

REMEDIAL ACTION REPORT ADDENDUM
SA-6 SOUTH BULKHEAD DEFERRED
AREA CHROMIUM REMEDY

STUDY AREA 6 SOUTH
NJDEP SITE 073

JERSEY CITY, NEW JERSEY

Prepared for

Honeywell

115 Tabor Road
Morris Plains, New Jersey 07950

Prepared by:

Wood Environment & Infrastructure Solutions, Inc.
200 American Metro Boulevard, Suite 113
Hamilton, New Jersey 08619
Project No. 7772210089

APRIL 2021



New Jersey Department of Environmental Protection
 Site Remediation and Waste Management Program

COVER/CERTIFICATION FORM

(Submit with Remedial Phase Report, Receptor Evaluation, and CEA Forms)

Date Stamp
 (For Department use only)

SECTION A. SITE INFORMATION

Site Name: Study Area SA-6 South Site 073

AKAs: Kellogg. St. Properties, etc.; Deed Notice #4 Tract 2

Street Address: Kellogg Street

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): G000000927

Case Tracking Number(s) for this submission: RAP180001

Date Remediation Initiated Pursuant to N.J.A.C. 7:26C-2: 05/26/2013

State Plane Coordinates for a central location at the site: Easting: 601437.751262 Northing: 685546.264835

List current Municipal Block and Lot Numbers of the Site:

Block # <u>21901.01</u>	Lot #(s) <u>8 and 9</u>	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____

SECTION B. SUBMISSION STATUS

1. Indicate how the Electronic Data Deliverable (EDD) for this submission is being provided to the NJDEP:

- Via Email at srpedd@dep.nj.gov (attach NJDEP confirmation email); or
- CD (attach to this submission)
- Not Applicable – No EDD

2. Complete the following Submission and Permit Status Table:

Remedial Phase Documents	N/A	Included in this Submission	Previously Submitted	Date of Submission	Date of Revised Submission	Date of Previous NJDEP Approval	Date of Document Withdrawal
Preliminary Assessment Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	03/30/2012		06/28/2012	
Site Investigation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Remedial Investigation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12/23/2008		03/24/2009	
Remedial Action Work Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12/23/2008		03/24/2009	
Remedial Action Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12/22/2016			
Response Action Outcome	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Other Submissions							
Alternative Soil Remediation Standard and/or Screening level Application Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Case Inventory Document		<input checked="" type="checkbox"/>		12/22/2016			
Classification Exception Area / Well Restriction Area (CEA/WRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	06/08/2009		07/31/2018	
Discharge to Ground Water Permit by Rule Authorization Request	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

IEC Engineered System Response Action Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Immediate Environmental Concern Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
LNAPL Interim Remedial Measure Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Public Notification	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	08/06/2009	09/01/2015		
Receptor Evaluation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12/22/2016			
Technical Impracticability Determination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Vapor Concern Mitigation Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Permit Application – list:	<input checked="" type="checkbox"/>						
Soil RA Permit		<input type="checkbox"/>	<input checked="" type="checkbox"/>	12/14/2017	03/15/2019	07/26/2019	
Groundwater RA Permit		<input type="checkbox"/>	<input type="checkbox"/>	12/05/2017		08/06/2018	
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
Radionuclide Remedial Action Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Radionuclide Remedial Action Workplan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Radionuclide Remedial Investigation Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Radionuclide Remedial Investigation Workplan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

SECTION C. SITE USE

Current Site Use: (check all that apply)

- Industrial
- Residential
- Commercial
- School or child care
- Other: _____
- Agricultural
- Park or recreational use
- Vacant
- Government

Intended Future Site Use, if known: (check all that apply)

- Industrial
- Residential
- Commercial
- School or child care
- Other: _____
- Park or recreational use
- Vacant
- Government
- Future site use unknown

SECTION D. CASE TYPE: (check all that apply)

- Administrative Consent Order (ACO)
- Brownfield Development Area (BDA)
- Child Care Facility
- Chrome Site (Chromate chemical production waste)
- Coal Gas
- Due Diligence with RAO
- Hazardous Discharge Remediation Fund (HDSRF) Grant/Loan
- ISRA
- Landfill (SRP subject only)
- Regulated Underground Storage Tank (UST)
- Remediation Agreement (RA)/Remediation Certification
- School Development Authority (SDA)
- School facility
- Spill Act Defense – Government Entity
- Spill Act Discharge
- UST Grant/Loan
- Other: _____

Federal Case (check all that apply)

- RCRA GPRA 2020
- CERCLA/NPL
- USDOD
- USDOE

1. Is the party conducting remediation a government entity? Yes No
 If "Yes," check one: Federal State Municipal County

SECTION E. PUBLIC FUNDS

Did the remediation utilize public funds? Yes No

If "Yes," check applicable:

- UST Grant
- HDSRF Grant
- Spill Fund
- UST Loan
- HDSRF Loan
- Schools Development Authority
- Brownfield Reimbursement Program
- Landfill Reimbursement Program
- Environmental Infrastructure Trust

SECTION F. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: Not Applicable

First Name: _____ Last Name: _____

Phone Numbers: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

(1) I certify, as a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C-1 et seq. to conduct business in New Jersey, that for the remediation described in this submission, and all attachments included in this submission, I personally: Managed, supervised, or performed the remediation conducted at this site that is described in this submission, and all attachments included in this submission; and/or periodically reviewed and evaluated the work performed by other persons that forms the basis for the information in this submission; and/or completed the work of another site remediation professional, licensed or not, after having: (1) reviewed all available documentation on which I relied; (2) conducted a site visit and observed the then-current conditions and verified the status of as much of the work as was reasonably observable; and (3) concluded, in the exercise of my independent professional judgment, that there was sufficient information upon which to complete any additional phase of remediation and prepare workplans and reports related thereto.

(2) I certify:

- *That I have read this submission and all attachments to this submission;*
- *That in performing the professional services as the licensed site remediation professional for the entire site or each area of concern, I adhered to the professional conduct standards and requirements governing licensed site remediation professionals provided in N.J.S.A. 58:10C-16;*
- *That the remediation conducted at the entire site or each area of concern, that is described in this submission and all attachments to this submission, was conducted pursuant to and in compliance with the remediation requirements in N.J.S.A. 58:10C-14.c;*
- *That the remediation described in this submission, and all attachments to this submission, was conducted pursuant to and in compliance with the regulations of the Site Remediation Professional Licensing Board at N.J.A.C. 7:26I; and*
- *That the information contained in this submission and all attachments to this submission is true, accurate, and complete.*

(3) I certify, when this submission includes a response action outcome, that the entire site or each area of concern has been remediated in compliance with all applicable statutes, rules, and regulations and is protective of public health and safety and the environment.

(4) I certify that no other person is authorized or able to use any password, encryption method, or electronic signature that the Board or the Department have provided to me.

(5) I certify that I understand and acknowledge that:

- *If I knowingly make a false statement, representation, or certification in any document or information I submit to the Department I may be subject to civil and administrative enforcement pursuant to N.J.S.A. 58:10C-17.a.1(a)through (f) by the Board, including but not limited to license suspension, revocation, or denial of renewal; and*
- *If I purposely, knowingly, or recklessly make a false statement, representation, or certification in any application, form, record, document or other information submitted to the Department or required to be maintained pursuant to the Site Remediation Reform Act, I shall be guilty, upon conviction, of a crime of the third degree and shall, notwithstanding the provisions of subsection b. of N.J.S.2C:43-3, be subject to a fine of not less than \$5,000 nor more than \$75,000 per day of violation, or by imprisonment, or both.*

(6) I certify that I have read this certification prior to signing, certifying, and making this submission.

LSRP Signature: _____

Date: _____

LSRP Name: _____

Company Name: _____

SECTION G. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Honeywell International Inc.

Representative First Name: Benny Representative Last Name: Dehghi

Title: Global Remediation Director

Phone Number: (310) 512-2296 Ext.: _____ FAX: _____

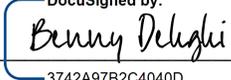
Mailing Address: 115 Tabor Road

Municipality: Morris Plains State: New Jersey Zip code: 07950

Email Address: benny.dehghi@honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

DocuSigned by:
Signature:  Date: 31-Mar-2021

Name/Title: 3742A97B2C4040D... Benny Dehghi/Global Remediation Director

For CEA Submissions:

Check this box if the person above is also the property owner of the site or their representative. If this person is not the site property owner, please ensure the site property owner's name and address is in the first line of the table in Section E.2 of the Classification Exception Area / Well Restriction Area (CEA/WRA) Fact Sheet Form.

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420



New Jersey Department of Environmental Protection
 Site Remediation and Waste Management Program

RECEPTOR EVALUATION (RE) FORM

Date Stamp
 (For Department use only)

SECTION A. SITE

Site Name: SA-6 South Site 073 - Degen Oil
 Program Interest (PI) Number(s): G000000927
 Communication Center Number(s) and/or ISRA number(s) for this submission: (as many as will fit in the space provided)
N/A

**This form must be attached to the Cover/Certification Form
 if not submitted through a Remedial Phase Online Service**

Indicate the type of submission:

- Initial RE Submission
- Updated RE Submission
 - Indicate the reason for submission of an updated RE form
 - Submission of an Immediate Environmental Concern (IEC) source control report;
 - Submission of a Remedial Investigation Report;
 - Submission of a Remedial Action Report;
 - Check if included in updated RE
 - The known concentration or extent of contamination in any medium has increased;
 - A new AOC has been identified;
 - A new receptor is identified;
 - A new exposure pathway has been identified.

SECTION B. ON SITE AND SURROUNDING PROPERTY USE

1. Identify any sensitive populations/uses that are currently on-site or surrounding property usage within 200 feet of the site property boundary (*check all that apply*):

	On-site	Off-site
None of the following	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Residences or residential property	<input type="checkbox"/>	<input type="checkbox"/>
Public or Private Schools Grades K-12	<input type="checkbox"/>	<input type="checkbox"/>
Child care centers	<input type="checkbox"/>	<input type="checkbox"/>
Public parks, playgrounds or other recreation areas	<input type="checkbox"/>	<input type="checkbox"/>
Other sensitive population use(s) Explain _____	<input type="checkbox"/>	<input type="checkbox"/>

If any of the above applies, attach a list of addresses, facility names, type of use, and a map depicting each location relative to the site.

2. Current site uses (*check all that apply*):

- Industrial
- Residential
- Commercial
- School or child care
- Government
- Park or recreational use
- Vacant
- Agricultural
- Other: _____

3. Planned future on-site uses and off-site uses within 200 feet of the site boundary (*check all that apply*):

<u>On-Site</u>	<u>Off-Site</u>	<u>On-Site</u>	<u>Off-Site</u>	<u>On-Site</u>	<u>Off-Site</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Provide a map depicting the location of the proposed changes in land use.

SECTION C. DESCRIPTION OF CONTAMINATION

1. Identify if any of the following exist at the site:

Yes No

Free product [N.J.A.C. 7:26E-1.8] identified is LNAPL* or DNAPL**.

Date identified: _____

Residual product [N.J.A.C. 7:26E-1.8]

Other primary source materials not identified above (e.g., buried drums, containers, unsecured friable asbestos). See form instructions for additional information.

Explain: Fill material containing chromite ore processing residue (COPR)

* LNAPL – measured thickness of .01 feet or more

**DNAPL – See *Ground Water Technical Guidance and USEPA Assessment and Delineation of DNAPL Source Zones at Hazardous Waste Sites* (attached as Appendix A of the NJDEP GW Guidance) available at: http://www.nj.gov/dep/srp/guidance/#pa_si_ri_gw. Also, see US EPA DNAPL Overview available at: [http://clu.in.org/contaminantfocus/default.focus/sec/Dense_Nonaqueous_Phase_Liquids_\(DNAPLS\)/cat/Overview](http://clu.in.org/contaminantfocus/default.focus/sec/Dense_Nonaqueous_Phase_Liquids_(DNAPLS)/cat/Overview)

2. Soil Migration Pathway

Has soil contamination been delineated to the applicable Direct Contact Soil

Remediation Standard pursuant to N.J.A.C. 7:26E-4.2? Yes No

Are all soils either below the applicable Direct Contact Criteria or under an institutional control (i.e. deed notice)? Yes No

3. If this evaluation is submitted with a technical document that includes contaminant summary information, proceed to Section D. Otherwise, attach a brief summary of all currently available data and information to be included in the site investigation or remedial investigation report.

SECTION D. GROUND WATER USE

1. Have all potentially contaminated areas of concern been evaluated to determine if there is a potential that ground water is contaminated pursuant to N.J.A.C. 7:26E-3.5? Yes No

If “No,” proceed to Section E.

2. Is a ground water investigation required? Yes No

If “No,” proceed to Section E.

3. Has a groundwater investigation been conducted? Yes No

If “Yes”:

Has the laboratory data package been received? Yes No

If the laboratory data package has not been received, provide the expected due date for data: _____ and proceed to Section E.

If “No”:

Proceed to Section E.

4. Is ground water contaminated above the Ground Water Remediation Standards [N.J.A.C. 7:9C]? Yes No

If “Yes”: Provide the date that the laboratory data package was available and confirmed contamination was identified above the Ground Water Remediation Standards.

Date: 08/23/2010

If “No”: Proceed to Section E.

5. Has ground water contamination been delineated to the applicable Remediation Standard pursuant to N.J.A.C 7:26E-4.3? Yes No

6. What is the ground water classification for this site as per N.J.A.C. 7:9C? (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Class I-A | <input checked="" type="checkbox"/> Class II-A |
| <input type="checkbox"/> Class I-PL Pinelands Protection Area | <input type="checkbox"/> Class III-A |
| <input type="checkbox"/> Class I-PL Pinelands Preservation Area | <input type="checkbox"/> Class III-B |

7. Has a well search been completed?..... Yes No
Date of most recent or updated well search: 02/09/2021

8. Is a completed Well Search Spreadsheet or historical well search table attached and has an electronic copy of the spreadsheet been submitted to srpgis_wrs@dep.nj.gov. Yes No
Note: Redacted wells must be excluded from all non-confidential documents including maps, tables, etc. (see RE Instructions).
If "No," explain: _____

9. Are any potable or irrigation wells located within 1/2 mile of the currently known extent of contamination? Yes No
If "Yes,":

- A door to door survey is required in accordance with [N.J.A.C.7:26E-1.14(a)ii]. Attach results of the door to door survey.
- Identify if any of the following conditions exist based on the well search and door to door survey [N.J.A.C.7:26E-1.14(a)]:

<u>Yes</u>	<u>No</u>	
<input type="checkbox"/>	<input type="checkbox"/>	Potable wells located within 500 feet from the downgradient edge of the currently known extent of contamination.
<input type="checkbox"/>	<input type="checkbox"/>	Potable wells located 250 feet upgradient or 500 feet side gradient of the currently known extent of contamination.
<input type="checkbox"/>	<input type="checkbox"/>	Ground water contamination from the discharge is located within a Tier 1 wellhead protection area (WHPA).

10. Has sampling been conducted of potable well(s) and /or non-potable use well(s)? Yes No
If "No," provide justification then proceed to Question 12.
No wells located within the canvas area.

11. Has contamination been identified in potable well(s), **not attributed to background conditions**, above the Class II Ground Water Remediation Standards or State Safe Drinking Water levels, N.J.A.C 7:1E, whichever is applicable? Yes No
If "Yes":

- Provide the date laboratory data package was received: _____
- Follow the **IEC** Guidance Document at <http://www.nj.gov/dep/srp/guidance/IEC/index.html> for required actions and answer the following:
- Has an engineered system response action been completed on all impacted receptors? Yes No
Provide a brief narrative description: _____

Date completed: _____ NJDEP Case Manager: _____

12. Has contamination been identified in non-potable well(s), **not attributed to background conditions**, above the Class II Ground Water Remediation Standards?..... Yes No
If "Yes," provide the date laboratory data package was received: _____

13. Has the ground water use evaluation been completed pursuant to N.J.A.C. 7:26E-1.14? Yes No

SECTION E. VAPOR INTRUSION (VI)

1. Indicate if any of the following conditions exist that trigger a Vapor Intrusion investigation. For each condition checked "Yes", provide the date the condition was first identified (e.g. date laboratory data package was available). (see NJDEP Vapor Intrusion Technical Guidance)

<u>Yes</u>	<u>No</u>	<u>Date Condition First Identified</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ground water contamination in excess of the NJDEP Vapor Intrusion Ground Water Screening Levels (VIGWSL) and within 30 feet of a building for Petroleum Hydrocarbon Compounds (PHC) or 100 feet for non-PHC compounds .. _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Free product within 30 feet of a building for PHC or 100 feet for non-PHC compounds _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Soil gas contamination detected at concentrations that exceed the Soil Gas Screening Levels (SGSL)..... _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Indoor air contamination that exceeds the Indoor Air Screening Levels..... _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Wet basement or sump containing free product or ground water containing detectable concentration of volatile organic contaminants..... _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Methane generating conditions causing oxygen deficient or explosion concern _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other human or safety concern from the VI pathway (i.e. elemental mercury, unsaturated soil contamination), <i>explain below:</i> _____

If you checked "No" to all boxes in Question 1., proceed to Section F, "Ecological Receptors", otherwise complete the rest of this section.

2. Has ground water contamination been delineated to the applicable Vapor Intrusion Ground Water Screening Levels pursuant to N.J.A.C 7:26E-4.3? Yes No
3. Was a site-specific screening level, modeling or other alternative approach employed for the VI pathway? Yes No
4. Identify and locate, on a scaled map, any buildings/sensitive populations that exist within the following distances from ground water contaminant concentrations above the Vapor Intrusion Ground Water Screening Levels or other specific triggers noted in Question 1 above.:

<u>Yes</u>	<u>No</u>
<input type="checkbox"/>	<input type="checkbox"/>
5. Is the vapor intrusion pathway a concern at or adjacent to the site? (if "No," attach justification)..... Yes No
6. Has soil gas sampling of the building(s) been conducted?..... Yes No

If "Yes," has the laboratory data package been received?..... Yes No

If the data package was received, did constituents exceed the Soil Gas Screening Levels? Yes No

If "No," attach technical justification consistent with the NJDEP Vapor Intrusion Technical Guidance.
7. Has indoor air sampling been conducted at the identified building(s)? Yes No

If "Yes," has the laboratory data package been received?..... Yes No

If the data package has been received, did constituents exceed the Indoor Air Screening Levels? .. Yes No

If "No," or awaiting indoor air laboratory data package, proceed to Question 12.

8. Has indoor air contamination been identified but not suspected to be from a discharge?
(if "Yes," attach justification) Yes No
9. Were indoor air results above the NJDEP's Rapid Action Levels? Yes No
- If "Yes":
- Provide the date laboratory data package was received: _____
 - Follow the IEC Guidance Document at <http://www.nj.gov/dep/srp/guidance/index.html#iec> for required actions and answer the following:
 - Was the IEC engineering system response for control implemented for all impacted structures? Yes No
- Date implemented: _____ NJDEP Case Manager: _____
10. Were the results of indoor air sampling above the NJDEP's Indoor Air Screening Levels but at, or below, the Rapid Action Levels Yes No
- If "Yes," answer the following:
- Provide the date laboratory data package was received: _____
 - Has the Vapor Concern (VC) Response Action Form notifying the NJDEP of the exceedances been submitted? Yes No
 - Date: _____
 - Has a plan to mitigate and monitor the exposure been submitted? Yes No
 - Date: _____
 - Has the Mitigation Response Action Report been submitted? Yes No
 - Date: _____
11. Do one or more buildings have an Indeterminate VI Pathway status? Yes No
- If "Yes," attach a list of the building(s) with address(s) and block/lot(s)
12. Has the vapor intrusion investigation been completed? Yes No
- If "No", is the vapor intrusion investigation stepping out as part of the site investigation or remedial investigation. (If "No," attach justification) Yes No

SECTION F. ECOLOGICAL RECEPTORS

1. Has an Ecological Evaluation (EE) been conducted? [N.J.A.C. 7:26E-1.16] Yes No
Date conducted: 12/01/2010
2. Are any site-related contaminants above any Ecological Screening Criteria? Yes No
3. Are there any Environmentally Sensitive Natural Resources (ESNRs) on or adjacent to the site, or potentially impacted by site related contamination? [N.J.A.C. 7:26E-1.16] Yes No
4. Do any potential or complete migration pathways exist between Contaminant of Potential Ecological Concern (COPECs) and ESNRs, or did historic migration pathways exist? Yes No

If You answered "No" to Questions 2, 3, or 4, above Stop Here (form is complete).

5. If site-related free or residual product is/was present, does/did a potential or complete migration pathway exist to an ESNR? Yes No
6. Do the results of an EE trigger a remedial investigation of ecological receptors? [N.J.A.C. 7:26E-4.8] Yes No
- If "Yes", has a remedial investigation of ecological receptors been conducted? Yes No
- Date conducted: _____

7. Do available data indicate an impact (COPECs above Ecological Screening Criteria in ESNRs) to Ecological Receptor(s), Surface water, or Sediment? Yes No

If "Yes,"

a) Check all ESNRs or media that apply:

Surface water Sediment Soil Wetlands

b) If this information is not submitted with an ecological evaluation that includes contaminant summary information, attach a brief summary of all currently available data and a description of all actions to be taken to mitigate exposure.

8. Have COPECs been fully delineated to the Ecological Screening Criteria [N.J.A.C. 7:26E-4.8(a)] in:

a) Migration pathways Yes No

b) ESNR Yes No

9. Has an Ecological Risk Assessment been conducted? Yes No

10. Provide the following information for any on-site and/or off-site surface water body, which is potentially impacted by the site related discharges:

Surface Water Body Name	Stream Classification	Antidegradation Designation	Trout Production	Trout Maintenance
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

11. Has a Program Interest (PI) or Permit number been issued for any regulated areas by the Division of Land Use Regulation? (e.g. wetlands, transition areas, flood hazard areas, coastal areas, tidelands, etc.) Yes No

If "Yes,":

Identify the type(s) of regulated areas: _____

Provide the Land Use Regulation Program (LURP) PI or Permit number(s) for the site:

12. Are there any **pending** applications for LURP jurisdiction letters or approvals under review by the NJDEP for the remediation? Yes No

13. Are there any **valid** LURP jurisdiction letters or approvals issued for the remediation? Yes No

Completed forms should be sent to the municipal clerk, designate health department, and:

Bureau of Case Assignment & Initial Notice
 Site Remediation Program
 NJ Department of Environmental Protection
 401-05H
 PO Box 420
 Trenton, NJ 08625-0420



LEGEND

- PROPERTY BOUNDARY BLOCK 21901.01, LOT 8
- 200 FOOT SITE RADIUS
- PARCEL BOUNDARY

PARCEL LABEL

21901.01 $\left\{ \begin{array}{l} \text{BLOCK} \\ 8 \quad \quad \quad \text{LOT} \end{array} \right.$

PARCEL LAND USE

- NON-SENSITIVE LAND USE PROPERTY

NOTES:

1. NON-SENSITIVE LAND USE PROPERTIES INCLUDE –
 - A. COMMERCIAL
 - B. FARM
 - C. INDUSTRIAL
 - D. TRANSPORTATION
 - E. VACANT LAND
2. SEE REMEDIAL INVESTIGATION REPORT FOR DETAILED DISCUSSION.

SOURCE:

STATE OF NEW JERSEY COMPOSITE OF PARCELS DATA, NEW JERSEY STATE PLANE; NJ OFFICE OF INFORMATION TECHNOLOGY (NJOIT), OFFICE OF GEOGRAPHIC INFORMATION SYSTEMS (OGIS); TRENTON, NJ; 2016/07/20; WOOD REVISED 2020.

TAX MAP OF JERSEY CITY NO. 219; T&M ASSOCIATES, MIDDLETOWN, NJ; AUGUST 2006, REVISED OCTOBER 2010.

STATE OF NEW JERSEY DIVISION OF TAXATION 2021 MOD-IV DATABASE.

NEW JERSEY PUBLIC, NON-PUBLIC, AND CHARTER SCHOOL POINT LOCATIONS; NJ OFFICE OF INFORMATION TECHNOLOGY (NJOIT), OFFICE OF GEOGRAPHIC INFORMATION SYSTEMS (OGIS), TRENTON, NEW JERSEY; 2021/01.

LICENSED CHILD CARE CENTERS IN NEW JERSEY; STATE OF NEW JERSEY DEPARTMENT OF CHILDREN AND FAMILIES; 2021.

PATH: D:\GIS\PROJECTS\HONEYWELL\STUDY AREA\6\6\2021 - RE SA-6 SOUTH BUILDING HEAD\FIGURE D-1 LAND USE MAP.MXD

NAD 1983 STATE PLANE NEW JERSEY FIPS 2900 FEET PROJECTION; TRANSVERSE MERCATOR DATUM; NORTH AMERICAN 1983 UNITS; FOOT US

REV NO.	DATE	STATUS	CHECKED BY	APPROVED BY

PROJECT NUMBER: 7772210089	
PREPARED/DATE: WSL 02/11/2021	CHECKED/DATE: NAW 02/11/2021

wood.
 ENVIRONMENT & INFRASTRUCTURE SOLUTIONS, INC.
 200 AMERICAN METRO BLVD, SUITE 113
 HAMILTON, NEW JERSEY 08619

LAND USE MAP
 BLOCK 21901.01, LOT 8
 JERSEY CITY, NEW JERSEY

Case Name Study Area SA-6 South Site 073
 PI #: G00000927
 Activity #:

IMPORTANT: 1) The CID must be **FINALIZED** prior to upload. After the CID has been populated, click the Validate for Upload button and follow the instructions.
 2) You **MUST SAVE** after finalizing, and before upload. Click the Enable for Editing button after uploading to edit again.

Case Inventory Document Version 1.5.1 02/04/21

AOC ID	AOC Type	AOC Description	Confirmed Contamination	Exclude AOC from Billing	AOC Status Achieved	Status Achieved Date	Incident Communication Center #s Managed in Case	NJDEP ID	Contaminated Media	Contaminants of Concern	Additional Contaminants of Concern	Additional Contaminants of Concern	Applicable Remediation Standard	Exposure Route	Additional Exposure Route	RA Type	Additional RA Type	Was an Order of Magnitude Evaluation Conducted?	Activity
Site 073 Portion of Open Space AOC	Other areas of concern - Any area suspected of containing contaminants	Cap Area for Chromium Remedy; overlaying Historic Fill	Yes		RA	12/20/2020			Mixed Media	Metals			Soil Cleanup Criteria (see instructions for appropriate use)	Ingestion/Dermal	Ground Water	Excavation	Capping	Yes	2012- Regional CEA for Groundwater updated 2018; 2013-2016 Site activities included installing hydraulic barrier and cap for chromium and groundwater extraction system to be run on contingent basis; 2017- RAR; Deed Notice and Conservation Restriction; RA Permits; 2020- additional excavation and capping; 2021 RAR, Deed Notice Termination; New Deed Notice

REMEDIAL ACTION REPORT ADDENDUM
SA-6 SOUTH BULKHEAD DEFERRED
AREA CHROMIUM REMEDY

STUDY AREA 6 SOUTH
NJDEP SITE 073

JERSEY CITY, NEW JERSEY

Prepared for

Honeywell

115 Tabor Road
Morris Plains, New Jersey 07950

Prepared by:

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200 American Metro Boulevard, Suite 113
Hamilton, New Jersey 08619
Project No. 7772210089

APRIL 2021

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EXECUTIVE SUMMARY

This Remedial Action Report Addendum (RAR) documents completion of remedial activities associated with an area of chromium-impacted soils referred to as the Hackensack River Bulkhead Deferred Area (“Bulkhead Deferred Area”) at Site 073, Study Area 6 South (SA-6 South or Site). The Site is located in Jersey City, Hudson County, New Jersey. The remedial activities were initiated in May 2020 and were completed in January 2021.

