Subsequent Reports
001	All parameters	December 31, 2021	June 30, 2022
			December 31, 2022
			June 30, 2023
			December 31, 2023
			June 30, 2024

2. To renew your Discharge Permit, a Discharge Permit Application is required six months prior to the expiration of this permit. Please submit by May 30, 2024.

Part I: SPECIFIC CONDITIONS

D. SITE MAP & SCHEMATIC FLOW DIAGRAM



wood.



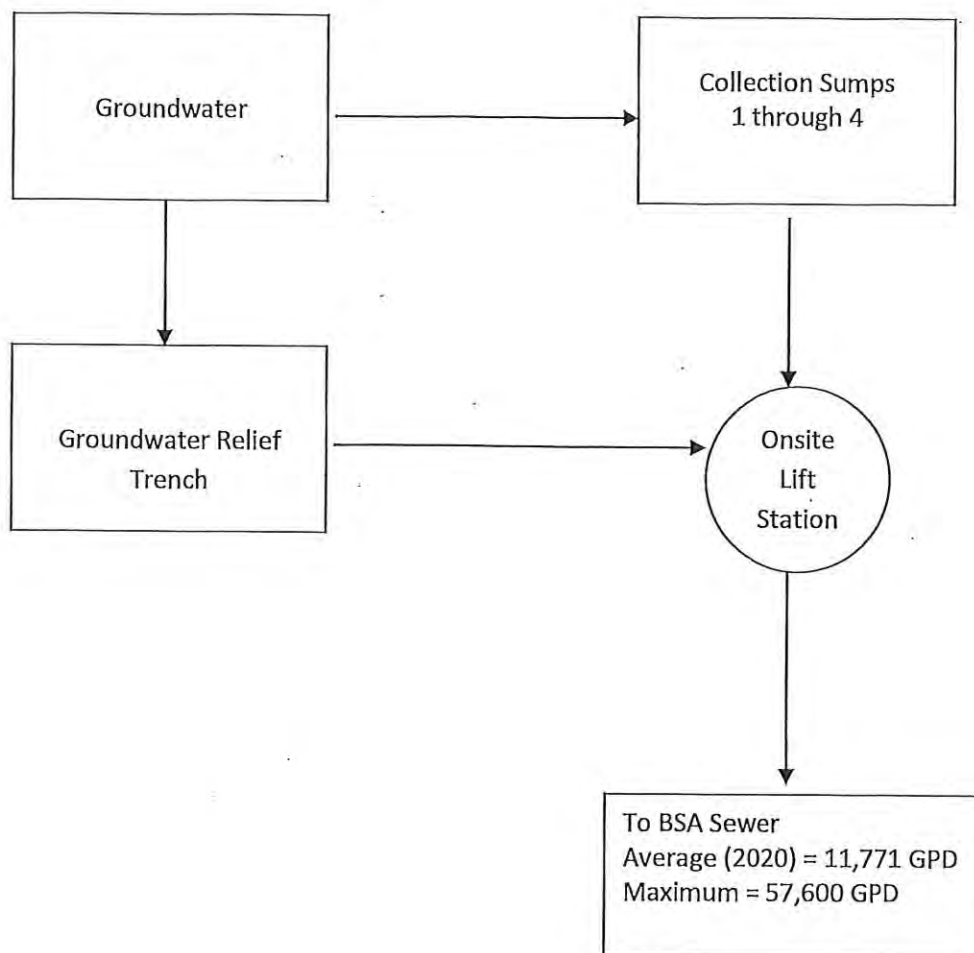
Figure 1
Permit Sample Location

Alltiff Landfill
Buffalo, New York

Part I: SPECIFIC CONDITIONS

D. SITE MAP & SCHEMATIC FLOW DIAGRAM CONTINUED

Schematic Flow Diagram
Alltft Landfill, Buffalo, New York



Prepared by/Date: Ryan Belcher 2-16-2021

BUFFALO POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
PART II: GENERAL CONDITIONS

A. MONITORING AND REPORTING

1. Local Limits

Except as otherwise specified in this permit, the permit holder shall comply with all specific prohibitions, limits on pollutants or pollutant parameters set forth in the Buffalo Sewer Authority Sewer Use Regulations, as amended from time to time, and such prohibitions, limits and parameters shall be deemed pretreatment standards for purposes for the Clean Water Act.

2. Definitions

Definitions of terms contained in this permit are as defined in the Buffalo Sewer Authority Sewer Use Regulations.

3. Discharge Sampling Analysis

All Wastewater discharge samples and analyses and flow measurements shall be representative of the volume and character of the monitored discharge. Methods employed for flow measurements and sample collections and analyses shall conform to the Buffalo Sewer Authority "Sampling Measurement and Analytical Guidelines Sheet".

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of the permit, the permittee shall record the information as required in the "Sampling Measurement and Analytical Guidelines Sheet".

5. Additional Monitoring by Permittee

If the permittee monitors any pollutants at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in 40 CFR Part 136 the results of such monitoring shall be included in the calculation and reporting of values required under Part I, B. Such increased frequency shall also be indicated.

6. Reporting

All reports prepared in accordance with this Permit shall be submitted to:

**Industrial Waste Section
Buffalo Sewer Authority Treatment Plant
90 West Ferry Street
Buffalo, New York 14213**

All self-monitoring reports shall be prepared in accordance with the BSA "Sampling Measurement and Analytical Guidelines Sheet". These reporting requirements shall not relieve the permittee of any other reports, which may be required by the N.Y.S.D.E.C. or the U.S.E.P.A.

7. Certification Statement

All self-monitoring reports shall include the following certification statement, signed by the preparer of the report:

"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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the systems, 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".

B. PERMITTEE REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit and with the information contained in the BPDES permit application on which basis this permit is granted. In the event of any facility expansions, production increases, process modifications or the installation, modification or repair of any pretreatment equipment which may result in new, different or increased discharges of pollutants, a new BPDES Permit application must be submitted prior to any change. Following receipt of an amended application, the BSA may modify this permit to specify and limit any pollutants not previously limited. In the event that the proposed change will be covered under an applicable Categorical Standard, a Baseline Monitoring Report must be submitted at least ninety (90) days prior to any discharge.

2. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation shall be retained at this facility for a minimum of three (3) years, or longer if requested by the General Manager.

3. Slug Control Plan

Upon written notification by the BSA that a slug control plan is necessary for the permittee, the plan shall be prepared in accordance with the BSA "Sampling Measurement and Analytical Guidelines" sheet. Within 90 days of the BSA notification, the permittee must implement the slug control plan

4. Notification of Slug, Accidental Discharge or Spill

In the event that a slug, accidental discharge or any spill occurs at the facility for which this permit is issued, it is the responsibility of the permittee to immediately notify the B.S.A. Treatment Plant of the quantity and character of such discharge. During normal business hours, Monday – Friday, 7:30 AM - 3:00 PM call 716-851-4664, ext. 5374. After normal business hours call 716-851-4664, ext. 600. For all slug discharges, and when requested by the BSA following an accidental discharge or spill, within five (5) days following all such discharges, the permittee shall submit a report describing the character and duration of the discharge, the cause of the discharge, and measures taken or that will be taken to prevent a recurrence of such discharge.

5. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any discharge limitation specified in this permit, the permittee or their assigns must verbally notify the Industrial Waste Section at 716-851-4664 ext. 5374 within twenty-four (24) hours of becoming aware of the violation. The permittee shall provide the Industrial Waste Section with the following information, in writing, within five (5) days of becoming aware of such condition:

- a. a description of the discharge and cause of noncompliance and;
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

Additionally, the permittee shall repeat the sampling and analysis and submit these results of the report analysis to the Industrial Waste Section within 30 days after becoming aware of the violation.

6. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the Buffalo Sewerage System resulting from noncompliance with any discharge limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

7. Waste Residuals

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters and/or the treatment of intake waters, shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the Buffalo Sewer System.

8. Power Failures

In order to maintain compliance with the discharge limitations and prohibitions of this permit, the permittee shall provide an alternative power source sufficient to operate the wastewater control facilities; or, if such alternative power source is not provided the permittee shall halt, reduce or otherwise control production and/or controlled discharges upon the loss of power to the wastewater control facilities.

9. Treatment Upsets

- a. Any industrial user which experiences an upset in operations that places it in a temporary state of noncompliance, which is not the result of operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation, shall inform the Industrial Waste Section immediately upon becoming aware of the upset. Where such information is given verbally, a written report shall be filed by the user within five (5) days. The report shall contain:
 - (i) A description of the upset, its cause(s) and impact on the discharger's compliance status;
 - (ii) The duration of noncompliance, including exact dates and times of noncompliance, and if the non-compliance is continuing, the time by which compliance is reasonably expected to be restored;
 - (iii) All steps taken or planned to reduce, eliminate, and prevent recurrence of such an upset.
- b. An industrial user which complies with the notification provisions of this Section in a timely manner shall have an affirmative defense to any enforcement action brought by the Industrial Waste Section for any

noncompliance of the limits in this permit, which arises out of violations attributable to and alleged to have occurred during the period of the documented and verified upset.

10. Treatment Bypasses

- a. A bypass of the treatment system is prohibited unless the following conditions are met:
 - (i) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; or
 - (ii) There was no feasible alternative to the bypass, including the use of auxiliary treatment or retention of the wastewater; and
 - (iii) The industrial user properly notified the Industrial Waste Section as described in paragraph b. below.
- b. Industrial users must provide immediate notice to the Industrial Waste Section upon discovery of an unanticipated bypass. If necessary, the Industrial Waste Section may require the industrial user to submit a written report explaining the cause(s), nature, and duration of the bypass, and the steps being taken to prevent its recurrence.
- c. An industrial user may allow a bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it is for essential maintenance to ensure efficient operation of the treatment system. Industrial users anticipating a bypass must submit notice to the Industrial Waste Section at least ten (10) days in advance. The Industrial Waste Section may only approve the anticipated bypass if the circumstances satisfy those set forth in paragraph a. above.

C. PERMITTEE RESPONSIBILITIES

1. Permit Availability

The originally signed permit must be available upon request at all times for review at the address stated on the first page of this permit.

2. Inspections

The permittee shall allow the General Manager of the Buffalo Sewer Authority and/or his authorized representatives, upon the presentation of credentials and during normal working hours or at any other reasonable times, to have access to and copy any records required in this permit; and to sample any discharge of pollutants.

3. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities for which this permit has been issued the permit shall become null and void. The succeeding owner shall submit a completed Buffalo Sewer Authority permit application prior to discharge to the sewer system.

D. PERMITTEE LIABILITIES

1. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to the following:

- a. Violation of any terms or conditions of this permit,
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts,
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

2. Imminent Danger

In the event there exists an imminent danger to health or property, the permitter reserves the right to take immediate action to halt the permitted discharge to the sewerage works.

3. Civil and Criminal Liability

Nothing in this permit shall relieve the permittee from any requirements, liabilities, or penalties under provisions of the "Sewer Regulations of the Buffalo Sewer Authority" or any Federal, State and/or local laws or regulations.

E. NATIONAL PRETREATMENT STANDARDS

If a pretreatment standard or prohibition (including any Schedule of Compliance specified in such pretreatment standard or prohibition) is established under Section 307 (b) of the Act for a pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with such pretreatment standard or prohibition.

F. PLANT CLOSURE

In the event of plant closure, the permittee is required to notify the Industrial Waste Section in writing as soon as an anticipated closure date is determined, but in no case later than five days of the actual closure.

G. CONFIDENTIALITY

Except for data determined to be confidential under Section 308 of the Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Buffalo Sewer Authority. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.

H. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT B.7

ANNUAL GROUNDWATER MONITORING DATA

TABLE 1
Summary of Groundwater Analytical Results - 2021
2021/2022 Annual OM&M Report
Alltift Landfill /Ramco Steel Site

Parameter Name	Units	NYSDEC Class GA Standards or Guidance Values	MW-2_092921	SUMP-1_092921	SUMP-2_092921	SUMP-3_092921	SUMP-4_092921	SUMP-4-FD_092921	SUMP-COMP_092921
			9/29/2021	9/29/2021	9/29/2021	9/29/2021	9/29/2021	9/29/2021	9/29/2021
Metals (Dissolved)									
ANTIMONY	mg/L	0.003	0.0047 U	-- --	-- --	-- --	0.0047 U	0.0047 U	0.0047 U
ARSENIC	mg/L	0.025	0.0028 U	-- --	-- --	-- --	0.0131	0.0116	0.0105
CADMIUM	mg/L	0.005	0.001 U	-- --	-- --	-- --	0.001 U	0.001 U	0.001 U
CHROMIUM	mg/L	0.05	0.002 U	-- --	-- --	-- --	0.0027 J	0.0047 J	0.0093 J
IRON	mg/L	0.3	0.0651 J	-- --	-- --	-- --	35.8	37.1	18.7
LEAD	mg/L	0.025	0.0018 U	-- --	-- --	-- --	0.0018 U	0.0018 U	0.0018 U
MANGANESE	mg/L	0.3	0.013 J	-- --	-- --	-- --	0.282	0.292	0.941
MERCURY	mg/L	0.0007	0.000095 U	-- --	-- --	-- --	0.000095 U	0.000095 U	0.000095 U
VOCs									
BENZENE	µg/L	1	0.43 U	0.47 J	0.44 J	1	0.58	1.7	-- --
CHLOROBENZENE	µg/L	5	0.56 U	10.3	10.9	7.2	36.3	51.4	-- --
ETHYLBENZENE	µg/L	5	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	-- --
XYLENES, TOTAL	µg/L	5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	-- --
1,2-DICHLOROBENZENE	µg/L	3	0.53 U	0.53 U	0.53 U	0.53 U	0.61 J	0.64 J	-- --
1,4-DICHLOROBENZENE	µg/L	3	0.51 U	0.51 U	0.51 U	0.51 U	0.88 J	1.1	-- --
SVOCs									
4-CHLOROANILINE	µg/L	5	0.32 U	-- --	-- --	-- --	0.67 J	0.84 J	2.1 J
NAPHTHALENE	µg/L	10	0.22 U	-- --	-- --	-- --	0.22 U	0.22 U	0.22 U
1,4-Dioxane	µg/L	1	0.048 U	-- --	-- --	-- --	18.3	16.9	12.5
PFAs									
Perfluorooctanesulfonic Acid (PFOS)	ng/L	10	13	17.8	18.9	20.6	17.5	18.4	15.9
Perfluoroundecanoic Acid (Pfunda)	ng/L	100	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.93 U
n-Methyl Perfluorooctanesulfonamidoacetic Acid (n-MeFOSAA)	ng/L	100	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U
Perfluoropentanoic Acid (PFPeA)	ng/L	100	4.7	3	0.89 U	4.5 U	6.9	6.7	4.6 U
6:2 Fluorotelomer Sulfonate (6:2 FTS)	ng/L	100	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U
n-Ethyl Perfluorooctanesulfonamidoacetic Acid (n-ETFOSAA)	ng/L	100	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U
Perfluorohexanoic Acid (PFHxA)	ng/L	100	3.3	10.1	12.7	16.2	9.8	10.9	12.2
Perfluorododecanoic Acid (PFDoA)	ng/L	100	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.93 U
Perfluorooctanoic Acid (PFOA)	ng/L	10	5.1	479	512	42.4	38.7	38.7	263
Perfluorodecanoic acid (PFDA)	ng/L	100	0.89 U	7	7.7	0.89 U	0.89 U	0.89 U	3.3
Perfluorodecanesulfonic acid (PFDS)	ng/L	100	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.93 U
Perfluorohexanesulfonic Acid (PFHxS)	ng/L	100	2.4	7.4	8.1	0.89 U	9.4	7	0.93 U
Perfluorobutanoic Acid (PFBA)	ng/L	100	16	67.5	60.3	96.6	69.4	70.2	74.5
Perfluorobutanesulfonic Acid (PFBS)	ng/L	100	2.8	0.89 U	24.8	0.89 U	0.89 U	0.89 U	0.93 U
Perfluoroheptanoic Acid (PFHpA)	ng/L	100	2.4	13.4	14.5	9.8	6.8	7.2	8.5
Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	100	0.89 U	0.89 U	0.89 U	1.2 J	0.89 U	0.89 U	0.93 U
Perfluorononanoic Acid (PFNA)	ng/L	100	0.96 J	0.89 U	1.3 J	0.89 U	0.89 U	0.89 U	0.93 U
Perfluorotetradecanoic Acid (PFTeDA)	ng/L	100	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.93 U
8:2 Fluorotelomer Sulfonate (8:2 FTS)	ng/L	100	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U
Perfluorotridecanoic Acid (Pftdda)	ng/L	100	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.93 U
Perfluorooctane Sulfonamide (FOSA)	ng/L	100	1.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U
Total PFAS	ng/L	500	50.7	605.2	660.3	186.8	158.5	159.1	374.1

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 or Guidance Value
mg/L - milligrams per liter
ng/L - nanograms per liter
µg/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 Tifft Street, Buffalo, NY

PO#A000804776

SGS Job Number: JD32637

Sampling Date: 09/29/21

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: **117**



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.



Mike Earp
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.

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Sample Summary

Honeywell International Inc. OMM work

Job No: JD32637

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

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

JD32637-1	09/29/21	12:55 BH	10/01/21	AQ	Ground Water	SUMP-1
JD32637-1A	09/29/21	12:55 BH	10/01/21	AQ	Ground Water	SUMP-1
JD32637-2	09/29/21	15:00 BH	10/01/21	AQ	Ground Water	SUMP-2
JD32637-2A	09/29/21	15:00 BH	10/01/21	AQ	Ground Water	SUMP-2
JD32637-3	09/29/21	17:00 BH	10/01/21	AQ	Ground Water	SUMP-3
JD32637-3A	09/29/21	17:00 BH	10/01/21	AQ	Ground Water	SUMP-3
JD32637-4	09/29/21	18:30 BH	10/01/21	AQ	Ground Water	SUMP-4
JD32637-4A	09/29/21	18:30 BH	10/01/21	AQ	Ground Water	SUMP-4
JD32637-4AD	09/29/21	18:30 BH	10/01/21	AQ	Water Dup/MSD	SUMP-4-MSD
JD32637-4AS	09/29/21	18:30 BH	10/01/21	AQ	Water Matrix Spike	SUMP-4-MS
JD32637-4D	09/29/21	18:30 BH	10/01/21	AQ	Water Dup/MSD	SUMP-4-MSD
JD32637-4S	09/29/21	18:30 BH	10/01/21	AQ	Water Matrix Spike	SUMP-4-MS



Sample Summary
(continued)

Honeywell International Inc. OMM work

Job No: JD32637

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
JD32637-5	09/29/21	18:30 BH	10/01/21	AQ	Ground Water	SUMP-4-FD
JD32637-5A	09/29/21	18:30 BH	10/01/21	AQ	Ground Water	SUMP-4-FD
JD32637-6	09/29/21	19:30 BH	10/01/21	AQ	Ground Water	SUMP-COMP
JD32637-6A	09/29/21	19:30 BH	10/01/21	AQ	Ground Water	SUMP-COMP
JD32637-7	09/29/21	10:20 BH	10/01/21	AQ	Ground Water	MW-2
JD32637-7A	09/29/21	10:20 BH	10/01/21	AQ	Ground Water	MW-2
JD32637-8	09/29/21	19:30 BH	10/01/21	AQ	Trip Blank Water	TRIP BLANK
JD32637-9	09/29/21	19:30 BH	10/01/21	AQ	Trip Blank Water	TRIP BLANK 2

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Honeywell International Inc. OMM work

Job No: JD32637

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

Report Date 10/19/2021 6:33:16 P

On 10/01/2021, 7 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 5.1 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD32637 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: V4D5034

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD32637-4MS, JD32637-4MSD were used as the QC samples indicated.
- JD32637-2: (pH=3)Sample pH did not satisfy field preservation criteria.
- JD32637-4: (pH=3)Sample pH did not satisfy field preservation criteria.
- JD32637-5: (pH=5)Sample pH did not satisfy field preservation criteria.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: F:OP87768

- The data for EPA 537M BY ID meets quality control requirements.
- JD32637-3A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD32637-9: Analysis performed at SGS Orlando, FL.
- JD32637-2A: Analysis performed at SGS Orlando, FL.
- JD32637-3A: Analysis performed at SGS Orlando, FL.
- JD32637-4A: Analysis performed at SGS Orlando, FL.
- JD32637-4A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD32637-5A: Analysis performed at SGS Orlando, FL.
- JD32637-1A: Analysis performed at SGS Orlando, FL.
- JD32637-2A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD32637-3A for PFOSA: Associated ID Standard outside control limits, Confirmed by re-analysis.
- JD32637-5A for PFOSA: Associated ID Standard outside control limits, Confirmed by re-analysis.

Matrix: AQ

Batch ID: F:OP87769

- The data for EPA 537M BY ID meets quality control requirements.
- JD32637-6A: Analysis performed at SGS Orlando, FL.
- JD32637-6A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD32637-7A: Analysis performed at SGS Orlando, FL.
- JD32637-6A for PFOSA: Associated ID Standard outside control limits, Confirmed by re-analysis.

Tuesday, October 19, 2021

Page 1 of 2

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ

Batch ID: OP35778

- All samples were extracted within the recommended method holding time.
- Sample(s) JD32637-4MS, JD32637-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ

Batch ID: OP35778A

- All samples were extracted within the recommended method holding time.
- Sample(s) JD32637-4MS, JD32637-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP29098

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD32637-4BSP, JD32637-4SDL, JD32637-4MS, JD32637-4MSD were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Chromium are outside control limits for sample MP29098-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JD32637-4, JD32637-5, JD32637-6, JD32637-7: 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.

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP29091

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD32637-4MS, JD32637-4MSD 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: JD32637

Site: HWINJOMM: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street,

Report Date: 10/19/2021 5:05:47

On 10/05/2021, 7 Sample(s), 1 Trip Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD32637 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.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: OP87768

Sample(s) JD32637-4AMS, JD32637-4AMSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for Perfluorobutanesulfonic acid are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Perfluorobutanesulfonic acid are outside control limits for sample OP87768-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A have surrogates outside control limits.

JD32637-1A for 13C8-FOSA: Outside control limits.

JD32637-2A for 13C8-FOSA: Outside control limits.

JD32637-2A: Dilution required due to matrix interference (ID recovery standard failure).

JD32637-3A for 13C4-PFBA: Outside control limits.

JD32637-3A for 13C5-PFHxA: Outside control limits.

JD32637-3A for 13C5-PFPeA: Outside control limits.

JD32637-3A for 13C8-FOSA: Outside control limits.

JD32637-3A for PFOSA: Associated ID Standard outside control limits, Confirmed by re-analysis.

JD32637-3A: Dilution required due to matrix interference (ID recovery standard failure).

JD32637-4A for 13C8-FOSA: Outside control limits.

JD32637-4A: Dilution required due to matrix interference (ID recovery standard failure).

JD32637-5A for 13C8-FOSA: Outside control limits.

JD32637-5A for 13C8-FOSA: Outside control limits.

JD32637-5A for PFOSA: Associated ID Standard outside control limits, Confirmed by re-analysis.

Matrix: AQ

Batch ID: OP87769

Sample(s) FA89587-2MS, FA89587-3DUP were used as the QC samples indicated.

RPD(s) for Duplicate for Perfluorooctanesulfonic acid are outside control limits for sample OP87769-DUP. Probable cause is due to sample non-homogeneity.

Sample(s) JD32637-6A have surrogates outside control limits.

JD32637-6A: Dilution required due to matrix interference (ID recovery standard failure).

JD32637-6A for PFOSA: Associated ID Standard outside control limits, Confirmed by re-analysis.

JD32637-6A for 13C5-PFHxA: Outside control limits.

JD32637-6A for 13C8-FOSA: Outside control limits.

JD32637-6A for 13C5-PFPeA: Outside control limits.

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.

Narrative prepared by:

Kim Benham, Client Services (*Signature on File*)

Summary of Hits

Job Number: JD32637

Account: Honeywell International Inc. OMM work

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

Collected: 09/29/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD32637-1 SUMP-1

Benzene	0.47 J	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene	10.3	1.0	0.56	ug/l	SW846 8260D

JD32637-1A SUMP-1

Perfluorobutanoic acid ^a	67.5	3.6	1.8	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a	3.0	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a	10.1	1.8	0.89	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a	13.4	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a	479	8.9	4.5	ng/l	EPA 537M BY ID
Perfluorodecanoic acid ^a	7.0	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a	7.4	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	17.8	1.8	0.89	ng/l	EPA 537M BY ID

JD32637-2 SUMP-2

Benzene ^b	0.44 J	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene ^b	10.9	1.0	0.56	ug/l	SW846 8260D

JD32637-2A SUMP-2

Perfluorobutanoic acid ^a	60.3	3.6	1.8	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a	12.7	1.8	0.89	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a	14.5	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^c	512	8.9	4.5	ng/l	EPA 537M BY ID
Perfluorononanoic acid ^a	1.3 J	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorodecanoic acid ^a	7.7	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a	24.8	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a	8.1	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	18.9	1.8	0.89	ng/l	EPA 537M BY ID

JD32637-3 SUMP-3

Benzene	1.0	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene	7.2	1.0	0.56	ug/l	SW846 8260D

JD32637-3A SUMP-3

Perfluorobutanoic acid ^c	96.6	18	8.9	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^c	16.2	8.9	4.5	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a	9.8	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a	42.4	1.8	0.89	ng/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid ^a	1.2 J	1.8	0.89	ng/l	EPA 537M BY ID

Summary of Hits

Job Number: JD32637

Account: Honeywell International Inc. OMM work

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

Collected: 09/29/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Perfluorooctanesulfonic acid ^a		20.6	1.8	0.89	ng/l	EPA 537M BY ID
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JD32637-4 SUMP-4

Benzene ^b		0.58	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene ^b		36.3	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene ^b		0.61 J	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene ^b		0.88 J	1.0	0.51	ug/l	SW846 8260D
4-Chloroaniline		0.67 J	4.8	0.32	ug/l	SW846 8270E
1,4-Dioxane		18.3	0.95	0.63	ug/l	SW846 8270E
Arsenic		13.1	3.0	2.8	ug/l	SW846 6010D
Chromium		2.7 J	10	2.0	ug/l	SW846 6010D
Iron		35800	100	32	ug/l	SW846 6010D
Manganese		282	15	1.4	ug/l	SW846 6010D

JD32637-4A SUMP-4

Perfluorobutanoic acid ^a		69.4	3.6	1.8	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a		6.9	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a		9.8	1.8	0.89	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a		6.8	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a		38.7	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a		9.4	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		17.5	1.8	0.89	ng/l	EPA 537M BY ID

JD32637-5 SUMP-4-FD

Benzene ^d		1.7	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene ^d		51.4	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene ^d		0.64 J	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene ^d		1.1	1.0	0.51	ug/l	SW846 8260D
4-Chloroaniline		0.84 J	4.8	0.32	ug/l	SW846 8270E
1,4-Dioxane		16.9	0.95	0.63	ug/l	SW846 8270E
Arsenic		11.6	3.0	2.8	ug/l	SW846 6010D
Chromium		4.7 J	10	2.0	ug/l	SW846 6010D
Iron		37100	100	32	ug/l	SW846 6010D
Manganese		292	15	1.4	ug/l	SW846 6010D

JD32637-5A SUMP-4-FD

Perfluorobutanoic acid ^a		70.2	3.6	1.8	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a		6.7	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a		10.9	1.8	0.89	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a		7.2	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a		38.7	1.8	0.89	ng/l	EPA 537M BY ID

Summary of Hits

Job Number: JD32637

Account: Honeywell International Inc. OMM work

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

Collected: 09/29/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Perfluorohexanesulfonic acid ^a		7.0	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		18.4	1.8	0.89	ng/l	EPA 537M BY ID

JD32637-6 SUMP-COMP

4-Chloroaniline		2.1 J	4.8	0.32	ug/l	SW846 8270E
1,4-Dioxane		12.5	0.95	0.63	ug/l	SW846 8270E
Arsenic		10.5	3.0	2.8	ug/l	SW846 6010D
Chromium		9.3 J	10	2.0	ug/l	SW846 6010D
Iron		18700	100	32	ug/l	SW846 6010D
Manganese		941	15	1.4	ug/l	SW846 6010D

JD32637-6A SUMP-COMP

Perfluorobutanoic acid ^a		74.5	3.7	1.9	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^c		12.2	9.3	4.6	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a		8.5	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a		263	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorodecanoic acid ^a		3.3	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		15.9	1.9	0.93	ng/l	EPA 537M BY ID

JD32637-7 MW-2

Iron		65.1 J	100	32	ug/l	SW846 6010D
Manganese		13.0 J	15	1.4	ug/l	SW846 6010D

JD32637-7A MW-2

Perfluorobutanoic acid ^a		16.0	3.6	1.8	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a		4.7	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a		3.3	1.8	0.89	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a		2.4	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a		5.1	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorononanoic acid ^a		0.96 J	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a		2.8	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a		2.4	1.8	0.89	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a		13.0	1.8	0.89	ng/l	EPA 537M BY ID

JD32637-8 TRIP BLANK

No hits reported in this sample.

