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engineering and constructing a better tomorrow

May 19, 2020

Ms. Megan Kuczka
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Subject: 2019/2020 Periodic Review Report
Alltift Landfill Site
NYSDEC Site No. 915054

Dear Ms. Kuczka:

MACTEC Engineering and Consulting, P.C. (MACTEC), is submitting this Periodic Review Report (PRR) for the Alltift Landfill Site/Ramco Steel Site (site) on behalf of Honeywell International Inc. (Honeywell). The completed Site Management PRR Notice - Institutional and Engineering Controls Certification Form is provided herein as Attachment A, which includes a summary of deed restrictions. 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 10, 2020.

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).

MACTEC Engineering and Consulting, P.C.
511 Congress Street • Portland, Maine 04101 • Phone: 207-775-5401 • Fax: 207-772-4762

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

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

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

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

During the 2019/2020 reporting period, the following routine OM&M activities were completed in accordance with the OM&M Manual:

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

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

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

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

II. Site Overview

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

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

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

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

III. Evaluation of Remedy Performance, Effectiveness and Protectiveness

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

- Ensuring the cap system is intact as constructed: Quarterly site inspections that include monitoring of landfill vegetation, ground inspections, and visual checks for evidence of erosion or subsidence are conducted. Resulting observations from the inspections indicate that the integrity of the cap appears sound (see the quarterly inspection reports included in Attachment B.2).

- Ensuring that groundwater is being routed to the groundwater collection trench: The integrity of the surface drainage and

groundwater collection systems is evaluated during the quarterly site inspections, and maintenance of these systems is performed when problems are identified. Water level measurements collected from site monitoring wells, piezometers, and sumps are used to establish quarterly groundwater elevations at the site (water level measurements and calculated groundwater elevations are included in Attachment B.3 and B.4, respectively). The quarterly groundwater elevations are then used to plot quarterly groundwater contour maps. The contour maps indicate that groundwater at the site is being routed to the groundwater collection trench as designed (quarterly groundwater contour maps are included in Attachment B.5).

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

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

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

VI. Operations and Maintenance Plan Compliance Report

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

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

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

- BSA discharge monitoring was conducted on a semi-annual basis in accordance with the BPDES Permit in effect (Permit #15-12-BU098). Collected samples were submitted to SGS in Dayton, New Jersey for analyses of the required parameters. Honeywell's OM&M Contractor - Jacobs (formerly CH2M) - prepared and submitted semi-annual discharge monitoring reports that documented the results of the monitoring to BSA. All sample results were within the permit limits (refer to Attachment B.6).
- Groundwater levels for site piezometers, wells and groundwater collection trench sumps were recorded on a quarterly basis.
- The annual groundwater sampling event completed on September 24, 2019 included collection of aqueous samples from background monitoring well MW-2 and collection system sumps; the samples were analyzed for parameters described in the OM&M Manual. The results are consistent with historical results and are presented in Attachment B.7.
- Landfill gas monitoring was conducted using a GEM 2000 (SN# GEM12691) on May 7, 2019 and April 1, 2020, and the results are presented in Attachment B.8.
- Quarterly site inspections were conducted as outlined in the OM&M Manual.
- Routine and non-routine maintenance activities completed during the reporting period included the following:
  - 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 October 11, 2019, with mowing activities completed on October 29, 2019
- Due to damage to MW-1 preventing the collection of water levels and groundwater samples, this well was decommissioned by removal consistent with the guidance provided in CP-43: Groundwater Monitoring Well Decommissioning Policy and as directed by the NYSDEC.

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: The current monitoring wells are fully functional. PZ-14, PZ-16, and MW-1 have been decommissioned, as approved by the NYSDEC, as they were no longer functional.

E. Conclusions and Recommendations:

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

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

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

- BSA Discharge Monitoring – In accordance with the current BSA permit, discharge monitoring will be conducted on a semi-annual basis, with reports issued to BSA and copied to the NYSDEC.
- Groundwater Monitoring – Annual groundwater monitoring will be completed in 2020 with groundwater monitoring results reported in the next annual PRR submittal.
- Water Level Measurements – Collection of water level measurements will be conducted on a quarterly basis.
- Landfill Gas Monitoring – The 2020 landfill gas monitoring is scheduled to occur in May 2020.
- Surface Water Level Measurements – in conjunction with the site inspections, surface water level measurements will continue to be collected using the top of the weir structure at the north end of Pond A as a reference.
- Site inspections will continue on a quarterly basis.
- OM&M activities will continue on a routine basis, with the frequency adjusted as needed based upon results of site inspections or to respond to groundwater collection system

autodialer callouts.

- The next PRR submittal should be completed and submitted to NYSDEC by the end of May 2021.

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 2021.

Closing

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

Respectfully,

MACTEC Engineering and Consulting P.C.

Ryan Belcher
Senior Engineer

Mark Stelmack, P.E.
Associate Engineer

Attachments
Attachment A - PRR Notice, , C/EC Controls Certification Form
Attachment B – Supporting Tables, Figures and Appendices
Attachment B.1 Site Figures
Attachment B.2 Quarterly Inspection Reports
Attachment B.3 Water Level Measurements
Attachment B.4 Quarterly Groundwater Elevations
Attachment B.5 Quarterly Groundwater Contour Maps
Attachment B.6 Discharge Monitoring Reports
Attachment B.7 Annual Groundwater Monitoring Data
Attachment B.8 Landfill Gas Monitoring Results
Attachment B.9 Monitoring Well Decommissioning Photos

Electronic Copy to:
E. Christodoulatos (Honeywell)
J. Paananen (City of Buffalo)
K. Boland (CSX)

ATTACHMENT A

PRR NOTICE

IC/EC CONTROLS CERTIFICATION FORM

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

Site Details **Box 1**

Site No. 915054

Site Name Alltift Landfill

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

Reporting Period: April 21, 2019 to April 21, 2020

	YES	NO
1. Is the information above correct?	X	☐
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?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
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?	☐	X

Box 2

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

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

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

_____ _____
Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 915054 **Box 3**

Description of Institutional Controls

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

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

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

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

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

Institutional Controls - Environmental Notice:

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

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

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

Deed Restriction - 637 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.

Box 4

Description of Engineering Controls

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

Engineering Controls:

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

Box 5

Periodic Review Report (PRR) Certification Statements

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

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

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

YES	NO
X	☐

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

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

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

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

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

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

YES	NO
X	☐

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

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

_____ _____

Signature of Owner, Remedial Party or Designated Representative — Date

IC CERTIFICATIONS
SITE NO. 915054

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

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

am certifying as Remediation Manager (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

5/18/2020
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I Mark Stelmack (print name) at MACTEC Engineering and Geology, P.C. 511 Congress St. Suite 200 Portland, ME 04101 (print business address)

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

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

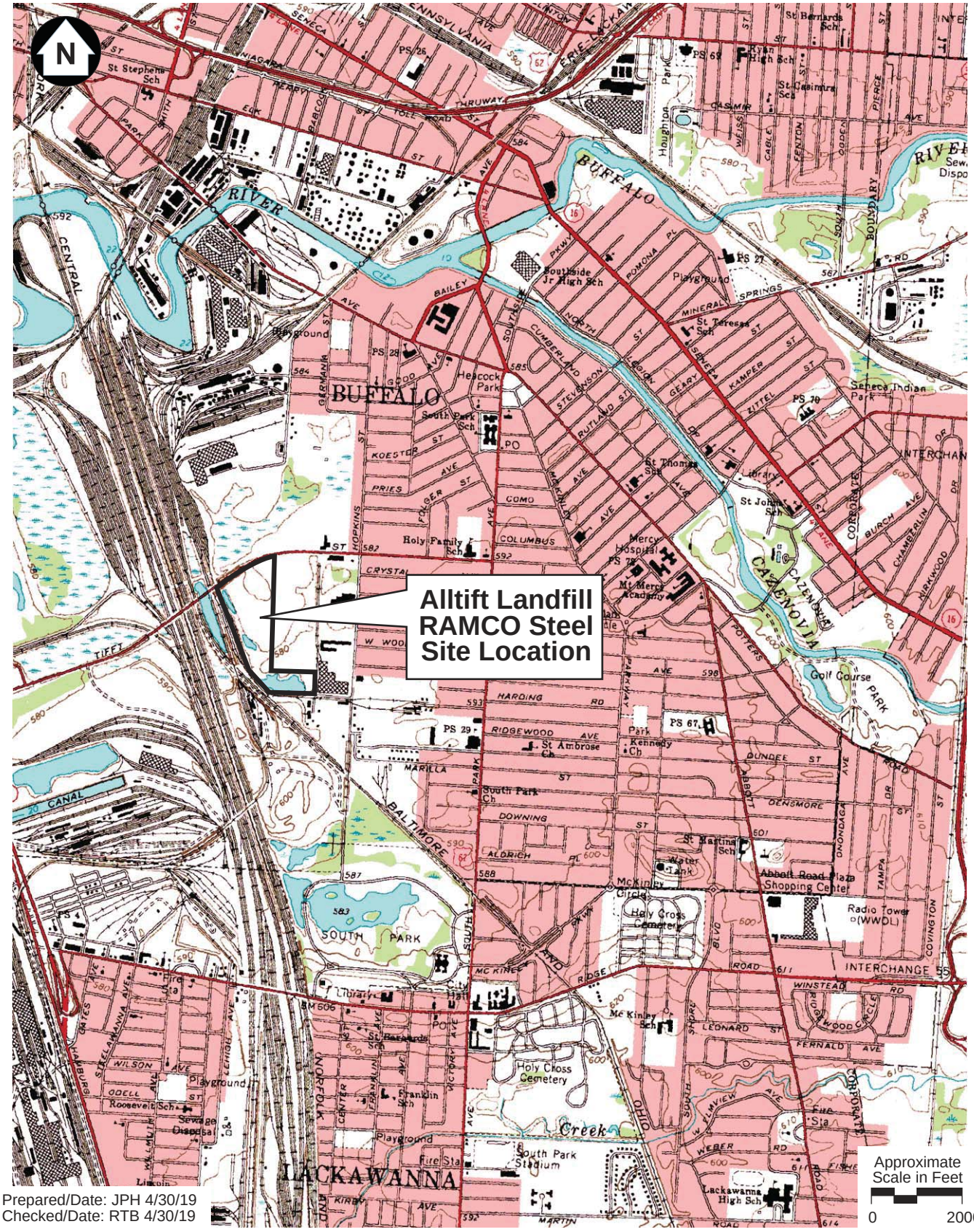
Stamp (Required for PE)

May 18, 2020
Date

ATTACHMENT B

SUPPORTING TABLES, FIGURES, AND APPENDICES

Attachment B.1 Site Figures



Prepared/Date: JPH 4/30/19
Checked/Date: RTB 4/30/19

Honeywell

MACTEC

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

PORT2011018a.ai

Honeywell

MACTEC

Current Conditions
Site Plan

Project 3612206091

Figure 2

Attachment B.2 Quarterly Inspection Reports

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 5/7/19

Weather: 55 degrees and cloudy
Assessment by: Michael Stout

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☐	☒	☐	5. Signs of trespassers/vandalism? _____
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress?
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable?
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

Site Inspection Form

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

F. Leachate Collection System

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

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Yes	No	N/A	
			H. Treatment Plant
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

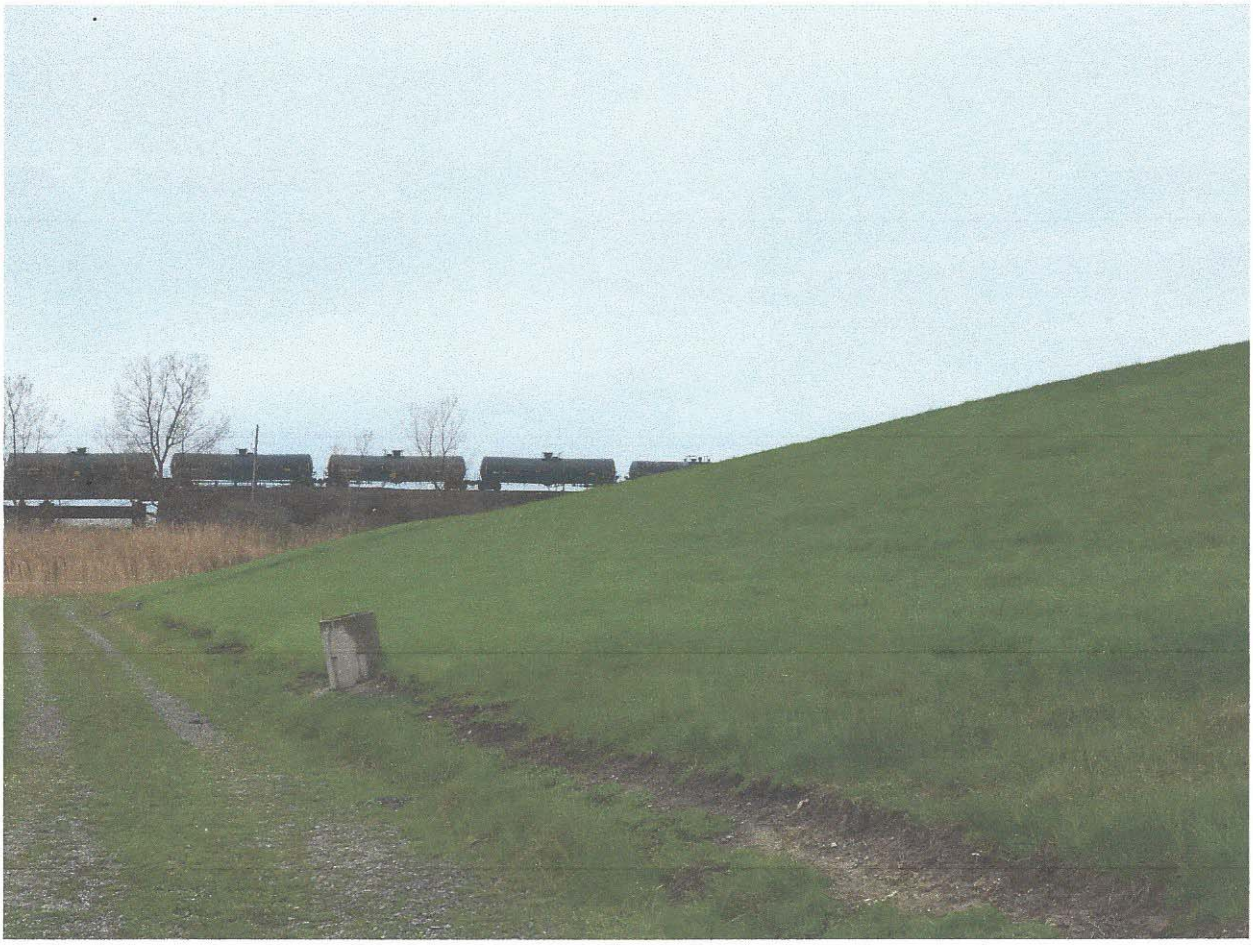
J. General Comments

None

No issues noted

View of Alltift Landfill cap facing north

View of east side of Alltift Landfill cap facing north



View of south side of Alltift facing west along access road.

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 7/23/19

Weather: 76 degrees and sunny
Assessment by: Michael Stout

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☐	☒	☐	5. Signs of trespassers/vandalism? _____
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress?
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable?
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

Site Inspection Form

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

F. Leachate Collection System

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

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Yes	No	N/A	
☐	☐	☒	**H. Treatment Plant**
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

None

No issues noted

Shed repainted

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 10/11/19

Weather: 55 degrees and sunny
Assessment by: Michael Stout

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☐	☒	☐	5. Signs of trespassers/vandalism? _____
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress?
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable?
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

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

F. Leachate Collection System

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

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Yes	No	N/A	
☐	☐	☒	**H. Treatment Plant**
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

None

No issues noted

Mowing completed

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 1/6/2020

Weather: Sunny 40 degrees
Assessment by: Michael Stout

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☐	☒	☐	5. Signs of trespassers/vandalism? _____
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress?
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable?
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

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

F. Leachate Collection System

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

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Site Inspection Form

Yes	No	N/A	
			H. Treatment Plant
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

None

No issues noted

Site Inspection Form

Site Name: Alltift
Project Number: 30130
Date: 4/1/2020

Weather: Sunny 49 degrees
Assessment by: Michael Stout

Yes	No	N/A	
			A. Security
☒	☐	☐	1. Does fence exist? _____
☐	☒	☐	2. Is there a breach in fence? _____
☒	☐	☐	3. Locks on gate? _____
☒	☐	☐	4. Posted signs? _____
☐	☒	☐	5. Signs of trespassers/vandalism? _____
			6. Other _____
			B. General Site Conditions
☐	☒	☐	1. Vegetation stress?
☐	☒	☐	2. Mowing required? _____
☒	☐	☐	3. Access road drivable?
☐	☒	☐	4. Odors? _____
			5. Other _____
			C. Cap Inspection
☐	☒	☐	1. Exposed waste? _____
☒	☐	☐	2. Side slope stable? _____
☐	☒	☐	3. Erosion? _____
☐	☒	☐	4. Leachate seeps (discolored vegetation)? _____
☐	☒	☐	5. Synthetic liner exposed? _____
☐	☒	☐	6. Bare spots? _____
☐	☒	☐	7. Presence of burrowing animals? _____
☐	☒	☐	8. Deep rooted vegetation? _____
☐	☒	☐	9. Cracking? _____
☐	☒	☐	10. Ponding water? _____
☐	☒	☐	11. Evidence of methane seeps? _____
			12. Other _____
			D. Surface Water
☐	☒	☐	1. Obstruction of flow ditches? _____
☐	☒	☐	2. Erosion of ditches? _____
☒	☐	☐	3. Silt & erosion control? _____
☒	☐	☐	4. Culverts in good condition? _____
☐	☒	☐	5. Evidence of overflow or uncontrolled flow? _____
☒	☐	☐	6. Outfalls in good condition? _____
☐	☐	☒	7. Sedimentation basin/ponds secure? _____
			8. Other _____
			E. Methane Gas Control

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

F. Leachate Collection System

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

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐	1. Locks on wells? _____
☒	☐	☐	2. Wells in good condition? _____
☒	☐	☐	3. Well seals in good condition? _____
☒	☐	☐	4. Access to wells? _____
☒	☐	☐	5. Monitoring reports current? _____
			6. Other _____

Site Inspection Form

Yes	No	N/A	
			H. Treatment Plant
☐	☐	☒	1. Building in good condition? (Doors, windows, wells, roof) _____
☐	☐	☒	2. Visual tank inspection performed? _____
☐	☐	☒	3. Visual inspection of pipes, valves, fittings etc.? _____
☐	☐	☒	4. Pump operation/inspection performed? _____
☐	☐	☒	5. Instruments operation/calibration? _____
☐	☐	☒	6. Mixer operation/inspection? _____
☐	☐	☒	7. Proper personal protection equipment? _____
☐	☐	☒	8. Air compressor system functioning properly? _____
☐	☐	☒	9. Filter press inspected? _____
☐	☐	☒	10. Emergency generator functioning properly? _____
			I. Polymeric Marine Mattress (PMM)
☐	☐	☒	1. Damage due to burrowing animals? _____
☐	☐	☒	2. Damage due ice and/or ice flowages? _____
☐	☐	☒	3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
☐	☐	☒	4. Impacts or damage due to navigation activities in the Buffalo River? _____
☐	☐	☒	5. Establishment of woody plant growth causing displacement or stress on the system? _____
☐	☐	☒	6. Areas of settlement or displacement of the system? _____
☐	☐	☒	7. Erosion at the upstream and downstream limits of the system? _____
☐	☐	☒	8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
☐	☐	☒	9. Damage to the stone infill within the marine mattresses? _____
☐	☐	☒	10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

None

No issues noted

Attachment B.3 Water Level Measurements

Alltift Landfill
Buffalo, New York

Piezometer Readings (DTW, ft)	7-May-19	23-Jul-19	11-Oct-19	6-Jan-20	1-Apr-20
PZ-1	9.35	7.60	10.12	10.14	10.20
PZ-2	8.90	7.94	9.65	9.59	9.75
PZ-3	9.90	10.58	10.42	10.45	10.53
PZ-4	7.50	5.22	14.76	8.00	7.70
PZ-5	7.90	6.48	11.12	8.32	8.40
PZ-6	8.85	9.70	9.47	9.30	9.60
PZ-7	7.60	8.43	8.25	8.10	8.10
PZ-8	6.03	6.84	6.80	6.68	6.80
PZ-9	6.73	7.64	7.20	6.90	7.00
PZ-10	7.95	9.35	8.50	7.85	7.70
PZ-11	6.67	8.00	7.60	6.77.	6.90
PZ-12	7.55	8.96	8.33	7.60	8.15
PZ-13	5.10	6.88	5.60	4.95	5.20
PZ-15	7.04	7.17	7.92	7.51	7.36
Groundwater Collection Trench Sumps (DTW, ft)					
GWCT-1	10.80	9.22	12.90	11.80	11.70
GWCT-2	8.84	12.55	13.25	13.12	14.90
GWCT-3	8.60	9.35	9.20	9.10	9.35
GWCT-4	6.80	7.70	7.48	7.16	7.30
Relief Trench Sumps (DTW, ft)					
GWR-1	7.10	7.80	7.23	6.10	6.30
GWR-2	7.10	7.87	7.35	6.05	6.10
Lift Station (DTW, ft)					
Lift	8.10	8.82	8.15	7.10	6.95
Offsite Background Wells (DTW, ft)					
MW-2	NM	NM	NM	NM	NM
Overflow Weir (DTW, ft)	3" over	3" over	3" over	3" over	2"over

Notes:
NM - Not Measured

Prepared by: John Formoza
Checked by: Ryan Belcher

Attachment B.4 Quarterly Groundwater Elevations

QUARTERLY GROUNDWATER ELEVATIONS

2019/2020 ANNUAL REPORT

ALLTIFT LANDFILL SITE

BUFFALO, NEW YORK

			5/7/2019		7/23/2019		10/11/2019 (see Note 1)		1/6/2020		4/1/2020	
MONITORING POINT	**TOTAL DEPTH (FT.)**	**TOP OF CASING ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**	**DEPTH TO WATER**	**GROUND WATER ELEVATION**
PIEZOMETERS												
PZ-1	16.8	585.01	9.35	575.66	7.60	577.41	10.12	574.89	10.14	574.87	10.20	574.81
PZ-2	16.9	584.96	8.90	576.06	7.94	577.02	9.65	575.31	9.59	575.37	9.75	575.21
PZ-3	16.9	585.05	9.90	575.15	10.58	574.47	10.42	574.63	10.45	574.60	10.53	574.52
PZ-4	16.6	585.79	7.50	578.29	5.22	580.57	14.76	571.03	8.00	577.79	7.70	578.09
PZ-5	16.9	584.52	7.90	576.62	6.48	578.04	11.12	573.40	8.32	576.20	8.40	576.12
PZ-6	17.8	584.74	8.85	575.89	9.70	575.04	9.47	575.27	9.30	575.44	9.60	575.14
PZ-7	20.0	584.99	7.60	577.39	8.43	576.56	8.25	576.74	8.10	576.89	8.10	576.89
PZ-8	20.7	584.48	6.03	578.45	6.84	577.64	6.80	577.68	6.68	577.80	6.80	577.68
PZ-9	15.1	586.86	6.73	580.13	7.64	579.22	7.20	579.66	6.90	579.96	7.00	579.86
PZ-10	11.5	589.41	7.95	581.46	9.35	580.06	8.50	580.91	7.85	581.56	7.70	581.71
PZ-11	19.5	594.72	6.67	588.05	8.00	586.72	7.60	587.12	6.77	587.95	6.90	587.82
PZ-12	21.8	592.78	7.55	585.23	8.96	583.82	8.33	584.45	7.60	585.18	8.15	584.63
PZ-13	22.5	589.04	5.10	583.94	6.88	582.16	5.60	583.44	4.95	584.09	5.20	583.84
PZ-15	17.0	588.79	7.04	581.75	7.17	581.62	7.92	580.87	7.51	581.28	7.36	581.43
BACKGROUND WELLS												
MW-2	17.0	586.67	NM	NC	NM	NC	6.75	579.92	NM	NC	NM	NC
GROUNDWATER COLLECTION TRENCH SUMPS												
S1	17.2	585.19	10.80	574.39	9.22	575.97	12.90	572.29	11.80	573.39	11.70	573.49
S2	24.8	585.45	8.84	576.61	12.55	572.90	13.25	572.20	13.12	572.33	14.90	570.55
S3	17.3	585.25	8.60	576.65	9.35	575.90	9.20	576.05	9.10	576.15	9.35	575.90
S4	17.8	585.00	6.80	578.20	7.70	577.30	7.48	577.52	7.16	577.84	7.30	577.70

Notes

1. MW-2 depth to water measurement taken on 9/24/2019

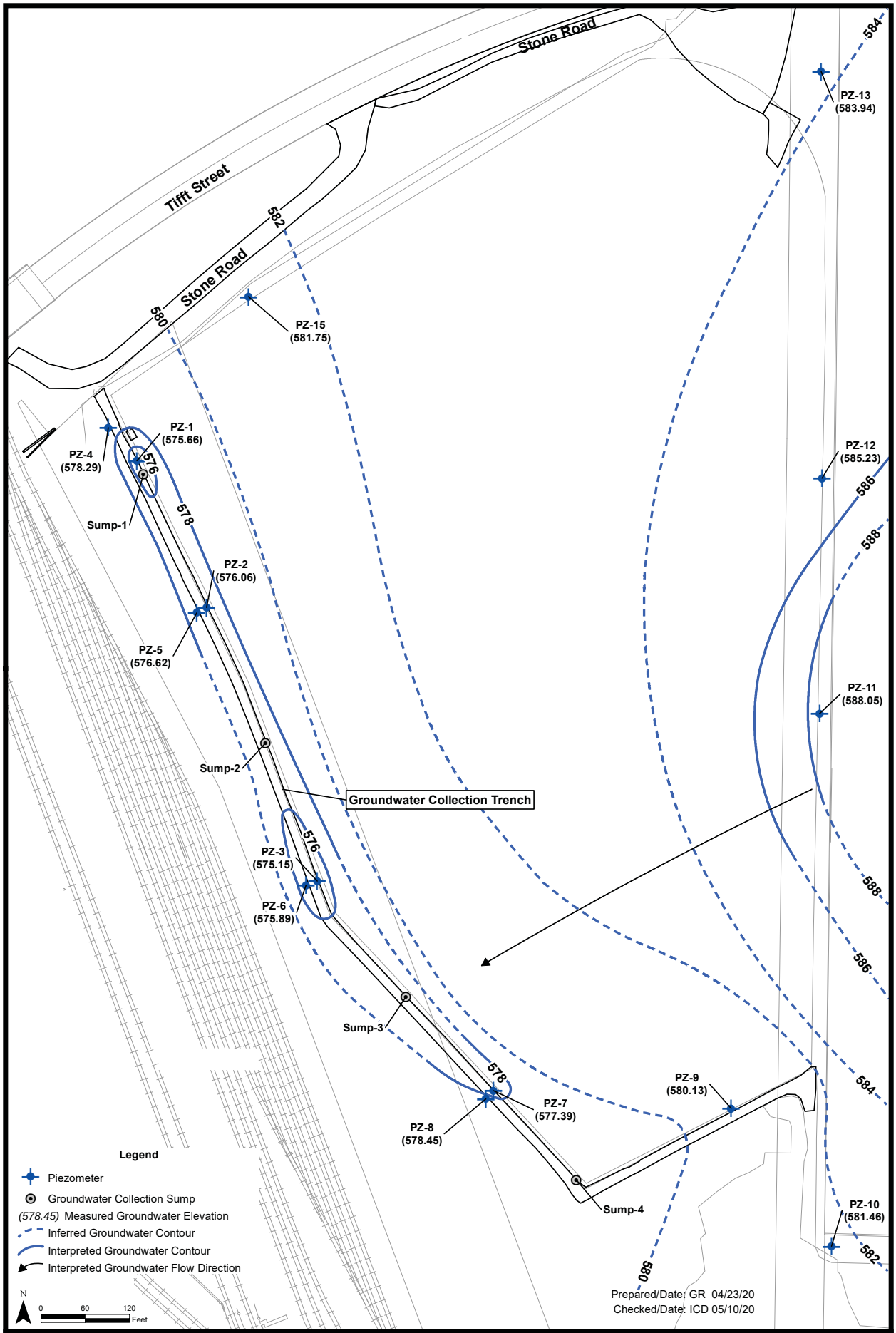
NC - Not calculable

NM - Not measured

Created By:HTS/AC 04/22/2020

Checked By:RTB 05/04/2020

Attachment B.5 Quarterly Groundwater Contour Maps



Honeywell Alltift Landfill Site
Buffalo, New York

wood.

Interpreted Groundwater Contours
May 7, 2019
Project 3612172375 Figure 1

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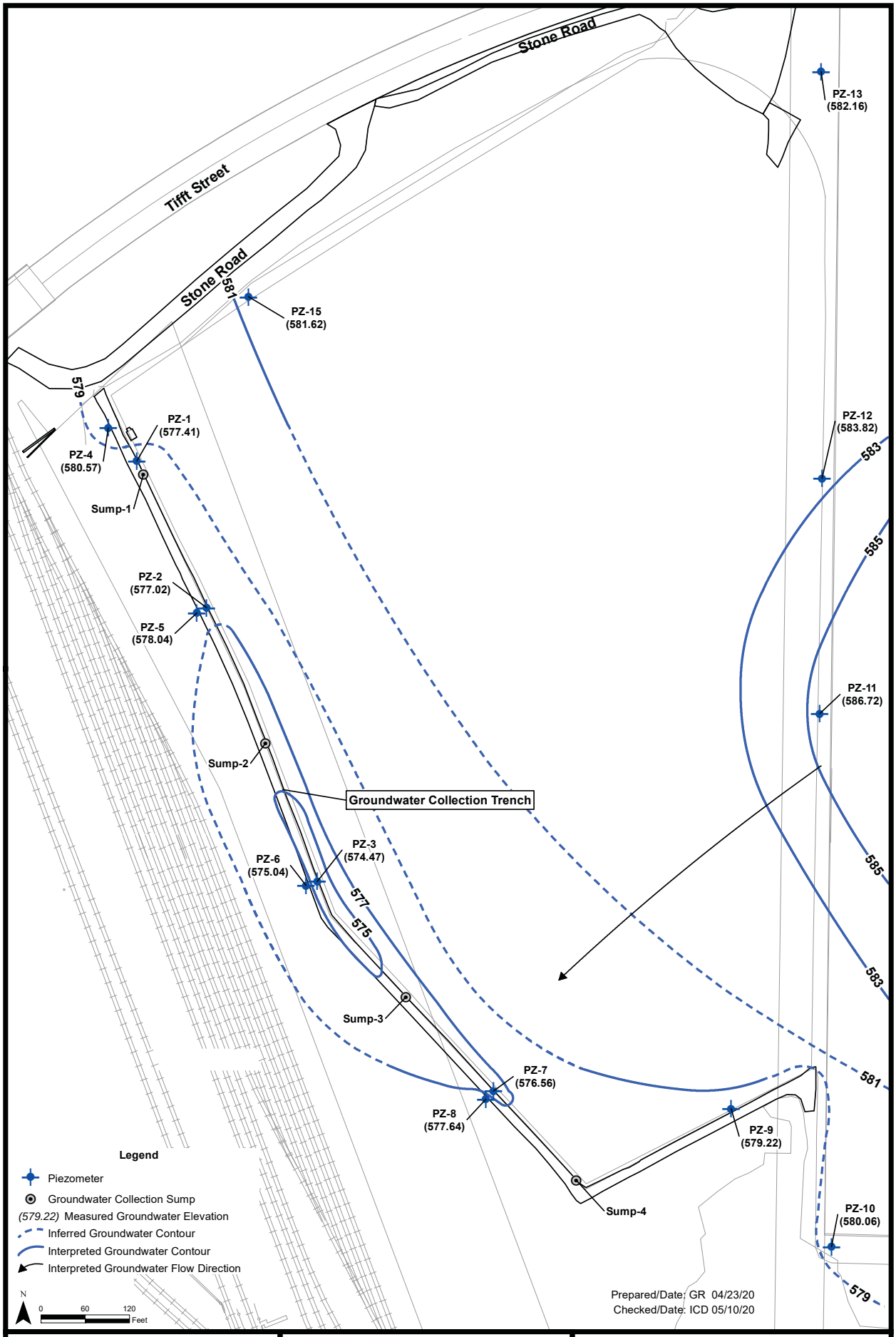

Honeywell Alltift Landfill Site
Buffalo, New York

wood.