As indicated in the SA-6 South 100% Design Report and the SA-6 South Remedial Action Report (RAR), the remediation of chromium-impacted soil in the Bulkhead Deferred Area could not be completed at the time of the implementation of the SA-6 South Chromium Remedy due to the deteriorated condition of the existing bulkhead. As a result, Honeywell deferred the remedy in the Bulkhead Deferred Area until a section of the Hackensack River bulkhead could be installed as part of the Bayfront Redevelopment Project. This section of the bulkhead is immediately adjacent to the Bulkhead Deferred Area and was utilized as structural support and containment for the excavation of the chromium-impacted soil in the Bulkhead Deferred Area, while ultimately serving as the permanent bulkhead for the Bayfront Redevelopment project.

The Deferred Area remedy was implemented in accordance with the documents listed in the February 2017 SA-6 South site-wide Remedial Action Report and subsequent Design Change Bulletins DCB 10A) dated January 16, 2020, (revision to DCB 010, dated May 19, 2014) and DCB 010A.1, dated March 12, 2020 which further clarified portions of DCB 010A. Both DCBs 010A and 010A.1 collectively defined the remedy of the Bulkhead Deferred Area.

Consistent with the NJDEP-approved Remedial Action Work Plan (RAWP) for the SA-6 South Site of which this area is a part, the contaminant of concern (COC) in soils is hexavalent chromium. The remedial action objectives (RAOs) established in the NJDEP-approved RAWP for SA-6 South soils included the excavation and removal of impacted soils containing >20 milligrams per kilogram (mg/kg) of hexavalent chromium to a depth of 20 feet below ground surface (bgs) in order to meet the requirements for unrestricted use.

The Chromium Remedy in the Bulkhead Deferred Area consisted of excavation of soils exceeding 20 mg/kg hexavalent chromium to the elevations established in the 100% Design Report and the subsequent DCBs, based upon either pre-design investigation (PDI) sample data or encountering Stratum D. All chromium-impacted soil excavated from the Bulkhead Deferred Area was disposed of offsite based upon waste characterization sampling implemented prior to mobilization. The existing western hydraulic barrier of the SA-6 South Open Space Area of Concern (Open Space AOC) was reinforced with additional steel sheet pilings and brackets as part of this project scope. Also, a portion of the existing Resource Conservation and Recovery Act (RCRA)-equivalent cap in the SA-6 South Open Space AOC was temporarily removed and afterwards replaced. In addition, a section of the Hackensack River bulkhead was installed by Honeywell on behalf of the City of Jersey City to be used as part of the Bayfront Redevelopment project. This bulkhead section was installed prior to the excavation of any chromium-impacted material.

Major activities associated with the Chromium Remedy included:

- Remedial Contractor mobilization and installation of site support facilities including construction trailers, decontamination stations, access roads, material stockpile areas, soil erosion controls, and a construction water treatment plant (CWTP);
- Abandonment of two existing piezometers (124-PZ-19 and 124-PZ-20) in the work area;
- Installation of shallow and deep dewatering wells within the Bulkhead Deferred Area excavation zone;
- Installation of a section of the Hackensack River Bulkhead;
- Installation of temporary sheetpile for excavation support;
- Excavation of chromium-impacted soils exceeding 20 mg/kg hexavalent chromium consistent with DCB limits;
- Offsite transportation and disposal of excavated chromium-impacted soils;
- Backfilling of excavated area with either previously-removed <20 mg/kg overburden or clean, imported fill material to an approximate elevation +15.0;

- Installation of new reinforcing steel sheetpile walls driven just east of and parallel to the existing SA-6 South Open Space AOC western hydraulic barrier wall, with temporary brackets connecting the two walls together;
- Stripping of cover soils and existing components of the RCRA-equivalent geosynthetic cap system from a partial area in the SA-6 South Open Space AOC;
- Removal and temporary stockpiling of chromium-impacted soil from the partial area in the SA-6 South Open Space AOC behind the existing SA-6 South Open Space AOC western hydraulic barrier wall;
- Replacement of the SA-6 South Open Space AOC chromium-impacted soil previously removed, the RCRA-equivalent geosynthetic cap system components, and the cover soils;
- Replacement of the two abandoned piezometers (124-PZ-19 and 124-PZ-20 (the replacement piezometers are 124-PZ-19R and 124-PZ-20R); and
- Terminating/modifying existing institutional controls (deed notice and NJDEP Remedial Action Permit for soils) for the Bulkhead Deferred Area (Tract 2 of Deed Notice Area 4) as a result of the successful removal of the chromium-impacted soil.

The RAOs for soils in the Bulkhead Deferred Area were met by implementation of excavation in accordance with the 100% Design Report and the subsequent DCBs. Since the Bulkhead Deferred Area remedy was implemented successfully, no further remedial actions are required. Honeywell will now revise the existing institutional controls (Deed Notice and Remedial Action Permit) associated with this Deferred Area. The Long-Term Monitoring Plan (LTMP) prepared for both SA-6 Sites establishes procedures and schedules for long-term inspection, maintenance, and operation of critical features of the Chromium Remedy.

Based on completion of the remedial actions for chromium-impacted soil in the Bulkhead Deferred Area as documented in this RAR Addendum, Honeywell is requesting NJDEP review and approval of this RAR in accordance with paragraph 23, G of the Consent Judgment. It is Honeywell's intention that this document will close out remediation of chromium-impacted soil in this Deferred Area. In accordance with paragraph 5 of the Consent Order Entering Consolidated 100% Design for Study Area 6 North and Study Area 6 South, Jersey City Municipal

Utilities Auth. v. Honeywell, No. 2:05-cv-05955-DMC-JAD (D. N.J. July 9, 2013), ECF No. 448, Honeywell will submit a Consent Order which has appended to it (i) the 100% Design except the drawings and (ii) this RAR Addendum for entry into Federal Court.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

This RAR Addendum, prepared by Wood Environment & Infrastructure Solutions, Inc. (Wood) on behalf of Honeywell, documents the completion of remedial activities associated with an area of chromium-impacted soil at Site 073, Study Area 6 South (SA-6 South or Site) referred to as the Bulkhead Deferred Area. The Site is located in Jersey City, Hudson County, New Jersey. The purpose of this RAR is to provide documentation to the New Jersey Department of Environmental Protection (NJDEP) and other stakeholders of the successful execution of the remedy at the area at SA-6 South. This report is an addendum to the overall SA-6 South RAR prepared to document the site-wide SA-6 South Chromium Remedy which was submitted to the NJDEP in February 2017. The NJDEP approved the SA-6 South RAR on March 30, 2017. Subsequently, on September 18, 2018, the NJDEP issued a compliance letter that addressed chromium impacts in soil and groundwater for SA-6 South.

The scope of this RAR Addendum is limited to an area of chromium-impacted soil at Deed Notice Area No. 4, known as the “Bulkhead Deferred Area,” which could not be completed at the time of the SA-6 South Chromium Remedy. As explained in the SA-6 South 100% Design Report and the RAR, deferment of the remedy in this area was necessary due to the deteriorated condition of the existing bulkhead which would have been required for support during the remedy implementation. Based on that, Honeywell deferred the remedy implementation for this area until a section of the Hackensack River bulkhead could be installed as part of the Bayfront Redevelopment project. This section of the bulkhead is immediately adjacent to the Bulkhead Deferred Area and was utilized as structural support and containment for the excavation of the chromium-impacted soil in the Bulkhead Deferred Area, while ultimately serving as the permanent bulkhead for the Bayfront Redevelopment project. The Deferred Area remedy was implemented from May 2020 to January 2021.

The SA-6 South Chromium Remedy was implemented in accordance with the various documents listed in the February 2017 SA-6 South RAR, and two subsequent DCBs: (a) DCB 10A, dated January 16, 2020, (a revision to DCB 010, dated May 19, 2014), and (b) DCB 010A.1, dated March 12, 2020 which further

clarified portions of DCB 010A. Both DCBs 010A and 010A.1 collectively defined the remedy of the Bulkhead Deferred Area.

This RAR Addendum was prepared in accordance with the remedial action reporting requirements specified in NJDEP's Technical Requirements for Site Remediation (TRSR), (NJDEP, 2018a) and the Administrative Requirements for the Remediation of Contaminated Sites (ARRCS) (NJDEP, 2018b), and applicable NJDEP guidance. (New Jersey Administrative Code [N.J.A.C.] 7:26E-5.7). Since NJDEP's Site Remediation Program Case Management Team retained direct oversight of the Chromium Remedy, Honeywell is requesting NJDEP review and approval of this RAR in accordance with paragraph 23, G of the Consent Judgment between Honeywell and the NJDEP dated September 7, 2011 (Consent Judgment).

1.2 SITE LOCATION

SA-6 South, located to the south of Study Area 7 (SA-7), and Study Area 6 North (SA-6 North), located to the north of SA-7, and SA-7 collectively comprise approximately 100 acres of land located within the Bayfront Redevelopment Area between Route 440 and the Hackensack River on the west site side of Jersey City. A Site Location Map is included as **Figure 1** and a Site Layout Map is included in **Figure 2**. In January 2019, the City of Jersey City (City) purchased approximately 70 acres of the 100-acre property. This purchase included the portion of SA-6 South in which the Bulkhead Deferred Area lies.

The City is currently implementing the Bayfront Redevelopment Project in accordance with the Bayfront I Redevelopment Plan, ("Bayfront Plan") which was approved by the City of Jersey City on March 12, 2008, and includes redeveloping 94 acres of the 100-acre property into a multi-use development consisting of market housing, retail shops, open space and recreational facilities, and waterfront improvements. Additional details regarding the Site Setting, Site History, Project Background, integration of the Remedy with the Bayfront Redevelopment Project, and the overall SA-6 South Chromium Remedy are described in the February 2017 RAR and are not repeated herein.

Deed Notice Area No. 4 is comprised of two tracts as shown in **Figure 3 and Illustration 1**. Tract 1 lies within the boundary of SA-7 and Tract 2 lies within the boundary of SA-6 South (Site 073). Tract 2 comprises the Bulkhead Deferred Area and is the subject of this RAR Addendum. The Deferred Area (Tract 2) is an

approximately ¼-acre portion of SA-6 South (Site 073) located along the Hackensack River bulkhead (see Photos 1 through 4). Following the approval of this RAR Addendum, the Tract 2 portion of Deed Notice Area No. 4 will be terminated. The chromium-impacted soils in the Tract 1 area will remain in place, per a new Deed Notice Area No. 4, and the associated NJDEP Remedial Action Permit (RAP) will be modified to reflect these changes. Excavation of residual chromium contamination in the Tract 2 area was deferred as prescribed by the Order Entering the 100% Design.

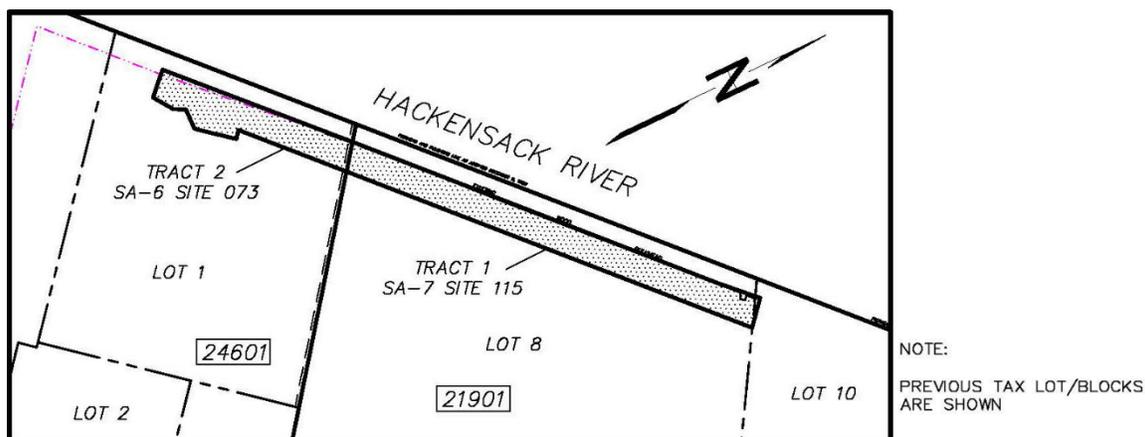


Illustration 1: Deed Notice No. 4 Area

1.3 CONTAMINANTS OF CONCERN AND REMEDIAL ACTION OBJECTIVES

Consistent with the NJDEP-approved Remedial Action Work Plan (RAWP) for the SA-6 South Site of which this area is a part, the contaminant of concern (COC) in soils is hexavalent chromium. The NJDEP-approved RAWP for SA-6 South identified specific RAOs for soil as follows:

- Prevent exposure to chromium-impacted soils containing hexavalent chromium above the NJDEP soil criteria of 20 mg/kg to a depth of 20 feet, consistent with NJDEP policy.
- Remove and consolidate chromium-impacted soils that may be disturbed by future Site redevelopment activities; and reuse soils beneath the area to be capped, to the extent feasible.
- Coordinate remedial actions for chromium with remedial actions for non-chromium contaminants and Site redevelopment, to the extent feasible.

To achieve the RAOs for SA-6 South soils in the Bulkhead Deferred Area, Honeywell excavated soil impacted with hexavalent chromium >20 mg/kg to a depth of 20 feet bgs and disposed of the excavated chromium-impacted soil offsite. As part of long-term operation and maintenance of the Site as a whole, Honeywell continues ongoing groundwater remedial actions in accordance with the groundwater RAOs as specified in the approved RAWP and RAR and an approved LTMP, dated February 2018, revised December 2020.

1.4 CONSTRUCTION OVERVIEW

The Chromium Remedy in the Bulkhead Deferred Area consisted of the excavation of soils exceeding 20 mg/kg hexavalent chromium to the elevations established in the 100% Design Report and the subsequent DCBs, based either upon PDI sample data or encountering Stratum D. All soil excavated from the Bulkhead Deferred Area was disposed of offsite based upon waste characterization sampling implemented prior to mobilization. The existing western hydraulic barrier of the SA-6 South Open Space AOC had to be reinforced with additional steel sheet pilings and brackets. Additionally, a portion of the existing RCRA-equivalent cap in the SA-6 South Open Space AOC was temporarily removed and replaced.

More specifically, the Chromium Remedy in the Bulkhead Deferred Area included the following main work elements:

- Remedial Contractor mobilization and installation of site support facilities including construction trailers, decontamination stations, access roads, material stockpile areas, soil erosion controls, and CWTP installation;
- Abandonment of two existing piezometers (124-PZ-19 and 124-PZ-20) in the work area;
- Installation of shallow and deep dewatering wells within the Bulkhead Deferred Area excavation zone;
- Installation of a section of Hackensack River Bulkhead adjacent to the Site;
- Installation of temporary sheetpile for excavation support;
- Excavation of chromium-impacted soils exceeding 20 mg/kg hexavalent chromium to a maximum depth of 20 feet;
- Offsite transportation and disposal of excavated chromium-impacted soils;

- Backfilling of excavated area with either removed <20 mg/kg overburden or clean, imported fill material to approximate elevation +15.0;
- Installation of a new reinforcing steel sheetpile wall driven just east of the existing SA-6 South Open Space AOC western hydraulic barrier wall and temporary connection of the two walls together;
- Stripping of cover soils and existing components of the RCRA-equivalent geosynthetic cap system from a partial area in the SA-6 South Open Space AOC;
- Removal and temporary stockpiling of chromium-impacted soil from the partial area in the SA-6 South Open Space AOC behind the existing SA-6 South Open Space AOC western hydraulic barrier wall;
- Replacement of the removed SA-6 South Open Space AOC chromium-impacted soil with clean fill, and restoration of the RCRA-equivalent geosynthetic cap system components and cover soils;
- Replacement of the two abandoned piezometers (124-PZ-19 and 124-PZ-20); and
- Termination of the Deed Notice applicable to the remediated Bulkhead Deferred Area, and modification of the existing Deed Notice Area 4 and NJDEP Remedial Action Permit for soils to reflect the removal of Tract 2 as a result of the completed remedial action for this area.

The Chromium Remedy in the Bulkhead Deferred Area included the following major items, and corresponding approximate quantities:

Item	Units	Quantity
Treated Construction Water Discharged	Gallons	1,654,260
Abandoned Existing Piezometers	Each (EA)	2
Dewatering Wells		
Shallow	EA	2
Deep	EA	4
Replacement Piezometers		
Piezometers	EA	2
Material Handling		
Recycled Concrete	Cubic Yards (CY)	1,020

Item	Units	Quantity
Excavated Soils		
<20 mg/kg Overburden	CY	230
Non-Hazardous Waste	CY	5,550
Hazardous Waste	CY	600
Cap Materials		
Subgrade Fill	CY	0
Geosynthetic Venting Layer (GVL)	Square Feet (SF)	9,980
Geosynthetic Composite Layer (GCL)	SF	9,980
Geotextile Layer	SF	9,980
Geosynthetic Drainage Layer (GDL)	SF	9,980
Liner	SF	9,980
GDL Soil	CY	0
Root Barrier	SF	9,980
Clean Cover Soils	CY	100
Backfill		
<20 mg/kg Overburden	CY	230
Imported Fill: Dense Grade Aggregate (DGA)/ Screenings/All Other Stone	CY	6,200
Lightweight Fill	CY	3,000
Bridge Lift	CY	0
Flowable Fill	CY	90
Clay Packer	CY	520
Disposal		
Concrete	Tons	0
Non-Hazardous Waste Soil	Tons	9,000
Hazardous Waste Soil	Tons	900
Timber	Tons	60

The Project Team Organization is shown in Illustration 2 below.

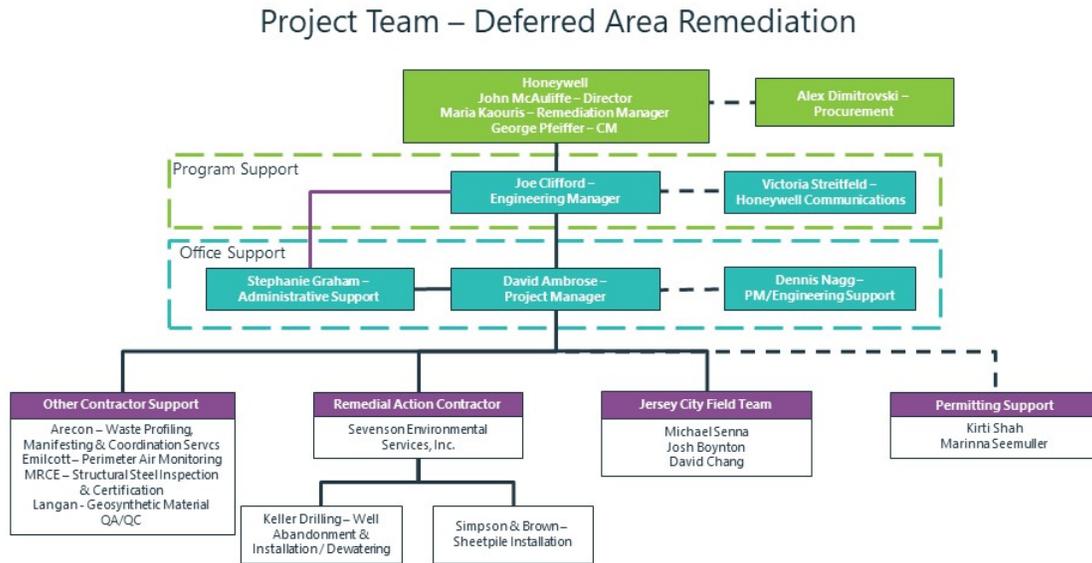


Illustration 2: Project Team Organization

The following entities were involved in the implementation of the Chromium Remedy in the Bulkhead Deferred Area:

Party	Responsibility
Honeywell	Overall compliance with court-ordered remediation
Wood	Engineer of Record (EOR), Design, Contract Documents, Construction Inspection, Health and Safety Oversight, and Overall Site Construction Management
Sevenson Environmental Services, Inc.	Bulkhead Installation, Dewatering, Excavation of Chromium-Impacted Soil, Imported Backfill Purchase and Placement, Hydraulic Barrier Wall Reinforcement, and Open Space Area Cap Partial Removal and Replacement.
Emilcott Associates	Air Monitoring
Arecon	Manifests, and Management of Excavated Soil Disposal
Middlesex County Landfill	Transportation, Treatment and Disposal of chromium-impacted non-hazardous soils
Clean Earth	Transportation, Treatment and Disposal of chromium-impacted hazardous soils

Party	Responsibility
Mueser Rutledge Consulting Engineers (MRCE)	3 rd Party Structural and Geotechnical Engineering Peer Review
Matrix New World Engineering	City of Jersey City's Structural and Geotechnical Engineering Peer Review (River Bulkhead Only)
Langan	3 rd Party Liner Quality Assurance/Quality Assurance (QA/QC)
SGS/Accutest Laboratories Inc. (SGS)	Analytical Laboratory for samples collected by Wood
Travelers Industrial Hygiene Laboratory	Analytical Laboratory for Perimeter Air Monitoring Plan (PAMP) samples
Analytical & Environmental Services, Inc. (AESI)	3 rd Party Analytical QA/QC
Validata, LLC	3 rd Party Analytical Data Validation

Mobilization commenced on May 26, 2020 and was completed on July 24, 2020. The Chromium Remedy in the Bulkhead Deferred Area was substantially complete by December 24, 2020. Demobilization was completed by January 18, 2021. Representative photographs of major components of the work are included in **Appendix A**.

1.5 DATA VALIDATION AND DATA USABILITY EVALUATION

Unless otherwise indicated for specific sample types, SGS analyzed the samples. Hexavalent chromium analysis was performed using United States Environmental Protection Agency (USEPA) Method 7199. Data validation was performed by a third-party data validation specialist with Validata, LLC (Validata) of Seattle, Washington. Additionally, Honeywell employs Dr. Rene Surgi of AESI of Glencoe, Illinois to provide third-party analytical QA/QC.

On the Bulkhead Deferred Area Chromium Remedy, Honeywell followed its general protocol for data validation as was used for the overall SA-6 Chromium Remedy. A summary of this general protocol follows. Dr. Surgi reviewed 100% of the hexavalent chromium analytical data and worked with SGS on any QA/QC matters prior to issuance of the final analytical data packages. Samples that do not meet the laboratory's strict internal QA/QC criteria are re-logged by the laboratory and re-analyzed. Once the data packages are issued by SGS to Validata, 100% of the

hexavalent (and total chromium, if performed) chromium samples are validated. Employing such a protocol provides a high degree of confidence that the hexavalent chromium analytical data that has passed the internal laboratory QA/QC standards and was not rejected by the validator is accurate, precise, representative and, thus, usable. Rejected data, although reported, is flagged with an “R” and is not used for the intended purpose of the associated sampling.

The Data Management Plan (DMP) contained in the SA-6 North 100% Design Report outlined, among other things, the specific data validation objectives and procedures involved in producing quality, usable analytical data during implementation of the Chromium Remedy. Honeywell revised the DMP in August 2014 to clarify data validation level and frequency based upon the purpose of the sampling and end use of the data. This revised DMP was submitted to NJDEP and all Parties on August 22, 2014. A summary of the data validation level and frequency for soil samples analyzed for total and hexavalent chromium collected during the SA-6 Chromium Remedy and based upon the revised DMP was as follows:

- Level IV data validation on samples analyzed that are used for compliance purposes (i.e., post-excavation samples and those collected for re-use applicability of excavated material); and
- Level II data validation of approximately 25% on samples that are used for non-compliance purposes (i.e., samples for soils consolidated in the Open Space AOC and those collected from soils being disposed of offsite).

Additionally, and in accordance with the DMP, data validation was also conducted on the following samples that included analysis of parameters other than total and hexavalent chromium:

- Level IV data validation on 100% of the monthly effluent water samples for tested parameters; and

The NJDEP issued guidance for the Data of Known Quality Protocols (DKQPs) in April 2014, approximately 1 year after the start of the SA-6 Chromium Remedy. The NJDEP was consulted regarding whether the questionnaire that is part of the DKQP process needed to be filled out for samples collected during the implementation of the Chromium Remedy. NJDEP concluded that the DKQP

questionnaires were not required for the Chromium Remedy since the laboratory follows rigorous QA/QC protocols specifically developed for the chromium program in Jersey City which results in the generation of data of known quality and because the third-party validation process covers the data assessment and usability evaluation promoted in the DKQP guidance. We note that the validation process essentially asks the same questions as those on the questionnaire. As indicated above, 100% of such samples for hexavalent chromium analysis were validated by Validata, whereas validation of all other analytical parameters was conducted on 10% of the samples. Rejected data is not used.

Given the high level of internal and external QA/QC that is conducted, the 100% data validation that Honeywell employs for hexavalent chromium, and validation of 10% of samples for analytical parameters other than hexavalent chromium, the analytical data meets NJDEP's standards of precision, accuracy, and usability.

Copies of the laboratory analytical reports and the data validation reports are available upon request. Electronic Data Deliverable (EDD) documentation is included in **Appendix B**.

1.6 REPORT ORGANIZATION

This document has been prepared to meet the provisions specified in Sections 1.6 and 5.7 of the TRSR and contains the following sections:

- *Introduction.* This section contains information on the purpose and scope of the document, site location, COCs and RAOs, overview of the Bulkhead Deferred Area Chromium Remedy construction elements, and report organization.
- *Preparatory and General Construction Activities.* This section describes the activities implemented that were in support of the main elements of the Chromium Remedy in the Bulkhead Deferred Area.
- *Dewatering and Construction Water Treatment (Section 3) through Site Restoration (Section 8).* Detailed descriptions of the main elements of the Chromium Remedy are provided in these sections. Tables and figures are used to graphically communicate the information. These sections include construction permits and record drawings.

- *Institutional Controls.* The modification of the existing deed notice and NJDEP Remedial Action Permit for soils is discussed in this section.
- *Remedial Action Costs.* A summary of the costs to complete the project are provided.
- *Remediation Close Out Summary.* This section contains the conclusions and recommendations.
- *References.* References used in preparing this document are listed in this section.
- *List of Acronyms and Abbreviations.* This section contains a list of acronyms and abbreviations used in this document.

2.0 PREPARATORY AND GENERAL CONSTRUCTION ACTIVITIES

On behalf of Honeywell, Wood managed and oversaw the bidding and contractor selection process for the Chromium Remedy in the Bulkhead Deferred Area. The selected primary contractor was Severson Environmental Services, Inc. (SES) of Niagara Falls, New York. Prior to mobilization, SES prepared and submitted to Wood and Honeywell various work plans and submittals and acquired certain construction permits and approvals required by the 100% Design Report for implementation of the SA-6 Chromium Remedy and subsequent DCBs prepared to govern the Bulkhead Deferred Area Chromium Remedy.

In addition, several other permits were obtained by Wood for execution of the SA-6 Chromium Remedy during the design process. Other additional permits were obtained after the design process as detailed designs prepared by SES were needed to obtain certain permits. Permits acquired for implementation of the SA-6 Chromium Remedy are listed in Section 7.

2.1 CONCRETE SAMPLING (PRE-MOBILIZATION)

In October 2019, Wood collected samples of the concrete rubble that had been piled up along the former bulkhead in the Bulkhead Deferred Area to evaluate the material for onsite reuse. It is surmised that this concrete rubble had been piled along the former timber bulkhead by former landowners/tenants to reinforce the bulkhead against wave action and to protect upland areas from flooding (see Photos 1 and 2 in **Appendix A**). In addition, 2 other samples were collected from subsurface concrete which was encountered while drilling the waste characterization soil borings described in Section 2.2. All sample collection, handling, preservation, analytical parameters and procedures, and data validation were identical to those used during the site-wide SA-6 South Chromium Remedy as documented in the overall SA-6 South RAR.