JD32637-9 TRIP BLANK 2

No hits reported in this sample.

Summary of Hits

Job Number: JD32637
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tifft Street, Buffalo, NY
Collected: 09/29/21



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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- (a) Analysis performed at SGS Orlando, FL.
- (b) (pH= 3)Sample pH did not satisfy field preservation criteria.
- (c) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- (d) (pH= 5)Sample pH did not satisfy field preservation criteria.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SUMP-1	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-1	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D113099.D	1	10/12/21 20:56	BK	n/a	n/a	V4D5034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.47	0.50	0.43	ug/l	J
108-90-7	Chlorobenzene	10.3	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		85-118%
17060-07-0	1,2-Dichloroethane-D4	107%		80-121%
2037-26-5	Toluene-D8	93%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP-1	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-1A	Date Received:	10/01/21
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	2Q78354.D	1	10/17/21 07:00	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109
Run #2 ^a	2Q78355.D	5	10/17/21 07:16	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2	280 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	67.5	3.6	1.8	ng/l	
2706-90-3	Perfluoropentanoic acid	3.0	1.8	0.89	ng/l	
307-24-4	Perfluorohexanoic acid	10.1	1.8	0.89	ng/l	
375-85-9	Perfluoroheptanoic acid	13.4	1.8	0.89	ng/l	
335-67-1	Perfluorooctanoic acid	479 ^b	8.9	4.5	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.89	ng/l	
335-76-2	Perfluorodecanoic acid	7.0	1.8	0.89	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.89	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.89	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.89	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.89	ng/l	
355-46-4	Perfluorohexanesulfonic acid	7.4	1.8	0.89	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.89	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	17.8	1.8	0.89	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.89	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND ^b	18	8.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.6	1.8	ng/l	
2991-50-6	EtFOSAA	ND	3.6	1.8	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.1	1.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.1	1.8	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-1	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-1A	Date Received:	10/01/21
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	48%	73%	35-135%
	13C5-PFPeA	54%	74%	50-150%
	13C5-PFHxA	51%	69%	50-150%
	13C4-PFHpA	53%	71%	50-150%
	13C8-PFOA	59%	74%	50-150%
	13C9-PFNA	66%	78%	50-150%
	13C6-PFDA	75%	86%	50-150%
	13C7-PFUnDA	78%	87%	40-140%
	13C2-PFDoDA	75%	77%	40-140%
	13C2-PFTeDA	64%	65%	30-130%
	13C3-PFBS	62%	76%	50-150%
	13C3-PFHxS	67%	81%	50-150%
	13C8-PFOS	74%	75%	50-150%
	13C8-FOSA	14% ^c	31%	30-130%
	d3-MeFOSAA	89%	106%	40-140%
	d5-EtFOSAA	91%	99%	40-140%
	13C2-6:2FTS	67%	81%	50-150%
	13C2-8:2FTS	87%	92%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Result is from Run# 2

(c) 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:	SUMP-2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-2	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	4D113090.D	1	10/12/21 16:36	BK	n/a	n/a	V4D5034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.44	0.50	0.43	ug/l	J
108-90-7	Chlorobenzene	10.9	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		85-118%
17060-07-0	1,2-Dichloroethane-D4	103%		80-121%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

(a) (pH= 3)Sample pH did not satisfy field preservation criteria.

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

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

Report of Analysis

Client Sample ID:	SUMP-2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-2A	Date Received:	10/01/21
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	2Q78356.D	1	10/17/21 07:31	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109
Run #2 ^b	2Q78357.D	5	10/17/21 07:47	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2	280 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	60.3	3.6	1.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	1.8	0.89	ng/l	
307-24-4	Perfluorohexanoic acid	12.7	1.8	0.89	ng/l	
375-85-9	Perfluoroheptanoic acid	14.5	1.8	0.89	ng/l	
335-67-1	Perfluorooctanoic acid	512 ^c	8.9	4.5	ng/l	
375-95-1	Perfluorononanoic acid	1.3	1.8	0.89	ng/l	J
335-76-2	Perfluorodecanoic acid	7.7	1.8	0.89	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.89	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.89	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.89	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	24.8	1.8	0.89	ng/l	
355-46-4	Perfluorohexanesulfonic acid	8.1	1.8	0.89	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.89	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	18.9	1.8	0.89	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.89	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND ^c	18	8.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.6	1.8	ng/l	
2991-50-6	EtFOSAA	ND	3.6	1.8	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.1	1.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.1	1.8	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-2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-2A	Date Received:	10/01/21
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		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	48%	70%	35-135%
	13C5-PFPeA	53%	71%	50-150%
	13C5-PFHxA	50%	67%	50-150%
	13C4-PFHpA	53%	67%	50-150%
	13C8-PFOA	58%	70%	50-150%
	13C9-PFNA	65%	74%	50-150%
	13C6-PFDA	73%	83%	50-150%
	13C7-PFUnDA	77%	82%	40-140%
	13C2-PFDoDA	67%	69%	40-140%
	13C2-PFTeDA	52%	55%	30-130%
	13C3-PFBS	61%	73%	50-150%
	13C3-PFHxS	66%	73%	50-150%
	13C8-PFOS	67%	74%	50-150%
	13C8-FOSA	17% ^d	35%	30-130%
	d3-MeFOSAA	89%	97%	40-140%
	d5-EtFOSAA	88%	88%	40-140%
	13C2-6:2FTS	64%	79%	50-150%
	13C2-8:2FTS	85%	81%	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

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Client Sample ID:	SUMP-3	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-3	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D113100.D	1	10/12/21 21:25	BK	n/a	n/a	V4D5034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.0	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	7.2	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		85-118%
17060-07-0	1,2-Dichloroethane-D4	105%		80-121%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SUMP-3	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-3A	Date Received:	10/01/21
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	2Q78358.D	1	10/17/21 08:02	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109
Run #2 ^b	2Q78359.D	5	10/17/21 08:18	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2	280 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	96.6 ^c	18	8.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND ^c	8.9	4.5	ng/l	
307-24-4	Perfluorohexanoic acid	16.2 ^c	8.9	4.5	ng/l	
375-85-9	Perfluoroheptanoic acid	9.8	1.8	0.89	ng/l	
335-67-1	Perfluorooctanoic acid	42.4	1.8	0.89	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.89	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.89	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.89	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.89	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.89	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.89	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.8	0.89	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.2	1.8	0.89	ng/l	J
1763-23-1	Perfluorooctanesulfonic acid	20.6	1.8	0.89	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.89	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA ^d	ND ^c	18	8.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.6	1.8	ng/l	
2991-50-6	EtFOSAA	ND	3.6	1.8	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.1	1.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.1	1.8	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-3	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-3A	Date Received:	10/01/21
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	34% ^e	63%	35-135%
	13C5-PFPeA	45% ^e	71%	50-150%
	13C5-PFHxA	44% ^e	68%	50-150%
	13C4-PFHpA	55%	71%	50-150%
	13C8-PFOA	64%	75%	50-150%
	13C9-PFNA	71%	81%	50-150%
	13C6-PFDA	87%	95%	50-150%
	13C7-PFUnDA	92%	92%	40-140%
	13C2-PFDoDA	82%	84%	40-140%
	13C2-PFTeDA	75%	78%	30-130%
	13C3-PFBS	55%	77%	50-150%
	13C3-PFHxS	72%	87%	50-150%
	13C8-PFOS	75%	85%	50-150%
	13C8-FOSA	14% ^e	24% ^e	30-130%
	d3-MeFOSAA	116%	103%	40-140%
	d5-EtFOSAA	100%	91%	40-140%
	13C2-6:2FTS	70%	85%	50-150%
	13C2-8:2FTS	96%	94%	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, Confirmed by re-analysis.

(e) 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

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Client Sample ID:	SUMP-4	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-4	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	4D113089.D	1	10/12/21 16:07	BK	n/a	n/a	V4D5034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.58	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	36.3	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	0.61	1.0	0.53	ug/l	J
106-46-7	1,4-Dichlorobenzene	0.88	1.0	0.51	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		85-118%
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

(a) (pH= 3)Sample pH did not satisfy field preservation criteria.

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP-4	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-4	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P501879.D	1	10/07/21 14:42	BL	10/06/21 07:50	OP35778	E6P3517
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	0.67	4.8	0.32	ug/l	J
123-91-1	1,4-Dioxane	18.3	0.95	0.63	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		35-127%
321-60-8	2-Fluorobiphenyl	89%		35-121%
1718-51-0	Terphenyl-d14	81%		28-135%

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

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

Report of Analysis

Client Sample ID:	SUMP-4	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-4	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M103018.D	1	10/08/21 06:44	CS	10/06/21 07:50	OP35778A	E4M4806
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%		21-121%
321-60-8	2-Fluorobiphenyl	63%		27-107%
1718-51-0	Terphenyl-d14	57%		25-118%

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

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

Report of Analysis

Client Sample ID:	SUMP-4	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-4	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift 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	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Arsenic	13.1	3.0	2.8	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Chromium	2.7 J	10	2.0	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Iron	35800	100	32	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Manganese	282	15	1.4	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Mercury	ND	0.20	0.095	ug/l	1	10/08/21	10/08/21	LM	SW846 7470A ¹ SW846 7470A ³

(1) Instrument QC Batch: MA51243

(2) Instrument QC Batch: MA51268

(3) Prep QC Batch: MP29091

(4) Prep QC Batch: MP29098

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	SUMP-4	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-4A	Date Received:	10/01/21
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	2Q78362.D	1	10/17/21 09:04	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109
Run #2 ^b	2Q78363.D	5	10/17/21 09:20	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2	280 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	69.4	3.6	1.8	ng/l	
2706-90-3	Perfluoropentanoic acid	6.9	1.8	0.89	ng/l	
307-24-4	Perfluorohexanoic acid	9.8	1.8	0.89	ng/l	
375-85-9	Perfluoroheptanoic acid	6.8	1.8	0.89	ng/l	
335-67-1	Perfluorooctanoic acid	38.7	1.8	0.89	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.89	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.89	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.89	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.89	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.89	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.89	ng/l	
355-46-4	Perfluorohexanesulfonic acid	9.4	1.8	0.89	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.89	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	17.5	1.8	0.89	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.89	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND ^c	18	8.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.6	1.8	ng/l	
2991-50-6	EtFOSAA	ND	3.6	1.8	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.1	1.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.1	1.8	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-4	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-4A	Date Received:	10/01/21
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	40%	68%	35-135%
	13C5-PFPeA	51%	72%	50-150%
	13C5-PFHxA	50%	69%	50-150%
	13C4-PFHpA	61%	72%	50-150%
	13C8-PFOA	68%	76%	50-150%
	13C9-PFNA	72%	82%	50-150%
	13C6-PFDA	86%	91%	50-150%
	13C7-PFUnDA	93%	93%	40-140%
	13C2-PFDoDA	89%	85%	40-140%
	13C2-PFTeDA	78%	78%	30-130%
	13C3-PFBS	62%	76%	50-150%
	13C3-PFHxS	74%	82%	50-150%
	13C8-PFOS	79%	86%	50-150%
	13C8-FOSA	17% ^d	33%	30-130%
	d3-MeFOSAA	106%	102%	40-140%
	d5-EtFOSAA	99%	92%	40-140%
	13C2-6:2FTS	77%	85%	50-150%
	13C2-8:2FTS	94%	92%	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:	SUMP-4-FD	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-5	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	4D113101.D	1	10/12/21 21:53	BK	n/a	n/a	V4D5034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.7	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	51.4	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	0.64	1.0	0.53	ug/l	J
106-46-7	1,4-Dichlorobenzene	1.1	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		85-118%
17060-07-0	1,2-Dichloroethane-D4	105%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

(a) (pH= 5)Sample pH did not satisfy field preservation criteria.

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	SUMP-4-FD	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-5	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E 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	6P501880.D	1	10/07/21 15:04	BL	10/06/21 07:50	OP35778	E6P3517
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	0.84	4.8	0.32	ug/l	J
123-91-1	1,4-Dioxane	16.9	0.95	0.63	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		35-127%
321-60-8	2-Fluorobiphenyl	87%		35-121%
1718-51-0	Terphenyl-d14	71%		28-135%

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

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

Report of Analysis

Client Sample ID:	SUMP-4-FD	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-5	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M103019.D	1	10/08/21 07:04	CS	10/06/21 07:50	OP35778A	E4M4806
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		21-121%
321-60-8	2-Fluorobiphenyl	60%		27-107%
1718-51-0	Terphenyl-d14	50%		25-118%

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

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

Report of Analysis

Client Sample ID:	SUMP-4-FD	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-5	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	ND	6.0	4.7	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Arsenic	11.6	3.0	2.8	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Chromium	4.7 J	10	2.0	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Iron	37100	100	32	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Manganese	292	15	1.4	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Mercury	ND	0.20	0.095	ug/l	1	10/08/21	10/08/21	LM	SW846 7470A ¹ SW846 7470A ³

- (1) Instrument QC Batch: MA51243
- (2) Instrument QC Batch: MA51268
- (3) Prep QC Batch: MP29091
- (4) Prep QC Batch: MP29098

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	SUMP-4-FD	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-5A	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q78368.D	1	10/17/21 10:37	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109
Run #2 ^a	2Q78369.D	5	10/17/21 10:53	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2	280 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	70.2	3.6	1.8	ng/l	
2706-90-3	Perfluoropentanoic acid	6.7	1.8	0.89	ng/l	
307-24-4	Perfluorohexanoic acid	10.9	1.8	0.89	ng/l	
375-85-9	Perfluoroheptanoic acid	7.2	1.8	0.89	ng/l	
335-67-1	Perfluorooctanoic acid	38.7	1.8	0.89	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.89	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.89	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.89	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.89	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.89	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.89	ng/l	
355-46-4	Perfluorohexanesulfonic acid	7.0	1.8	0.89	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.89	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	18.4	1.8	0.89	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.89	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA ^b	ND ^c	18	8.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.6	1.8	ng/l	
2991-50-6	EtFOSAA	ND	3.6	1.8	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.1	1.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.1	1.8	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-4-FD	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-5A	Date Received:	10/01/21
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		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	42%	73%	35-135%
	13C5-PFPeA	54%	79%	50-150%
	13C5-PFHxA	54%	77%	50-150%
	13C4-PFHpA	65%	81%	50-150%
	13C8-PFOA	75%	85%	50-150%
	13C9-PFNA	79%	91%	50-150%
	13C6-PFDA	92%	103%	50-150%
	13C7-PFUnDA	94%	98%	40-140%
	13C2-PFDoDA	83%	90%	40-140%
	13C2-PFTeDA	73%	80%	30-130%
	13C3-PFBS	66%	80%	50-150%
	13C3-PFHxS	78%	92%	50-150%
	13C8-PFOS	86%	100%	50-150%
	13C8-FOSA	11% ^d	21% ^d	30-130%
	d3-MeFOSAA	111%	108%	40-140%
	d5-EtFOSAA	98%	91%	40-140%
	13C2-6:2FTS	83%	96%	50-150%
	13C2-8:2FTS	102%	99%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Associated ID Standard outside control limits, Confirmed by re-analysis.

(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

Page 1 of 1

Client Sample ID:	SUMP-COMP	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-6	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E 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	6P501881.D	1	10/07/21 15:27	BL	10/06/21 07:50	OP35778	E6P3517
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	2.1	4.8	0.32	ug/l	J
123-91-1	1,4-Dioxane	12.5	0.95	0.63	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		35-127%
321-60-8	2-Fluorobiphenyl	91%		35-121%
1718-51-0	Terphenyl-d14	73%		28-135%

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:	09/29/21
Lab Sample ID:	JD32637-6	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M103020.D	1	10/08/21 07:24	CS	10/06/21 07:50	OP35778A	E4M4806
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%		21-121%
321-60-8	2-Fluorobiphenyl	62%		27-107%
1718-51-0	Terphenyl-d14	50%		25-118%

ND = Not detected
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

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Report of Analysis

Client Sample ID:	SUMP-COMP	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-6	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	ND	6.0	4.7	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Arsenic	10.5	3.0	2.8	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Chromium	9.3 J	10	2.0	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Iron	18700	100	32	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Manganese	941	15	1.4	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Mercury	ND	0.20	0.095	ug/l	1	10/08/21	10/08/21	LM	SW846 7470A ¹ SW846 7470A ³

- (1) Instrument QC Batch: MA51243
- (2) Instrument QC Batch: MA51268
- (3) Prep QC Batch: MP29091
- (4) Prep QC Batch: MP29098

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	SUMP-COMP	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-6A	Date Received:	10/01/21
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	2Q78172.D	1	10/15/21 05:38	AFL	10/11/21 08:00	F:OP87769	F:S2Q1107
Run #2 ^b	2Q78201.D	5	10/15/21 13:13	AFL	10/11/21 08:00	F:OP87769	F:S2Q1107

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2	270 ml	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	74.5	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND ^c	9.3	4.6	ng/l	
307-24-4	Perfluorohexanoic acid	12.2 ^c	9.3	4.6	ng/l	
375-85-9	Perfluoroheptanoic acid	8.5	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	263	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.93	ng/l	
335-76-2	Perfluorodecanoic acid	3.3	1.9	0.93	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	15.9	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA ^d	ND ^c	19	9.3	ng/l	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	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:	09/29/21
Lab Sample ID:	JD32637-6A	Date Received:	10/01/21
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		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	40%	67%	35-135%
	13C5-PFPeA	49% ^e	72%	50-150%
	13C5-PFHxA	47% ^e	70%	50-150%
	13C4-PFHpA	51%	70%	50-150%
	13C8-PFOA	58%	73%	50-150%
	13C9-PFNA	66%	78%	50-150%
	13C6-PFDA	69%	84%	50-150%
	13C7-PFUnDA	73%	81%	40-140%
	13C2-PFDoDA	66%	72%	40-140%
	13C2-PFTeDA	35%	52%	30-130%
	13C3-PFBS	58%	74%	50-150%
	13C3-PFHxS	63%	74%	50-150%
	13C8-PFOS	72%	78%	50-150%
	13C8-FOSA	9% ^e	18% ^e	30-130%
	d3-MeFOSAA	91%	91%	40-140%
	d5-EtFOSAA	87%	84%	40-140%
	13C2-6:2FTS	63%	78%	50-150%
	13C2-8:2FTS	78%	87%	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, Confirmed by re-analysis.

(e) 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:	MW-2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-7	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D113098.D	1	10/12/21 20:27	BK	n/a	n/a	V4D5034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		85-118%
17060-07-0	1,2-Dichloroethane-D4	105%		80-121%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-7	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P501882.D	1	10/07/21 15:49	BL	10/06/21 07:50	OP35778	E6P3517
Run #2							

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

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		35-127%
321-60-8	2-Fluorobiphenyl	83%		35-121%
1718-51-0	Terphenyl-d14	97%		28-135%

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-7	Date Received:	10/01/21
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		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M103021.D	1	10/08/21 07:44	CS	10/06/21 07:50	OP35778A	E4M4806
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.095	0.048	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		21-121%
321-60-8	2-Fluorobiphenyl	60%		27-107%
1718-51-0	Terphenyl-d14	70%		25-118%

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:	09/29/21
Lab Sample ID:	JD32637-7	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	HLAME: 30130-Alltiff Landfill, 579 Tift 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	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Arsenic	ND	3.0	2.8	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Cadmium	ND	3.0	1.0	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Chromium	ND	10	2.0	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Iron	65.1 J	100	32	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Lead	ND	3.0	1.8	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Manganese	13.0 J	15	1.4	ug/l	1	10/10/21	10/12/21	ND	SW846 6010D ² SW846 3010A ⁴
Mercury	ND	0.20	0.095	ug/l	1	10/08/21	10/08/21	LM	SW846 7470A ¹ SW846 7470A ³

- (1) Instrument QC Batch: MA51243
- (2) Instrument QC Batch: MA51268
- (3) Prep QC Batch: MP29091
- (4) Prep QC Batch: MP29098

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-7A	Date Received:	10/01/21
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	2Q78173.D	1	10/15/21 05:53	AFL	10/11/21 08:00	F:OP87769	F:S2Q1107
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	16.0	3.6	1.8	ng/l	
2706-90-3	Perfluoropentanoic acid	4.7	1.8	0.89	ng/l	
307-24-4	Perfluorohexanoic acid	3.3	1.8	0.89	ng/l	
375-85-9	Perfluoroheptanoic acid	2.4	1.8	0.89	ng/l	
335-67-1	Perfluorooctanoic acid	5.1	1.8	0.89	ng/l	
375-95-1	Perfluorononanoic acid	0.96	1.8	0.89	ng/l	J
335-76-2	Perfluorodecanoic acid	ND	1.8	0.89	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.89	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.89	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.89	ng/l	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	2.8	1.8	0.89	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.4	1.8	0.89	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.89	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	13.0	1.8	0.89	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.89	ng/l	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	3.6	1.8	ng/l	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	3.6	1.8	ng/l	
2991-50-6	EtFOSAA	ND	3.6	1.8	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.1	1.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.1	1.8	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:	09/29/21
Lab Sample ID:	JD32637-7A	Date Received:	10/01/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	HLAME: 30130-Alltift Landfill, 579 Tiftt Street, Buffalo, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	75%		35-135%
	13C5-PFPeA	78%		50-150%
	13C5-PFHxA	75%		50-150%
	13C4-PFHpA	77%		50-150%
	13C8-PFOA	80%		50-150%
	13C9-PFNA	82%		50-150%
	13C6-PFDA	87%		50-150%
	13C7-PFUnDA	84%		40-140%
	13C2-PFDoDA	79%		40-140%
	13C2-PFTeDA	74%		30-130%
	13C3-PFBS	81%		50-150%
	13C3-PFHxS	80%		50-150%
	13C8-PFOS	84%		50-150%
	13C8-FOSA	64%		30-130%
	d3-MeFOSAA	101%		40-140%
	d5-EtFOSAA	91%		40-140%
	13C2-6:2FTS	85%		50-150%
	13C2-8:2FTS	91%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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:	09/29/21
Lab Sample ID:	JD32637-8	Date Received:	10/01/21
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D113097.D	1	10/12/21 19:58	BK	n/a	n/a	V4D5034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		85-118%
17060-07-0	1,2-Dichloroethane-D4	104%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK 2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-9	Date Received:	10/01/21
Matrix:	AQ - Trip Blank 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	2Q78370.D	1	10/17/21 11:09	AFL	10/11/21 08:00	F:OP87768	F:S2Q1109
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.6	1.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	1.8	0.89	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.8	0.89	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.8	0.89	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.8	0.89	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.89	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.89	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.89	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.89	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.89	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.89	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.8	0.89	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.89	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.8	0.89	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.89	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	3.6	1.8	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.6	1.8	ng/l	
2991-50-6	EtFOSAA	ND	3.6	1.8	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.1	1.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.1	1.8	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 BLANK 2	Date Sampled:	09/29/21
Lab Sample ID:	JD32637-9	Date Received:	10/01/21
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	82%		35-135%
	13C5-PFPeA	83%		50-150%
	13C5-PFHxA	82%		50-150%
	13C4-PFHpA	84%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	87%		50-150%
	13C6-PFDA	95%		50-150%
	13C7-PFUnDA	95%		40-140%
	13C2-PFDoDA	92%		40-140%
	13C2-PFTeDA	90%		30-130%
	13C3-PFBS	92%		50-150%
	13C3-PFHxS	97%		50-150%
	13C8-PFOS	94%		50-150%
	13C8-FOSA	81%		30-130%
	d3-MeFOSAA	99%		40-140%
	d5-EtFOSAA	88%		40-140%
	13C2-6:2FTS	90%		50-150%
	13C2-8:2FTS	94%		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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

JD32637

5.1

Initial Assessment 12/2-21
Label Verification _____

SGS Sample Receipt Summary

Job Number: JD32637

Client: WOOD ENVIRONMENT & INFRASTRUCT

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

Date / Time Received: 10/1/2021 10:00:00 AM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (3.0); Cooler 2: (4.1); Cooler 3: (5.1);

Cooler Temps (Corrected) °C: Cooler 1: (3.0); Cooler 2: (4.1); Cooler 3: (5.1);

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: ☐ ☐ | |
| 2. Cooler temp verification: <u>N/A</u> | |
| 3. Cooler media: <u>N/A</u> | |
| 4. No. Coolers: <u>N/A</u> | |

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: <u>Intact</u> | |

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: <u>231619</u>	pH 12+: <u>203117A</u>	Other: (Specify) _____
--------------------	------------------------	------------------------	------------------------

Comments

SM089-03
Rev. Date 12/7/17

JD32637: Chain of Custody

Page 2 of 3

Job Change Order: JD32637

Requested Date:	10/6/2021	Received Date:	10/1/2021
Account Name:	Honeywell International Inc. OMM	Due Date:	10/6/2021
Project Description:	HLAME: 30130-Alltiff Landfill, 579 Tifft Street, Bu	Deliverable:	COMMBN
C/O Initiated By:	KRISTIN.DE	PM:	KD
		TAT (Days):	7

=====

Sample #:	JD32637-1 through -8, -4D, -4S	Change:	
Dept:			Please add VMS+ETHBNZ
TAT:	7		

=====

Above Changes Per: Client / Mike Fay

Date/Time: 10/6/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD32637: 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 1

Job Number: JD32637

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
V4D5034-MB	4D113088.D	1	10/12/21	BK	n/a	n/a	V4D5034

The QC reported here applies to the following samples:

Method: SW846 8260D

JD32637-1, JD32637-2, JD32637-3, JD32637-4, JD32637-5, JD32637-7, JD32637-8

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	89% 85-118%
17060-07-0	1,2-Dichloroethane-D4	106% 80-121%
2037-26-5	Toluene-D8	95% 80-120%
460-00-4	4-Bromofluorobenzene	97% 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 1

Job Number: JD32637

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
V4D5034-BS	4D113086.D	1	10/12/21	BK	n/a	n/a	V4D5034

The QC reported here applies to the following samples:

Method: SW846 8260D

JD32637-1, JD32637-2, JD32637-3, JD32637-4, JD32637-5, JD32637-7, JD32637-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	43.9	88	78-117
108-90-7	Chlorobenzene	50	45.4	91	83-115
95-50-1	1,2-Dichlorobenzene	50	48.2	96	85-117
106-46-7	1,4-Dichlorobenzene	50	45.8	92	82-115
100-41-4	Ethylbenzene	50	45.2	90	80-115
1330-20-7	Xylene (total)	150	139	93	81-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	87%	85-118%
17060-07-0	1,2-Dichloroethane-D4	102%	80-121%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	96%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: JD32637

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
JD32637-4MS ^a	4D113093.D	1	10/12/21	BK	n/a	n/a	V4D5034
JD32637-4MSD ^a	4D113094.D	1	10/12/21	BK	n/a	n/a	V4D5034
JD32637-4 ^a	4D113089.D	1	10/12/21	BK	n/a	n/a	V4D5034