Interpreted Groundwater Contours
July 23, 2019
Project 3612172375 Figure 2

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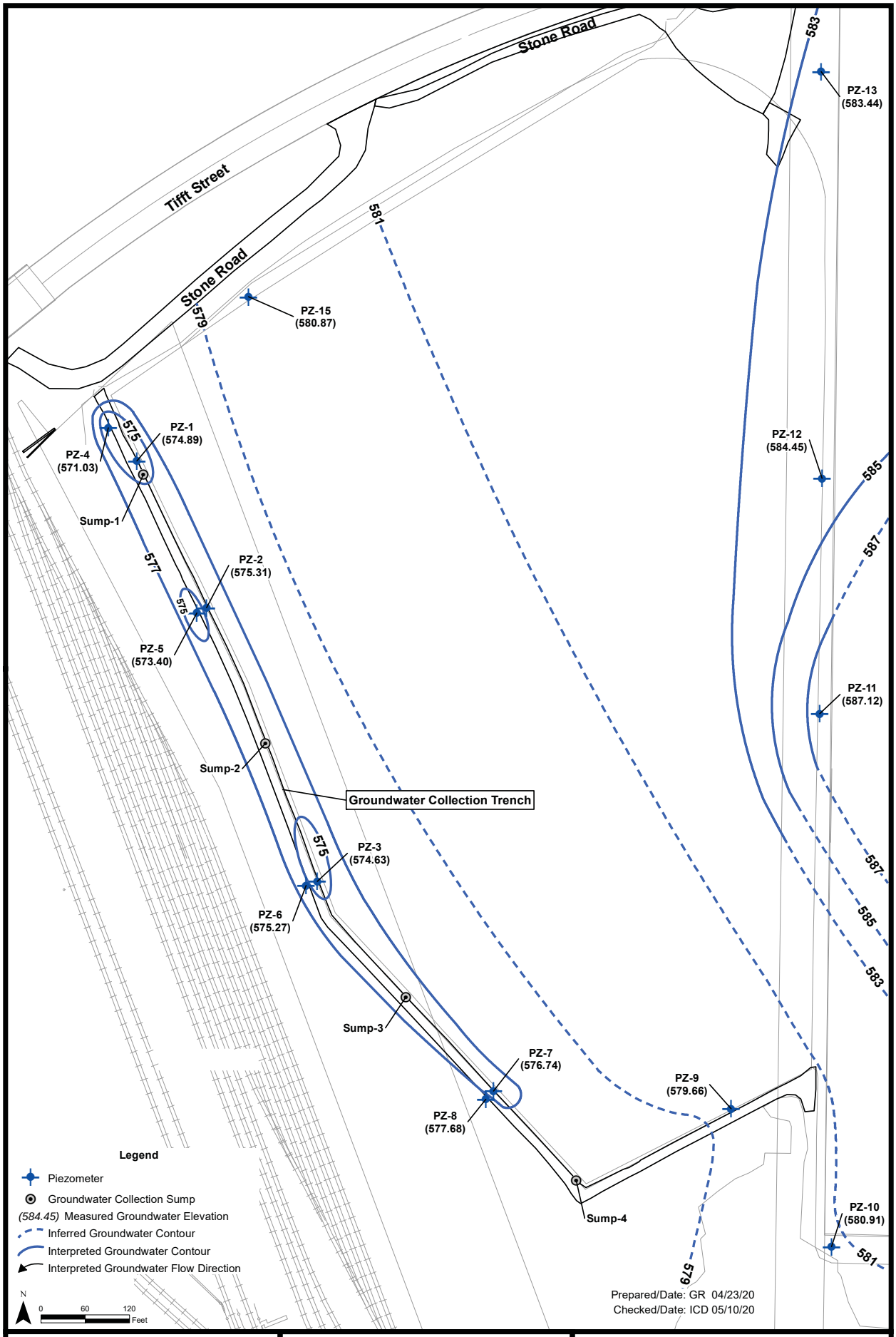

Honeywell Alltift Landfill Site
Buffalo, New York

wood.

Interpreted Groundwater Contours
October 11, 2019
Project 3612172375 Figure 3

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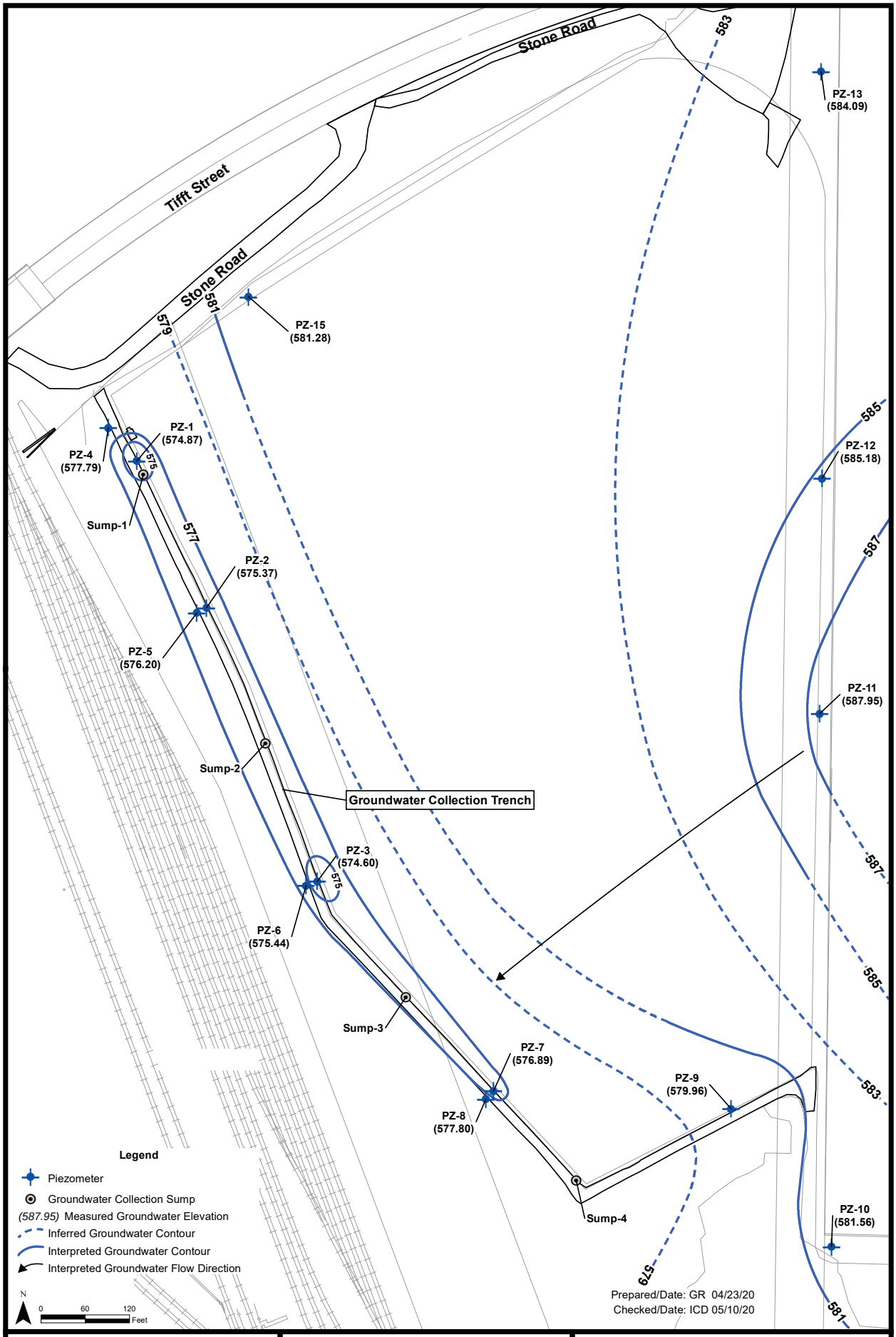
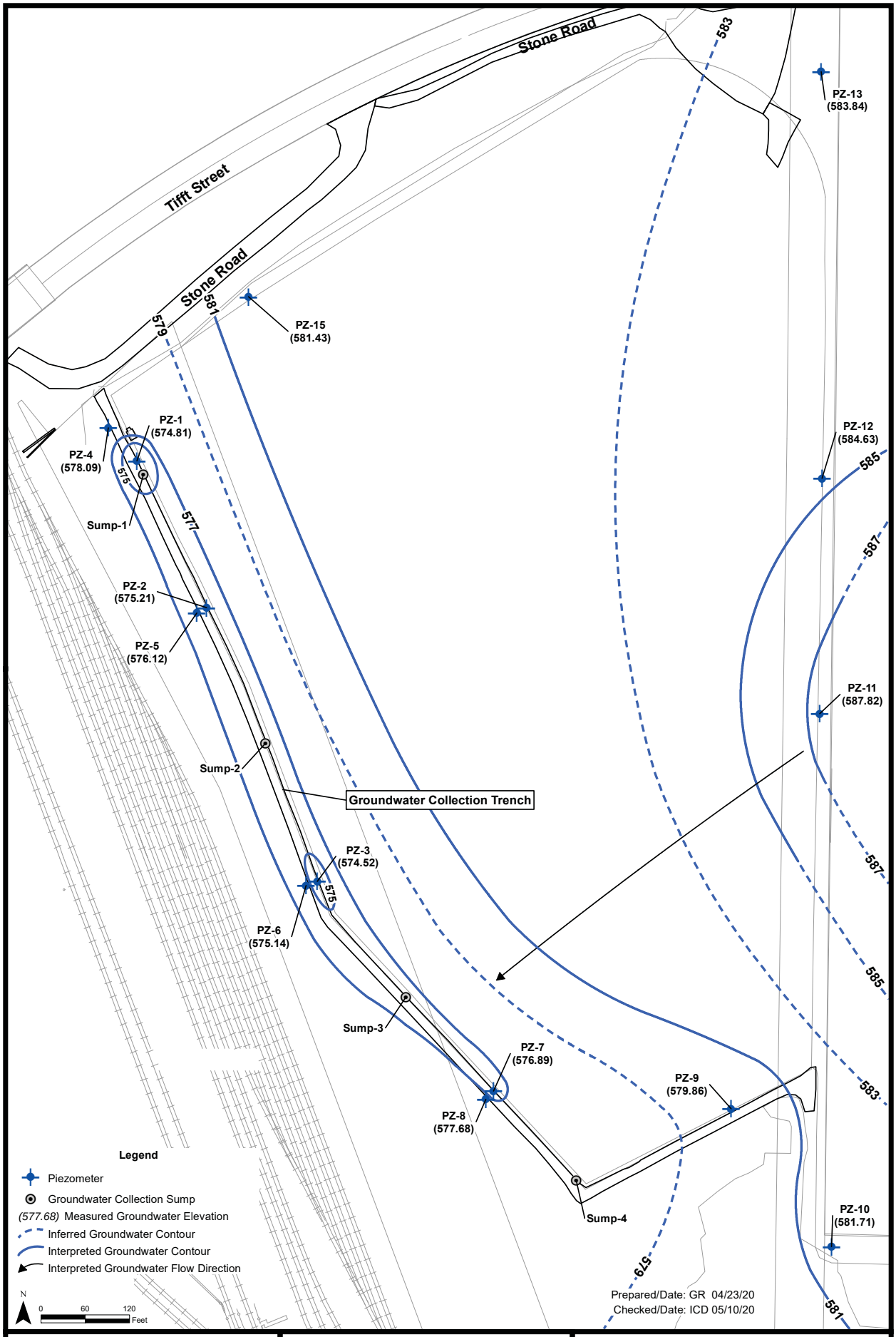


Honeywell Alltift Landfill Site
Buffalo, New York

wood.

Interpreted Groundwater Contours
January 6, 2020
Project 3612172375 Figure 4

C:\PROJECT_DELIVERABLES\GIS_SITES\HW_ALLTIFTMAPFILES\2020\ALLTIFT_FIGURE04_GROUNDWATER_JANUARY_2020_HTSREV2.MXD ARUN 5/14/2020 4:04:34 PM



Honeywell Alltift Landfill Site
Buffalo, New York

wood.

Interpreted Groundwater Contours
April 1, 2020
Project 3612172375 Figure 5

C:\PROJECT_DELIVERABLES\GIS_SITES\HW_ALLTIFTMAPFILES\2020\ALLTIFT_FIGURE05_GROUNDWATER_APRIL_2020_HTSREV1.MXD ARUN 5/13/2020 4:36:24 PM

Attachment B.6 Discharge Monitoring Reports

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

May 31, 2019

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
2019 First Semi-Annual Report
BPDES Permit Number 18-12-BU098

Dear Ms. Adams:

Enclosed please find the 2019 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 2,198,200 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from October 5, 2018 through May 7, 2019 for a total of 214 days. Flow metering readings collected during the reporting period are included as Attachment 1.

A time composite discharge sample was collected from within the pump station on May 7, 2019. 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. 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. John Morris (Honeywell)
Mr. Maurice Moore (NYSDEC)
Mr. Jason Paananen(City of Buffalo)
Mr. Robert Gersh (Wood E&IS)

Table 1
Alltift Landfill/Ramco Steel Site
First Semi-annual Report for 2019
Discharge Monitoring Report

BSA Permit No. 18-12-BU098	
Sample Date:	May 7, 2019
Sample Location:	Onsite Pump Station to BSA

BSA Permit Parameter	Input Analytical Results				Converted Analytical Results		BSA Daily Max Discharge Limit		Permit Compliance
	Quantity	Qualifier	Reporting Limit	Unit	Quantity	Unit	Quantity	Unit	
pH	7.22		0.100	SU	7.22	SU	5.0 - 12.0	SU	Yes
Copper	0.0059	J	0.010	mg/L	0.0005	lbs/day	7.68	lbs/day	Yes
Mercury	ND		0.0002	mg/l	ND	mg/l	0.0008	mg/l	Yes
Zinc	0.0137	J	0.020	mg/L	0.0012	lbs/day	12	lbs/day	Yes
Total Suspended Solids	42.9		4.0	mg/L	42.9	mg/L	250	mg/L	Yes
Total Phosphorus	0.065		0.050	mg/L	0.065	mg/L	15.35	mg/L	Yes
USEPA Test Method 624	ND - 61.0			µg/L	Monitor Only				
USEPA Test Method 625	ND - 13.1			µg/L					
Total Flow (average)	7.13			gpm	10,272	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)	833100	10/5/2018
Final Reading (pump station)	1508500	12/11/2018
Initial Reading - new flow meter(pump station)	0	12/11/2018
Final Reading (pump station)	1522800	5/7/2019
Total Days in Period		214
Total Flow for Period	**2,198,200**	**gallons**
Average Flow for Period	**7.13**	**gpm**

Note: New flow meter installed on 12/11/18

Prepared by, Date: Aruna, 05/31/2019
Checked by, Date: Ryan Belcher, 05/31/2019

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	**Totalizer Reading (gallons)**
10/5/2018	833,100
12/11/2018	1,508,500
1/4/2019	86,500
1/17/2019	226,700
2/22/2019	909,700
3/8/2019	1,126,300
3/15/2019	1,171,200
5/7/2019	1,522,800

New pump installed 12/11/18

CERTIFICATION STATEMENT

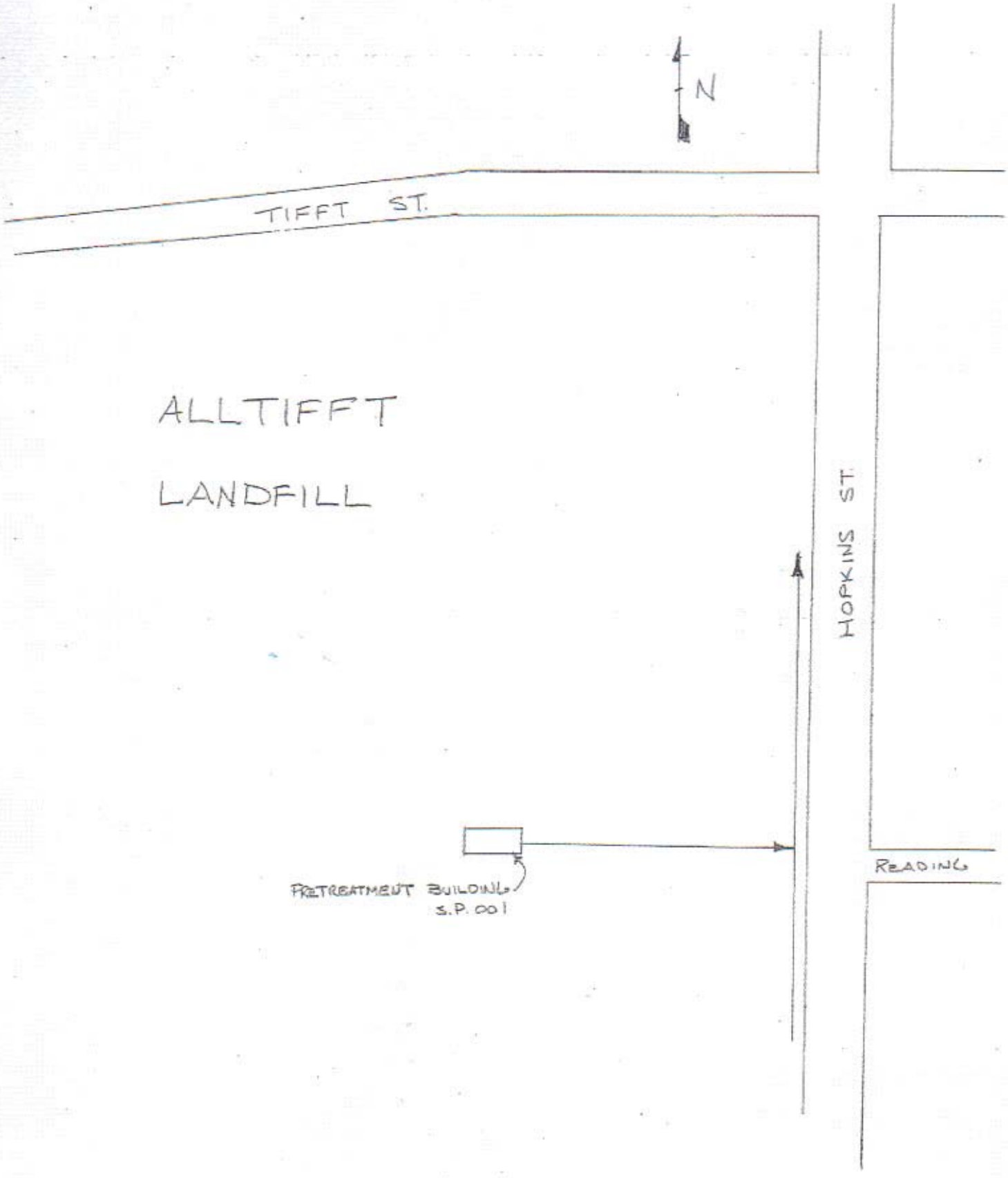
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage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

(Your signature here) 

John W. Formoza, Area Manager **5/31/19**

Jacobs

(Print your name & title here) Date
(Print your company name here)


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

JACOBS

Project Name Honeywell - BUFFALO
Job Number 693104.55.RM.RS
Field Team Jacob Church + Damon Pugh + Mike Stout
Field Conditions

Sampling Event Sem: Annual
Date 5/7/19
Page ___ of ___

Well/Sample Number BSA LIFT STATION
Start Time 6:50 **Finish Time** 13:30

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

Purge Method:
Geopump Ded. Pump (Other) ___
Sample Method: BAILER

Sample ID GRAB1-050719
Duplicate Sample ID GRAB2-050719
Split Sample ID GRAB3-050719
GRAB4-050719
COMP-050719

7:00
Sample Time 9:00
Dupl. Time 11:00
Split. Time 13:00
13:05

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

Water Quality Parameter Measurment Technique: flow-thru cell in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
7:00	COLLECT		SAMPLE	GRAB1-050719				
9:00	COLLECT		SAMPLE	GRAB2-050719				
11:00	COLLECT		SAMPLE	GRAB3-050719				
13:00	COLLECT		SAMPLE	GRAB4-050719				
13:05	COLLECT		SAMPLE	COMP-050719				
PH READING - 7.68								

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
B625	1L AG	(2) 1L	N	None		
V624 PPL	40mL Vials	(3) 40mL	N	NONE		
PH	250mL P	250mL	N	NONE		
TRO4	500mL P	500mL	N	H2SO4		
TSS	1L P	(2) 1L	N	NONE		
ZN, CU	500mL P	500mL	N	HNO3		

Remarks: WATER IS GOLD TINGED WITH NO NOTICABLE ODORS.

WATER METER: 15228

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-Alltift Landfill, 579 Tifft Street, Buffalo, NY

R35116

SGS Job Number: JC87724

Sampling Date: 05/07/19

Report to:

CH2M

John.formoza@ch2m.com

ATTN: John Formoza

Total number of pages in report: **19**

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

Brian McGuire
General Manager

Client Service contact: Rocus Peters 732-329-0200

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

Sections: 1 2 3 4 5

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-1-

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Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **6**
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4.2: JC87724-2: TB- 10
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Sample Summary

Honeywell International Inc. OMM work

Job No: JC87724

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JC87724-1	05/07/19	13:05		05/08/19	AQ	Ground Water	COMP-050719/BSA DISCHARGE
JC87724-2	05/07/19	13:05	MS	05/08/19	AQ	Trip Blank Water	TB-
JC87724-3	05/07/19	13:00	MS	05/08/19	AQ	Ground Water	COMP 1-4 GRAB

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Honeywell International Inc. OMM work	**Job No**	JC87724
Site:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY	**Report Date**	5/23/2019 1:26:15 PM

On 05/08/2019, 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 1.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC87724 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:** VN11647

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC87398-4MS, JC87398-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,1-Dichloroethane, 1,1-Dichloroethene, Acrylonitrile, Chloromethane, cis-1,2-Dichloroethene, Vinyl chloride are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Outside control limits due to acid preservation.
- RPD(s) for MSD for 1,1-Dichloroethene, cis-1,2-Dichloroethene are outside control limits for sample JC87398-4MSD. Outside control limits due to matrix interference.
- JC87724-3: (pH=7) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.

Matrix: AQ **Batch ID:** VT9817

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC87604-7DUP, JC87604-8MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, Dichlorodifluoromethane, Trichlorofluoromethane are outside control limits. Outside control limits due to matrix interference.
- JC87724-2: (pH=5) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits Outside control limits due to acid preservation.

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ **Batch ID:** OP20287

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC87724-3 for Benzidine: Associated CCV outside of control limits low.

Metals Analysis By Method EPA 200.7

Matrix: AQ **Batch ID:** MP14915

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC87713-4MS, JC87713-4MSD, JC87713-4SDL were used as the QC samples for metals.

Metals Analysis By Method EPA 245.1

Matrix:	AQ	Batch ID:	MP15032

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC87943-1MS, JC87943-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 365.3

Matrix:	AQ	Batch ID:	GP21324

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC87605-2DUP, JC87605-2MS were used as the QC samples for Phosphorus, Total.

General Chemistry By Method SM2540 D-11

Matrix:	AQ	Batch ID:	GN95193

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC87676-1DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix:	AQ	Batch ID:	R178293

- The data for SM4500H+ B-11 meets quality control requirements.
- JC87724-1 for pH: Sample received out of holding time for pH analysis.

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

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

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

Summary of Hits

Job Number: JC87724
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Collected: 05/07/19

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC87724-1	**COMP-050719/BSA DISCHARGE**					
Copper		5.9 J	10	4.1	ug/l	EPA 200.7
Zinc		13.7 J	20	8.5	ug/l	EPA 200.7
Phosphorus, Total		0.065	0.050	0.027	mg/l	EPA 365.3
Solids, Total Suspended		42.9	4.0	1.5	mg/l	SM2540 D-11
pH [a]		7.22			su	SM4500H+ B-11
JC87724-2	**TB-**					
No hits reported in this sample.						
JC87724-3	**COMP 1-4 GRAB**					
Benzene [b]		5.1	1.0	0.34	ug/l	EPA 624.1
Chlorobenzene [b]		61.0	1.0	0.33	ug/l	EPA 624.1
Chloroethane [b]		1.9	1.0	0.54	ug/l	EPA 624.1
1,2-Dichlorobenzene [b]		0.54 J	1.0	0.30	ug/l	EPA 624.1
1,4-Dichlorobenzene [b]		0.78 J	1.0	0.63	ug/l	EPA 624.1
cis-1,2-Dichloroethene [b]		15.7	1.0	0.51	ug/l	EPA 624.1
trans-1,2-Dichloroethene [b]		8.9	1.0	0.46	ug/l	EPA 624.1
Trichloroethene [b]		0.97 J	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride [b]		13.5	1.0	0.79	ug/l	EPA 624.1
4-Chloroaniline		13.1	4.8	0.32	ug/l	EPA 625.1
Naphthalene		0.28 J	0.95	0.22	ug/l	EPA 625.1

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

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: COMP-050719/BSA DISCHARGE
Lab Sample ID: JC87724-1 **Date Sampled:** 05/07/19
Matrix: AQ - Ground Water **Date Received:** 05/08/19
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	5.9 J	10	4.1	ug/l	1	05/10/19	05/11/19	ND	EPA 200.7 [1]	EPA 200.7 [3]
Mercury	ND	0.20	0.092	ug/l	1	05/14/19	05/14/19	LL	EPA 245.1 [2]	EPA 245.1 [4]
Zinc	13.7 J	20	8.5	ug/l	1	05/10/19	05/11/19	ND	EPA 200.7 [1]	EPA 200.7 [3]

(1) Instrument QC Batch: MA46695
(2) Instrument QC Batch: MA46707
(3) Prep QC Batch: MP14915
(4) Prep QC Batch: MP15032

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

Report of Analysis

Client Sample ID:	COMP-050719/BSA DISCHARGE		
Lab Sample ID:	JC87724-1	**Date Sampled:**	05/07/19
Matrix:	AQ - Ground Water	**Date Received:**	05/08/19
		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	0.065	0.050	0.027	mg/l	1	05/20/19 13:22	MP	EPA 365.3
Solids, Total Suspended	42.9	4.0	1.5	mg/l	1	05/10/19 17:40	RC	SM2540 D-11
pH [a]	7.22			su	1	05/14/19 14:23	JP	SM4500H+ B-11

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

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	TB-		
Lab Sample ID:	JC87724-2	**Date Sampled:**	05/07/19
Matrix:	AQ - Trip Blank Water	**Date Received:**	05/08/19
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	T237981.D	1	05/09/19 15:25	CSF	n/a	n/a	VT9817
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

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-		
Lab Sample ID:	JC87724-2	**Date Sampled:**	05/07/19
Matrix:	AQ - Trip Blank Water	**Date Received:**	05/08/19
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	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)	104%		76-122%
2037-26-5	Toluene-D8 (SUR)	91%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%		80-120%
1868-53-7	Dibromofluoromethane (S)	102%		80-120%

(a) (pH= 5) Sample is not acid preserved per method/client criteria. Sample analyzed within 3 days holding time as required for acrolein and acrylonitrile. Other compounds within 7 days as required by the method.

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

Report of Analysis

Client Sample ID:	COMP 1-4 GRAB		
Lab Sample ID:	JC87724-3	**Date Sampled:**	05/07/19
Matrix:	AQ - Ground Water	**Date Received:**	05/08/19
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	N275655.D	1	05/10/19 11:49	CSF	n/a	n/a	VN11647
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	5.1	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	61.0	1.0	0.33	ug/l	
75-00-3	Chloroethane	1.9	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	0.54	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	0.78	1.0	0.63	ug/l	J
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	15.7	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	8.9	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
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 1-4 GRAB		
Lab Sample ID:	JC87724-3	**Date Sampled:**	05/07/19
Matrix:	AQ - Ground Water	**Date Received:**	05/08/19
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.97	1.0	0.43	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	13.5	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)	111%		76-122%
2037-26-5	Toluene-D8 (SUR)	98%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	91%		80-120%
1868-53-7	Dibromofluoromethane (S)	108%		80-120%

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

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

Report of Analysis

Client Sample ID:	COMP 1-4 GRAB		
Lab Sample ID:	JC87724-3	**Date Sampled:**	05/07/19
Matrix:	AQ - Ground Water	**Date Received:**	05/08/19
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E107643.D	1	05/10/19 17:35	CS	05/10/19 07:00	OP20287	E3E4822
Run #2							

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

BN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	13.1	4.8	0.32	ug/l	
218-01-9	Chrysene	ND	0.95	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.24	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	1.9	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.35	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	0.95	0.16	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	0.95	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	0.95	0.18	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	0.95	0.16	ug/l	
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	

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 1-4 GRAB		
Lab Sample ID:	JC87724-3	**Date Sampled:**	05/07/19
Matrix:	AQ - Ground Water	**Date Received:**	05/08/19
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

BN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	0.28	0.95	0.22	ug/l	J
98-95-3	Nitrobenzene	ND	1.9	0.61	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.78	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.21	ug/l	
85-01-8	Phenanthrene	ND	0.95	0.17	ug/l	
129-00-0	Pyrene	ND	0.95	0.21	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		32-132%
321-60-8	2-Fluorobiphenyl	65%		40-117%
1718-51-0	Terphenyl-d14	79%		33-126%

(a) Associated CCV outside of control limits low.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

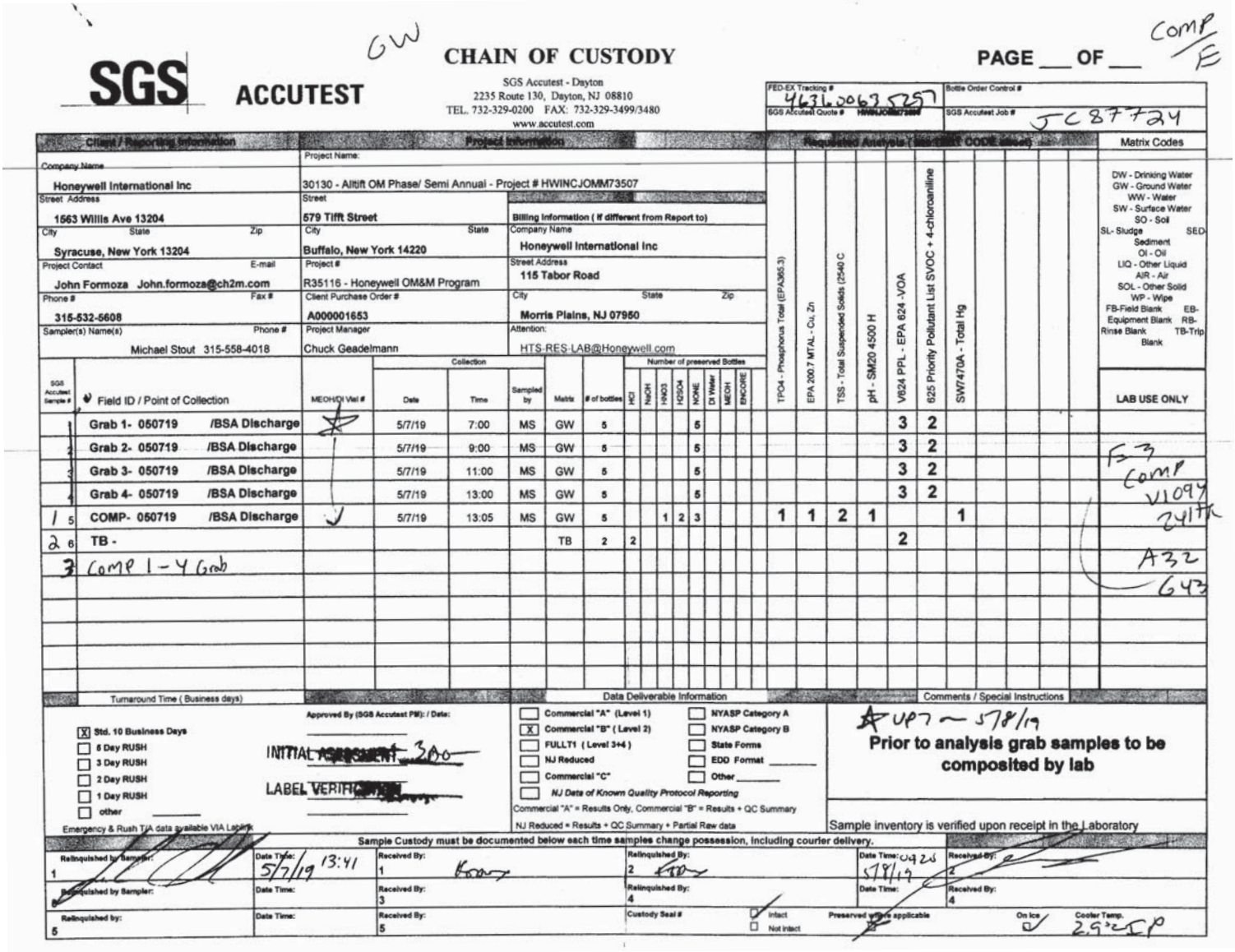
Job Number: JC87724
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

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]
1,3-Dichlorobenzene	541-73-1	**EPA 625.1**	AQ	SGS is not certified for this parameter.[a]
1,4-Dichlorobenzene	106-46-7	**EPA 625.1**	AQ	SGS is not certified for this parameter.[a]

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

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



SGS ACCUTEST

GW

CHAIN OF CUSTODY

PAGE ___ OF ___

Comp E

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

FED-EX Tracking # 4631 2063 5257
Bottle Order Control #
SGS Accutest Quote #
SGS Accutest Job # JC87724

Client / Reporting Information

Company Name: Honeywell International Inc
Street Address: 1563 Willis Ave 13204
City State Zip: Syracuse, New York 13204
Project Contact E-mail: John Formoza John.formoza@ch2m.com
Phone # Fax #: 315-532-5608
Sampler(s) Name(s) Phone #: Michael Stout 315-558-4018

Project Information

Project Name: 30130 - Alltift OM Phase/ Semi Annual - Project # HWINCJOMM73507
Street: 579 Tifft Street
City State: Buffalo, New York 14220
Project #: R35116 - Honeywell OM&M Program
Client Purchase Order #: A000001653
Project Manager: Chuck Geadelmann

Billing Information (if different from Report to)

Company Name: Honeywell International Inc
Street Address: 115 Tabor Road
City State Zip: Morris Plains, NJ 07950
Attention: HTS-RES-LAB@Honeywell.com

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPO4 - Phosphorus Total (EPA365.3)	EPA 200.7 MTAL - Cu, Zn	TSS - Total Suspended Solids (2540 C	pH - SM20 4500 H	V624 PPL - EPA 624 -VOA	625 Priority Pollutant List SVOC + 4-chloroaniline	SW7470A - Total Hg
1	Grab 1- 050719 /BSA Discharge	★	5/7/19	7:00	MS	GW	5					5								3	2	
2	Grab 2- 050719 /BSA Discharge		5/7/19	9:00	MS	GW	5					5								3	2	
3	Grab 3- 050719 /BSA Discharge		5/7/19	11:00	MS	GW	5					5								3	2	
4	Grab 4- 050719 /BSA Discharge		5/7/19	13:00	MS	GW	5					5								3	2	
5	COMP- 050719 /BSA Discharge	✓	5/7/19	13:05	MS	GW	5			1	2	3				1	1	2	1			1
6	TB -					TB	2	2												2		
7	Comp 1-4 Grab																					

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED- Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB-Rinse Blank; TB-Trip Blank

LAB USE ONLY

F3 Comp V1094 241FK A32 643

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

INITIAL ASSESSMENT 3DO

LABEL VERIFI[illegible]

Emergency & Rush T/A data available VIA Labnet

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [X] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

★ UP7 — 5/8/19
Prior to analysis grab samples to be composited by lab

Sample inventory is verified upon receipt in the Laboratory

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/7/19 13:41	1	2	5/8/19 0925	1
2	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
			3	4		4
3	Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not intact	Preserved where applicable
			5			On Ice ✓ Cooler Temp. 2.9°C IP

5.2 5

JC87724: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JC87724 **Client:** AMEC FOSTER WHEELER **Project:** HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 5/8/2019 9:20:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.9);

Cooler Temps (Corrected) °C: Cooler 1: (1.9);