The NJDEP-approved Soil Management Plan (SMP) which was part of the SA-6 100% Design Report and the *Proposed Concrete and Asphalt Sampling Plan (CASP)*, dated September 2013 which was submitted to the NJDEP on October 28, 2013 allowed concrete meeting NJDEP reuse parameters to be reused onsite as backfill in

excavations. Any concrete material that did not meet the reuse criteria was to be transported offsite for disposal.

Sampling of the aboveground concrete rubble material took place on October 21, 2019 as shown on **Figure 6**. Wood estimated that there were 500 CYs of concrete rubble piled along the bulkhead to be sampled. Concrete sampling and analysis was conducted in accordance with the September 2013 CASP. The procedures outlined in the CASP were in accordance with the NJDEP guidance document titled *Guidance for Characterization of Concrete and Clean Material Certification for Recycling*, dated January 12, 2010 and the NJDEP guidance document titled *Alternative and Clean Fill Guidance for SRP Sites*, dated December 29, 2011 – Version 2. According to the NJDEP guidance document for concrete quantities ranging from 400-2,000 CYs, sampling is to be completed at a frequency of 1 sample/200 CYs + 2 additional samples. Thus, for 500 CYs, Wood collected 5 concrete samples of the concrete rubble along the former bulkhead. Representative samples were obtained from the concrete rubble cross-section (including the exposed surfaces) and were mechanically crushed by hand to fit into laboratory-supplied sample containers.

Sampling of the subsurface concrete encountered in the soil borings was conducted on December 6, 2019 (see Section 2.2 for details of the soil boring program).

The concrete sample results are included in **Tables 2A through 2H**. As seen on **Tables 2A through 2H**, one subsurface concrete sample (073-WC-114) collected from the soil borings exhibited an elevated concentration of one PCB Aroclor above the NJDEP criteria of 0.2 mg/kg. Thus, once the excavation in the Bulkhead Deferred Area was implemented and the subsurface concrete was demolished, Wood separated out approximately 100 CYs of the concrete represented by this sample and disposed of it with the hazardous waste soil (see Section 4.7). The total amount of concrete shipped offsite was approximately 200 tons.

The remaining concrete met the reuse criteria and was sized to 4-inch minus for reuse as bridge lift backfill material.

2.2 WASTE CHARACTERIZATION SAMPLING (PRE-MOBILIZATION)

Prior to mobilization, in December 2019, Wood conducted additional soil borings in the Site 073 Deferred Area with the following objectives

- Collect waste characterization samples for offsite disposal purposes;
- Further characterize subsurface concrete slabs in the excavation area; and
- Refine vertical delineation of chromium-impacted soil in portions of the Bulkhead Deferred Area excavation.

The additional soil borings in the Site 073 Deferred Area were conducted using a Geoprobe® drill rig in two phases. The first phase, consisting of two borings, 073-WC-09 and 073-WC-10, was conducted on October 28, 2019. The second phase, consisting of six borings, 073-WC-11 through 073-WC-16, was conducted on December 9, 2019. The locations of all eight borings are shown on **Figure 7** as well as other proximate PDI borings drilled previously in the Bulkhead Deferred Area. Boring logs are contained in **Appendix D**. All sample collection, handling, preservation, analytical parameters and procedures, and data validation were identical to those used during the site-wide SA-6 South Chromium Remedy and as documented in the overall SA-6 South RAR.

Based on the SA-6 Chromium Remedy 100% Design, the waste characterization soil sampling frequency was one sample for each 500 CYs. Wood estimated that there were 6,000 CYs of chromium-impacted soil in the Bulkhead Deferred Area to be excavated and disposed offsite. Thus, Wood collected twelve waste characterization samples in total from the excavation area.

The analytical data for the waste characterization soil samples are summarized in **Tables 3A through 3H**. The analytical results were compared to RCRA hazardous limits. The data indicates that one sample (073-WC-09-1014) had a toxicity characteristic leaching procedure (TCLP) chromium result of 6.8 milligrams per liter (mg/L) and which caused the approximately 500 CYs represented by this sample to be characterized as hazardous waste. None of the remaining samples were above RCRA limits and thus, the remaining approximately 5,500 CYs was characterized as non-hazardous waste. **Section 4.6** provides more details regarding the offsite transportation and disposal of the excavated soil.

The analytical data for the subsurface concrete samples (073-WC-114 and 073-WC-115) collected from the December 2019 waste characterization soil borings are included in **Tables 2A through 2H** and were discussed in Section 2.1.

Wood collected five soil delineation samples from four of the soil borings which helped to further define the excavation bottom depths in several locations in the Bulkhead Deferred Area based upon previous RI and PDI sample results. These samples were analyzed for hexavalent chromium only. The analytical data for the additional soil delineation samples collected in the 2019 waste characterization borings are summarized in **Table 4A**. Four of the five samples were below the NJDEP criteria of 20 mg/kg for hexavalent chromium. However, one sample collected from boring 073-WC-16 exhibited hexavalent chromium above 20 mg/kg; therefore, Wood instructed the laboratory to analyze a hold sample collected from a deeper sampling interval. This deeper sample was below 20 mg/kg for hexavalent chromium and established the depth of excavation in that area. EDDs for these samples were submitted to the NJDEP's electronic mail site on February 9, 2021. A copy of the confirmation email message from the NJDEP acknowledging submittal of the EDD is included in **Appendix B**.

2.3 MOBILIZATION AND SITE PREPARATION

Wood and SES mobilized equipment and labor forces to the Site between May 26, 2020 and July 24, 2020. Mobilization and site preparation included the following key activities:

- Mobilization and set-up of office trailers (see Photo 5) at SA-6 South for SES operations. The trailers were outfitted with temporary electrical, internet, and telephone infrastructure;
- Construction of a compacted gravel access road (see Photo 6) from the gate at the west end of Kellogg Street to the support area and over to the work zones;
- Mark-out of excavation, capping, staging and lay down areas;
- Set up of vibration and settlement monitoring equipment (see Photo 7);
- Installation of soil and erosion controls (see Photos 8 and 9);
- Inspection and rigging of crane for sheet pile installation and delivery of sheetpile for the new bulkhead (see Photos 10 and 11)
- Setup of the temporary CWTP at SA-6 North (see Photos 12 and 13) adjacent to Honeywell's permanent groundwater treatment plant (GWTP);
- Establishment of material stockpile (see Photo 18) and staging areas;

- Construction of decontamination facilities; and
- Repair of gate entrance, and establishment of initial exclusion zones, contaminant reduction zones and support zones. Such zones were maintained and modified as needed throughout the execution of remediation activities.

Other preparatory activities that occurred either just prior to or during initial stages of the construction activities are described in the sections that follow.

2.4 HEALTH AND SAFETY

Health and Safety on the Bulkhead Deferred Area Chromium Remedy was controlled by a Master Health and Safety Plan (HASP). The Master HASP was included as Appendix D of the SA-6 North Chromium Remedy 100% Design Report. Each site contractor was required to prepare and submit a HASP for their specific work requirements in conformance with the Master HASP. Direct responsibility for employee safety was retained by each contractor as outlined in the contractor's respective HASP.

The minimum personal protective equipment (PPE) for personnel within the fenced-in portion of the Site included hardhats, high visibility vests, gloves, safety glasses, and steel toed boots. Because of the COVID-19 pandemic in 2020, all workers were also required to wear face coverings at all times. Minimum worker PPE within exclusion zones at the Site consisted of mask, hardhat, safety glasses, high visibility vests, Tyvek™ suits, gloves, and steel-toed boots. Upon leaving the exclusion zone, disposable PPE was placed into containers staged within the contamination reduction zone. Non-disposable PPE was decontaminated in the same area. Disposable PPE was combined with other chromium-impacted waste and transported and disposed of offsite. Decontamination fluids were processed through the onsite CWTP and subsequently discharged via JCMUA and PVSC discharge permits and agreements.

During the course of the project, approximately 26,200 worker-hours were completed on site. There were no Occupational Safety and Health Administration (OSHA) recordable incidents during the Chromium Remedy in the Bulkhead Deferred Area.

A perimeter air monitoring program was carried out to document protection of human health outside of the remediation zone(s) to airborne COCs. The perimeter air monitoring program is discussed in detail in Section 2.5. In the course of the project, there were no exceedances of the perimeter air action levels.

2.5 PERIMETER AIR MONITORING

An air monitoring program was implemented and maintained whenever ground-intrusive activities were occurring throughout the course of the Bulkhead Deferred Area Chromium Remedy. The NJDEP has recently adapted the National Ambient Air Quality Standard for respirable particulate matter, i.e., less than 10 microns, of 150 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) as a 24-hour average (USEPA 40 CFR Part 50). Therefore, in January 2020 Wood updated the PAMP from that provided in the 100% Design Report. Air monitoring within the work zone area and around the perimeter of the Site was implemented by Emilcott Associates, Inc., on behalf of Honeywell, in accordance with the updated PAMP. The objective of the perimeter air monitoring was to verify that COCs did not result in potential exposures to the surrounding public.

The primary Target Chemical Parameter Respirable Particulate Matter Action Level (RPMAL) for perimeter air monitoring at the Bulkhead Deferred Area was hexavalent chromium. During ground disturbing remedial activities, the most likely method of transport of hexavalent chromium offsite is via impacted particulates such as airborne dust and soil particles, which can transport hexavalent chromium to offsite receptors. The PAMP documented the Respirable Particulate Matter Action Level for perimeter air quality as $150 \mu\text{g}/\text{m}^3$ for the Bulkhead Deferred Area Remedy. The real-time data generated during perimeter air monitoring was used to document airborne concentrations measured during excavation activities and assist Site personnel with determining the need for preventive measures or alteration of work activities. Preventative measures to control the generation of dust were conducted as per the PAMP and the HASPs. In order to assess the potential presence of hexavalent chromium in dust, perimeter air monitoring stations were located throughout the multi-phase excavation areas using a grid system. The monitoring points were determined by an onsite Wood representative based on the location of soil disturbance activities, prevailing wind direction, field conditions and the requirements stated in the PAMP.

PAMP data is included on **Table 1**. In the course of the project, there were no recorded employee exposures above the OSHA Permissible Exposure Limit. The highest total particulate detection at the Bulkhead Deferred Area was measured on July 14, 2020 at 42 $\mu\text{g}/\text{m}^3$ (well below operative action level of 150 $\mu\text{g}/\text{m}^3$) and the corresponding hexavalent chromium laboratory analysis result was non-detect. The highest hexavalent chromium detection, which took place on September 8, 2020 was 13 nanograms per cubic meter where the corresponding particulate detection was not detected. **Figure 4** indicates the locations of the PAMP stations.

2.6 SITE SECURITY

The City of Jersey City maintains responsibility of overall site security through the use of 3rd party security contractor. Overall site access is controlled by the City's security contractor who maintains 24-hour guard services at a gate at the northeast corner of SA-6 North. In addition, the security guards periodically patrol the Sites in vehicles after hours. The City's security contractor did not provide any other specific security at the Bulkhead Deferred Area worksite, rather worksite security was primarily focused on the perimeter fence line. The perimeter of the SA-6 North, SA-7 and SA-6 South Sites are already secured by existing chain link fence installed due to the previous Chromium Remedies and/or Jersey City operations. Minor perimeter fence enhancements were made as required at SA-6 South. Access to the Bulkhead Deferred Area support and work zones was established through the existing gate from Kellogg Street which was closed and locked at the end of each workday.

2.7 SUPPORT FACILITIES AND TEMPORARY SITE UTILITIES

Existing support facilities for the Honeywell and Wood construction management teams had already been established in permanent trailers located in the northwest corner of SA-6 North prior to mobilization. SES established their own office trailer support facilities during mobilization. They provided their own electric and internet infrastructure for the trailers.

Site water for construction and dust suppression activities was obtained from a JCMUA fire hydrant located on SA-6 North. SES constructed the CWTP immediately adjacent to Honeywell's onsite GWTP at SA-6 North. The construction of the CWTP is described in more detail in Section 3. SA-7 was used for the staging of the clean Open Space AOC soils removed above the existing liner. Imported clean

soils, geotextiles, equipment staging, parking, truck staging, and other storage was located in available areas at SA-6 South.

2.8 TURBIDITY MONITORING

The Deferred Area is immediately adjacent to the Hackensack River. Due to the potential disturbance of sediment during installation of the permanent river bulkhead and during grout column installation, turbidity monitoring was conducted in the Hackensack River.

Turbidity monitoring consisted of the installation of a turbidity curtain (semi-permeable, single Type 3 manufactured by Siltdam) that encompassed the sheet pile installation area (see Photo 9). In addition, two monitoring buoys equipped with 600 OMS V2 Turbidity Sonodes recorded turbidity, temperature, and dissolved oxygen data every 15 minutes. Due to accelerated algae growth interfering with accurate turbidity readings, the buoy system was replaced in favor of manually collected readings with a handheld turbidity sensor three times a day (startup, during, and days end). Turbidity action levels are 30 nephelometric turbidity units (NTU) at any time, or 10 NTU, 30-day average. Turbidity monitoring locations are indicated on **Figure 9**. Results of turbidity monitoring are provided on **Table 7** and ranged from 0 to 19.9. No exceedances of turbidity regulatory action levels were recorded.

2.9 DEFLECTION MONITORING

The bottom of the deepest excavations in the Bulkhead Deferred Area were completed at approximately elevation -10 feet, mean sea level (msl [National Geodetic Vertical Datum 1929]). Because the deep excavations were immediately adjacent to the existing western hydraulic barrier wall (HBW) of the SA-6 South Open Space AOC and as a result the HBW could deflect, monitoring of deflection in the HBW was conducted. The newly installed permanent bulkhead was also monitored for deflection. MRCE assisted Wood in determining appropriate deflection action levels for the various sections of sheetpile.

Deflection monitoring involved the installation of 12 survey targets approximately every 25 feet onto the new steel bulkhead and 7 survey targets onto the existing hydraulic barrier wall approximately every 25 feet. These were all aligned to a survey total station located on top of the Jersey City Municipal Utilities Authority (JCMUA) force main tower. Readings were collected every day and an alert system

was in place to alert any survey target locations that moved out of project determined action levels. Readings reached alert levels, but never exceeded the stop-work action level. Deflection monitoring locations are indicated on **Figure 9** and results are provided in **Appendix J**.

2.10 VIBRATION MONITORING

Because vibratory equipment is used during the sheetpile driving operations, Wood performed vibration monitoring to assess any adverse effects on nearby critical infrastructure. Vibration monitoring activities commenced with the installation of two remote vibration monitoring systems (RVMS) on June 29th, 2020. One of the RVMS were installed outside of the excavation on the north side of the Bulkhead Deferred Area, and it was later moved August 7, 2020 to the south side of the excavation. A second vibration monitoring station was installed adjacent to the 72” force main north of the SA-6 North cap (see Photo 7). Several deflection and settlement prisms were also installed at an interval of 25 feet from the Bulkhead Deferred Area excavation limits as well as several control points installed at several points throughout the entire SA-6/7 property. MRCE assisted Wood in determining appropriate vibration monitoring action levels. None of those vibration monitoring action levels were exceeded during the sheetpile driving operations.

Vibration monitoring locations are indicated on **Figure 9** and results are provided in **Appendix K**.

2.11 PIEZOMETER ABANDONMENT

During the SA-6 South Chromium Remedy completed in 2016, two piezometers were installed in the Bulkhead Deferred Area to monitor the shallow groundwater gradient across the western end of the SA-6 South HBW. Piezometer 124-PZ-19 was installed between the HBW and the Hackensack River bulkhead in the Bulkhead Deferred Area excavation area. Piezometer 124-PZ-20 was installed within the Open Space AOC. Both piezometers had been installed above Stratum D and Honeywell had installed dataloggers and telemetry equipment in each to continuously monitor groundwater levels.

Due to the ground disturbance activities in both the Bulkhead Deferred Area excavation area and the Open Space AOC, both piezometers had to be abandoned. Piezometer 124-PZ-19 was abandoned on June 19, 2020 and piezometer 124-PZ-20

was abandoned on July 24, 2020. The piezometers were abandoned properly in accordance with N.J.A.C. 7:9D by a New Jersey licensed driller from Keller. Keller completed all the well abandonment records (see **Appendix D**).

2.12 SUSTAINABILITY EFFORTS DURING CONSTRUCTION

Under Honeywell's stewardship, the construction process was integrated into the overall vision for the Jersey City west side redevelopment by incorporating a sustainable design approach which focused on conservation of natural resources through beneficial reuse, recycling, minimization of ongoing energy consumption and reduction in carbon footprint. Specifically, Honeywell's sustainable construction efforts integrated:

- Use of renewable B-5 Biodiesel in lieu of conventional fossil fuel based petrodiesel in construction equipment, and
- Crushing and recycling of demolition generated clean concrete to be reused as clean fill material on site.

3.0 DEWATERING AND CONSTRUCTION WATER TREATMENT

3.1 GENERAL

Dewatering was conducted to remove groundwater and stormwater from within the excavation areas and to minimize the moisture content of excavated soils. Capture, collection, and treatment of stormwater/surface water that came in contact with impacted soils and any that accumulated in designated decontamination pads was also completed. Collected groundwater, stormwater, and surface water was pumped to the CWTP on SA-6 North. SES subcontracted Keller North America. (Keller) of Rockaway, New Jersey, a licensed New Jersey well drilling contractor, for all well drilling and also the installation and operation of the dewatering pumps.

Because of the proximity of the Bulkhead Deferred Area excavation to the fragile former timber bulkhead along the river and the depth of some of the excavation zones, a new bulkhead had to be installed prior to the start of excavation activities. The new bulkhead was installed on behalf of the City of Jersey City and was designed to be incorporated into the City's long-term redevelopment objectives for a new bulkhead to raise grades and construct a Riverwalk feature along the River. The new bulkhead was constructed of marine-grade steel sheetpile and all of its joints were sealed to minimize river water infiltration. More detail of the bulkhead installation is provided in Section 4.1.

Wood subcontracted Cornerstone to prepare a model simulation of the shallow groundwater dewatering and depressurization pumping for the Bulkhead Deferred Area soil excavation zone. Cornerstone's evaluation predicted the number, location and approximate pumping rate of both shallow dewatering sumps and deep depressurization wells necessary to maintain a dry excavation and prohibit uplift of the underlying Stratum D. The model incorporated the new bulkhead as a boundary condition to minimize infiltration of river water into the excavation.

Because the entire Deferred Area was surrounded by bulkhead, the HBW, or temporary excavation support sheetpile, very little run-on from precipitation entered the excavation area and came in contact with impacted soils. Nevertheless, SES minimized the open excavation between the excavation face and the backfill to limit the quantity of impacted water to be treated.

3.2 CONSTRUCTION WATER TREATMENT PLANT

The CWTP (see Photos 12 and 13) for the Bulkhead Deferred Area was constructed on SA-6 North, immediately adjacent to the east side of the onsite GWTP. The CWTP was similar to the CWTP used for the SA-6 South Chromium Remedy as documented in the overall SA-6 South RAR. All dewatering pumps were connected to double-walled high-density polyethylene (HDPE) pipe (see Photo 14) that conveyed the water from the Bulkhead Deferred Area to the CWTP for treatment.

Key elements of the CWTP included:

- The CWTP was built within a secondary containment system constructed of a heavy membrane liner and perimeter berms;
- The system consisted of one 200,000-gallon ModuTank, and two 21,000-gallon effluent “frac” tanks within the secondary containment area located on SA-6 North; as well as two additional 21,000 gallon settling “frac” tanks within secondary containment on SA-6 South.
- The CWTP had a dual treatment train composed of 50 micron and 5-micron bag filters with a maximum throughput capacity of 500 gallons per minute (gpm).
- Treated effluent water was pumped into the unused JCMUA South Sludge digester tank.
- JCMUA managed discharge of treated water from the digester tank to the local wastewater treatment plant operated by PVSC;
- The discharge of treated CWTP water was under PVSC Sewer Use Permit number 31630040;
- As required by the permit a non-resettable totalizing flow meter was used to record the instantaneous flow rate as well as the total flow;
- Treated effluent samples were collected monthly; and
- The Passaic Valley Sewer Commission (PVSC)-required MR-1 and MR-2 self-reporting documents were completed and sent to PVSC each month, reporting for the prior month.
- During the project, additional four 21,000-gallon “frac” tanks were brought onto the site, north of the Bulkhead Deferred Area excavation to efficiently

remove and store additional water from the excavation after large rain events.

Treated effluent sample analytical results for the monthly samples are summarized on **Tables 6A through 6D**. The total chromium concentration discharge limit permitted by PVSC was 24.38 mg/L. This discharge limit was not exceeded during the implementation of the Chromium Remedy. Thus, as anticipated and stated in the Construction Water Treatment System Design Report (CWTS Report) from the 100% Design Report, chemical treatment to remove chromium from the construction water was not required.

3.3 WELL AND SUMP INSTALLATION

Excavation dewatering was accomplished with a combination of several localized sumps installed as needed in the excavation areas and four deep depressurization (DP) wells installed below Stratum D (see Photos 15 through 17). Similar to the SA-6 South Chromium Remedy, the deep DP wells were used to relieve hydrostatic pressures on Stratum D due to the excavation of the soil above Stratum D. Three observation wells were also installed within the Bulkhead Deferred Area excavation zone below Stratum D to monitor the confined zone dewatering progress. A fourth shallow observation well was also installed within the Open Space AOC above Stratum D to monitor dewatering progress there once the interior piezometer, 124-PZ-20, had been abandoned.

Sumps were installed within the deeper excavation areas, Area 1A and Area 1B. The sumps consisted of a 14-inch perforated pipe placed within a deeper excavated hole and backfilled with 3/4-inch clean crushed stone. Sumps were not installed below and did not penetrate the Stratum D layer.

Keller obtained all well permits. New well permits, Form A & B wells records, and new well construction diagrams are included in **Appendix D**. Prior to the start of excavation activities, the wells were installed in accordance with N.J.A.C. 7:9D. The sumps, observation wells, and deep DP wells are shown on the record drawing by SES contained in **Appendix C**. The observation wells were given the designations OW-1 through OW-4. The deep DP wells were given the designations DP-1 through DP-4.

The observation wells were drilled using a mud-rotary wash rig. Each was drilled through the Stratum O/D layer to an approximate elevation of -24 feet. Each observation well was constructed of 2-inch diameter polyvinyl chloride (PVC) screen and riser pipe. Screen lengths in each were 10 feet.

The deep DP wells were drilled using a mud-rotary wash rig. Each was drilled through the Stratum O/D layer to a total depth of up to 50 feet bgs, 15 feet below the top of the Stratum O/D layer. A 4-inch diameter screen and riser pipe were used in the construction of each deep DP well. Screen lengths were 10 feet long in each. A 10-inch diameter PVC conductor casing was set 1 to 2 feet into the top of the Stratum O/D layer to isolate water above the Stratum O/D layer from that below.

Well component specifications were submitted by SES prior to installation. The sumps within the excavation areas were completely removed with the excavated soils. Deep DP wells and observation wells were abandoned by Keller's licensed driller once an adequate amount of backfill placement and compaction within an area was complete (see Photo 63).

3.4 GROUNDWATER MANAGEMENT

The general process for managing groundwater was to eliminate the existing groundwater and prevent additional groundwater or surface run-on from contacting chromium-impacted fill materials yet to be excavated. Dewatering with shallow sumps and deep DP wells began prior to excavation activities to achieve drawdown in advance of excavation. Site dewatering data is included in **Appendix E**.

Electric 3-inch trash pumps in the sumps were operated continuously during excavation activities and until backfilling had been completed up to a level above the ambient shallow groundwater level. Wood continuously monitored groundwater levels in the observation wells to track the efficacy of the dewatering operations. For the most part, the sumps installed in the northern-most excavation zones 1A and 1B were capable of dewatering most of the Bulkhead Deferred Area excavation zones above the meadow mat. However, as needed, SES deployed other supplemental electric trash pumps at the bottoms of the excavations to assist in the shallow dewatering as excavation progressed to other zones.

The deep DP wells were each fitted with a dedicated electric submersible pump. Since SES started excavating at the north end of the Bulkhead Deferred Area

(excavation zone 1A), the northern DP pumps were started first to begin depressurizing below Stratum D approximately 2 weeks before the start of excavation.

3.5 SUPPLEMENTAL DEWATERING MANAGEMENT

In general, the new Hackensack River steel sheetpile bulkhead greatly reduced the amount of river water infiltration. However, river water did infiltrate during partial excavation of zone 1A in the northwest corner of the Bulkhead Deferred Area excavation where the new bulkhead met a section of existing sheetpile left in place during the SA-7 Chromium Remedy completed in 2009. Simpson & Brown (Sevenson's Sheet Pile Installer Subcontractor) had installed 2 grout columns at the sheetpile intersection in this area (see Photo 36). Keller was brought in to install an additional 3 grout columns but ultimately needed a jet grout curtain of approximately 20 feet in length to stanch the flow of river water (see Photos 37 through 39). Because of this unanticipated additional infiltration of river water, SES had to modify its excavation sequencing until Keller could install the additional grout and the grout had time to set. Thus, SES postponed excavating in zone 1A and moved excavation operations to the southern end of the Bulkhead Deferred Area excavation area (Area 4) where the prescribed excavation depths were shallower (see Section 4.1 for more details).

4.0 EXCAVATION ACTIVITIES

Excavation of chromium-impacted soil in the Bulkhead Deferred Area was performed consistent with the NJDEP-approved RAWP, 100% Design Report, and subsequent DCBs 010A and 010A.1 applicable to the Bulkhead Deferred Area. Excavation was performed at the Bulkhead Deferred Area from September 2, 2020 to November 8, 2020. A progression chart was maintained throughout the project which tracked excavation and backfilling operations. This chart was utilized for the tracking of work sequence and quality control and was reviewed with all Parties at routine progress meetings/conference calls. As excavation progressed, Honeywell periodically submitted to all Parties documentation of completion of portions of the excavation operations in accordance with the SA-6 South Standard Operating Procedure - Confirmation of Excavation Limits, dated March 3, 2014 (and including Honeywell's April 24, 2014 letter and attachments). Record Drawings for excavation and backfill work are included in **Appendix C**.

4.1 PERMANENT BULKHEAD INSTALLATION

As stated previously, Wood installed approximately 270 linear feet of new permanent bulkhead along the Hackensack River. The new bulkhead installation spanned the entire western perimeter of the Bulkhead Deferred Area excavation from north to south. Bulkhead installation was performed at SA-6 South from July 20, 2020 to August 14, 2020. The new bulkhead was installed on behalf of the City of Jersey City and will be incorporated into the City's long-term redevelopment objectives for a new bulkhead to raise grades and construct a Riverwalk feature along the River. Honeywell subcontracted MRCE of New York, NY to design the new bulkhead. The new bulkhead was installed prior to the start of excavation activities because of the excavations' proximity to the River and because the depth of the excavations would be below the River level.

Prior to bulkhead installation, the concrete rubble that was located atop the existing timber bulkhead was removed and stockpiled in a staging area for later processing or offsite disposal depending on waste characterization data (see Section 2.1). Additionally, the top several feet of soil across a portion of the Bulkhead Deferred Area was removed to elevation +8.0 feet, msl to relieve pressure on the timber bulkhead (see Photos 26 through 32). The new bulkhead was constructed of marine-grade steel sheetpile NZ-38, welded pairs. The sheetpile was coated with epoxy

above the mud line. All of the joints between the welded pairs were sealed with Steelwall Steelant® to minimize river water infiltration.