The QC reported here applies to the following samples:

Method: SW846 8260D

JD32637-1, JD32637-2, JD32637-3, JD32637-4, JD32637-5, JD32637-7, JD32637-8

CAS No.	Compound	JD32637-4 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.58		50	47.6	94	50	46.6	92	2	55-129/11
108-90-7	Chlorobenzene	36.3		50	82.8	93	50	80.3	88	3	71-119/10
95-50-1	1,2-Dichlorobenzene	0.61	J	50	50.1	99	50	49.0	97	2	73-117/10
106-46-7	1,4-Dichlorobenzene	0.88	J	50	48.4	95	50	47.7	94	1	70-117/10
100-41-4	Ethylbenzene	ND		50	47.6	95	50	46.7	93	2	44-136/10
1330-20-7	Xylene (total)	ND		150	145	97	150	143	95	1	46-138/10

CAS No.	Surrogate Recoveries	MS	MSD	JD32637-4	Limits
1868-53-7	Dibromofluoromethane	88%	88%	87%	85-118%
17060-07-0	1,2-Dichloroethane-D4	102%	103%	101%	80-121%
2037-26-5	Toluene-D8	94%	96%	96%	80-120%
460-00-4	4-Bromofluorobenzene	95%	95%	97%	80-120%

(a) (pH= 3)Sample pH did not satisfy field preservation criteria.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: V4D5025-BFB

Injection Date: 10/05/21

Lab File ID: 4D112911.D

Injection Time: 18:39

Instrument ID: GCMS4D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	17222	21.2	Pass
75	30.0 - 60.0% of mass 95	38448	47.4	Pass
95	Base peak, 100% relative abundance	81051	100.0	Pass
96	5.0 - 9.0% of mass 95	5366	6.62	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	67941	83.8	Pass
175	5.0 - 9.0% of mass 174	5087	6.28 (7.49) ^a	Pass
176	95.0 - 101.0% of mass 174	65907	81.3 (97.0) ^a	Pass
177	5.0 - 9.0% of mass 176	4443	5.48 (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
V4D5025-IC5025	4D112912.D	10/05/21	19:11	00:32	Initial cal 0.2
V4D5025-IC5025	4D112913.D	10/05/21	19:40	01:01	Initial cal 0.5
V4D5025-IC5025	4D112914.D	10/05/21	20:09	01:30	Initial cal 1
V4D5025-IC5025	4D112915.D	10/05/21	20:38	01:59	Initial cal 2
V4D5025-IC5025	4D112916.D	10/05/21	21:06	02:27	Initial cal 4
V4D5025-IC5025	4D112917.D	10/05/21	21:35	02:56	Initial cal 8
V4D5025-IC5025	4D112918.D	10/05/21	22:04	03:25	Initial cal 20
V4D5025-ICC5025	4D112919.D	10/05/21	22:33	03:54	Initial cal 50
V4D5025-IC5025	4D112920.D	10/05/21	23:02	04:23	Initial cal 100
V4D5025-IC5025	4D112921.D	10/05/21	23:30	04:51	Initial cal 200

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: V4D5025-BFB3

Injection Date: 10/07/21

Lab File ID: 4D112930.D

Injection Time: 10:44

Instrument ID: GCMS4D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	17424	21.5	Pass
75	30.0 - 60.0% of mass 95	38093	47.0	Pass
95	Base peak, 100% relative abundance	81027	100.0	Pass
96	5.0 - 9.0% of mass 95	5047	6.23	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	68376	84.4	Pass
175	5.0 - 9.0% of mass 174	5367	6.62 (7.85) ^a	Pass
176	95.0 - 101.0% of mass 174	66312	81.8 (97.0) ^a	Pass
177	5.0 - 9.0% of mass 176	4421	5.46 (6.67) ^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
V4D5025-ICV5025	4D112931.D	10/07/21	11:12	00:28	Initial cal verification 50

Instrument Performance Check (BFB)

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Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: V4D5034-BFB

Injection Date: 10/12/21

Lab File ID: 4D113084.D

Injection Time: 13:22

Instrument ID: GCMS4D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	21176	25.0	Pass
75	30.0 - 60.0% of mass 95	40504	47.8	Pass
95	Base peak, 100% relative abundance	84680	100.0	Pass
96	5.0 - 9.0% of mass 95	5488	6.48	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	74160	87.6	Pass
175	5.0 - 9.0% of mass 174	5652	6.67 (7.62) ^a	Pass
176	95.0 - 101.0% of mass 174	71005	83.9 (95.7) ^a	Pass
177	5.0 - 9.0% of mass 176	4712	5.56 (6.64) ^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
V4D5034-CC5025	4D113084.D	10/12/21	13:22	00:00	Continuing cal 50
V4D5034-BS	4D113086.D	10/12/21	14:41	01:19	Blank Spike
V4D5034-MB	4D113088.D	10/12/21	15:38	02:16	Method Blank
JD32637-4	4D113089.D	10/12/21	16:07	02:45	SUMP-4
JD32637-2	4D113090.D	10/12/21	16:36	03:14	SUMP-2
ZZZZZZ	4D113091.D	10/12/21	17:05	03:43	(unrelated sample)
ZZZZZZ	4D113092.D	10/12/21	17:34	04:12	(unrelated sample)
JD32637-4MS	4D113093.D	10/12/21	18:03	04:41	Matrix Spike
JD32637-4MSD	4D113094.D	10/12/21	18:32	05:10	Matrix Spike Duplicate
ZZZZZZ	4D113096.D	10/12/21	19:29	06:07	(unrelated sample)
JD32637-8	4D113097.D	10/12/21	19:58	06:36	TRIP BLANK
JD32637-7	4D113098.D	10/12/21	20:27	07:05	MW-2
JD32637-1	4D113099.D	10/12/21	20:56	07:34	SUMP-1
JD32637-3	4D113100.D	10/12/21	21:25	08:03	SUMP-3
JD32637-5	4D113101.D	10/12/21	21:53	08:31	SUMP-4-FD
ZZZZZZ	4D113102.D	10/12/21	22:22	09:00	(unrelated sample)
ZZZZZZ	4D113103.D	10/12/21	22:51	09:29	(unrelated sample)
ZZZZZZ	4D113104.D	10/12/21	23:20	09:58	(unrelated sample)
ZZZZZZ	4D113105.D	10/12/21	23:49	10:27	(unrelated sample)
ZZZZZZ	4D113106.D	10/13/21	00:17	10:55	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD32637
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tift Street, Buffalo, NY

Method: SW846 8260D	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD32637-1	4D113099.D	90	107	93	95
JD32637-2	4D113090.D	88	103	95	97
JD32637-3	4D113100.D	89	105	95	96
JD32637-4	4D113089.D	87	101	96	97
JD32637-5	4D113101.D	88	105	98	97
JD32637-7	4D113098.D	89	105	95	95
JD32637-8	4D113097.D	89	104	96	96
JD32637-4MS	4D113093.D	88	102	94	95
JD32637-4MSD	4D113094.D	88	103	96	95
V4D5034-BS	4D113086.D	87	102	95	96
V4D5034-MB	4D113088.D	89	106	95	97

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	85-118%
S2 = 1,2-Dichloroethane-D4	80-121%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	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)
- Isotope Dilution Standard/Surrogate Recovery Summaries

Method Blank Summary

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Job Number: JD32637

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
OP35778-MB1	6P501875.D	1	10/07/21	BL	10/06/21	OP35778	E6P3517

The QC reported here applies to the following samples:

Method: SW846 8270E

JD32637-4, JD32637-5, JD32637-6, JD32637-7

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	35% 10-83%
4165-62-2	Phenol-d5	24% 10-82%
118-79-6	2,4,6-Tribromophenol	89% 37-139%
4165-60-0	Nitrobenzene-d5	86% 35-127%
321-60-8	2-Fluorobiphenyl	81% 35-121%
1718-51-0	Terphenyl-d14	88% 28-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
57-10-3	n-Hexadecanoic acid	9.26	6.5	ug/l	JN
	Total TIC, Semi-Volatile		6.5	ug/l	J

Method Blank Summary

Job Number: JD32637
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
OP35778A-MB1	4M103014.D	1	10/08/21	CS	10/06/21	OP35778A	E4M4806

The QC reported here applies to the following samples: Method: SW846 8270E BY SIM

JD32637-4, JD32637-5, JD32637-6, JD32637-7

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	Limits
367-12-4	2-Fluorophenol	29% 0-94%
4165-62-2	Phenol-d5	23% 10-102%
118-79-6	2,4,6-Tribromophenol	74% 30-132%
4165-60-0	Nitrobenzene-d5	70% 21-121%
321-60-8	2-Fluorobiphenyl	59% 27-107%
1718-51-0	Terphenyl-d14	67% 25-118%

Blank Spike Summary

Job Number: JD32637
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
OP35778-BS1	6P501876.D	1	10/07/21	BL	10/06/21	OP35778	E6P3517

The QC reported here applies to the following samples: Method: SW846 8270E

JD32637-4, JD32637-5, JD32637-6, JD32637-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-47-8	4-Chloroaniline	50	34.2	68	12-92
123-91-1	1,4-Dioxane	50	15.5	31	10-87
91-20-3	Naphthalene	50	42.2	84	43-109

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	39%	10-83%
4165-62-2	Phenol-d5	28%	10-82%
118-79-6	2,4,6-Tribromophenol	95%	37-139%
4165-60-0	Nitrobenzene-d5	87%	35-127%
321-60-8	2-Fluorobiphenyl	86%	35-121%
1718-51-0	Terphenyl-d14	95%	28-135%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD32637
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
OP35778A-BS12	4M103015.D	1	10/08/21	CS	10/06/21	OP35778A	E4M4806

The QC reported here applies to the following samples: Method: SW846 8270E BY SIM

JD32637-4, JD32637-5, JD32637-6, JD32637-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	1	0.321	32	10-112

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	34%	0-94%
4165-62-2	Phenol-d5	26%	10-102%
118-79-6	2,4,6-Tribromophenol	79%	30-132%
4165-60-0	Nitrobenzene-d5	76%	21-121%
321-60-8	2-Fluorobiphenyl	65%	27-107%
1718-51-0	Terphenyl-d14	70%	25-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD32637
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
OP35778-MS	6P501877.D	1	10/07/21	BL	10/06/21	OP35778	E6P3517
OP35778-MSD	6P501878.D	1	10/07/21	BL	10/06/21	OP35778	E6P3517
JD32637-4	6P501879.D	1	10/07/21	BL	10/06/21	OP35778	E6P3517

The QC reported here applies to the following samples: Method: SW846 8270E

JD32637-4, JD32637-5, JD32637-6, JD32637-7

CAS No.	Compound	JD32637-4 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-47-8	4-Chloroaniline	0.67	J	47.6	24.3	50	47.6	20.3	41	18	10-129/75
123-91-1	1,4-Dioxane	18.3		47.6	31.4	28	47.6	33.0	31	5	10-128/47
91-20-3	Naphthalene	ND		47.6	37.6	79	47.6	38.9	82	3	18-149/35

CAS No.	Surrogate Recoveries	MS	MSD	JD32637-4	Limits
367-12-4	2-Fluorophenol	32%	38%		10-83%
4165-62-2	Phenol-d5	24%	27%		10-82%
118-79-6	2,4,6-Tribromophenol	94%	93%		37-139%
4165-60-0	Nitrobenzene-d5	86%	89%	82%	35-127%
321-60-8	2-Fluorobiphenyl	87%	89%	89%	35-121%
1718-51-0	Terphenyl-d14	50%	52%	81%	28-135%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD32637
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
OP35778A-MSA	4M103016.D	1	10/08/21	CS	10/06/21	OP35778A	E4M4806
OP35778A-MSDA	4M103017.D	1	10/08/21	CS	10/06/21	OP35778A	E4M4806
JD32637-4	4M103018.D	1	10/08/21	CS	10/06/21	OP35778A	E4M4806

The QC reported here applies to the following samples: Method: SW846 8270E BY SIM

JD32637-4, JD32637-5, JD32637-6, JD32637-7

CAS No.	Compound	JD32637-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	19.0	E	0.952	20.4	147* a	0.952	19.3	31	6	10-114/69

CAS No.	Surrogate Recoveries	MS	MSD	JD32637-4	Limits
367-12-4	2-Fluorophenol	38%	35%		0-94%
4165-62-2	Phenol-d5	23%	27%		10-102%
118-79-6	2,4,6-Tribromophenol	89%	85%		30-132%
4165-60-0	Nitrobenzene-d5	75%	79%	70%	21-121%
321-60-8	2-Fluorobiphenyl	65%	66%	63%	27-107%
1718-51-0	Terphenyl-d14	46%	48%	57%	25-118%

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

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E4M4772-DFTPP

Injection Date: 09/10/21

Lab File ID: 4M102280.D

Injection Time: 14:32

Instrument ID: GCMS4M

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	36008	42.5	Pass
68	Less than 2.0% of mass 69	649	0.77 (1.44) ^a	Pass
69	Mass 69 relative abundance	45051	53.2	Pass
70	Less than 2.0% of mass 69	101	0.12 (0.22) ^a	Pass
127	40.0 - 60.0% of mass 198	35885	42.3	Pass
197	Less than 1.0% of mass 198	208	0.25	Pass
198	Base peak, 100% relative abundance	84749	100.0	Pass
199	5.0 - 9.0% of mass 198	6002	7.08	Pass
275	10.0 - 30.0% of mass 198	21568	25.4	Pass
365	1.0 - 100.0% of mass 198	3117	3.68	Pass
441	Present, but less than mass 443	9560	11.3 (78.6) ^b	Pass
442	40.0 - 100.0% of mass 198	65587	77.4	Pass
443	17.0 - 23.0% of mass 442	12159	14.3 (18.5) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M4772-IC4772	4M102281.D	09/10/21	14:51	00:19	Initial cal 1
E4M4772-IC4772	4M102282.D	09/10/21	15:20	00:48	Initial cal 0.05
E4M4772-IC4772	4M102283.D	09/10/21	15:41	01:09	Initial cal 5
E4M4772-IC4772	4M102284.D	09/10/21	16:01	01:29	Initial cal 0.01
E4M4772-IC4772	4M102285.D	09/10/21	16:21	01:49	Initial cal 2.5
E4M4772-IC4772	4M102286.D	09/10/21	16:41	02:09	Initial cal 0.02
E4M4772-ICC4772	4M102287.D	09/10/21	17:02	02:30	Initial cal 0.5
E4M4772-IC4772	4M102288.D	09/10/21	17:22	02:50	Initial cal 0.1
E4M4772-IC4772	4M102289.D	09/10/21	17:42	03:10	Initial cal 0.2
E4M4772-ICV4772	4M102291.D	09/10/21	18:28	03:56	Initial cal verification 1
ZZZZZZ	4M102292.D	09/10/21	18:54	04:22	(unrelated sample)
ZZZZZZ	4M102293.D	09/10/21	19:14	04:42	(unrelated sample)
ZZZZZZ	4M102294.D	09/10/21	19:34	05:02	(unrelated sample)
ZZZZZZ	4M102295.D	09/10/21	19:55	05:23	(unrelated sample)
ZZZZZZ	4M102296.D	09/10/21	20:15	05:43	(unrelated sample)
ZZZZZZ	4M102297.D	09/10/21	20:36	06:04	(unrelated sample)
ZZZZZZ	4M102298.D	09/10/21	20:56	06:24	(unrelated sample)

Instrument Performance Check (DFTPP)

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Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E4M4806-DFTPP

Injection Date: 10/08/21

Lab File ID: 4M103012.D

Injection Time: 04:26

Instrument ID: GCMS4M

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	61563	39.8	Pass
68	Less than 2.0% of mass 69	634	0.41 (0.82) ^a	Pass
69	Mass 69 relative abundance	77496	50.1	Pass
70	Less than 2.0% of mass 69	424	0.27 (0.55) ^a	Pass
127	40.0 - 60.0% of mass 198	64413	41.6	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	154763	100.0	Pass
199	5.0 - 9.0% of mass 198	10588	6.84	Pass
275	10.0 - 30.0% of mass 198	42453	27.4	Pass
365	1.0 - 100.0% of mass 198	5992	3.87	Pass
441	Present, but less than mass 443	21536	13.9 (85.3) ^b	Pass
442	40.0 - 100.0% of mass 198	136283	88.1	Pass
443	17.0 - 23.0% of mass 442	25248	16.3 (18.5) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M4806-CC4772	4M103013.D	10/08/21	04:38	00:12	Continuing cal 1
OP35778A-MB1	4M103014.D	10/08/21	05:23	00:57	Method Blank
OP35778A-BS12	4M103015.D	10/08/21	05:43	01:17	Blank Spike
OP35778A-MSA	4M103016.D	10/08/21	06:04	01:38	Matrix Spike
OP35778A-MSDA	4M103017.D	10/08/21	06:24	01:58	Matrix Spike Duplicate
JD32637-4	4M103018.D	10/08/21	06:44	02:18	SUMP-4
JD32637-5	4M103019.D	10/08/21	07:04	02:38	SUMP-4-FD
JD32637-6	4M103020.D	10/08/21	07:24	02:58	SUMP-COMP
JD32637-7	4M103021.D	10/08/21	07:44	03:18	MW-2
ZZZZZZ	4M103022.D	10/08/21	08:04	03:38	(unrelated sample)
ZZZZZZ	4M103023.D	10/08/21	08:24	03:58	(unrelated sample)
ZZZZZZ	4M103024.D	10/08/21	08:45	04:19	(unrelated sample)
ZZZZZZ	4M103025.D	10/08/21	09:05	04:39	(unrelated sample)
ZZZZZZ	4M103026.D	10/08/21	09:25	04:59	(unrelated sample)
ZZZZZZ	4M103027.D	10/08/21	09:45	05:19	(unrelated sample)
ZZZZZZ	4M103028.D	10/08/21	10:05	05:39	(unrelated sample)
ZZZZZZ	4M103029A.D	10/08/21	11:16	06:50	(unrelated sample)
ZZZZZZ	4M103034.D	10/08/21	11:36	07:10	(unrelated sample)
ZZZZZZ	4M103030.D	10/08/21	11:56	07:30	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD32637
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Sample:	E4M4806-DFTPP	Injection Date:	10/08/21
Lab File ID:	4M103012.D	Injection Time:	04:26
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M103031.D	10/08/21	12:16	07:50	(unrelated sample)
ZZZZZZ	4M103032.D	10/08/21	12:36	08:10	(unrelated sample)
ZZZZZZ	4M103033.D	10/08/21	12:56	08:30	(unrelated sample)
OP35789A-MB1	4M103035.D	10/08/21	14:17	09:51	Method Blank
OP35789A-BS12	4M103036.D	10/08/21	14:37	10:11	Blank Spike
ZZZZZZ	4M103037.D	10/08/21	14:57	10:31	(unrelated sample)
ZZZZZZ	4M103038.D	10/08/21	15:18	10:52	(unrelated sample)
ZZZZZZ	4M103039.D	10/08/21	15:42	11:16	(unrelated sample)
ZZZZZZ	4M103040.D	10/08/21	16:02	11:36	(unrelated sample)
ZZZZZZ	4M103041.D	10/08/21	16:22	11:56	(unrelated sample)

Instrument Performance Check (DFTPP)

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Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E6P3504-DFTPP

Injection Date: 09/29/21

Lab File ID: 6P501599.D

Injection Time: 13:43

Instrument ID: GCMS6P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	259029	44.7	Pass
68	Less than 2.0% of mass 69	1354	0.23 (0.38) ^a	Pass
69	Mass 69 relative abundance	353085	61.0	Pass
70	Less than 2.0% of mass 69	2293	0.40 (0.65) ^a	Pass
127	40.0 - 60.0% of mass 198	335087	57.9	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	579136	100.0	Pass
199	5.0 - 9.0% of mass 198	36184	6.25	Pass
275	10.0 - 30.0% of mass 198	164402	28.4	Pass
365	1.0 - 100.0% of mass 198	22673	3.91	Pass
441	Present, but less than mass 443	54549	9.42 (85.9) ^b	Pass
442	40.0 - 100.0% of mass 198	346410	59.8	Pass
443	17.0 - 23.0% of mass 442	63467	11.0 (18.3) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3504-IC3504	6P501600.D	09/29/21	14:00	00:17	Initial cal 1
E6P3504-IC3504	6P501601.D	09/29/21	14:22	00:39	Initial cal 2
E6P3504-IC3504	6P501602.D	09/29/21	14:44	01:01	Initial cal 5
E6P3504-IC3504	6P501603.D	09/29/21	15:06	01:23	Initial cal 10
E6P3504-IC3504	6P501604.D	09/29/21	15:28	01:45	Initial cal 25
E6P3504-ICC3504	6P501605.D	09/29/21	15:49	02:06	Initial cal 50
E6P3504-IC3504	6P501606.D	09/29/21	16:11	02:28	Initial cal 80
E6P3504-IC3504	6P501607.D	09/29/21	16:33	02:50	Initial cal 100
E6P3504-ICV3504	6P501609.D	09/29/21	17:17	03:34	Initial cal verification 50
E6P3504-ICV3504	6P501610.D	09/29/21	17:39	03:56	Initial cal verification 50

Instrument Performance Check (DFTPP)

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Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E6P3505-DFTPP

Injection Date: 09/29/21

Lab File ID: 6P501613.D

Injection Time: 20:16

Instrument ID: GCMS6P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	220472	43.2	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	288218	56.4	Pass
70	Less than 2.0% of mass 69	1549	0.30 (0.54) ^a	Pass
127	40.0 - 60.0% of mass 198	280674	55.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	510592	100.0	Pass
199	5.0 - 9.0% of mass 198	33288	6.52	Pass
275	10.0 - 30.0% of mass 198	146973	28.8	Pass
365	1.0 - 100.0% of mass 198	20256	3.97	Pass
441	Present, but less than mass 443	50272	9.85 (79.9) ^b	Pass
442	40.0 - 100.0% of mass 198	322026	63.1	Pass
443	17.0 - 23.0% of mass 442	62917	12.3 (19.5) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3505-IC3505	6P501614.D	09/29/21	20:26	00:10	Initial cal 1
E6P3505-IC3505	6P501615.D	09/29/21	20:48	00:32	Initial cal 2
E6P3505-IC3505	6P501616.D	09/29/21	21:10	00:54	Initial cal 5
E6P3505-IC3505	6P501617.D	09/29/21	21:32	01:16	Initial cal 10
E6P3505-IC3505	6P501618.D	09/29/21	21:53	01:37	Initial cal 25
E6P3505-ICC3505	6P501619.D	09/29/21	22:15	01:59	Initial cal 50
E6P3505-IC3505	6P501620.D	09/29/21	22:37	02:21	Initial cal 80
E6P3505-IC3505	6P501621.D	09/29/21	22:59	02:43	Initial cal 100
E6P3505-ICV3505	6P501622.D	09/29/21	23:21	03:05	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E6P3506-DFTPP

Injection Date: 09/30/21

Lab File ID: 6P501623.D

Injection Time: 11:06

Instrument ID: GCMS6P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	259309	43.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	273800	45.7	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
127	40.0 - 60.0% of mass 198	341070	57.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	598592	100.0	Pass
199	5.0 - 9.0% of mass 198	35030	5.85	Pass
275	10.0 - 30.0% of mass 198	168085	28.1	Pass
365	1.0 - 100.0% of mass 198	22458	3.75	Pass
441	Present, but less than mass 443	51624	8.62 (78.4) ^b	Pass
442	40.0 - 100.0% of mass 198	364992	61.0	Pass
443	17.0 - 23.0% of mass 442	65872	11.0 (18.0) ^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
E6P3506-ICV3504	6P501625.D	09/30/21	11:38	00:32	Initial cal verification 50

Instrument Performance Check (DFTPP)

Page 1 of 1

Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E6P3507-DFTPP

Injection Date: 09/30/21

Lab File ID: 6P501626.D

Injection Time: 13:41

Instrument ID: GCMS6P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	228085	41.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	316429	57.3	Pass
70	Less than 2.0% of mass 69	1962	0.36 (0.62) ^a	Pass
127	40.0 - 60.0% of mass 198	302040	54.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	552000	100.0	Pass
199	5.0 - 9.0% of mass 198	35967	6.52	Pass
275	10.0 - 30.0% of mass 198	160352	29.0	Pass
365	1.0 - 100.0% of mass 198	22148	4.01	Pass
441	Present, but less than mass 443	59389	10.8 (88.4) ^b	Pass
442	40.0 - 100.0% of mass 198	374058	67.8	Pass
443	17.0 - 23.0% of mass 442	67160	12.2 (18.0) ^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
E6P3507-ICV3504	6P501627.D	09/30/21	13:51	00:10	Initial cal verification 50
E6P3507-CC3504	6P501628.D	09/30/21	14:22	00:41	Continuing cal 25
E6P3507-CC3505	6P501629.D	09/30/21	15:07	01:26	Continuing cal 25
OP35623-MB1	6P501630C.D	09/30/21	19:42	06:01	Method Blank
OP35623-BS1	6P501631.D	09/30/21	20:03	06:22	Blank Spike
ZZZZZZ	6P501632.D	09/30/21	20:25	06:44	(unrelated sample)
ZZZZZZ	6P501633.D	09/30/21	20:47	07:06	(unrelated sample)
JD32216-1	6P501634A.D	09/30/21	21:48	08:07	(used for QC only; not part of job JD32637)
ZZZZZZ	6P501635.D	09/30/21	22:09	08:28	(unrelated sample)
ZZZZZZ	6P501636.D	09/30/21	22:31	08:50	(unrelated sample)
ZZZZZZ	6P501637.D	09/30/21	22:53	09:12	(unrelated sample)
ZZZZZZ	6P501638.D	09/30/21	23:15	09:34	(unrelated sample)
OP35623-MS	6P501639.D	09/30/21	23:36	09:55	Matrix Spike
OP35623-MSD	6P501640.D	09/30/21	23:58	10:17	Matrix Spike Duplicate
ZZZZZZ	6P501641.D	10/01/21	00:20	10:39	(unrelated sample)
ZZZZZZ	6P501642.D	10/01/21	00:42	11:01	(unrelated sample)
ZZZZZZ	6P501643.D	10/01/21	01:03	11:22	(unrelated sample)
ZZZZZZ	6P501644.D	10/01/21	01:25	11:44	(unrelated sample)

Instrument Performance Check (DFTPP)

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Job Number: JD32637

Account: HWINJOMM Honeywell International Inc. OMM work

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

Sample: E6P3517-DFTPP

Injection Date: 10/07/21

Lab File ID: 6P501872.D

Injection Time: 12:06

Instrument ID: GCMS6P

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	305356	38.0	Pass
68	Less than 2.0% of mass 69	6449	0.80 (1.48) ^a	Pass
69	Mass 69 relative abundance	436334	54.3	Pass
70	Less than 2.0% of mass 69	2696	0.34 (0.62) ^a	Pass
127	40.0 - 60.0% of mass 198	441115	54.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	804224	100.0	Pass
199	5.0 - 9.0% of mass 198	50412	6.27	Pass
275	10.0 - 30.0% of mass 198	230267	28.6	Pass
365	1.0 - 100.0% of mass 198	30115	3.74	Pass
441	Present, but less than mass 443	84077	10.5 (81.2) ^b	Pass
442	40.0 - 100.0% of mass 198	556693	69.2	Pass
443	17.0 - 23.0% of mass 442	103499	12.9 (18.6) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3517-CC3504	6P501873.D	10/07/21	12:19	00:13	Continuing cal 50
E6P3517-CC3505	6P501874.D	10/07/21	12:41	00:35	Continuing cal 50
OP35778-MB1	6P501875.D	10/07/21	13:14	01:08	Method Blank
OP35778-BS1	6P501876.D	10/07/21	13:36	01:30	Blank Spike
OP35778-MS	6P501877.D	10/07/21	13:58	01:52	Matrix Spike
OP35778-MSD	6P501878.D	10/07/21	14:20	02:14	Matrix Spike Duplicate
JD32637-4	6P501879.D	10/07/21	14:42	02:36	SUMP-4
JD32637-5	6P501880.D	10/07/21	15:04	02:58	SUMP-4-FD
JD32637-6	6P501881.D	10/07/21	15:27	03:21	SUMP-COMP
JD32637-7	6P501882.D	10/07/21	15:49	03:43	MW-2
ZZZZZZ	6P501883.D	10/07/21	16:11	04:05	(unrelated sample)
ZZZZZZ	6P501884.D	10/07/21	16:33	04:27	(unrelated sample)
ZZZZZZ	6P501885.D	10/07/21	18:39	06:33	(unrelated sample)
ZZZZZZ	6P501886.D	10/07/21	19:01	06:55	(unrelated sample)
ZZZZZZ	6P501887.D	10/07/21	19:53	07:47	(unrelated sample)
ZZZZZZ	6P501888.D	10/07/21	20:15	08:09	(unrelated sample)
ZZZZZZ	6P501891.D	10/07/21	21:21	09:15	(unrelated sample)
ZZZZZZ	6P501892.D	10/07/21	21:43	09:37	(unrelated sample)
ZZZZZZ	6P501893.D	10/07/21	22:04	09:58	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD32637
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: SW846 8270E	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JD32637-4	6P501879.D	82	89	81
JD32637-5	6P501880.D	81	87	71
JD32637-6	6P501881.D	84	91	73
JD32637-7	6P501882.D	82	83	97
OP35778-BS1	6P501876.D	87	86	95
OP35778-MB1	6P501875.D	86	81	88
OP35778-MS	6P501877.D	86	87	50
OP35778-MSD	6P501878.D	89	89	52