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

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

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

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

Sample Integrity - Instructions	Y	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: 206717 pH 12+: 208717 Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JC87724: Chain of Custody
Page 2 of 2

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

October 18, 2019

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
2019 Second Semi-Annual Report
BPDES Permit Number 18-12-BU098

Dear Ms. Adams:

Enclosed please find the 2019 Second Semi-Annual discharge monitoring report for the pumping facility located at the Alltift Landfill/Ramco Steel (Alltift) Site. The total flow to the Buffalo Sewer Authority (BSA) during this period was 1,049,700 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from May 7, 2019 through September 25, 2019 for a total of 141 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 25, 2019. 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. 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
Alltift Landfill/Ramco Steel Site
Second Semi-annual Report for 2019
Discharge Monitoring Report

BSA Permit No. 18-12-BU098	
Sample Date:	September 25, 2019
Sample Location:	Onsite Pump Station to BSA

BSA Permit Parameter	Input Analytical Results				Converted Analytical Results		BSA Daily Max Discharge Limit		Permit Compliance
	Quantity	Qualifier	Reporting Limit	Unit	Quantity	Unit	Quantity	Unit	
pH	7.12		0.100	SU	7.12	SU	5.0 - 12.0	SU	Yes
Copper	0.0066	J	0.010	mg/L	0.0004	lbs/day	7.68	lbs/day	Yes
Mercury	ND		0.0012	mg/l	ND	mg/l	0.0008	mg/l	Yes
Zinc	ND		0.020	mg/L	ND	lbs/day	12	lbs/day	Yes
Total Suspended Solids	99.1		4.0	mg/L	99.1	mg/L	250	mg/L	Yes
Total Phosphorus	0.10		0.050	mg/L	0.10	mg/L	15.35	mg/L	Yes
USEPA Test Method 624	ND - 56.6			µg/L	Monitor Only				
USEPA Test Method 625	ND - 0.28			µg/L					
Total Flow (average)	5.17			gpm	7,445	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)	1522800	5/7/2019
Final Reading (pump station)	2572500	9/25/2019
Total Days in Period		141
Total Flow for Period	**1,049,700**	**gallons**
Average Flow for Period	**5.17**	**gpm**

Note: New flow meter installed on 12/11/18

Prepared by, Date: Aruna, 10/16/2019
Checked by, Date: Ryan Belcher, 10/16/2019

Attachment 1 - Flow Meter Readings

Buffalo Alltift Lift Station	
Date	**Totalizer Reading (gallons)**
5/7/2019	1,522,800
5/31/2019	1,746,000
7/23/2019	2,004,200
9/25/2019	2,572,500

CERTIFICATION STATEMENT

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

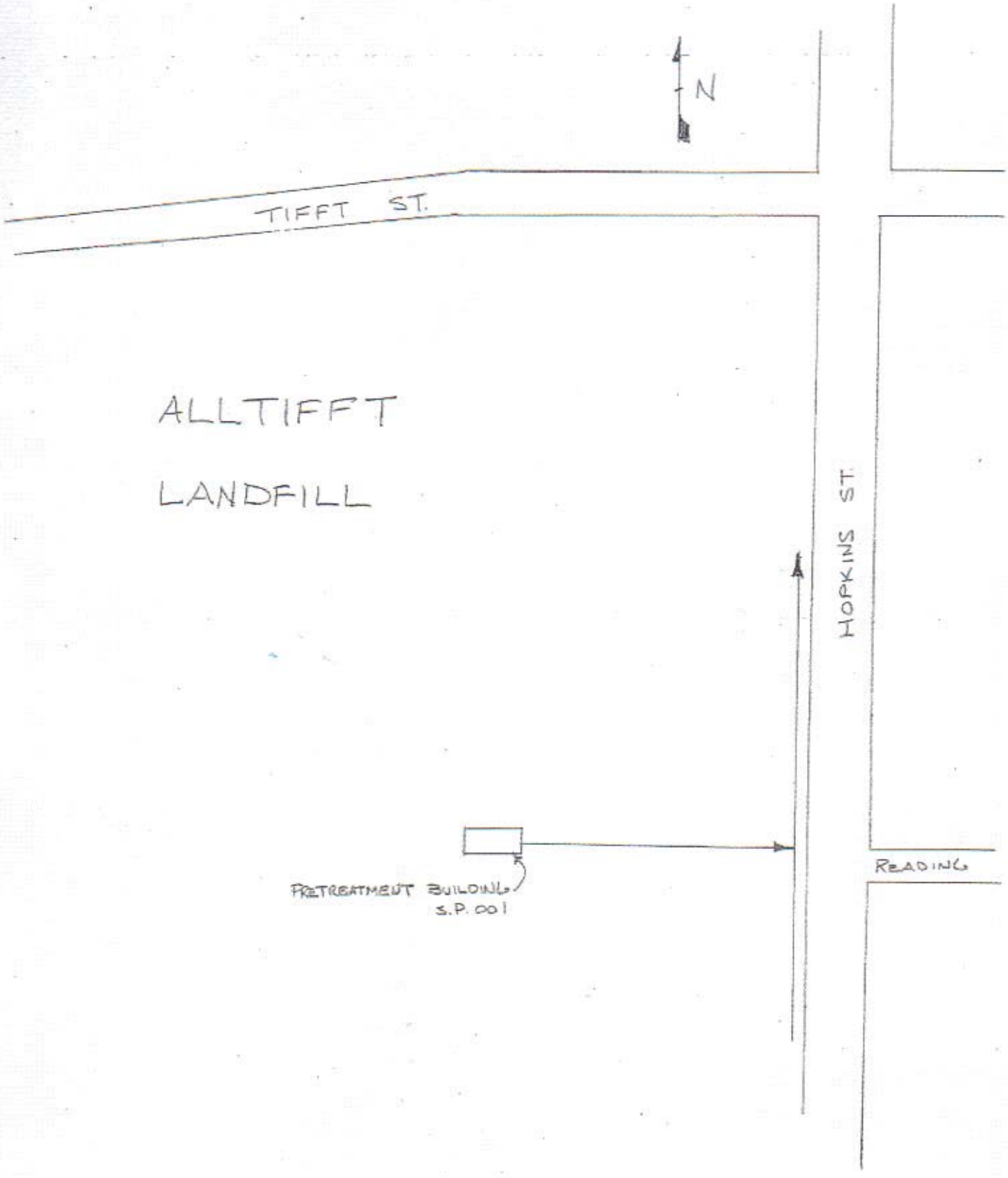
(Your signature here)

John W. Formoza **10/18/19**

Jacobs

(Print your name & title here) Date

(Print your company name here)


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

JACOBS

Project Name Honeywell - BUFFALO
Job Number 693092
Field Team JAKE CHURCH + MIKE STOUT
Field Conditions

Sampling Event SEMI ANNUAL
Date 9-25-19
Page ___ of ___

Well/Sample Number BSA LIFT STATION
Start Time ___ Finish Time ___
Initial Depth to Water ___ Measure Point: PVC Steel Casing Other: ___
Purge Method:
Geopump Ded. Pump (Other) ___
Sample Method: BAILER

Sample ID 6RAB1-092519
Duplicate Sample ID 6RAB2-092519
Split Sample ID 6RAB3-092519
6RAB4-092519
COMP-092519

Sample Time ___
Dupl. Time ___
Split. Time ___

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

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
0700		COLLECT SAMPLE 6RAB1-092519						
0900		COLLECT SAMPLE 6RAB2-092519						
1100		COLLECT SAMPLE 6RAB3-092519						
1300		COLLECT SAMPLE 6RAB4-092519						
1305		COLLECT SAMPLE COMP-092519						
PH READING:		7-10						

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
B625	1L A6	(2) 1L	N	NONE		
V624 PPL	40ml VIALS	(3) 40ml VIALS	N	NONE		
PH	250ml P	250ml	N	NONE		
TP 4	500ml P	500ml	N	H2SO4		
TSS	1L P	(2) 1L	N	NONE		
ZN, CU	500ML P	500ml	N	HNO3		

Remarks:

WATER METER : 2572500

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-Alltift Landfill, 579 Tifft Street, Buffalo, NY

R35116

SGS Job Number: JC95670

Sampling Date: 09/25/19

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: 59

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

Laura Degenhardt
General Manager

Client Service contact: 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)

Sections: 1 2 3 4 5 6 7 8 9

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SGS North America Inc.

Sample Summary

Honeywell International Inc. OMM work

Job No: JC95670

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JC95670-1	09/25/19	13:00	MS	09/26/19	AQ	Ground Water	GRAB 1 THRU 4/BSA DISCHARGE
JC95670-2	09/25/19	13:35	MS	09/26/19	AQ	Ground Water	COMP-092519/BSA DISCHARGE
JC95670-3	09/25/19	13:35	MS	09/26/19	AQ	Trip Blank Water	TB-082119

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Honeywell International Inc. OMM work	**Job No**	JC95670
Site:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY	**Report Date**	10/10/2019 3:06:35 P

On 09/26/2019, 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 JC95670 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:** VN11733

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC96241-2MS, JC96241-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Outside control limits due to acid preservation.
- Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Outside control limits due to acid preservation.
- JC95670-1: Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
- JC95670-3: Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ **Batch ID:** OP23013

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC95670-1 for Benzidine: Associated CCV outside of control limits high, sample was ND.
- OP23013-BSD for Benzidine: Outside of in house control limits.

Metals Analysis By Method EPA 200.7

Matrix: AQ **Batch ID:** MP17602

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC95647-1MS, JC95647-1MSD, JC95647-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Copper are outside control limits for sample MP17602-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP17602-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals Analysis By Method EPA 245.1

Matrix: AQ **Batch ID:** MP17614

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC95654-1MS, JC95654-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 365.3

Matrix: AQ **Batch ID:** GP24037

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC95856-3DUP, JC95856-3MS were used as the QC samples for Phosphorus, Total.

General Chemistry By Method SM2540 D-11

Matrix: AQ **Batch ID:** GN623

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC95769-1DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ **Batch ID:** R181649

- The data for SM4500H+ B-11 meets quality control requirements.
- JC95670-2 for pH: Sample received out of holding time for pH analysis.

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

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

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

Summary of Hits

Job Number: JC95670
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Collected: 09/25/19

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC95670-1	**GRAB 1 THRU 4/BSA DISCHARGE**					
Benzene [a]		4.5	1.0	0.34	ug/l	EPA 624.1
Chlorobenzene [a]		56.6	1.0	0.33	ug/l	EPA 624.1
Chloroethane [a]		1.2	1.0	0.54	ug/l	EPA 624.1
1,2-Dichlorobenzene [a]		0.69 J	1.0	0.30	ug/l	EPA 624.1
1,4-Dichlorobenzene [a]		0.98 J	1.0	0.63	ug/l	EPA 624.1
cis-1,2-Dichloroethene [a]		13.2	1.0	0.51	ug/l	EPA 624.1
trans-1,2-Dichloroethene [a]		4.6	1.0	0.46	ug/l	EPA 624.1
Trichloroethene [a]		0.87 J	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride [a]		8.7	1.0	0.79	ug/l	EPA 624.1
1,2-Dichlorobenzene		0.28 J	1.0	0.17	ug/l	EPA 625.1
JC95670-2	**COMP-092519/BSA DISCHARGE**					
Copper		6.6 J	10	4.1	ug/l	EPA 200.7
Phosphorus, Total		0.10	0.050	0.027	mg/l	EPA 365.3
Solids, Total Suspended		99.1	4.0	1.5	mg/l	SM2540 D-11
pH [b]		7.12			su	SM4500H+ B-11
JC95670-3	**TB-082119**					

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) Sample received out of holding time for pH analysis.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4/BSA DISCHARGE		
Lab Sample ID:	JC95670-1	**Date Sampled:**	09/25/19
Matrix:	AQ - Ground Water	**Date Received:**	09/26/19
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	N277847.D	1	10/08/19 18:21	CSF	n/a	n/a	VN11733
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	4.5	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	56.6	1.0	0.33	ug/l	
75-00-3	Chloroethane	1.2	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	0.69	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	0.98	1.0	0.63	ug/l	J
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	13.2	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	4.6	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
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/BSA DISCHARGE		
Lab Sample ID:	JC95670-1	**Date Sampled:**	09/25/19
Matrix:	AQ - Ground Water	**Date Received:**	09/26/19
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.87	1.0	0.43	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	8.7	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)	100%		76-122%
2037-26-5	Toluene-D8 (SUR)	97%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	103%		80-120%
1868-53-7	Dibromofluoromethane (S)	96%		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.

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/BSA DISCHARGE		
Lab Sample ID:	JC95670-1	**Date Sampled:**	09/25/19
Matrix:	AQ - Ground Water	**Date Received:**	09/26/19
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F187455.D	1	09/30/19 16:06	AR	09/29/19 22:00	OP23013	EF8076
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.20	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.22	ug/l	
92-87-5	Benzidine [a]	ND	10	0.94	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.21	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.22	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	0.36	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.42	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.48	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.25	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	0.35	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.26	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.1	0.42	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	0.28	1.0	0.17	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.18	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.58	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.1	0.53	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.34	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.52	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.24	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.27	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.18	ug/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:	GRAB 1 THRU 4/BSA DISCHARGE		
Lab Sample ID:	JC95670-1	**Date Sampled:**	09/25/19
Matrix:	AQ - Ground Water	**Date Received:**	09/26/19
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

BN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
86-73-7	Fluorene	ND	1.0	0.18	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.34	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.51	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.9	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.41	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.35	ug/l	
78-59-1	Isophorone	ND	2.1	0.29	ug/l	
91-20-3	Naphthalene	ND	1.0	0.24	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.67	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.1	0.85	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.23	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		32-132%
321-60-8	2-Fluorobiphenyl	57%		40-117%
1718-51-0	Terphenyl-d14	38%		33-126%

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

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

Report of Analysis

Client Sample ID:	COMP-092519/BSA DISCHARGE		
Lab Sample ID:	JC95670-2	**Date Sampled:**	09/25/19
Matrix:	AQ - Ground Water	**Date Received:**	09/26/19
		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	6.6 J	10	4.1	ug/l	1	09/30/19	10/01/19	RP	EPA 200.7 [2]	EPA 200.7 [3]
Mercury	ND	1.2	0.55	ug/l	1	09/29/19	09/29/19	CH	EPA 245.1 [1]	EPA 245.1 [4]
Zinc	ND	20	8.5	ug/l	1	09/30/19	10/01/19	RP	EPA 200.7 [2]	EPA 200.7 [3]

(1) Instrument QC Batch: MA47535
(2) Instrument QC Batch: MA47545
(3) Prep QC Batch: MP17602
(4) Prep QC Batch: MP17614

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	COMP-092519/BSA DISCHARGE		
Lab Sample ID:	JC95670-2	**Date Sampled:**	09/25/19
Matrix:	AQ - Ground Water	**Date Received:**	09/26/19
		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	0.10	0.050	0.027	mg/l	1	10/02/19 11:12	MP	EPA 365.3
Solids, Total Suspended	99.1	4.0	1.5	mg/l	1	10/01/19 11:27	RC	SM2540 D-11
pH [a]	7.12			su	1	09/26/19 11:09	SUB	SM4500H+ B-11

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

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	TB-082119		
Lab Sample ID:	JC95670-3	**Date Sampled:**	09/25/19
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/26/19
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	N277845.D	1	10/08/19 17:23	CSF	n/a	n/a	VN11733
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

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-082119		
Lab Sample ID:	JC95670-3	**Date Sampled:**	09/25/19
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/26/19
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	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)	102%		76-122%
2037-26-5	Toluene-D8 (SUR)	97%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	103%		80-120%
1868-53-7	Dibromofluoromethane (S)	97%		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.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

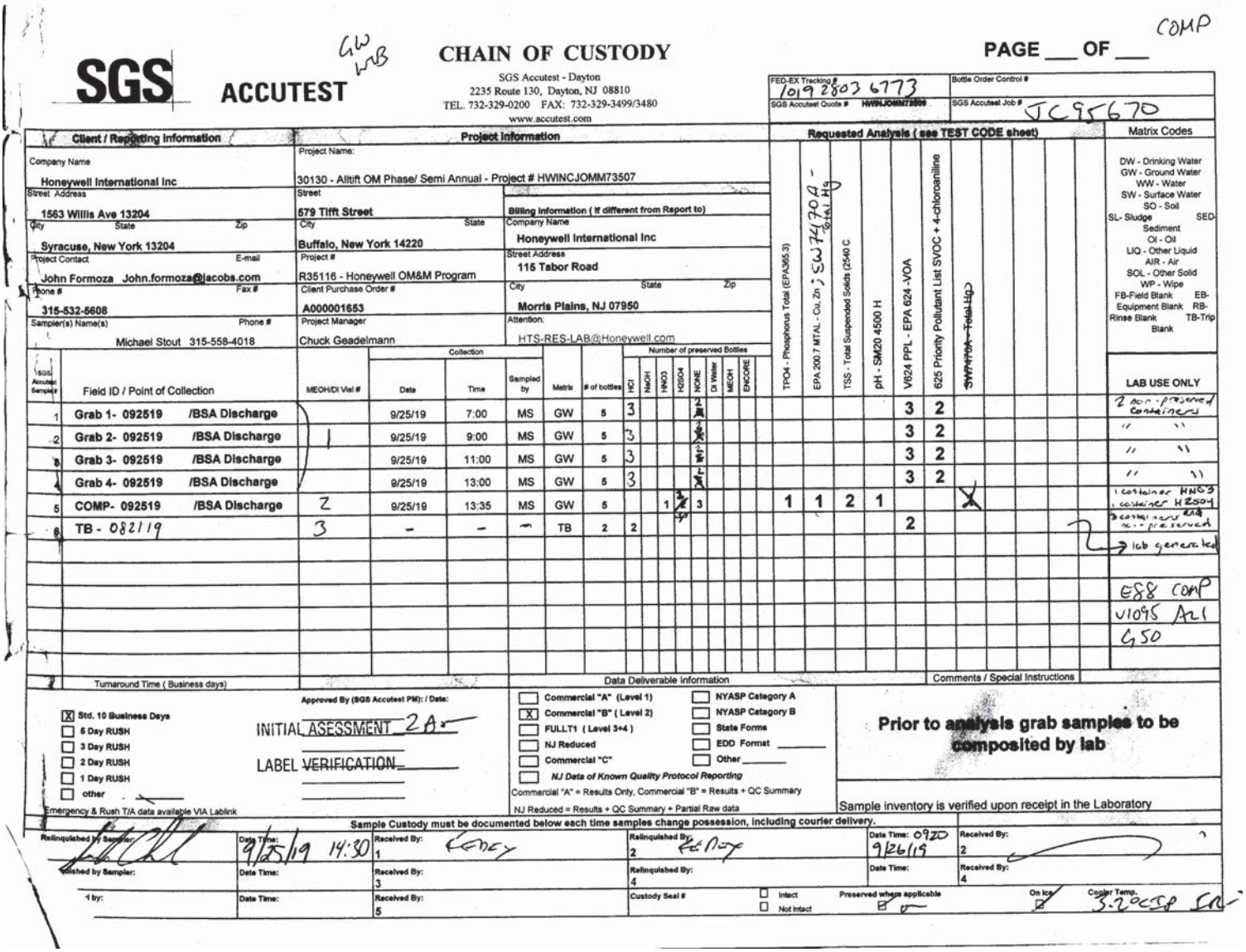
Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

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]
1,3-Dichlorobenzene	541-73-1	**EPA 625.1**	AQ	SGS is not certified for this parameter.[a]
1,4-Dichlorobenzene	106-46-7	**EPA 625.1**	AQ	SGS is not certified for this parameter.[a]

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

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



SGS ACCUTEST

GW WB

COMP

CHAIN OF CUSTODY

PAGE ___ OF ___

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

FED-EX Tracking # 1019 2803 6773 | Bottle Order Control #
SGS Accutest Quote # HWINJOMM73009 | SGS Accutest Job # JC95670

Client / Reporting Information

Company Name: Honeywell International Inc
Street Address: 1563 Willis Ave 13204
City State Zip: Syracuse, New York 13204
Project Contact: John Formoza | E-mail: John.formoza@jacobs.com
Phone #: 315-532-5608 | Fax #
Sampler(s) Name(s): Michael Stout | Phone #: 315-558-4018

Project Information

Project Name: 30130 - Alltift OM Phase/ Semi Annual - Project # HWINCJOMM73507
Street: 579 Tifft Street
City State: Buffalo, New York 14220
Project #: R35116 - Honeywell OM&M Program
Client Purchase Order #: A000001653
Project Manager: Chuck Geadelmann

Billing Information (if different from Report to)

Company Name: Honeywell International Inc
Street Address: 115 Tabor Road
City State Zip: Morris Plains, NJ 07950
Attention: HTS-RES-LAB@Honeywell.com

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPO4 - Phosphorus Total (EPA365.3)	EPA 200.7 MTAL - Cu, Zn; SW 7470A - Total Hg	TSS - Total Suspended Solids (2540 C	pH - SM20 4500 H	V624 PPL - EPA 624 -VOA	625 Priority Pollutant List SVOC + 4-chloroaniline	SW846A - Total Hg	LAB USE ONLY
1	Grab 1- 092519 /BSA Discharge		9/25/19	7:00	MS	GW	5	3				2								3	2		2 non-preserved containers
2	Grab 2- 092519 /BSA Discharge	1	9/25/19	9:00	MS	GW	5	3				2								3	2		" "
3	Grab 3- 092519 /BSA Discharge		9/25/19	11:00	MS	GW	5	3				2								3	2		" "
4	Grab 4- 092519 /BSA Discharge		9/25/19	13:00	MS	GW	5	3				2								3	2		" "
5	COMP- 092519 /BSA Discharge	2	9/25/19	13:35	MS	GW	5				1	3				1	1	2	1			X	1 container HNO3 1 container H2SO4 3 containers non-preserved
6	TB - 082119	3	-	-	-	TB	2	2												2			lab generated
																							ESS COMP
																							V1095 AZ1
																							G50

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

INITIAL ASESSMENT 2A
LABEL VERIFICATION

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [X] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Prior to analysis grab samples to be composited by lab

Sample inventory is verified upon receipt in the Laboratory

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
	9/25/19 14:30	1 Fedex	2 Fedex	9/26/19 0920	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp.
		5					3.2 0C SP

5.2 5

JC95670: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JC95670 **Client:** WOOD ENVIRONMENT & INFRASTRUCT **Project:** HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 9/26/2019 9:20:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

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

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

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

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

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

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

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

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

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

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11733-MB	N277833.D	1	10/08/19	CSF	n/a	n/a	VN11733

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

JC95670-1, JC95670-3

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11733-MB	N277833.D	1	10/08/19	CSF	n/a	n/a	VN11733

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

JC95670-1, JC95670-3

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%	76-122%
2037-26-5	Toluene-D8 (SUR)	99%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	100%	80-120%
1868-53-7	Dibromofluoromethane (S)	101%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.52	120	ug/l	J
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11733-BS	N277831.D	1	10/08/19	CSF	n/a	n/a	VN11733

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

JC95670-1, JC95670-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-02-8	Acrolein	20	18.5	93	60-140
107-13-1	Acrylonitrile	20	22.1	111	64-137
71-43-2	Benzene	20	18.1	91	78-118
75-27-4	Bromodichloromethane	20	17.8	89	77-119
75-25-2	Bromoform	20	18.4	92	70-128
74-83-9	Bromomethane	20	20.4	102	59-141
56-23-5	Carbon tetrachloride	20	20.1	101	69-130
108-90-7	Chlorobenzene	20	19.3	97	78-116
75-00-3	Chloroethane	20	15.9	80	63-136
110-75-8	2-Chloroethyl vinyl ether	100	99.5	100	55-147
67-66-3	Chloroform	20	17.6	88	78-122
74-87-3	Chloromethane	20	17.9	90	49-125
124-48-1	Dibromochloromethane	20	17.9	90	75-117
95-50-1	1,2-Dichlorobenzene	20	18.5	93	76-115
541-73-1	1,3-Dichlorobenzene	20	18.3	92	75-114
106-46-7	1,4-Dichlorobenzene	20	17.9	90	75-113
75-71-8	Dichlorodifluoromethane	20	18.2	91	48-129
75-34-3	1,1-Dichloroethane	20	18.5	93	73-124
107-06-2	1,2-Dichloroethane	20	17.6	88	74-127
75-35-4	1,1-Dichloroethene	20	16.0	80	54-122
156-59-2	cis-1,2-Dichloroethene	20	17.4	87	72-115
156-60-5	trans-1,2-Dichloroethene	20	18.0	90	70-121
78-87-5	1,2-Dichloropropane	20	17.7	89	75-118
10061-01-5	cis-1,3-Dichloropropene	20	18.8	94	76-118
10061-02-6	trans-1,3-Dichloropropene	20	19.2	96	70-122
100-41-4	Ethylbenzene	20	18.9	95	76-118
75-09-2	Methylene chloride	20	17.9	90	69-120
79-34-5	1,1,2,2-Tetrachloroethane	20	18.4	92	66-119
127-18-4	Tetrachloroethene	20	18.3	92	70-130
108-88-3	Toluene	20	19.2	96	78-119
71-55-6	1,1,1-Trichloroethane	20	19.1	96	74-130
79-00-5	1,1,2-Trichloroethane	20	17.8	89	74-121
79-01-6	Trichloroethene	20	17.6	88	78-117
75-69-4	Trichlorofluoromethane	20	17.9	90	66-126
75-01-4	Vinyl chloride	20	19.1	96	54-125
1330-20-7	Xylenes (total)	60	58.4	97	76-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN11733-BS	N277831.D	1	10/08/19	CSF	n/a	n/a	VN11733

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

JC95670-1, JC95670-3

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	102%	76-122%
2037-26-5	Toluene-D8 (SUR)	99%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98%	80-120%
1868-53-7	Dibromofluoromethane (S)	99%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC96241-2MS	N277842.D	1	10/08/19	CSF	n/a	n/a	VN11733
JC96241-2MSD	N277843.D	1	10/08/19	CSF	n/a	n/a	VN11733
JC96241-2	N277834.D	1	10/08/19	CSF	n/a	n/a	VN11733

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

JC95670-1, JC95670-3

CAS No.	Compound	JC96241-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
107-02-8	Acrolein	ND		20	19.8	99	20	20.2	101	2	40-154/18
107-13-1	Acrylonitrile	ND		20	23.9	120	20	23.4	117	2	60-142/19
71-43-2	Benzene	ND		20	22.3	112	20	22.7	114	2	59-136/13
75-27-4	Bromodichloromethane	ND		20	21.8	109	20	22.0	110	1	73-125/13
75-25-2	Bromoform	ND		20	20.0	100	20	20.2	101	1	62-134/12
74-83-9	Bromomethane	ND		20	27.1	136	20	27.0	135	0	54-149/19
56-23-5	Carbon tetrachloride	ND		20	25.3	127	20	26.0	130	3	70-140/14
108-90-7	Chlorobenzene	ND		20	23.9	120	20	23.8	119	0	69-128/11
75-00-3	Chloroethane	ND		20	20.8	104	20	21.4	107	3	58-145/19
110-75-8	2-Chloroethyl vinyl ether	ND		100	ND	0* [a]	100	ND	0* [a]	nc	10-179/37
67-66-3	Chloroform	ND		20	21.9	110	20	21.4	107	2	71-131/15
74-87-3	Chloromethane	ND		20	22.8	114	20	24.8	124	8	44-136/21
124-48-1	Dibromochloromethane	ND		20	21.8	109	20	21.4	107	2	72-123/12
95-50-1	1,2-Dichlorobenzene	ND		20	21.8	109	20	22.2	111	2	69-123/11
541-73-1	1,3-Dichlorobenzene	ND		20	22.6	113	20	23.2	116	3	71-122/11
106-46-7	1,4-Dichlorobenzene	ND		20	22.0	110	20	23.2	116	5	69-121/10
75-71-8	Dichlorodifluoromethane	ND		20	23.0	115	20	24.2	121	5	42-138/19
75-34-3	1,1-Dichloroethane	ND		20	22.0	110	20	23.6	118	7	66-132/18
107-06-2	1,2-Dichloroethane	ND		20	20.8	104	20	20.7	104	0	68-140/13
75-35-4	1,1-Dichloroethene	ND		20	19.8	99	20	19.7	99	1	49-127/18
156-59-2	cis-1,2-Dichloroethene	ND		20	20.7	104	20	21.6	108	4	50-134/14
156-60-5	trans-1,2-Dichloroethene	ND		20	22.9	115	20	22.0	110	4	63-129/18
78-87-5	1,2-Dichloropropane	ND		20	22.8	114	20	22.3	112	2	73-123/14
10061-01-5	cis-1,3-Dichloropropene	ND		20	23.0	115	20	21.3	107	8	71-124/13
10061-02-6	trans-1,3-Dichloropropene	ND		20	23.2	116	20	22.7	114	2	66-127/14
100-41-4	Ethylbenzene	ND		20	24.8	124	20	24.3	122	2	65-130/13
75-09-2	Methylene chloride	ND		20	22.0	110	20	21.9	110	0	65-127/15
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	21.5	108	20	22.1	111	3	62-126/14
127-18-4	Tetrachloroethene	ND		20	23.8	119	20	23.9	120	0	51-145/13
108-88-3	Toluene	ND		20	23.3	117	20	23.7	119	2	66-132/12
71-55-6	1,1,1-Trichloroethane	ND		20	23.8	119	20	23.9	120	0	63-143/15
79-00-5	1,1,2-Trichloroethane	ND		20	21.1	106	20	20.8	104	1	71-127/13
79-01-6	Trichloroethene	ND		20	23.1	116	20	22.4	112	3	46-145/12
75-69-4	Trichlorofluoromethane	ND		20	21.3	107	20	21.9	110	3	57-139/17
75-01-4	Vinyl chloride	ND		20	24.4	122	20	26.2	131	7	45-136/20
1330-20-7	Xylenes (total)	ND		60	73.7	123	60	74.0	123	0	66-131/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC96241-2MS	N277842.D	1	10/08/19	CSF	n/a	n/a	VN11733
JC96241-2MSD	N277843.D	1	10/08/19	CSF	n/a	n/a	VN11733
JC96241-2	N277834.D	1	10/08/19	CSF	n/a	n/a	VN11733

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

JC95670-1, JC95670-3

CAS No.	Surrogate Recoveries	MS	MSD	JC96241-2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	101%	98%	102%	76-122%
2037-26-5	Toluene-D8 (SUR)	103%	101%	97%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	103%	107%	101%	80-120%
1868-53-7	Dibromofluoromethane (S)	96%	96%	101%	80-120%

(a) Outside control limits due to acid preservation.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	VN11706-BFB	**Injection Date:**	09/04/19
Lab File ID:	N277110.D	**Injection Time:**	12:21
Instrument ID:	GCMSN		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	17687	17.4		Pass
75	30.0 - 60.0% of mass 95	55416	54.4		Pass
95	Base peak, 100% relative abundance	101914	100.0		Pass
96	5.0 - 9.0% of mass 95	6890	6.76		Pass
173	Less than 2.0% of mass 174	521	0.51	(0.46) [a]	Pass
174	50.0 - 120.0% of mass 95	112613	110.5		Pass
175	5.0 - 9.0% of mass 174	8682	8.52	(7.71) [a]	Pass
176	95.0 - 101.0% of mass 174	109472	107.4	(97.2) [a]	Pass
177	5.0 - 9.0% of mass 176	6962	6.83	(6.36) [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
VN11706-IC11706	N277111.D	09/04/19	12:52	00:31	Initial cal 0.5
VN11706-IC11706	N277112.D	09/04/19	13:21	01:00	Initial cal 1
VN11706-IC11706	N277113.D	09/04/19	13:51	01:30	Initial cal 2
VN11706-IC11706	N277114.D	09/04/19	14:20	01:59	Initial cal 4
VN11706-IC11706	N277115.D	09/04/19	14:49	02:28	Initial cal 8
VN11706-ICC11706	N277116.D	09/04/19	15:19	02:58	Initial cal 20
VN11706-IC11706	N277117.D	09/04/19	15:48	03:27	Initial cal 50
VN11706-IC11706	N277118.D	09/04/19	16:17	03:56	Initial cal 100
VN11706-IC11706	N277119.D	09/04/19	16:46	04:25	Initial cal 200
VN11706-ICV11706	N277122.D	09/04/19	18:14	05:53	Initial cal verification 20

Instrument Performance Check (BFB)

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	VN11733-BFB	**Injection Date:**	10/08/19
Lab File ID:	N277830.D	**Injection Time:**	08:36
Instrument ID:	GCMSN		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	62936	19.0		Pass
75	30.0 - 60.0% of mass 95	185003	55.8		Pass
95	Base peak, 100% relative abundance	331456	100.0		Pass
96	5.0 - 9.0% of mass 95	21963	6.63		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	335317	101.2		Pass
175	5.0 - 9.0% of mass 174	26787	8.08	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	332181	100.2	(99.1) [a]	Pass
177	5.0 - 9.0% of mass 176	23320	7.04	(7.02) [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
VN11733-BS	N277831.D	10/08/19	09:11	00:35	Blank Spike
VN11733-CC11706	N277831.D	10/08/19	09:11	00:35	Continuing cal 20
VN11733-MB	N277833.D	10/08/19	10:13	01:37	Method Blank
JC96241-2	N277834.D	10/08/19	10:43	02:07	(used for QC only; not part of job JC95670)
ZZZZZZ	N277835.D	10/08/19	11:15	02:39	(unrelated sample)
ZZZZZZ	N277837.D	10/08/19	13:29	04:53	(unrelated sample)
ZZZZZZ	N277838.D	10/08/19	13:58	05:22	(unrelated sample)
ZZZZZZ	N277839.D	10/08/19	14:27	05:51	(unrelated sample)
ZZZZZZ	N277840.D	10/08/19	14:56	06:20	(unrelated sample)
ZZZZZZ	N277841.D	10/08/19	15:26	06:50	(unrelated sample)
JC96241-2MS	N277842.D	10/08/19	15:55	07:19	Matrix Spike
JC96241-2MSD	N277843.D	10/08/19	16:24	07:48	Matrix Spike Duplicate
JC95670-3	N277845.D	10/08/19	17:23	08:47	TB-082119
ZZZZZZ	N277846.D	10/08/19	17:52	09:16	(unrelated sample)
JC95670-1	N277847.D	10/08/19	18:21	09:45	GRAB 1 THRU 4/BSA DISCHARGE
ZZZZZZ	N277848.D	10/08/19	18:50	10:14	(unrelated sample)
ZZZZZZ	N277849.D	10/08/19	19:19	10:43	(unrelated sample)
ZZZZZZ	N277850.D	10/08/19	19:48	11:12	(unrelated sample)