SES subcontracted Simpson and Brown to drive the bulkhead steel. A HMC 51 vibratory hammer attached to a 75-ton crane, located on land to the east of the bulkhead area, was utilized (see Photos 33 through 35). SES commenced sheetpile installation at the north end of the Bulkhead Deferred Area adjacent to a section of existing sheetpile left in place from the SA-7 Chromium Remedy and advanced to the south. The sheets were generally driven to a tip elevation of -50 feet msl along the northern portion and -40 feet msl along the southern portion to provide for cantilevered support of the adjacent excavation without the need for tie backs or other supplemental support mechanisms. The new bulkhead sheetpile was driven no more than 2 feet outboard of the former timber bulkhead. Support structures/timbers in place to bolster the former timber bulkhead were removed above the mudline as necessary as sheetpile installation progressed.

4.2 TEMPORARY EXCAVATION SUPPORT

Temporary excavation support consisting of sheetpile was installed as shown on **Figure 8** (see Photo 40). Due to the presence of the existing HBW, the existing sheetpile at the north end of the Bulkhead Deferred Area, and the newly-installed river bulkhead, temporary excavation support was only needed in a limited area at the southern end of the Bulkhead Deferred Area excavation. Honeywell's geotechnical consultant, MRCE, designed the temporary excavation support sheeting which was documented in DCB 010A. The temporary excavation support system consisted of NZ38 and NZ14 sheetpile. Upon completion of excavation and backfilling activities, the temporary excavation support sheeting was either removed (see Photo 64) and demobilized from the Site or cut off and abandoned in place by SES.

The SES Quality Control Engineer monitored the temporary excavation supports for horizontal deflection during excavation. Vibration monitoring was performed for the duration of the project and was demobilized once backfilling activities were complete. Vibration monitoring was discussed further in Section 2.10.

4.3 EXCAVATION IMPLEMENTATION AND SEQUENCING

As indicated in the 100% Design, Honeywell collected post-excavation equivalent samples during the remedial investigation (RI) and PDI to establish the horizontal and vertical limits of the chromium-impacted soils and, thus, defined the extent of the excavations at SA-6 South. The PDI report included in the SA-6 South 100% Design Report documented all horizontal and vertical delineation samples for the entire SA-6 South excavation area, including the Bulkhead Deferred Area. The existing sheetpile between the north end of the Bulkhead Deferred Area and SA-7, the new Hackensack River bulkhead, and the HBW defined the horizontal limits of 75% of the Bulkhead Deferred Area excavation. Samples that were < 20 mg/kg for hexavalent chromium defined the southern and eastern horizontal limits of the southern approximately 25% of the Bulkhead Deferred Area excavation. As indicated in Section 2.2, additional post-excavation vertical delineation samples were collected during the 2019 waste characterization sampling activities to further refine excavation depths at selected locations in the Bulkhead Deferred Area (see **Table 4A**). **Table 4B** lists the complete set of post-excavation sidewall and bottom samples for the Bulkhead Deferred Area, including those from **Table 4A**.

To keep track of excavation and backfilling progress, Wood divided the Bulkhead Deferred Area excavation into 7 zones, labeled from north to south 1A through 1D, 2, 3, and 4 (see **Figure 8** and Photos 49 through 58). Because the deepest excavation zones in the Bulkhead Deferred Area excavation were between the new river bulkhead and the HBW, MRCE determined that the deep excavations should be limited in their north-south dimension to a maximum of 40 feet and be backfilled up to elevation +5 ft, msl prior to advancing to the next excavation area in order to minimize deflection of the adjacent sheetpile structures. Therefore, zones 1A, 1B, and 1C were further subdivided into zones 1A-1, 1A-2, 1A-3, 1B-1, 1B-2, 1C-1, 1C-2, and 1C-3. Based on the RI and PDI sample data, most of the northern extent of the Bulkhead Deferred Area (zones 1A through 1D) was excavated to Stratum D (approximately elevation -10 feet, msl). The remaining zones were shallower excavations based upon vertical delineation samples.

Wood provided global positioning system (GPS) coordinates to SES to identify the location of overburden soils (see Section 4.5), the soils characterized as hazardous waste, and the vertical limits of the excavation zones. SES loaded the GPS data into

their machine control system within the excavators and the excavation operators managed the excavation extents with the GPS machine control system.

4.4 EXCAVATION EXTENT SURVEYING AND CONFIRMATION

Similar to the overall SA-6 Chromium Remedy as documented in the RAR, once excavation zones had been completely excavated to their horizontal and/or vertical limits based upon the GPS data in the excavation machine control system, the horizontal and vertical extents of the completed cells were surveyed. SES subcontracted Maser Consulting P.A. (Maser) of Marmora, New Jersey to perform all survey services. R. Thomas Hugg, a New Jersey Professional Land Surveyor, certified all the post-excavation extent survey data and tabulated the survey information. The surveyed data included any PDI post-excavation equivalent soil samples that were located within individual excavation zones. Similar to the overall SA-6 Chromium Remedy, Honeywell submitted documentation confirming the completion of individual excavation zones. Copies of the emails, along with the tabulated excavation extent survey data and a summary figure, are provided in **Appendix M**. Honeywell provided the same information in these confirmation emails for each zone as those provided during the overall SA-6 Chromium Remedy. The email confirmation process was described in detail in the RAR and is not being repeated in this RAR Addendum.

Surveying of the final “as-built” horizontal and vertical extent of the excavations was conducted by Maser and R. Thomas Hugg certified the record drawings surveyed by Maser. Record drawings are discussed and presented in Section 18.

4.5 EXCAVATED MATERIAL (STOCKPILE) TESTING

In accordance with the SMP provided in the 100% Design Report, overburden material that had been characterized as < 20 mg/kg for hexavalent chromium from RI and/or PDI samples was initially removed, stockpiled onsite, and sampled to confirm that the soil was < 20 mg/kg for hexavalent chromium. In the Bulkhead Deferred Area, only approximately 250 CYs of overburden material was identified as < 20 mg/kg for hexavalent chromium based upon RI and/or PDI samples. This material was staged in a designated stockpile area built exclusively for this material. Four grab samples of the overburden material were collected for hexavalent chromium analysis; each sample representing approximately 50 CYs. **Table 5** summarizes the stockpile sample analytical results and indicates that each

sample was confirmed <20 mg/kg hexavalent chromium. Consequently, this material was reused as backfill material to supplement the common borrow material brought onsite from the offsite source (see Section 5.1).

4.6 OFFSITE TRANSPORTATION AND DISPOSAL

As indicated in Section 2.2, the soils to be excavated were characterized in-place for offsite disposal prior to mobilization by collecting soil samples from soil borings. Based on the waste characterization results, approximately 500 CYs of soil (see Photo 48) was characterized as hazardous waste and approximately 5,500 CYs was characterized as non-hazardous waste (see Photo 46). Wood subcontracted Arecon Environmental (Arecon) of Hamilton, New Jersey to provide waste disposal coordination services. Once the waste characterization results were obtained Arecon determined appropriate disposal facilities which could accept the soils and Arecon completed waste profile documentation.

During excavation activities, the soils characterized as hazardous waste were stockpiled separately from those characterized as non-hazardous waste. Once enough of the materials had been stockpiled, SES and Arecon coordinated and scheduled the trucking companies and load out activities as needed to move the material offsite. Arecon completed all waste manifests and bills of lading.

All soil characterized as non-hazardous waste was loaded into tri-axle dump trucks and shipped offsite to Middlesex County Landfill located in Monroe Township, New Jersey. A total of 9,000 tons of material was shipped offsite as non-hazardous waste. All soil characterized as hazardous waste was loaded into tri-axle dump trucks and shipped offsite to Clean Earth of North Jersey located in Kearney, NJ. A total of 900 tons of material was shipped offsite as hazardous waste. As indicated in Section 2.1, approximately 200 tons of concrete material that did not meet the reuse criteria was mixed into the soil shipped offsite as hazardous waste (see Photos 42 through 44). All waste manifests, bills of lading, and certificates of disposal are included as **Appendix F**.

All trucks hauling soils offsite were lined, loaded, and decontaminated similarly to those used to haul material offsite during the overall SA-6 Chromium Remedy as documented in the RAR.

5.0 BACKFILLING, COMPACTION, AND COMPACTION TESTING

Backfilling of the Bulkhead Deferred Area excavation zones included the spreading/placing, compacting, and grading of backfill materials that met the Specifications and were approved by the EOR.

5.1 BACKFILL SOURCES

Sources of imported backfill from offsite locations were tested and analyzed to confirm the material met the NJDEP’s definition of clean fill in accordance with the TRSR and did not contain hexavalent chromium above 1 mg/kg. Tested and approved imported backfill material for the Bulkhead Deferred Area were provided from the following quarries licensed by NJDEP:

Source	Quarry	Material Type	Approximate Volume Imported (CYs)
Tilcon	Mount Hope/Pompton Lake, NJ	¾” Stone	420
Tilcon	Mount Hope/Pompton Lake, NJ	6”-18” Riprap	50
Tilcon	Mount Hope/Pompton Lake, NJ	DGA	2,800
Tilcon	Mount Hope/Pompton Lake, NJ	Screenings	2,900
Tilcon	Mount Hope/Pompton Lake, NJ	2.5” Stone	30
Tilcon	Mount Hope/Pompton Lake, NJ	1” Stone	30
Solite	962 Kings Highway, Saugerties, NY	Lightweight Fill	3,000
Dunrite	Vineland, NJ	Lean Clay	520
Eastern Concrete	Not Applicable	Flowable Fill	90
EME	New Egypt, NJ	Horizon C	50
EME	New Egypt, NJ	Horizon B	50

Additionally, approximately 1000 CYs of onsite concrete were tested and approved for reuse in accordance with the SMP (see Section 2.1).

5.2 BACKFILL TESTING

Backfill quality control testing was performed as indicated in the 100% Design Report. One sample for chemical analytical testing was required for each 5,000 tons brought onsite to confirm the imported backfill material met the definition of clean

fill in the TRSR. Analytical results for imported backfill used in the Bulkhead Deferred Area were compared to the Residential Direct Contact Soil Remediation Standards. In addition, the 100% Design Report required imported fill to have a hexavalent chromium concentration of ≤ 1 mg/kg.

SES collected samples of imported fill material for analysis by their subcontracted analytical laboratory, Eurofins Test America, Edison. Samples were tested for hexavalent chromium by USEPA Method 7199.

In accordance with the 100% Design Report, imported fill samples were analyzed for (see **Appendix G**):

- Target Compound List (TCL) VOCs by SW8260
- TCL Semivolatiles by SW8270
- Extractable Petroleum Hydrocarbons (EPH) by NJEPH 10/08
- Target Analyte List (TAL) Metals by SW6010B/7471
- Pesticides by SW8081
- Herbicides by SW846 8151
- Polychlorinated Biphenyls by SW8082
- Cyanide SW846 9012
- Hexavalent Chromium by USEPA 7199
- Synthetic Precipitation Leaching Procedure (SPLP) Metals by SW6010B/7471 only for those contaminants that exceed Impact to Groundwater standards.

Clean fill certifications were obtained from suppliers of the imported source location and certifying that the soil material was virgin and free of hazardous material or contaminants and included in **Appendix G**. The Specifications also required one sample of each source of imported fill to be tested for maximum dry density and optimum moisture content as determined by American Society of Testing Materials (ASTM) D 698 (Standard Proctor). The Proctor results were used by the technician conducting the compaction testing in the field to determine the degree of compaction based upon a percentage of the Proctor as specified in the 100% Design Report.

5.3 BACKFILLING AND COMPACTION

The 100% Design Report allowed for the use of crushed recycled concrete as bridge lift where necessary to stabilize soft or wet subgrade materials at the bottom of excavations. Because of the depth of the excavation zones in the Bulkhead Deferred Area excavation and to protect the new permanent bulkhead and the HBW, deeper areas were partially backfilled up against the sheetpile walls immediately following excavation. Approved-for-reuse overburden soil (historic fill) or the offsite sources of clean backfill indicated above in Section 5.2 were placed over the bridge lift to bring the backfill to the appropriate design grades. The condition of all placed material was observed and any unsuitable materials were removed, either based on visual observation or by compaction testing criteria.

Bridge lifts were initially placed in nominal 12-inch lifts and compacted with 3 passes of a static steel drum roller as specified (see Photos 59 through 62). Generally, vibratory compaction equipment was not used in the bridging lift. Based on the observation of the stability of the lift, the EOR permitted increasing the lift to 18 inches using dozer placement. If the lift was stable, static rolling was initiated. In some locations it was necessary to defer rolling until up to a 3-foot-thick bridging lift was placed due to excessive pumping of groundwater. In other locations geotextile fabric was added between bridge lift layers or on top of the bridge lift to add additional reinforcing and material separation (see Photo 61). Subsequent lifts of non-bridge-lift backfill materials were placed at a maximum of 12 inches thick loose lift and compacted using vibratory smooth-drum rollers to at least 95% of the maximum dry density in accordance with the Specifications (see Photos 65 through 74).

Approved-for-reuse overburden material (historic fill) was generally placed and compacted near the bottom of the excavations and buried at an elevation no higher than -3.5 feet with additional imported clean backfill as needed to achieve the design grades. The variable nature of this material precluded testing for compaction using the Proctor density methods. Instead, a proof-roll area was set up where approved-for-reuse overburden material was compacted and tested in multiple passes of the vibratory rollers until minimal change in maximum dry density was observed in the last few passes. The final maximum dry density from this proof-roll area was then used as the target density for the remaining areas and lifts where approved-for-reuse overburden material was placed and compacted.

5.4 IN-PLACE BACKFILL DENSITY TESTING

The in-place density of the compacted imported backfill materials were verified in the field using a nuclear surface moisture-density gauge in accordance with ASTM D 2922 (see Photo 70). ATC Group Services LLC, of Burlington, New Jersey, was subcontracted to SES and performed compaction testing at the Bulkhead Deferred Area excavation area. Testing was performed in accordance with the 100% Design Report at a testing frequency of one test per 2,500 SF per compacted lift. **Appendix H** contains the in-field density test results for each lift and a figure showing the in-place density testing locations. The coordinates of the testing locations and elevations of each associated lift are also provided in **Appendix H**.

6.0 OPEN SPACE AREA CONTAINMENT SYSTEM MODIFICATION

6.1 DESIGN CRITERIA

In accordance with the SA-6 South Consent Decree and the 100% Design Report, the Chromium Remedy for the Open Space AOC included a containment system consisting of the HBW, a RCRA-equivalent cap, and a contingent groundwater extraction system to provide hydraulic control of shallow groundwater. The HBW at SA-6 South consists of steel sheetpile with sealed joints around the eastern, southern, and western perimeters of the Open Space AOC. The hydraulic barrier is connected to the existing SA-7 Soil-Cement Bentonite wall on the northern boundary of SA-6 South. The western hydraulic barrier was installed approximately 38 feet inboard of the timber bulkhead. Due to the elevations of the deeper excavation area between the bulkhead and the western HBW of the SA-6 South Open Space Area, the HBW had to be reinforced prior to the excavation of chromium-impacted soils in order to withstand lateral pressures from the east during excavation.

The RCRA-equivalent cap at SA-6 South consists of multiple layers of geosynthetic materials and soils, each designed with a specific purpose. The cap materials work together to limit infiltration of precipitation moisture into the chromium-impacted soil within the Open Space AOC and provide a medium for vegetation growth. To maintain the integrity of the cap, there are strict design criteria for allowable ground pressures on the Open Space AOC cap materials.

The implementation of the Bulkhead Deferred Area Chromium Remedy required the modification of the containment system within the Open Space AOC for the following reasons:

- Reinforcement of the HBW due to excavation of chromium-impacted soils on the western side of the HBW down to elevation -10 ft, msl;
- Access to a portion of the Open Space AOC for equipment to drive the HBW reinforcement sheetpile; and
- Temporarily reduce the soil pressure on the newly installed HBW reinforcement sheetpile by temporarily removing a zone of soil behind the HBW.

- Provide storage area for the soils removed to reduce pressure on the HBW within the Open Space AOC.

Key design features of the Open Space AOC containment system modifications were as follows:

- The water table behind the HBW wall was temporarily lowered to elevation 0.0 ft, msl to relieve hydrostatic pressure on the HBW during the Bulkhead Deferred Area excavation activities.
- A temporary access ramp was constructed in the southwestern corner of the Open Space AOC to allow for vehicle and equipment access.
- The existing soil cap materials above the geosynthetic materials were stripped from an approximately 7,500 SF area and staged for later reuse.
- The existing geosynthetic materials from this same 7,500 SF area were removed and disposed of.
- Approximately 600 cubic yards of existing chromium-impacted soil was excavated and staged within the Open Space AOC for later re-consolidation back its original location under the cap.
- A new reinforcing steel sheetpile wall was driven to a tip elevation of -47 ft. msl just east of the existing western HBW. The two walls were connected at the top using steel brackets spaced 5 feet apart.
- Once the new reinforcing wall was installed and excavation and backfilling were completed in the Bulkhead Deferred Area excavation, the chromium-impacted soil excavated from the 7,500 SF Open Space AOC area was replaced and compacted back into this area.
- The geosynthetic materials and soil cap materials above the geosynthetic materials were replaced as specified in the 100% Design.

6.2 LOWERING OF WATER TABLE IN THE OPEN SPACE AOC

The water table in the Open Space AOC, behind the HBW, had to be lowered to reduce hydrostatic pressure on the HBW once excavation was implemented. MRCE determined that the Open Space AOC water table needed to be lowered to a minimum +2.0 ft., msl. Consequently, Wood operated the Contingent Groundwater Extraction System (CGWES) pump in the SA-6 South Open Space AOC from June 5, 2020, approximately 2 weeks before excavation commenced, until November 24,

2020, once backfill material in the Bulkhead Deferred Area excavation had been brought up to an elevation of +5 ft, msl. The SA-6 South CGWES pump was operated continuously, except for occasional temporary shut-downs for minor maintenance activities and during 10 days in October when Honeywell conducted a major overhaul of the main treatment processing unit in the GWTP. The water table in the Open Space AOC was lowered to +1 ft, msl during operation of the SA-6 South CGWES pump, which was 1 foot below the design elevation.

6.3 REMOVAL OF OPEN SPACE AOC SOILS AND GEOSYNTHETIC CAP MATERIALS

Once the temporary access ramp was built and excavation equipment could access the Open Space AOC, the soils above the geosynthetic materials were removed and stockpiled on SA-7 (see Photos 19 through 23). The 100% Design mandated that multiple distinct soil horizons/types were designated for specific locations throughout the Open Space AOC. The soil horizons/types were designated as Horizon A, B, and C, GDL Cover Soil, and Structural Fill. Each soil horizon had specific soil properties depending on their function and vertical distribution. From the bottom up, the soil horizons/types were distributed as GDL Cover Soil, Structural Fill (where designated), C, B, and A.

All soil horizons/types were present in the 7,500 SF Open Space AOC area designated for the modifications. SES carefully removed each soil horizon and stockpiled it separately so that each could be replaced once the Open Space AOC restoration was to take place. Since this material was clean soil it was stockpiled on SA-7.

Once the clean Open Space AOC soils (Horizon A, Horizon B, Horizon C, GDL Cover Soil, and structural fill) were removed and stockpiled, the existing 60 mil linear low-density polyethylene liner was cut, removed, and disposed of. A geotextile was then placed in the Open Space AOC beyond the temporary access ramp and DGA was placed and compacted to allow project equipment to access the area beyond the ramp and reduce the load on the HBW.

6.4 HYDRAULIC BARRIER REINFORCEMENT

As documented in DCB 010A, MRCE designed the HBW reinforcement wall to be installed adjacent to the HBW (see Photos 24 and 25). The HBW reinforcement wall

was NZ38 sheetpile driven to a tip elevation of approximately -47 ft, msl to provide enough structural support for the HBW once excavation was implemented to an elevation of -10 ft, msl in the Bulkhead Deferred Area.

SES' subcontractor, Simpson and Brown, also drove the HBW reinforcement wall steel sheetpile. They used the same vibratory hammer attached to the 75-ton crane as was used to drive the new bulkhead sheetpile. As the new HBW reinforcement wall was driven, SES welded the steel brackets to the tops of both the reinforcement wall and the HBW to minimize deflection of the HBW.

6.5 CAP MATERIALS RESTORATION

Once the Bulkhead Deferred Area excavation was completed and backfilling activities had progressed far enough to fully support the HBW to the west, the restoration of the Open Space AOC cap materials proceeded (see Photos 75 through 99). The key components and sequence of the cap materials restoration were as follows:

- Chromium-impacted materials that had been removed were replaced and graded to match the subgrade elevations and contours from the overall SA-6 South Chromium Remedy.
- HBW reinforcing brackets were removed.
- Utility corridors in the area were restored in the subgrade.
- The multi-layered geosynthetic materials were replaced and welded or stitched to existing like materials outside of the disturbed area.
- Horizon C, B, and A, GDL Cover Soil, and Structural Fill materials initially stripped off and stockpiled for reuse were replaced above the geosynthetic materials.
- The temporary access ramp was removed.
- The topsoil (Horizon A) in the area where vegetation had been replaced or disturbed was seeded and protected with erosion control blankets.

Once the temporary access ramp was removed, it was observed that the existing liner under the ramp adjacent to the HBW was slightly damaged. This material was subsequently removed as originally planned and in accordance with DCB 10A.1. Wood then inspected the liner beyond the extent of the ramp and noted that there

was no further damaged material. The new replacement liner that was installed over the 7,500 SF area was welded to competent existing material.

6.6 GEOSYNTHETIC MATERIAL QC

Similar to the overall SA-6 Chromium Remedy, Wood subcontracted Langan to provide third-party QA/QC for cap geosynthetic materials installation activities. Langan prepared a *Cap Geosynthetics Quality Assurance Report* (see **Appendix L**).

6.7 PIEZOMETER REPLACEMENT

Prior to installation of the cap geosynthetic materials in the Open Space AOC, Wood replaced the previously abandoned piezometer, 124-PZ-20, that had been installed in the Open Space AOC during the site-wide SA-6 South Chromium Remedy (see Photos 79 and 80). Piezometer 124-PZ-20R was installed in virtually the same location as the original piezometer, 124-PZ-20, and was constructed in virtually the same way.

Additionally, the previously abandoned piezometer, 124-PZ-19, that had been installed in the Bulkhead Deferred Area excavation area was replaced. Likewise, piezometer 124-PZ-19R was installed in virtually the same location as the original piezometer and was constructed in virtually the same way. As agreed to by All Parties, piezometer 124-PZ-19R was installed within the clay packer material backfilled in the Bulkhead Deferred Area excavated area between the bulkhead and the western SA-6 South hydraulic barrier wall (see Photos 67 and 68). As provided to the Parties via email on July 9, 2020, the clay packer material has a permeability of $2.59E-06$ centimeters/second which was determined by Wood and Cornerstone to be reasonably proximity to the target value and satisfied the intent of the “clay curtain” material. The purpose of such material is to minimize pore velocity of water flow adjacent to the western SA-6 South hydraulic barrier wall during tidal cycles. Replacement piezometer locations are shown on **Figure 8**.

7.0 CONSTRUCTION PERMITS

The following construction permits were obtained to complete the onsite work. The respective permits and their expiration dates are listed below. Permits that were no longer required were allowed to expire.

Permit	Status	Expiration Date
NJDEP General Permit 11	Obtained 03/13/2020	03/12/2025
USACE Nationwide Permit 33/38	Obtained 01/06/2020	03/18/2022
PVSC SUP No. 31630040	Obtained 11/27/2019	11/27/2020
Soil Erosion and Sedimentation Control Plan	Obtained 05/06/2020	11/06/2023
NJDEP – Treatment Works Approval	Obtained 12/03/2019	12/03/2021

8.0 SITE RESTORATION

Site restoration activities were performed during the demobilization phase of the project. Site restoration activities included the following:

- Construction of a Redi-Rock wall along the exposed face of the hydraulic barrier wall (see Photos 100 and 101);
- Placement and grading of stone as final surface in the Bulkhead Deferred Area (see Photos 104 through 109);
- Installation of erosion control blanket over the topsoil in the Open Space AOC (see Photos 99 and 107);
- Decontamination and demobilization of construction equipment and surplus materials;
- Decontamination, decommissioning and dismantlement of the construction wastewater treatment system piping;
- Removal of temporary office trailers and power/phone service;
- Removal of traffic control features;
- Removal of construction debris;
- Disposal of other non-regulated waste; and
- Seeding of the Open Space AOC cover soils (see Photo 98).

9.0 INSTITUTIONAL CONTROLS

Institutional controls are integral to the Chromium Remedy at SA-6 South and were made a part of the RAOs. The institutional controls are applied in accordance with Subchapter 7 of NJDEP's ARRCs (N.J.A.C. 7:26C).

Institutional controls include deed notices and remedial action permits at specific areas where chromium-impacted soils remain and a groundwater remedial action permit and Classification Exception Area for residual chromium-impacted groundwater. Additional institutional controls for the Open Space AOC include the application of an amended conservation restriction pursuant to the SA-6 South Consent Decrees, which also provide for the transfer of ownership to Jersey City after construction of roads and utility corridors.

9.1 MODIFICATION OF DEED NOTICE NO. 4

Honeywell established Deed Notice No. 4 for chromium-impacted materials remaining along the bulkhead in SA-7 and in the Bulkhead Deferred Area. Deed Notice No. 4 was recorded at Hudson County on November 30, 2017. The Deed Notice No. 4 area is shown on **Figure 3**. Tract 1 is the area on SA-7 and Tract 2 is the Bulkhead Deferred Area. Since the Bulkhead Deferred Area Chromium Remedy is now complete, Honeywell will terminate the existing Deed Notice No. 4 to remove Tract 2, and will submit a new deed notice corresponding to the Tract 1 area. The draft revised deed notice is contained in **Appendix N**. After the final text of the revised deed notice has been reviewed and approved by the NJDEP, and approved by the Court pursuant to the Study Area 6 South Consent Decree, it will be recorded at the office of the Hudson County Register.

The revised deed notice has been prepared in accordance with NJDEP's ARRCs. The deed notice specifies conditions for alteration, improvement, and/or disturbance of the engineering controls, and provide monitoring, maintenance, notification and reporting requirements. These requirements include documentation that applicable worker health and safety laws and regulations are followed during the disturbance and restoration of those controls. The deed notices contain figures and cross-sections showing the engineering controls and details regarding notification and reporting requirements.

9.2 MODIFICATION OF REMEDIAL ACTION SOIL PERMIT

Honeywell also applied for an associated NJDEP Remedial Action Soil Permit for the Deed Notice No. 4 areas. The Remedial Action Soil Permit was issued by NJDEP on June 1, 2018. Once the new Deed Notice No. 4 is recorded, Honeywell will modify the RAP including only the Tract 1 area at SA-7.

9.3 SA-6 SOUTH CONSERVATION RESTRICTION

Conservation Restrictions were prepared for both Open Space Areas at SA-6 North and SA-6 South at the time of property transfer from Jersey City Redevelopment Agency to Bayfront Redevelopment LLC per Paragraph 60(b) of the SA-6 North Consent Decree and at the time of the granting of the option to buy per Paragraph 74(b) of the SA-6 South Consent Decree. These conservation restrictions were recorded on March 25, 2010. As agreed to by Honeywell and the Parties, the amendment of the existing conservation restriction placed on the SA-6 South Open Space AOC was deferred until the Bulkhead Deferred Area Remedy could be completed. Now that the Bulkhead Deferred Area Chromium Remedy is completed, Honeywell will revise the SA-6 South Conservation Restriction area to be limited to the extents of the hydraulic barriers surrounding the Open Space Area. Hackensack River Watershed Land Trust shall be the primary holder of the conservation restrictions.