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	35-127%
S2 = 2-Fluorobiphenyl	35-121%
S3 = Terphenyl-d14	28-135%

7.5.1
7

Surrogate Recovery Summary

Job Number: JD32637
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltft Landfill, 579 Tiftt Street, Buffalo, NY

Method: SW846 8270E BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JD32637-4	4M103018.D	70	63	57
JD32637-5	4M103019.D	69	60	50
JD32637-6	4M103020.D	71	62	50
JD32637-7	4M103021.D	67	60	70
OP35778A-BS12	4M103015.D	76	65	70
OP35778A-MB1	4M103014.D	70	59	67
OP35778A-MSA	4M103016.D	75	65	46
OP35778A-MSDA	4M103017.D	79	66	48

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	21-121%
S2 = 2-Fluorobiphenyl	27-107%
S3 = Terphenyl-d14	25-118%

7.5.2
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: JD32637
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP29091
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/08/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	0.049	<0.20

Associated samples MP29091: JD32637-4, JD32637-5, JD32637-6, JD32637-7

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32637

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP29091

Methods: SW846 7470A

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/08/21

Metal	JD32637-4		Spike lot		QC
	Original	MS	HGPW3	% Rec	Limits
Mercury	0.053	2.0	2	97.4	75-125

Associated samples MP29091: JD32637-4, JD32637-5, JD32637-6, JD32637-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

8.1.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32637
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP29091
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 10/08/21

Metal	JD32637-4 Original MSD		Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.053	2.1	2	102.4	4.9	20

Associated samples MP29091: JD32637-4, JD32637-5, JD32637-6, JD32637-7

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD32637

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

QC Batch ID: MP29091
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/08/21

Metal	BSP Result	SpikeLot HGPW3	% Rec	QC Limits
Mercury	2.1	2	105.0	80-120

Associated samples MP29091: JD32637-4, JD32637-5, JD32637-6, JD32637-7

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD32637
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP29098
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/10/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	9.2	150		
Antimony	6.0	2.8	4.7	0.80	<6.0
Arsenic	3.0	2.6	2.8	0.40	<3.0
Barium	200	.2	13		
Beryllium	1.0	.2	.5		
Bismuth	20	2.5	8.6		
Boron	100	1.8	10		
Cadmium	3.0	.4	1	0.10	<3.0
Calcium	5000	13	99		
Cerium	100				
Chromium	10	.7	2	0.10	<10
Cobalt	50	.6	2.6		
Copper	10	.7	5.9		
Iron	100	3.3	32	5.4	<100
Lead	3.0	2	1.8	-1.1	<3.0
Lithium	50	1.5	7.3		
Magnesium	5000	25	140		
Manganese	15	.1	1.4	0.0	<15
Molybdenum	20	.6	3.6		
Nickel	10	.8	1.7		
Phosphorus	50	7	18		
Potassium	10000	35	200		
Selenium	10	3.6	4.9		
Silicon	200	2.2	32		
Silver	10	.6	6.1		
Sodium	10000	14	570		
Strontium	10	.1	2.7		
Sulfur	50	3.7	45		
Thallium	10	5.2	1.8		
Tin	10	1.4	3.7		
Titanium	10	.8	2.5		
Tungsten	50	1.3	40		
Vanadium	50	.5	1.8		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD32637
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP29098
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/10/21

Metal	RL	IDL	MDL	MB raw	final
Zinc	20	.3	6.9		
Zirconium	10	.5	4.1		

Associated samples MP29098: JD32637-4, JD32637-5, JD32637-6, JD32637-7

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32637

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

QC Batch ID: MP29098
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/10/21

Metal	JD32637-4 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	anr				
Antimony	0.0	1790	2000	89.5	75-125
Arsenic	13.1	1840	2000	91.3	75-125
Barium	anr				
Beryllium	anr				
Bismuth					
Boron					
Cadmium	0.0	1890	2000	94.5	75-125
Calcium	anr				
Cerium					
Chromium	2.7	1860	2000	92.9	75-125
Cobalt	anr				
Copper	anr				
Iron	35800	59900	25000	96.4	75-125
Lead	0.0	1900	2000	95.0	75-125
Lithium					
Magnesium	anr				
Manganese	282	2210	2000	96.4	75-125
Molybdenum					
Nickel	anr				
Phosphorus					
Potassium	anr				
Selenium	anr				
Silicon					
Silver	anr				
Sodium	anr				
Strontium					
Sulfur					
Thallium	anr				
Tin					
Titanium					
Tungsten					
Vanadium	anr				

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32637

Account: HWINJOMM - Honeywell International Inc. OMM work

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

QC Batch ID: MP29098

Methods: SW846 6010D

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/10/21

Metal	JD32637-4 Original MS	Spike lot MPSPK2	% Rec	QC Limits
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Zinc anr

Zirconium

Associated samples MP29098: JD32637-4, JD32637-5, JD32637-6, JD32637-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

8.2.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32637
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP29098
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 10/10/21

Metal	JD32637-4 Original	MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	0.0	1780	2000	89.0	0.6	20
Arsenic	13.1	1820	2000	90.3	1.1	20
Barium	anr					
Beryllium	anr					
Bismuth						
Boron						
Cadmium	0.0	1880	2000	94.0	0.5	20
Calcium	anr					
Cerium						
Chromium	2.7	1860	2000	92.9	0.0	20
Cobalt	anr					
Copper	anr					
Iron	35800	58600	25000	91.2	2.2	20
Lead	0.0	1900	2000	95.0	0.0	20
Lithium						
Magnesium	anr					
Manganese	282	2200	2000	95.9	0.5	20
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium	anr					
Selenium	anr					
Silicon						
Silver	anr					
Sodium	anr					
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD32637
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP29098
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 10/10/21

Metal	JD32637-4 Original MSD	Spike lot MPSPK2	% Rec	MSD RPD	QC Limit
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Zinc anr

Zirconium

Associated samples MP29098: JD32637-4, JD32637-5, JD32637-6, JD32637-7

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

8.2.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD32637

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

QC Batch ID: MP29098
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/10/21

Metal	BSP Result	SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	anr			
Antimony	1740	2000	87.0	80-120
Arsenic	1770	2000	88.5	80-120
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	1840	2000	92.0	80-120
Calcium	anr			
Cerium				
Chromium	1930	2000	96.5	80-120
Cobalt	anr			
Copper	anr			
Iron	26200	25000	104.8	80-120
Lead	1960	2000	98.0	80-120
Lithium				
Magnesium	anr			
Manganese	2000	2000	100.0	80-120
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD32637

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

QC Batch ID: MP29098
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/10/21

Metal	BSP Result	SpikeLot MPSPK2	% Rec	QC Limits
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Zinc anr

Zirconium

Associated samples MP29098: JD32637-4, JD32637-5, JD32637-6, JD32637-7

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

8.2.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD32637
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiffitt Street, Buffalo, NY

QC Batch ID: MP29098
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 10/10/21

Metal	JD32637-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	0.00	0.00	NC	0-10
Arsenic	13.1	16.4	25.2 (a)	0-10
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Cerium				
Chromium	2.70	0.00	100.0(a)	0-10
Cobalt	anr			
Copper	anr			
Iron	35800	37600	4.9	0-10
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium	anr			
Manganese	282	295	4.5	0-10
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD32637
 Account: HWINJOMM - Honeywell International Inc. OMM work
 Project: HLAME: 30130-Alltiff Landfill, 579 Tiff Street, Buffalo, NY

QC Batch ID: MP29098
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 10/10/21

Metal	JD32637-4		QC Limits
	Original	SDL 1:5 %DIF	

Zinc anr

Zirconium

Associated samples MP29098: JD32637-4, JD32637-5, JD32637-6, JD32637-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

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

8.2.4

8

Misc. Forms

Custody Documents and Other Forms

(SGS Orlando, FL)

Includes the following where applicable:

- Chain of Custody

SGS Sample Receipt Summary

Job Number: JD32637

Client: SGS NJ

Project: HLAME: 30130-ALL

Date / Time Received: 10/5/2021 3:00:00 PM

Delivery Method: FX

Airbill #'s: 5272 0634 8809

Therm ID: IR 1;

Therm CF: 0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.2);

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

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | ☐ | ☐ | ☒ |
| 2. Trip Blank listed on COC | ☐ | ☐ | ☒ |
| | <u>W or S</u> | <u>N/A</u> | |
| 3. Type Of TB Received | ☐ | ☐ | ☒ |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☐ | ☒ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #'s: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: STEPHENP

Date: 10/5/2021 3:00:00 PM

Reviewer: _____

Date: _____

JD32637: Chain of Custody

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MS Semi-volatiles

QC Data Summaries

(SGS Orlando, FL)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Isotope Dilution Standard Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: JD32637**Account:** ALNJ SGS Dayton, NJ**Project:** HWINJOMM: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87769-MB	2Q78171.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107

The QC reported here applies to the following samples:**Method:** EPA 537M BY ID

JD32637-6A, JD32637-7A

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0040	0.0020	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0020	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.0010	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.0010	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
754-91-6	PFOSA	ND	0.0040	0.0020	ug/l	
2355-31-9	MeFOSAA	ND	0.0040	0.0020	ug/l	
2991-50-6	EtFOSAA	ND	0.0040	0.0020	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	90% 35-135%
	13C5-PFPeA	89% 50-150%
	13C5-PFHxA	89% 50-150%
	13C4-PFHpA	89% 50-150%
	13C8-PFOA	90% 50-150%
	13C9-PFNA	90% 50-150%
	13C6-PFDA	93% 50-150%
	13C7-PFUnDA	91% 40-140%
	13C2-PFDoDA	83% 40-140%
	13C2-PFTeDA	74% 30-130%
	13C3-PFBS	89% 50-150%

Method Blank Summary

Job Number: JD32637
Account: ALNJ SGS Dayton, NJ
Project: HWINJOMM: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87769-MB	2Q78171.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107

The QC reported here applies to the following samples: Method: EPA 537M BY ID
JD32637-6A, JD32637-7A

CAS No.	ID Standard Recoveries	Limits
	13C3-PFHxS	90% 50-150%
	13C8-PFOS	91% 50-150%
	13C8-FOSA	90% 30-130%
	d3-MeFOSAA	89% 40-140%
	d5-EtFOSAA	81% 40-140%
	13C2-4:2FTS	85% 50-150%
	13C2-6:2FTS	87% 50-150%
	13C2-8:2FTS	89% 50-150%
	13C3-HFPO-DA	100% 50-150%

Method Blank Summary

Page 1 of 2

Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87768-MB	2Q78335.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JD32637-9, JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0040	0.0020	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0020	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.0010	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.0010	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
754-91-6	PFOSA	ND	0.0040	0.0020	ug/l	
2355-31-9	MeFOSAA	ND	0.0040	0.0020	ug/l	
2991-50-6	EtFOSAA	ND	0.0040	0.0020	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	90% 35-135%
	13C5-PFPeA	93% 50-150%
	13C5-PFHxA	91% 50-150%
	13C4-PFHpA	93% 50-150%
	13C8-PFOA	93% 50-150%
	13C9-PFNA	93% 50-150%
	13C6-PFDA	99% 50-150%
	13C7-PFUnDA	97% 40-140%
	13C2-PFDoDA	90% 40-140%
	13C2-PFTeDA	86% 30-130%
	13C3-PFBS	89% 50-150%

Method Blank Summary

Job Number: JD32637
Account: ALNJ SGS Dayton, NJ
Project: HWINJOMM: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87768-MB	2Q78335.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109

The QC reported here applies to the following samples: Method: EPA 537M BY ID

JD32637-9, JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A

CAS No.	ID Standard Recoveries	Limits
	13C3-PFHxS	96% 50-150%
	13C8-PFOS	94% 50-150%
	13C8-FOSA	90% 30-130%
	d3-MeFOSAA	99% 40-140%
	d5-EtFOSAA	84% 40-140%
	13C2-4:2FTS	86% 50-150%
	13C2-6:2FTS	90% 50-150%
	13C2-8:2FTS	92% 50-150%
	13C3-HFPO-DA	94% 50-150%

10.1.2
10

Instrument Blank

Page 1 of 2

Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S2Q1107-IBLK	2Q78147.D	1	10/14/21	NG	n/a	n/a	S2Q1107

The QC reported here applies to the following samples:

Method: EPA 537M QSM5.3 B-15

JD32637-6A, JD32637-7A

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0020	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0010	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0010	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0010	ug/l	
754-91-6	PFOSA	ND	0.0040	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0080	0.0020	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0020	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	107% 50-150%
	13C5-PFPeA	105% 50-150%
	13C5-PFHxA	105% 50-150%
	13C4-PFHpA	106% 50-150%
	13C8-PFOA	105% 50-150%
	13C9-PFNA	105% 50-150%
	13C6-PFDA	107% 50-150%
	13C7-PFUnDA	107% 50-150%
	13C2-PFDoDA	105% 50-150%
	13C2-PFTeDA	100% 50-150%
	13C3-PFBS	106% 50-150%

Instrument Blank

Job Number: JD32637
Account: ALNJ SGS Dayton, NJ
Project: HWINJOMM: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S2Q1107-IBLK	2Q78147.D	1	10/14/21	NG	n/a	n/a	S2Q1107

The QC reported here applies to the following samples: Method: EPA 537M QSM5.3 B-15
JD32637-6A, JD32637-7A

CAS No.	ID Standard Recoveries	Limits
13C3-PFHxS	105%	50-150%
13C8-PFOS	107%	50-150%
13C8-FOSA	113%	50-150%
d3-MeFOSAA	107%	50-150%
d5-EtFOSAA	105%	50-150%
13C2-4:2FTS	99%	50-150%
13C2-6:2FTS	100%	50-150%
13C2-8:2FTS	102%	50-150%

10.1.3
10

Instrument Blank

Page 1 of 2

Job Number: JD32637**Account:** ALNJ SGS Dayton, NJ**Project:** HWINJOMM: HLAME: 30130-Alltiff Landfill, 579 Tiftt Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S2Q1109-IBLK	2Q78281.D	1	10/16/21	NG	n/a	n/a	S2Q1109

The QC reported here applies to the following samples:**Method:** EPA 537M QSM5.3 B-15

JD32637-9, JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0020	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0010	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0010	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0010	ug/l	
754-91-6	PFOSA	ND	0.0040	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0080	0.0020	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0020	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	111% 50-150%
	13C5-PFPeA	112% 50-150%
	13C5-PFHxA	110% 50-150%
	13C4-PFHpA	112% 50-150%
	13C8-PFOA	113% 50-150%
	13C9-PFNA	112% 50-150%
	13C6-PFDA	118% 50-150%
	13C7-PFUnDA	121% 50-150%
	13C2-PFDoDA	117% 50-150%
	13C2-PFTeDA	119% 50-150%
	13C3-PFBS	112% 50-150%

Instrument Blank

Job Number: JD32637
Account: ALNJ SGS Dayton, NJ
Project: HWINJOMM: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S2Q1109-IBLK	2Q78281.D	1	10/16/21	NG	n/a	n/a	S2Q1109

The QC reported here applies to the following samples: Method: EPA 537M QSM5.3 B-15

JD32637-9, JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A

CAS No.	ID Standard Recoveries	Limits
13C3-PFHxS	117%	50-150%
13C8-PFOS	117%	50-150%
13C8-FOSA	124%	50-150%
d3-MeFOSAA	125%	50-150%
d5-EtFOSAA	116%	50-150%
13C2-4:2FTS	104%	50-150%
13C2-6:2FTS	108%	50-150%
13C2-8:2FTS	111%	50-150%

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Blank Spike Summary

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Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87769-BS	2Q78170.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JD32637-6A, JD32637-7A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.08	0.0752	94	70-130
2706-90-3	Perfluoropentanoic acid	0.08	0.0778	97	70-130
307-24-4	Perfluorohexanoic acid	0.08	0.0756	95	70-130
375-85-9	Perfluoroheptanoic acid	0.08	0.0786	98	70-130
335-67-1	Perfluorooctanoic acid	0.08	0.0763	95	70-130
375-95-1	Perfluorononanoic acid	0.08	0.0755	94	70-130
335-76-2	Perfluorodecanoic acid	0.08	0.0754	94	70-130
2058-94-8	Perfluoroundecanoic acid	0.08	0.0784	98	70-130
307-55-1	Perfluorododecanoic acid	0.08	0.0774	97	70-130
72629-94-8	Perfluorotridecanoic acid	0.08	0.0696	87	60-140
376-06-7	Perfluorotetradecanoic acid	0.08	0.0783	98	70-130
375-73-5	Perfluorobutanesulfonic acid	0.08	0.0750	94	70-130
355-46-4	Perfluorohexanesulfonic acid	0.08	0.0734	92	70-130
375-92-8	Perfluoroheptanesulfonic acid	0.08	0.0785	98	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.08	0.0780	98	70-130
335-77-3	Perfluorodecanesulfonic acid	0.08	0.0733	92	60-130
754-91-6	PFOSA	0.08	0.0755	94	70-130
2355-31-9	MeFOSAA	0.08	0.0746	93	70-130
2991-50-6	EtFOSAA	0.08	0.0753	94	70-130
27619-97-2	6:2 Fluorotelomer sulfonate	0.08	0.0847	106	70-130
39108-34-4	8:2 Fluorotelomer sulfonate	0.08	0.0795	99	70-130

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	97%	35-135%
	13C5-PFPeA	97%	50-150%
	13C5-PFHxA	96%	50-150%
	13C4-PFHpA	95%	50-150%
	13C8-PFOA	96%	50-150%
	13C9-PFNA	97%	50-150%
	13C6-PFDA	99%	50-150%
	13C7-PFUnDA	96%	40-140%
	13C2-PFDoDA	87%	40-140%
	13C2-PFTeDA	77%	30-130%
	13C3-PFBS	96%	50-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD32637
Account: ALNJ SGS Dayton, NJ
Project: HWINJOMM: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87769-BS	2Q78170.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107

The QC reported here applies to the following samples: Method: EPA 537M BY ID
JD32637-6A, JD32637-7A

CAS No.	ID Standard Recoveries	BSP	Limits
	13C3-PFHxS	98%	50-150%
	13C8-PFOS	97%	50-150%
	13C8-FOSA	87%	30-130%
	d3-MeFOSAA	93%	40-140%
	d5-EtFOSAA	84%	40-140%
	13C2-4:2FTS	96%	50-150%
	13C2-6:2FTS	96%	50-150%
	13C2-8:2FTS	97%	50-150%
	13C3-HFPO-DA	105%	50-150%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87768-BS	2Q78334.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JD32637-9, JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.08	0.0758	95	70-130
2706-90-3	Perfluoropentanoic acid	0.08	0.0780	98	70-130
307-24-4	Perfluorohexanoic acid	0.08	0.0762	95	70-130
375-85-9	Perfluoroheptanoic acid	0.08	0.0791	99	70-130
335-67-1	Perfluorooctanoic acid	0.08	0.0787	98	70-130
375-95-1	Perfluorononanoic acid	0.08	0.0780	98	70-130
335-76-2	Perfluorodecanoic acid	0.08	0.0754	94	70-130
2058-94-8	Perfluoroundecanoic acid	0.08	0.0781	98	70-130
307-55-1	Perfluorododecanoic acid	0.08	0.0784	98	70-130
72629-94-8	Perfluorotridecanoic acid	0.08	0.0778	97	60-140
376-06-7	Perfluorotetradecanoic acid	0.08	0.0816	102	70-130
375-73-5	Perfluorobutanesulfonic acid	0.08	0.0759	95	70-130
355-46-4	Perfluorohexanesulfonic acid	0.08	0.0778	97	70-130
375-92-8	Perfluoroheptanesulfonic acid	0.08	0.0827	103	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.08	0.0771	96	70-130
335-77-3	Perfluorodecanesulfonic acid	0.08	0.0762	95	60-130
754-91-6	PFOSA	0.08	0.0777	97	70-130
2355-31-9	MeFOSAA	0.08	0.0765	96	70-130
2991-50-6	EtFOSAA	0.08	0.0776	97	70-130
27619-97-2	6:2 Fluorotelomer sulfonate	0.08	0.0857	107	70-130
39108-34-4	8:2 Fluorotelomer sulfonate	0.08	0.0799	100	70-130

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	92%	35-135%
	13C5-PFPeA	95%	50-150%
	13C5-PFHxA	94%	50-150%
	13C4-PFHpA	95%	50-150%
	13C8-PFOA	95%	50-150%
	13C9-PFNA	95%	50-150%
	13C6-PFDA	101%	50-150%
	13C7-PFUnDA	101%	40-140%
	13C2-PFDoDA	95%	40-140%
	13C2-PFTeDA	93%	30-130%
	13C3-PFBS	94%	50-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD32637
Account: ALNJ SGS Dayton, NJ
Project: HWINJOMM: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87768-BS	2Q78334.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109

The QC reported here applies to the following samples: Method: EPA 537M BY ID

JD32637-9, JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A

CAS No.	ID Standard Recoveries	BSP	Limits
	13C3-PFHxS	97%	50-150%
	13C8-PFOS	97%	50-150%
	13C8-FOSA	91%	30-130%
	d3-MeFOSAA	108%	40-140%
	d5-EtFOSAA	95%	40-140%
	13C2-4:2FTS	95%	50-150%
	13C2-6:2FTS	96%	50-150%
	13C2-8:2FTS	99%	50-150%
	13C3-HFPO-DA	95%	50-150%

* = Outside of Control Limits.

Matrix Spike Summary

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Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87769-MS	2Q78181.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107
FA89587-2	2Q78180.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JD32637-6A, JD32637-7A

CAS No.	Compound	FA89587-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.0634		0.0714	0.129	92	70-130
2706-90-3	Perfluoropentanoic acid	0.0565		0.0714	0.127	99	70-130
307-24-4	Perfluorohexanoic acid	0.0060		0.0714	0.0721	93	70-130
375-85-9	Perfluoroheptanoic acid	ND		0.0714	0.0679	95	70-130
335-67-1	Perfluorooctanoic acid	ND		0.0714	0.0681	95	70-130
375-95-1	Perfluorononanoic acid	ND		0.0714	0.0669	94	70-130
335-76-2	Perfluorodecanoic acid	ND		0.0714	0.0645	90	70-130
2058-94-8	Perfluoroundecanoic acid	ND		0.0714	0.0688	96	70-130
307-55-1	Perfluorododecanoic acid	ND		0.0714	0.0658	92	70-130
72629-94-8	Perfluorotridecanoic acid	ND		0.0714	0.0635	89	60-140
376-06-7	Perfluorotetradecanoic acid	ND		0.0714	0.0694	97	70-130
375-73-5	Perfluorobutanesulfonic acid	ND		0.0714	0.0653	91	70-130
355-46-4	Perfluorohexanesulfonic acid	ND		0.0714	0.0679	95	70-130
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0714	0.0712	100	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.0012	J	0.0714	0.0664	91	70-130
335-77-3	Perfluorodecanesulfonic acid	ND		0.0714	0.0640	90	60-130
754-91-6	PFOSA	ND		0.0714	0.0672	94	70-130
2355-31-9	MeFOSAA	ND		0.0714	0.0660	92	70-130
2991-50-6	EtFOSAA	ND		0.0714	0.0634	89	70-130
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0714	0.0745	104	70-130
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.0714	0.0684	96	70-130

CAS No.	ID Standard Recoveries	MS	FA89587-2	Limits
	13C4-PFBA	93%	79%	35-135%
	13C5-PFPeA	93%	80%	50-150%
	13C5-PFHxA	90%	79%	50-150%
	13C4-PFHpA	93%	81%	50-150%
	13C8-PFOA	93%	82%	50-150%
	13C9-PFNA	95%	83%	50-150%
	13C6-PFDA	97%	86%	50-150%
	13C7-PFUnDA	93%	80%	40-140%
	13C2-PFDoDA	90%	76%	40-140%
	13C2-PFTeDA	80%	72%	30-130%
	13C3-PFBS	93%	81%	50-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD32637
Account: ALNJ SGS Dayton, NJ
Project: HWINJOMM: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87769-MS	2Q78181.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107
FA89587-2	2Q78180.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107

The QC reported here applies to the following samples: Method: EPA 537M BY ID
JD32637-6A, JD32637-7A

CAS No.	ID Standard Recoveries	MS	FA89587-2	Limits
	13C3-PFHxS	96%	84%	50-150%
	13C8-PFOS	97%	85%	50-150%
	13C8-FOSA	84%	80%	30-130%
	d3-MeFOSAA	97%	84%	40-140%
	d5-EtFOSAA	89%	77%	40-140%
	13C2-4:2FTS	92%	76%	50-150%
	13C2-6:2FTS	96%	80%	50-150%
	13C2-8:2FTS	95%	79%	50-150%
	13C3-HFPO-DA	107%		50-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87768-MS	2Q78364.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109
OP87768-MSD	2Q78366.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109
JD32637-4A	2Q78362.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109
JD32637-4A ^a	2Q78363.D	5	10/17/21	NG	10/11/21	OP87768	S2Q1109

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JD32637-9, JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A

CAS No.	Compound	JD32637-4A ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	0.0694	0.0714	0.135	92	0.0714	0.140	99	4	70-130/30
2706-90-3	Perfluoropentanoic acid	0.0069	0.0714	0.0782	100	0.0714	0.0982	128	23	70-130/30
307-24-4	Perfluorohexanoic acid	0.0098	0.0714	0.0852	106	0.0714	0.0842	104	1	70-130/30
375-85-9	Perfluoroheptanoic acid	0.0068	0.0714	0.0759	97	0.0714	0.0783	100	3	70-130/30
335-67-1	Perfluorooctanoic acid	0.0387	0.0714	0.108	97	0.0714	0.110	100	2	70-130/30
375-95-1	Perfluorononanoic acid	ND	0.0714	0.0692	97	0.0714	0.0704	99	2	70-130/30
335-76-2	Perfluorodecanoic acid	ND	0.0714	0.0666	93	0.0714	0.0661	93	1	70-130/30
2058-94-8	Perfluoroundecanoic acid	ND	0.0714	0.0689	96	0.0714	0.0695	97	1	70-130/30
307-55-1	Perfluorododecanoic acid	ND	0.0714	0.0679	95	0.0714	0.0701	98	3	70-130/30
72629-94-8	Perfluorotridecanoic acid	ND	0.0714	0.0656	92	0.0714	0.0687	96	5	60-140/30
376-06-7	Perfluorotetradecanoic acid	ND	0.0714	0.0700	98	0.0714	0.0730	102	4	70-130/30
375-73-5	Perfluorobutanesulfonic acid	ND	0.0714	0.0689	96	0.0714	0.138	193*	67*	70-130/30
355-46-4	Perfluorohexanesulfonic acid	0.0094	0.0714	0.0731	89	0.0714	0.0776	95	6	70-130/30
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0714	0.0725	101	0.0714	0.0766	107	5	70-130/30
1763-23-1	Perfluorooctanesulfonic acid	0.0175	0.0714	0.0844	94	0.0714	0.0925	105	9	70-130/30
335-77-3	Perfluorodecanesulfonic acid	ND	0.0714	0.0623	87	0.0714	0.0576	81	8	60-130/30
754-91-6	PFOSA	ND ^b	0.0714	0.0721	101	0.0714	0.0671	94	7	70-130/30
2355-31-9	MeFOSAA	ND	0.0714	0.0673	94	0.0714	0.0680	95	1	70-130/30
2991-50-6	EtFOSAA	ND	0.0714	0.0695	97	0.0714	0.0710	99	2	70-130/30
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0714	0.0766	107	0.0714	0.0774	108	1	70-130/30
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0714	0.0693	97	0.0714	0.0697	98	1	70-130/30

CAS No.	ID Standard Recoveries	MS	MSD	JD32637-4A	JD32637-4A	Limits
13C4-PFBA		40%	39%	40%	68%	35-135%
13C5-PFPeA		51%	49%* ^c	51%	72%	50-150%
13C5-PFHxA		51%	50%	50%	69%	50-150%
13C4-PFHpA		62%	58%	61%	72%	50-150%
13C8-PFOA		70%	66%	68%	76%	50-150%
13C9-PFNA		74%	71%	72%	82%	50-150%
13C6-PFDA		86%	84%	86%	91%	50-150%
13C7-PFUnDA		92%	88%	93%	93%	40-140%
13C2-PFDoDA		88%	80%	89%	85%	40-140%
13C2-PFTeDA		73%	74%	78%	78%	30-130%
13C3-PFBS		63%	62%	62%	76%	50-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87768-MS	2Q78364.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109
OP87768-MSD	2Q78366.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109
JD32637-4A	2Q78362.D	1	10/17/21	NG	10/11/21	OP87768	S2Q1109
JD32637-4A ^a	2Q78363.D	5	10/17/21	NG	10/11/21	OP87768	S2Q1109

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JD32637-9, JD32637-1A, JD32637-2A, JD32637-3A, JD32637-4A, JD32637-5A

CAS No.	ID Standard Recoveries	MS	MSD	JD32637-4A	JD32637-4A	Limits
13C3-PFHxS		76%	72%	74%	82%	50-150%
13C8-PFOS		79%	73%	79%	86%	50-150%
13C8-FOSA		15%* ^c	15%* ^c	17%* ^c	33%	30-130%
d3-MeFOSAA		108%	104%	106%	102%	40-140%
d5-EtFOSAA		96%	91%	99%	92%	40-140%
13C2-4:2FTS		56%	54%			50-150%
13C2-6:2FTS		82%	78%	77%	85%	50-150%
13C2-8:2FTS		101%	96%	94%	92%	50-150%
13C3-HFPO-DA		73%	69%			50-150%

(a) Dilution required due to matrix interference (ID recovery standard failure).