Surrogate Recovery Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Method: EPA 624.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC95670-1	N277847.D	100	97	103	96
JC95670-3	N277845.D	102	97	103	97
JC96241-2MS	N277842.D	101	103	103	96
JC96241-2MSD	N277843.D	98	101	107	96
VN11733-BS	N277831.D	102	99	98	99
VN11733-MB	N277833.D	103	99	100	101

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

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23013-MB1	F187445.D	1	09/30/19	AR	09/29/19	OP23013	EF8076

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

JC95670-1

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

Method Blank Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23013-MB1	F187445.D	1	09/30/19	AR	09/29/19	OP23013	EF8076

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

JC95670-1

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	36%	10-110%
4165-62-2	Phenol-d5	25%	10-110%
118-79-6	2,4,6-Tribromophenol	86%	35-147%
4165-60-0	Nitrobenzene-d5	81%	32-132%
321-60-8	2-Fluorobiphenyl	72%	40-117%
1718-51-0	Terphenyl-d14	97%	33-126%

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

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23013-BS1	F187446.D	1	09/30/19	AR	09/29/19	OP23013	EF8076
OP23013-BSD	F187447.D	1	09/30/19	AR	09/29/19	OP23013	EF8076

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

JC95670-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	50	36.2	72	35.1	70	3	47-110/24
208-96-8	Acenaphthylene	50	39.7	79	37.6	75	5	45-110/24
120-12-7	Anthracene	50	40.2	80	38.3	77	5	52-110/24
92-87-5	Benzidine	100	27.7	28	2.4	2* [a]	168* [a]	10-110/65
56-55-3	Benzo(a)anthracene	50	41.8	84	40.4	81	3	53-110/20
50-32-8	Benzo(a)pyrene	50	45.3	91	42.3	85	7	55-110/23
205-99-2	Benzo(b)fluoranthene	50	42.3	85	40.3	81	5	57-110/23
191-24-2	Benzo(g,h,i)perylene	50	46.0	92	42.2	84	9	51-110/23
207-08-9	Benzo(k)fluoranthene	50	43.3	87	40.9	82	6	56-110/22
101-55-3	4-Bromophenyl phenyl ether	50	41.7	83	39.6	79	5	51-112/23
85-68-7	Butyl benzyl phthalate	50	38.8	78	38.3	77	1	50-122/23
91-58-7	2-Chloronaphthalene	50	33.7	67	33.5	67	1	41-110/26
106-47-8	4-Chloroaniline	50	23.3	47	20.2	40	14	10-110/44
218-01-9	Chrysene	50	40.2	80	37.9	76	6	52-110/20
111-91-1	bis(2-Chloroethoxy)methane	50	36.5	73	35.9	72	2	36-110/21
111-44-4	bis(2-Chloroethyl)ether	50	33.3	67	33.6	67	1	40-111/21
108-60-1	2,2'-Oxybis(1-chloropropane)	50	39.2	78	38.1	76	3	37-110/25
7005-72-3	4-Chlorophenyl phenyl ether	50	41.8	84	40.3	81	4	48-110/25
95-50-1	1,2-Dichlorobenzene	50	29.2	58	29.9	60	2	35-110/28
122-66-7	1,2-Diphenylhydrazine	50	39.8	80	37.8	76	5	39-128/23
541-73-1	1,3-Dichlorobenzene	50	29.0	58	29.5	59	2	32-110/28
106-46-7	1,4-Dichlorobenzene	50	30.3	61	30.0	60	1	33-110/27
121-14-2	2,4-Dinitrotoluene	50	42.0	84	40.9	82	3	61-117/25
606-20-2	2,6-Dinitrotoluene	50	40.9	82	40.9	82	0	61-119/23
91-94-1	3,3'-Dichlorobenzidine	100	63.7	64	58.8	59	8	20-110/33
53-70-3	Dibenzo(a,h)anthracene	50	42.5	85	39.7	79	7	55-110/25
84-74-2	Di-n-butyl phthalate	50	44.3	89	42.4	85	4	55-118/25
117-84-0	Di-n-octyl phthalate	50	39.7	79	37.9	76	5	49-124/26
84-66-2	Diethyl phthalate	50	42.3	85	40.0	80	6	54-113/23
131-11-3	Dimethyl phthalate	50	39.7	79	38.8	78	2	56-110/23
117-81-7	bis(2-Ethylhexyl)phthalate	50	38.0	76	37.5	75	1	50-120/22
206-44-0	Fluoranthene	50	45.2	90	42.2	84	7	55-111/23
86-73-7	Fluorene	50	42.4	85	40.6	81	4	51-110/25
118-74-1	Hexachlorobenzene	50	41.1	82	39.5	79	4	47-116/23
87-68-3	Hexachlorobutadiene	50	32.9	66	33.4	67	2	24-110/34
77-47-4	Hexachlorocyclopentadiene	100	62.2	62	62.7	63	1	10-110/39

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23013-BS1	F187446.D	1	09/30/19	AR	09/29/19	OP23013	EF8076
OP23013-BSD	F187447.D	1	09/30/19	AR	09/29/19	OP23013	EF8076

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

JC95670-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-72-1	Hexachloroethane	50	30.4	61	29.5	59	3	28-110/34
193-39-5	Indeno(1,2,3-cd)pyrene	50	44.7	89	42.1	84	6	51-112/24
78-59-1	Isophorone	50	38.8	78	38.8	78	0	42-111/20
91-20-3	Naphthalene	50	34.7	69	34.3	69	1	34-110/25
98-95-3	Nitrobenzene	50	36.3	73	36.2	72	0	39-110/21
62-75-9	n-Nitrosodimethylamine	50	19.6	39	20.1	40	3	15-110/19
621-64-7	N-Nitroso-di-n-propylamine	50	37.3	75	36.1	72	3	33-117/21
86-30-6	N-Nitrosodiphenylamine	50	41.7	83	39.2	78	6	54-110/24
85-01-8	Phenanthrene	50	38.6	77	37.3	75	3	53-110/23
129-00-0	Pyrene	50	40.7	81	39.0	78	4	52-110/22
120-82-1	1,2,4-Trichlorobenzene	50	32.7	65	32.8	66	0	30-110/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	38%	37%	10-110%
4165-62-2	Phenol-d5	29%	26%	10-110%
118-79-6	2,4,6-Tribromophenol	97%	89%	35-147%
4165-60-0	Nitrobenzene-d5	79%	79%	32-132%
321-60-8	2-Fluorobiphenyl	75%	74%	40-117%
1718-51-0	Terphenyl-d14	98%	95%	33-126%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EF8050-DFTPP	**Injection Date:**	09/09/19
Lab File ID:	F186994.D	**Injection Time:**	11:42
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	19251	36.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	26576	49.6		Pass
70	Less than 2.0% of mass 69	109	0.20	(0.41) [a]	Pass
127	40.0 - 60.0% of mass 198	27289	51.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	53530	100.0		Pass
199	5.0 - 9.0% of mass 198	3396	6.34		Pass
275	10.0 - 30.0% of mass 198	11323	21.2		Pass
365	1.0 - 100.0% of mass 198	1420	2.65		Pass
441	Present, but less than mass 443	3344	6.25	(70.8) [b]	Pass
442	40.0 - 100.0% of mass 198	23777	44.4		Pass
443	17.0 - 23.0% of mass 442	4722	8.82	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8050-IC8050	F186996.D	09/09/19	15:07	03:25	Initial cal 100
EF8050-IC8050	F186997.D	09/09/19	15:36	03:54	Initial cal 80
EF8050-ICC8050	F186998.D	09/09/19	16:05	04:23	Initial cal 50
EF8050-IC8050	F186999.D	09/09/19	16:34	04:52	Initial cal 25
EF8050-IC8050	F187000.D	09/09/19	17:04	05:22	Initial cal 10
EF8050-IC8050	F187001.D	09/09/19	17:33	05:51	Initial cal 5
EF8050-IC8050	F187002.D	09/09/19	18:02	06:20	Initial cal 2
EF8050-IC8050	F187009.D	09/09/19	18:31	06:49	Initial cal 1
EF8050-ICV8050	F187003.D	09/09/19	19:00	07:18	Initial cal verification 50
EF8050-ICV8050	F187004.D	09/09/19	19:29	07:47	Initial cal verification 50
EF8050-ICV8050	F187005.D	09/09/19	21:02	09:20	Initial cal verification 50
EF8050-ICV8050	F187006.D	09/09/19	21:31	09:49	Initial cal verification 50
EF8050-ICV8050	F187007.D	09/09/19	22:00	10:18	Initial cal verification 50
EF8050-ICV8050	F187008.D	09/09/19	22:29	10:47	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EF8051-DFTPP	**Injection Date:**	09/09/19
Lab File ID:	F187010.D	**Injection Time:**	22:54
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	32371	37.9		Pass
68	Less than 2.0% of mass 69	110	0.13	(0.28) [a]	Pass
69	Mass 69 relative abundance	39802	46.7		Pass
70	Less than 2.0% of mass 69	125	0.15	(0.31) [a]	Pass
127	40.0 - 60.0% of mass 198	43974	51.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	85301	100.0		Pass
199	5.0 - 9.0% of mass 198	5791	6.79		Pass
275	10.0 - 30.0% of mass 198	20470	24.0		Pass
365	1.0 - 100.0% of mass 198	3126	3.66		Pass
441	Present, but less than mass 443	7257	8.51	(77.4) [b]	Pass
442	40.0 - 100.0% of mass 198	50296	59.0		Pass
443	17.0 - 23.0% of mass 442	9381	11.0	(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
EF8051-IC8051	F187011.D	09/09/19	23:06	00:12	Initial cal 100
EF8051-IC8051	F187012.D	09/09/19	23:35	00:41	Initial cal 80
EF8051-ICC8051	F187013.D	09/10/19	00:04	01:10	Initial cal 50
EF8051-IC8051	F187014.D	09/10/19	00:33	01:39	Initial cal 25
EF8051-IC8051	F187015.D	09/10/19	01:02	02:08	Initial cal 10
EF8051-IC8051	F187016.D	09/10/19	01:32	02:38	Initial cal 5
EF8051-IC8051	F187017.D	09/10/19	02:01	03:07	Initial cal 2
EF8051-IC8051	F187018.D	09/10/19	02:30	03:36	Initial cal 1
EF8051-ICV8051	F187019.D	09/10/19	02:59	04:05	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EF8052-DFTPP	**Injection Date:**	09/10/19
Lab File ID:	F187020.D	**Injection Time:**	03:24
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	32045	37.0		Pass
68	Less than 2.0% of mass 69	85	0.10	(0.21) [a]	Pass
69	Mass 69 relative abundance	41247	47.6		Pass
70	Less than 2.0% of mass 69	208	0.24	(0.50) [a]	Pass
127	40.0 - 60.0% of mass 198	43296	50.0		Pass
197	Less than 1.0% of mass 198	117	0.14		Pass
198	Base peak, 100% relative abundance	86586	100.0		Pass
199	5.0 - 9.0% of mass 198	6005	6.94		Pass
275	10.0 - 30.0% of mass 198	19688	22.7		Pass
365	1.0 - 100.0% of mass 198	2644	3.05		Pass
441	Present, but less than mass 443	7583	8.76	(78.2) [b]	Pass
442	40.0 - 100.0% of mass 198	50101	57.9		Pass
443	17.0 - 23.0% of mass 442	9696	11.2	(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
EF8052-IC8052	F187021.D	09/10/19	03:36	00:12	Initial cal 100
EF8052-IC8052	F187022.D	09/10/19	04:05	00:41	Initial cal 80
EF8052-ICC8052	F187023.D	09/10/19	04:34	01:10	Initial cal 50
EF8052-IC8052	F187024.D	09/10/19	05:04	01:40	Initial cal 25
EF8052-IC8052	F187025.D	09/10/19	05:33	02:09	Initial cal 10
EF8052-IC8052	F187026.D	09/10/19	06:02	02:38	Initial cal 5
EF8052-IC8052	F187027.D	09/10/19	06:31	03:07	Initial cal 2
EF8052-IC8052	F187028.D	09/10/19	07:00	03:36	Initial cal 1
EF8052-ICV8052	F187029.D	09/10/19	07:28	04:04	Initial cal verification 50
EF8052-ICV8052	F187030.D	09/10/19	07:58	04:34	Initial cal verification 50
EF8052-ICV8052	F187031.D	09/10/19	08:26	05:02	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EF8076-DFTPP	**Injection Date:**	09/30/19
Lab File ID:	F187438.D	**Injection Time:**	08:04
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	41709	36.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	52868	46.1		Pass
70	Less than 2.0% of mass 69	44	0.04	(0.08) [a]	Pass
127	40.0 - 60.0% of mass 198	58149	50.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	114722	100.0		Pass
199	5.0 - 9.0% of mass 198	7844	6.84		Pass
275	10.0 - 30.0% of mass 198	26501	23.1		Pass
365	1.0 - 100.0% of mass 198	3294	2.87		Pass
441	Present, but less than mass 443	9878	8.61	(80.2) [b]	Pass
442	40.0 - 100.0% of mass 198	69581	60.7		Pass
443	17.0 - 23.0% of mass 442	12314	10.7	(17.7) [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
EF8076-CC8050	F187439.D	09/30/19	08:15	00:11	Continuing cal 25
EF8076-CC8051	F187440.D	09/30/19	08:44	00:40	Continuing cal 25
EF8076-CC8052	F187441.D	09/30/19	09:14	01:10	Continuing cal 25
OP23027-MB1	F187442.D	09/30/19	09:43	01:39	Method Blank
OP23027-LB36	F187443.D	09/30/19	10:12	02:08	Leachate Blank
OP23027-BS1	F187444.D	09/30/19	10:42	02:38	Blank Spike
OP23013-MB1	F187445.D	09/30/19	11:11	03:07	Method Blank
OP23013-BS1	F187446.D	09/30/19	11:40	03:36	Blank Spike
OP23013-BSD	F187447.D	09/30/19	12:10	04:06	Blank Spike Duplicate
OP23027-MS	F187448.D	09/30/19	12:39	04:35	Matrix Spike
OP23027-LS21	F187448.D	09/30/19	12:39	04:35	Leachate Spike
OP23027-MSD	F187449.D	09/30/19	13:09	05:05	Matrix Spike Duplicate
JC95673-1	F187450.D	09/30/19	13:38	05:34	(used for QC only; not part of job JC95670)
ZZZZZZ	F187451.D	09/30/19	14:08	06:04	(unrelated sample)
ZZZZZZ	F187452.D	09/30/19	14:37	06:33	(unrelated sample)
ZZZZZZ	F187453.D	09/30/19	15:07	07:03	(unrelated sample)
ZZZZZZ	F187454.D	09/30/19	15:37	07:33	(unrelated sample)
JC95670-1	F187455.D	09/30/19	16:06	08:02	GRAB 1 THRU 4/BSA DISCHARGE
ZZZZZZ	F187456.D	09/30/19	16:36	08:32	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EF8076-DFTPP	**Injection Date:**	09/30/19
Lab File ID:	F187438.D	**Injection Time:**	08:04
Instrument ID:	GCMSF		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	F187457.D	09/30/19	17:05	09:01	(unrelated sample)
ZZZZZZ	F187459.D	09/30/19	18:04	10:00	(unrelated sample)

Surrogate Recovery Summary

Job Number: JC95670
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft 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
JC95670-1	F187455.D	67	57	38
OP23013-BS1	F187446.D	79	75	98
OP23013-BSD	F187447.D	79	74	95
OP23013-MB1	F187445.D	81	72	97

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

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: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	13	77		
Antimony	6.0	1.1	4.1		
Arsenic	3.0	1.2	2.5		
Barium	200	.2	17		
Beryllium	1.0	.1	.5		
Bismuth	20	1.8	4.8		
Boron	100	1.2	85		
Cadmium	3.0	.2	1.2		
Calcium	5000	3.7	130		
Cerium	100				
Chromium	10	.4	1.5		
Cobalt	50	.3	2.5		
Copper	10	1	4.1	1.4	<10
Iron	100	2.4	30		
Lead	3.0	1.5	2.4		
Lithium	50	1.5	9.1		
Magnesium	5000	17	200		
Manganese	15	.1	2		
Molybdenum	20	.3	4.5		
Nickel	10	.3	1.8		
Phosphorus	50	2	14		
Potassium	10000	40	200		
Selenium	10	1.8	5.5		
Silicon	200	.9	130		
Silver	10	.5	2.4		
Sodium	10000	13	900		
Strontium	10	.2	1.6		
Sulfur	50	3.5	18		
Thallium	10	1.6	1.9		
Tin	50	.6	4.7		
Titanium	10	.6	1.9		
Tungsten	50	1.1	19		
Vanadium	50	.4	2.3		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	RL	IDL	MDL	MB raw	final
Zinc	20	.2	8.5	4.0	<20
Zirconium	10	.2	4.9		

Associated samples MP17602: JC95670-2

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: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	JC95647-1 Original	MS	Spikelot MP200.7A	% Rec	QC Limits
Aluminum	anr				
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Bismuth					
Boron					
Cadmium	anr				
Calcium					
Cerium					
Chromium	anr				
Cobalt					
Copper	25.2	2030	2000	100.2	70-130
Iron	anr				
Lead	anr				
Lithium					
Magnesium					
Manganese	anr				
Molybdenum					
Nickel	anr				
Phosphorus					
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Sulfur					
Thallium	anr				
Tin	anr				
Titanium					
Tungsten					
Vanadium					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	JC95647-1 Original	MS	Spikelot MP200.7A	% Rec	QC Limits
Zinc	32.0	2100	2000	103.4	70-130
Zirconium					

Associated samples MP17602: JC95670-2

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: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	JC95647-1 Original	MSD	Spikelot MP200.7A	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Bismuth						
Boron						
Cadmium	anr					
Calcium						
Cerium						
Chromium	anr					
Cobalt						
Copper	25.2	2060	2000	101.7	1.5	10
Iron	anr					
Lead	anr					
Lithium						
Magnesium						
Manganese	anr					
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Sulfur						
Thallium	anr					
Tin	anr					
Titanium						
Tungsten						
Vanadium						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602 Methods: EPA 200.7
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/30/19

Metal	JC95647-1 Original	MSD	Spikelot MP200.7A	% Rec	MSD RPD	QC Limit
Zinc	32.0	2100	2000	103.4	0.0	10
Zirconium						

Associated samples MP17602: JC95670-2

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: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	BSP Result	Spikelot MP200.7A	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Cerium				
Chromium	anr			
Cobalt				
Copper	2050	2000	102.5	85-115
Iron	anr			
Lead	anr			
Lithium				
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Sulfur				
Thallium	anr			
Tin	anr			
Titanium				
Tungsten				
Vanadium				

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	BSP Result	Spikelot MP200.7A	% Rec	QC Limits
Zinc	2140	2000	107.0	85-115
Zirconium				

Associated samples MP17602: JC95670-2

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	JC95647-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Cerium				
Chromium	anr			
Cobalt				
Copper	25.2	60.3	139.3(a)	0-10
Iron	anr			
Lead	anr			
Lithium				
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Sulfur				
Thallium	anr			
Tin	anr			
Titanium				
Tungsten				
Vanadium				

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17602
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 09/30/19

Metal	JC95647-1 Original	SDL 1:5	%DIF	QC Limits
Zinc	32.0	36.2	13.1*(b)	0-10
Zirconium				

Associated samples MP17602: JC95670-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

8.1.4

8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17614
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 09/29/19

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.014	.092	-0.032	<0.20

Associated samples MP17614: JC95670-2

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: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17614
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 09/29/19

Metal	JC95654-1 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	2.1	2	105.0	70-130

Associated samples MP17614: JC95670-2

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: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17614
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 09/29/19

Metal	JC95654-1 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.1	2	105.0	0.0	19

Associated samples MP17614: JC95670-2

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: JC95670
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17614
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 09/29/19

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

Associated samples MP17614: JC95670-2

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: JC95670
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	GP24037/GN682	0.050	0.0	mg/l	0.40	0.37	92.5	80-120%
Solids, Total Suspended	GN623	4.0	0.0	mg/l				

Associated Samples:
Batch GN623: JC95670-2
Batch GP24037: JC95670-2
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC95670
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	GP24037/GN682	JC95856-3	mg/l	0.0	0.0	0.0	0-38%
Solids, Total Suspended	GN623	JC95769-1	mg/l	0.0	0.0	0.0	0-17%

Associated Samples:
Batch GN623: JC95670-2
Batch GP24037: JC95670-2
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC95670
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	GP24037/GN682	JC95856-3	mg/l	0.0	0.40	0.34	85.0	35-137%

Associated Samples:
Batch GP24037: JC95670-2
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

JACOBS

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F +1 315 468-1664
www.jacobs.com

May 4, 2020

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

Subject: **Alltift Landfill/Ramco Steel Site**
Discharge Monitoring Report
2020 First Semi-Annual Report
BPDES Permit Number 18-12-BU098

Dear Ms. Adams:

Enclosed please find the 2020 First Semi-Annual discharge monitoring report for the pumping facility located at the Alltift Landfill/Ramco Steel (Alltift) Site. The total flow to the Buffalo Sewer Authority (BSA) during this period was 3,029.992 gallons. The flow was measured from a totalizing meter within the lift station at the Alltift Site from September 25, 2019 through April 01, 2020 for a total of 189 days. Flow metering readings collected during the reporting period are included as Attachment 1.

A time composite discharge sample was collected from within the pump station on April 01, 2020. Four samples were collected over an evenly-spaced work day period for VOCs and SVOCs, with the four samples composited in the laboratory per permit requirements. The sample for metals, total suspended solids, total phosphorus, mercury and pH was collected as a composite sample. The pH reported on the discharge monitoring report is the pH reported on the laboratory report. A second pH was taken in the field and reported on the field sampling notes. A summary of the analytical results, compared to permit limits, is provided in Table 1. All parameters were in compliance with permit limits. The laboratory analytical report is provided as Attachment 2. If you have any questions or require additional information, please contact me at (315) 468-1663.

Sincerely,

Jacobs,

John W. Formoza
Area Manager

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

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

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

BSA Permit No. 18-12-BU098	
Sample Date:	September 25, 2019
Sample Location:	Onsite Pump Station to BSA

BSA Permit Parameter	Input Analytical Results				Converted Analytical Results		BSA Daily Max Discharge Limit		Permit Compliance
	Quantity	Qualifier	Reporting Limit	Unit	Quantity	Unit	Quantity	Unit	
pH	7.04		0.100	SU	7.04	SU	5.0 - 12.0	SU	Yes
Copper	ND		0.010	mg/L	ND	lbs/day	7.68	lbs/day	Yes
Mercury	ND		0.0002	mg/l	ND	mg/l	0.0008	mg/l	Yes
Zinc	ND		0.020	mg/L	ND	lbs/day	12	lbs/day	Yes
Total Suspended Solids	43.2		4.0	mg/L	43.2	mg/L	250	mg/L	Yes
Total Phosphorus	0.053		0.050	mg/L	0.05	mg/L	15.35	mg/L	Yes
USEPA Test Method 624	ND - 47			µg/L	Monitor Only				
USEPA Test Method 625	ND-20.1			µg/L					
Total Flow (average)	11.13			gpm	16,032	gpd	57,600	gpd	Yes

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

Flow Calculations	Meter	
Initial Reading (pump station)	2572500	9/25/2019
Final Reading (pump station)	2827092	10/29/2019
Initial Reading (pump station)	0	10/29/2019
Final Reading (pump station)	2775400	4/1/2020
Total Days in Period		189
Total Flow for Period	**3,029,992**	**gallons**
Average Flow for Period	**11.13**	**gpm**

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

Prepared by, Date: Aruna, 4/27/2020
Checked by, Date: John Formoza, 5/04/2020

Attachment 1 - Flow Meter Readings

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

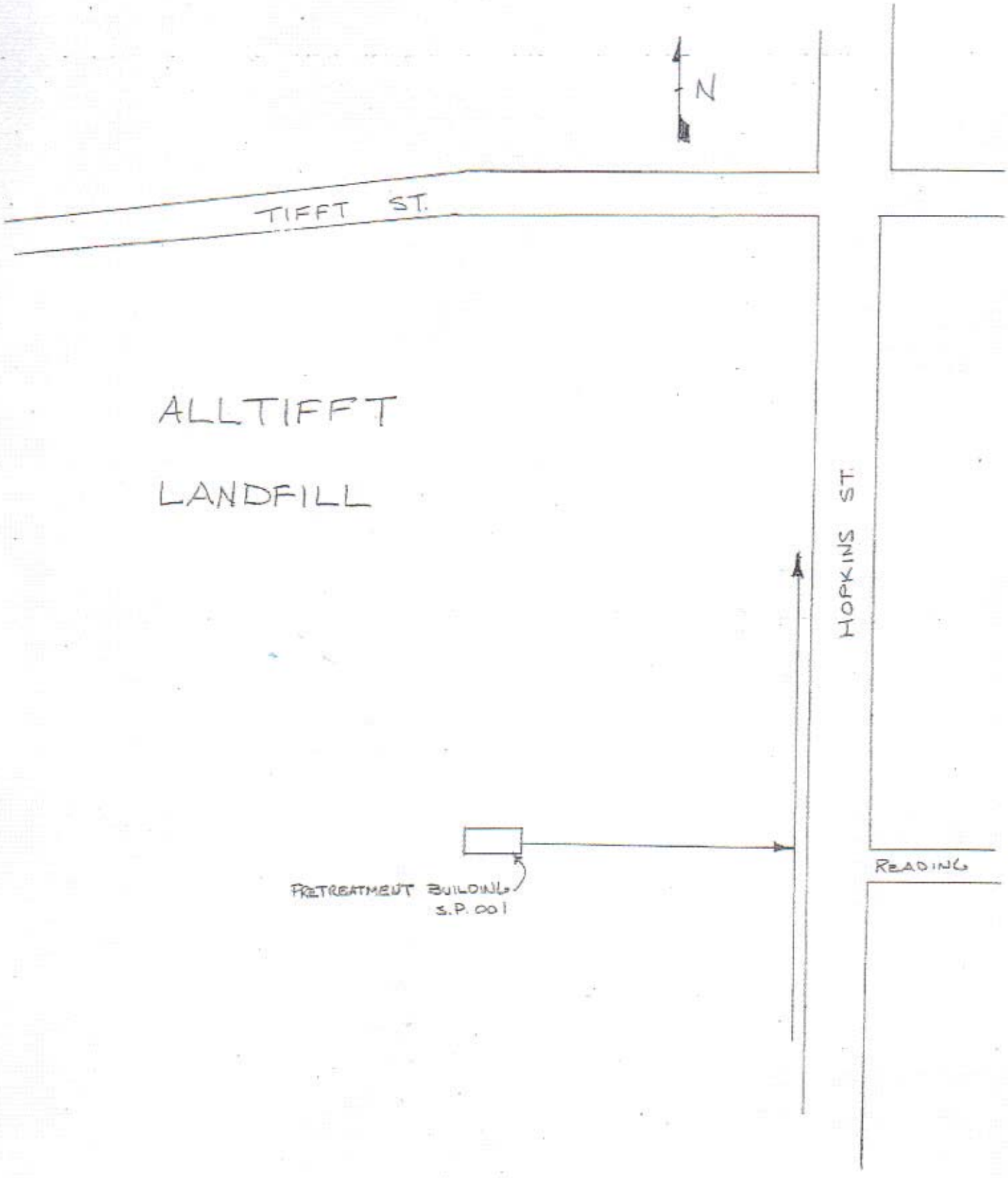
CERTIFICATION STATEMENT

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

John W Formoza AREA MANAGER MAY 4, 2020

John W. Formoza
Jacobs

Date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TIFFT ST.
ALLTIFFT
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HOPKINS ST.
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PRETREATMENT BUILDING
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Project Name Honeywell - Buffalo
Job Number HWOMM468
Field Team Damon Pugh ; Andrew Petrilli
Field Conditions 54°F; Sunny

Sampling Event Semi-Annual
Date 4/1/2020
Page 1 of 1

Well/Sample Number BSA 4A Station

Start Time 0750 Finish Time 1415

Initial Depth to Water ____ Measure Point: PVC Steel Casing Other: ____

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

Sample ID	GRAB 1 - 040120	Sample Time 0800
Duplicate Sample ID	GRAB 3 - 040120	Dupl. Time 1200
Split Sample ID	GRAB 4 - 040120	Split. Time 1400
	COMP - 040120	1405

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

Water Quality Parameter Measurment Technique: flow-thru cell in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
0800		Collect	sample	GRAB 1 - 040120				
1000		Collect	sample	GRAB 2 - 040120				
1200		Collect	sample	GRAB 3 - 040120				
1400		Collect	sample	GRAB 4 - 040120				
1405		Collect	sample	COMP - 040120				
pH reading : 7.16								

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
BGS	1L AG	1L	N	None		
VG24 PPL	40 mL VOAs	40 mL	N	None		
PH	250 mL P	250 mL	N	None		
TPO4	500 mL P	500 mL	N	H2SO4		
TSS	1L Poly	1L	N	None		
ZN, CU	500 mL P	500mL	N	HNO3		

Remarks: Water consistently hinged yellow throughout each draw. No noticeable odor.

Water meter : 27754

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-Alltift Landfill, 579 Tifft Street, Buffalo, NY

R35116 PO#A000572179

SGS Job Number: JD5669

Sampling Date: 04/01/20

Report to:

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

ATTN: Ryan Belcher

Total number of pages in report: **71**

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

Laura Degenhardt
General Manager

Client Service contact: Victoria Pushkova 732-329-0200

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

May 1, 2020

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

RE: SGS – Dayton, Job # JD5669 – Reissues

Dear Mr. Belcher,

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

Specifically, the ABN parameter list has been revised to meet client's request. The attached revised report incorporates these revisions.

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

Sincerely,

Report Department

SGS North America Inc.

CONTINUOUS SERVICE IMPROVEMENT!

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

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SGS North America Inc.

Sample Summary

Honeywell International Inc. OMM work

Job No: JD5669

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD5669-1	04/01/20	14:00	MS	04/06/20	AQ	Ground Water	GRAB 1 THRU 4-040120/BSA DISCHARGE
JD5669-2	04/01/20	14:05	MS	04/06/20	AQ	Ground Water	COMP-040120/BSA DISCHARGE
JD5669-3	04/01/20	14:05	MS	04/06/20	AQ	Trip Blank Water	TB-

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Honeywell International Inc. OMM work	**Job No**	JD5669
Site:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY	**Report Date**	5/1/2020 2:10:32 PM

On 04/06/2020, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 5.5 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD5669 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

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

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

MS Volatiles By Method EPA 624.1

Matrix: AQ **Batch ID:** VT10095

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

Matrix: AQ **Batch ID:** VT10104

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

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ **Batch ID:** OP26904

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

Metals Analysis By Method EPA 200.7

Matrix: AQ **Batch ID:** MP20636

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

Metals Analysis By Method EPA 245.1

Matrix: AQ **Batch ID:** MP20647

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

General Chemistry By Method EPA 365.3

Matrix: AQ **Batch ID:** GP27714

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

General Chemistry By Method SM2540 D-11

Matrix: AQ **Batch ID:** GN7037

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

General Chemistry By Method SM4500H+ B-11

Matrix: AQ **Batch ID:** R184820

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

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

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

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

Summary of Hits

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

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD5669-1	**GRAB 1 THRU 4-040120/BSA DISCHARGE**					
Benzene [a]		2.7	1.0	0.34	ug/l	EPA 624.1
Chlorobenzene [a]		47.0	1.0	0.33	ug/l	EPA 624.1
Chloroethane [a]		2.4	1.0	0.54	ug/l	EPA 624.1
1,2-Dichlorobenzene [a]		0.47 J	1.0	0.30	ug/l	EPA 624.1
cis-1,2-Dichloroethene [a]		12.6	1.0	0.51	ug/l	EPA 624.1
trans-1,2-Dichloroethene [a]		7.1	1.0	0.46	ug/l	EPA 624.1
Trichloroethene [a]		0.78 J	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride [a]		6.4	1.0	0.79	ug/l	EPA 624.1
4-Chloroaniline		20.1	4.8	0.32	ug/l	EPA 625.1
1,2-Dichlorobenzene		0.26 J	0.95	0.16	ug/l	EPA 625.1
JD5669-2	**COMP-040120/BSA DISCHARGE**					
Phosphorus, Total		0.053	0.050	0.027	mg/l	EPA 365.3
Solids, Total Suspended		43.2	4.0	1.5	mg/l	SM2540 D-11
pH [b]		7.04			su	SM4500H+ B-11
JD5669-3	**TB-**					

No hits reported in this sample.