10.0 REMEDIAL ACTION COSTS

Remediation costs are summarized in the table below:

Activity	Cost (\$1MM)
Construction Costs	\$7,000,000
Soil Disposal	\$838,000
Oversight/Construction Management	\$1,000,000
Total	\$8,838,000

10.1 FINANCIAL ASSURANCE

Long term monitoring for SA 6 North and South is part of the overall financial assurance letter of credit for chromium remediation at SA-5, SA-6 North, SA-6 South, and SA-7 that are subject to the oversight of the Special Master. This letter of credit is issued by the MUFG Union Bank, N.A. in the amount of \$46,946,915 to cover all remediation and long-term monitoring activities at these sites.

11.0 REMEDIATION CLOSE OUT SUMMARY

The Chromium Remedy at the SA-6 South Deferred Area was implemented successfully in accordance with the TRSR, the Administrative Consent Order, the SA-6 South Consent Decree, the 100% Design Report and subsequent DCBs, and other clarifying correspondence between Honeywell and NJDEP and/or Plaintiffs. Therefore, no further remedial actions are required for the SA-6 South Bulkhead Deferred Area. Remediation of other Deferred Areas at SA-6 along Route 440, will be implemented at another time and will be coordinated with the Bayfront Redevelopment Project and/or the widening of Route 440.

The RAOs in the Bulkhead Deferred Area soils were met by implementation of excavation in accordance with the 100% Design Report and the subsequent DCBs. There were no RAOs for shallow groundwater associated with the Bulkhead Deferred Area. With the Bulkhead Deferred Area Chromium Remedy now complete, Honeywell can proceed to revise the existing institutional controls. The LTMP prepared for both SA-6 Sites establishes procedures and schedules for long-term inspection, maintenance, and operation of critical features of the Chromium Remedy. An updated RE Form, Cover Form, and Case Information Documents are submitted with this report as required by the TRSR.

Based on completion of the remedial actions for chromium-impacted soil in the Bulkhead Deferred Area as documented in this RAR Addendum, Honeywell is requesting NJDEP review and approval of this RAR in accordance with Paragraph 23, G of the Consent Judgment. This document will close out remediation of chromium-impacted soil in the Bulkhead Deferred Area. In accordance with paragraph 5 of the Consent Order Entering Consolidated 100% Design for Study Area 6 North and Study Area 6 South, *Jersey City Municipal Utilities Auth. v. Honeywell*, No. 2:05-cv-05955-DMC-JAD (D. N.J. July 9, 2013), ECF No. 448, Honeywell will submit a Consent Order which has appended to it (i) the 100% Design, excluding drawings and (ii) this Final RAR Addendum for entry into Federal Court. Figure 10 shows the Master Schedule for the SA-6 Sites.

12.0 REFERENCES

- AMEC Environment and Infrastructure, Inc., 2015. Long Term Monitoring Plan, Study Area 6 North (Sites 087 and 088) and Study Area 6 South (Sites 073, 124, 125, 134, 140, and 163), Jersey City, New Jersey. February 2018, Revised December 2020.
- AMEC Environment and Infrastructure, Inc., 2013. Chromium Remedy 100% Design Report – Issued for Construction, Study Area 6 North, Sites 087 and 088, Jersey City, New Jersey. June 2013.
- AMEC Environment and Infrastructure, Inc., 2013. Chromium Remedy 100% Design Report – Issued for Construction, Study Area 6 South, Sites 073, 124, 125, 134, 140, and 163, Jersey City, New Jersey. June 2013.
- Administrative Consent Order (ACO) between Honeywell, formerly Allied Signal, Inc., and the New Jersey Department of Environmental Protection, 1993.
- First Amended Consent Decree Regarding Remediation and Redevelopment of Study Area 6 South, entered August 2, 2012.
- Consent Judgment between Honeywell and the NJDEP dated September 7, 2011.
- HydroQual, Inc., 2005. HydroQual, Inc., 2005. Preliminary Deep Overburden Groundwater Report, Honeywell Study Area 7. March 31, 2005, HWEL.002.001.11.
- HydroQual, Inc., 2006. Deep Overburden Groundwater Remedial Alternatives (DORAA) Report Honeywell Study Area 7. June 2006. HWEL.002.001.11.
- HydroQual, Inc., 2007. Final Groundwater Investigation Report, Honeywell Study Area 7. February 2, 2007. HWEL 002.001.11
- MACTEC Engineering and Consulting, Inc., 2008. Supplemental Remedial Investigation Report/ Remedial Action Selection Report/Remedial Action Work Plan for Chromium, Study Area 6 South, Kellogg Street Properties, Jersey City, New Jersey. December 2008.
- NJDEP, 2007; Chromium Policy Memorandum dated February 8, 2007.
- NJDEP, 2012. New Jersey Administrative Code, Chapter 26C Administrative Requirements for the Remediation of Contaminated Sites; last revised May 7, 2012, Trenton, New Jersey.

- NJDEP, 2018a; Technical Requirements for Site Remediation, N.J.A.C. 7:26E; last amended August 6, 2018
- NJDEP, 2018b; Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C. Last amended August 6, 2018
- Settlement Consent Order by and between the Jersey City Entities and Honeywell International Inc., entered April 21, 2008.
- TetraTech, Inc., 2000. Draft Remedial Investigation Report Addendum, Study Area 6 NJDEP Site No. 073, 087, 088, 124, 125, 134, 140, and 163, Jersey City, New Jersey. July 2000.
- Wood Environment & Infrastructure Solutions, Inc., 2020. Perimeter Air Monitoring Plan, Deferred Area Remediation Project, Study Area 6 South, Jersey City, New Jersey, January 2020.

13.0 LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern	GCL	Geosynthetic Composite Layer
ARRCS	Administrative Requirements for Remediation of Contaminated Sites	GDL	Geosynthetic Drainage Layer
ASTM	American Society of Testing Materials	gpm	gallons per minute
bgs	Below ground surface	GPS	Global Positioning System
CASP	Concrete and Asphalt Sampling Plan	GWTP	Groundwater Treatment Plant
CGWES	Contingent Groundwater Extraction System	GVL	Geosynthetic Venting Layer
COC	Contaminants of Concern	HASP	Health and Safety Plan
CWTP	Construction Water Treatment Plant	HBW	Hydraulic Barrier Wall
CY	Cubic Yards	HDPE	High-density polyethylene
DCB	Design Change Bulletins	JCMUA	Jersey City Municipal Utilities Authority
DGA	Dense Grade Aggregate	LTMP	Long Term Monitoring Plan
DKQP	Data of Known Quality Protocols	$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
DMP	Data Management Plan	mg/kg	milligrams per kilogram
DP	Deep Pressurization	MRCE	Mueser Rutledge Consulting Engineers
EA	Each	N.J.A.C.	New Jersey Administrative Code
EDD	Electronic Data Deliverables	NJDEP	New Jersey Department of Environmental Protection
EOR	Engineer of Record		
EPH	Extractable Petroleum Hydrocarbons		

NTU	Nephelometric Turbidity Unit	SPLP	Synthetic Precipitation Leaching Procedure
OSHA	Occupational Safety and Health Administration	SVOC	Semi-Volatile Organic Compounds
PAMP	Perimeter Air Monitoring Plan	TAL	Target Analyte List
PDI	Pre-Design Investigation	TCL	Target Compound List
PPE	Personal Protective Equipment	TRSR	Technical Regulations for Site Remediation
PVC	Polyvinyl Chloride	USEPA	United States Environmental Protection Agency
PVSC	Passaic Valley Sewerage Commission	VOC	Volatile Organic Compound
QA/QC	Quality Assurance/Quality Control		
RAOs	Remedial Action Objectives		
RAR	Remedial Action Report		
RAP	Remedial Action Permit		
RAWP	Remedial Action Work Plan		
RCRA	Resource Conservation and Recovery Act		
RI	Remedial Investigation		
RPMAL	Respirable Particulate Matter Action Level		
RVMS	Remote Vibration Monitoring System		
SA	Study Area		
SF	Square Feet		
SMP	Soil Management Plan		

TABLES

TABLE 1A
Bulkhead Air Sample Tracking Log - Hexavalent Chromium Air Samples
Study Area 6 South
Honeywell International Inc.
Jersey City, New Jersey

Entry	Date	Sample #	Location	Start	Stop	Minutes	Volume		Analytical Results for Hexavalent Chromium (ng/m ³)
1	Friday, June 19, 2020	MD-2-061920-CR6	MD-2	7:55	15:15	440	1734	<	17.0
2	Friday, June 26, 2020	MD-2-062620-CR6	MD-2	7:20	15:05	465	1860	<	16.0
3	Thursday, July 2, 2020	MD-4-070220-CR6	MD-4	8:25	15:00	395	1580	<	19.0
4	Friday, July 10, 2020	MD-4-071020-CR6	MD-4	7:30	11:00	210	630	<	48.0
5	Tuesday, July 14, 2020	MD-3-071420-CR6	MD-3	7:55	16:30	515	2060	<	15.0
6	Wednesday, July 22, 2020	MD-4-072220-CR6	MD-4	7:50	15:30	460	1380	<	22.0
7	Wednesday, July 29, 2020	MD-2-072920-CR6	MD-2	7:45	14:45	420	1260	<	24.0
8	Wednesday, August 5, 2020	MD-1-080520-CR6	MD-1	7:50	14:30	400	1600	<	6.5
9	Wednesday, August 12, 2020	MD-4-081220-CR6	MD-4	7:30	13:15	345	1380	<	7.6
10	Tuesday, August 18, 2020	MD-4-081820-CR6	MD-4	7:50	14:35	405	1620	<	6.4
11	Tuesday, August 25, 2020	MD-4-082520-CR6	MD-4	7:45	13:09	444	1776	<	5.8
12	Tuesday, September 1, 2020	MD-4-090120-CR6	MD-4	7:35	15:00	445	1780		9.0
13	Tuesday, September 8, 2020	MD-3-090820-CR6	MD-3	7:15	15:32	497	1466		13.0
14	Tuesday, September 15, 2020	MD-4-091520-CR6	MD-4	7:50	14:50	420	1680	<	6.2
15	Tuesday, September 22, 2020	MD-4-092220-CR6	MD-4	7:45	15:00	435	1740	<	5.9
16	Tuesday, September 29, 2020	MD-4-092920-CR6	MD-4	8:00	15:19	439	1756	<	5.9
17	Wednesday, October 7, 2020	MD-2-10072020-CR6	MD-4	8:00	14:50	410	1640	<	6.3
18	Wednesday, October 14, 2020	MD-4-10142020-CR6	MD-4	7:40	14:48	428	1712	<	6.0
19	Wednesday, October 21, 2020	MD-4-102120-CR6	MD-4	7:47	14:30	403	1612	<	6.4
20	Friday, October 30, 2020	MD-4-103020-CR6	MD-4	7:00	13:30	390	1560	<	6.6
21	Wednesday, November 4, 2020	MD-2-110420-CR6	MD-2	7:40	14:45	425	1081		6.5
22	Tuesday, November 11, 2020	MD-4-111020-CR6	MD-4	8:00	15:00	420	1680		7.6
23	Tuesday, November 17, 2020	MD-4-111720-CR6	MD-4	8:00	15:00	420	1680	<	6.1
24	Tuesday, November 24, 2020	MD-4-112420-CR6	MD-4	8:37	15:15	398	1592	<	6.5
25	Wednesday, December 2, 2020	MD-4-12220-CR6	MD-4	8:00	15:00	420	1680	<	6.1
26	Wednesday, December 9, 2020	MD-4-120920-CR6	MD-4	8:00	15:05	425	1700	<	5.9

TABLE 1A
Bulkhead Air Sample Tracking Log - Hexavalent Chromium Air Samples
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Entry	Date	Sample #	Location	Start	Stop	Minutes	Volume		Analytical Results for Hexavalent Chromium (ng/m ³)
27	Tuesday, December 15, 2020	MD-4-121520-CR6	MD-4	7:55	14:51	416	1664	<	6.1
28	Tuesday, December 22, 2020	MD-2-122220-CR6	MD-2	7:30	17:10	580	1311	<	7.7
29	Thursday, January 7, 2021	MD-4-010721-CR6	MD-4	7:48	15:00	432	1728	<	5.9
30	Tuesday, January 12, 2021	MD-4-011221-CR6	MD-4	8:00	14:57	417	1668	<	6.1

Notes:

Bold concentrations are detections

ng/m³ : nanograms per cubic meter

TABLE 1B
Bulkhead Air Sample Tracking Log - Total Respirable Particulates Air Samples
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Entry	Date	Sample #	Location	Start	Stop	Minutes	Volume		Analytical Results for Respirable Particulate ($\mu\text{g}/\text{m}^3$)
1	Friday, June 19, 2020	MD-2-061920-RP	MD-2	7:55	15:15	440	1320	<	38.0
2	Friday, June 26, 2020	MD-2-062620-RP	MD-2	7:20	15:05	465	1395	<	36.0
3	Thursday, July 2, 2020	MD-4-070220-RP	MD-4	8:25	15:00	395	1185	<	42.0
4	Friday, July 10, 2020	MD-4-071020-RP	MD-4	7:30	11:00	210	840	<	60.0
5	Tuesday, July 14, 2020	MD-3-071420-RP	MD-3	7:55	16:30	515	1545		42.0
6	Wednesday, July 22, 2020	MD-4-072220-RP	MD-4	7:50	15:30	460	1840	<	27.0
7	Wednesday, July 29, 2020	MD-2-072920-RP	MD-2	7:45	14:45	420	1050	<	48.0
8	Wednesday, August 5, 2020	MD-1-080520-RP	MD-1	7:50	14:30	400	1024	<	98.0
9	Wednesday, August 12, 2020	MD-4-081220-RP	MD-4	7:30	13:15	345	900	<	11.0
10	Tuesday, August 18, 2020	MD-4-081820-RP	MD-4	7:50	14:35	405	1057	<	95.0
11	Tuesday, August 25, 2020	MD-4-082520-RP	MD-4	7:45	13:09	444	1137	<	88.0
12	Tuesday, September 1, 2020	MD-4-090120-RP	MD-4	7:35	15:00	445	1164	<	86.0
13	Tuesday, September 8, 2020	MD-4-090820-RP	MD-3	7:15	15:32	497	1081	<	93.0
14	Tuesday, September 15, 2020	MD-4-091520-RP	MD-4	7:50	14:50	420	1088	<	92.0
15	Tuesday, September 22, 2020	MD-4-092220-RP	MD-4	7:45	15:00	435	1133	<	88.0
16	Tuesday, September 29, 2020	MD-4-092920-RP	MD-4	8:00	15:19	439	1137	<	88.0
17	Wednesday, October 7, 2020	MD-2-1007202RP	MD-4	8:00	14:50	410	1070	<	93.0
18	Wednesday, October 14, 2020	MD-4-1014202RP	MD-4	7:40	14:48	428	1087	<	92.0
19	Wednesday, October 21, 2020	MD-4-102120-RP	MD-4	7:47	14:30	403	1005	<	100.0
20	Friday, October 30, 2020	MD-4-103020-RP	MD-4	7:00	13:30	390	1024	<	98.0
21	Wednesday, November 4, 2020	MD-2-110420-RP	MD-2	7:40	14:45	425	1692	<	93.0
22	Tuesday, November 11, 2020	MD-4-111020-RP	MD-4	8:00	15:00	420	1079	<	93.0
23	Tuesday, November 17, 2020	MD-4-111720-RP	MD-4	8:00	15:00	420	1056	<	95.0
24	Tuesday, November 24, 2020	MD-4-112420-RP	MD-4	8:37	15:15	398	1017	<	98.0
25	Wednesday, December 2, 2020	MD-4-12220-CRP	MD-4	8:00	15:00	420	1079	<	93.0
26	Wednesday, December 9, 2020	MD-4-120920-RP	MD-4	8:00	15:05	425	1086	<	92.0

TABLE 1B
Bulkhead Air Sample Tracking Log - Total Respirable Particulates Air Samples
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Entry	Date	Sample #	Location	Start	Stop	Minutes	Volume		Analytical Results for Respirable Particulate ($\mu\text{g}/\text{m}^3$)
27	Tuesday, December 15, 2020	MD-4-121520-RP	MD-4	7:55	14:51	416	1063	<	94.0
28	Tuesday, December 22, 2020	MD-2-122220-RP	MD-2	7:30	17:10	580	1224	<	82.0
29	Thursday, January 7, 2021	MD-4-010721-RP	MD-4	7:48	15:00	432	1231	<	81.0
30	Tuesday, January 12, 2021	MD-4-011221-RP	MD-4	8:00	14:57	417	1130	<	88.0

Note:
 $\mu\text{g}/\text{m}^3$: micrograms per cubic meter

TABLE 2A
Concrete Sample Results - VOCs
Study Area 6 South
Honeywell International Inc.
Jersey City, New Jersey

Location			073-WC-109	073-WC-110	073-WC-111	073-WC-112	073-WC-113	073-WC-114	073-WC-115	
Sample ID			073-WC-109-102119	073-WC-110-102119	073-WC-111-102119	073-WC-112-102119	073-WC-113-102119	073-WC-114-120619	073-WC-115-120619	
Lab Sample ID			JC97156-1	JC97156-2	JC97156-3	JC97156-4	JC97156-5	JC99775-1	JC99775-2	
Date			10/21/2019	10/21/2019	10/21/2019	10/21/2019	10/21/2019	12/6/2019	12/6/2019	
Chemical	Units	RDC	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	mg/kg	160000	0.0021	U	0.0019	U	0.0021	U	0.0021	U
1,1,2,2-Tetrachloroethane	mg/kg	1	0.0021	U	0.0019	U	0.0021	U	0.0021	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg	NC	0.0052	U	0.0048	U	0.0052	U	0.0053	U
1,1,2-Trichloroethane	mg/kg	2	0.0021	U	0.0019	U	0.0021	U	0.0021	U
1,1-Dichloroethane	mg/kg	8	0.001	U	0.00096	U	0.001	U	0.0011	U
1,1-Dichloroethene	mg/kg	11	0.001	U	0.00096	U	0.001	U	0.0011	U
1,2,3-Trichlorobenzene	mg/kg	NC	0.0052	U	0.0048	U	0.0052	U	0.0053	U
1,2,4-Trichlorobenzene	mg/kg	73	0.0052	U	0.0048	U	0.0052	U	0.0053	U
1,2-Dibromo-3-Chloropropane	mg/kg	0.08	0.0021	U	0.0019	U	0.0021	U	0.0021	U
1,2-Dibromoethane	mg/kg	0.008	0.001	U	0.00096	U	0.001	U	0.0011	U
1,2-Dichlorobenzene	mg/kg	5300	0.001	U	0.00096	U	0.001	U	0.0011	U
1,2-Dichloroethane	mg/kg	0.9	0.001	U	0.00096	U	0.001	U	0.0011	U
1,2-Dichloropropane	mg/kg	2	0.0021	U	0.0019	U	0.0021	U	0.0021	U
1,3-Dichlorobenzene	mg/kg	5300	0.001	U	0.00096	U	0.001	U	0.0011	U
1,4-Dichlorobenzene	mg/kg	5	0.001	U	0.00096	U	0.001	U	0.0011	U
2-Butanone	mg/kg	3100	0.01	U	0.0096	U	0.01	U	0.011	U
2-Hexanone	mg/kg	NC	0.0052	U	0.0048	U	0.0052	U	0.0053	U
4-Methyl-2-Pentanone	mg/kg	NC	0.0052	U	0.0048	U	0.0052	U	0.0053	U
Acetone	mg/kg	70000	0.01	U	0.0057	J	0.0072	J	0.0067	J
Benzene	mg/kg	2	0.00052	U	0.00048	U	0.00052	U	0.00053	U
Bromochloromethane	mg/kg	NC	0.0052	U	0.0048	U	0.0052	U	0.0053	U
Bromodichloromethane	mg/kg	1	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Bromoform	mg/kg	81	0.0052	U	0.0048	U	0.0052	U	0.0053	U
Bromomethane	mg/kg	25	0.0052	U	0.0048	U	0.0052	U	0.0053	U
Carbon Disulfide	mg/kg	7800	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Carbon Tetrachloride	mg/kg	2	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Chlorobenzene	mg/kg	510	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Chloroethane	mg/kg	220	0.0052	U	0.0048	U	0.0052	U	0.0053	U
Chloroform	mg/kg	0.6	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Chloromethane	mg/kg	4	0.0052	U	0.0048	U	0.0052	U	0.0053	U
cis-1,2-Dichloroethene	mg/kg	230	0.001	U	0.00096	U	0.001	U	0.0011	U
cis-1,3-Dichloropropene	mg/kg	2	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Cyclohexane	mg/kg	NC	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Dibromochloromethane	mg/kg	3	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Dichlorodifluoromethane	mg/kg	490	0.0052	U	0.0048	U	0.0052	U	0.0053	U
Ethylbenzene	mg/kg	7800	0.001	U	0.00096	U	0.001	U	0.0011	U
Isopropylbenzene	mg/kg	NC	0.0021	U	0.0019	U	0.0021	U	0.0021	U
m&p-Xylenes	mg/kg	NC	0.001	U	0.00096	U	0.001	U	0.0011	U
Methyl Acetate	mg/kg	78000	0.0052	U	0.0048	U	0.0052	U	0.0053	U
Methyl Tert-Butyl Ether	mg/kg	110	0.001	U	0.00096	U	0.001	U	0.0011	U
Methylcyclohexane	mg/kg	NC	0.0021	U	0.0019	U	0.0021	U	0.0021	U
Methylene Chloride	mg/kg	46	0.0052	U	0.0012	J	0.0012	J	0.0012	J

TABLE 2A
Concrete Sample Results - VOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location			073-WC-109		073-WC-110		073-WC-111		073-WC-112		073-WC-113		073-WC-114		073-WC-115	
Sample ID			073-WC-109-102119		073-WC-110-102119		073-WC-111-102119		073-WC-112-102119		073-WC-113-102119		073-WC-114-120619		073-WC-115-120619	
Lab Sample ID			JC97156-1		JC97156-2		JC97156-3		JC97156-4		JC97156-5		JC99775-1		JC99775-2	
Date			10/21/2019		10/21/2019		10/21/2019		10/21/2019		10/21/2019		12/6/2019		12/6/2019	
Chemical	Units	RDC	CONC	Q												
o-Xylene	mg/kg	NC	0.001	U	0.00096	U	0.001	U	0.001	U	0.0011	U	0.001	U	0.001	U
Styrene	mg/kg	90	0.0021	U	0.0019	U	0.0021	U	0.002	U	0.0021	U	0.0021	U	0.002	U
Tetrachloroethene	mg/kg	43	0.0021	U	0.0019	U	0.0021	U	0.002	U	0.0021	U	0.0021	U	0.002	U
Toluene	mg/kg	6300	0.001	U	0.00096	U	0.001	U	0.001	U	0.0011	U	0.001	U	0.001	U
Total Xylenes	mg/kg	12000	0.001	U	0.00096	U	0.001	U	0.001	U	0.0011	U	0.001	U	0.001	U
trans-1,2-Dichloroethene	mg/kg	300	0.001	U	0.00096	U	0.001	U	0.001	U	0.0011	U	0.001	U	0.001	U
trans-1,3-Dichloropropene	mg/kg	2	0.0021	U	0.0019	U	0.0021	U	0.002	U	0.0021	U	0.0021	U	0.002	U
Trichloroethene	mg/kg	3	0.001	U	0.00096	U	0.001	U	0.001	U	0.0011	U	0.0106	U	0.0189	U
Trichlorofluoromethane	mg/kg	23000	0.0052	U	0.0048	U	0.0052	U	0.0051	U	0.0053	U	0.0052	U	0.005	U
Vinyl Chloride	mg/kg	0.7	0.0021	U	0.0019	U	0.0021	U	0.002	U	0.0021	U	0.0021	U	0.002	U
Total TICs, Volatile	mg/kg	NC	0	NJ	0	NJ	0	NJ	0.0063	NJ	0	NJ	0	NJ	0	NJ

Notes:

RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

NC: No criterion established

Bold concentrations exceed the RDC

Depths reported in feet below ground surface

J: Estimated concentration

N: Negated by laboratory or data validator

U: Not detected above method detection limit

Results with a value of "0" indicates no TICs were detected

N: Indicates presumptive evidence of a compound

TABLE 2B
Concrete Sample Results - SVOCs
Study Area 6 South
Honeywell International Inc.
Jersey City, New Jersey

Location			073-WC-109		073-WC-110		073-WC-111		073-WC-112		073-WC-113		073-WC-114		073-WC-115	
Sample ID			073-WC-109-102119		073-WC-110-102119		073-WC-111-102119		073-WC-112-102119		073-WC-113-102119		073-WC-114-120619		073-WC-115-120619	
Lab Sample ID			JC97156-1		JC97156-2		JC97156-3		JC97156-4		JC97156-5		JC99775-1		JC99775-2	
Date			10/21/2019		10/21/2019		10/21/2019		10/21/2019		10/21/2019		12/6/2019		12/6/2019	
Chemical	Units	RDC	CONC	Q												
1,1'-Biphenyl	mg/kg	61	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
1,2,4,5-Tetrachlorobenzene	mg/kg	NC	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
1,4-Dioxane	mg/kg	NC	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
2,2'-Oxybis(1-Chloropropane)	mg/kg	23	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
2,3,4,6-Tetrachlorophenol	mg/kg	NC	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
2,4,5-Trichlorophenol	mg/kg	6100	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
2,4,6-Trichlorophenol	mg/kg	19	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
2,4-Dichlorophenol	mg/kg	180	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
2,4-Dimethylphenol	mg/kg	1200	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
2,4-Dinitrophenol	mg/kg	120	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
2,4-Dinitrotoluene	mg/kg	0.7	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
2,6-Dinitrotoluene	mg/kg	0.7	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
2-Chloronaphthalene	mg/kg	NC	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
2-Chlorophenol	mg/kg	310	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
2-Methylnaphthalene	mg/kg	230	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
2-Methylphenol	mg/kg	310	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
2-Nitroaniline	mg/kg	39	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
2-Nitrophenol	mg/kg	NC	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
3,3'-Dichlorobenzidine	mg/kg	1	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
3-Nitroaniline	mg/kg	NC	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
4,6-Dinitro-2-Methylphenol	mg/kg	6	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
4-Bromophenyl Phenyl Ether	mg/kg	NC	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
4-Chloro-3-Methylphenol	mg/kg	NC	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
4-Chloroaniline	mg/kg	NC	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
4-Chlorophenyl Phenyl Ether	mg/kg	NC	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
4-Nitroaniline	mg/kg	NC	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
4-Nitrophenol	mg/kg	NC	0.35	U	0.34	U	0.34	U	0.33	U	0.35	U	0.34	U	0.35	U
Acenaphthene	mg/kg	3400	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
Acenaphthylene	mg/kg	NC	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
Acetophenone	mg/kg	2	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
Anthracene	mg/kg	17000	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
Atrazine	mg/kg	210	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Benzaldehyde	mg/kg	6100	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
Benzo(A)Anthracene	mg/kg	5	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.0164	J	0.035	U
Benzo(A)Pyrene	mg/kg	0.5	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.0171	J	0.035	U
Benzo(B)Fluoranthene	mg/kg	5	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.0203	J	0.035	U
Benzo(G,H,I)perylene	mg/kg	380000	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
Benzo(K)Fluoranthene	mg/kg	45	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
bis-(2-Chloroethoxy)Methane	mg/kg	NC	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
bis-(2-Chloroethyl)Ether	mg/kg	0.4	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
bis-(2-Ethylhexyl)Phthalate	mg/kg	35	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Butylbenzyl Phthalate	mg/kg	1200	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U