(b) Result is from Run #2.

(c) Outside control limits.

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 2

Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87769-DUP	2Q78182.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107
FA89587-3	2Q78183.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JD32637-6A, JD32637-7A

CAS No.	Compound	FA89587-3 ug/l	DUP Q ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND	ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND	ND		nc	30
307-24-4	Perfluoroheptanoic acid	ND	ND		nc	30
375-85-9	Perfluoroheptanoic acid	ND	ND		nc	30
335-67-1	Perfluorooctanoic acid	ND	ND		nc	30
375-95-1	Perfluorononanoic acid	ND	ND		nc	30
335-76-2	Perfluorodecanoic acid	ND	ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND	ND		nc	30
307-55-1	Perfluorododecanoic acid	ND	ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND	ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND	ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND	ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND	ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND	ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0011	J	200*	30
335-77-3	Perfluorodecanesulfonic acid	ND	ND		nc	30
754-91-6	PFOSA	ND	ND		nc	30
2355-31-9	MeFOSAA	ND	ND		nc	30
2991-50-6	EtFOSAA	ND	ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND	ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND	ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FA89587-3	Limits
	13C4-PFBA	93%	86%	35-135%
	13C5-PFPeA	92%	86%	50-150%
	13C5-PFHxA	92%	85%	50-150%
	13C4-PFHpA	93%	86%	50-150%
	13C8-PFOA	93%	88%	50-150%
	13C9-PFNA	92%	89%	50-150%
	13C6-PFDA	96%	89%	50-150%
	13C7-PFUnDA	92%	83%	40-140%
	13C2-PFDoDA	87%	78%	40-140%
	13C2-PFTeDA	82%	75%	30-130%
	13C3-PFBS	93%	87%	50-150%

* = Outside of Control Limits.

Duplicate Summary

Page 2 of 2

Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP87769-DUP	2Q78182.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107
FA89587-3	2Q78183.D	1	10/15/21	NG	10/11/21	OP87769	S2Q1107

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JD32637-6A, JD32637-7A

CAS No.	ID Standard Recoveries	DUP	FA89587-3	Limits
	13C3-PFHxS	95%	91%	50-150%
	13C8-PFOS	94%	88%	50-150%
	13C8-FOSA	92%	79%	30-130%
	d3-MeFOSAA	92%	87%	40-140%
	d5-EtFOSAA	84%	80%	40-140%
	13C2-4:2FTS	84%	80%	50-150%
	13C2-6:2FTS	87%	82%	50-150%
	13C2-8:2FTS	88%	85%	50-150%
	13C3-HFPO-DA	102%		50-150%

* = Outside of Control Limits.

Isotope Dilution Standard Recovery Summary

Page 1 of 3

Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Method: EPA 537M BY ID

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6	S7	S8
JD32637-9	2Q78370.D	82	83	82	84	86	87	95	95
JD32637-1A	2Q78355.D	73	74	69	71	74	78	86	87
JD32637-1A	2Q78354.D	48	54	51	53	59	66	75	78
JD32637-2A	2Q78357.D	70	71	67	67	70	74	83	82
JD32637-2A	2Q78356.D	48	53	50	53	58	65	73	77
JD32637-3A	2Q78359.D	63	71	68	71	75	81	95	92
JD32637-3A	2Q78358.D	34* a	45* a	44* a	55	64	71	87	92
JD32637-4A	2Q78363.D	68	72	69	72	76	82	91	93
JD32637-4A	2Q78362.D	40	51	50	61	68	72	86	93
JD32637-5A	2Q78369.D	73	79	77	81	85	91	103	98
JD32637-5A	2Q78368.D	42	54	54	65	75	79	92	94
JD32637-6A	2Q78201.D	67	72	70	70	73	78	84	81
JD32637-6A	2Q78172.D	40	49* a	47* a	51	58	66	69	73
JD32637-7A	2Q78173.D	75	78	75	77	80	82	87	84
OP87768-BS	2Q78334.D	92	95	94	95	95	95	101	101
OP87768-MB	2Q78335.D	90	93	91	93	93	93	99	97
OP87768-MS	2Q78364.D	40	51	51	62	70	74	86	92
OP87768-MSD	2Q78366.D	39	49* a	50	58	66	71	84	88
OP87769-BS	2Q78170.D	97	97	96	95	96	97	99	96
OP87769-DUP	2Q78182.D	93	92	92	93	93	92	96	92
OP87769-MB	2Q78171.D	90	89	89	89	90	90	93	91
OP87769-MS	2Q78181.D	93	93	90	93	93	95	97	93

Isotope Dilution Standards

Recovery Limits

S1 = 13C4-PFBA
S2 = 13C5-PFPeA
S3 = 13C5-PFHxA
S4 = 13C4-PFHpA
S5 = 13C8-PFOA
S6 = 13C9-PFNA
S7 = 13C6-PFDA
S8 = 13C7-PFUnDA

35-135%
50-150%
50-150%
50-150%
50-150%
50-150%
50-150%
40-140%

(a) Outside control limits.

10.6.1
10

Isotope Dilution Standard Recovery Summary

Page 2 of 3

Job Number: JD32637

Account: ALNJ SGS Dayton, NJ

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

Method: EPA 537M BY ID

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S9	S10	S11	S12	S13	S14	S15	S16
JD32637-9	2Q78370.D	92	90	92	97	94	81	99	88
JD32637-1A	2Q78355.D	77	65	76	81	75	31	106	99
JD32637-1A	2Q78354.D	75	64	62	67	74	14* a	89	91
JD32637-2A	2Q78357.D	69	55	73	73	74	35	97	88
JD32637-2A	2Q78356.D	67	52	61	66	67	17* a	89	88
JD32637-3A	2Q78359.D	84	78	77	87	85	24* a	103	91
JD32637-3A	2Q78358.D	82	75	55	72	75	14* a	116	100
JD32637-4A	2Q78363.D	85	78	76	82	86	33	102	92
JD32637-4A	2Q78362.D	89	78	62	74	79	17* a	106	99
JD32637-5A	2Q78369.D	90	80	80	92	100	21* a	108	91
JD32637-5A	2Q78368.D	83	73	66	78	86	11* a	111	98
JD32637-6A	2Q78201.D	72	52	74	74	78	18* a	91	84
JD32637-6A	2Q78172.D	66	35	58	63	72	9* a	91	87
JD32637-7A	2Q78173.D	79	74	81	80	84	64	101	91
OP87768-BS	2Q78334.D	95	93	94	97	97	91	108	95
OP87768-MB	2Q78335.D	90	86	89	96	94	90	99	84
OP87768-MS	2Q78364.D	88	73	63	76	79	15* a	108	96
OP87768-MSD	2Q78366.D	80	74	62	72	73	15* a	104	91
OP87769-BS	2Q78170.D	87	77	96	98	97	87	93	84
OP87769-DUP	2Q78182.D	87	82	93	95	94	92	92	84
OP87769-MB	2Q78171.D	83	74	89	90	91	90	89	81
OP87769-MS	2Q78181.D	90	80	93	96	97	84	97	89

Isotope Dilution Standards

Recovery Limits

S9 = 13C2-PFDoDA
S10 = 13C2-PFTeDA
S11 = 13C3-PFBS
S12 = 13C3-PFHxS
S13 = 13C8-PFOS
S14 = 13C8-FOSA
S15 = d3-MeFOSAA
S16 = d5-EtFOSAA

40-140%
30-130%
50-150%
50-150%
50-150%
30-130%
40-140%
40-140%

(a) Outside control limits.

10.6.1
10

Isotope Dilution Standard Recovery Summary

Job Number: JD32637
Account: ALNJ SGS Dayton, NJ
Project: HWINJOMM: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Method: EPA 537M BY ID	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S17	S18
JD32637-9	2Q78370.D	90	94
JD32637-1A	2Q78355.D	81	92
JD32637-1A	2Q78354.D	67	87
JD32637-2A	2Q78357.D	79	81
JD32637-2A	2Q78356.D	64	85
JD32637-3A	2Q78359.D	85	94
JD32637-3A	2Q78358.D	70	96
JD32637-4A	2Q78363.D	85	92
JD32637-4A	2Q78362.D	77	94
JD32637-5A	2Q78369.D	96	99
JD32637-5A	2Q78368.D	83	102
JD32637-6A	2Q78201.D	78	87
JD32637-6A	2Q78172.D	63	78
JD32637-7A	2Q78173.D	85	91
OP87768-BS	2Q78334.D	96	99
OP87768-MB	2Q78335.D	90	92
OP87768-MS	2Q78364.D	82	101
OP87768-MSD	2Q78366.D	78	96
OP87769-BS	2Q78170.D	96	97
OP87769-DUP	2Q78182.D	87	88
OP87769-MB	2Q78171.D	87	89
OP87769-MS	2Q78181.D	96	95

Isotope Dilution Standards	Recovery Limits
S17 = 13C2-6:2FTS	50-150%
S18 = 13C2-8:2FTS	50-150%

10.6.1
10

Well Sampling Form

Page 1 of 1

Project Name Alltiff Landfill
 Location 579 Tift Street, Buffalo NY
 Sampling Event Annual/PFAS
 Job # HWOMMS08

Date 9/29/2021
 Field Team Benjamin Hendry
 Field Conditions 63°F, sunny

Well / Sample # Sump 1 Start Time 1245 End Time 1300
 Initial DTW 12.4
 Purge Method (circle) Peristaltic Ded. Pump Other _____ Measure Point (circle) PVC Steel Other _____
 Sample Method Peristaltic Pump
 Sample ID Sump 1 Sample Time 1255
 Dup. Sample ID N/A Dup. Time: _____
 QC Sample ID N/A QC Time: _____
 Depth to Bottom (from meas. pt., ft.): 16.95 Min. Purge Vol. (gal. or L): N/A Purge Rate (gpm or ml/min) 300
 WQ Parameter Measurement Technique (circle): Flow-thru cell In-situ Open container

Time	Volume Purged gal <u>Ⓢ</u>	pH SU (+/- 0.1)	Conductivity µS/cm (+/- 3%)	Turbidity NTU (+/- 10% if > 10 NTU)	DO mg/L (+/- 10%)	Temperature °C (+/- 3%)	Eh / ORP mv (+/- 10 mV)	DTW ft.
1200	Start pump, raise probes in well to raise LL							
1205	1.5	7.16	2650	78.40	1.06	16.7	-84.5	9.63
1210	3.0	7.21	2488	85.07	1.40	16.8	-72.9	9.17
1215	4.5	7.19	2251	92.45	2.61	16.6	-63.2	8.99
1220	6.0	7.19	2267	101.42	2.63	16.9	-56.7	8.78
1225	7.5	7.20	2278	108.31	2.88	17.2	-46.9	8.65
1230	9.0	7.21	2276	115.65	3.12	17.2	-48.5	8.60
1235	10.5	7.23	2264	121.29	3.50	17.2	-9.6	8.41
1240	12.0	7.23	2261	109.59	3.62	17.2	-0.1	8.19
1245	13.5	7.21	2263	100.30	3.29	17.3	8.1	8.17
1250	15.0	7.22	2298	93.27	3.09	17.4	17.3	8.20
1255	16.5	Take Sample						

Sample Collection Information

Parameter	Bottle Type	Volume	Quantity	Preservative	Field Filtered(Y/N)	Sample Taken(Y/N)	Notes
VOC	VOA	40mL	3	HCl	N	Y	
SVOC	Amber	1L	2	None	N	N	
1,4-Dioxane	Amber	1L	2	None	N	N	
Metals	Poly	500mL	1	HNO3	N	N	
PFAS	HDPE	250mL	2	None	N	Y	

Notes

Sample depth: 14.0 ft. Water has light orange tint, faint odor. Effervescence slightly on contact with HCl preservative. Collected additional 1 gal. in carboy for sump composite.

Well Sampling Form

Page 1 of 1

Project Name Alltiff Landfill
 Location 579 Tiff Street, Buffalo NY
 Sampling Event Annual/PFAS
 Job # HWOMM508

Date 9/29/2021
 Field Team Benjamin Hendry
 Field Conditions 65°F, sunny

Well / Sample # Sample 2
 Initial DTW: 19.11 Start Time 1345 End Time 1505
 Purge Method (circle): Peristaltic Ded. Pump Other: _____ Measure Point (circle): PVC Steel Other: _____
 Sample Method: Peristaltic Pump
 Sample ID Sample 2 Sample Time: 1500
 Dup. Sample ID N/A Dup. Time: _____
 QC Sample ID N/A QC Time: _____
 Depth to Bottom (from meas. pt., ft.): 22.75 Min. Purge Vol. (gal. or L): N/A Purge Rate (gpm or mLpm): 300
 WQ Parameter Measurement Technique (circle): Flow-thru cell In-situ Open container

Time	Volume Purged gal / L	pH SU (+/- 0.1)	Conductivity µS/cm (+/- 3%)	Turbidity NTU (+/- 10% if > 10 NTU)	DO mg/L (+/- 10%)	Temperature °C (+/- 3%)	Eh / ORP mv (+/- 10 mV)	DTW ft.
1350	Start pump raise probes to			raise 1h.	0.98			
1355	1.5	6.92	4867	30.78	0.91	15.8	-74.4	18.55
1400	3.0	6.86	4811	25.09	0.73	15.8	-71.6	18.20
1405	4.5	6.88	4762	46.31	0.81	16.5	-73.4	17.62
1410	6.0	6.93	4753	42.02	0.90	16.6	-73.0	20.16
1415	7.5	6.94	4849	42.26	0.98	15.9	-71.7	20.09
1420	Pump failure, missed		recording.	Field repair	pump 1418-1427.			
1430	9.0	6.92	4688	109.81	4.09	17.3	-63.2	15.91
1435	10.5	6.90	2434	102.31	6.10	16.6	1.5	15.30
1440	12.0	6.91	2289	116.88	6.21	16.5	8.6	14.73
1445	13.5	6.94	2275	87.28	6.27	16.7	7.1	14.02
1450	15.0	7.01	2279	90.62	5.85	16.7	16.8	13.68
1455	16.5	7.02	2280	89.80	5.80	16.6	19.0	12.89
1500	18.0	Sample taken						

Sample Collection Information

Parameter	Bottle Type	Volume	Quantity	Preservative	Field Filtered(Y/N)	Sample Taken(Y/N)	Notes
VOC	VOA	40mL	3	HCl	N	Y	
SVOC	Amber	1L	2	None	N	N	
1,4-Dioxane	Amber	1L	2	None	N	N	
Metals	Poly	500mL	1	HNO3	N	N	
PFAS	HDPE	250mL	2	None	N	Y	

Notes

Sample depth: 20.0 ft. Water has orange tint, faint odor. Collected additional 1 gal. in carboy for sump composite.

Project Name Altift Landfill
 Location 579 Tift Street, Buffalo NY
 Sampling Event Annual/PFAS
 Job # HWDMASDB

Date 9/29/2021
 Field Team Benjamin Hendry
 Field Conditions 64°F, Sunny

Well / Sample # Sample 3 Start Time 1545 End Time 1705
 Initial DTW 10.91
 Purge Method (circle) Peristaltic Measure Point (circle) PWT
 Submersible Peristaltic Dead Pump Other
 Sample Method Peristaltic Pump
 Sample ID Sample 3 Sample Time 1700
 Dup. Sample ID N/A Dup. Time
 QC Sample ID N/A QC Time
 Depth to Bottom (from meas. pt. ft.) 13.05 Min. Purge Vol. (gal. or L) N/A Purge Rate (gpm or ml/min) 300
 WG Parameter Measurement Technique (circle) Flow-thru cell In-situ Open container

Time	Volume Purged gal	pH SU (+/- 0.1)	Conductivity µS/cm (+/- 3%)	Turbidity NTU (+/- 10% if > 10 NTU)	DO mg/L (+/- 10%)	Temperature °C (+/- 3%)	Eh / ORP mv (+/- 10 mV)	DTW ft.
1555	Start pump							
1600	1.5	6.71	3418	30.13	0.61	15.4	-59.9	11.04
1605	3.0	6.70	3229	28.89	0.47	15.8	-59.5	11.12
1610	4.5	6.68	3108	31.08	0.42	16.4	-56.7	11.13
1615	6.0	6.66	3106	27.82	0.35	16.3	-55.8	11.12
1620	7.5	6.65	3108	24.43	0.32	16.1	-55.7	11.13
1625	9.0	6.64	3107	20.09	0.29	16.0	-55.4	11.14
1630	11.5	6.64	3108	18.13	0.28	16.1	-55.9	11.14
1635	13.0	6.64	3109	17.01	0.28	16.1	-56.0	11.15
1640	14.5	6.64	3115	15.66	0.27	16.3	-56.4	11.16
1645	16.0	6.64	3128	14.96	0.27	16.3	-57.1	11.17
1650	17.5	6.65	3127	14.63	0.28	16.5	-57.3	11.16
1655	19.0	6.65	3135	14.48	0.27	16.4	-58.1	11.17
1700	20.5 Samples taken							

Sample Collection Information

Parameter	Bottle Type	Volume	Quantity	Preservative	Field Filtered(Y/N)	Sample Taken(Y/N)	Notes
VOC	VOA	40mL	3	HCl	N	Y	
SVOC	Amber	1L	2	None	N	N	
1,4-Dioxane	Amber	1L	2	None	N	N	
Metals	Poly	500mL	1	HNO3	N	N	
PFAS	HDPE	250mL	2	None	N	Y	

Notes

Sample depth: 12.40 ft. Water has orange tint, no odor. Collected additional 1 gal. in carboy for sump composite.

Project Name Alltiff Landfill
 Location 579 Tift Street, Buffalo NY
 Sampling Event Annual/PFAS
 Job # HWOMMS08

Date 9/29/2021
 Field Team Benjamin Hendry
 Field Conditions 60°F, Sunny

Well / Sample # Sump 4 Start Time 1720 End Time 1920
 Initial DTW: 8.70
 Purge Method (circle): Peristaltic Measure Point (circle): PVC
 Submersible Peristaltic Ded Pump Other Steel Other
 Sample Method Peristaltic Pump
 Sample ID Sump 4 Sample Time: 1830
 Dup. Sample Sump 4 Dup. Time: 1830
 QC Sample ID Sump 4 MS QC Time: 1830
 Depth to Bottom (from meas. pt., ft.): 17.75 Min. Purge Vol. (gal. or L): NA Purge Rate (gpm or mL/min): 300
 WQ Parameter Measurement Technique (circle): Flow-thru cell In-situ Open container

Time	Volume Purged gal	pH SU (+/- 0.1)	Conductivity µS/cm (+/- 3%)	Turbidity NTU (+/- 10% if > 10 NTU)	DO mg/L (+/- 10%)	Temperature °C (+/- 3%)	Eh / ORP mv (+/- 10 mV)	DTW ft.
1730	1.5	6.80	2746	4.51	0.93	16.6	-69.8	8.73
1735	3.0	6.72	2748	3.02	0.78	17.6	-70.2	8.74
1740	4.5	6.68	2753	3.91	0.61	16.9	-71.1	8.74
1745	6.0	6.68	2760	4.18	0.34	16.4	-71.9	8.75
1750	7.5	6.69	2753	3.81	0.32	16.4	-72.7	8.78
1755	9.0	6.69	2728	3.57	0.31	16.4	-73.8	8.79
1800	10.5	6.68	2759	3.48	0.30	16.3	-73.8	8.80
1805	12.0	6.67	2786	3.33	0.30	16.2	-73.9	8.81
1810	13.5	6.67	2802	3.81	0.30	16.2	-74.3	8.82
1815	15.0	6.67	2834	4.00	0.29	16.1	-74.7	8.81
1820	17.5	6.69	2800	3.61	0.29	16.1	-75.4	8.82
1825	19.0	6.70	2775	3.36	0.29	16.2	-76.1	8.83
1830	20.5	Take Samples						

Sample Collection Information

Parameter	Bottle Type	Volume	Quantity	Preservative	Field Filtered(Y/N)	Sample Taken(Y/N)	Notes
VOC	VOA	40mL	3	HCl	N	Y	
SVOC	Amber	1L	2	None	N	N	
1,4-Dioxane	Amber	1L	2	None	N	N	
Metals	Poly	500mL	1	HNO3	N	N	
PFAS	HDPE	250mL	2	None	N	Y	

Notes

Sample depth: 15.0 ft. Water has slight orange tint, no odor. Collected additional 1 gal in carboy for Sump composite. Increased pump rate to 400 mL/min to sample due to high sample volume.



Date	9/29/2021
Field Team	Benjamin Hendry
Field Conditions	60°F, dark, clear.

[illegible]

Sample Collection Information							
Parameter	Bottle Type	Volume	Quantity	Preservative	Field Filtered(Y/N)	Sample Taken(Y/N)	Notes
VOC	VOA	40mL	3	HCl	N	Y	
SVOC	Amber	1L	2	None	N	Y	
1,4-Dioxane	Amber	1L	2	None	N	Y	
Metals	Poly	500mL	1	HNO3	N	Y	
PFAS	HDPE	250mL	2	None	N	Y	

Notes

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 HDPE & Silicon tubing
- ☒ 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~~ N/A

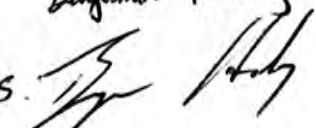
Equipment Decontamination:

- ☒ "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

Benjamin Hendry

09-29-21, 0925. 

2021-09-29

Alliott Landfill Annual / PFAS Sampling
Benjamin HencheyYSI CALIBRATION LOG

Meter: YSI DSS Pro, sourced from Pine Environmental. See attached rental/cal log from Pine for more info.

Parameter	Value	Sol. Source	Sol. Lot #	Sol. Exp.	AM Cal. APPR. 0840-0900		PM Cal. APPR. 1320-1335		Notes
					Fund	Left	Fund	Left	
PH	4.0	Aqua Phosnix	16C758	3-31-23	4.01	4.00	4.00	4.00	
PH	7.0	Aqua Phosnix	16C1089	3-31-23	7.02	7.01	7.00	7.01	
PH	10.0	Aqua Phosnix	16C436	3-31-23	10.02	10.00	9.98	10.00	
mV	240	Aqua Phosnix	16C715	10-31-21	239.6	240.1	243.6	240.0	
$\mu S/cm$	1413	Aqua Phosnix	16C1036	3-31-22	1414	1413	1409	1412	
DO (mg/L)	100	N/A, open air test.	N/A	—	100	100	100	100	Shows 100% in open air.
Temp	N/A	N/A, open air test.	N/A	—	17.5, accurate		16.9 - accurate		Accurate to air temp.
Al	0 sln	Amco	21150206	05/22	All 0s	—	All 0s	—	0 cal. sln. for all parameters.
NTU	124.0	GFS Chemicals	21010211	1-21-22	124.1	124.0	129.1	124.1	

Tech: Benjamin Henchey

Signature: NOTE: All cal. solutions are from Pine Env, sourced by them.
Photos of bottles attached. See rental form for s/n.