(a) (pH= 2.5)Sample pH did not satisfy field preservation criteria.
(b) Sample received out of holding time for pH analysis. Temp of pH Reading: 15.6 Deg. C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-040120/BSA DISCHARGE		
Lab Sample ID:	JD5669-1	**Date Sampled:**	04/01/20
Matrix:	AQ - Ground Water	**Date Received:**	04/06/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	T244298.D	1	04/14/20 20:29	CSF	n/a	n/a	VT10104
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	2.7	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	47.0	1.0	0.33	ug/l	
75-00-3	Chloroethane	2.4	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	0.47	1.0	0.30	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	12.6	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	7.1	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

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

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-040120/BSA DISCHARGE		
Lab Sample ID:	JD5669-1	**Date Sampled:**	04/01/20
Matrix:	AQ - Ground Water	**Date Received:**	04/06/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.78	1.0	0.43	ug/l	J
75-69-4	Trichlorofluoromethane [b]	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	6.4	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	114%		76-122%
2037-26-5	Toluene-D8 (SUR)	92%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%		80-120%
1868-53-7	Dibromofluoromethane (S)	99%		80-120%

(a) (pH= 2.5)Sample pH did not satisfy field preservation criteria.
(b) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-040120/BSA DISCHARGE		
Lab Sample ID:	JD5669-1	**Date Sampled:**	04/01/20
Matrix:	AQ - Ground Water	**Date Received:**	04/06/20
Method:	EPA 625.1 EPA 608	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

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

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

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.8	0.78	ug/l	
59-50-7	4-Chloro-3-methyl phenol [a]	ND	4.8	0.85	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	1.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	2.3	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	9.5	1.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.8	1.2	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.91	ug/l	
100-02-7	4-Nitrophenol [a]	ND	9.5	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	4.8	1.3	ug/l	
108-95-2	Phenol	ND	1.9	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.88	ug/l	
83-32-9	Acenaphthene	ND	0.95	0.18	ug/l	
208-96-8	Acenaphthylene	ND	0.95	0.13	ug/l	
120-12-7	Anthracene	ND	0.95	0.20	ug/l	
92-87-5	Benzidine	ND	9.5	0.86	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.95	0.19	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.95	0.20	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.95	0.20	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.95	0.32	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.95	0.20	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.38	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.44	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.22	ug/l	
106-47-8	4-Chloroaniline	20.1	4.8	0.32	ug/l	
218-01-9	Chrysene	ND	0.95	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.24	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	1.9	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.35	ug/l	
95-50-1	1,2-Dichlorobenzene	0.26	0.95	0.16	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	0.95	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	0.95	0.18	ug/l	

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

Report of Analysis

Client Sample ID:	GRAB 1 THRU 4-040120/BSA DISCHARGE		
Lab Sample ID:	JD5669-1	**Date Sampled:**	04/01/20
Matrix:	AQ - Ground Water	**Date Received:**	04/06/20
Method:	EPA 625.1 EPA 608	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	0.95	0.16	ug/l	
121-14-2	2,4-Dinitrotoluene [a]	ND	0.95	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.95	0.45	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	0.48	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.95	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.47	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.9	0.22	ug/l	
84-66-2	Diethyl phthalate	ND	1.9	0.25	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.21	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate [a]	ND	1.9	1.6	ug/l	
206-44-0	Fluoranthene	ND	0.95	0.16	ug/l	
86-73-7	Fluorene	ND	0.95	0.16	ug/l	
118-74-1	Hexachlorobenzene	ND	0.95	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.95	0.47	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.5	2.6	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.37	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.95	0.32	ug/l	
78-59-1	Isophorone	ND	1.9	0.26	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.61	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.78	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.21	ug/l	
85-01-8	Phenanthrene	ND	0.95	0.17	ug/l	
129-00-0	Pyrene	ND	0.95	0.21	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.95	0.24	ug/l	

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

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

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

Report of Analysis

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

Total Metals Analysis

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

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

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

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

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Phosphorus, Total	0.053	0.050	0.027	mg/l	1	04/18/20 11:40	AM	EPA 365.3
Solids, Total Suspended	43.2	4.0	1.5	mg/l	1	04/07/20 19:44	EB	SM2540 D-11
pH [a]	7.04			su	1	04/06/20 13:56	AS	SM4500H+ B-11

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

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

Report of Analysis

Client Sample ID:	TB-		
Lab Sample ID:	JD5669-3	**Date Sampled:**	04/01/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/06/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	T244129.D	1	04/06/20 16:44	CSF	n/a	n/a	VT10095
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane [b]	ND	1.0	0.35	ug/l	
75-25-2	Bromoform [c]	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane [d]	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride [c]	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene [b]	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane [b]	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene [b]	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane [c]	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
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-		
Lab Sample ID:	JD5669-3	**Date Sampled:**	04/01/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/06/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene [b]	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane [b]	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	114%		76-122%
2037-26-5	Toluene-D8 (SUR)	90%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%		80-120%
1868-53-7	Dibromofluoromethane (S)	103%		80-120%

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JD5669
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift 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.

CHAIN OF CUSTODY

SGS ACCUTEST GW WTB

PAGE 1 OF 1 COMP

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

FED-EX Tracking # 3915 5201 2554
Bottle Order Control # SW-032320-112
SGS Accutest Quote # HWNJOMM73509
SGS Accutest Job # JD5669

Client / Reporting Information

Company Name: Honeywell International Inc
Street Address: 1563 Willis Ave 13204
City, State, Zip: Syracuse, New York 13204
Project Contact / E-mail: John Formoza John.formoza@jacobs.com
Phone #: 315-532-5608
Fax #:
Sampler(s) Name(s) / Phone #: Michael Stout 315-558-4018

Project Information

Project Name: 30130 - Alltift OM Phase/ Semi Annual - Project # HWINCJOMM73507
Street: 579 Tifft Street
City / State: Buffalo, New York 14220
Project #: R35116 - Honeywell OM&M Program
Client Purchase Order #: A000572179
Project Manager: Chuck Geadelmann

Billing Information (if different from Report to)
Company Name: Honeywell International Inc
Street Address: 115 Tabor Road
City / State / Zip: Morris Plains, NJ 07950
Attention: HTS-RES-LAB@Honeywell.com

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL- Sludge, SED-Sediment, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe, FB-Field Blank, EB-Equipment Blank, RB-Rinse Blank, TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPO4 - Phosphorus Total (EPA365.3)	EPA 200.7 MTAL - Cu, Zn, SW7940A total Hg	TSS - Total Suspended Solids (2540 C)	pH - SM20 4500 H	V624 PPL - EPA 624 -VOA	625 Priority Pollutant List SVOC + 4-chloroaniline	SW7470A - Total Hg	LAB USE ONLY
1 1	Grab 1- 040120 /BSA Discharge		4/1/20	0800	MS	GW	5	3				2								3	2		E86
2 2	Grab 2- 040120 /BSA Discharge		4/1/20	1000	MS	GW	5	3				2								3	2		V227
3 3	Grab 3- 040120 /BSA Discharge	1	4/1/20	1200	MS	GW	5	3				2								3	2		
4 4	Grab 4- 040120 /BSA Discharge		4/1/20	1400	MS	GW	5	3				2								3	2		A39
5 5	COMP- 040120 /BSA Discharge	2	4/1/20	1405	MS	GW	5			1	2	3				1	1	2	1			1	G20
6 6	TB -	3				TB	2	2												2			COMP

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Approved By (SGS Accutest PM): / Date:

Initial Assessment

Label Verification

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [X] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Prior to analysis grab samples to be composited by lab

Sample inventory is verified upon receipt in the Laboratory

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Andrew Petrull	4/1/2020 @ 1445	1 FedEx	2 FedEx	4-6-2020 1100	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice	Cooler Temp. 5.9

JD5669: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: JD5669 **Client:** AMEC FOSTER WHEELER **Project:** HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 4/6/2020 11:00:00 AM **Delivery Method:** FedEx **Airbill #'s:**

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

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

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

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

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

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

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

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify)

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

SM089-02 Rev. Date 12/1/16

5.2 5

Responded to by: VP

Response Date: 4/6

OK to proceed as noted

JD5669: 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

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

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

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

JD5669-3

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

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

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

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

JD5669-3

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

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

Method Blank Summary

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

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

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

JD5669-1

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	0.72	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.66	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.56	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

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

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

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

JD5669-1

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

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

Blank Spike Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VT10095-BS	T244117.D	1	04/06/20	CSF	n/a	n/a	VT10095

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

JD5669-3

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

* = Outside of Control Limits.

Blank Spike Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VT10095-BS	T244117.D	1	04/06/20	CSF	n/a	n/a	VT10095

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

JD5669-3

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

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

* = Outside of Control Limits.

Blank Spike Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VT10104-BS	T244278.D	1	04/14/20	CSF	n/a	n/a	VT10104

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

JD5669-1

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

* = Outside of Control Limits.

Blank Spike Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VT10104-BS	T244278.D	1	04/14/20	CSF	n/a	n/a	VT10104

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

JD5669-1

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

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

* = Outside of Control Limits.

Matrix Spike Summary

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

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

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

JD5669-3

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

* = Outside of Control Limits.

Matrix Spike Summary

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

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

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

JD5669-3

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

(a) Outside control limits due to acid preservation.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD5536-1MS	T244287.D	10	04/14/20	CSF	n/a	n/a	VT10104
JD5536-1MSD	T244288.D	10	04/14/20	CSF	n/a	n/a	VT10104
JD5536-1 [a]	T244282.D	10	04/14/20	CSF	n/a	n/a	VT10104

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

JD5669-1

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD5536-1MS	T244287.D	10	04/14/20	CSF	n/a	n/a	VT10104
JD5536-1MSD	T244288.D	10	04/14/20	CSF	n/a	n/a	VT10104
JD5536-1 [a]	T244282.D	10	04/14/20	CSF	n/a	n/a	VT10104

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

JD5669-1

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

(a) Dilution required due to high concentration of target compound.
(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Duplicate Summary

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

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

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

JD5669-3

CAS No.	Compound	JD5573-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
107-02-8	Acrolein	ND		ND		nc	10
107-13-1	Acrylonitrile	ND		ND		nc	10
71-43-2	Benzene	ND		ND		nc	12
75-27-4	Bromodichloromethane	ND		ND		nc	10
75-25-2	Bromoform	ND		ND		nc	10
74-83-9	Bromomethane	ND		ND		nc	10
56-23-5	Carbon tetrachloride	ND		ND		nc	10
108-90-7	Chlorobenzene	ND		ND		nc	10
75-00-3	Chloroethane	ND		ND		nc	10
110-75-8	2-Chloroethyl vinyl ether	ND		ND		nc	10
67-66-3	Chloroform	ND		ND		nc	20
74-87-3	Chloromethane	ND		ND		nc	10
124-48-1	Dibromochloromethane	ND		ND		nc	10
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	10
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	10
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	10
75-71-8	Dichlorodifluoromethane	ND		ND		nc	10
75-34-3	1,1-Dichloroethane	ND		ND		nc	13
107-06-2	1,2-Dichloroethane	ND		ND		nc	11
75-35-4	1,1-Dichloroethene	ND		ND		nc	14
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	22
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	14
78-87-5	1,2-Dichloropropane	ND		ND		nc	10
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	10
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	10
100-41-4	Ethylbenzene	ND		ND		nc	10
75-09-2	Methylene chloride	ND		ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	10
127-18-4	Tetrachloroethene	ND		ND		nc	16
108-88-3	Toluene	ND		ND		nc	13
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	10
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	10
79-01-6	Trichloroethene	ND		ND		nc	18
75-69-4	Trichlorofluoromethane	ND		ND		nc	10
75-01-4	Vinyl chloride	ND		ND		nc	14
1330-20-7	Xylenes (total)	ND		ND		nc	14

* = Outside of Control Limits.

Duplicate Summary

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

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

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

JD5669-3

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

* = Outside of Control Limits.

Instrument Performance Check (BFB)

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

Sample:	VT10040-BFB	**Injection Date:**	01/30/20
Lab File ID:	T242984.D	**Injection Time:**	16:16
Instrument ID:	GCMST		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9437	18.6		Pass
75	30.0 - 60.0% of mass 95	25882	51.0		Pass
95	Base peak, 100% relative abundance	50786	100.0		Pass
96	5.0 - 9.0% of mass 95	3301	6.50		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	36565	72.0		Pass
175	5.0 - 9.0% of mass 174	2681	5.28	(7.33) [a]	Pass
176	95.0 - 101.0% of mass 174	36101	71.1	(98.7) [a]	Pass
177	5.0 - 9.0% of mass 176	2546	5.01	(7.05) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VT10040-IC10040	T242985.D	01/30/20	16:48	00:32	Initial cal 0.5
VT10040-IC10040	T242986.D	01/30/20	17:18	01:02	Initial cal 1
VT10040-IC10040	T242987.D	01/30/20	17:49	01:33	Initial cal 2
VT10040-IC10040	T242988.D	01/30/20	18:19	02:03	Initial cal 4
VT10040-IC10040	T242989.D	01/30/20	18:49	02:33	Initial cal 8
VT10040-ICC10040	T242990.D	01/30/20	19:20	03:04	Initial cal 20
VT10040-IC10040	T242991.D	01/30/20	19:50	03:34	Initial cal 50
VT10040-IC10040	T242992.D	01/30/20	20:21	04:05	Initial cal 100
VT10040-IC10040	T242993.D	01/30/20	20:51	04:35	Initial cal 200
VT10040-ICV10040	T242996.D	01/30/20	22:22	06:06	Initial cal verification 20
VT10040-ICV10040	T242997.D	01/30/20	22:52	06:36	Initial cal verification 20

Instrument Performance Check (BFB)

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

Sample:	VT10040-BFB2	**Injection Date:**	01/31/20
Lab File ID:	T243000.D	**Injection Time:**	10:50
Instrument ID:	GCMST		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16138	18.1		Pass
75	30.0 - 60.0% of mass 95	45469	51.0		Pass
95	Base peak, 100% relative abundance	89242	100.0		Pass
96	5.0 - 9.0% of mass 95	5587	6.26		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	63570	71.2		Pass
175	5.0 - 9.0% of mass 174	4883	5.47	(7.68) [a]	Pass
176	95.0 - 101.0% of mass 174	62928	70.5	(99.0) [a]	Pass
177	5.0 - 9.0% of mass 176	4156	4.66	(6.60) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VT10040-ICV10040	T243001.D	01/31/20	12:01	01:11	Initial cal verification 20

Instrument Performance Check (BFB)

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

Sample:	VT10095-BFB	**Injection Date:**	04/06/20
Lab File ID:	T244115.D	**Injection Time:**	09:04
Instrument ID:	GCMST		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	17020	17.7		Pass
75	30.0 - 60.0% of mass 95	48565	50.5		Pass
95	Base peak, 100% relative abundance	96187	100.0		Pass
96	5.0 - 9.0% of mass 95	6097	6.34		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	72131	75.0		Pass
175	5.0 - 9.0% of mass 174	5415	5.63	(7.51) [a]	Pass
176	95.0 - 101.0% of mass 174	70821	73.6	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	4755	4.94	(6.71) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VT10095-BS	T244117.D	04/06/20	10:25	01:21	Blank Spike
VT10095-CC10040	T244117.D	04/06/20	10:25	01:21	Continuing cal 20
VT10095-MB	T244119.D	04/06/20	11:29	02:25	Method Blank
JD5573-1	T244120.D	04/06/20	12:07	03:03	(used for QC only; not part of job JD5669)
JD5493-1	T244121.D	04/06/20	12:38	03:34	(used for QC only; not part of job JD5669)
JD5538-1	T244122.D	04/06/20	13:08	04:04	(used for QC only; not part of job JD5669)
ZZZZZZ	T244123.D	04/06/20	13:39	04:35	(unrelated sample)
JD5573-1DUP	T244124.D	04/06/20	14:12	05:08	Duplicate
JD5493-1MS	T244125.D	04/06/20	14:42	05:38	Matrix Spike
JD5538-1MS	T244126.D	04/06/20	15:12	06:08	Matrix Spike
JD5538-1MSD	T244127.D	04/06/20	15:43	06:39	Matrix Spike Duplicate
ZZZZZZ	T244128.D	04/06/20	16:14	07:10	(unrelated sample)
JD5669-3	T244129.D	04/06/20	16:44	07:40	TB-
ZZZZZZ	T244130.D	04/06/20	17:14	08:10	(unrelated sample)
ZZZZZZ	T244131.D	04/06/20	17:44	08:40	(unrelated sample)
ZZZZZZ	T244132.D	04/06/20	18:15	09:11	(unrelated sample)
ZZZZZZ	T244133.D	04/06/20	18:45	09:41	(unrelated sample)

Instrument Performance Check (BFB)

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

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16410	17.9		Pass
75	30.0 - 60.0% of mass 95	48741	53.2		Pass
95	Base peak, 100% relative abundance	91691	100.0		Pass
96	5.0 - 9.0% of mass 95	5859	6.39		Pass
173	Less than 2.0% of mass 174	251	0.27	(0.36) [a]	Pass
174	50.0 - 120.0% of mass 95	69805	76.1		Pass
175	5.0 - 9.0% of mass 174	5366	5.85	(7.69) [a]	Pass
176	95.0 - 101.0% of mass 174	67915	74.1	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	4594	5.01	(6.76) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VT10104-BS	T244278.D	04/14/20	10:17	01:23	Blank Spike
VT10104-CC10040	T244278.D	04/14/20	10:17	01:23	Continuing cal 20
VT10104-MB	T244280.D	04/14/20	11:22	02:28	Method Blank
ZZZZZZ	T244281.D	04/14/20	11:52	02:58	(unrelated sample)
JD5536-1	T244282.D	04/14/20	12:23	03:29	(used for QC only; not part of job JD5669)
ZZZZZZ	T244283.D	04/14/20	12:53	03:59	(unrelated sample)
ZZZZZZ	T244284.D	04/14/20	13:23	04:29	(unrelated sample)
ZZZZZZ	T244285.D	04/14/20	13:54	05:00	(unrelated sample)
ZZZZZZ	T244286.D	04/14/20	14:24	05:30	(unrelated sample)
JD5536-1MS	T244287.D	04/14/20	14:54	06:00	Matrix Spike
JD5536-1MSD	T244288.D	04/14/20	15:24	06:30	Matrix Spike Duplicate
ZZZZZZ	T244289.D	04/14/20	15:54	07:00	(unrelated sample)
ZZZZZZ	T244290.D	04/14/20	16:25	07:31	(unrelated sample)
ZZZZZZ	T244291.D	04/14/20	16:55	08:01	(unrelated sample)
ZZZZZZ	T244292.D	04/14/20	17:26	08:32	(unrelated sample)
ZZZZZZ	T244293.D	04/14/20	17:56	09:02	(unrelated sample)
ZZZZZZ	T244294.D	04/14/20	18:27	09:33	(unrelated sample)
ZZZZZZ	T244295.D	04/14/20	18:57	10:03	(unrelated sample)
ZZZZZZ	T244296.D	04/14/20	19:28	10:34	(unrelated sample)
JD5669-1	T244298.D	04/14/20	20:29	11:35	GRAB 1 THRU 4-040120/BSA DISCHARGE

Surrogate Recovery Summary

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

Method: EPA 624.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD5669-1	T244298.D	114	92	102	99
JD5669-3	T244129.D	114	90	102	103
JD5493-1MS	T244125.D	110	91	99	100
JD5536-1MS	T244287.D	109	96	100	101
JD5536-1MSD	T244288.D	108	94	104	99
JD5573-1DUP	T244124.D	111	89	100	100
VT10095-BS	T244117.D	111	92	100	98
VT10095-MB	T244119.D	109	92	98	100
VT10104-BS	T244278.D	110	92	100	100
VT10104-MB	T244280.D	108	93	107	98

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

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP26904-MB1	M165202.D	1	04/10/20	CS	04/08/20	OP26904	EM6992

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

JD5669-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	

Method Blank Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP26904-MB1	M165202.D	1	04/10/20	CS	04/08/20	OP26904	EM6992

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

JD5669-1

CAS No.	Compound	Result	RL	MDL	Units	Q
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	0.19	1.0	0.17	ug/l	J
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	0.22	1.0	0.18	ug/l	J
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	41%	10-110%
4165-62-2	Phenol-d5	33%	10-110%
118-79-6	2,4,6-Tribromophenol	78%	35-147%

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

Blank Spike/Blank Spike Duplicate Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP26904-BS1	M165203.D	1	04/10/20	CS	04/08/20	OP26904	EM6992
OP26904-BSD	M165204.D	1	04/10/20	CS	04/08/20	OP26904	EM6992

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

JD5669-1

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

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

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

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP26904-BS1	M165203.D	1	04/10/20	CS	04/08/20	OP26904	EM6992
OP26904-BSD	M165204.D	1	04/10/20	CS	04/08/20	OP26904	EM6992

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

JD5669-1

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

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

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

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

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	49075	37.2		Pass
68	Less than 2.0% of mass 69	804	0.61	(1.37) [a]	Pass
69	Mass 69 relative abundance	58856	44.6		Pass
70	Less than 2.0% of mass 69	341	0.26	(0.58) [a]	Pass
127	40.0 - 60.0% of mass 198	61610	46.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	131872	100.0		Pass
199	5.0 - 9.0% of mass 198	9349	7.09		Pass
275	10.0 - 30.0% of mass 198	33602	25.5		Pass
365	1.0 - 100.0% of mass 198	4243	3.22		Pass
441	Present, but less than mass 443	12007	9.11	(74.1) [b]	Pass
442	40.0 - 100.0% of mass 198	81629	61.9		Pass
443	17.0 - 23.0% of mass 442	16214	12.3	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6957-IC6957	M164356.D	03/09/20	15:18	00:14	Initial cal 100
EM6957-IC6957	M164357.D	03/09/20	15:46	00:42	Initial cal 80
EM6957-ICC6957	M164358B.D	03/09/20	17:03	01:59	Initial cal 50
EM6957-IC6957	M164359.D	03/09/20	17:50	02:46	Initial cal 25
EM6957-IC6957	M164360.D	03/09/20	18:17	03:13	Initial cal 10
EM6957-IC6957	M164361.D	03/09/20	18:45	03:41	Initial cal 5
EM6957-IC6957	M164362.D	03/09/20	19:12	04:08	Initial cal 2
EM6957-IC6957	M164363.D	03/09/20	19:40	04:36	Initial cal 1
EM6957-ICV6957	M164364.D	03/09/20	20:08	05:04	Initial cal verification 50
EM6957-ICV6957	M164365.D	03/09/20	20:36	05:32	Initial cal verification 50
EM6957-ICV6957	M164366.D	03/09/20	21:04	06:00	Initial cal verification 50
EM6957-ICV6957	M164367.D	03/09/20	21:31	06:27	Initial cal verification 50
EM6957-ICV6957	M164368.D	03/09/20	21:59	06:55	Initial cal verification 50
EM6957-ICV6957	M164369.D	03/09/20	22:27	07:23	Initial cal verification 50

Instrument Performance Check (DFTPP)

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

Sample:	EM6959-DFTPP	**Injection Date:**	03/10/20
Lab File ID:	M164380.D	**Injection Time:**	03:52
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	49920	31.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	62518	39.4		Pass
70	Less than 2.0% of mass 69	410	0.26	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	71405	45.0		Pass
197	Less than 1.0% of mass 198	593	0.37		Pass
198	Base peak, 100% relative abundance	158778	100.0		Pass
199	5.0 - 9.0% of mass 198	11711	7.38		Pass
275	10.0 - 30.0% of mass 198	44157	27.8		Pass
365	1.0 - 100.0% of mass 198	5473	3.45		Pass
441	Present, but less than mass 443	13411	8.45	(74.2) [b]	Pass
442	40.0 - 100.0% of mass 198	88773	55.9		Pass
443	17.0 - 23.0% of mass 442	18068	11.4	(20.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6959-IC6959	M164381.D	03/10/20	04:05	00:13	Initial cal 100
EM6959-IC6959	M164382B.D	03/10/20	08:11	04:19	Initial cal 80
EM6959-ICC6959	M164383.D	03/10/20	08:38	04:46	Initial cal 50
EM6959-IC6959	M164384.D	03/10/20	09:06	05:14	Initial cal 25
EM6959-IC6959	M164385.D	03/10/20	09:33	05:41	Initial cal 10
EM6959-IC6959	M164386.D	03/10/20	10:01	06:09	Initial cal 5
EM6959-IC6959	M164387.D	03/10/20	10:28	06:36	Initial cal 2
EM6959-IC6959	M164388.D	03/10/20	10:56	07:04	Initial cal 1
EM6959-ICV6959	M164389.D	03/10/20	11:24	07:32	Initial cal verification 50
EM6959-ICV6959	M164390.D	03/10/20	11:52	08:00	Initial cal verification 50
EM6959-ICV6959	M164391.D	03/10/20	12:19	08:27	Initial cal verification 50

Instrument Performance Check (DFTPP)

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

Sample:	EM6961-DFTPP	**Injection Date:**	03/11/20
Lab File ID:	M164410.D	**Injection Time:**	11:17
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	73276	32.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	90344	39.9		Pass
70	Less than 2.0% of mass 69	338	0.15	(0.37) [a]	Pass
127	40.0 - 60.0% of mass 198	103029	45.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	226325	100.0		Pass
199	5.0 - 9.0% of mass 198	14630	6.46		Pass
275	10.0 - 30.0% of mass 198	58768	26.0		Pass
365	1.0 - 100.0% of mass 198	6685	2.95		Pass
441	Present, but less than mass 443	18805	8.31	(71.0) [b]	Pass
442	40.0 - 100.0% of mass 198	130410	57.6		Pass
443	17.0 - 23.0% of mass 442	26500	11.7	(20.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6961-IC6961	M164414.D	03/11/20	12:51	01:34	Initial cal 100
EM6961-IC6961	M164415.D	03/11/20	13:18	02:01	Initial cal 80
EM6961-ICC6961	M164416.D	03/11/20	13:46	02:29	Initial cal 50
EM6961-IC6961	M164417.D	03/11/20	14:14	02:57	Initial cal 25
EM6961-IC6961	M164418.D	03/11/20	14:41	03:24	Initial cal 10
EM6961-IC6961	M164419A.D	03/11/20	15:14	03:57	Initial cal 5
EM6961-IC6961	M164420.D	03/11/20	15:38	04:21	Initial cal 2
EM6961-IC6961	M164421.D	03/11/20	16:05	04:48	Initial cal 1
EM6961-ICV6961	M164422.D	03/11/20	16:33	05:16	Initial cal verification 50

Instrument Performance Check (DFTPP)

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

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	44135	32.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	57664	42.9		Pass
70	Less than 2.0% of mass 69	142	0.11	(0.25) [a]	Pass
127	40.0 - 60.0% of mass 198	62727	46.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	134523	100.0		Pass
199	5.0 - 9.0% of mass 198	8915	6.63		Pass
275	10.0 - 30.0% of mass 198	35528	26.4		Pass
365	1.0 - 100.0% of mass 198	4201	3.12		Pass
441	Present, but less than mass 443	12740	9.47	(76.1) [b]	Pass
442	40.0 - 100.0% of mass 198	84309	62.7		Pass
443	17.0 - 23.0% of mass 442	16752	12.5	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6992-CC6957	M165198.D	04/09/20	23:57	00:14	Continuing cal 25
EM6992-CC6961	M165199.D	04/10/20	00:25	00:42	Continuing cal 25
EM6992-CC6959	M165200.D	04/10/20	00:53	01:10	Continuing cal 25
EM6992-CC6957	M165201.D	04/10/20	01:21	01:38	Continuing cal 5
OP26904-MB1	M165202.D	04/10/20	02:01	02:18	Method Blank
OP26904-BS1	M165203.D	04/10/20	02:29	02:46	Blank Spike
OP26904-BSD	M165204.D	04/10/20	02:57	03:14	Blank Spike Duplicate
OP26887-MB1	M165205.D	04/10/20	03:25	03:42	Method Blank
OP26887-BS1	M165206.D	04/10/20	03:53	04:10	Blank Spike
OP26887-BSD	M165207.D	04/10/20	04:20	04:37	Blank Spike Duplicate
ZZZZZZ	M165208.D	04/10/20	04:48	05:05	(unrelated sample)
ZZZZZZ	M165209.D	04/10/20	05:16	05:33	(unrelated sample)
ZZZZZZ	M165210.D	04/10/20	05:44	06:01	(unrelated sample)
ZZZZZZ	M165211.D	04/10/20	06:11	06:28	(unrelated sample)
ZZZZZZ	M165212.D	04/10/20	06:39	06:56	(unrelated sample)
ZZZZZZ	M165213.D	04/10/20	07:06	07:23	(unrelated sample)
JD5669-1	M165215.D	04/10/20	08:02	08:19	GRAB 1 THRU 4-040120/BSA DISCHARGE
ZZZZZZ	M165218.D	04/10/20	09:25	09:42	(unrelated sample)
ZZZZZZ	M165219.D	04/10/20	09:53	10:10	(unrelated sample)

Surrogate Recovery Summary

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

Method: EPA 625.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD5669-1	M165215.D	48	40	92	89	84	83
OP26904-BS1	M165203.D	56	41	76			
OP26904-BSD	M165204.D	55	41	76			
OP26904-MB1	M165202.D	41	33	78			

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	35-147%
S4 = Nitrobenzene-d5	32-132%
S5 = 2-Fluorobiphenyl	40-117%
S6 = Terphenyl-d14	33-126%

Metals Analysis

QC Data Summaries

Includes the following where applicable:

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

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

Associated samples MP20636: JD5669-2

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3 Original	MS	Spikelot MPEPA200.7	% Rec	QC Limits
Zinc	8.2	2160	2000	107.6	70-130
Zirconium					

Associated samples MP20636: JD5669-2

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3 Original	MSD	Spikelot MPEPA200.7	% Rec	MSD RPD	QC Limit
Zinc	8.2	2170	2000	108.1	0.5	10
Zirconium						

Associated samples MP20636: JD5669-2

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	BSP Result	Spikelot MPEPA200.7	% Rec	QC Limits
Zinc	2130	2000	106.5	85-115
Zirconium				

Associated samples MP20636: JD5669-2

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

SERIAL DILUTION RESULTS SUMMARY

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

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

SERIAL DILUTION RESULTS SUMMARY

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

QC Batch ID: MP20636
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/08/20

Metal	JD5627-3 Original	SDL 1:5	%DIF	QC Limits
Zinc	8.20	9.80	19.5*(b)	0-10
Zirconium				

Associated samples MP20636: JD5669-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

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

QC Batch ID: MP20647
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/09/20

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

Associated samples MP20647: JD5669-2

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

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

QC Batch ID: MP20647
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/09/20

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

Associated samples MP20647: JD5669-2

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

8.2.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

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

QC Batch ID: MP20647
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/09/20

Metal	JD5751-9A Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	1.8	2	90.0	0.0	19

Associated samples MP20647: JD5669-2

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

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

QC Batch ID: MP20647
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/09/20

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

Associated samples MP20647: JD5669-2

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

General Chemistry

QC Data Summaries

Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

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

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

Associated Samples:
Batch GN7037: JD5669-2
Batch GP27714: JD5669-2
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD5669
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	GP27714/GN7346	JD5749-1	mg/l	0.012	0.0	0.0	0-38%
Solids, Total Suspended	GN7037	JD5546-1	mg/l	0.0	0.0	0.0	0-17%

Associated Samples:
Batch GN7037: JD5669-2
Batch GP27714: JD5669-2
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

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

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Phosphorus, Total	GP27714/GN7346	JD5749-1	mg/l	0.012	0.40	0.40	100.0	35-137%

Associated Samples:
Batch GP27714: JD5669-2
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Attachment B.7 Annual Groundwater Monitoring Data

TABLE 1
Summary of Groundwater Analytical Results - 2019
2019/2020 Annual OM&M Report
Alltift Landfill /Ramco Steel Site

Parameter Name	Units	NYSDEC Class GA Standards	MW2-092419 9/24/2019	SUMP 1-092419 9/24/2019	SUMP 2-092419 9/24/2019	SUMP 3-092419 9/24/2019	SUMP 4-092419 9/24/2019	FDUP-SUMP 4-092419 9/24/2019	SUMP COMP-092419 9/24/2019
Metals (Dissolved)									
ANTIMONY	**mg/L**	**0.003**	0.006 U	-- --	-- --	-- --	0.006 U	0.006 U	0.006 U
ARSENIC	**mg/L**	**0.025**	**0.0028** J	-- --	-- --	-- --	**0.0159**	**0.014**	**0.0143**
CADMIUM	**mg/L**	**0.005**	0.003 U	-- --	-- --	-- --	0.003 U	0.003 U	0.003 U
CHROMIUM	**mg/L**	**0.05**	0.01 U	-- --	-- --	-- --	**0.005** J	**0.0029** J	**0.0034** J
IRON	**mg/L**	**0.3**	**0.199**	-- --	-- --	-- --	**48.8**	**44.6**	**21.4**
LEAD	**mg/L**	**0.025**	0.003 U	-- --	-- --	-- --	0.006 U	0.006 U	0.003 U
MANGANESE	**mg/L**	**0.3**	**0.034**	-- --	-- --	-- --	**0.94**	**0.883**	**1.53**
MERCURY	**mg/L**	**0.0007**	0.0002 U	-- --	-- --	-- --	0.0002 U	0.0002 U	0.0002 U
VOCs									
BENZENE	**ug/L**	**1**	0.5 U	0.5 U	**5.7**	0.5 U	**1.1**	**1.5**	-- --
CHLOROBENZENE	**ug/L**	**5**	1 U	**7**	**108**	**0.87** J	**57**	**64**	-- --
ETHYLBENZENE	**ug/L**	**5**	1 U	1 U	1 U	1 U	1 U	1 U	-- --
XYLENES, TOTAL	**ug/L**	**5**	1 U	1 U	1 U	1 U	1 U	1 U	-- --
1,2-DICHLOROBENZENE	**ug/L**	**3**	1 U	1 U	**0.87** J	1 U	**0.58** J	**0.54** J	-- --
1,4-DICHLOROBENZENE	**ug/L**	**3**	1 U	1 U	**1.4**	1 U	**0.58** J	**0.55** J	-- --
SVOCs									
4-CHLOROANILINE	**ug/L**	**5**	4.8 U	-- --	-- --	-- --	5 U	4.8 U	**10.9**
NAPHTHALENE	**ug/L**	**10**	0.95 U	-- --	-- --	-- --	1 U	0.95 U	0.97 U

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

Prepared By: HTS/AC 04/17/2020
Checked By: RTB 05/04/2020

JACOBS

Project Name Honeywell - BUFFALO
Job Number 693092
Field Team JAKE CHURCH + MIKE STOUT
Field Conditions

Sampling Event ANNUAL SAMPLING
Date 9/24/19
Page ___ of ___

Well/Sample Number MW2
Initial Depth to Water 6.75
Start Time 7:48 Finish Time 8:40
Measure Point: PVC (Steel Casing) Other:

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

Sample ID MW2-092419
Duplicate Sample ID
Split Sample ID

Sample Time 8:35
Dupl. Time
Split. Time

Depth to Botton (from meas. pt): 16.95 Min. Purge Volume (gal)/(L) 4.0 Purge Rate (gpm)/(mLpm)
Water Quality Parameter Measurment Technique: (flow-thru cell) in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
8:20	4.0	6.65	1.26	0	2.31	17.63	-39	8.50
8:35	COLLECT SAMPLE			MW2-092419				12.0

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
SB, PB, MN, HG, FE, CR, LD, AS	P500ml	500ml	N	HNO_3		
BB270CH-CHLORANILINE+NAPTH	AG 950ml	950ml	N	NONE		
VB260 [12DCB, BENZ, EBENZ, CHLOBENZ, TOTAL XYL]	40ml VIAL	40ml	N	HCL		

Remarks: WATER IS CLEAR WITH NO ODOR.