TABLE 2B
Concrete Sample Results - SVOCs
Study Area 6 South
Honeywell International Inc.
Jersey City, New Jersey

Location		073-WC-109	073-WC-110	073-WC-111	073-WC-112	073-WC-113	073-WC-114	073-WC-115								
Sample ID		073-WC-109-102119	073-WC-110-102119	073-WC-111-102119	073-WC-112-102119	073-WC-113-102119	073-WC-114-120619	073-WC-115-120619								
Lab Sample ID		JC97156-1	JC97156-2	JC97156-3	JC97156-4	JC97156-5	JC99775-1	JC99775-2								
Date		10/21/2019	10/21/2019	10/21/2019	10/21/2019	10/21/2019	12/6/2019	12/6/2019								
Chemical	Units	RDC	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q				
Caprolactam	mg/kg	31000	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Carbazole	mg/kg	24	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Chrysene	mg/kg	450	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.0138	J	0.035	U
Dibenzo(a,h)Anthracene	mg/kg	0.5	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
Dibenzofuran	mg/kg	NC	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Diethyl Phthalate	mg/kg	49000	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Dimethyl Phthalate	mg/kg	NC	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Di-n-Butyl Phthalate	mg/kg	6100	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Di-n-Octyl Phthalate	mg/kg	2400	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Fluoranthene	mg/kg	2300	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.0238	J	0.035	U
Fluorene	mg/kg	2300	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
Hexachlorobenzene	mg/kg	0.3	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Hexachlorobutadiene	mg/kg	6	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
Hexachlorocyclopentadiene	mg/kg	45	0.35	U	0.34	U	0.34	U	0.33	U	0.35	U	0.34	U	0.35	U
Hexachloroethane	mg/kg	12	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
Indeno(1,2,3-Cd)Pyrene	mg/kg	5	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.034	U	0.035	U
Isophorone	mg/kg	510	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
m,p-Cresol	mg/kg	NC	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
Naphthalene	mg/kg	6	0.035	U	0.034	U	0.034	U	0.0116	J	0.035	U	0.034	U	0.035	U
Nitrobenzene	mg/kg	5	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
n-Nitroso-di-n-Propylamine	mg/kg	0.2	0.07	U	0.067	U	0.069	U	0.067	U	0.071	U	0.069	U	0.07	U
n-Nitrosodiphenylamine	mg/kg	99	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U
Pentachlorophenol	mg/kg	0.9	0.14	U	0.13	U	0.14	U	0.13	U	0.14	U	0.14	U	0.14	U
Phenanthrene	mg/kg	NC	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.0208	J	0.035	U
Phenol	mg/kg	18000	0.07	U	0.067	U	0.069	U	0.0633	J	0.071	U	0.069	U	0.07	U
Pyrene	mg/kg	1700	0.035	U	0.034	U	0.034	U	0.033	U	0.035	U	0.0248	J	0.035	U
Total TICs SVOC	mg/kg	NC	1.37	NJ	0	NJ	0	NJ	0.69	NJ	0	NJ	2.39	NJ	1.98	NJ

Notes:

RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

NC: No criterion established

Depths reported in feet below ground surface

J: Estimated concentration

N: Negated by laboratory or data validator

U: Not detected above method detection limit

Results with a value of "0" indicates no TICs were detected

N: Indicates presumptive evidence of a compound

TABLE 2C
Concrete Sample Results - Metals
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location			073-WC-109		073-WC-110		073-WC-111		073-WC-112		073-WC-113		073-WC-114		073-WC-115	
Sample ID			073-WC-109-102119		073-WC-110-102119		073-WC-111-102119		073-WC-112-102119		073-WC-113-102119		073-WC-114-120619		073-WC-115-120619	
Lab Sample ID			JC97156-1		JC97156-2		JC97156-3		JC97156-4		JC97156-5		JC99775-1		JC99775-2	
Date			10/21/2019		10/21/2019		10/21/2019		10/21/2019		10/21/2019		12/6/2019		12/6/2019	
Chemical	Units	RDC	CONC	Q												
Aluminum	mg/kg	78000	7000		4570		4750		6270		8060		7260		6100	
Antimony	mg/kg	31	2	U	2.1	U	2.1	U	2	U	2.1	U	2.2	U	2.1	U
Arsenic	mg/kg	19	2.1		2.4		3.9		3.2		16.7		3.9		3.1	
Barium	mg/kg	16000	31.2		27.2		36.4		40.4		118		42.3		37.7	
Beryllium	mg/kg	16	0.22		0.21	U	0.21	U	0.26		0.95		0.22	U	0.21	U
Cadmium	mg/kg	78	0.51	U	0.52	U	0.54	U	0.51	U	0.52	U	0.54	U	0.53	U
Calcium	mg/kg	NC	72200		65800		94400		87300		61800		103000		118000	
Chromium	mg/kg	120000	35.3		59.7		55.3		15.8		25.6		24.6		21.2	
Cobalt	mg/kg	1600	10.2		5.2	U	5.4	U	5.1	U	6.2		5.4	U	5.3	U
Copper	mg/kg	3100	24.3		11		6.2		19.1		28.4		11.9		8.6	
Iron	mg/kg	NC	13200		7780		6110		9340		10400		8150		6750	
Lead	mg/kg	400	10.9		6.4		2.2		6.9		19.3		9.9		5.2	
Magnesium	mg/kg	NC	4580		2870		3340		3840		2570		15500		27600	
Manganese	mg/kg	11000	190		103		132		150		86.7		155		142	
Mercury	mg/kg	23	0.031	U	0.033	U	0.033	U	0.031	U	0.032	U	0.045		0.033	U
Nickel	mg/kg	1600	16.8		24.3		4.4		7.3		14.5		8.7		8.3	
Potassium	mg/kg	NC	1000	U	1000	U	1100	U	1000	U	1000	U	1100	U	1160	
Selenium	mg/kg	390	2	U	2.1	U	2.1	U	2	U	2.1	U	11	U	<u>21</u>	<u>U</u>
Silver	mg/kg	390	<u>2.6</u>	<u>U</u>	<u>2.6</u>	<u>U</u>	<u>2.7</u>	<u>U</u>	<u>2.5</u>	<u>U</u>	<u>2.6</u>	<u>U</u>	<u>2.7</u>	<u>U</u>	<u>5.3</u>	<u>U</u>
Sodium	mg/kg	NC	1000	U	1000	U	1100	U	1000	U	1000	U	1100	U	1100	U
Thallium	mg/kg	NC	1	U	1	U	1.1	U	1	U	1	U	<u>5.4</u>	<u>U</u>	<u>11</u>	<u>U</u>
Vanadium	mg/kg	78	25.7		12.2		9.2		23.4		24.9		19.6		11.2	
Zinc	mg/kg	23000	60.1		15.5		54.8		26		71.6		26.2		19.3	

Notes:
 RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].
 NC: No criterion established
Bold concentrations exceed the RDC
Italicized values not detected; reporting limit exceeds criteria
 Depths reported in feet below ground surface
 U: Not detected above method detection limit

TABLE 2D
Concrete Sample Results - Pesticides and PCBs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location			073-WC-109	073-WC-110	073-WC-111	073-WC-112	073-WC-113	073-WC-114	073-WC-115					
Sample ID			073-WC-109-102119	073-WC-110-102119	073-WC-111-102119	073-WC-112-102119	073-WC-113-102119	073-WC-114-120619	073-WC-115-120619					
Lab Sample ID			JC97156-1	JC97156-2	JC97156-3	JC97156-4	JC97156-5	JC99775-1	JC99775-2					
Date			10/21/2019	10/21/2019	10/21/2019	10/21/2019	10/21/2019	12/6/2019	12/6/2019					
Chemical	Units	RDC	CONC	Q	CONC	Q	CONC	Q	CONC	Q				
Pesticides														
4,4'-DDD	mg/kg	3	0.0007	U	0.00068	U	0.00068	U	0.00072	U	0.00068	U	0.00071	U
4,4'-DDE	mg/kg	2	0.0007	U	0.00068	U	0.0015	U	0.00063	U	0.00072	U	0.00068	U
4,4'-DDT	mg/kg	2	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Aldrin	mg/kg	0.04	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Alpha-BHC	mg/kg	0.1	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Alpha-Chlordane	mg/kg	0.2	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Beta-BHC	mg/kg	0.4	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Chlordane	mg/kg	0.2	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Delta-BHC	mg/kg	NC	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Dieldrin	mg/kg	0.04	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Endosulfan I	mg/kg	470	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Endosulfan II	mg/kg	470	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Endosulfan Sulfate	mg/kg	470	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Endrin	mg/kg	23	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Endrin Aldehyde	mg/kg	NC	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Endrin Ketone	mg/kg	NC	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Gamma-BHC (Lindane)	mg/kg	0.4	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Heptachlor	mg/kg	0.1	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Heptachlor Epoxide	mg/kg	0.07	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
Methoxychlor	mg/kg	390	0.0014	U	0.0014	U	0.0014	U	0.0013	U	0.0014	U	0.0014	U
Toxaphene	mg/kg	0.6	0.017	U	0.017	U	0.017	U	0.016	U	0.018	U	0.017	U
trans-Chlordane	mg/kg	NC	0.0007	U	0.00068	U	0.00068	U	0.00063	U	0.00072	U	0.00068	U
PCBs														
Aroclor-1016	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.031	U	0.036	U	0.034	U
Aroclor-1221	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.031	U	0.036	U	0.034	U
Aroclor-1232	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.031	U	0.036	U	0.034	U
Aroclor-1242	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.0777	U	0.036	U	0.034	U
Aroclor-1248	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.031	U	0.036	U	0.034	U
Aroclor-1254	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.031	U	0.036	U	0.034	U
Aroclor-1260	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.031	U	0.036	U	0.034	U
Aroclor-1262	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.031	U	0.036	U	0.773	U
Aroclor-1268	mg/kg	NC	0.034	U	0.034	U	0.034	U	0.031	U	0.036	U	0.034	U
TOTAL PCBs	mg/kg	0.2	0.034	U	0.034	U	0.034	U	0.0777	U	0.036	U	0.773	U

Notes:
 RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].
 NC: No criterion established
Bold concentrations exceed the RDC
 Depths reported in feet below ground surface
 U: Not detected above method detection limit

TABLE 2E
Concrete Sample Results - EPH/Petroleum Hydrocarbons
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location			073-WC-109		073-WC-110		073-WC-111		073-WC-112		073-WC-113		073-WC-114		073-WC-115	
Sample ID			073-WC-109-102119		073-WC-110-102119		073-WC-111-102119		073-WC-112-102119		073-WC-113-102119		073-WC-114-120619		073-WC-115-120619	
Lab Sample ID			JC97156-1		JC97156-2		JC97156-3		JC97156-4		JC97156-5		JC99775-1		JC99775-2	
Date			10/21/2019		10/21/2019		10/21/2019		10/21/2019		10/21/2019		12/6/2019		12/6/2019	
Chemical	Units	RDC	CONC	Q												
C28-C40 Petroleum Hydrocarbons	mg/kg	NC	19		6.9	U	6.9	U	6.8	U	6.9	U	40.6		26.1	
EPH (C9-C28)	mg/kg	NC	6.8	U	6.9	U	6.9	U	6.8	U	6.9	U	33.4		14.2	
Total EPH (C9-C40)	mg/kg	NC	19		6.9	U	6.9	U	6.8	U	6.9	U	74.1		40.4	

Notes:

RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

NC: No criterion established

Depths reported in feet below ground surface

U: Not detected above method detection limit

TABLE 2F
Concrete Sample Results - General Chemistry
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location			073-WC-109	073-WC-110	073-WC-111	073-WC-112	073-WC-113	073-WC-114	073-WC-115						
Sample ID			073-WC-109-102119	073-WC-110-102119	073-WC-111-102119	073-WC-112-102119	073-WC-113-102119	073-WC-114-120619	073-WC-115-120619						
Lab Sample ID			JC97156-1	JC97156-2	JC97156-3	JC97156-4	JC97156-5	JC99775-1	JC99775-2						
Date			10/21/2019	10/21/2019	10/21/2019	10/21/2019	10/21/2019	12/6/2019	12/6/2019						
Chemical	Units	RDC	CONC	Q	CONC	Q	CONC	Q	CONC	Q					
Hexavalent Chromium	mg/kg	20	4.9		5.1		7.2		2.1		4.7		0.53		0.48

Notes:

RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

NC: No criterion established

Depths reported in feet below ground surface

TABLE 2G
Concrete Sample Results - TCLP
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location		073-WC-109	073-WC-110	073-WC-111	073-WC-112	073-WC-113	073-WC-114	073-WC-115						
Sample ID		073-WC-109-102119	073-WC-110-102119	073-WC-111-102119	073-WC-112-102119	073-WC-113-102119	073-WC-114-120619	073-WC-115-120619						
Lab Sample ID		JC97156-1A	JC97156-2A	JC97156-3A	JC97156-4A	JC97156-5A	JC99775-1A	JC99775-2A						
Date		10/21/2019	10/21/2019	10/21/2019	10/21/2019	10/21/2019	12/6/2019	12/6/2019						
Chemical	Units	RCRA Toxicity Characteristics (40 CFR261.24)	CONC		CONC		CONC		CONC		CONC		CONC	
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		
Arsenic	mg/L	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Barium	mg/L	100	1	U	1	U	1	U	1	U	1	U	1	U
Cadmium	mg/L	1	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Chromium	mg/L	5	0.05	U	0.073		0.18		0.05	U	0.11		0.05	U
Lead	mg/L	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Mercury	mg/L	0.2	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Selenium	mg/L	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	mg/L	5	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U

Notes:
 Depths reported in feet below ground surface
 CONC: Concentration reported in milligrams per liter (mg/L)
 Q: Data qualifier assigned by laboratory or data validator
 U: Not detected above method detection limit

TABLE 3A
Soil Waste Class Analysis - VOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

			Location ID	073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15	
			Client Sample ID	073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002	
			Lab Sample ID	JC97631-1		JC97631-2		JC97631-3		JC97631-4		JC97631-5		JC99893-1		JC99893-2		JC99893-3		JC99893-4		JC99893-5		JC99893-6		JC99893-7	
			Date Sampled	10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019	
Method	Parameter	Units	RDC	CONC	Q																						
SW8260	1,1,1-Trichloroethane	mg/kg	160000	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	1,1,2,2-Tetrachloroethane	mg/kg	1	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg	NC	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	1,1,2-Trichloroethane	mg/kg	2	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	1,1-Dichloroethane	mg/kg	8	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	1,1-Dichloroethene	mg/kg	11	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	1,2,3-Trichlorobenzene	mg/kg	NC	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	1,2,4-Trichlorobenzene	mg/kg	73	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	1,2-Dibromo-3-Chloropropane	mg/kg	0.08	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	1,2-Dibromoethane	mg/kg	0.008	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	1,2-Dichlorobenzene	mg/kg	5300	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	1,2-Dichloroethane	mg/kg	0.9	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	1,2-Dichloropropane	mg/kg	2	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	1,3-Dichlorobenzene	mg/kg	5300	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	1,4-Dichlorobenzene	mg/kg	5	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	2-Butanone	mg/kg	3100	0.0099	U	0.013	U	0.013	U	0.012	U	0.014	U	0.013	U	0.014	U	0.011	U	0.012	U	0.01	U	0.014	U	0.013	U
SW8260	2-Hexanone	mg/kg	NC	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	4-Methyl-2-Pentanone	mg/kg	NC	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	Acetone	mg/kg	70000	0.0099	U	0.0091	J	0.0098	J	0.0316		0.0129	J	0.013	U	0.0181	U	0.0135	U	0.012	U	0.01	U	0.014	U	0.0303	U
SW8260	Benzene	mg/kg	2	0.00049	U	0.00066	U	0.00067	U	0.00062	U	0.00071	U	0.00063	U	0.00068	U	0.00057	U	0.00059	U	0.00051	U	0.0007	U	0.00063	U
SW8260	Bromochloromethane	mg/kg	NC	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	Bromodichloromethane	mg/kg	1	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Bromoform	mg/kg	81	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	Bromomethane	mg/kg	25	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	Carbon Disulfide	mg/kg	7800	0.002	U	0.0043		0.0012	J	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0015	J	0.0024	U	0.001	J	0.0028	U	0.0025	U
SW8260	Carbon Tetrachloride	mg/kg	2	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Chlorobenzene	mg/kg	510	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Chloroethane	mg/kg	220	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	Chloroform	mg/kg	0.6	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Chloromethane	mg/kg	4	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	cis-1,2-Dichloroethene	mg/kg	230	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	cis-1,3-Dichloropropene	mg/kg	2	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Cyclohexane	mg/kg	NC	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Dibromochloromethane	mg/kg	3	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Dichlorodifluoromethane	mg/kg	490	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	Ethylbenzene	mg/kg	7800	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	Isopropylbenzene	mg/kg	NC	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	m&p-Xylenes	mg/kg	NC	0.00099	U	0.0037		0.0022		0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0012	J
SW8260	Methyl Acetate	mg/kg	78000	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	Methyl Tert-Butyl Ether	mg/kg	110	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	Methylcyclohexane	mg/kg	NC	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Methylene Chloride	mg/kg	46	0.0025	J	0.0022	J	0.0026	J	0.0019	J	0.0032	J	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	o-Xylene	mg/kg	NC	0.00099	U	0.0029		0.0019		0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	Styrene	mg/kg	90	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Tetrachloroethene	mg/kg	43	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Toluene	mg/kg	6300	0.00099	U	0.0013	U	0.0013																			

TABLE 3A
Soil Waste Class Analysis - VOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15	
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002	
Lab Sample ID				JC97631-1		JC97631-2		JC97631-3		JC97631-4		JC97631-5		JC99893-1		JC99893-2		JC99893-3		JC99893-4		JC99893-5		JC99893-6		JC99893-7	
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019	
Method	Parameter	Units	RDC	CONC	Q																						
SW8260	trans-1,3-Dichloropropene	mg/kg	2	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Trichloroethene	mg/kg	3	0.00099	U	0.0013	U	0.0013	U	0.0012	U	0.0014	U	0.0013	U	0.0014	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	0.0013	U
SW8260	Trichlorofluoromethane	mg/kg	23000	0.0049	U	0.0066	U	0.0067	U	0.0062	U	0.0071	U	0.0063	U	0.0068	U	0.0057	U	0.0059	U	0.0051	U	0.007	U	0.0063	U
SW8260	Vinyl Chloride	mg/kg	0.7	0.002	U	0.0026	U	0.0027	U	0.0025	U	0.0028	U	0.0025	U	0.0027	U	0.0023	U	0.0024	U	0.002	U	0.0028	U	0.0025	U
SW8260	Total TICs, Volatile	mg/kg	NC	0	NJ	0	NJ	0.017	NJ	0	NJ	0.0099	NJ	0	NJ												

Notes:
 RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].
 NC: No criterion established
Bold and underlined concentrations exceed the RDC
Italicized values not detected; reporting limit exceeds criteria
 CONC: Concentration reported in milligrams per kilogram (mg/kg)
 J: Estimated concentration
 Q: Data qualifier assigned by laboratory or data validator
 N: Indicates presumptive evidence of a compound
 U: Not detected above method detection limit
 Results with a value of "0" indicates no TICs were detected
 VOCs: Volatile Organic Compounds

TABLE 3B
Soil Waste Class Analysis - SVOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15	
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002	
Lab Sample ID				JC97631-1		JC97631-2		JC97631-3		JC97631-4		JC97631-5		JC99893-1		JC99893-2		JC99893-3		JC99893-4		JC99893-5		JC99893-6		JC99893-7	
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019	
Method	Parameter	Units	RDC	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
SW8270	1,1'-Biphenyl	mg/kg	61	0.073	U	0.082	U	0.096	U	0.0232	J	0.08	U	0.0062	J	0.0131	J	0.081	U	0.087	U	0.081	U	0.0547	J	0.0156	J
SW8270	1,2,4,5-Tetrachlorobenzene	mg/kg	NC	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	1,4-Dioxane	mg/kg	NC	0.037	U	0.041	U	0.048	U	0.046	U	0.04	U	0.036	U	0.045	U	0.041	U	0.043	U	0.041	U	0.04	U	0.038	U
SW8270	2,2'-Oxybis(1-Chloropropane)	mg/kg	23	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	2,3,4,6-Tetrachlorophenol	mg/kg	NC	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	2,4,5-Trichlorophenol	mg/kg	6100	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	2,4,6-Trichlorophenol	mg/kg	19	0.18	U	<u>0.21</u>	<u>U</u>	<u>0.24</u>	<u>U</u>	<u>0.23</u>	<u>U</u>	0.2	U	0.18	U	<u>0.23</u>	<u>U</u>	0.2	U	<u>0.22</u>	<u>U</u>	0.2	U	0.2	U	0.19	U
SW8270	2,4-Dichlorophenol	mg/kg	180	0.18	U	<u>0.21</u>	<u>U</u>	<u>0.24</u>	<u>U</u>	<u>0.23</u>	<u>U</u>	0.2	U	0.18	U	<u>0.23</u>	<u>U</u>	0.2	U	<u>0.22</u>	<u>U</u>	0.2	U	0.2	U	0.19	U
SW8270	2,4-Dimethylphenol	mg/kg	1200	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	2,4-Dinitrophenol	mg/kg	120	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	2,4-Dinitrotoluene	mg/kg	0.7	0.037	U	0.041	U	0.048	U	0.046	U	0.04	U	0.036	U	0.045	U	0.041	U	0.043	U	0.041	U	0.04	U	0.038	U
SW8270	2,6-Dinitrotoluene	mg/kg	0.7	0.037	U	0.041	U	0.048	U	0.046	U	0.04	U	0.036	U	0.045	U	0.041	U	0.043	U	0.041	U	0.04	U	0.038	U
SW8270	2-Chloronaphthalene	mg/kg	NC	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	2-Chlorophenol	mg/kg	310	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	2-Methylnaphthalene	mg/kg	230	0.037	U	0.013	J	0.048	U	0.0867		0.04	U	0.0164	J	0.0583		0.041	U	0.043	U	0.041	U	0.242		0.059	
SW8270	2-Methylphenol	mg/kg	310	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	2-Nitroaniline	mg/kg	39	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	2-Nitrophenol	mg/kg	NC	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	3,3'-Dichlorobenzidine	mg/kg	1	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	3-Nitroaniline	mg/kg	NC	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	4,6-Dinitro-2-Methylphenol	mg/kg	6	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	4-Bromophenyl Phenyl Ether	mg/kg	NC	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	4-Chloro-3-Methylphenol	mg/kg	NC	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	4-Chloroaniline	mg/kg	NC	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	4-Chlorophenyl Phenyl Ether	mg/kg	NC	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	4-Nitroaniline	mg/kg	NC	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	4-Nitrophenol	mg/kg	NC	0.37	U	0.41	U	0.48	U	0.46	U	0.4	U	0.36	U	0.45	U	0.41	U	0.43	U	0.41	U	0.4	U	0.38	U
SW8270	Acenaphthene	mg/kg	3400	0.037	U	0.041	U	0.048	U	0.0863		0.04	U	0.036	U	0.045	U	0.041	U	0.043	U	0.041	U	0.0969		0.091	
SW8270	Acenaphthylene	mg/kg	NC	0.037	U	0.041	U	0.048	U	0.0439	J	0.04	U	0.036	U	0.031	J	0.041	U	0.043	U	0.041	U	0.182		0.0726	
SW8270	Acetophenone	mg/kg	2	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	Anthracene	mg/kg	17000	0.037	U	0.041	U	0.048	U	0.278		0.04	U	0.036	U	0.0448	J	0.041	U	0.043	U	0.041	U	1.32		0.233	
SW8270	Atrazine	mg/kg	210	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	Benzaldehyde	mg/kg	6100	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	Benzo(A)Anthracene	mg/kg	5	0.0123	J	0.019	J	0.048	U	0.7		0.0133	J	0.051		0.0984		0.0321	J	0.0367	J	0.0204	J	1.1		0.623	
SW8270	Benzo(A)Pyrene	mg/kg	0.5	0.037	U	0.0203	J	0.048	U	<u>0.595</u>		0.04	U	0.0572		0.106		0.0229	J	0.0327	J	0.041	U	<u>1.4</u>		<u>0.621</u>	
SW8270	Benzo(B)Fluoranthene	mg/kg	5	0.037	U	0.0248	J	0.048	U	0.71		0.04	U	0.0695		0.163		0.0239	J	0.051		0.041	U	2.42		0.845	
SW8270	Benzo(G,H,I)perylene	mg/kg	380000	0.037	U	0.041	U	0.048	U	0.371		0.04	U	0.0557		0.096		0.041	U	0.0327	J	0.041	U	0.901		0.432	
SW8270	Benzo(K)Fluoranthene	mg/kg	45	0.037	U	0.041	U	0.048	U	0.299		0.04	U	0.0331	J	0.0567		0.041	U	0.0233	J	0.041	U	0.608		0.286	
SW8270	bis-(2-Chloroethoxy)Methane	mg/kg	NC	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	bis-(2-Chloroethyl)Ether	mg/kg	0.4	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	bis-(2-Ethylhexyl)Phthalate	mg/kg	35	0.073	U	0.082	U	0.096	U	0.24		0.08	U	0.0711	J	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.218	
SW8270	Butylbenzyl Phthalate	mg/kg	1200	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	Caprolactam	mg/kg	31000	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	Carbazole	mg/kg	24	0.073	U	0.082	U	0.096	U	0.141		0.08	U	0.0091	J	0.0147	J	0.081	U	0.087	U	0.081	U	0.159		0.0996	
SW8270	Chrysene	mg/kg	450	0.037	U	0.0237	J	0.048	U	0.815		0.04	U	0.0634		0.123		0.026	J	0.0327	J	0.041	U	1.78		0.728	
SW8270	Dibenzo(a,h)Anthracene	mg/kg	0.5	0.037	U	0.041	U	0.048	U	0.109		0.04	U	0.036	U	0.0338	J	0.041	U	0.043	U	0.041	U	0.273		0.136	
SW8270	Dibenzofuran	mg/kg	NC	0.073	U	0.082	U	0.096	U	0.0957		0.08	U	0.073	U	0.0249	J	0.081	U	0.087	U	0.081	U	0.159		0.043	J
SW8270	Diethyl Phthalate	mg/kg	49000	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U