ORDER

RENTAL

Page: 1(1)

Pine Environmental Services LLC
405 Cambridge Ave
Syracuse, NY - 13208
Main: (315) 455-5100 Toll Free: (877) 903-7463
Fax: (315) 455-5130
www.pine-environmental.com

Order Date
09/22/21
Shipped Date
09/28/21
Begin Date
09/29/21

Order #
A729537
Requested Date
092221
Requested Time

Customer
CH2M HILL
P.O. Box 241329
TAX ID #59-0918189
DENVER, CO - 80224
United States

Ship To
Pine Environmental
405 Cambridge Ave
Syracuse, NY - 13208
United States
Attn: BEN HENDRY
Phone: 315.806.4029

Prepared By
Charity Shumer

Email:benjamin.hendry@jacobs.com

Customer #
21200015
Currency
USD US Dollar

Project #

Purchase Order #
667828

Payment Terms
Net 30 Days
Delivery Method
Pick Up

Ordered By
BEN HENDRY
315.806.4029

Item #	Type	Description	Whse	Qty	Shipped Qty	U/M	ID#
55020	RENT	YSI ProDSS Display (No GPS)	R13	1.00	1.00	EA	49451
56003	RENT	DSS-10 Meter 4 port Cable Assembly, No Depth	R13	1.00	1.00	EA	49452
51860	RENT	PINE Peri-Pump (DC Only)	R13	1.00	1.00	EA	10985
90238	RENT	12V Rechargeable Battery (small in bag)	R13	1.00	1.00	EA	

Environmental Services LLC
405 Cambridge Ave
Syracuse, NY - 13208
Main: (315) 455-5100 Toll Free: (877) 903-7463
Fax: (315) 455-5130
www.pine-environmental.com

Order Date
09/22/21
Shipped Date
09/28/21

Order #
A729537
Requested Date
092221
Requested Time

Customer
CH2M HILL
P.O. Box 241329
TAX ID #59-0918189
DENVER, CO - 80224
United States

Ship To
Pine Environmental
405 Cambridge Ave
Syracuse, NY - 13208
United States
Attn: BEN HENDRY
Phone: 315.806.4029

Prepared By
Charity Shumer

Email:benjamin.hendry@jacobs.com

Project #

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667828

Payment Terms
Net 30 Days
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BEN HENDRY
315.806.4029

Customer #
21200015
Currency
USD US Dollar

Item #	Type	Description	Whse	Qty	Shipped Qty	U/M	ID#
74101	SALE	Tubing Silicone 3/16ID x 3/8OD	S13	25.00	25.00	FT	
74122	SALE	Tubing HDPE 1/4" ID X 3/8" OD 100'	S13	1.00	1.00	ROL	

INSTRUMENT QC/ PACKING LIST

Description	YSI ProDSS sonde and display
Sonde ID#	49452
Display ID#	49451
Date Calibrated	9/27/2021



www.pine-environmental.com

Standard Items	Prepared	QC check	Received by customer	Returned to Pine
YSI ProDSS sonde w/ 10 m cable and case	☒	☒	☐	☐
YSI ProDSS Display	☒	☒	☐	☐
Manual	☒	☒	☐	☐
Battery Charger	☒	☒	☐	☐
• USB to Micro USB				
• AC adapter				
Calibration/ Storage cup	☒	☒	☐	☐
• sponge				
• O-ring				
• Retaining ring				
• Bottom cap				
Flow cell	☒	☒	☐	☐
• Top				
• Bottom				
• Center window				
• (2) O-rings				
Probe Guard	☒	☒	☐	☐
2 of each barb size (1/4, 3/8, 1/2)	☒	☒	☐	☐
Comm. cable: Micro USB to Female USB	☒	☒	☐	☐
YSI ProDSS Software	☒	☒	☐	☐
Calibration kit, pH (4.7,10), conductivity, 124 NTU turbidity, and ORP	☒	☒	☐	☐
ProCal Calibration Sheet	☒	☒	☐	☐
Supporting Items				
Probe guard weight (required w/ cables > 10m.)	☐	☐	☐	☐

Prepared by:

JB

QC checked by:

Date:

9-27-21

This packing list is to ensure that every item needed to operate the unit was sent and received. Upon receiving a shipment, please fill out the "Received by customer" column. Call Pine within 24 hours of receiving the equipment if any pieces are missing, damaged, or malfunctioning. Thank you for choosing Pine Environmental Services LLC

INSTRUMENT CALIBRATION REPORT



Pine Environmental Services LLC

405 Cambridge Ave
Syracuse, NY 13208
Toll-free: (877) 903-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 49452

Description YSI Pro DSS Sonde

Calibrated 9/27/2021 2:32:06PM

Group # 5
Group Name Dissolved Oxygen Span
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
100.00 / 100.00	%	100.00	%	101.90	100.00	0.00%	Pass

Test Instruments Used During the Calibration

<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>(As Of Cal Entry Date)</u>	
					<u>Last Cal Date/ Opened Date</u>	<u>Next Cal Date / Expiration Date</u>
NYS COND 1.413 - 1GC030	NYS COND 1.413	AquaPhoenix Scientific	31986	1GC030		3/31/2022
NYS ORP 240 - 1GD531	NYS ORP 240	AquaPhoenix Scientific	32001	1GD531		1/31/2022
NYS PH 10 - 9GL648	NYS PH 10	Pine Environmental Services, Inc.	32034	9GL648		12/31/2021
NYS PH 4 - 9GL804	NYS PH 4	AquaPhoenix Scientific	32017	9GL804		12/31/2021
NYS PH 7 - 0GJ538	NYS PH 7	AquaPhoenix Scientific	32025	0GJ538		12/29/2022
NYS TURB 0 NTU - 21030147	0 NTU TURBIDITY STANDARD	GFS	32101	21030147		3/31/2022
NYS TURB 124 NTU - 21A20490054	124 NTU TURBIDITY STANDARD	YSI	31963			1/31/2022

Notes about this calibration

Calibration Result Calibration Successful

Who Calibrated Joseph P. Burkhart

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

INSTRUMENT CALIBRATION REPORT



Pine Environmental Services LLC

405 Cambridge Ave
Syracuse, NY 13208
Toll-free: (877) 903-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 49452

Description YSI Pro DSS Sonde

Calibrated 9/27/2021 2:32:06PM

Manufacturer YSI

Model Number Pro DSS

Serial Number/ Lot 20k102500

Number

Location New York

Department

State Certified

Status Pass

Temp °C 21

Humidity % 46

Calibration Specifications

Group # 1

Group Name PH

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	6.93	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.11	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.05	10.00	0.00%	Pass

Group # 2

Group Name Turbidity

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	NTU	0.00	NTU	0.00	0.00	0.00%	Pass
124.00 / 124.00	NTU	124.00	NTU	127.00	124.00	0.00%	Pass

Group # 3

Group Name Conductivity

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.000

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.402	1.413	0.00%	Pass

Group # 4

Group Name Redox (ORP)

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.00 / 240.00	mv	240.00	mv	233.00	240.00	0.00%	Pass

Group # 5

Group Name Dissolved Oxygen Span

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
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 **PINE**

pH 10 buffer solution

Exp: 03/31/2023

Lot#: 1GC436

Manufacturer: AquaPhoenix Scientific

Headquarters 800-301-9663

www.pine-environmental.com

 **PINE**

pH 4 buffer solution

Exp: 03/31/2023

Lot#: 1GC758

Manufacturer: AquaPhoenix Scientific

Headquarters 800-301-9663

www.pine-environmental.com

 **PINE**

124.0 NTU Turbidity Solution

When using YSI 6136 turbidity sensor, calibrate to 124.0 NTU
When using EXO turbidity sensor, calibrate to 124.0 NTU

Exp: 01/21/2022

Lot#: 21010211

Manufacturer: GFS Chemicals

Headquarters 800-301-9663

www.pine-environmental.com

 **PINE**

240.0 mV ORP Solution

Exp: 10/31/2021

Lot#: 1GC715

Manufacturer: AquaPhoenix Scientific

Headquarters 800-301-9663

www.pine-environmental.com

 **PINE**

0.0 Auto Cal

Exp: MAY 2022

Lot#: 21150206

Manufacturer: AMCO

Headquarters: 585-424-2140

www.pine-environmental.com

 **PINE**

pH 7 buffer solution

Exp: 03/31/2023

Lot#: 1GC1089

Manufacturer: AquaPhoenix Scientific

Headquarters 800-301-9663

 **PINE**

1.413 mS/cm conductivity standard

Exp: 03/31/2022

Lot#: 1GC1036

Manufacturer: AquaPhoenix Scientific

Headquarters 800-301-9663

www.pine-environmental.com

SGS Laboratories

2235 Route 130
Dayton, NJ 08810
(973) 732-2389-0200

Chain Of Custody/Analysis Request
Project Name: Buffalo Albitt Landfill
Lab Project Name: H1AME; 30130-Albitt Landfill, 579 Tift Street, Buffalo, NY

AFST Ref: 3809.5915

COC #:

20210929-Albitt-Semi

Lab Use Only

Lab SDG

Lab ID

Client Contact (name, etc., address)

Eric A. Bivins/Analyst
Horswell International
401 Plainfield Road, Suite 300
Stamford, New York 12157

Email: eric.bivins@horswell.com

Hardware Report Etc.

Do Not Send Hardware Unless Requested

Invoice Etc.

Privileged & Confidential

LDD Etc.

John Formosa (john.formosa@jacobs.com)

Facility Name

Albitt Landfill

Location of Site

Buffalo, New York

Site Code

30130

Sample

Benjamin Hendry

Sampling Company

Jacobs

P#

A000004756

Analysis Turnaround Time

Standard

Y

Risk Charges Authorized For

N

Turn Around Time Required

7 Days

Preservative

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Composite (Yes/No)

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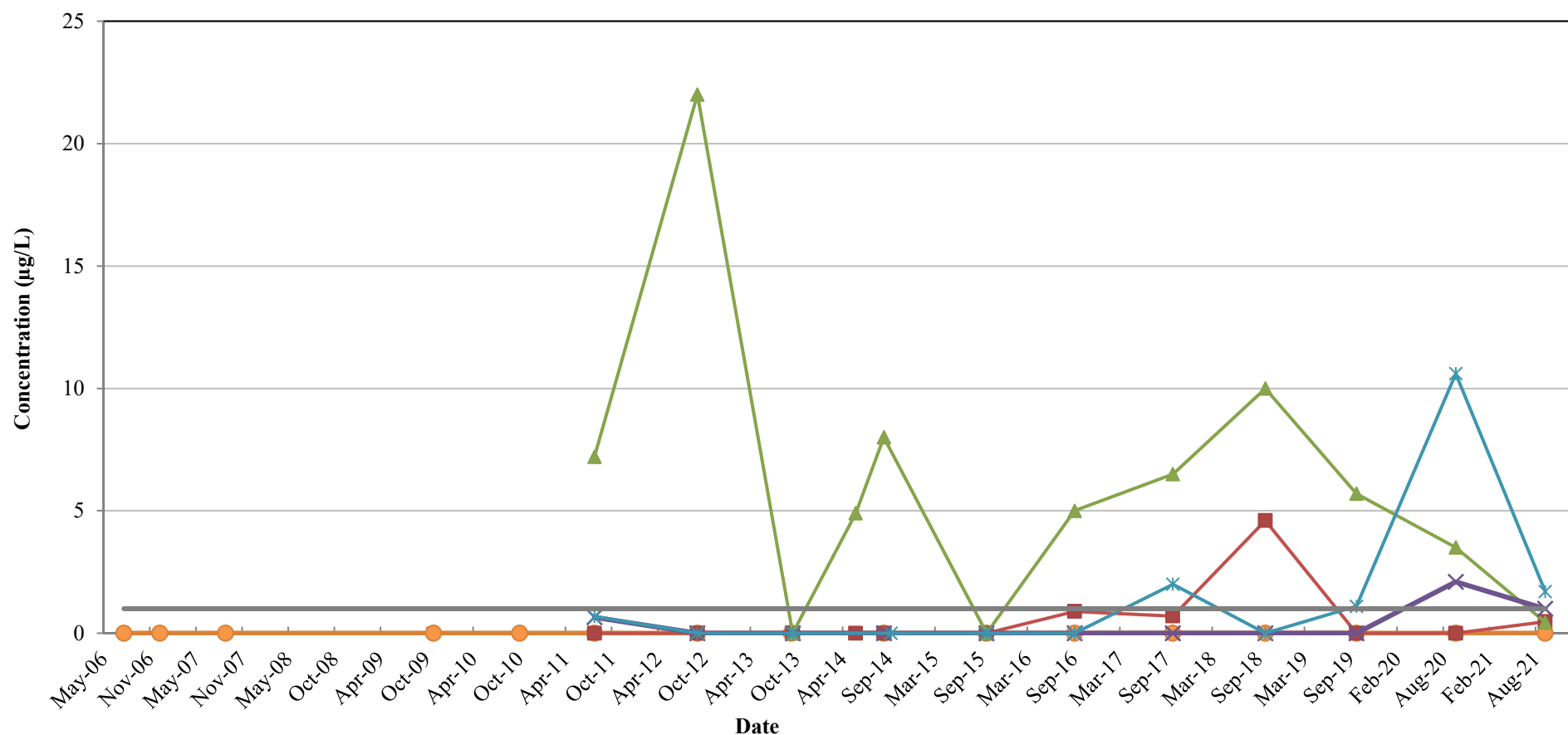
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1

ATTACHMENT B.8

GROUNDWATER TREND GRAPHS



Notes:

µg/L = micrograms per liter

—●— MW-02

—■— Sump 1

—▲— Sump 2

—×— Sump 3

—*— Sump 4

— NYSDEC Standard

TITLE:

Benzene Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

 **MACTEC**

APPROVED

RTB

FIGURE

DRAFTED

ZRP

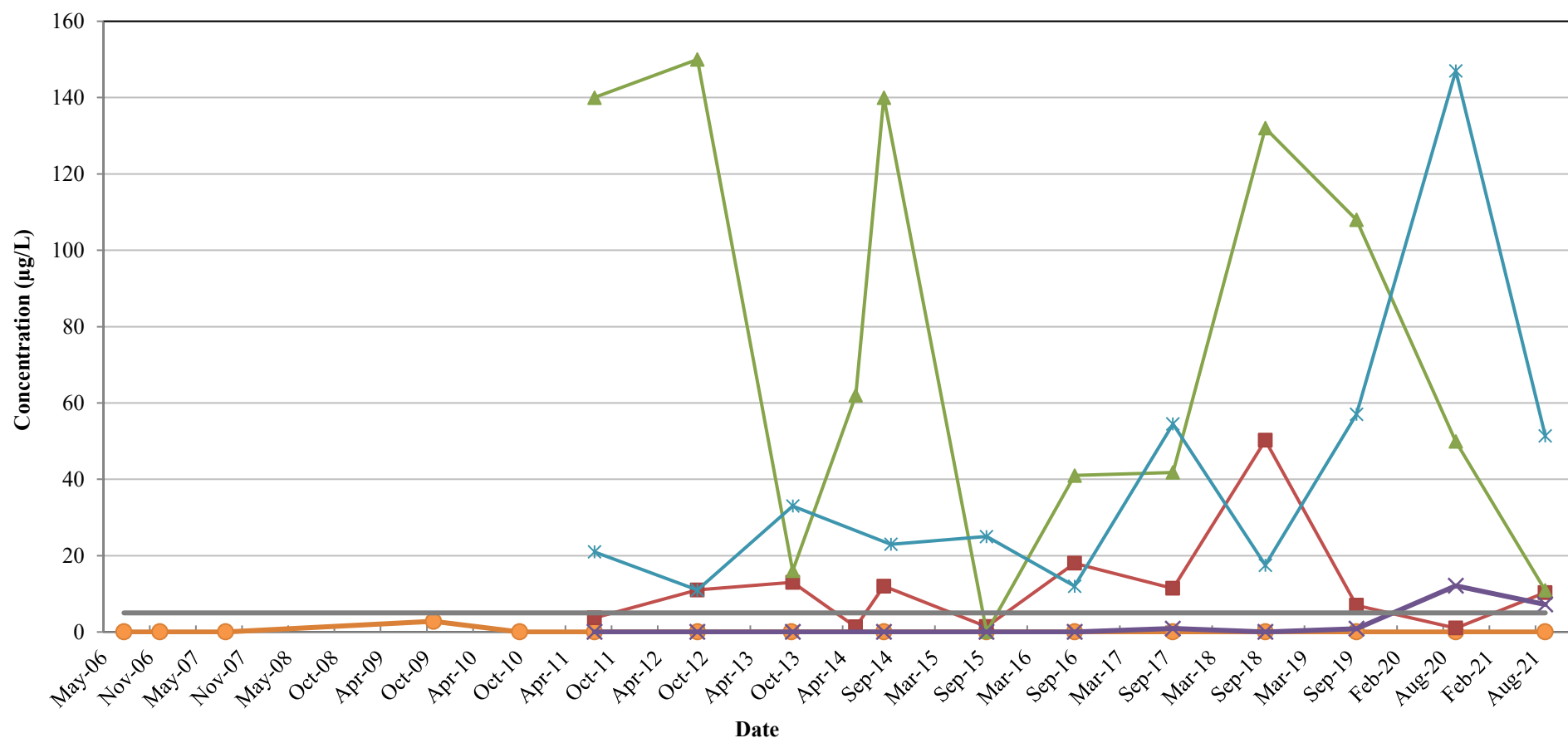
PROJECT#

3616216168

1

DATE

4-12-22



Notes:

µg/L = micrograms per liter

○ MW-02 ■ Sump 1 ▲ Sump 2
 ✕ Sump 3 * Sump 4 — NYSDEC Standard

TITLE:

Chlorobenzene Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED

RTB

FIGURE

DRAFTED

ZRP

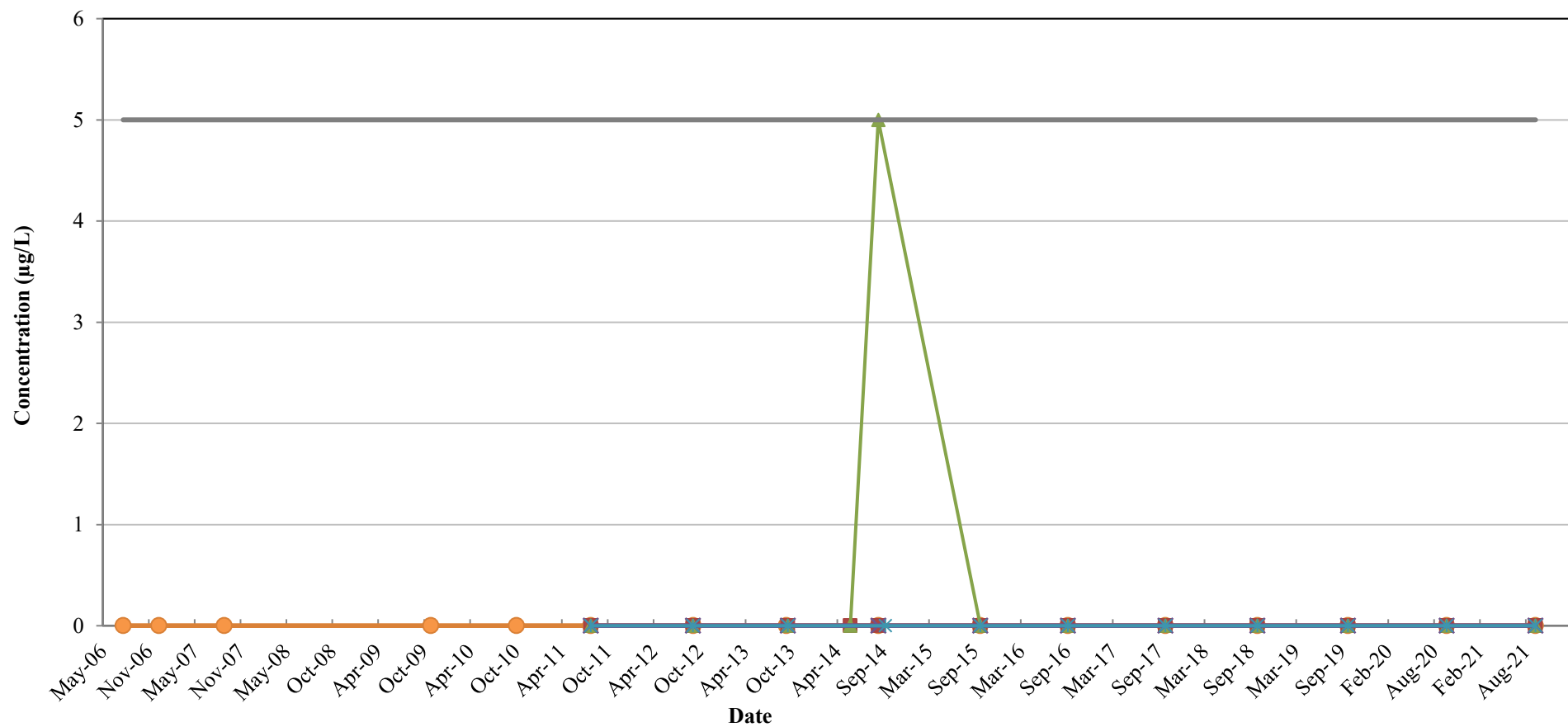
PROJECT#

3616216168

2

DATE

4-12-22



Notes:

µg/L = micrograms per liter

● MW-02 ■ Sump 1 ▲ Sump 2
 ✕ Sump 3 ✱ Sump 4 — NYSDEC Standard

TITLE:

Ethylbenzene Concentration Trends

LOCATION:

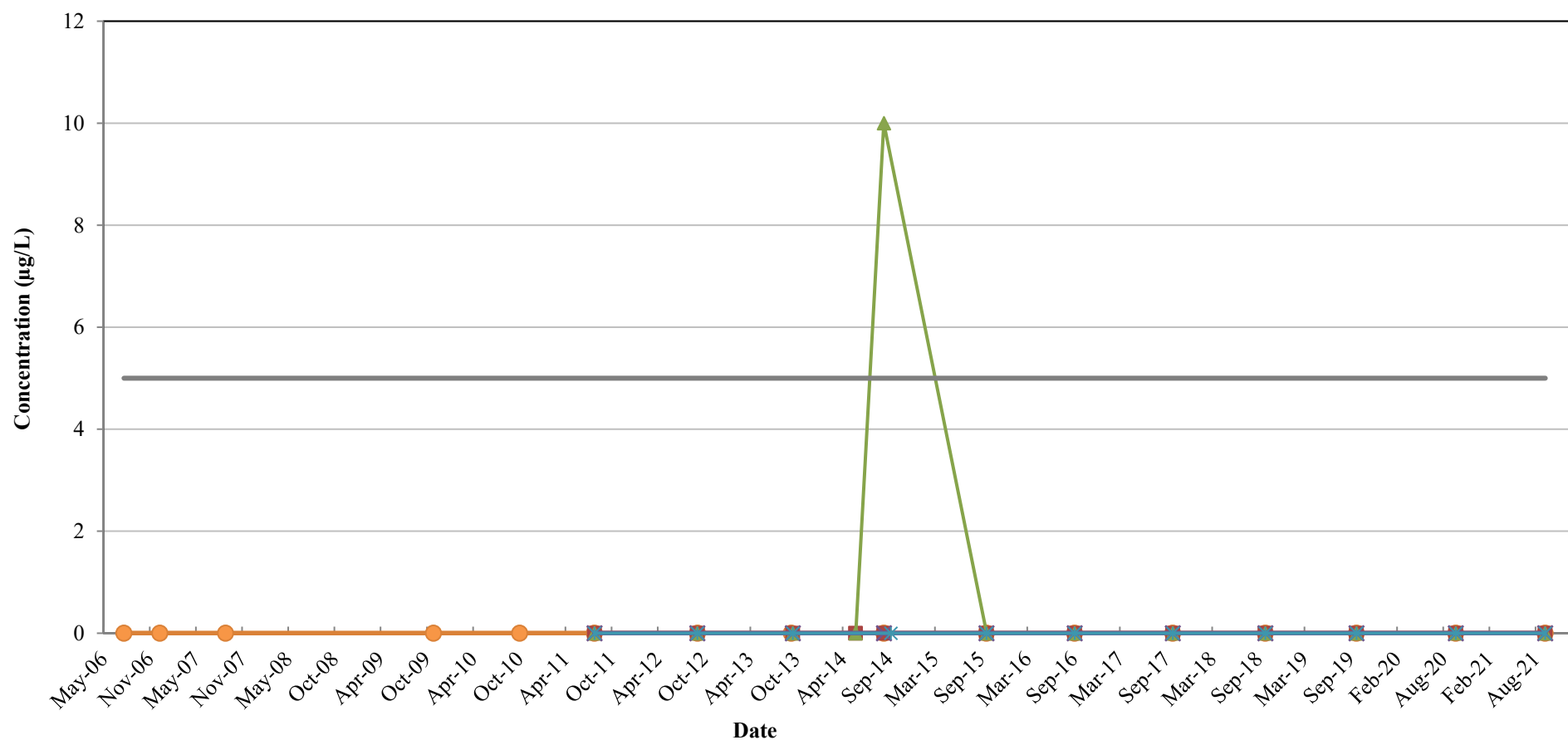
**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**



APPROVED	RTB
DRAFTED	ZRP
PROJECT#	3616216168
DATE	4-12-22

FIGURE

3



Notes:

µg/L = micrograms per liter

○ MW-02 ■ Sump 1 ▲ Sump 2
 ✕ Sump 3 * Sump 4 — NYSDEC Standard

TITLE:

Total Xylenes Concentration Trends

LOCATION:

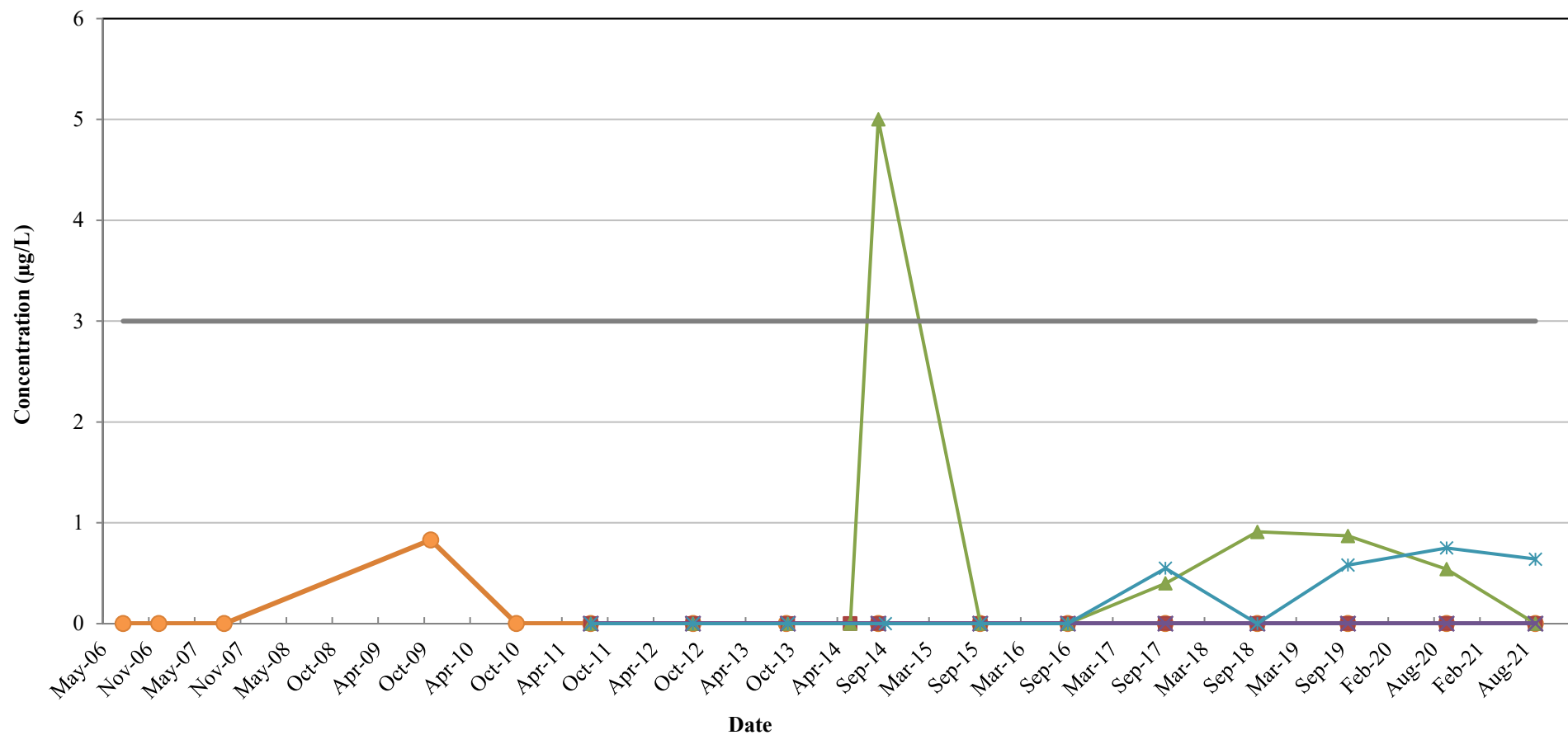
**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED	RTB
DRAFTED	ZRP
PROJECT#	3616216168
DATE	4-12-22

FIGURE

4



Notes:

µg/L = micrograms per liter

—●— MW-02

—■— Sump 1

—▲— Sump 2

—×— Sump 3

—*— Sump 4

— NYSDEC Standard

TITLE:

1,2-dichlorobenzene Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED

RTB

FIGURE

DRAFTED

ZRP

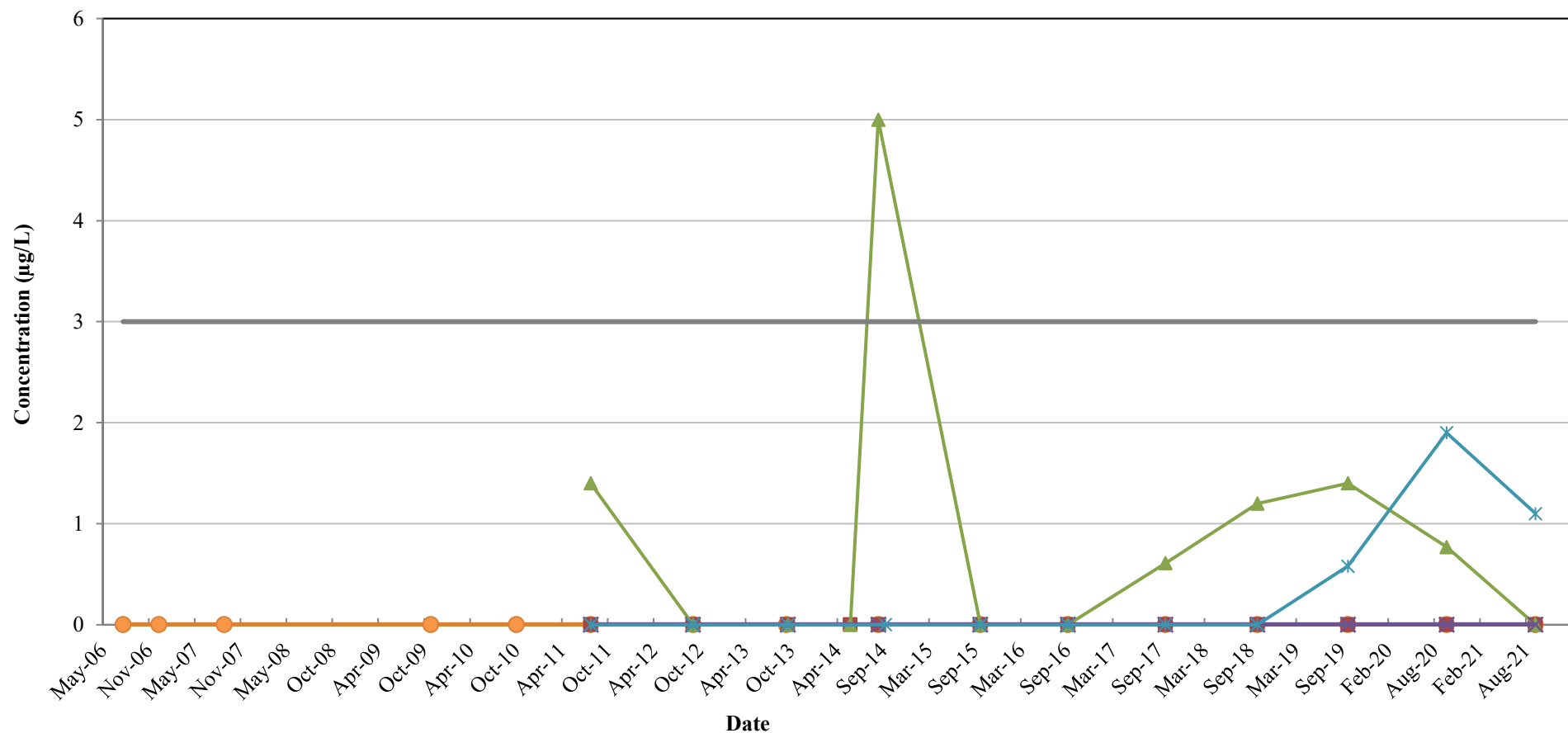
PROJECT#

3616216168

5

DATE

4-12-22



Notes:

µg/L = micrograms per liter

—○— MW-02

—■— Sump 1

—▲— Sump 2

—×— Sump 3

—×— Sump 4

— NYSDEC Standard

TITLE:

1,4-dichlorobenzene Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED

RTB

DRAFTED

ZRP

PROJECT#

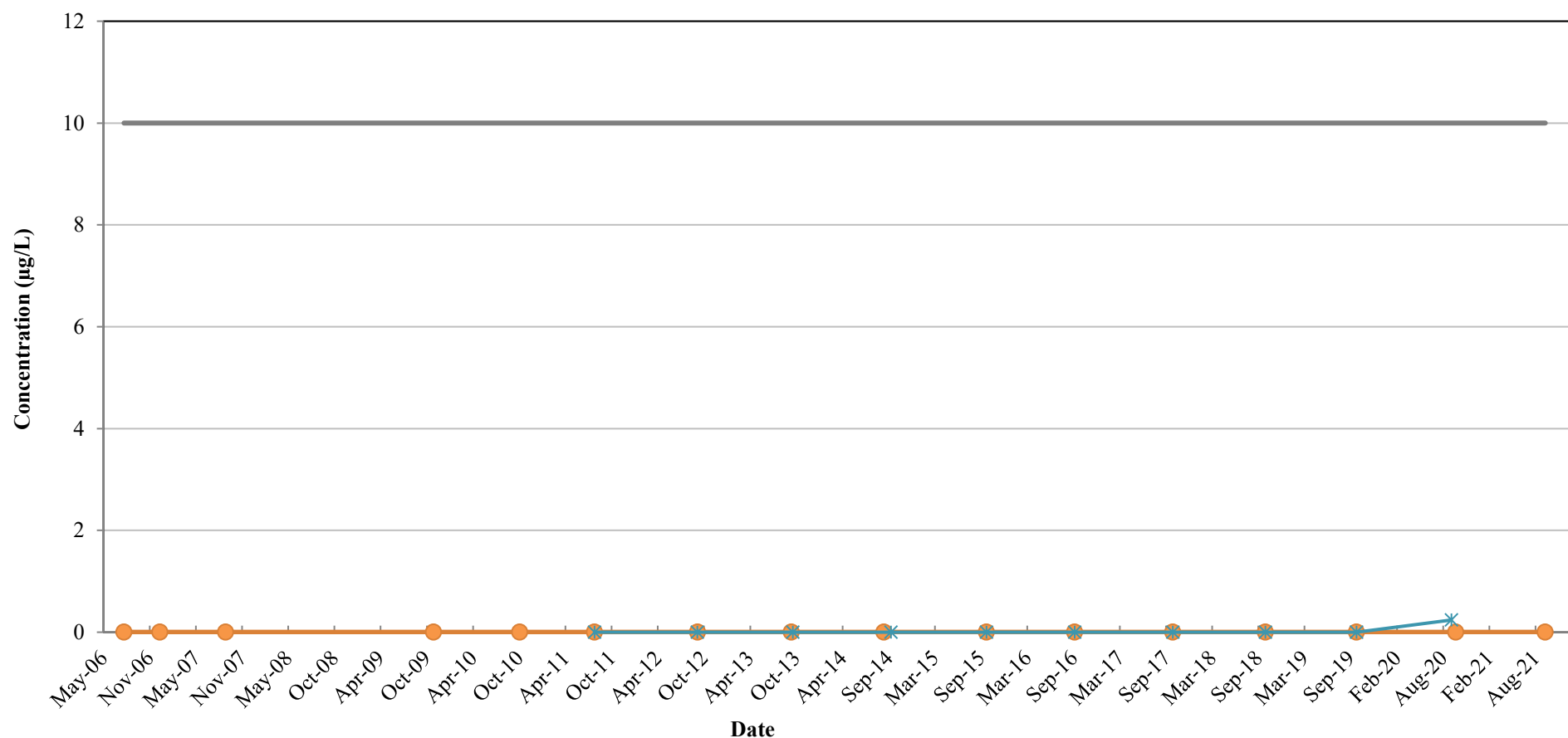
3616216168

DATE

4-12-22

FIGURE

6



Notes:

µg/L = micrograms per liter

- MW-02
- Sump 1
- ▲ Sump 2
- ✕ Sump 3
- ✕ Sump 4
- NYSDEC Standard

TITLE:

Naphthalene Concentration Trends

LOCATION:

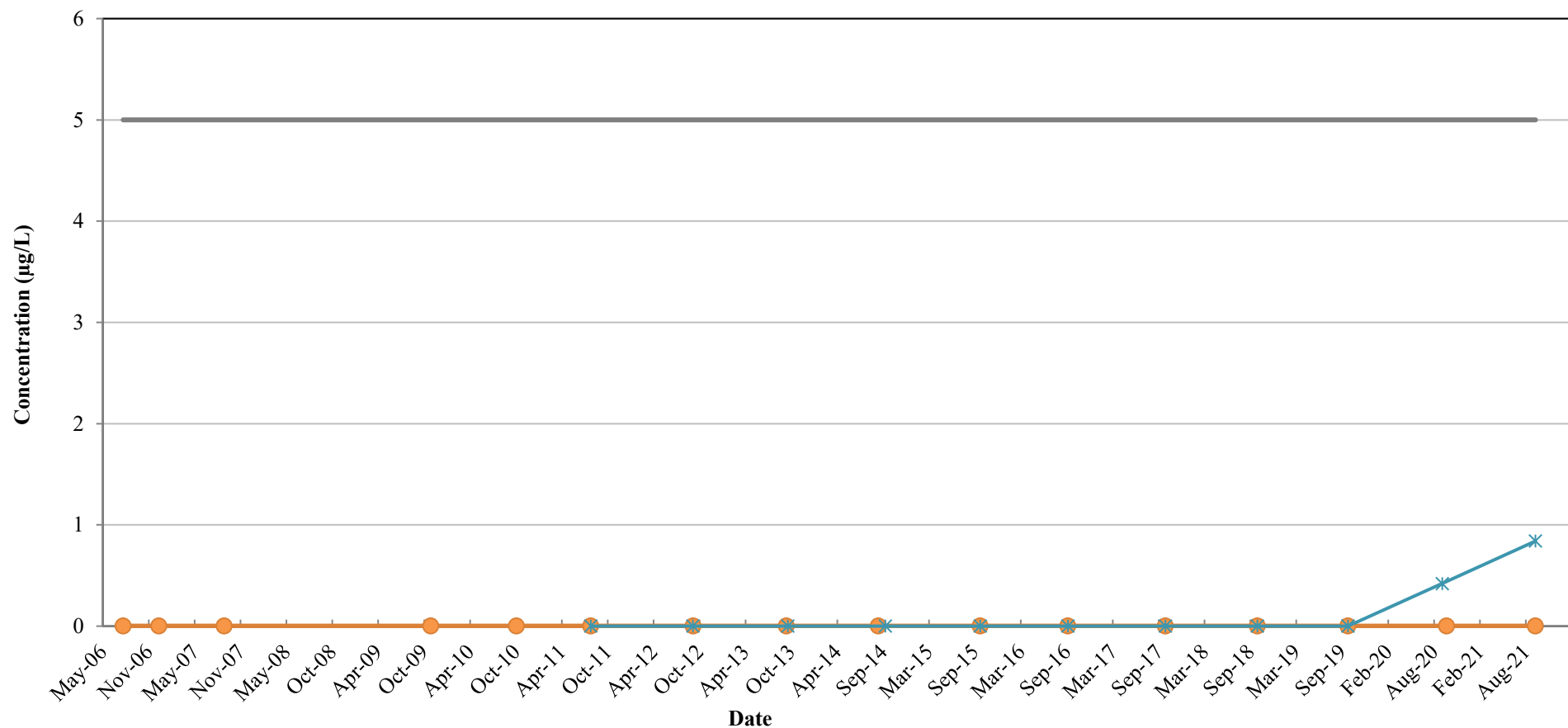
**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED	RTB
DRAFTED	ZRP
PROJECT#	3616216168
DATE	4-12-22

FIGURE

7



Notes:

µg/L = micrograms per liter

—●— MW-02

—■— Sump 1

—▲— Sump 2

—×— Sump 3

—*— Sump 4

— NYSDEC Standard

TITLE:

4-Chloroaniline Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

 **MACTEC**

APPROVED

RTB

FIGURE

DRAFTED

ZRP

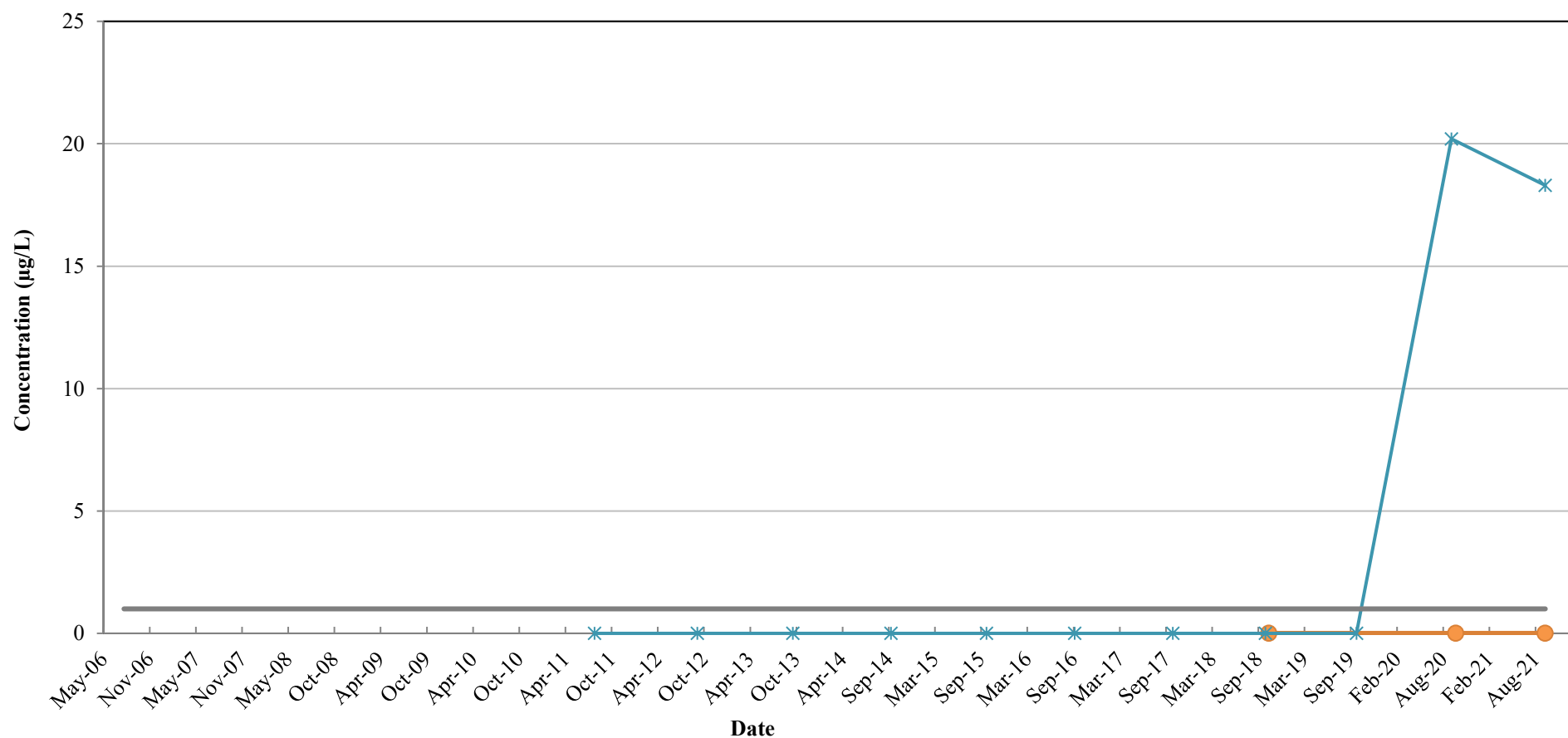
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PROJECT#

3616216168

DATE

4-12-22



Notes:

µg/L = micrograms per liter

● MW-02

■ Sump 1

▲ Sump 2

✱ Sump 3

✱ Sump 4

— NYSDEC Standard

TITLE:

1,4-dioxane Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED

RTB

FIGURE

DRAFTED

ZRP

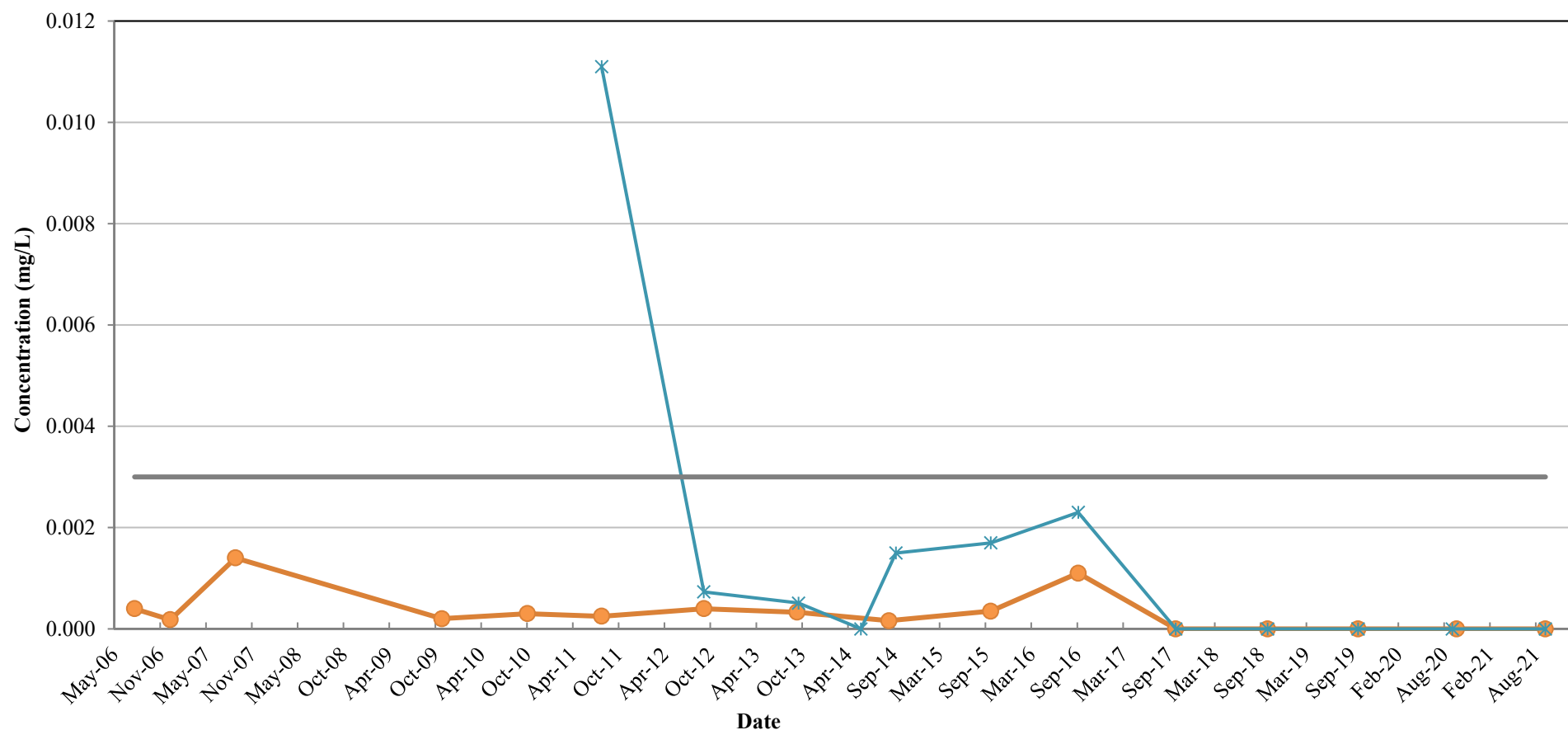
PROJECT#

3616216168

9

DATE

4-12-22



Notes:

mg/L = milligrams per liter

MW-02 Sump 1 Sump 2
 Sump 3 Sump 4 NYSDEC Standard

TITLE:

Antimony Concentration Trends

LOCATION:

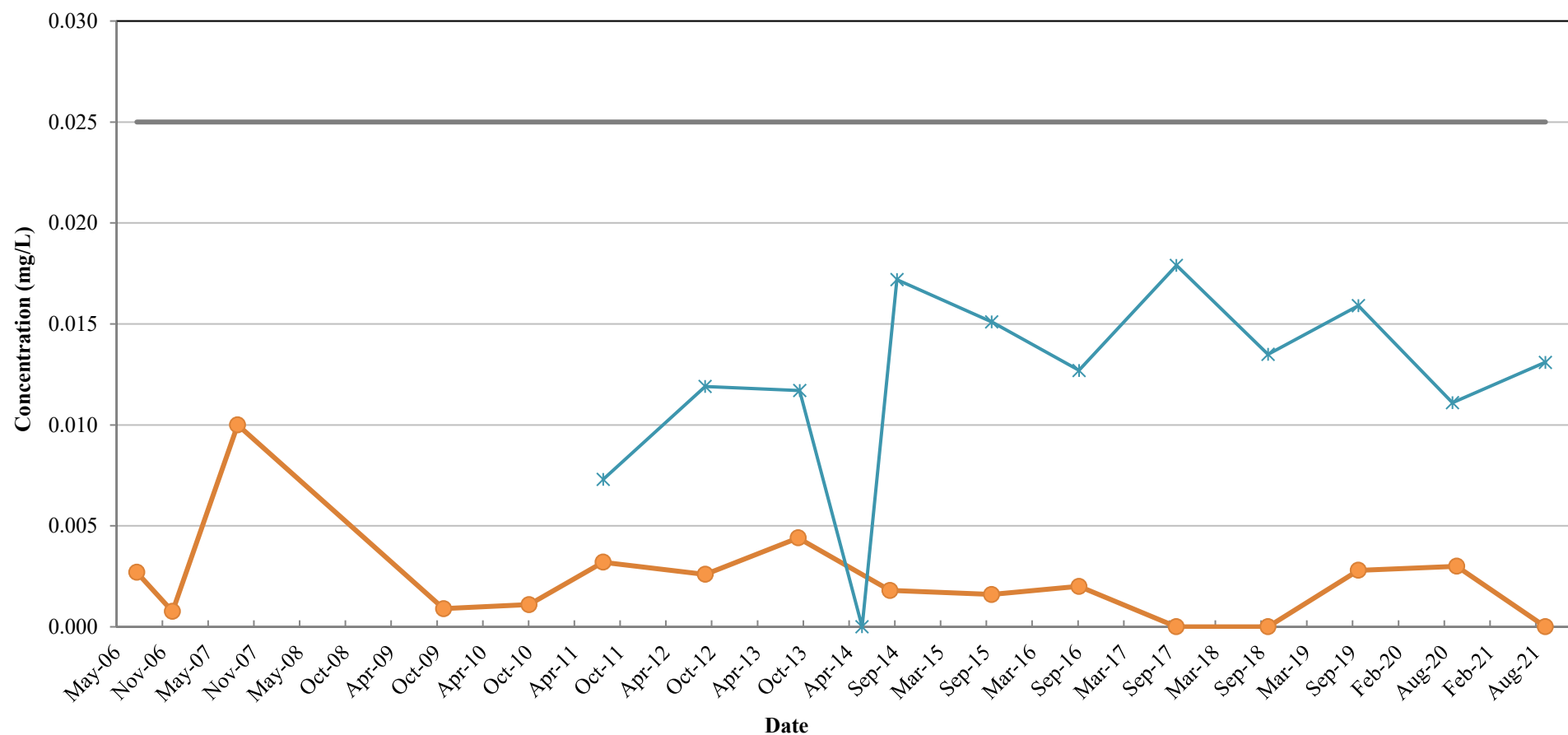
**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED	RTB
DRAFTED	ZRP
PROJECT#	3616216168
DATE	4-12-22

FIGURE

10



Notes:

mg/L = milligrams per liter

MW-02 Sump 1 Sump 2
 Sump 3 Sump 4 NYSDEC Standard

TITLE:

Arsenic Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED

RTB

DRAFTED

ZRP

PROJECT#

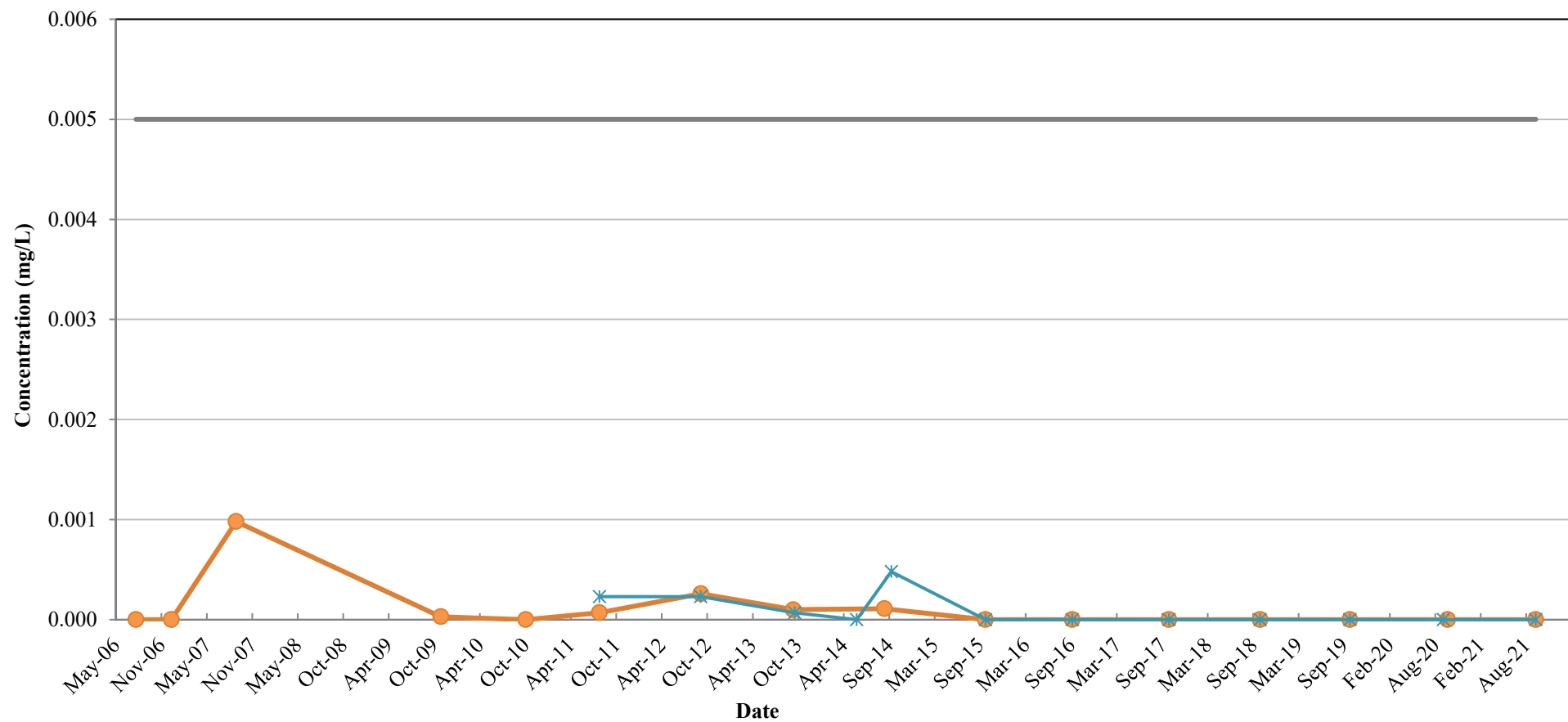
3616216168

DATE

4-12-22

FIGURE

11

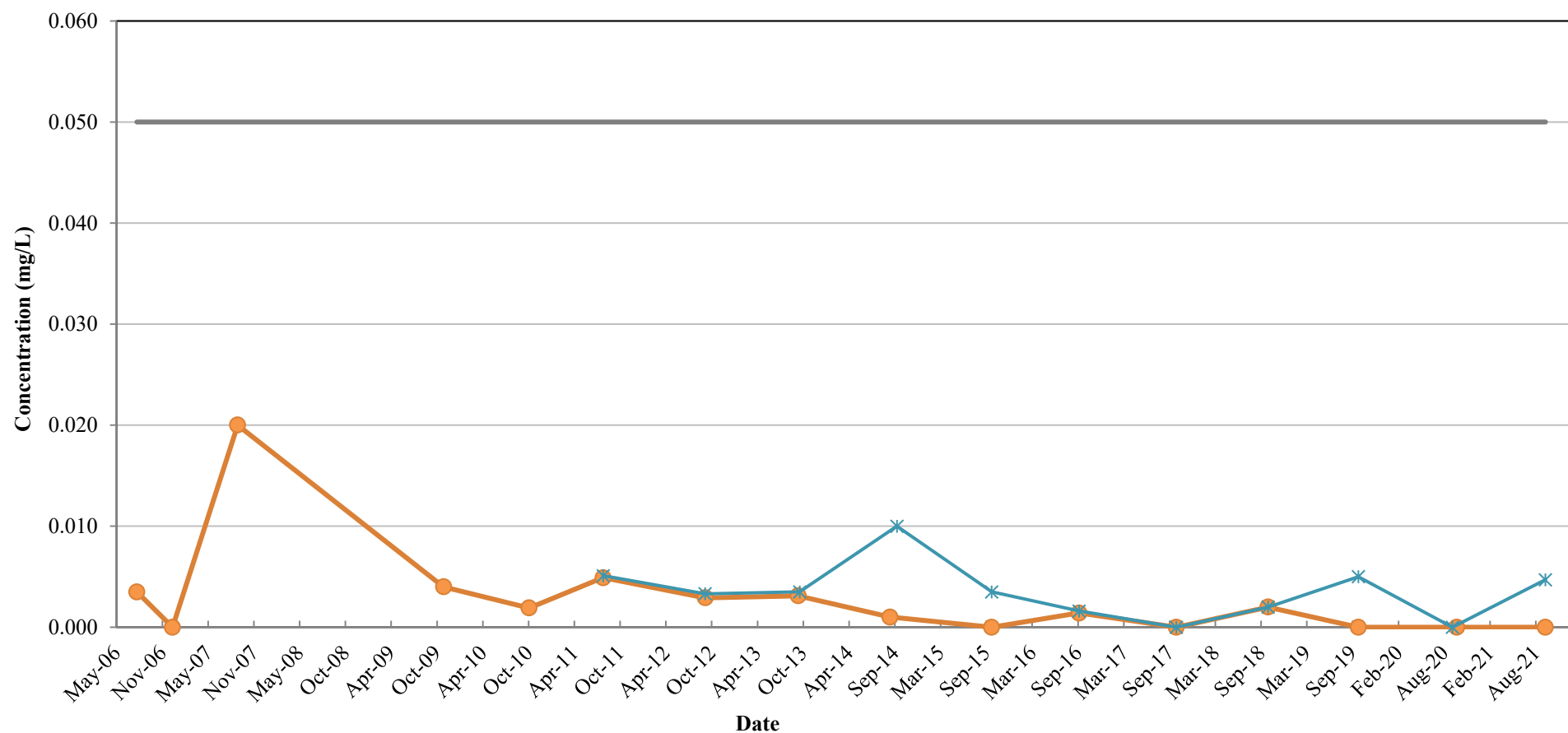


Notes:

mg/L = milligrams per liter

- MW-02
 —■— Sump 1
 —▲— Sump 2
- ✕— Sump 3
 —✕— Sump 4
 — NYSDEC Standard

TITLE:			
Cadmium Concentration Trends			
LOCATION:			
Honeywell Altift Landfill Buffalo NY, Site No. 915054			
	APPROVED	RTB	FIGURE 12
	DRAFTED	ZRP	
	PROJECT#	3616216168	
	DATE	4-12-22	