JACOBS

Project Name Honeywell - BUFFALO
Job Number 693092
Field Team JAKE CHURCH + MIKE STOUT
Field Conditions

Sampling Event ANNUAL SAMPLING
Date 9/24/19
Page ___ of ___

Well/Sample Number SUMP 1
Start Time 13:15 Finish Time 13:43
Initial Depth to Water 9.05
Measure Point: PVC (Steel Casing) Other:

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

Sample ID SUMP1-092419
Duplicate Sample ID
Split Sample ID

Sample Time 13:40
Dupl. Time
Split. Time

Depth to Botton (from meas. pt): 17.05 Min. Purge Volume (gal)(L) 4.0 Purge Rate (gpm)/(mLpm)
Water Quality Parameter Measurment Technique: (flow-thru cell) in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
13:35	4.0	7.20	1.95	0	2.12	18.58	-195	11.50
13:40		COLLECT SAMPLE SUMP1-092419						12.0

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
V8260 [12DCB, 14DCB, BENZ, EBENZ, CHLOROBENZ, TOTAL XYL]	40ml VIAL	40ml	N	HCL		

Remarks: WATER HAS YELLOWISH TINT WITH NO ODOR. EQUIPMENT DECONNED PER JACOBS STANDARDS.

JACOBS

Project Name Honeywell - BUFFALO
Job Number 693092
Field Team JAKE CHURCH + MIKE STOUT
Field Conditions

Sampling Event ANNUAL SAMPLING
Date 9-24-19
Page ___ of ___

Well/Sample Number SUMP 2
Start Time 12:30 Finish Time 13:10
Initial Depth to Water 12.30
Measure Point: PVC (Steel Casing) Other:

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

Sample ID SUMP2-092419
Duplicate Sample ID
Split Sample ID

Sample Time 13:05
Dupl. Time
Split. Time

Depth to Botton (from meas. pt): 24.3 Min. Purge Volume (gal)/(L) 4 Purge Rate (gpm)/(mLpm)
Water Quality Parameter Measurment Technique: (flow-thru cell) in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
13:00	4.0	7.09	4.19	0	4.35	18.37	-203	13.30
13:05		COLLECT SAMPLE SUMP2-092419						12.0

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
V8260 [12DCB, BENZ, EBENZ, CHLOROBENZ, TOTAL XYZ]	40ml/VIAL	40ml	N	HCL		

Remarks: WATER HAS YELLOWISH TINT WITH NO ODOR.
EQUIPMENT DECONNED PER JACOBS STANDARDS.

JACOBS

Project Name Honeywell - BUFFALO
Job Number 693092
Field Team JAKE CHURCH + MIKE STOUT
Field Conditions

Sampling Event ANNUAL SAMPLING
Date 9/24/19
Page ___ of ___

Well/Sample Number SUMP 3
Start Time 10:50 Finish Time 11:20
Initial Depth to Water 9.00
Measure Point: PVC (Steel Casing) Other:

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

Sample ID SUMP3-092419
Duplicate Sample ID
Split Sample ID

Sample Time 11:15
Dupl. Time
Split. Time

Depth to Botton (from meas. pt): 17.35 Min. Purge Volume (gal)/(L) 4 Purge Rate (gpm)/(mLpm)
Water Quality Parameter Measurment Technique: (flow-thru cell) in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
11:10	4.0	6.7	2.67	31.30	1.45	24.13	-140	9.87
11:15		COLLECT SAMPLE SUMP3-092419						12.0

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
V8260 [12DLB, 14DXB, BENZ, TOTAL X [L] EBENZ, CHLOROBENZ]	40ml VOA	40ml	N	HCL		

Remarks: WATER HAS YELLOW TINT WITH NO ORGANIC ODOR.
EQUIPTMENT DECONNED PER JACOBS STANDARDS.

JACOBS

Project Name Honeywell - BUFFALO
Job Number 693042
Field Team JAKE CHURCH + MIKE STOUT
Field Conditions

Sampling Event ANNUAL SAMPLING
Date 9/24/19
Page ___ of ___

Well/Sample Number SUMP 4
Start Time 9:10 Finish Time 10:30
Initial Depth to Water 7.55
Measure Point: PVC (Steel Casing) Other:

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

Sample ID	SUMP4-092419	Sample Time 9:55
Duplicate Sample ID	SUMP4-092419-MS	Dupl. Time 10:05
Split Sample ID	SUMP4-092419-MSD	Split. Time 10:15
	SUMP4-092419-FDUP	10:25

Depth to Botton (from meas. pt): 17.83 Min. Purge Volume (gal)/(L) 4.0 Purge Rate (gpm)/(mLpm)
Water Quality Parameter Measurment Technique: (flow-thru cell) in-situ open container

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
0950	4.0	6.66	3.05	11.90	4.33	17.64	-195	7.95
9:55		COLLECT SAMPLE SUMP4-092419						12.0
10:05		COLLECT SAMPLE SUMP4-092419-MS						12.0
10:15		COLLECT SAMPLE SUMP4-092419-MSD						12.0
10:25		COLLECT SAMPLE SUMP4-092419-FDUP						12.0

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
SB, PB, MN, HG, FE, CL, CU	HS P 500ml	500ml	N	HNO_3		
8270 CL-CHLOROANELINE + NAPTH ADD 5ml		950ml	N	N/P		
8260 [12 DLB, 14 PLB, BENZ, EBENZ, CHLOROBENZ, TOTAL XYL]						
	40 ml VOA	40ml	N	HCL		

Remarks: WATER HAS SLIGHT YELLOWISH TINT WITH NO ODOR. WATER DECONNED PER JACOBS STANDARDS.

JACOBS

Project Name Honeywell - BUFFALO
Job Number 693092
Field Team JAKE CHURCH, MIKE STOUT
Field Conditions

Sampling Event ANNUAL SAMPLING
Date 9/24/19
Page ___ of ___

Well/Sample Number SUMP COMP
Start Time 13:45 Finish Time
Initial Depth to Water — Measure Point: PVC Steel Casing Other:

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

Sample ID SUMP COMP-0924A Sample Time 13:45
Duplicate Sample ID Dupl. Time
Split Sample ID Split. Time

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

Time	Vol. Purged gallons / liters	pH (+/-0.1)	Conductivity mS/cm (+/-3%)	Turbidity NTU (+/-10% if >10NTU)	Diss. Oxygen mg/L (+/-10%)	Temp. °C (+/-3%)	Eh / ORP mv +/-10 mV	DTW ft
		COLLECT SAMPLE SUMP COMP-0924/19						—

SAMPLE COLLECTION INFORMATION

Parameter	Type of Bottle	Volume	Field Filtered (y/n)	Preservative	pH	Notes
SB, PB, MN, HG, FE, CR, CU, AS	P500ml	500ml	N	HNO_3		
B82305 4-CHLOROANILINE + NAPTH	AG950ml	950ml	N	N/P		

Remarks: SAMPLE TAKEN FROM COMPOSITE.

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Honeywell International Inc. OMM work

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

R35116 PO# A000001653

SGS Job Number: JC95633

Sampling Date: 09/24/19

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: **81**

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

Laura Degenhardt
General Manager

Client Service contact: 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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SGS North America Inc.

Sample Summary

Honeywell International Inc. OMM work

Job No: JC95633

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116 PO# A000001653

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC95633-1	09/24/19	13:45	MS	09/25/19	AQ	Ground Water	SUMP COMP-092419
JC95633-2	09/24/19	13:40	MS	09/25/19	AQ	Ground Water	SUMP 1-092419
JC95633-3	09/24/19	13:05	MS	09/25/19	AQ	Ground Water	SUMP 2-092419
JC95633-4	09/24/19	11:15	MS	09/25/19	AQ	Ground Water	SUMP 3-092419
JC95633-5	09/24/19	09:55	MS	09/25/19	AQ	Ground Water	SUMP 4-092419
JC95633-5D	09/24/19	09:55	MS	09/25/19	AQ	Water Dup/MSD	SUMP 4-092419
JC95633-5S	09/24/19	09:55	MS	09/25/19	AQ	Water Matrix Spike	SUMP 4-092419
JC95633-6	09/24/19	08:35	MS	09/25/19	AQ	Ground Water	MW2-092419
JC95633-7	09/24/19	10:25	MS	09/25/19	AQ	Ground Water	FDUP-SUMP 4-092419
JC95633-8	09/24/19	13:40	MS	09/25/19	AQ	Trip Blank Water	TRIP BLANK

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Honeywell International Inc. OMM work	**Job No**	JC95633
Site:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY	**Report Date**	10/8/2019 6:18:03 PM

On 09/25/2019, 7 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.3 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC95633 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

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

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

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V4B4032

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC95633-5MS, JC95633-5MSD were used as the QC samples indicated.
- JC95633-3: (pH=5)Sample pH did not satisfy field preservation criteria.

Matrix: AQ **Batch ID:** V4B4034

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC95797-2MS, JC95797-3DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

MS Semi-volatiles By Method SW846 8270D

Matrix: AQ **Batch ID:** OP22998

- All samples were extracted within the recommended method holding time.
- Sample(s) JC95633-5MS, JC95633-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Naphthalene are outside control limits.
- RPD(s) for MSD for 4-Chloroaniline, Naphthalene are outside control limits for sample OP22998-MSD. Analytical precision exceeds in-house control limits.
- OP22998-MS for 2-Fluorobiphenyl: Outside of in house control limits.
- OP22998-MS for Nitrobenzene-d5: Outside of in house control limits.
- OP22998-MS for Naphthalene: Outside of in house control limits.

Matrix: AQ **Batch ID:** OP23046

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

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP17585

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC95633-5MS, JC95633-5SDL, JC95633-5MSD were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Cadmium, Chromium are outside control limits for sample MP17585-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JC95633-7 for Lead: Elevated detection limit due to dilution required for high interfering element.
- MP17585-SD1 for Iron: Serial dilution indicates possible matrix interference.
- JC95633-5 for Lead: Elevated detection limit due to dilution required for high interfering element.

Metals Analysis By Method SW846 7470A

Matrix: AQ **Batch ID:** MP17579

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC95633-5MS, JC95633-5MSD were used as the QC samples for metals.

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

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

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

Summary of Hits

Job Number: JC95633
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Collected: 09/24/19

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC95633-1	**SUMP COMP-092419**					
4-Chloroaniline		10.9	4.9	0.33	ug/l	SW846 8270D
Arsenic		14.3	3.0	2.8	ug/l	SW846 6010D
Chromium		3.4 J	10	2.0	ug/l	SW846 6010D
Iron		21400	100	32	ug/l	SW846 6010D
Manganese		1530	15	1.4	ug/l	SW846 6010D
JC95633-2	**SUMP 1-092419**					
Chlorobenzene		7.0	1.0	0.56	ug/l	SW846 8260C
JC95633-3	**SUMP 2-092419**					
Benzene [a]		5.7	0.50	0.43	ug/l	SW846 8260C
Chlorobenzene [a]		108	1.0	0.56	ug/l	SW846 8260C
1,2-Dichlorobenzene [a]		0.87 J	1.0	0.53	ug/l	SW846 8260C
1,4-Dichlorobenzene [a]		1.4	1.0	0.51	ug/l	SW846 8260C
JC95633-4	**SUMP 3-092419**					
Chlorobenzene		0.87 J	1.0	0.56	ug/l	SW846 8260C
JC95633-5	**SUMP 4-092419**					
Benzene		1.1	0.50	0.43	ug/l	SW846 8260C
Chlorobenzene		57.0	1.0	0.56	ug/l	SW846 8260C
1,2-Dichlorobenzene		0.58 J	1.0	0.53	ug/l	SW846 8260C
1,4-Dichlorobenzene		0.58 J	1.0	0.51	ug/l	SW846 8260C
Arsenic		15.9	3.0	2.8	ug/l	SW846 6010D
Chromium		5.0 J	10	2.0	ug/l	SW846 6010D
Iron		48800	100	32	ug/l	SW846 6010D
Manganese		940	15	1.4	ug/l	SW846 6010D
JC95633-6	**MW2-092419**					
Arsenic		2.8 J	3.0	2.8	ug/l	SW846 6010D
Iron		199	100	32	ug/l	SW846 6010D
Manganese		34.0	15	1.4	ug/l	SW846 6010D
JC95633-7	**FDUP-SUMP 4-092419**					
Benzene		1.5	0.50	0.43	ug/l	SW846 8260C
Chlorobenzene		64.0	1.0	0.56	ug/l	SW846 8260C
1,2-Dichlorobenzene		0.54 J	1.0	0.53	ug/l	SW846 8260C

Summary of Hits

Job Number: JC95633
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Collected: 09/24/19

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,4-Dichlorobenzene		0.55 J	1.0	0.51	ug/l	SW846 8260C
Arsenic		14.0	3.0	2.8	ug/l	SW846 6010D
Chromium		2.9 J	10	2.0	ug/l	SW846 6010D
Iron		44600	100	32	ug/l	SW846 6010D
Manganese		883	15	1.4	ug/l	SW846 6010D

JC95633-8 TRIP BLANK

No hits reported in this sample.

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

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SUMP COMP-092419		
Lab Sample ID:	JC95633-1	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P485462.D	1	09/28/19 19:47	HSS	09/27/19 22:00	OP22998	E6P2749
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-47-8	4-Chloroaniline	10.9	4.9	0.33	ug/l	
91-20-3	Naphthalene	ND	0.97	0.23	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		34-128%
321-60-8	2-Fluorobiphenyl	66%		38-119%
1718-51-0	Terphenyl-d14	34%		26-129%

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

Report of Analysis

Client Sample ID: SUMP COMP-092419
Lab Sample ID: JC95633-1
Matrix: AQ - Ground Water
Date Sampled: 09/24/19
Date Received: 09/25/19
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
Antimony	ND	6.0	4.7	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [4]
Arsenic	14.3	3.0	2.8	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [4]
Cadmium	ND	3.0	1.0	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [4]
Chromium	3.4 J	10	2.0	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [4]
Iron	21400	100	32	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [4]
Lead	ND	3.0	1.8	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [4]
Manganese	1530	15	1.4	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [4]
Mercury	ND	0.20	0.095	ug/l	1	09/27/19	09/27/19	LL	SW846 7470A [1]	SW846 7470A [3]

(1) Instrument QC Batch: MA47522
(2) Instrument QC Batch: MA47538
(3) Prep QC Batch: MP17579
(4) Prep QC Batch: MP17585

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

Report of Analysis

Client Sample ID:	SUMP 1-092419		
Lab Sample ID:	JC95633-2	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94717.D	1	10/07/19 13:10	EH	n/a	n/a	V4B4034
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	7.0	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	114%		80-120%

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

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

Report of Analysis

Client Sample ID:	SUMP 2-092419		
Lab Sample ID:	JC95633-3	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4B94669.D	1	10/04/19 02:10	EH	n/a	n/a	V4B4032
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	5.7	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	108	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	0.87	1.0	0.53	ug/l	J
106-46-7	1,4-Dichlorobenzene	1.4	1.0	0.51	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	110%		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

Client Sample ID:	SUMP 3-092419		
Lab Sample ID:	JC95633-4	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94670.D	1	10/04/19 02:39	EH	n/a	n/a	V4B4032
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	0.87	1.0	0.56	ug/l	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	111%		80-120%

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

Report of Analysis

Client Sample ID:	SUMP 4-092419		
Lab Sample ID:	JC95633-5	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94662.D	1	10/03/19 22:53	EH	n/a	n/a	V4B4032
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	1.1	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	57.0	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	0.58	1.0	0.53	ug/l	J
106-46-7	1,4-Dichlorobenzene	0.58	1.0	0.51	ug/l	J
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	109%		80-120%

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

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

Report of Analysis

Client Sample ID:	SUMP 4-092419		
Lab Sample ID:	JC95633-5	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P131978.D	1	10/01/19 16:51	AR	09/30/19 22:00	OP23046	EP5986
Run #2							

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

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		34-128%
321-60-8	2-Fluorobiphenyl	71%		38-119%
1718-51-0	Terphenyl-d14	47%		26-129%

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

Report of Analysis

Client Sample ID: SUMP 4-092419
Lab Sample ID: JC95633-5
Matrix: AQ - Ground Water
Date Sampled: 09/24/19
Date Received: 09/25/19
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
Antimony	ND	6.0	4.7	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Arsenic	15.9	3.0	2.8	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Cadmium	ND	3.0	1.0	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Chromium	5.0 J	10	2.0	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Iron	48800	100	32	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Lead [a]	ND	6.0	3.6	ug/l	2	09/27/19	09/30/19	ND	SW846 6010D [3]	SW846 3010A [5]
Manganese	940	15	1.4	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Mercury	ND	0.20	0.095	ug/l	1	09/27/19	09/27/19	LL	SW846 7470A [1]	SW846 7470A [4]

(1) Instrument QC Batch: MA47522
(2) Instrument QC Batch: MA47538
(3) Instrument QC Batch: MA47543
(4) Prep QC Batch: MP17579
(5) Prep QC Batch: MP17585

(a) Elevated detection limit due to dilution required for high interfering element.

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

Report of Analysis

Client Sample ID:	MW2-092419		
Lab Sample ID:	JC95633-6	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94671.D	1	10/04/19 03:07	EH	n/a	n/a	V4B4032
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	
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	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	109%		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:	MW2-092419		
Lab Sample ID:	JC95633-6	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P485464.D	1	09/28/19 20:31	HSS	09/27/19 22:00	OP22998	E6P2749
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	73%		34-128%
321-60-8	2-Fluorobiphenyl	69%		38-119%
1718-51-0	Terphenyl-d14	72%		26-129%

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

Report of Analysis

Client Sample ID: MW2-092419
Lab Sample ID: JC95633-6
Matrix: AQ - Ground Water
Date Sampled: 09/24/19
Date Received: 09/25/19
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
Antimony	ND	6.0	4.7	ug/l	1	09/27/19	09/30/19	ND	SW846 6010D [3]	SW846 3010A [5]
Arsenic	2.8 J	3.0	2.8	ug/l	1	09/27/19	09/30/19	ND	SW846 6010D [3]	SW846 3010A [5]
Cadmium	ND	3.0	1.0	ug/l	1	09/27/19	09/30/19	ND	SW846 6010D [3]	SW846 3010A [5]
Chromium	ND	10	2.0	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Iron	199	100	32	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Lead	ND	3.0	1.8	ug/l	1	09/27/19	09/30/19	ND	SW846 6010D [3]	SW846 3010A [5]
Manganese	34.0	15	1.4	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [5]
Mercury	ND	0.20	0.095	ug/l	1	09/27/19	09/27/19	LL	SW846 7470A [1]	SW846 7470A [4]

(1) Instrument QC Batch: MA47522
(2) Instrument QC Batch: MA47538
(3) Instrument QC Batch: MA47543
(4) Prep QC Batch: MP17579
(5) Prep QC Batch: MP17585

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

Report of Analysis

Client Sample ID:	FDUP-SUMP 4-092419		
Lab Sample ID:	JC95633-7	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94672.D	1	10/04/19 03:35	EH	n/a	n/a	V4B4032
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	1.5	0.50	0.43	ug/l	
108-90-7	Chlorobenzene	64.0	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	0.54	1.0	0.53	ug/l	J
106-46-7	1,4-Dichlorobenzene	0.55	1.0	0.51	ug/l	J
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	110%		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:	FDUP-SUMP 4-092419		
Lab Sample ID:	JC95633-7	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P485465.D	1	09/28/19 20:53	HSS	09/27/19 22:00	OP22998	E6P2749
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	76%		34-128%
321-60-8	2-Fluorobiphenyl	69%		38-119%
1718-51-0	Terphenyl-d14	57%		26-129%

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

Report of Analysis

Client Sample ID: FDUP-SUMP 4-092419
Lab Sample ID: JC95633-7
Matrix: AQ - Ground Water
Date Sampled: 09/24/19
Date Received: 09/25/19
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
Antimony	ND	6.0	4.7	ug/l	1	09/27/19	09/30/19	ND	SW846 6010D [3]	SW846 3010A [6]
Arsenic	14.0	3.0	2.8	ug/l	1	09/27/19	09/30/19	ND	SW846 6010D [3]	SW846 3010A [6]
Cadmium	ND	3.0	1.0	ug/l	1	09/27/19	09/30/19	ND	SW846 6010D [3]	SW846 3010A [6]
Chromium	2.9 J	10	2.0	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [6]
Iron	44600	100	32	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [6]
Lead [a]	ND	6.0	3.6	ug/l	2	09/27/19	10/01/19	ND	SW846 6010D [4]	SW846 3010A [6]
Manganese	883	15	1.4	ug/l	1	09/27/19	09/28/19	ND	SW846 6010D [2]	SW846 3010A [6]
Mercury	ND	0.20	0.095	ug/l	1	09/27/19	09/27/19	LL	SW846 7470A [1]	SW846 7470A [5]

(1) Instrument QC Batch: MA47522
(2) Instrument QC Batch: MA47538
(3) Instrument QC Batch: MA47543
(4) Instrument QC Batch: MA47548
(5) Prep QC Batch: MP17579
(6) Prep QC Batch: MP17585

(a) Elevated detection limit due to dilution required for high interfering element.

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JC95633-8	**Date Sampled:**	09/24/19
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94668.D	1	10/04/19 01:42	EH	n/a	n/a	V4B4032
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	
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	108%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	106%		80-120%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW WTB

CHAIN OF CUSTODY

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

PAGE 1 OF 1 L

FED-EX Tracking # 1019 2803 6660 (1019 2803 6670)
Bottle Order Control #
SGS Accutest Quote # HWNJOMM73507
SGS Accutest Job # JC95633

Client / Reporting Information

Company Name: Honeywell International Inc
Street Address: 1563 Willis Ave
City / State / Zip: Syracuse, New York 13204
Project Contact: John Formoza E-mail: John.formoza@jacobs.com
Phone #: 315-532-5608 Fax #:
Sampler(s) Name(s): Phone #:

Project Information

Project Name: HLAME 30130 - Alltift Landfill - Annual
Street: 579 Tifft Street
City / State: Buffalo, New York 14220
Project #: R35116 - Honeywell OM&M Program
Client Purchase Order #: A000001653
Project Manager: Chuck Geadelmann

Billing Information (If different from Report to)
Company Name: Honeywell International Inc
Street Address: 115 Tabor Road
City / State / Zip: Morris Plains, NJ 07950
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	As, Cd, Cr, Fe, Pb, Mn, Sb, Hg	B8270NAP, BMS+4CANILINE only	V8260SL4 (1,2-dichlorobenzene, 1,4-dichlorobenzene, benzene, chlorobenzene, total xylene only)	LAB USE ONLY
1 1	Sump Comp - 092419		9/24/19	13:45	MS	GW	3					3				1	2		E40
2 2	Sump 1 - 092419		9/24/19	13:40	MS	GW	3	3										3	A16
3 3	Sump 2 - 092419		9/24/19	13:05	MS	GW	3	3										3	V1088
4 4	Sump 3 - 092419		9/24/19	11:15	MS	GW	3	3										3	
5 5	Sump 4 - 092419		9/24/19	9:55	MS	GW	5	3				2				1	2	3	
6 6	MW2 - 092419		9/24/19	8:35	MS	GW	5	3				2				1	2	3	
7 7	FDUP - Sump 4 - 092419		9/24/19	10:25	MS	GW	5	3				2				1	2	3	
8 8	Trip Blank		9/24/19		MS	WW	1											1	
5 9	Sump 4 - 092419 - MS		9/24/19	10:05	MS	GW	5	3				2				1	2	3	
5 10	Sump 4 - 092419 - MSD		9/24/19	10:15	MS	GW	5	3				2				1	2	3	

INITIAL ASSESSMENT 3A
LABEL VERIFICATION

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank

Turnaround Time (Business days)
- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [X] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample inventory is verified upon receipt in the Laboratory

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	9/24/19 14:30	1 Fed Ex	2 Fed Ex	9/25/19 1040	2 [signature]
3		3	4		4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☑ On Ice ☑ Cooler Temp. 3.4/3.1 °C IR IR-1

JC95633: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: JC95633 **Client:** WOOD ENVIRONMENT & INFRASTRUCT **Project:** HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 9/25/2019 10:40:00 AM **Delivery Method:** FedEx **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4); Cooler 2: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (3.3); Cooler 2: (3.0);

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

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

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

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

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

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify)

Comments -2 1 of 3 VOC vials rec'd empty. We will not screen sample.

SM089-03
Rev. Date 12/7/17

Responded to by: CSR: N/A

Response Date: Response Date: 9/25/2019

Response:

Response: Proceed with analysis

JC95633: 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

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B4032-MB	4B94661.D	1	10/03/19	EH	n/a	n/a	V4B4032

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-3, JC95633-4, JC95633-5, JC95633-6, JC95633-7, JC95633-8

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	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	81-124%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	109%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.57	8.6	ug/l	J
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B4034-MB	4B94709.D	1	10/07/19	EH	n/a	n/a	V4B4034

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-2

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

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	81-124%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	111%	80-120%

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

Blank Spike Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B4032-BS	4B94659.D	1	10/03/19	EH	n/a	n/a	V4B4032

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-3, JC95633-4, JC95633-5, JC95633-6, JC95633-7, JC95633-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	50.1	100	80-120
108-90-7	Chlorobenzene	50	50.3	101	84-117
95-50-1	1,2-Dichlorobenzene	50	50.9	102	84-119
106-46-7	1,4-Dichlorobenzene	50	50.3	101	82-117
1330-20-7	Xylene (total)	150	152	101	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	92%	81-124%
2037-26-5	Toluene-D8	101%	80-120%
460-00-4	4-Bromofluorobenzene	105%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B4034-BS	4B94707.D	1	10/07/19	EH	n/a	n/a	V4B4034

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	52.3	105	80-120
108-90-7	Chlorobenzene	50	52.3	105	84-117
95-50-1	1,2-Dichlorobenzene	50	52.3	105	84-119
106-46-7	1,4-Dichlorobenzene	50	52.3	105	82-117
1330-20-7	Xylene (total)	150	158	105	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	80-120%
17060-07-0	1,2-Dichloroethane-D4	94%	81-124%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	103%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC95797-2MS	4B94718.D	1	10/07/19	EH	n/a	n/a	V4B4034
JC95797-2	4B94711.D	1	10/07/19	EH	n/a	n/a	V4B4034

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-2

CAS No.	Compound	JC95797-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
71-43-2	Benzene	0.91		50	45.0	88	54-136
108-90-7	Chlorobenzene	ND		50	44.7	89	78-123
95-50-1	1,2-Dichlorobenzene	ND		50	43.5	87	77-123
106-46-7	1,4-Dichlorobenzene	ND		50	44.1	88	76-122
1330-20-7	Xylene (total)	ND		150	131	87	56-139

CAS No.	Surrogate Recoveries	MS	JC95797-2	Limits
1868-53-7	Dibromofluoromethane	108%	107%	80-120%
17060-07-0	1,2-Dichloroethane-D4	94%	96%	81-124%
2037-26-5	Toluene-D8	102%	101%	80-120%
460-00-4	4-Bromofluorobenzene	106%	109%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC95633-5MS	4B94663.D	1	10/03/19	EH	n/a	n/a	V4B4032
JC95633-5MSD	4B94664.D	1	10/03/19	EH	n/a	n/a	V4B4032
JC95633-5	4B94662.D	1	10/03/19	EH	n/a	n/a	V4B4032

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-3, JC95633-4, JC95633-5, JC95633-6, JC95633-7, JC95633-8

CAS No.	Compound	JC95633-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.1		50	50.1	98	50	49.7	97	1	54-136/10
108-90-7	Chlorobenzene	57.0		50	108	102	50	112	110	4	78-123/10
95-50-1	1,2-Dichlorobenzene	0.58	J	50	47.4	94	50	48.6	96	3	77-123/11
106-46-7	1,4-Dichlorobenzene	0.58	J	50	47.1	93	50	47.4	94	1	76-122/11
1330-20-7	Xylene (total)	ND		150	145	97	150	145	97	0	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC95633-5	Limits
1868-53-7	Dibromofluoromethane	106%	103%	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	93%	92%	96%	81-124%
2037-26-5	Toluene-D8	99%	101%	100%	80-120%
460-00-4	4-Bromofluorobenzene	104%	104%	109%	80-120%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC95797-3DUP	4B94721.D	1	10/07/19	EH	n/a	n/a	V4B4034
JC95797-3	4B94712.D	1	10/07/19	EH	n/a	n/a	V4B4034

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-2

CAS No.	Compound	JC95797-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
71-43-2	Benzene	ND		ND		nc	20
108-90-7	Chlorobenzene	ND		ND		nc	20
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	20
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	20
1330-20-7	Xylene (total)	ND		ND		nc	20

CAS No.	Surrogate Recoveries	DUP	JC95797-3	Limits
1868-53-7	Dibromofluoromethane	109%	109%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	97%	81-124%
2037-26-5	Toluene-D8	106%	98%	80-120%
460-00-4	4-Bromofluorobenzene	110%	112%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	V4B4006-BFB	**Injection Date:**	09/14/19
Lab File ID:	4B94136.D	**Injection Time:**	15:52
Instrument ID:	GCMS4B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	23218	22.6		Pass
75	30.0 - 60.0% of mass 95	52906	51.5		Pass
95	Base peak, 100% relative abundance	102802	100.0		Pass
96	5.0 - 9.0% of mass 95	6965	6.78		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	93778	91.2		Pass
175	5.0 - 9.0% of mass 174	8225	8.00	(8.77) [a]	Pass
176	95.0 - 101.0% of mass 174	91152	88.7	(97.2) [a]	Pass
177	5.0 - 9.0% of mass 176	6241	6.07	(6.85) [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
V4B4006-IC4006	4B94137.D	09/14/19	16:26	00:34	Initial cal 0.2
V4B4006-IC4006	4B94138.D	09/14/19	16:54	01:02	Initial cal 0.5
V4B4006-IC4006	4B94139.D	09/14/19	17:22	01:30	Initial cal 1
V4B4006-IC4006	4B94140.D	09/14/19	17:50	01:58	Initial cal 2
V4B4006-IC4006	4B94141.D	09/14/19	18:18	02:26	Initial cal 4
V4B4006-IC4006	4B94142.D	09/14/19	18:47	02:55	Initial cal 8
V4B4006-IC4006	4B94143.D	09/14/19	19:15	03:23	Initial cal 20
V4B4006-ICC4006	4B94144.D	09/14/19	19:43	03:51	Initial cal 50
V4B4006-IC4006	4B94145.D	09/14/19	20:11	04:19	Initial cal 100
V4B4006-IC4006	4B94146.D	09/14/19	20:39	04:47	Initial cal 200
V4B4006-ICV4006	4B94149.D	09/14/19	22:03	06:11	Initial cal verification 50
V4B4006-ICV4006	4B94150.D	09/14/19	22:31	06:39	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	V4B4032-BFB	**Injection Date:**	10/03/19
Lab File ID:	4B94658.D	**Injection Time:**	21:00
Instrument ID:	GCMS4B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	24555	18.5		Pass
75	30.0 - 60.0% of mass 95	63195	47.7		Pass
95	Base peak, 100% relative abundance	132424	100.0		Pass
96	5.0 - 9.0% of mass 95	8596	6.49		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	129971	98.1		Pass
175	5.0 - 9.0% of mass 174	10353	7.82	(7.97) [a]	Pass
176	95.0 - 101.0% of mass 174	128048	96.7	(98.5) [a]	Pass
177	5.0 - 9.0% of mass 176	8310	6.28	(6.49) [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
V4B4032-CC4006	4B94658.D	10/03/19	21:00	00:00	Continuing cal 50
V4B4032-BS	4B94659.D	10/03/19	21:28	00:28	Blank Spike
V4B4032-MB	4B94661.D	10/03/19	22:24	01:24	Method Blank
JC95633-5	4B94662.D	10/03/19	22:53	01:53	SUMP 4-092419
JC95633-5MS	4B94663.D	10/03/19	23:21	02:21	Matrix Spike
JC95633-5MSD	4B94664.D	10/03/19	23:49	02:49	Matrix Spike Duplicate
ZZZZZZ	4B94666.D	10/04/19	00:46	03:46	(unrelated sample)
ZZZZZZ	4B94667.D	10/04/19	01:14	04:14	(unrelated sample)
JC95633-8	4B94668.D	10/04/19	01:42	04:42	TRIP BLANK
JC95633-3	4B94669.D	10/04/19	02:10	05:10	SUMP 2-092419
JC95633-4	4B94670.D	10/04/19	02:39	05:39	SUMP 3-092419
JC95633-6	4B94671.D	10/04/19	03:07	06:07	MW2-092419
JC95633-7	4B94672.D	10/04/19	03:35	06:35	FDUP-SUMP 4-092419
ZZZZZZ	4B94673.D	10/04/19	04:03	07:03	(unrelated sample)
ZZZZZZ	4B94674.D	10/04/19	04:31	07:31	(unrelated sample)
ZZZZZZ	4B94676.D	10/04/19	05:27	08:27	(unrelated sample)
ZZZZZZ	4B94677.D	10/04/19	05:55	08:55	(unrelated sample)
ZZZZZZ	4B94678.D	10/04/19	06:24	09:24	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	V4B4034-BFB	**Injection Date:**	10/07/19
Lab File ID:	4B94706.D	**Injection Time:**	07:36
Instrument ID:	GCMS4B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	26368	19.7		Pass
75	30.0 - 60.0% of mass 95	64408	48.2		Pass
95	Base peak, 100% relative abundance	133755	100.0		Pass
96	5.0 - 9.0% of mass 95	9204	6.88		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	123779	92.5		Pass
175	5.0 - 9.0% of mass 174	10323	7.72	(8.34) [a]	Pass
176	95.0 - 101.0% of mass 174	120589	90.2	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	7912	5.92	(6.56) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4B4034-CC4006	4B94706.D	10/07/19	07:36	00:00	Continuing cal 20
V4B4034-BS	4B94707.D	10/07/19	08:13	00:37	Blank Spike
V4B4034-MB	4B94709.D	10/07/19	09:09	01:33	Method Blank
ZZZZZZ	4B94710.D	10/07/19	09:53	02:17	(unrelated sample)
JC95797-2	4B94711.D	10/07/19	10:21	02:45	(used for QC only; not part of job JC95633)
JC95797-3	4B94712.D	10/07/19	10:49	03:13	(used for QC only; not part of job JC95633)
ZZZZZZ	4B94713.D	10/07/19	11:17	03:41	(unrelated sample)
ZZZZZZ	4B94714.D	10/07/19	11:45	04:09	(unrelated sample)
ZZZZZZ	4B94715.D	10/07/19	12:13	04:37	(unrelated sample)
ZZZZZZ	4B94716.D	10/07/19	12:41	05:05	(unrelated sample)
JC95633-2	4B94717.D	10/07/19	13:10	05:34	SUMP 1-092419
JC95797-2MS	4B94718.D	10/07/19	13:38	06:02	Matrix Spike
ZZZZZZ	4B94720.D	10/07/19	14:35	06:59	(unrelated sample)
JC95797-3DUP	4B94721.D	10/07/19	15:03	07:27	Duplicate
ZZZZZZ	4B94722.D	10/07/19	15:31	07:55	(unrelated sample)
ZZZZZZ	4B94723.D	10/07/19	15:59	08:23	(unrelated sample)
ZZZZZZ	4B94724.D	10/07/19	16:27	08:51	(unrelated sample)
ZZZZZZ	4B94725.D	10/07/19	16:56	09:20	(unrelated sample)
ZZZZZZ	4B94726.D	10/07/19	17:24	09:48	(unrelated sample)
ZZZZZZ	4B94727.D	10/07/19	17:52	10:16	(unrelated sample)
ZZZZZZ	4B94728.D	10/07/19	18:20	10:44	(unrelated sample)
ZZZZZZ	4B94729.D	10/07/19	18:49	11:13	(unrelated sample)