TABLE 3B
Soil Waste Class Analysis - SVOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15	
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002	
Lab Sample ID				JC97631-1		JC97631-2		JC97631-3		JC97631-4		JC97631-5		JC99893-1		JC99893-2		JC99893-3		JC99893-4		JC99893-5		JC99893-6		JC99893-7	
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019	
Method	Parameter	Units	RDC	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
SW8270	Dimethyl Phthalate	mg/kg	NC	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	Di-n-Butyl Phthalate	mg/kg	6100	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.007	J	0.087	U	0.0092	J	0.08	U	0.076	U
SW8270	Di-n-Octyl Phthalate	mg/kg	2400	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	Fluoranthene	mg/kg	2300	0.037	U	0.0324	J	0.048	U	1.07		0.04	U	0.0813		0.156		0.0319	J	0.0398	J	0.0181	J	1.85		1.03	
SW8270	Fluorene	mg/kg	2300	0.037	U	0.041	U	0.048	U	0.0756		0.04	U	0.036	U	0.045	U	0.041	U	0.043	U	0.041	U	0.116		0.104	
SW8270	Hexachlorobenzene	mg/kg	0.3	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	Hexachlorobutadiene	mg/kg	6	0.037	U	0.041	U	0.048	U	0.046	U	0.04	U	0.036	U	0.045	U	0.041	U	0.043	U	0.041	U	0.04	U	0.038	U
SW8270	Hexachlorocyclopentadiene	mg/kg	45	0.37	U	0.41	U	0.48	U	0.46	U	0.4	U	0.36	U	0.45	U	0.41	U	0.43	U	0.41	U	0.4	U	0.38	U
SW8270	Hexachloroethane	mg/kg	12	0.18	U	<u>0.21</u>	<u>U</u>	<u>0.24</u>	<u>U</u>	<u>0.23</u>	<u>U</u>	0.2	U	0.18	U	<u>0.23</u>	<u>U</u>	0.2	U	<u>0.22</u>	<u>U</u>	0.2	U	0.2	U	0.19	U
SW8270	Indeno(1,2,3-Cd)Pyrene	mg/kg	5	0.037	U	0.041	U	0.048	U	0.402		0.04	U	0.0548		0.0968		0.041	U	0.0285	J	0.041	U	0.979		0.46	
SW8270	Isophorone	mg/kg	510	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	m,p-Cresol	mg/kg	NC	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	Naphthalene	mg/kg	6	0.037	U	0.0218	J	0.048	U	0.147		0.04	U	0.0288	J	0.084		0.041	U	0.043	U	0.041	U	0.47		0.0618	
SW8270	Nitrobenzene	mg/kg	5	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	n-Nitroso-di-n-Propylamine	mg/kg	0.2	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	n-Nitrosodiphenylamine	mg/kg	99	0.18	U	0.21	U	0.24	U	0.23	U	0.2	U	0.18	U	0.23	U	0.2	U	0.22	U	0.2	U	0.2	U	0.19	U
SW8270	Pentachlorophenol	mg/kg	0.9	0.15	U	0.16	U	0.19	U	0.18	U	0.16	U	0.15	U	0.18	U	0.16	U	0.17	U	0.16	U	0.16	U	0.15	U
SW8270	Phenanthrene	mg/kg	NC	0.037	U	0.0201	J	0.048	U	1.32		0.04	U	0.0525		0.105		0.041	U	0.0172	J	0.041	U	0.749		0.611	
SW8270	Phenol	mg/kg	18000	0.073	U	0.082	U	0.096	U	0.091	U	0.08	U	0.073	U	0.091	U	0.081	U	0.087	U	0.081	U	0.08	U	0.076	U
SW8270	Pyrene	mg/kg	1700	0.0159	J	0.0332	J	0.0219	J	1.41		0.0219	J	0.0777		0.147		0.0347	J	0.0335	J	0.0204	J	3.02		0.99	
SW8270	Total TICs SVOC	mg/kg	NC	0.21	NJ	1.85	NJ	0.2	NJ	7.02	NJ	0.22	NJ	16.67	NJ	0.8	NJ	0.21	NJ	0.2	NJ	0	NJ	9.14	NJ	7.74	NJ

Notes:
 RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].
 NC: No criterion established
Bold and underlined concentrations exceed the RDC
Italicized values not detected; reporting limit exceeds criteria
 CONC: Concentration reported in milligrams per kilogram (mg/kg)
 J: Estimated concentration
 Q: Data qualifier assigned by laboratory or data validator
 N: Indicates presumptive evidence of a compound
 U: Not detected above method detection limit
 Results with a value of "0" indicates no TICs were detected
 SVOCs: Semi-Volatile Organic Compounds

TABLE 3C
Soil Waste Class Analysis - PCBs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15	
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002	
Lab Sample ID				JC97631-1		JC97631-2		JC97631-3		JC97631-4		JC97631-5		JC99893-1		JC99893-2		JC99893-3		JC99893-4		JC99893-5		JC99893-6		JC99893-7	
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019	
Method	Parameter	Units	RDC	CONC	Q																						
SW8082	Aroclor-1016	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.044	U	0.037	U	0.036	U	0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.038	U
SW8082	Aroclor-1221	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.044	U	0.037	U	0.036	U	0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.038	U
SW8082	Aroclor-1232	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.044	U	0.037	U	0.036	U	0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.038	U
SW8082	Aroclor-1242	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.044	U	0.037	U	0.036	U	0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.038	U
SW8082	Aroclor-1248	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.044	U	0.037	U	0.036	U	0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.146	U
SW8082	Aroclor-1254	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.0295	J	0.037	U	0.161		0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.038	U
SW8082	Aroclor-1260	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.044	U	0.037	U	0.036	U	0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.038	U
SW8082	Aroclor-1262	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.044	U	0.037	U	0.036	U	0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.038	U
SW8082	Aroclor-1268	mg/kg	NC	0.037	U	0.039	U	0.043	U	0.044	U	0.037	U	0.036	U	0.044	U	0.042	U	0.043	U	0.042	U	0.04	U	0.038	U

Notes:
 RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].
 NC: No criterion established
Bold and underlined concentrations exceed the RDC
Italicized values not detected; reporting limit exceeds criteria
 CONC: Concentration reported in milligrams per kilogram (mg/kg)
 J: Estimated concentration
 Q: Data qualifier assigned by laboratory or data validator
 U: Not detected above method detection limit
 PCBs: Polychlorinated biphenyls

TABLE 3D
Soil Waste Class Analysis - Metals
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15	
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002	
Lab Sample ID				JC97631-1		JC97631-2		JC97631-3		JC97631-4		JC97631-5		JC99893-1		JC99893-2		JC99893-3		JC99893-4		JC99893-5		JC99893-6		JC99893-7	
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019	
Method	Parameter	Units	RDC	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
SW6010	Arsenic	mg/kg	19	4.7	U	12	U	3	U	14	U	2.4	U	5.8	<u>22.1</u>	4.7		13	U	3.9		10		10.8			
SW6010	Barium	mg/kg	16000	45.5		40.9		53.4		125		24	U	140		146		97.5		27	U	81.4		81.3		91.3	
SW6010	Beryllium	mg/kg	16	0.47	U	0.27		0.39		0.74		0.24	U	0.43		0.83		0.64		<u>1.3</u>	<u>U</u>	0.51		0.39		0.42	
SW6010	Cadmium	mg/kg	78	0.59	U	0.62	U	0.75	U	<u>3.6</u>	<u>U</u>	0.61	U	0.69		1.4	U	0.63	U	<u>3.3</u>	<u>U</u>	0.65	U	<u>3</u>	<u>U</u>	<u>3</u>	<u>U</u>
SW6010	Chromium	mg/kg	120000	62.8		2810		1130		3100		772		146		324		265		6070		773		1680		1610	
SW6010	Copper	mg/kg	3100	70.6		22		9.1		24.2		3.9		121		115		15.7		19.7		12.3		172		176	
SW6010	Lead	mg/kg	400	11.3		12.7		5.1		16.6		2.4	U	269		149		9.3		13	U	9.3		128		229	
SW7471	Mercury	mg/kg	23	0.037	U	0.044		0.044	U	0.98		0.039	U	0.75		0.76		0.031	U	0.035		0.036	U	1		0.61	
SW6010	Nickel	mg/kg	1600	105		74.4		12.9		88.3		6		40.8		36.6		19		612		15.6		147		111	
SW6010	Selenium	mg/kg	390	4.7	U	2.5	U	0.98	U	<u>14</u>	<u>U</u>	2.4	U	2.2	U	5.4	U	2.5	U	<u>13</u>	<u>U</u>	2.6	U	<u>12</u>	<u>U</u>	<u>12</u>	<u>U</u>
SW6010	Silver	mg/kg	390	<u>1.2</u>	<u>U</u>	0.62	U	0.75	U	<u>3.6</u>	<u>U</u>	0.61	U	0.7		1.8		0.63	U	6.2		0.65	U	<u>3</u>	<u>U</u>	<u>3</u>	<u>U</u>
SW6010	Vanadium	mg/kg	78	42.7		36.6		15.3		46.9		6.7		30.8		33.2		23.5		<u>670</u>		22.8		<u>99.1</u>		<u>115</u>	
SW6010	Zinc	mg/kg	23000	41		734		37.8		896		14.8		583		208		44		276		38.3		294		290	

Notes:
 RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].
 NC: No criterion established
Bold and underlined concentrations exceed the RDC
Italicized values not detected; reporting limit exceeds criteria
 CONC: Concentration reported in milligrams per kilogram (mg/kg)
 J: Estimated concentration
 Q: Data qualifier assigned by laboratory or data validator
 U: Not detected above method detection limit

TABLE 3E
Soil Waste Class Analysis - NJEPH
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15	
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002	
Lab Sample ID				JC97631-1		JC97631-2		JC97631-3		JC97631-4		JC97631-5		JC99893-1		JC99893-2		JC99893-3		JC99893-4		JC99893-5		JC99893-6		JC99893-7	
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019	
Method	Parameter	Units	RDC	CONC	Q																						
NJDEPEPH	EPH (C9-C28)	mg/kg	NC	7	U	7.6	U	9.3	U	60.4		7.4	U	127		85.7		7.9	U	18.1		7.7	U	155		401	
SW8015	Petroleum Hydrocarbons Above C-10	mg/kg	NC	11	U	12	U	14	U	204		12	U	263		260		12	U	22.8		12	U	228		565	
SW8015	PHC As Gasoline	mg/kg	NC	12	U	14	U	18	U	18	U	15	U	12	U	17	U	15	U	16	U	15	U	14	U	17.8	
NJDEPEPH	Residual Range Organics C28-C40	mg/kg	NC	7	U	7.6	U	9.3	U	80.8		7.4	U	253		258		7.9	U	52.7		7.7	U	180		519	
NJDEPEPH	Total EPH (C9-C40)	mg/kg	NC	7	U	7.6	U	9.3	U	141		7.4	U	381		344		7.9	U	70.8		7.7	U	336		920	

Notes:
 RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].
 NC: No criterion established
Bold and underlined concentrations exceed the RDC
Italicized values not detected; reporting limit exceeds criteria
 CONC: Concentration reported in milligrams per kilogram (mg/kg)
 J: Estimated concentration
 Q: Data qualifier assigned by laboratory or data validator
 U: Not detected above method detection limit
 NJEPH: Extractable and Petroleum Hydrocarbons

TABLE 3F
Soil Waste Class Analysis - Pesticides and Herbicides
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15			
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002			
Lab Sample ID				JC97631-1		JC97631-2		JC97631-3		JC97631-4		JC97631-5		JC99893-1		JC99893-2		JC99893-3		JC99893-4		JC99893-5		JC99893-6		JC99893-7			
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019			
Method	Parameter	Units	RDC	CONC	Q																								
SW8151	2,4,5-T	mg/kg	NC	0.0037	U	0.004	U	0.0046	U	0.0046	U	0.0039	U	0.0036	U	0.0044	U	0.0043	U	0.0041	U	0.0039	U	0.0039	U	0.0039	U	0.0036	U
SW8151	2,4,5-TP (Silvex)	mg/kg	NC	0.0037	U	0.004	U	0.0046	U	0.0046	U	0.0039	U	0.0036	U	0.0044	U	0.0043	U	0.0041	U	0.0039	U	0.0039	U	0.0039	U	0.0036	U
SW8151	2,4-D	mg/kg	NC	0.018	U	0.02	U	0.023	U	0.023	U	0.02	U	0.018	U	0.022	U	0.021	U	0.021	U	0.02	U	0.019	U	0.019	U	0.018	U
SW8151	2,4-DB	mg/kg	NC	0.018	U	0.02	U	0.023	U	0.023	U	0.02	U	0.018	U	0.022	U	0.021	U	0.021	U	0.02	U	0.019	U	0.019	U	0.018	U
SW8081	4,4'-DDD	mg/kg	3	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.01	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.002	U	0.00078	U	0.00078	U
SW8081	4,4'-DDE	mg/kg	2	0.00073	U	0.00082	U	0.00095	U	0.0023	U	0.00072	U	0.0034	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	4,4'-DDT	mg/kg	2	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.009	U	0.0032	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Aldrin	mg/kg	0.04	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Alpha-BHC	mg/kg	0.1	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Alpha-Chlordane	mg/kg	0.2	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.0027	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Beta-BHC	mg/kg	0.4	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Chlordane	mg/kg	0.2	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.0027	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8151	Dalapon	mg/kg	NC	0.0037	U	0.004	U	0.0046	U	0.0046	U	0.0039	U	0.0036	U	0.0044	U	0.0043	U	0.0041	U	0.0039	U	0.0039	U	0.0039	U	0.0036	U
SW8081	Delta-BHC	mg/kg	NC	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8151	Dicamba	mg/kg	NC	0.0037	U	0.004	U	0.0046	U	0.0046	U	0.0039	U	0.0036	U	0.0044	U	0.0043	U	0.0041	U	0.0039	U	0.0039	U	0.0039	U	0.0036	U
SW8151	Dichloroprop	mg/kg	NC	0.018	U	0.02	U	0.023	U	0.023	U	0.02	U	0.018	U	0.022	U	0.021	U	0.021	U	0.02	U	0.019	U	0.019	U	0.018	U
SW8081	Dieldrin	mg/kg	0.04	0.00073	U	0.00082	U	0.00095	U	0.00084	J	0.00072	U	0.0054	U	0.00088	U	0.00085	U	0.00085	U	0.0044	U	0.00081	U	0.00078	U	0.00078	U
SW8151	Dinoseb	mg/kg	NC	0.018	U	0.02	U	0.023	U	0.023	U	0.02	U	0.018	U	0.022	U	0.021	U	0.021	U	0.02	U	0.019	U	0.019	U	0.018	U
SW8081	Endosulfan I	mg/kg	470	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Endosulfan II	mg/kg	470	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Endosulfan Sulfate	mg/kg	470	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Endrin	mg/kg	23	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.0016	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Endrin Aldehyde	mg/kg	NC	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Endrin Ketone	mg/kg	NC	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Gamma-BHC (Lindane)	mg/kg	0.4	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Heptachlor	mg/kg	0.1	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.0064	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8081	Heptachlor Epoxide	mg/kg	0.07	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U
SW8151	MCPA	mg/kg	NC	1.8	U	2	U	2.3	U	2.3	U	2	U	1.8	U	2.2	U	2.1	U	2.1	U	2	U	1.9	U	1.8	U	1.8	U
SW8151	Mecoprop	mg/kg	NC	1.8	U	2	U	2.3	U	2.3	U	2	U	1.8	U	2.2	U	2.1	U	2.1	U	2	U	1.9	U	1.8	U	1.8	U
SW8081	Methoxychlor	mg/kg	390	0.0015	U	0.0016	U	0.0019	U	0.0018	U	0.0014	U	0.0015	U	0.0018	U	0.0017	U	0.0017	U	0.0017	U	0.0016	U	0.0016	U	0.0016	U
SW8151	Pentachlorophenol	mg/kg	0.9	0.0018	U	0.002	U	0.0023	U	0.0023	U	0.002	U	0.0018	U	0.0022	U	0.0021	U	0.0021	U	0.002	U	0.0019	U	0.0018	U	0.0018	U
SW8081	Toxaphene	mg/kg	0.6	0.018	U	0.021	U	0.024	U	0.023	U	0.018	U	0.018	U	0.022	U	0.021	U	0.021	U	0.021	U	0.02	U	0.019	U	0.019	U
SW8081	trans-Chlordane	mg/kg	NC	0.00073	U	0.00082	U	0.00095	U	0.00091	U	0.00072	U	0.00073	U	0.00088	U	0.00085	U	0.00085	U	0.00084	U	0.00081	U	0.00078	U	0.00078	U

Notes:
 RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].
 NC: No criterion established
Bold and underlined concentrations exceed the RDC
Italicized values not detected; reporting limit exceeds criteria
 CONC: Concentration reported in milligrams per kilogram (mg/kg)
 J: Estimated concentration
 Q: Data qualifier assigned by laboratory or data validator
 U: Not detected above method detection limit
 PEST-HERB: Pesticides and Herbicides

TABLE 3G
Soil Waste Class Analysis - General Chemistry
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15			
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002			
Lab Sample ID				JC97631-1/1A		JC97631-2/2A		JC97631-3/3A		JC97631-4/4A		JC97631-5/5A		JC99893-1/1A		JC99893-2/2A		JC99893-3/3A		JC99893-4/4A		JC99893-5/5A		JC99893-6/6A		JC99893-7/7A			
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019			
Method	Parameter	Units	RDC	CONC	Q																								
SW9045	Corrosivity	SU	NC	0		0		0		0		0		0	U	0	U	0	U	0	U	0	U	0	U	0	U	0	U
SW9012	Cyanide Anion (CN)	mg/kg	47	0.23	U	0.29	U	0.32	U	0.87		0.24	U	0.28	U	0.38		0.28	U	0.4		0.29	U	0.46		0.33	U		
SW7196/SW7199	Hexavalent Chromium	mg/kg	20	2.9		27		51		21.5		32.4		0.82	U	0.54	U	2.7		347		64		31.8		1.5			
SW1010	Ignitability	deg F	NC	0	U	0	U	0	U	0	U	0	U	0	U	0	U	0	U	0	U	0	U	0	U	0	U		
SW9095	Paint Filter Test	NEG	NC	0.5	U																								
SW9045	pH	SU	NC	NS		7.93		8.03		9.68		9.81		9.11		8.25		8.11											
SW9012	Reactive Cyanide	mg/kg	NC	12	U	13	U	15	U	14	U	12	U	12	U	14	U	13	U	13	U	13	U	13	U	12	U	12	U
SW9034	Reactive Sulfide	mg/kg	NC	120	U	130	U	150	U	140	U	120	U	120	U	140	U	130	U	130	U	130	U	130	U	120	U	120	U
ASTM D1498	Redox Potential	mV	NC	NS		345		342		147		196		174		217		225											
SM2540D/SM2540E	Solids	%	NC	87.4		80.3		69.3		71.6		82.1		86.6		73.2		NS		74.3		77.7		82.7		85.8			

Notes:

RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

NC: No criterion established

Bold and underlined concentrations exceed the RDC

Italicized values not detected; reporting limit exceeds criteria

CONC: Concentration reported in milligrams per kilogram (mg/kg)

J: Estimated concentration

Q: Data qualifier assigned by laboratory or data validator

U: Not detected above method detection limit

SU: Standard Units

mV: Millivolts

GENCHEM: General Chemistry

TABLE 3H
Soil Waste Class Analysis - TCLP
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID				073-WC-09		073-WC-09		073-WC-09		073-WC-10		073-WC-10		073-WC-11		073-WC-11		073-WC-11		073-WC-13		073-WC-13		073-WC-14		073-WC-15					
Client Sample ID				073-WC-09-0103		073-WC-09-0510		073-WC-09-1014		073-WC-10-0610		073-WC-10-1418		073-WC-11-0203		073-WC-11-0708		073-WC-11-0910		073-WC-13-0102		073-WC-13-0611		073-WC-14-0103		073-WC-15-0002					
Lab Sample ID				JC97631-1A		JC97631-2A		JC97631-3A		JC97631-4A		JC97631-5A		JC99893-1A		JC99893-2A		JC99893-3A		JC99893-4A		JC99893-5A		JC99893-6A		JC99893-7A					
Date Sampled				10/28/2019		10/28/2019		10/28/2019		10/28/2019		10/28/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019		12/9/2019					
Method	Parameter	Units	RCRA Toxicity Characteristics (40 CFR261.24)	CONC		Q		CONC		Q																					
SW6010	Arsenic	mg/L	5	0.5	U	0.5	U																								
SW6010	Barium	mg/L	100	0.067	U	1	U	1	U	1	U	0.067	U	1	U	1	U	1.2	U	1	U	1	U	1	U	1	U	1	U		
SW6010	Cadmium	mg/L	1	0.02	U	0.02	U																								
SW6010	Chromium	mg/L	5	1.9	U	3.2	U	6.8	U	0.05	U	3.6	U	0.05	U	0.072	U	0.059	U	4.9	U	0.12	U	0.05	U	0.17	U	0.13	U		
SW6010	Copper	mg/L	NC	0.05	U	0.052	U	0.05	U	0.05	U																				
SW6010	Lead	mg/L	5	0.5	U	0.5	U																								
SW6010	Nickel	mg/L	NC	0.05	U	0.17	U	0.05	U	0.23	U	0.05	U	0.066	U	0.11	U	0.05	U	0.05	U	0.05	U	0.05	U	0.13	U	0.37	U		
SW6010	Selenium	mg/L	1	0.5	U	0.5	U																								
SW6010	Silver	mg/L	5	0.05	U	0.05	U																								
SW6010	Zinc	mg/L	NC	0.1	U	0.6	U	1.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.19	U	1	U										
SW7470	Mercury	mg/L	0.2	0.0002	U	0.0002	U																								
SW8260	1,1-Dichloroethene	mg/L	0.7	0.005	U	0.005	U																								
SW8260	1,2-Dichloroethane	mg/L	0.5	0.005	U	0.005	U																								
SW8260	1,4-Dichlorobenzene	mg/L	7.5	0.005	U	0.005	U																								
SW8260	2-Butanone	mg/L	200	0.1	U	0.1	U																								
SW8260	Benzene	mg/L	0.5	0.0025	U	0.0025	U																								
SW8260	Carbon Tetrachloride	mg/L	0.5	0.005	U	0.005	U																								
SW8260	Chlorobenzene	mg/L	100	0.005	U	0.005	U																								
SW8260	Chloroform	mg/L	6	0.005	U	0.005	U																								
SW8260	Tetrachloroethene	mg/L	0.7	0.005	U	0.005	U																								
SW8260	Trichloroethene	mg/L	0.5	0.005	U	0.005	U																								
SW8260	Vinyl Chloride	mg/L	0.2	0.005	U	0.005	U																								
SW8270	1,4-Dichlorobenzene	mg/L	7.5	0.02	U	0.02	U																								
SW8270	2,4,5-Trichlorophenol	mg/L	400	0.05	U	0.05	U																								
SW8270	2,4,6-Trichlorophenol	mg/L	2	0.05	U	0.05	U																								
SW8270	2,4-Dinitrotoluene	mg/L	0.13	0.02	U	0.02	U																								
SW8270	2-Methylphenol	mg/L	200	0.02	U	0.02	U																								
SW8270	Hexachlorobenzene	mg/L	0.13	0.02	U	0.02	U																								
SW8270	Hexachlorobutadiene	mg/L	0.5	0.01	U	0.01	U																								
SW8270	Hexachloroethane	mg/L	3	0.05	U	0.05	U																								
SW8270	m,p-Cresol	mg/L	NC	0.02	U	0.02	U																								
SW8270	Nitrobenzene	mg/L	2	0.02	U	0.02	U																								
SW8270	Pentachlorophenol	mg/L	100	0.1	U	0.1	U																								
SW8270	Pyridine	mg/L	5	0.02	U	0.02	U																								

Notes:

RCRA Toxicity Characteristics from 40 CFR 261.24

NC: No criterion established

Bold and shaded concentrations exceed the Toxicity Characteristics

Depths reported in feet below ground surface

CONC: Concentration reported in milligrams per liter (mg/L)

J: Estimated concentration

Q: Data qualifier assigned by laboratory or data validator

U: Not detected above method detection limit

TABLE 4A
2019 Soil Delineation Sample Results
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location					073-WC-11	073-WC-12	073-WC-14	073-WC-16	073-WC-16			
Sample ID					073-WC-11-0910	073-WC-12-0910	073-WC-14-0809	073-WC-16-0809	073-WC-16-0809B			
Lab Sample ID					JC99783-1/1R	JC99783-2/2R	JC99783-3/3R	JC99783-4/4R	JC99782-13/13R			
Date					12/6/2019	12/6/2019	12/6/2019	12/6/2019	12/6/2019			
Sample Depth (ft)					9.5 - 10	9.5 - 10	8 - 8.5	8 - 8.5	8.5 - 9			
Chemical	Units	RDC	NRDC	IGW	CONC	Q	CONC	Q	CONC	Q		
Hexavalent Chromium	mg/kg	20	20	NC	13		8.2		24.2		18.8	J

Notes:

RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

NRDC: NJDEP Non-Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

IGW – NJDEP Impact to Groundwater Soil Screening Levels [N.J.A.C. 7:26D; last amended November 2013]

NC: No criterion established

Bold and shaded concentrations exceed the RDC or NRDC

Italicized values not detected; reporting limit exceeds criteria

Depths reported in feet below ground surface

J: Estimated concentration

R or N: Rejected or negated by laboratory or data validator

U: Not detected above method detection limit

TABLE 4B
Final Post-Excavation Samples
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location ID	Date Sampled	Top of Sample Depth (ft)	Elevation (ft., msl)	Excavation Surveyed Elevation (ft., msl)	Hexavalent Chromium Concentration (mg/kg)	Validation Qualifier	Lab Sample ID	Designation
073-SB-002	7/14/2008	9.0	0.5	-3.30	7.20	J	J95590-12A	B
073-SB-003	7/14/2008	1	8.8	NS	0.90	UJ	J95590-18A	SW
073-SB-003	7/14/2008	2.5	7.3	NS	1.70		J95590-19A	SW
073-SB-003	7/14/2008	4	5.8	NS	0.97	U	J95590-20A	SW
073-SB-003	7/14/2008	7	2.8	4.22	0.92	U	J95590-21A	SW
073-SB-024	4/19/2010	10.5	-0.8	-3.76	1.00	U	JA44697-36A	B
073-SB-025	4/19/2010	4.5	5.0	-3.55	6.10		JA44697-40AR	B
073-SB-029	4/20/2010	6.0	3.8	0.91	9.20		JA44697-51A	SW
073-SB-053R	10/25/2010	5.5	4.3	-0.89	6.80		JA59782-2A	B
073-SB-054	5/24/2010	5.0	4.4	NS	0.96	U	JA47480-10A	SW
073-SB-055	8/5/2010	3.0	7.0	-1.36	7.40		JA53418-2A	B
073-SB-070	11/29/2010	19.0	-10.0	-10.91	6.80		JA62707-44A	B
073-SB-101	5/5/2014	13.5	-3.8	-4.32	4.10		JB66204-5/5R	B
073-WC-11	12/6/2019	9.5	2.0	0.77	13.00		JC99783-1/1R	B
073-WC-12	12/6/2019	9.5	2.0	0.57	8.20		JC99783-2/2R	B
073-WC-14	12/6/2019	8.0	2.0	-1.00	15.00		JC99783-3/3R	B
073-WC-16	12/6/2019	8.5	1.0	-3.47	18.80	J	JC99783-13/13R	B

Notes:

mg/kg = milligrams per kilogram

ft. msl = feet mean sea level

SW = post-excavation sidewall sample

B = post-excavation base sample

J = Estimated concentration

U = Not detected above method detection limit

NS = Not surveyed

TABLE 5
Soil Stockpile Sample Results
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

Location					073-WC-116A	073-WC-116B	073-WC-116C	073-WC-116D
Sample ID					073-WC-116A-090820	073-WC-116B-090820	073-WC-116C-090820	073-WC-116D-090820
Lab Sample ID					JD12798-1/1R	JD12798-2/2R	JD12798-3/3R	JD12798-4/4R
Date					9/8/2020	9/8/2020	9/8/2020	9/8/2020
Chemical	Units	RDC	NRDC	IGW	CONC	Q	CONC	Q
Hexavalent Chromium	mg/kg	20	20	NC	1.1		0.47	
							9.2	
								3.1

Notes:

RDC: NJDEP Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

NRDC: NJDEP Non-Residential Direct Contact Soil Remediation Standards [N.J.A.C. 7:26D; last amended 9/18/2017].