Notes:

mg/L = milligrams per liter

MW-02 Sump 1 Sump 2
 Sump 3 Sump 4 NYSDEC Standard

TITLE:

Chromium Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED

RTB

DRAFTED

ZRP

PROJECT#

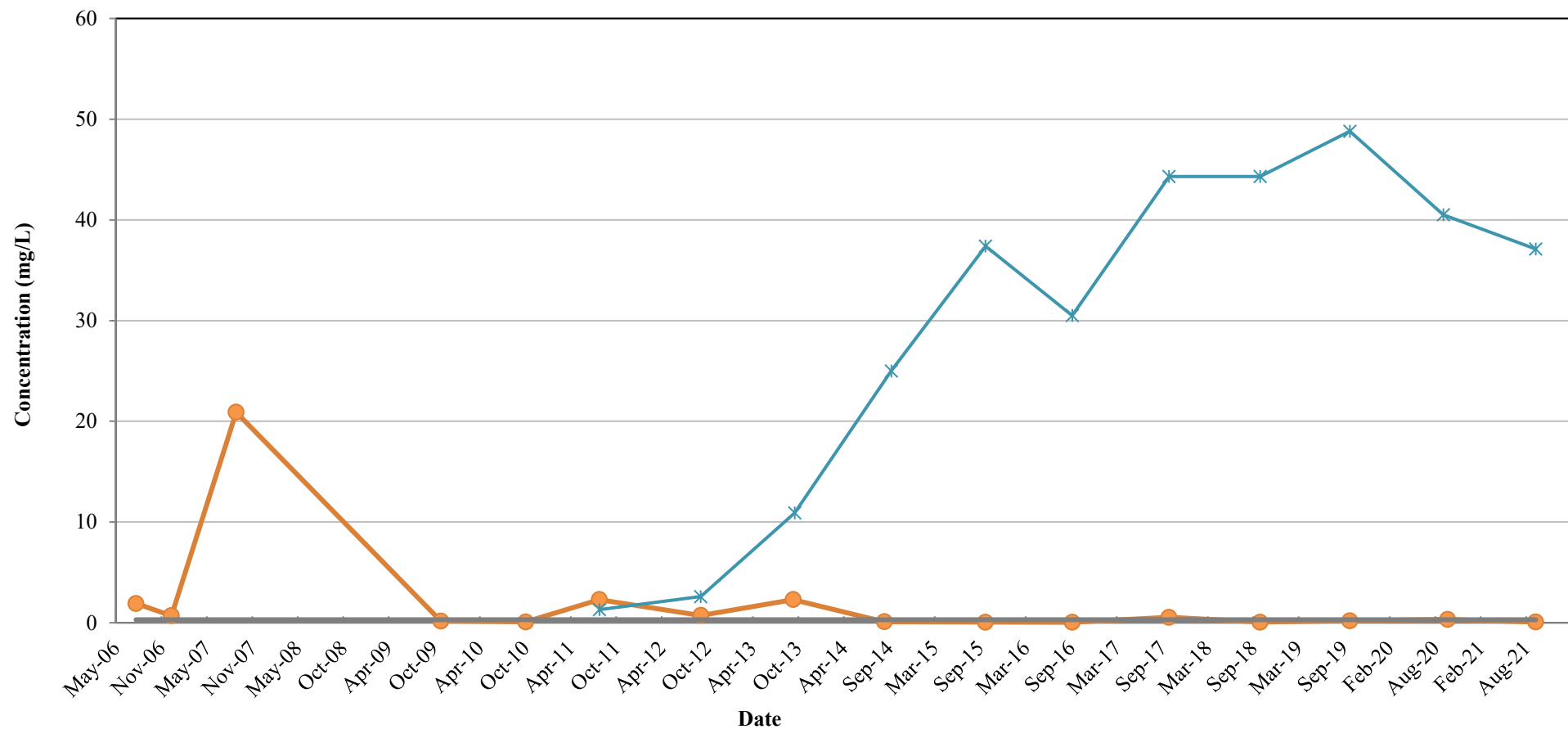
3616216168

DATE

4-12-22

FIGURE

13



Notes:

mg/L = milligrams per liter

MW-02 Sump 1 Sump 2
 Sump 3 Sump 4 NYSDEC Standard

TITLE:

Iron Concentration Trends

LOCATION:

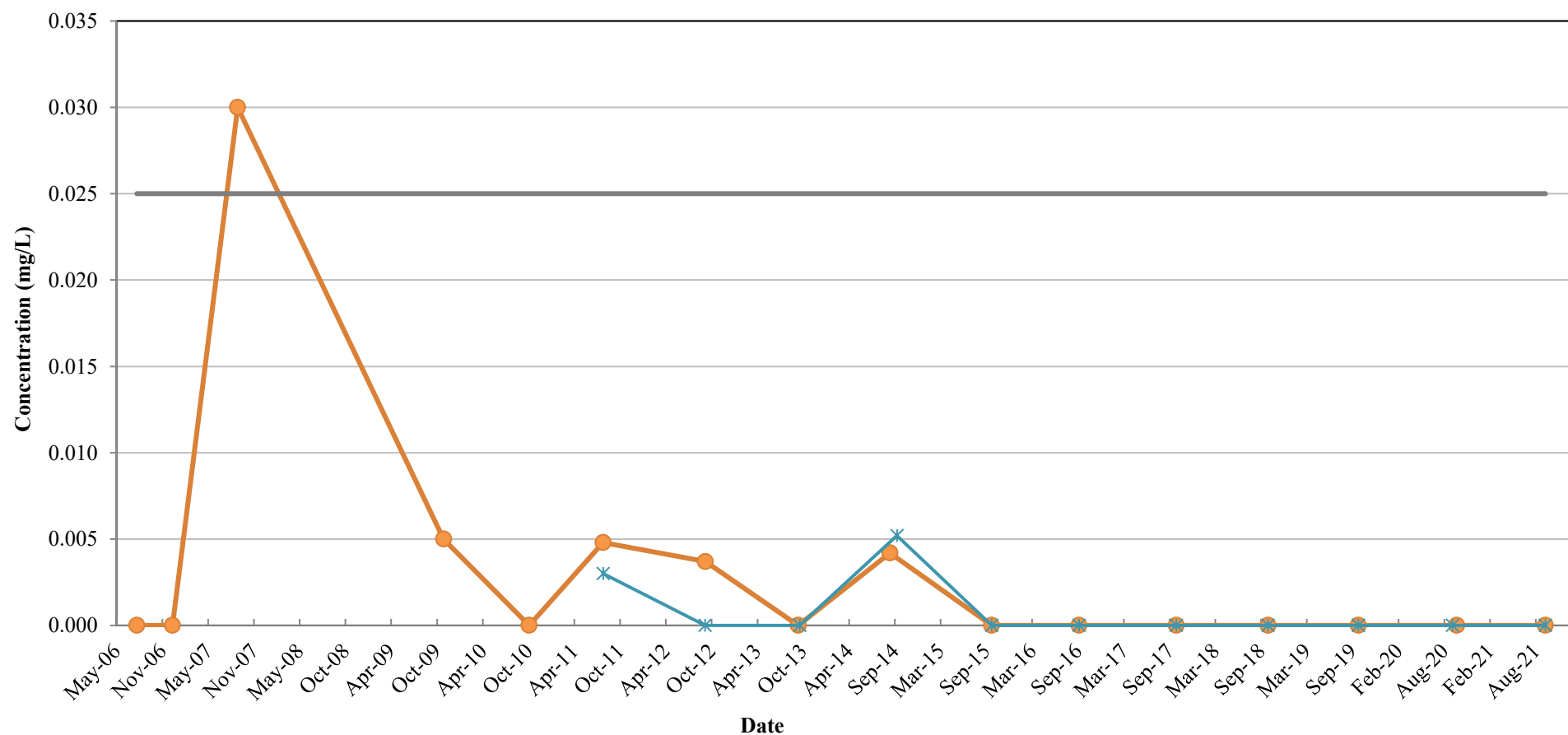
**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED	RTB
DRAFTED	ZRP
PROJECT#	3616216168
DATE	4-12-22

FIGURE

14



Notes:

mg/L = milligrams per liter

MW-02 (orange circle) Sump 1 (red square) Sump 2 (green triangle) Sump 3 (purple asterisk) Sump 4 (teal asterisk) NYSDEC Standard (grey line)

TITLE:

Lead Concentration Trends

LOCATION:

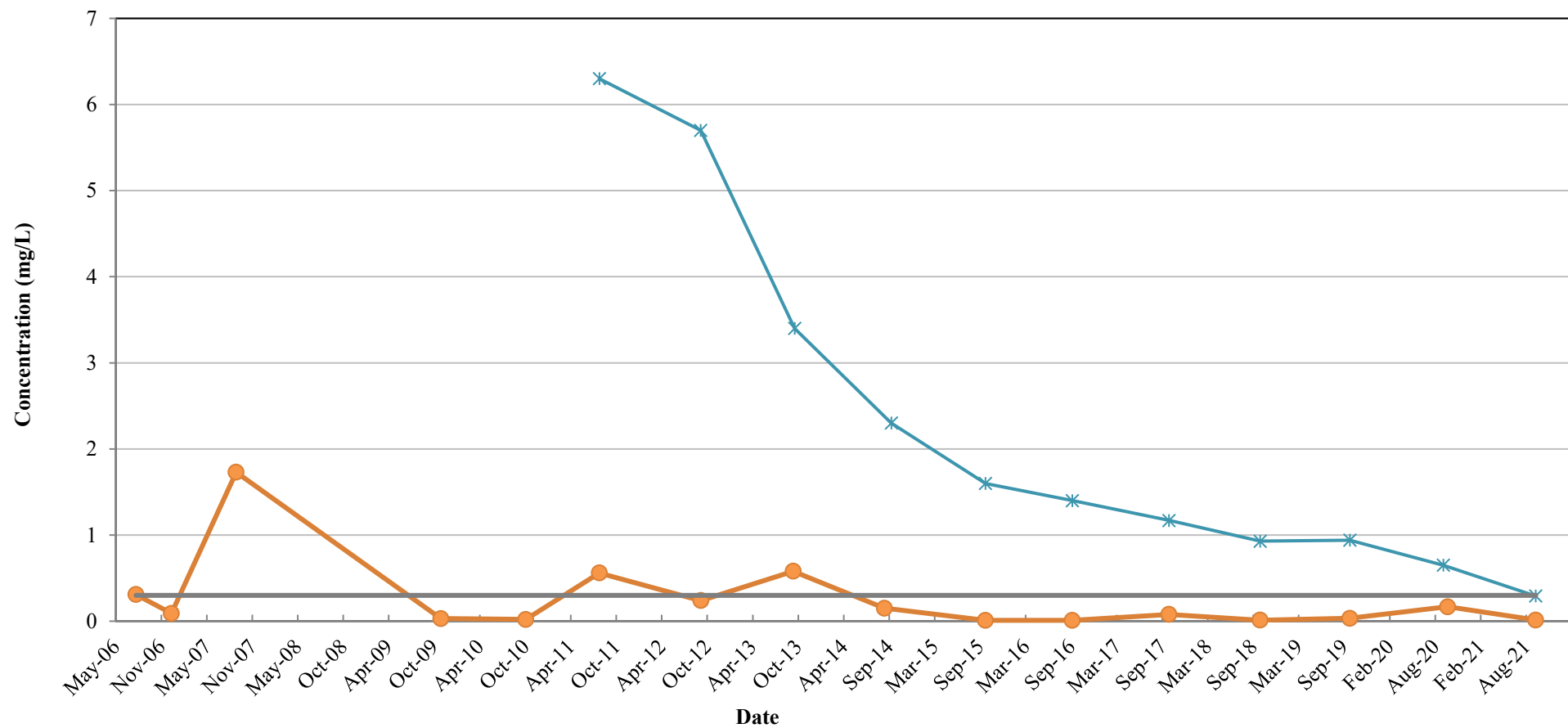
**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED	RTB
DRAFTED	ZRP
PROJECT#	3616216168
DATE	4-12-22

FIGURE

15



Notes:

mg/L = milligrams per liter

MW-02 Sump 1 Sump 2
 Sump 3 Sump 4 NYSDEC Standard

TITLE:

Manganese Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED

RTB

DRAFTED

ZRP

PROJECT#

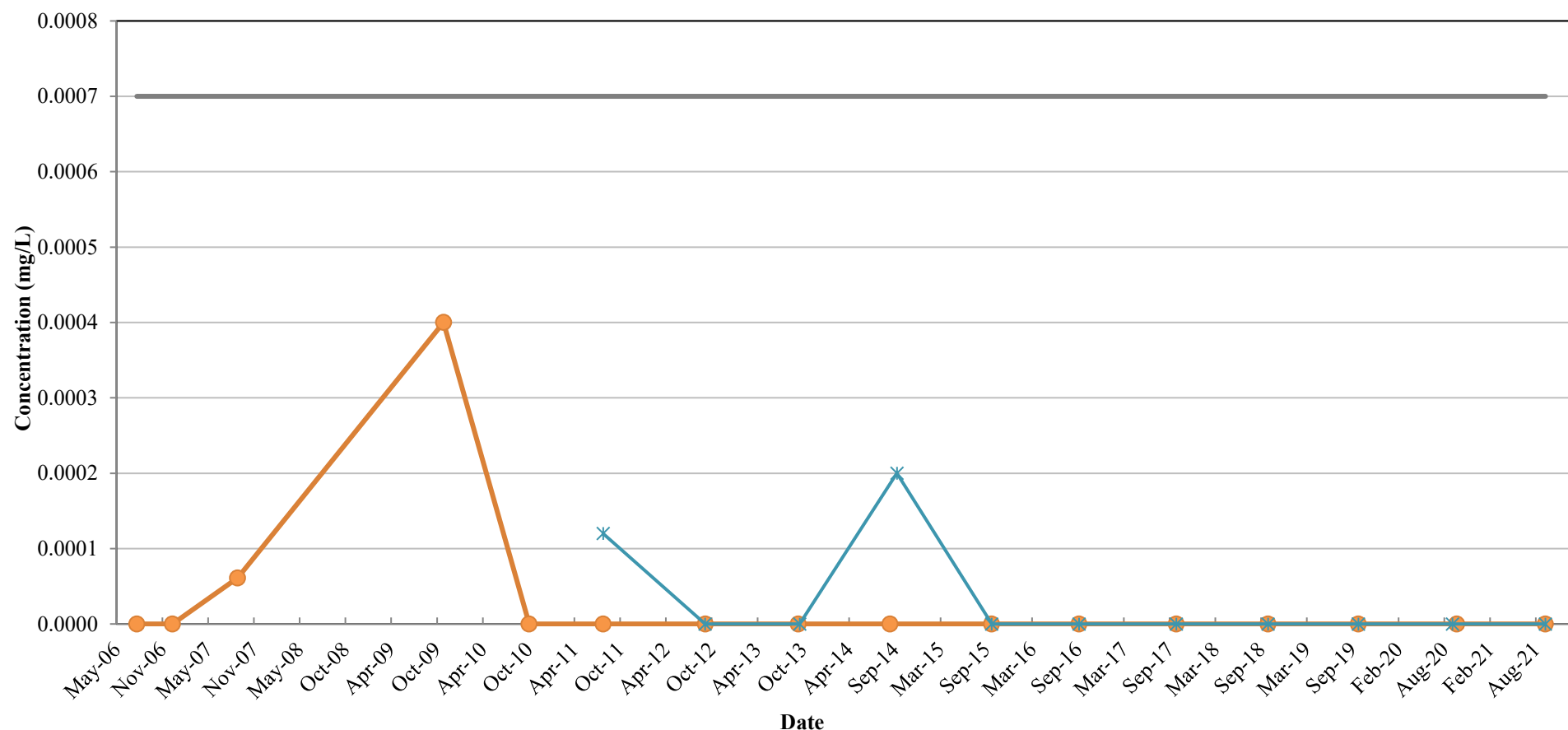
3616216168

DATE

4-12-22

FIGURE

16



Notes:

mg/L = milligrams per liter

—●— MW-02

—■— Sump 1

—▲— Sump 2

—×— Sump 3

—*— Sump 4

— NYSDEC Standard

TITLE:

Mercury Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

 **MACTEC**

APPROVED

RTB

FIGURE

DRAFTED

ZRP

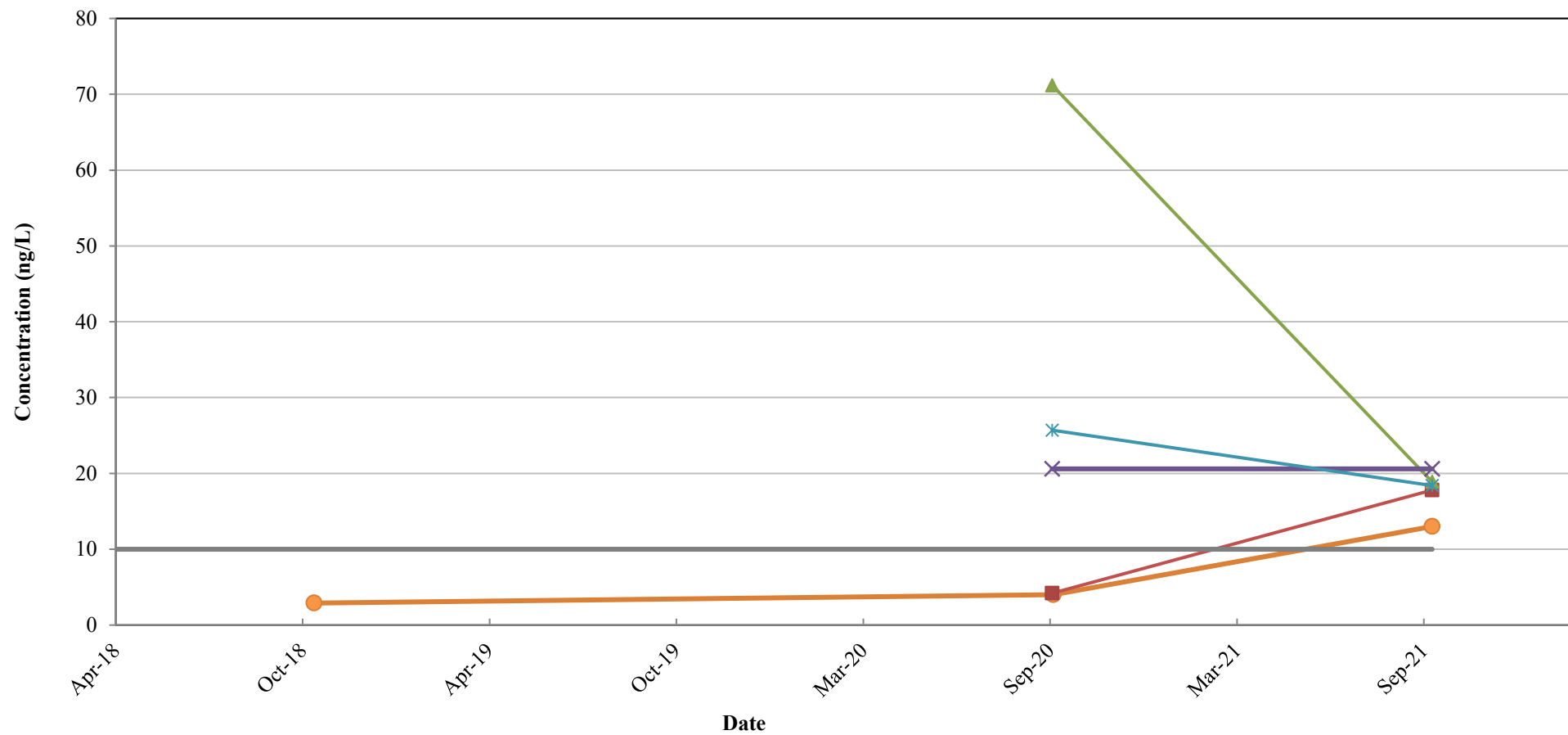
17

PROJECT#

3616216168

DATE

4-12-22



Notes:

ng/L = nanograms per liter

○ MW-02 ■ Sump 1 ▲ Sump 2
 × Sump 3 * Sump 4 — NYSDEC Standard

TITLE:

Perfluorooctane sulfonic acid (PFOS) Concentration Trends

LOCATION:

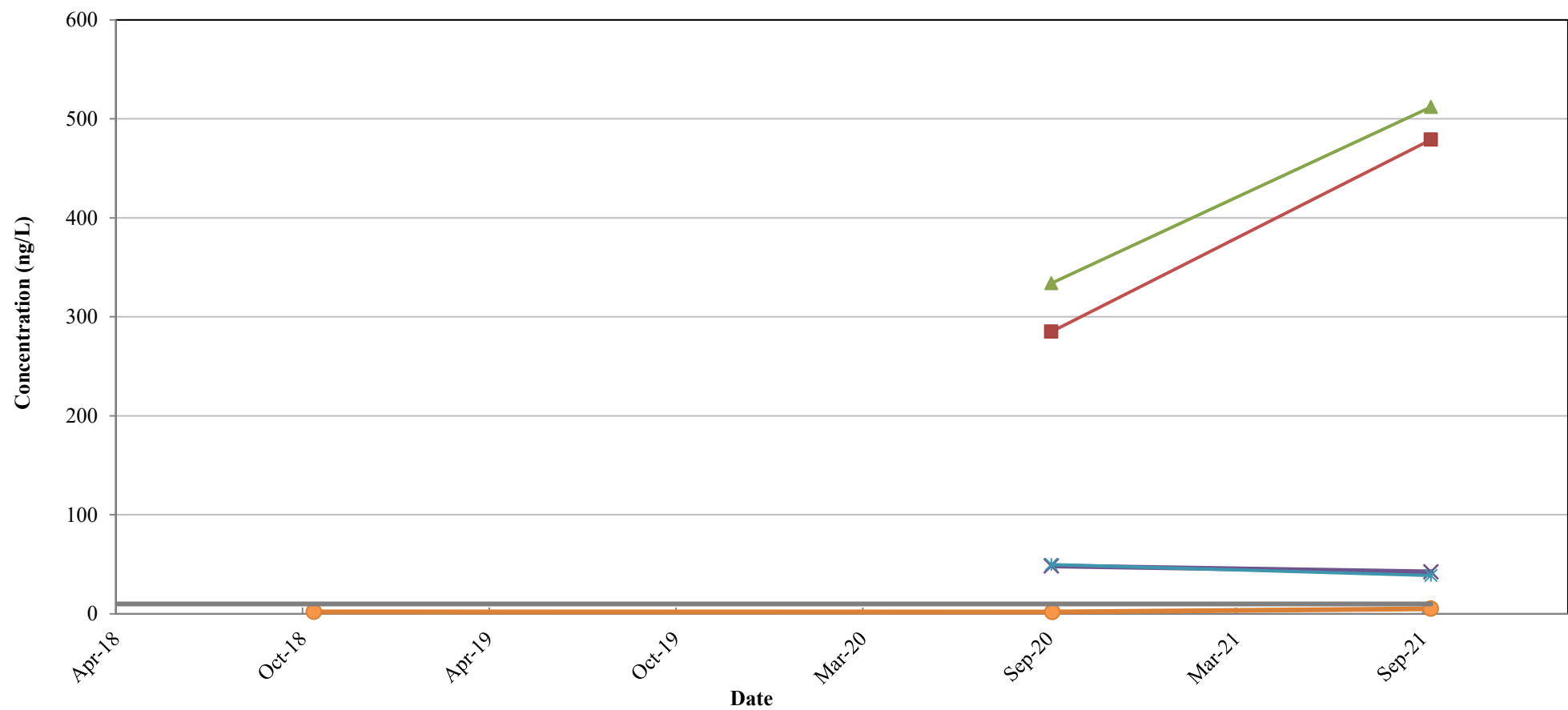
**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**

MACTEC

APPROVED	RTB
DRAFTED	ZRP
PROJECT#	3616216168
DATE	4-12-22

FIGURE

18



Notes:

ng/L = nanograms per liter

- MW-02
- Sump 1
- Sump 2
- Sump 3
- Sump 4
- NYSDEC Standard

TITLE:

Perfluorooctanoic acid (PFOA) Concentration Trends

LOCATION:

**Honeywell Altift Landfill
Buffalo NY, Site No. 915054**



APPROVED	RTB
DRAFTED	ZRP
PROJECT#	3616216168
DATE	4-12-22

FIGURE

19

ATTACHMENT B.9

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.