Surrogate Recovery Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC95633-2	4B94717.D	109	96	99	114
JC95633-3	4B94669.D	108	97	102	110
JC95633-4	4B94670.D	109	95	102	111
JC95633-5	4B94662.D	105	96	100	109
JC95633-6	4B94671.D	109	97	100	109
JC95633-7	4B94672.D	108	96	101	110
JC95633-8	4B94668.D	108	96	101	106
JC95633-5MS	4B94663.D	106	93	99	104
JC95633-5MSD	4B94664.D	103	92	101	104
JC95797-2MS	4B94718.D	108	94	102	106
JC95797-3DUP	4B94721.D	109	100	106	110
V4B4032-BS	4B94659.D	106	92	101	105
V4B4032-MB	4B94661.D	106	95	102	109
V4B4034-BS	4B94707.D	107	94	99	103
V4B4034-MB	4B94709.D	106	95	102	111

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

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

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22998-MB1	6P485450.D	1	09/28/19	HSS	09/27/19	OP22998	E6P2749

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

JC95633-1, JC95633-6, JC95633-7

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

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	73%	34-128%
321-60-8	2-Fluorobiphenyl	66%	38-119%
1718-51-0	Terphenyl-d14	99%	26-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	11.63	9.5	ug/l	J
	Total TIC, Semi-Volatile		9.5	ug/l	J

Method Blank Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22998-MB1	Z140678.D	1	10/04/19	JC	09/27/19	OP22998	EZ6941

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

JC95633-1, JC95633-6, JC95633-7

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

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	69%	34-128%
321-60-8	2-Fluorobiphenyl	64%	38-119%
1718-51-0	Terphenyl-d14	83%	26-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	4.71	4	ug/l	J
	Internal standard added for SIM test	6.07	4.4	ug/l	J
	Internal standard added for SIM test	7.33	4.2	ug/l	J
	unknown	13.38	7.6	ug/l	J
	Total TIC, Semi-Volatile		7.6	ug/l	J

Method Blank Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23046-MB1	P131975.D	1	10/01/19	AR	09/30/19	OP23046	EP5986

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

JC95633-5

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	35%	10-110%
4165-62-2	Phenol-d5	23%	10-110%
118-79-6	2,4,6-Tribromophenol	74%	36-151%
4165-60-0	Nitrobenzene-d5	71%	34-128%
321-60-8	2-Fluorobiphenyl	67%	38-119%
1718-51-0	Terphenyl-d14	83%	26-129%

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

Method Blank Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23046-MB1	2P90212.D	1	10/07/19	JC	09/30/19	OP23046	E2P3992

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

JC95633-5

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	35%	10-110%
4165-62-2	Phenol-d5	25%	10-110%
118-79-6	2,4,6-Tribromophenol	68%	36-151%
4165-60-0	Nitrobenzene-d5	79%	34-128%
321-60-8	2-Fluorobiphenyl	61%	38-119%
1718-51-0	Terphenyl-d14	97%	26-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	15.29	11	ug/l	J
	alkane	18.01	9.4	ug/l	J
	Total TIC, Semi-Volatile		20.4	ug/l	J

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22998-BS1	6P485451.D	1	09/28/19	HSS	09/27/19	OP22998	E6P2749
OP22998-BSD	6P485452.D	1	09/28/19	HSS	09/27/19	OP22998	E6P2749

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

JC95633-1, JC95633-6, JC95633-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
106-47-8	4-Chloroaniline	50	23.5	47	16.8	34	33	17-87/39
91-20-3	Naphthalene	50	32.6	65	28.4	57	14	29-110/23

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	79%	71%	34-128%
321-60-8	2-Fluorobiphenyl	75%	66%	38-119%
1718-51-0	Terphenyl-d14	101%	85%	26-129%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23046-BS1	P131976.D	1	10/01/19	AR	09/30/19	OP23046	EP5986
OP23046-BSD	P131977.D	1	10/01/19	AR	09/30/19	OP23046	EP5986

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

JC95633-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
106-47-8	4-Chloroaniline	50	30.2	60	31.8	64	5	17-87/39
91-20-3	Naphthalene	50	37.2	74	37.4	75	1	29-110/23

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	43%	43%	10-110%
4165-62-2	Phenol-d5	33%	31%	10-110%
118-79-6	2,4,6-Tribromophenol	80%	79%	36-151%
4165-60-0	Nitrobenzene-d5	79%	79%	34-128%
321-60-8	2-Fluorobiphenyl	77%	72%	38-119%
1718-51-0	Terphenyl-d14	97%	96%	26-129%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22998-MS	6P485466.D	1	09/28/19	HSS	09/27/19	OP22998	E6P2749
OP22998-MSD	6P485467.D	1	09/28/19	HSS	09/27/19	OP22998	E6P2749
JC95633-5 [a]	6P485463.D	1	09/28/19	HSS	09/27/19	OP22998	E6P2749

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

JC95633-1, JC95633-6, JC95633-7

CAS No.	Compound	JC95633-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-47-8	4-Chloroaniline	ND		47.6	10.4	22	47.6	21.7	46	70* [b]	10-110/49
91-20-3	Naphthalene	ND		47.6	11.0	23* [c]	47.6	34.3	72	103* [b]	24-119/33

CAS No.	Surrogate Recoveries	MS	MSD	JC95633-5	Limits
4165-60-0	Nitrobenzene-d5	29%* [c]	87%		34-128%
321-60-8	2-Fluorobiphenyl	25%* [c]	83%		38-119%
1718-51-0	Terphenyl-d14	28%	100%		26-129%

(a) Sample used for QC purposes only.
(b) Analytical precision exceeds in-house control limits.
(c) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E2P3965-DFTPP	**Injection Date:**	09/13/19
Lab File ID:	2P89594.D	**Injection Time:**	23:43
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	67727	34.1		Pass
68	Less than 2.0% of mass 69	132	0.07	(0.14) [a]	Pass
69	Mass 69 relative abundance	91517	46.1		Pass
70	Less than 2.0% of mass 69	367	0.18	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	110840	55.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	198443	100.0		Pass
199	5.0 - 9.0% of mass 198	13665	6.89		Pass
275	10.0 - 30.0% of mass 198	52800	26.6		Pass
365	1.0 - 100.0% of mass 198	7569	3.81		Pass
441	Present, but less than mass 443	24248	12.2	(78.8) [b]	Pass
442	40.0 - 100.0% of mass 198	155275	78.2		Pass
443	17.0 - 23.0% of mass 442	30771	15.5	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P3965-IC3965	2P89595.D	09/14/19	00:07	00:24	Initial cal 100
E2P3965-IC3965	2P89596.D	09/14/19	00:32	00:49	Initial cal 80
E2P3965-ICC3965	2P89597.D	09/14/19	00:57	01:14	Initial cal 50
E2P3965-IC3965	2P89598.D	09/14/19	01:22	01:39	Initial cal 25
E2P3965-IC3965	2P89599.D	09/14/19	01:48	02:05	Initial cal 10
E2P3965-IC3965	2P89600.D	09/14/19	02:14	02:31	Initial cal 5
E2P3965-IC3965	2P89601.D	09/14/19	02:38	02:55	Initial cal 2
E2P3965-IC3965	2P89602.D	09/14/19	03:02	03:19	Initial cal 1
E2P3965-ICV3965	2P89603.D	09/14/19	03:26	03:43	Initial cal verification 50
E2P3965-ICV3965	2P89604.D	09/14/19	03:51	04:08	Initial cal verification 50
E2P3965-ICV3965	2P89605.D	09/14/19	04:15	04:32	Initial cal verification 50
E2P3965-ICV3965	2P89606.D	09/14/19	04:41	04:58	Initial cal verification 50
E2P3965-ICV3965	2P89607.D	09/14/19	05:07	05:24	Initial cal verification 50
E2P3965-ICV3965	2P89608.D	09/14/19	05:32	05:49	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E2P3966-DFTPP	**Injection Date:**	09/14/19
Lab File ID:	2P89610.D	**Injection Time:**	06:06
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	61010	33.5		Pass
68	Less than 2.0% of mass 69	427	0.23	(0.49) [a]	Pass
69	Mass 69 relative abundance	87723	48.1		Pass
70	Less than 2.0% of mass 69	432	0.24	(0.49) [a]	Pass
127	40.0 - 60.0% of mass 198	102605	56.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	182229	100.0		Pass
199	5.0 - 9.0% of mass 198	12460	6.84		Pass
275	10.0 - 30.0% of mass 198	45525	25.0		Pass
365	1.0 - 100.0% of mass 198	5994	3.29		Pass
441	Present, but less than mass 443	20484	11.2	(83.4) [b]	Pass
442	40.0 - 100.0% of mass 198	128352	70.4		Pass
443	17.0 - 23.0% of mass 442	24553	13.5	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P3966-IC3966	2P89611.D	09/14/19	06:20	00:14	Initial cal 100
E2P3966-IC3966	2P89612.D	09/14/19	06:46	00:40	Initial cal 80
E2P3966-ICC3966	2P89613.D	09/14/19	07:11	01:05	Initial cal 50
E2P3966-IC3966	2P89614.D	09/14/19	07:37	01:31	Initial cal 25
E2P3966-IC3966	2P89615.D	09/14/19	08:03	01:57	Initial cal 10
E2P3966-IC3966	2P89616.D	09/14/19	08:29	02:23	Initial cal 5
E2P3966-IC3966	2P89617.D	09/14/19	08:54	02:48	Initial cal 2
E2P3966-IC3966	2P89618.D	09/14/19	09:19	03:13	Initial cal 1
E2P3966-ICV3966	2P89619.D	09/14/19	09:45	03:39	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E2P3967-DFTPP	**Injection Date:**	09/14/19
Lab File ID:	2P89620.D	**Injection Time:**	10:06
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	55186	33.0		Pass
68	Less than 2.0% of mass 69	162	0.10	(0.20) [a]	Pass
69	Mass 69 relative abundance	79387	47.4		Pass
70	Less than 2.0% of mass 69	391	0.23	(0.49) [a]	Pass
127	40.0 - 60.0% of mass 198	94280	56.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	167427	100.0		Pass
199	5.0 - 9.0% of mass 198	11039	6.59		Pass
275	10.0 - 30.0% of mass 198	43347	25.9		Pass
365	1.0 - 100.0% of mass 198	6208	3.71		Pass
441	Present, but less than mass 443	20543	12.3	(81.0) [b]	Pass
442	40.0 - 100.0% of mass 198	128096	76.5		Pass
443	17.0 - 23.0% of mass 442	25355	15.1	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P3967-IC3967	2P89621.D	09/14/19	10:18	00:12	Initial cal 100
E2P3967-IC3967	2P89622.D	09/14/19	10:45	00:39	Initial cal 80
E2P3967-ICC3967	2P89623.D	09/14/19	11:10	01:04	Initial cal 50
E2P3967-IC3967	2P89624.D	09/14/19	11:36	01:30	Initial cal 25
E2P3967-IC3967	2P89625.D	09/14/19	12:02	01:56	Initial cal 10
E2P3967-IC3967	2P89626.D	09/14/19	12:28	02:22	Initial cal 5
E2P3967-IC3967	2P89627.D	09/14/19	12:53	02:47	Initial cal 2
E2P3967-IC3967	2P89628.D	09/14/19	13:19	03:13	Initial cal 1
E2P3967-ICV3967	2P89629.D	09/14/19	13:45	03:39	Initial cal verification 50
E2P3967-ICV3967	2P89630.D	09/14/19	14:10	04:04	Initial cal verification 50
E2P3967-ICV3967	2P89631.D	09/14/19	14:36	04:30	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E2P3992-DFTPP	**Injection Date:**	10/07/19
Lab File ID:	2P90201.D	**Injection Time:**	13:35
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	73552	43.2		Pass
68	Less than 2.0% of mass 69	117	0.07	(0.12) [a]	Pass
69	Mass 69 relative abundance	98618	57.9		Pass
70	Less than 2.0% of mass 69	328	0.19	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	99354	58.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	170197	100.0		Pass
199	5.0 - 9.0% of mass 198	11045	6.49		Pass
275	10.0 - 30.0% of mass 198	41611	24.4		Pass
365	1.0 - 100.0% of mass 198	5757	3.38		Pass
441	Present, but less than mass 443	20274	11.9	(83.7) [b]	Pass
442	40.0 - 100.0% of mass 198	124584	73.2		Pass
443	17.0 - 23.0% of mass 442	24218	14.2	(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
E2P3992-CC3965	2P90202.D	10/07/19	14:49	01:14	Continuing cal 25
E2P3992-CC3966	2P90203.D	10/07/19	15:15	01:40	Continuing cal 25
E2P3992-CC3967	2P90204.D	10/07/19	15:40	02:05	Continuing cal 25
OP23016A-MB1	2P90206.D	10/07/19	16:42	03:07	Method Blank
OP23016A-BS1	2P90207.D	10/07/19	17:08	03:33	Blank Spike
OP23016A-BSD	2P90208.D	10/07/19	17:34	03:59	Blank Spike Duplicate
OP22430A-MB1	2P90209.D	10/07/19	17:59	04:24	Method Blank
OP22430A-BS1	2P90210.D	10/07/19	18:25	04:50	Blank Spike
OP22430A-BSD	2P90211.D	10/07/19	18:51	05:16	Blank Spike Duplicate
OP23046-MB1	2P90212.D	10/07/19	19:17	05:42	Method Blank
OP23033-MB1	2P90213.D	10/07/19	19:42	06:07	Method Blank
ZZZZZZ	2P90214.D	10/07/19	20:08	06:33	(unrelated sample)
ZZZZZZ	2P90215.D	10/07/19	20:34	06:59	(unrelated sample)
ZZZZZZ	2P90216.D	10/07/19	20:59	07:24	(unrelated sample)
ZZZZZZ	2P90217.D	10/07/19	21:25	07:50	(unrelated sample)
ZZZZZZ	2P90218.D	10/07/19	21:50	08:15	(unrelated sample)
ZZZZZZ	2P90219.D	10/07/19	22:15	08:40	(unrelated sample)
ZZZZZZ	2P90220.D	10/07/19	22:40	09:05	(unrelated sample)
ZZZZZZ	2P90221.D	10/07/19	23:05	09:30	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E2P3992-DFTPP	**Injection Date:**	10/07/19
Lab File ID:	2P90201.D	**Injection Time:**	13:35
Instrument ID:	GCMS2P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	2P90222.D	10/07/19	23:31	09:56	(unrelated sample)
ZZZZZZ	2P90223.D	10/07/19	23:56	10:21	(unrelated sample)
ZZZZZZ	2P90224.D	10/08/19	00:21	10:46	(unrelated sample)
OP23089-MS	2P90225.D	10/08/19	00:46	11:11	Matrix Spike
OP23089-MSD	2P90226.D	10/08/19	01:11	11:36	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E6P2725-DFTPP	**Injection Date:**	09/10/19
Lab File ID:	6P484902.D	**Injection Time:**	01:00
Instrument ID:	GCMS6P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	89290	43.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	99342	48.2		Pass
70	Less than 2.0% of mass 69	845	0.41	(0.85) [a]	Pass
127	40.0 - 60.0% of mass 198	111834	54.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	206194	100.0		Pass
199	5.0 - 9.0% of mass 198	14935	7.24		Pass
275	10.0 - 30.0% of mass 198	52111	25.3		Pass
365	1.0 - 100.0% of mass 198	5870	2.85		Pass
441	Present, but less than mass 443	19332	9.38	(78.2) [b]	Pass
442	40.0 - 100.0% of mass 198	127810	62.0		Pass
443	17.0 - 23.0% of mass 442	24723	12.0	(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
E6P2725-ICC2725	6P484905.D	09/10/19	02:03	01:03	Initial cal 50
E6P2725-IC2725	6P484903A.D	09/10/19	02:25	01:25	Initial cal 100
E6P2725-IC2725	6P484904A.D	09/10/19	02:46	01:46	Initial cal 80
E6P2725-IC2725	6P484906.D	09/10/19	03:09	02:09	Initial cal 25
E6P2725-IC2725	6P484907.D	09/10/19	03:31	02:31	Initial cal 10
E6P2725-IC2725	6P484908.D	09/10/19	03:53	02:53	Initial cal 5
E6P2725-IC2725	6P484909.D	09/10/19	04:15	03:15	Initial cal 2
E6P2725-IC2725	6P484910.D	09/10/19	04:37	03:37	Initial cal 1
E6P2725-ICV2725	6P484911.D	09/10/19	04:59	03:59	Initial cal verification 50
E6P2725-ICV2725	6P484912.D	09/10/19	05:21	04:21	Initial cal verification 50
E6P2725-ICV2725	6P484913.D	09/10/19	05:43	04:43	Initial cal verification 50
E6P2725-ICV2725	6P484914.D	09/10/19	06:05	05:05	Initial cal verification 50
E6P2725-ICV2725	6P484915.D	09/10/19	06:27	05:27	Initial cal verification 50
E6P2725-ICV2725	6P484916.D	09/10/19	06:49	05:49	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample: E6P2726-DFTPP
Lab File ID: 6P484917.D
Instrument ID: GCMS6P
Injection Date: 09/10/19
Injection Time: 07:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	87002	44.9		Pass
68	Less than 2.0% of mass 69	1572	0.81	(1.71) [a]	Pass
69	Mass 69 relative abundance	91913	47.4		Pass
70	Less than 2.0% of mass 69	765	0.39	(0.83) [a]	Pass
127	40.0 - 60.0% of mass 198	106834	55.1		Pass
197	Less than 1.0% of mass 198	608	0.31		Pass
198	Base peak, 100% relative abundance	193792	100.0		Pass
199	5.0 - 9.0% of mass 198	12138	6.26		Pass
275	10.0 - 30.0% of mass 198	47992	24.8		Pass
365	1.0 - 100.0% of mass 198	6143	3.17		Pass
441	Present, but less than mass 443	18426	9.51	(72.7) [b]	Pass
442	40.0 - 100.0% of mass 198	126490	65.3		Pass
443	17.0 - 23.0% of mass 442	25343	13.1	(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
E6P2726-IC2726	6P484918.D	09/10/19	07:19	00:13	Initial cal 100
E6P2726-IC2726	6P484919.D	09/10/19	07:41	00:35	Initial cal 80
E6P2726-ICC2726	6P484920.D	09/10/19	08:03	00:57	Initial cal 50
E6P2726-IC2726	6P484921.D	09/10/19	08:25	01:19	Initial cal 25
E6P2726-IC2726	6P484922.D	09/10/19	08:47	01:41	Initial cal 10
E6P2726-IC2726	6P484923.D	09/10/19	09:09	02:03	Initial cal 5
E6P2726-IC2726	6P484924.D	09/10/19	09:31	02:25	Initial cal 2
E6P2726-IC2726	6P484925.D	09/10/19	09:53	02:47	Initial cal 1
E6P2726-ICV2726	6P484926.D	09/10/19	10:15	03:09	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E6P2727-DFTPP	**Injection Date:**	09/10/19
Lab File ID:	6P484927.D	**Injection Time:**	11:16
Instrument ID:	GCMS6P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	87762	45.7		Pass
68	Less than 2.0% of mass 69	1019	0.53	(1.11) [a]	Pass
69	Mass 69 relative abundance	92099	48.0		Pass
70	Less than 2.0% of mass 69	359	0.19	(0.39) [a]	Pass
127	40.0 - 60.0% of mass 198	105616	55.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	191936	100.0		Pass
199	5.0 - 9.0% of mass 198	13162	6.86		Pass
275	10.0 - 30.0% of mass 198	47778	24.9		Pass
365	1.0 - 100.0% of mass 198	6147	3.20		Pass
441	Present, but less than mass 443	17634	9.19	(76.8) [b]	Pass
442	40.0 - 100.0% of mass 198	116709	60.8		Pass
443	17.0 - 23.0% of mass 442	22975	12.0	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P2727-IC2727	6P484928.D	09/10/19	11:29	00:13	Initial cal 100
E6P2727-IC2727	6P484929.D	09/10/19	11:51	00:35	Initial cal 80
E6P2727-ICC2727	6P484930.D	09/10/19	12:13	00:57	Initial cal 50
E6P2727-IC2727	6P484931.D	09/10/19	12:35	01:19	Initial cal 25
E6P2727-IC2727	6P484932.D	09/10/19	12:57	01:41	Initial cal 10
E6P2727-IC2727	6P484933.D	09/10/19	13:19	02:03	Initial cal 5
E6P2727-IC2727	6P484934A.D	09/10/19	14:04	02:48	Initial cal 2
E6P2727-IC2727	6P484935.D	09/10/19	14:26	03:10	Initial cal 1
E6P2727-ICV2727	6P484936.D	09/10/19	14:48	03:32	Initial cal verification 50
E6P2727-ICV2727	6P484937.D	09/10/19	15:10	03:54	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	E6P2749-DFTPP	**Injection Date:**	09/28/19
Lab File ID:	6P485445.D	**Injection Time:**	13:39
Instrument ID:	GCMS6P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	98447	49.1		Pass
68	Less than 2.0% of mass 69	647	0.32	(0.66) [a]	Pass
69	Mass 69 relative abundance	98152	49.0		Pass
70	Less than 2.0% of mass 69	921	0.46	(0.94) [a]	Pass
127	40.0 - 60.0% of mass 198	109501	54.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	200512	100.0		Pass
199	5.0 - 9.0% of mass 198	13445	6.71		Pass
275	10.0 - 30.0% of mass 198	54768	27.3		Pass
365	1.0 - 100.0% of mass 198	8291	4.13		Pass
441	Present, but less than mass 443	17089	8.52	(81.5) [b]	Pass
442	40.0 - 100.0% of mass 198	109595	54.7		Pass
443	17.0 - 23.0% of mass 442	20971	10.5	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P2749-CC2725	6P485446.D	09/28/19	13:51	00:12	Continuing cal 25
E6P2749-CC2726	6P485447.D	09/28/19	14:13	00:34	Continuing cal 25
E6P2749-CC2727	6P485448.D	09/28/19	14:36	00:57	Continuing cal 25
OP22998-MB1	6P485450.D	09/28/19	15:20	01:41	Method Blank
OP22998-BS1	6P485451.D	09/28/19	15:42	02:03	Blank Spike
OP22998-BSD	6P485452.D	09/28/19	16:04	02:25	Blank Spike Duplicate
ZZZZZZ	6P485453.D	09/28/19	16:26	02:47	(unrelated sample)
ZZZZZZ	6P485454.D	09/28/19	16:49	03:10	(unrelated sample)
ZZZZZZ	6P485455.D	09/28/19	17:11	03:32	(unrelated sample)
ZZZZZZ	6P485456.D	09/28/19	17:33	03:54	(unrelated sample)
ZZZZZZ	6P485461.D	09/28/19	19:25	05:46	(unrelated sample)
JC95633-1	6P485462.D	09/28/19	19:47	06:08	SUMP COMP-092419
JC95633-5	6P485463.D	09/28/19	20:09	06:30	SUMP 4-092419
JC95633-6	6P485464.D	09/28/19	20:31	06:52	MW2-092419
JC95633-7	6P485465.D	09/28/19	20:53	07:14	FDUP-SUMP 4-092419
OP22998-MS	6P485466.D	09/28/19	21:16	07:37	Matrix Spike
OP22998-MSD	6P485467.D	09/28/19	21:38	07:59	Matrix Spike Duplicate
ZZZZZZ	6P485468.D	09/28/19	22:00	08:21	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EP5919-DFTPP	**Injection Date:**	07/09/19
Lab File ID:	P130614.D	**Injection Time:**	23:15
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	15053	35.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	14769	34.8		Pass
70	Less than 2.0% of mass 69	52	0.12	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	18279	43.1		Pass
197	Less than 1.0% of mass 198	166	0.39		Pass
198	Base peak, 100% relative abundance	42399	100.0		Pass
199	5.0 - 9.0% of mass 198	3004	7.09		Pass
275	10.0 - 30.0% of mass 198	10856	25.6		Pass
365	1.0 - 100.0% of mass 198	1420	3.35		Pass
441	Present, but less than mass 443	3975	9.38	(75.1) [b]	Pass
442	40.0 - 100.0% of mass 198	25920	61.1		Pass
443	17.0 - 23.0% of mass 442	5290	12.5	(20.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5919-IC5919	P130615.D	07/09/19	23:30	00:15	Initial cal 1
EP5919-IC5919	P130616.D	07/09/19	23:57	00:42	Initial cal 2
EP5919-IC5919	P130617.D	07/10/19	00:27	01:12	Initial cal 25
EP5919-IC5919	P130618.D	07/10/19	00:54	01:39	Initial cal 100
EP5919-IC5919	P130619.D	07/10/19	01:21	02:06	Initial cal 80
EP5919-ICC5919	P130620.D	07/10/19	01:48	02:33	Initial cal 50
EP5919-IC5919	P130621.D	07/10/19	02:16	03:01	Initial cal 10
EP5919-IC5919	P130622.D	07/10/19	02:42	03:27	Initial cal 5
EP5919-ICV5919	P130623.D	07/10/19	03:09	03:54	Initial cal verification 50
EP5919-ICV5919	P130625.D	07/10/19	04:03	04:48	Initial cal verification 50
EP5919-ICV5919	P130627.D	07/10/19	04:57	05:42	Initial cal verification 50
EP5919-ICV5919	P130628.D	07/10/19	05:24	06:09	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EP5920-DFTPP	**Injection Date:**	07/10/19
Lab File ID:	P130629.D	**Injection Time:**	05:47
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	9522	41.8		Pass
68	Less than 2.0% of mass 69	111	0.49	(1.18) [a]	Pass
69	Mass 69 relative abundance	9418	41.3		Pass
70	Less than 2.0% of mass 69	51	0.22	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	10837	47.6		Pass
197	Less than 1.0% of mass 198	77	0.34		Pass
198	Base peak, 100% relative abundance	22790	100.0		Pass
199	5.0 - 9.0% of mass 198	1530	6.71		Pass
275	10.0 - 30.0% of mass 198	5437	23.9		Pass
365	1.0 - 100.0% of mass 198	828	3.63		Pass
441	Present, but less than mass 443	2110	9.26	(78.6) [b]	Pass
442	40.0 - 100.0% of mass 198	14228	62.4		Pass
443	17.0 - 23.0% of mass 442	2685	11.8	(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
EP5920-IC5920	P130630.D	07/10/19	05:59	00:12	Initial cal 100
EP5920-IC5920	P130631.D	07/10/19	06:26	00:39	Initial cal 80
EP5920-ICC5920	P130632.D	07/10/19	06:53	01:06	Initial cal 50
EP5920-IC5920	P130633.D	07/10/19	07:20	01:33	Initial cal 25
EP5920-IC5920	P130634.D	07/10/19	07:47	02:00	Initial cal 10
EP5920-IC5920	P130635.D	07/10/19	08:13	02:26	Initial cal 5
EP5920-IC5920	P130637.D	07/10/19	09:07	03:20	Initial cal 1
EP5920-IC5920	P130639.D	07/10/19	10:01	04:14	Initial cal 2
EP5920-ICV5920	P130640.D	07/10/19	10:28	04:41	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EP5921-DFTPP	**Injection Date:**	07/10/19
Lab File ID:	P130641.D	**Injection Time:**	10:51
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	7820	44.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	7759	44.4		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	8753	50.1		Pass
197	Less than 1.0% of mass 198	83	0.48		Pass
198	Base peak, 100% relative abundance	17456	100.0		Pass
199	5.0 - 9.0% of mass 198	1162	6.66		Pass
275	10.0 - 30.0% of mass 198	4038	23.1		Pass
365	1.0 - 100.0% of mass 198	618	3.54		Pass
441	Present, but less than mass 443	1608	9.21	(82.7) [b]	Pass
442	40.0 - 100.0% of mass 198	10065	57.7		Pass
443	17.0 - 23.0% of mass 442	1945	11.1	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5921-IC5921	P130642.D	07/10/19	11:03	00:12	Initial cal 100
EP5921-ICC5921	P130644.D	07/10/19	11:57	01:06	Initial cal 50
EP5921-IC5921	P130645.D	07/10/19	12:24	01:33	Initial cal 25
EP5921-IC5921	P130646.D	07/10/19	12:51	02:00	Initial cal 10
EP5921-IC5921	P130647.D	07/10/19	13:18	02:27	Initial cal 5
EP5921-IC5921	P130648.D	07/10/19	13:45	02:54	Initial cal 2
EP5921-IC5921	P130649.D	07/10/19	14:13	03:22	Initial cal 1
EP5921-IC5921	P130650.D	07/10/19	14:40	03:49	Initial cal 80
EP5921-ICV5921	P130651.D	07/10/19	15:07	04:16	Initial cal verification 50
EP5921-ICV5921	P130652.D	07/10/19	15:34	04:43	Initial cal verification 50
EP5921-ICV5921	P130653.D	07/10/19	16:01	05:10	Initial cal verification 50
EP5921-ICV5919	P130654.D	07/10/19	16:29	05:38	Initial cal verification 50
EP5921-ICV5919	P130655A.D	07/10/19	17:25	06:34	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EP5986-DFTPP	**Injection Date:**	10/01/19
Lab File ID:	P131970.D	**Injection Time:**	13:27
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	6769	46.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	6828	46.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	7387	50.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	14632	100.0		Pass
199	5.0 - 9.0% of mass 198	944	6.45		Pass
275	10.0 - 30.0% of mass 198	3232	22.1		Pass
365	1.0 - 100.0% of mass 198	395	2.70		Pass
441	Present, but less than mass 443	1104	7.55	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	6755	46.2		Pass
443	17.0 - 23.0% of mass 442	1305	8.92	(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
EP5986-CC5919	P131971.D	10/01/19	13:39	00:12	Continuing cal 50
EP5986-CC5920	P131972.D	10/01/19	14:06	00:39	Continuing cal 50
EP5986-CC5921	P131973.D	10/01/19	14:34	01:07	Continuing cal 50
OP23046-MB1	P131975.D	10/01/19	15:29	02:02	Method Blank
OP23046-BS1	P131976.D	10/01/19	15:56	02:29	Blank Spike
OP23046-BSD	P131977.D	10/01/19	16:23	02:56	Blank Spike Duplicate
JC95633-5	P131978.D	10/01/19	16:51	03:24	SUMP 4-092419
ZZZZZZ	P131979.D	10/01/19	17:18	03:51	(unrelated sample)
ZZZZZZ	P131980.D	10/01/19	17:45	04:18	(unrelated sample)
ZZZZZZ	P131981.D	10/01/19	18:12	04:45	(unrelated sample)
ZZZZZZ	P131982.D	10/01/19	18:39	05:12	(unrelated sample)
ZZZZZZ	P131983.D	10/01/19	19:07	05:40	(unrelated sample)
ZZZZZZ	P131984.D	10/01/19	19:34	06:07	(unrelated sample)
ZZZZZZ	P131985.D	10/01/19	20:01	06:34	(unrelated sample)
ZZZZZZ	P131986.D	10/01/19	20:28	07:01	(unrelated sample)
ZZZZZZ	P131987.D	10/01/19	20:55	07:28	(unrelated sample)
ZZZZZZ	P131988.D	10/01/19	21:22	07:55	(unrelated sample)
ZZZZZZ	P131989.D	10/01/19	21:49	08:22	(unrelated sample)
ZZZZZZ	P131990.D	10/01/19	22:16	08:49	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EP5986-DFTPP	**Injection Date:**	10/01/19
Lab File ID:	P131970.D	**Injection Time:**	13:27
Instrument ID:	GCMSP		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P131992.D	10/01/19	23:11	09:44	(unrelated sample)
JC95703-8	P131993.D	10/01/19	23:38	10:11	(used for QC only; not part of job JC95633)
ZZZZZZ	P131994.D	10/02/19	00:05	10:38	(unrelated sample)
ZZZZZZ	P131995.D	10/02/19	00:32	11:05	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EZ6934-DFTPP	**Injection Date:**	09/26/19
Lab File ID:	Z140553.D	**Injection Time:**	02:34
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	75152	34.0		Pass
68	Less than 2.0% of mass 69	817	0.37	(0.96) [a]	Pass
69	Mass 69 relative abundance	84899	38.5		Pass
70	Less than 2.0% of mass 69	547	0.25	(0.64) [a]	Pass
127	40.0 - 60.0% of mass 198	114173	51.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	220771	100.0		Pass
199	5.0 - 9.0% of mass 198	14941	6.77		Pass
275	10.0 - 30.0% of mass 198	50645	22.9		Pass
365	1.0 - 100.0% of mass 198	6376	2.89		Pass
441	Present, but less than mass 443	21701	9.83	(81.2) [b]	Pass
442	40.0 - 100.0% of mass 198	142843	64.7		Pass
443	17.0 - 23.0% of mass 442	26738	12.1	(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
EZ6934-IC6934	Z140554.D	09/26/19	02:48	00:14	Initial cal 100
EZ6934-IC6934	Z140555.D	09/26/19	03:14	00:40	Initial cal 80
EZ6934-ICC6934	Z140556.D	09/26/19	03:41	01:07	Initial cal 50
EZ6934-IC6934	Z140557.D	09/26/19	04:07	01:33	Initial cal 25
EZ6934-IC6934	Z140558.D	09/26/19	04:34	02:00	Initial cal 10
EZ6934-IC6934	Z140559.D	09/26/19	05:00	02:26	Initial cal 5
EZ6934-IC6934	Z140560.D	09/26/19	05:26	02:52	Initial cal 2
EZ6934-IC6934	Z140561.D	09/26/19	05:53	03:19	Initial cal 1
EZ6934-ICV6934	Z140562.D	09/26/19	06:19	03:45	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EZ6935-DFTPP	**Injection Date:**	09/26/19
Lab File ID:	Z140563.D	**Injection Time:**	06:44
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	52668	30.6		Pass
68	Less than 2.0% of mass 69	1009	0.59	(1.66) [a]	Pass
69	Mass 69 relative abundance	60617	35.2		Pass
70	Less than 2.0% of mass 69	374	0.22	(0.62) [a]	Pass
127	40.0 - 60.0% of mass 198	86349	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	172120	100.0		Pass
199	5.0 - 9.0% of mass 198	10984	6.38		Pass
275	10.0 - 30.0% of mass 198	40707	23.7		Pass
365	1.0 - 100.0% of mass 198	5542	3.22		Pass
441	Present, but less than mass 443	18628	10.8	(79.9) [b]	Pass
442	40.0 - 100.0% of mass 198	126920	73.7		Pass
443	17.0 - 23.0% of mass 442	23300	13.5	(18.4) [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
EZ6935-IC6935	Z140564.D	09/26/19	06:59	00:15	Initial cal 100
EZ6935-IC6935	Z140565.D	09/26/19	07:25	00:41	Initial cal 80
EZ6935-ICC6935	Z140566.D	09/26/19	07:52	01:08	Initial cal 50
EZ6935-IC6935	Z140567.D	09/26/19	08:18	01:34	Initial cal 25
EZ6935-IC6935	Z140568.D	09/26/19	08:44	02:00	Initial cal 10
EZ6935-IC6935	Z140569.D	09/26/19	09:11	02:27	Initial cal 5
EZ6935-IC6935	Z140570.D	09/26/19	09:37	02:53	Initial cal 2
EZ6935-IC6935	Z140571.D	09/26/19	10:04	03:20	Initial cal 1
EZ6935-ICV6935	Z140572.D	09/26/19	10:30	03:46	Initial cal verification 50
EZ6935-ICV6935	Z140573.D	09/26/19	10:57	04:13	Initial cal verification 50
EZ6935-ICV6935	Z140574.D	09/26/19	11:23	04:39	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EZ6937-DFTPP	**Injection Date:**	09/26/19
Lab File ID:	Z140584.D	**Injection Time:**	16:50
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	47808	31.9		Pass
68	Less than 2.0% of mass 69	405	0.27	(0.76) [a]	Pass
69	Mass 69 relative abundance	53183	35.5		Pass
70	Less than 2.0% of mass 69	390	0.26	(0.73) [a]	Pass
127	40.0 - 60.0% of mass 198	75301	50.2		Pass
197	Less than 1.0% of mass 198	103	0.07		Pass
198	Base peak, 100% relative abundance	149955	100.0		Pass
199	5.0 - 9.0% of mass 198	9723	6.48		Pass
275	10.0 - 30.0% of mass 198	34980	23.3		Pass
365	1.0 - 100.0% of mass 198	5059	3.37		Pass
441	Present, but less than mass 443	16303	10.9	(83.1) [b]	Pass
442	40.0 - 100.0% of mass 198	106160	70.8		Pass
443	17.0 - 23.0% of mass 442	19608	13.1	(18.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ6937-IC6937	Z140585.D	09/26/19	17:05	00:15	Initial cal 1
EZ6937-IC6937	Z140586.D	09/26/19	17:31	00:41	Initial cal 100
EZ6937-IC6937	Z140587.D	09/26/19	17:58	01:08	Initial cal 80
EZ6937-ICC6937	Z140588.D	09/26/19	18:51	02:01	Initial cal 50
EZ6937-IC6937	Z140589.D	09/26/19	19:18	02:28	Initial cal 25
EZ6937-IC6937	Z140590.D	09/26/19	19:44	02:54	Initial cal 10
EZ6937-IC6937	Z140591.D	09/26/19	20:11	03:21	Initial cal 5
EZ6937-IC6937	Z140592.D	09/26/19	20:38	03:48	Initial cal 2
EZ6937-ICV6937	Z140593.D	09/26/19	21:04	04:14	Initial cal verification 50
EZ6937-ICV6937	Z140594.D	09/26/19	21:31	04:41	Initial cal verification 50
EZ6937-ICV6937	Z140595.D	09/26/19	21:58	05:08	Initial cal verification 50
EZ6937-ICV6937	Z140596.D	09/26/19	22:25	05:35	Initial cal verification 50
EZ6937-ICV6937	Z140597.D	09/26/19	22:51	06:01	Initial cal verification 50
EZ6937-ICV6937	Z140598.D	09/26/19	23:18	06:28	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	EZ6941-DFTPP	**Injection Date:**	10/04/19
Lab File ID:	Z140673.D	**Injection Time:**	12:27
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	74899	32.4		Pass
68	Less than 2.0% of mass 69	277	0.12	(0.31) [a]	Pass
69	Mass 69 relative abundance	88184	38.2		Pass
70	Less than 2.0% of mass 69	446	0.19	(0.51) [a]	Pass
127	40.0 - 60.0% of mass 198	119736	51.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	231040	100.0		Pass
199	5.0 - 9.0% of mass 198	15496	6.71		Pass
275	10.0 - 30.0% of mass 198	53677	23.2		Pass
365	1.0 - 100.0% of mass 198	7000	3.03		Pass
441	Present, but less than mass 443	22141	9.58	(79.9) [b]	Pass
442	40.0 - 100.0% of mass 198	147107	63.7		Pass
443	17.0 - 23.0% of mass 442	27719	12.0	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ6941-CC6937	Z140674.D	10/04/19	12:56	00:29	Continuing cal 25
EZ6941-CC6934	Z140675.D	10/04/19	13:22	00:55	Continuing cal 25
EZ6941-CC6935	Z140676.D	10/04/19	13:48	01:21	Continuing cal 25
OP23069-MB1	Z140677.D	10/04/19	14:15	01:48	Method Blank
OP22998-MB1	Z140678.D	10/04/19	14:41	02:14	Method Blank
OP23113-BSD	Z140682.D	10/04/19	15:09	02:42	Blank Spike Duplicate
ZZZZZZ	Z140680.D	10/04/19	16:02	03:35	(unrelated sample)
ZZZZZZ	Z140683.D	10/04/19	16:55	04:28	(unrelated sample)
ZZZZZZ	Z140684.D	10/04/19	17:21	04:54	(unrelated sample)
ZZZZZZ	Z140685.D	10/04/19	17:47	05:20	(unrelated sample)
ZZZZZZ	Z140686.D	10/04/19	18:14	05:47	(unrelated sample)
ZZZZZZ	Z140687.D	10/04/19	18:40	06:13	(unrelated sample)
ZZZZZZ	Z140688.D	10/04/19	19:06	06:39	(unrelated sample)
ZZZZZZ	Z140689.D	10/04/19	19:32	07:05	(unrelated sample)
ZZZZZZ	Z140690.D	10/04/19	19:59	07:32	(unrelated sample)
ZZZZZZ	Z140691.D	10/04/19	20:25	07:58	(unrelated sample)
ZZZZZZ	Z140692.D	10/04/19	20:51	08:24	(unrelated sample)
ZZZZZZ	Z140693.D	10/04/19	21:17	08:50	(unrelated sample)
ZZZZZZ	Z140694.D	10/04/19	21:43	09:16	(unrelated sample)

Surrogate Recovery Summary

Job Number: JC95633
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JC95633-1	6P485462.D	75	66	34
JC95633-5	P131978.D	75	71	47
JC95633-5	6P485463.D			
JC95633-6	6P485464.D	73	69	72
JC95633-7	6P485465.D	76	69	57
OP22998-BS1	6P485451.D	79	75	101
OP22998-BSD	6P485452.D	71	66	85
OP22998-MB1	6P485450.D	73	66	99
OP22998-MB1	Z140678.D	69	64	83
OP22998-MS	6P485466.D	29* [a]	25* [a]	28
OP22998-MSD	6P485467.D	87	83	100
OP23046-BS1	P131976.D	79	77	97
OP23046-BSD	P131977.D	79	72	96
OP23046-MB1	P131975.D	71	67	83
OP23046-MB1	2P90212.D	79	61	97

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	34-128%
S2 = 2-Fluorobiphenyl	38-119%
S3 = Terphenyl-d14	26-129%

(a) Outside of in house control limits.

Metals Analysis

QC Data Summaries

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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: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17579
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/27/19

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.014	.095	0.047	<0.20

Associated samples MP17579: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17579
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/27/19

Metal	JC95633-5 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	1.8	2	90.0	75-125

Associated samples MP17579: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17579
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/27/19

Metal	JC95633-5 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	1.8	2	90.0	0.0	20

Associated samples MP17579: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17579
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/27/19

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	1.9	2	95.0	80-120

Associated samples MP17579: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/27/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	46		
Antimony	6.0	1.3	4.7	2.0	<6.0
Arsenic	3.0	1.5	2.8	-0.90	<3.0
Barium	200	.3	13		
Beryllium	1.0	.1	.5		
Bismuth	20	3.3	4		
Boron	100	.8	63		
Cadmium	3.0	.1	1	0.10	<3.0
Calcium	5000	2.3	99		
Cerium	100				
Chromium	10	.5	2	-0.10	<10
Cobalt	50	.4	2.6		
Copper	10	.8	5.9		
Iron	100	4.4	32	2.2	<100
Lead	3.0	1.1	1.8	0.0	<3.0
Lithium	50	4.4	7.3		
Magnesium	5000	14	140		
Manganese	15	.1	1.4	0.0	<15
Molybdenum	20	.7	3.6		
Nickel	10	.3	1.7		
Phosphorus	50	2.4	18		
Potassium	10000	140	200		
Selenium	10	1.8	4.9		
Silicon	200	2.2	100		
Silver	10	.5	1.9		
Sodium	10000	34	570		
Strontium	10	.1	1		
Sulfur	50	9.8	45		
Thallium	10	1.3	1.8		
Tin	10	.9	3.7		
Titanium	10	.3	2.5		
Tungsten	50	3.9	40		
Vanadium	50	.3	1.8		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/27/19

Metal	RL	IDL	MDL	MB raw	final
Zinc	20	1.3	6.9		
Zirconium	10	.2	4.1		

Associated samples MP17585: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/27/19

Metal	JC95633-5 Original	MS	Spikelot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0	2030	2000	101.5	75-125
Arsenic	15.9	2030	2000	100.7	75-125
Barium					
Beryllium					
Bismuth					
Boron					
Cadmium	0.30	1950	2000	97.5	75-125
Calcium					
Cerium					
Chromium	5.0	1880	2000	93.8	75-125
Cobalt					
Copper					
Iron	48800	72100	25000	93.2	75-125
Lead	0.0	2080	2000	104.0	75-125
Lithium					
Magnesium					
Manganese	940	2810	2000	93.5	75-125
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silicon					
Silver					
Sodium	anr				
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/27/19

Metal	JC95633-5 Original MS	Spikelot MPSPK2	% Rec	QC Limits
Zinc				
Zirconium				

Associated samples MP17585: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/27/19

Metal	JC95633-5 Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	2040	2000	102.0	0.5	20
Arsenic	15.9	2050	2000	101.7	1.0	20
Barium						
Beryllium						
Bismuth						
Boron						
Cadmium	0.30	1970	2000	98.5	1.0	20
Calcium						
Cerium						
Chromium	5.0	1890	2000	94.3	0.5	20
Cobalt						
Copper						
Iron	48800	72700	25000	95.6	0.8	20
Lead	0.0	2100	2000	105.0	1.0	20
Lithium						
Magnesium						
Manganese	940	2820	2000	94.0	0.4	20
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silicon						
Silver						
Sodium	anr					
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/27/19

Metal	JC95633-5 Original MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Zinc					
Zirconium					

Associated samples MP17585: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/27/19

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	1950	2000	97.5	80-120
Arsenic	1940	2000	97.0	80-120
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium	1880	2000	94.0	80-120
Calcium				
Cerium				
Chromium	1910	2000	95.5	80-120
Cobalt				
Copper				
Iron	24500	25000	98.0	80-120
Lead	1920	2000	96.0	80-120
Lithium				
Magnesium				
Manganese	1950	2000	97.5	80-120
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	anr			
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/27/19

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Zinc				
Zirconium				

Associated samples MP17585: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/27/19

Metal	JC95633-5 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	9.20	NC	0-10
Arsenic	15.9	14.0	11.9 (a)	0-10
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium	0.300	0.500	66.7 (a)	0-10
Calcium				
Cerium				
Chromium	5.00	5.90	18.0 (a)	0-10
Cobalt				
Copper				
Iron	48800	54600	12.1*(b)	0-10
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese	940	959	2.0	0-10
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	anr			
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC95633
Account: HWINJOMM - Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

QC Batch ID: MP17585 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/27/19

Metal	JC95633-5 Original SDL 1:5	%DIF	QC Limits
Zinc			
Zirconium			

Associated samples MP17585: JC95633-1, JC95633-5, JC95633-6, JC95633-7

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).
(b) Serial dilution indicates possible matrix interference.

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-Alltift Landfill, 579 Tifft Street, Buffalo, NY

R35116 PO# A000001653

SGS Job Number: JC95633R

Sampling Date: 09/24/19

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: **30**

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

Laura Degenhardt
General Manager

Client Service contact: Victoria Pushkova 732-329-0200

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

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Sample Summary

Honeywell International Inc. OMM work

Job No: JC95633R

HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Project No: R35116 PO# A000001653

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JC95633-2R	09/24/19	13:40	MS	09/25/19	AQ	Ground Water	SUMP 1-092419
JC95633-3R	09/24/19	13:05	MS	09/25/19	AQ	Ground Water	SUMP 2-092419
JC95633-4R	09/24/19	11:15	MS	09/25/19	AQ	Ground Water	SUMP 3-092419
JC95633-5DR	09/24/19	09:55	MS	09/25/19	AQ	Water Dup/MSD	SUMP 4-092419
JC95633-5R	09/24/19	09:55	MS	09/25/19	AQ	Ground Water	SUMP 4-092419
JC95633-5SR	09/24/19	09:55	MS	09/25/19	AQ	Water Matrix Spike	SUMP 4-092419
JC95633-6R	09/24/19	08:35	MS	09/25/19	AQ	Ground Water	MW2-092419
JC95633-7R	09/24/19	10:25	MS	09/25/19	AQ	Ground Water	FDUP-SUMP 4-092419
JC95633-8R	09/24/19	13:40	MS	09/25/19	AQ	Trip Blank Water	TRIP BLANK

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Honeywell International Inc. OMM work	**Job No**	JC95633R
Site:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY	**Report Date**	4/27/2020 2:22:47 PM

On 09/25/2019, 6 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.3 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC95633R was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

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

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

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V4B4032

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC95633-5MS, JC95633-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** V4B4034

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC95797-2MS, JC95797-3DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

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

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

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

Summary of Hits

Job Number: JC95633R
Account: Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY
Collected: 09/24/19

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC95633-2R	**SUMP 1-092419**					
No hits reported in this sample.						
JC95633-3R	**SUMP 2-092419**					
No hits reported in this sample.						
JC95633-4R	**SUMP 3-092419**					
No hits reported in this sample.						
JC95633-5R	**SUMP 4-092419**					
No hits reported in this sample.						
JC95633-6R	**MW2-092419**					
No hits reported in this sample.						
JC95633-7R	**FDUP-SUMP 4-092419**					
No hits reported in this sample.						
JC95633-8R	**TRIP BLANK**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SUMP 1-092419		
Lab Sample ID:	JC95633-2R	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94717R.D	1	10/07/19 13:10	EH	n/a	n/a	V4B4034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	114%		80-120%

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

Report of Analysis

Client Sample ID:	SUMP 2-092419		
Lab Sample ID:	JC95633-3R	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94669R.D	1	10/04/19 02:10	EH	n/a	n/a	V4B4032
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	110%		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 3-092419		
Lab Sample ID:	JC95633-4R	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94670R.D	1	10/04/19 02:39	EH	n/a	n/a	V4B4032
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	111%		80-120%

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

Report of Analysis

Client Sample ID:	SUMP 4-092419		
Lab Sample ID:	JC95633-5R	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94662R.D	1	10/03/19 22:53	EH	n/a	n/a	V4B4032
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	109%		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:	MW2-092419		
Lab Sample ID:	JC95633-6R	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94671R.D	1	10/04/19 03:07	EH	n/a	n/a	V4B4032
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	109%		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:	FDUP-SUMP 4-092419		
Lab Sample ID:	JC95633-7R	**Date Sampled:**	09/24/19
Matrix:	AQ - Ground Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94672R.D	1	10/04/19 03:35	EH	n/a	n/a	V4B4032
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	110%		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		
Lab Sample ID:	JC95633-8R	**Date Sampled:**	09/24/19
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/25/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B94668R.D	1	10/04/19 01:42	EH	n/a	n/a	V4B4032
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	106%		80-120%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW WTB

CHAIN OF CUSTODY

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

1019 2803 6620

PAGE 1 OF 1

FED-EX Tracking #	Bottle Order Control #
1019 2803 6620	
SGS Accutest Quote # HWINJOMM73807	SGS Accutest Job # JC95633

Client / Reporting Information

Company Name: Honeywell International Inc
Street Address: 1563 Willis Ave
City / State / Zip: Syracuse, New York 13204
Project Contact / E-mail: John Formoza John.formoza@jacobs.com
Phone # / Fax #: 315-532-5608
Sampler(s) Name(s) / Phone #:

Project Information

Project Name: HLAME 30130 - Alltift Landfill - Annual
Street: 579 Tifft Street
City / State: Buffalo, New York 14220
Project #: R35116 - Honeywell OM&M Program
Client Purchase Order #: A000001653
Project Manager: Chuck Geadelmann

Billing Information (If different from Report to)

Company Name: Honeywell International Inc
Street Address: 115 Tabor Road
City / State / Zip: Morris Plains, NJ 07950
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED- Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB-Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	As, Cd, Cr, Fe, Pb, Mn, Sb, Hg	B8270NAP, BMS+4CANILINE only	VE260/SL4 (1,2-dichlorobenzene, 1,4 - dichlorobenzene, benzene, chlorobenzene, total xylene only)	LAB USE ONLY
1	Sump Comp - 092419		9/24/19	13:45	MS	GW	3					3				1	2		E40
2	Sump 1 - 092419		9/24/19	13:40	MS	GW	3	3										3	A16
3	Sump 2 - 092419		9/24/19	13:05	MS	GW	3	3										3	V1088
4	Sump 3 - 092419		9/24/19	11:15	MS	GW	3	3										3	
5	Sump 4 - 092419		9/24/19	9:55	MS	GW	5	3				2				1	2	3	
6	MW2 - 092419		9/24/19	8:35	MS	GW	5	3				2				1	2	3	
7	FDUP - Sump 4 - 092419		9/24/19	10:25	MS	GW	5	3				2				1	2	3	
8	Trip Blank		9/24/19		MS	WW	1											1	
9	Sump 4 - 092419 - MS		9/24/19	10:05	MS	GW	5	3				2				1	2	3	
10	Sump 4 - 092419 - MSD		9/24/19	10:15	MS	GW	5	3				2				1	2	3	

INITIAL ASSESSMENT 3A

LABEL VERIFICATION

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [X] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample inventory is verified upon receipt in the Laboratory

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		9/24/19 14:30	1 Fed Ex	2 Fed Ex	9/25/19 1040	2
3			3	4		4
5			5			

Custody Seal # — [ ] Intact [ ] Not intact — Preserved where applicable [X] — On Ice [X] — Cooler Temp: 3.4, 3.1 °C IP

IR7

5.1 5

SGS Sample Receipt Summary

Job Number: JC95633 **Client:** WOOD ENVIRONMENT & INFRASTRUCT **Project:** HLAME: 30130-ALLTIFT LANDFILL, 579 TIFFT S

Date / Time Received: 9/25/2019 10:40:00 AM **Delivery Method:** FedEx **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4); Cooler 2: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (3.3); Cooler 2: (3.0);

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

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

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

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

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

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify)

Comments -2 1 of 3 VOC vials rec'd empty. We will not screen sample.

SM089-03
Rev. Date 12/7/17

Responded to by: CSR: N/A

Response Date: Response Date: 9/25/2019

Response:

Response: Proceed with analysis

Job Change Order: JC95633

Requested Date:	4/18/2020	**Received Date:**	9/25/2019
Account Name:	Honeywell International Inc. OMM	**Due Date:**	10/9/2019
Project Description:	HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffal	**Deliverable:**	COMMBN
C/O Initiated By:	SW **PM:** VP	**TAT (Days):**	14

Sample #: JC95633-2--8, 5S, 5D

Dept:

TAT: 14

Change:
Please relog/retrieve -VR8260ETHBNZ

Above Changes Per: John F **Date/Time:** 4/18/2020 3:28:22 PM

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

JC95633R: Chain of Custody
Page 4 of 4

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

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B4032-MB	4B94661.D	1	10/03/19	EH	n/a	n/a	V4B4032

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-3R, JC95633-4R, JC95633-5R, JC95633-6R, JC95633-7R, JC95633-8R

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	81-124%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	109%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.57	8.6	ug/l	J
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B4034-MB	4B94709.D	1	10/07/19	EH	n/a	n/a	V4B4034

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-2R

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	81-124%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	111%	80-120%

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

Blank Spike Summary

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B4032-BS	4B94659.D	1	10/03/19	EH	n/a	n/a	V4B4032

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-3R, JC95633-4R, JC95633-5R, JC95633-6R, JC95633-7R, JC95633-8R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	50.2	100	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	92%	81-124%
2037-26-5	Toluene-D8	101%	80-120%
460-00-4	4-Bromofluorobenzene	105%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B4034-BS	4B94707.D	1	10/07/19	EH	n/a	n/a	V4B4034

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-2R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	52.2	104	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	80-120%
17060-07-0	1,2-Dichloroethane-D4	94%	81-124%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	103%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC95797-2MS	4B94718.D	1	10/07/19	EH	n/a	n/a	V4B4034
JC95797-2	4B94711.D	1	10/07/19	EH	n/a	n/a	V4B4034

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-2R

CAS No.	Compound	JC95797-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
100-41-4	Ethylbenzene	ND		50	44.4	89	51-140

CAS No.	Surrogate Recoveries	MS	JC95797-2	Limits
1868-53-7	Dibromofluoromethane	108%	107%	80-120%
17060-07-0	1,2-Dichloroethane-D4	94%	96%	81-124%
2037-26-5	Toluene-D8	102%	101%	80-120%
460-00-4	4-Bromofluorobenzene	106%	109%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC95633-5MS	4B94663.D	1	10/03/19	EH	n/a	n/a	V4B4032
JC95633-5MSD	4B94664.D	1	10/03/19	EH	n/a	n/a	V4B4032
JC95633-5	4B94662.D	1	10/03/19	EH	n/a	n/a	V4B4032

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-3R, JC95633-4R, JC95633-5R, JC95633-6R, JC95633-7R, JC95633-8R

CAS No.	Compound	JC95633-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND		50	48.3	97	50	48.4	97	0	51-140/20

CAS No.	Surrogate Recoveries	MS	MSD	JC95633-5	Limits
1868-53-7	Dibromofluoromethane	106%	103%	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	93%	92%	96%	81-124%
2037-26-5	Toluene-D8	99%	101%	100%	80-120%
460-00-4	4-Bromofluorobenzene	104%	104%	109%	80-120%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC95797-3DUP	4B94721.D	1	10/07/19	EH	n/a	n/a	V4B4034
JC95797-3	4B94712.D	1	10/07/19	EH	n/a	n/a	V4B4034

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC95633-2R

CAS No.	Compound	JC95797-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
100-41-4	Ethylbenzene	ND		ND		nc	20

CAS No.	Surrogate Recoveries	DUP	JC95797-3	Limits
1868-53-7	Dibromofluoromethane	109%	109%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	97%	81-124%
2037-26-5	Toluene-D8	106%	98%	80-120%
460-00-4	4-Bromofluorobenzene	110%	112%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	V4B4006-BFB	**Injection Date:**	09/14/19
Lab File ID:	4B94136.D	**Injection Time:**	15:52
Instrument ID:	GCMS4B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	23218	22.6		Pass
75	30.0 - 60.0% of mass 95	52906	51.5		Pass
95	Base peak, 100% relative abundance	102802	100.0		Pass
96	5.0 - 9.0% of mass 95	6965	6.78		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	93778	91.2		Pass
175	5.0 - 9.0% of mass 174	8225	8.00	(8.77) [a]	Pass
176	95.0 - 101.0% of mass 174	91152	88.7	(97.2) [a]	Pass
177	5.0 - 9.0% of mass 176	6241	6.07	(6.85) [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
V4B4006-IC4006	4B94137.D	09/14/19	16:26	00:34	Initial cal 0.2
V4B4006-IC4006	4B94138.D	09/14/19	16:54	01:02	Initial cal 0.5
V4B4006-IC4006	4B94139.D	09/14/19	17:22	01:30	Initial cal 1
V4B4006-IC4006	4B94140.D	09/14/19	17:50	01:58	Initial cal 2
V4B4006-IC4006	4B94141.D	09/14/19	18:18	02:26	Initial cal 4
V4B4006-IC4006	4B94142.D	09/14/19	18:47	02:55	Initial cal 8
V4B4006-IC4006	4B94143.D	09/14/19	19:15	03:23	Initial cal 20
V4B4006-ICC4006	4B94144.D	09/14/19	19:43	03:51	Initial cal 50
V4B4006-IC4006	4B94145.D	09/14/19	20:11	04:19	Initial cal 100
V4B4006-IC4006	4B94146.D	09/14/19	20:39	04:47	Initial cal 200
V4B4006-ICV4006	4B94149.D	09/14/19	22:03	06:11	Initial cal verification 50
V4B4006-ICV4006	4B94150.D	09/14/19	22:31	06:39	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	V4B4032-BFB	**Injection Date:**	10/03/19
Lab File ID:	4B94658.D	**Injection Time:**	21:00
Instrument ID:	GCMS4B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	24555	18.5		Pass
75	30.0 - 60.0% of mass 95	63195	47.7		Pass
95	Base peak, 100% relative abundance	132424	100.0		Pass
96	5.0 - 9.0% of mass 95	8596	6.49		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	129971	98.1		Pass
175	5.0 - 9.0% of mass 174	10353	7.82	(7.97) [a]	Pass
176	95.0 - 101.0% of mass 174	128048	96.7	(98.5) [a]	Pass
177	5.0 - 9.0% of mass 176	8310	6.28	(6.49) [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
V4B4032-CC4006	4B94658.D	10/03/19	21:00	00:00	Continuing cal 50
V4B4032-BS	4B94659.D	10/03/19	21:28	00:28	Blank Spike
V4B4032-MB	4B94661.D	10/03/19	22:24	01:24	Method Blank
JC95633-5R	4B94662R.D	10/03/19	22:53	01:53	SUMP 4-092419
JC95633-5	4B94662.D	10/03/19	22:53	01:53	(used for QC only; not part of job JC95633R)
JC95633-5MS	4B94663.D	10/03/19	23:21	02:21	Matrix Spike
JC95633-5MSD	4B94664.D	10/03/19	23:49	02:49	Matrix Spike Duplicate
ZZZZZZ	4B94666.D	10/04/19	00:46	03:46	(unrelated sample)
ZZZZZZ	4B94667.D	10/04/19	01:14	04:14	(unrelated sample)
JC95633-8R	4B94668R.D	10/04/19	01:42	04:42	TRIP BLANK
ZZZZZZ	4B94668.D	10/04/19	01:42	04:42	(unrelated sample)
JC95633-3R	4B94669R.D	10/04/19	02:10	05:10	SUMP 2-092419
ZZZZZZ	4B94669.D	10/04/19	02:10	05:10	(unrelated sample)
JC95633-4R	4B94670R.D	10/04/19	02:39	05:39	SUMP 3-092419
ZZZZZZ	4B94670.D	10/04/19	02:39	05:39	(unrelated sample)
ZZZZZZ	4B94671.D	10/04/19	03:07	06:07	(unrelated sample)
JC95633-6R	4B94671R.D	10/04/19	03:07	06:07	MW2-092419
JC95633-7R	4B94672R.D	10/04/19	03:35	06:35	FDUP-SUMP 4-092419
ZZZZZZ	4B94672.D	10/04/19	03:35	06:35	(unrelated sample)
ZZZZZZ	4B94673.D	10/04/19	04:03	07:03	(unrelated sample)
ZZZZZZ	4B94674.D	10/04/19	04:31	07:31	(unrelated sample)
ZZZZZZ	4B94676.D	10/04/19	05:27	08:27	(unrelated sample)
ZZZZZZ	4B94677.D	10/04/19	05:55	08:55	(unrelated sample)
ZZZZZZ	4B94678.D	10/04/19	06:24	09:24	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Sample:	V4B4034-BFB	**Injection Date:**	10/07/19
Lab File ID:	4B94706.D	**Injection Time:**	07:36
Instrument ID:	GCMS4B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	26368	19.7		Pass
75	30.0 - 60.0% of mass 95	64408	48.2		Pass
95	Base peak, 100% relative abundance	133755	100.0		Pass
96	5.0 - 9.0% of mass 95	9204	6.88		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	123779	92.5		Pass
175	5.0 - 9.0% of mass 174	10323	7.72	(8.34) [a]	Pass
176	95.0 - 101.0% of mass 174	120589	90.2	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	7912	5.92	(6.56) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4B4034-CC4006	4B94706.D	10/07/19	07:36	00:00	Continuing cal 20
V4B4034-BS	4B94707.D	10/07/19	08:13	00:37	Blank Spike
V4B4034-MB	4B94709.D	10/07/19	09:09	01:33	Method Blank
ZZZZZZ	4B94710.D	10/07/19	09:53	02:17	(unrelated sample)
JC95797-2	4B94711.D	10/07/19	10:21	02:45	(used for QC only; not part of job JC95633R)
JC95797-3	4B94712.D	10/07/19	10:49	03:13	(used for QC only; not part of job JC95633R)
ZZZZZZ	4B94713.D	10/07/19	11:17	03:41	(unrelated sample)
ZZZZZZ	4B94714.D	10/07/19	11:45	04:09	(unrelated sample)
ZZZZZZ	4B94715.D	10/07/19	12:13	04:37	(unrelated sample)
ZZZZZZ	4B94716.D	10/07/19	12:41	05:05	(unrelated sample)
JC95633-2R	4B94717R.D	10/07/19	13:10	05:34	SUMP 1-092419
ZZZZZZ	4B94717.D	10/07/19	13:10	05:34	(unrelated sample)
JC95797-2MS	4B94718.D	10/07/19	13:38	06:02	Matrix Spike
ZZZZZZ	4B94720.D	10/07/19	14:35	06:59	(unrelated sample)
JC95797-3DUP	4B94721.D	10/07/19	15:03	07:27	Duplicate
ZZZZZZ	4B94722.D	10/07/19	15:31	07:55	(unrelated sample)
ZZZZZZ	4B94723.D	10/07/19	15:59	08:23	(unrelated sample)
ZZZZZZ	4B94724.D	10/07/19	16:27	08:51	(unrelated sample)
ZZZZZZ	4B94725.D	10/07/19	16:56	09:20	(unrelated sample)
ZZZZZZ	4B94726.D	10/07/19	17:24	09:48	(unrelated sample)
ZZZZZZ	4B94727.D	10/07/19	17:52	10:16	(unrelated sample)
ZZZZZZ	4B94728.D	10/07/19	18:20	10:44	(unrelated sample)
ZZZZZZ	4B94729.D	10/07/19	18:49	11:13	(unrelated sample)

Surrogate Recovery Summary

Job Number: JC95633R
Account: HWINJOMM Honeywell International Inc. OMM work
Project: HLAME: 30130-Alltift Landfill, 579 Tifft Street, Buffalo, NY

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC95633-2R	4B94717R.D	109	96	99	114
JC95633-3R	4B94669R.D	108	97	102	110
JC95633-4R	4B94670R.D	109	95	102	111
JC95633-5R	4B94662R.D	105	96	100	109
JC95633-6R	4B94671R.D	109	97	100	109
JC95633-7R	4B94672R.D	108	96	101	110
JC95633-8R	4B94668R.D	108	96	101	106
JC95633-5MS	4B94663.D	106	93	99	104
JC95633-5MSD	4B94664.D	103	92	101	104
JC95797-2MS	4B94718.D	108	94	102	106
JC95797-3DUP	4B94721.D	109	100	106	110
V4B4032-BS	4B94659.D	106	92	101	105
V4B4032-MB	4B94661.D	106	95	102	109
V4B4034-BS	4B94707.D	107	94	99	103
V4B4034-MB	4B94709.D	106	95	102	111

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Attachment B.8 Landfill Gas Monitoring Results

TABLE 2
Landfill Gas Monitoring Data - 2013 through 2020
2019/2020 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.

Created By:HTS/AC/ 4/17/2020
Checked By:RTB 4/24/2020

TABLE 2
Landfill Gas Monitoring Data - 2013 through 2020
2019/2020 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 0_2	LEL CH_4	CH_4	CO_2	O_2	Balance 0_2	LEL CH_4	CH_4	CO_2	O_2	Balance 0_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:
Ground 1 - Mo
Ground 2 - Mo
Ground 3 - Mo
Ground 4 - Mo
LEL - Lower Ex
CH4 - Methane
CO2 - Carbon D
O2 - Oxygen
Landfill Gas M

Created By:HTS/AC/ 4/17/2020
Checked By:RTB 4/24/2020

Attachment B.9 Monitoring Well Decommissioning Photos

Honeywell Alltift MW#1 – Exposure of MW#1

Honeywell Alltift MW#1 – Removal of MW#1

Honeywell Alltift MW#1 – MW#1 being grouted and abandoned

Honeywell Alltift MW#1 – Final covering of former MW#1 after being removed