IGW – NJDEP Impact to Groundwater Soil Screening Levels [N.J.A.C. 7:26D; last amended November 2013].

NC: No criterion established

Bold and shaded concentrations exceed the RDC or NRDC

Italicized values not detected; reporting limit exceeds criteria

J: Estimated concentration

R or N: Rejected or negated by laboratory or data validator

U: Not detected above method detection limit

TABLE 6A
CWTP Effluent Results - VOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

SAMPLE LOCATION		SA-6 CWTP Effluent Criteria	073-TW-47		073-TW-48		073-TW-49		073-TW-50	
FIELD SAMPLE ID			073-TW-47-090320	073-TW-48-100920		073-TW-49-110620		073-TW-50-120320		
SAMPLING DATE			9/3/2020	10/9/2020		11/6/2020		12/3/2020		
LAB SAMPLE ID			JD12665-1	JD14493-1		JD15828-1		JD17093-1		
Filtered			No	No		No		No		
PARAMETER	UNITS		CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	µg/L	NC	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	µg/L	NC	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	µg/L	NC	1	U	1	U	1	U	1	U
1,1-Dichloroethane	µg/L	NC	1	U	1	U	1	U	1	U
1,1-Dichloroethene	µg/L	NC	1	U	1	U	1	U	1	U
1,2-Dibromoethane	µg/L	NC	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	µg/L	NC	1	U	1	U	1	U	1	U
1,2-Dichloroethane	µg/L	NC	1	U	1	U	1	U	1	U
1,2-Dichloropropane	µg/L	NC	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	µg/L	NC	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	µg/L	NC	1	U	1	U	1	U	1	U
1,4-Dioxane	µg/L	NC	130	U	130	U	130	U	130	U
2-Chloroethyl Vinyl Ether	µg/L	NC	5	U	5	U	5	U	5	U
Acrolein	µg/L	NC	10	U	10	U	10	U	10	U
Acrylonitrile	µg/L	NC	10	U	10	U	10	U	10	U
Benzene	µg/L	NC	1	U	1	U	1	U	1	U
bis-(Chloromethyl)Ether	µg/L	NC			0	U	0	U	0	U
Bromodichloromethane	µg/L	NC	1	U	1	U	1	U	1	U
Bromoform	µg/L	NC	1	U	1	U	1	U	1	U
Bromomethane	µg/L	NC	1	U	1	U	1	U	1	U
Carbon Tetrachloride	µg/L	NC	1	U	1	U	1	U	1	U
Chlorobenzene	µg/L	NC	1	U	1	U	1	U	1	U
Chloroethane	µg/L	NC	1	U	1	U	1	U	1	U
Chloroform	µg/L	NC	1	U	1	U	1	U	1	U
Chloromethane	µg/L	NC	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	µg/L	NC	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	µg/L	NC	1	U	1	U	1	U	1	U
Dibromochloromethane	µg/L	NC	1	U	1	U	1	U	1	U

TABLE 6A
CWTP Effluent Results - VOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

SAMPLE LOCATION		SA-6 CWTP Effluent Criteria	073-TW-47		073-TW-48		073-TW-49		073-TW-50	
FIELD SAMPLE ID			073-TW-47-090320	073-TW-48-100920		073-TW-49-110620		073-TW-50-120320		
SAMPLING DATE			9/3/2020	10/9/2020		11/6/2020		12/3/2020		
LAB SAMPLE ID			JD12665-1	JD14493-1		JD15828-1		JD17093-1		
Filtered			No	No		No		No		
PARAMETER	UNITS		CONC	Q	CONC	Q	CONC	Q	CONC	Q
Dichlorodifluoromethane	µg/L	NC	2	U	2	U	2	U	2	U
Ethylbenzene	µg/L	NC	1	U	0.41	J	0.52	J	1	U
Ethylenimine	µg/L	NC			0	U	0	U	0	U
Methylene Chloride	µg/L	NC	1	U	1	U	1	U	1	U
Tetrachloroethene	µg/L	NC	1	U	1	U	1	U	1	U
Toluene	µg/L	NC	1	U	1	U	1	U	1	U
Total Xylenes	µg/L	NC	1	U	1.9		4.3		1	U
trans-1,2-Dichloroethene	µg/L	NC	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	µg/L	NC	1	U	1	U	1	U	1	U
Trichloroethene	µg/L	NC	1	U	1	U	1	U	1	U
Trichlorofluoromethane	µg/L	NC	2	U	2	U	2	U	2	U
Vinyl Chloride	µg/L	NC	1	U	1	U	1	U	1	U
Total VOCs	µg/L	2130	0		2.31		4.82		0	

Notes:

SA-6 CWTP Effluent Criteria is the discharge limitation criteria from Sewer Use Permit #31630019

NC: No criterion established

CONC: Concentration reported in micrograms per liter (µg/L)

J: Estimated concentration

R or N: Rejected or negated by laboratory or data validator

U: Not detected above method detection limit

TABLE 6B
CWTP Effluent Results - SVOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

SAMPLE LOCATION		SA-6 CWTP Effluent Criteria	073-TW-47		073-TW-48		073-TW-49		073-TW-50	
FIELD SAMPLE ID			073-TW-47-090320	073-TW-48-100920		073-TW-49-110620		073-TW-50-120320		
SAMPLING DATE			9/3/2020	10/9/2020		11/6/2020		12/3/2020		
LAB SAMPLE ID			JD12665-1	JD14493-1		JD15828-1		JD17093-1		
Filtered			No	No		No		No		
PARAMETER	UNITS		CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4-Trichlorobenzene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
1,2-Dichlorobenzene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
1,2-Diphenylhydrazine/Azobenzene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
1,3-Dichlorobenzene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
1,4-Dichlorobenzene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
2,2'-Oxybis(1-Chloropropane)	µg/L	NC	2	U	2	U	1.9	U	1.9	U
2,4,6-Trichlorophenol	µg/L	NC	4.9	U	5	U	4.9	U	4.8	U
2,4-Dichlorophenol	µg/L	NC	2	U	2	U	1.9	U	1.9	U
2,4-Dimethylphenol	µg/L	NC	4.9	U	5	U	2.5	J	4.8	U
2,4-Dinitrophenol	µg/L	NC	9.8	U	10	U	9.7	U	9.5	U
2,4-Dinitrotoluene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
2,6-Dinitrotoluene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
2-Chloronaphthalene	µg/L	NC	2	U	2	U	1.9	U	1.9	U
2-Chlorophenol	µg/L	NC	4.9	U	5	U	4.9	U	4.8	U
2-Nitrophenol	µg/L	NC	4.9	U	5	U	4.9	U	4.8	U
3,3'-Dichlorobenzidine	µg/L	NC	2	U	2	UJ	1.9	U	1.9	U
4,6-Dinitro-2-Methylphenol	µg/L	NC	4.9	U	5	U	4.9	U	4.8	U
4-Bromophenyl Phenyl Ether	µg/L	NC	2	U	2	U	1.9	U	1.9	U
4-Chloro-3-Methylphenol	µg/L	NC	4.9	U	5	U	4.9	U	4.8	U
4-Chloroaniline	µg/L	NC	4.9	U	5	UJ	4.9	U	4.8	U
4-Chlorophenyl Phenyl Ether	µg/L	NC	2	U	2	U	1.9	U	1.9	U
4-Nitrophenol	µg/L	NC	9.8	U	10	U	9.7	U	9.5	U
Acenaphthene	µg/L	NC	0.98	U	1	U	0.35	J	0.31	J
Acenaphthylene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
Anthracene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
Benzidine	µg/L	NC	9.8	U	10	UJ	9.7	UJ	9.5	UJ
Benzo(A)Anthracene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
Benzo(A)Pyrene	µg/L	NC	0.98	U	1	UJ	0.97	U	0.95	U

TABLE 6B
CWTP Effluent Results - SVOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

SAMPLE LOCATION		SA-6 CWTP Effluent Criteria	073-TW-47		073-TW-48		073-TW-49		073-TW-50	
FIELD SAMPLE ID			073-TW-47-090320	073-TW-48-100920		073-TW-49-110620		073-TW-50-120320		
SAMPLING DATE			9/3/2020	10/9/2020		11/6/2020		12/3/2020		
LAB SAMPLE ID			JD12665-1	JD14493-1		JD15828-1		JD17093-1		
Filtered			No	No		No		No		
PARAMETER	UNITS		CONC	Q	CONC	Q	CONC	Q	CONC	Q
Benzo(B)Fluoranthene	µg/L	NC	0.98	U	1	UJ	0.97	U	0.95	U
Benzo(G,H,I)perylene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
Benzo(K)Fluoranthene	µg/L	NC	0.98	U	1	UJ	0.97	U	0.95	U
bis-(2-Chloroethoxy)Methane	µg/L	NC	2	U	2	U	1.9	U	1.9	U
bis-(2-Chloroethyl)Ether	µg/L	NC	2	U	2	U	1.9	U	1.9	U
bis-(2-Ethylhexyl)Phthalate	µg/L	NC	2	U	2	U	1.9	U	1.9	U
Butylbenzyl Phthalate	µg/L	NC	2	U	2	U	1.9	U	1.9	U
Chrysene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
Dibenzo(a,h)Anthracene	µg/L	NC	0.98	U	1	UJ	0.97	U	0.95	U
Diethyl Phthalate	µg/L	NC	2	U	2	U	1.9	U	1.9	U
Dimethyl Phthalate	µg/L	NC	2	U	2	U	1.9	U	1.9	U
Di-n-Butyl Phthalate	µg/L	NC	2	U	2	U	1.9	U	1.9	U
Di-n-Octyl Phthalate	µg/L	NC	2	U	2	UJ	1.9	U	1.9	U
Fluoranthene	µg/L	NC	0.98	U	1	U	0.97	U	0.6	J
Fluorene	µg/L	NC	0.98	U	1	U	0.97	U	0.29	J
Hexachlorobenzene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
Hexachlorobutadiene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
Hexachlorocyclopentadiene	µg/L	NC	9.8	U	10	U	9.7	U	9.5	U
Hexachloroethane	µg/L	NC	2	U	2	U	1.9	U	1.9	U
Indeno(1,2,3-Cd)Pyrene	µg/L	NC	0.98	U	1	UJ	0.97	U	0.95	U
Isophorone	µg/L	NC	2	U	2	U	1.9	U	1.9	U
Naphthalene	µg/L	NC	0.98	U	1	U	0.97	U	0.95	U
Nitrobenzene	µg/L	NC	2	U	2	U	1.9	U	1.9	U
n-Nitrosodimethylamine	µg/L	NC	2	U	2	U	1.9	U	1.9	U
n-Nitroso-di-n-Propylamine	µg/L	NC	2	U	2	U	1.9	U	1.9	U
n-Nitrosodiphenylamine	µg/L	NC	4.9	U	5	U	4.9	U	4.8	U
Pentachlorophenol	µg/L	NC	4.9	U	5	U	4.9	U	4.8	U
Phenanthrene	µg/L	NC	0.98	U	1	U	0.97	U	0.48	J

TABLE 6B
CWTP Effluent Results - SVOCs
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

SAMPLE LOCATION		SA-6 CWTP Effluent Criteria	073-TW-47		073-TW-48		073-TW-49		073-TW-50	
FIELD SAMPLE ID			073-TW-47-090320	073-TW-48-100920		073-TW-49-110620		073-TW-50-120320		
SAMPLING DATE			9/3/2020	10/9/2020		11/6/2020		12/3/2020		
LAB SAMPLE ID			JD12665-1	JD14493-1		JD15828-1		JD17093-1		
Filtered			No	No		No		No		
PARAMETER	UNITS		CONC	Q	CONC	Q	CONC	Q	CONC	Q
Phenol	µg/L	NC	2	U	2	U	1.9	U	1.9	U
Pyrene	µg/L	NC	0.98	U	1	U	0.97	U	0.23	J

Notes:

SA-6 CWTP Effluent Criteria is the discharge limitation criteria from Sewer Use Permit #31630019

NC: No criterion established

CONC: Concentration reported in micrograms per liter (µg/L)

J: Estimated concentration

R or N: Rejected or negated by laboratory or data validator

U: Not detected above method detection limit

TABLE 6C
CWTP Effluent Results - Metals
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

SAMPLE LOCATION		SA-6 CWTP Effluent Criteria	073-TW-47		073-TW-48		073-TW-49		073-TW-50	
FIELD SAMPLE ID			073-TW-47-090320	073-TW-48-100920		073-TW-49-110620		073-TW-50-120320		
SAMPLING DATE			9/3/2020	10/9/2020		11/6/2020		12/3/2020		
LAB SAMPLE ID			JD12665-1	JD14493-1		JD15828-1		JD17093-1		
Filtered			No	No		No		No		
PARAMETER	UNITS		CONC	Q	CONC	Q	CONC	Q	CONC	Q
Chromium	mg/L	NC	0.229		0.301		0.416		0.331	J
Copper	mg/L	306	0.204		0.0329		0.0216		0.011	
Lead	mg/L	1	<u>1.34</u>		0.0371		0.0151		0.015	U
Mercury	mg/L	0.08	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Nickel	mg/L	3.9	0.0642		0.01	U	0.05	U	0.01	U
Zinc	mg/L	4.2	0.149		0.0232		0.0247		0.02	U

Notes:

SA-6 CWTP Effluent Criteria is the discharge limitation criteria from Sewer Use Permit #31630019

NC: No criterion established

Bold and underlined concentrations exceed the CWTP Effluent Criteria

CONC: Concentration reported in micrograms per liter (ug/l)

J: Estimated concentration

R or N: Rejected or negated by laboratory or data validator

U: Not detected above method detection limit

TABLE 6D
CWTP Effluent Results - General Chemistry
 Study Area 6 South
 Honeywell International Inc.
 Jersey City, New Jersey

SAMPLE LOCATION		SA-6 CWTP Effluent Criteria	073-TW-47		073-TW-48		073-TW-49		073-TW-50		
FIELD SAMPLE ID			073-TW-47-090320	073-TW-48-100920		073-TW-49-110620		073-TW-50-120320			
SAMPLING DATE			9/3/2020	10/9/2020		11/6/2020		12/3/2020			
LAB SAMPLE ID			JD12665-1	JD14493-1		JD15828-1		JD17093-1			
Filtered			No	No		No		No			
PARAMETER	UNITS		CONC	Q	CONC	Q	CONC	Q	CONC	Q	
Biochemical Oxygen Demand, Five Day	mg/L	NC	1210		14.1		11.4		1	U	
Hexane Ext Material Silica Gel Treated	mg/L	100	5	U	5	U	5	U	5	U	
Hexavalent Chromium	mg/L	NC	0.0055	U	0.28		0.38		0.34	J	

Notes:

SA-6 CWTP Effluent Criteria is the discharge limitation criteria from Sewer Use Permit #31630019

NC: No criterion established

CONC: Concentration reported in micrograms per liter (ug/l)

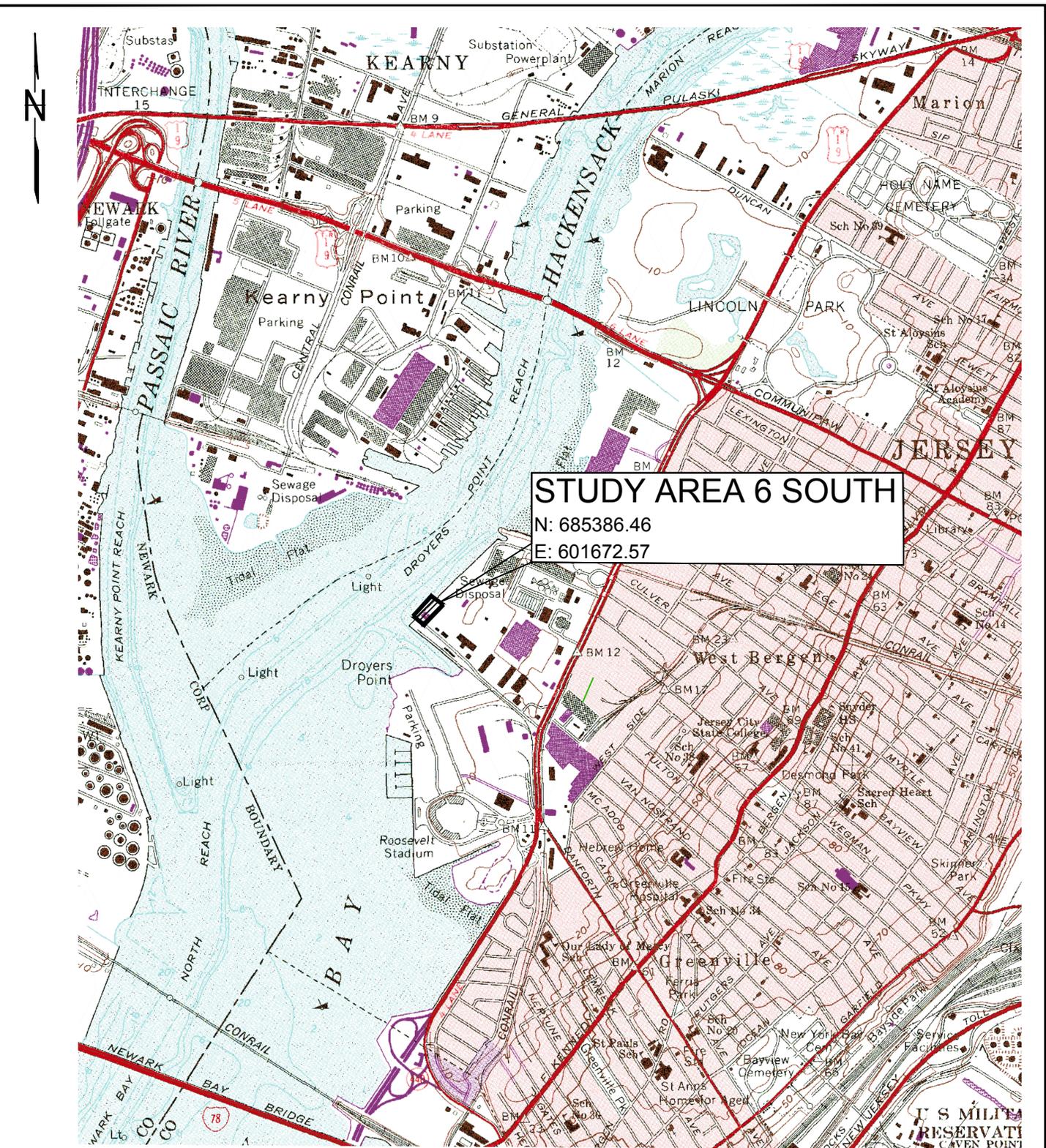
J: Estimated concentration

R or N: Rejected or negated by laboratory or data validator

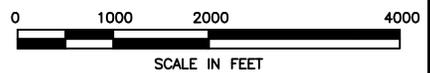
U: Not detected above method detection limit

FIGURES

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SOURCE: USGS QUADRANGLE MAP, 7.5 MIN SERIES
 JERSEY CITY, NJ-NY 1967, PHOTO REVISED 1981

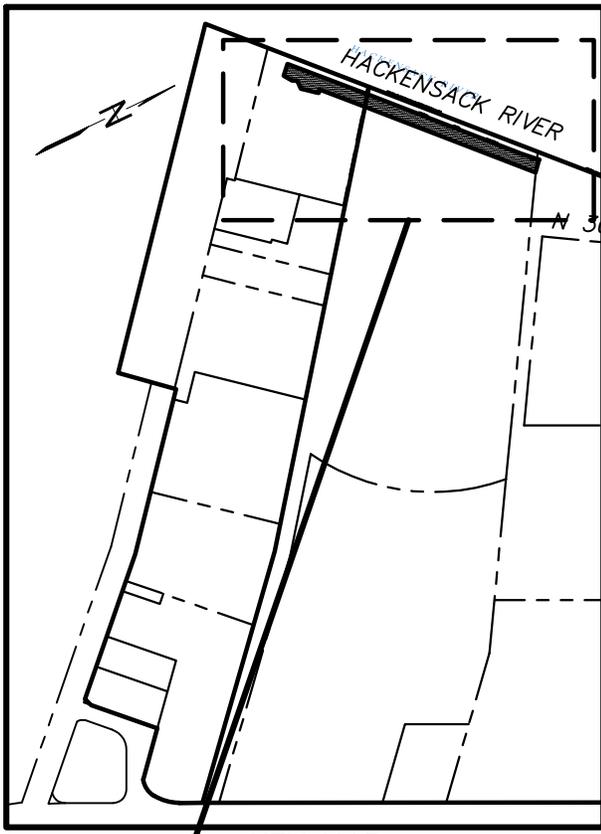


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FIGURE 1
 SITE LOCATION MAP
 STUDY AREA SA-6 SOUTH SITE 073
 JERSEY CITY, NEW JERSEY

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LEGEND

21901 BLOCK NUMBER

LOT 8 LOT NUMBER

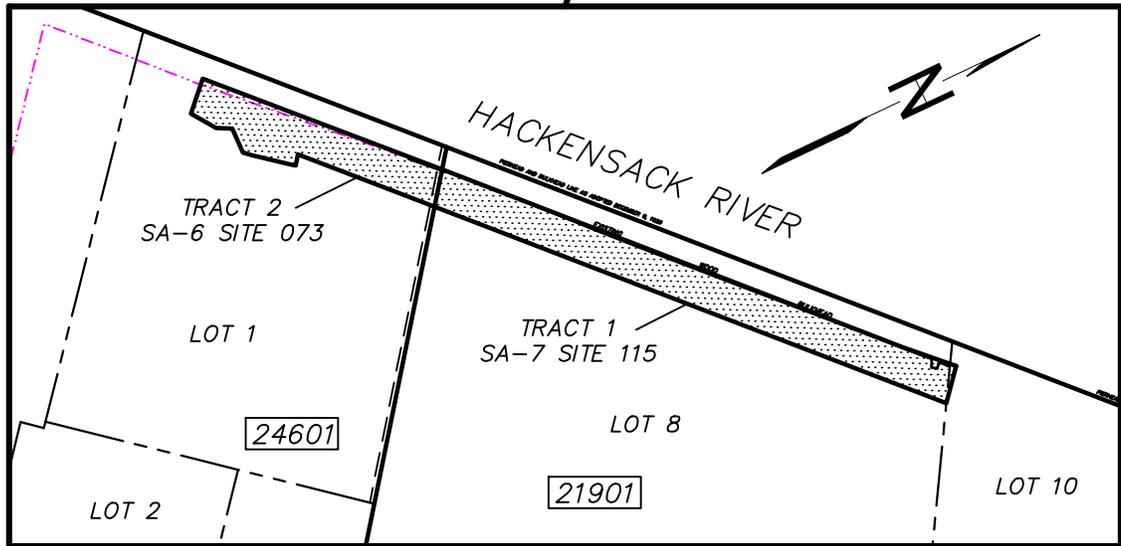
— BLOCK LINE

- - - LOT LINE

NOTE:

PREVIOUS TAX LOT/BLOCKS ARE SHOWN

KEY MAP
SCALE 1" = 600'

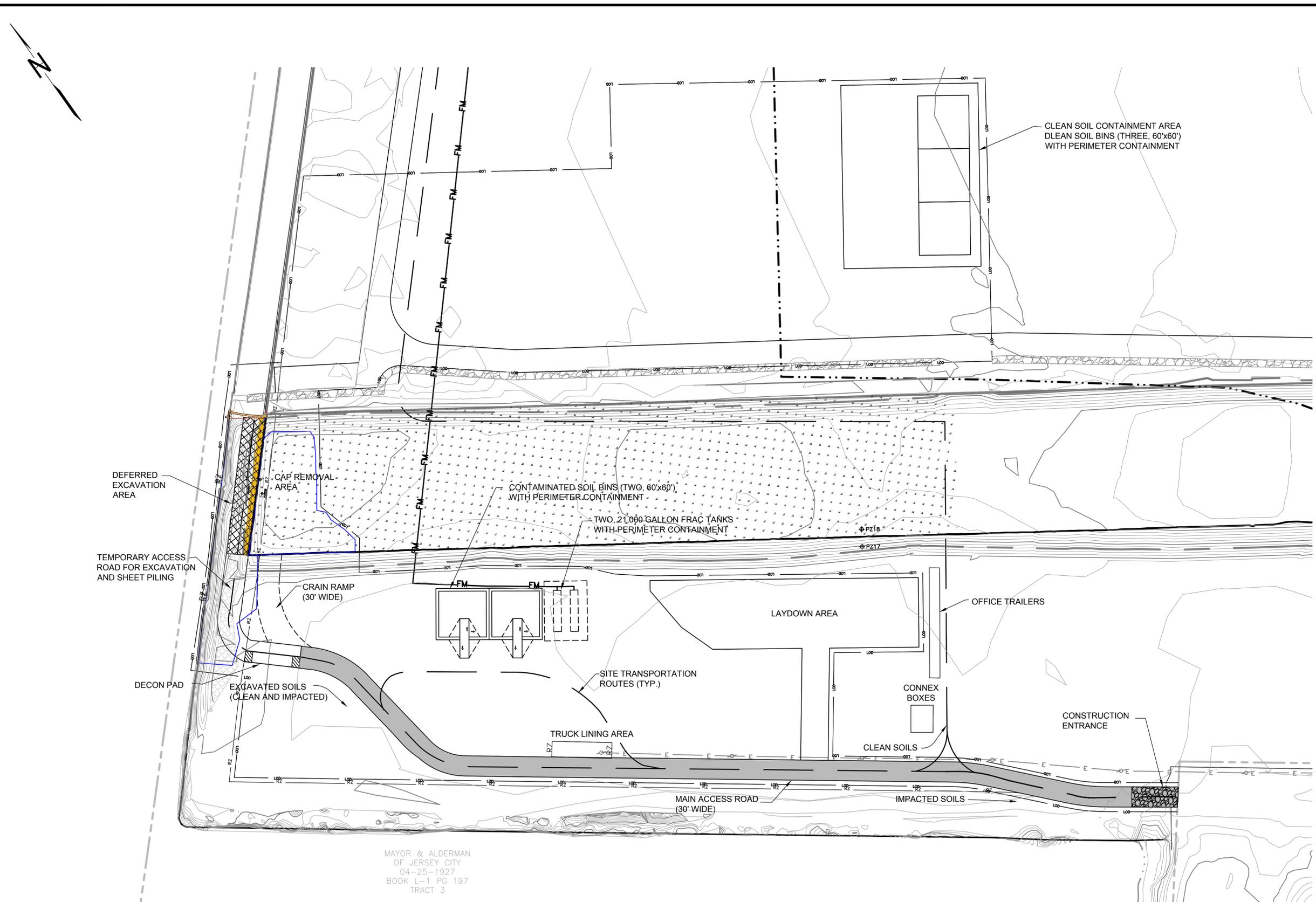


0 100 200 400
SCALE IN FEET

WOOD PROJECT No. 7772210089 DRAWING: 7772210089-5710-PAM0-F300		 ENVIRONMENT & INFRASTRUCTURE SOLUTIONS 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619	FIGURE 3 DEED NOTICE #4 RESTRICTED AREA STUDY AREA 6 SOUTH SITE 073 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 02/17/21	CHECKED/DATE: ZA 03/02/21		

C:\Users\scott.rudin\temp\cad\scott.rudin\deferred area rev\current drawings\7772210089-5710-PAM0-F300.dwg Wed, 31 Mar 2021 - 11:16pm scott.rudin

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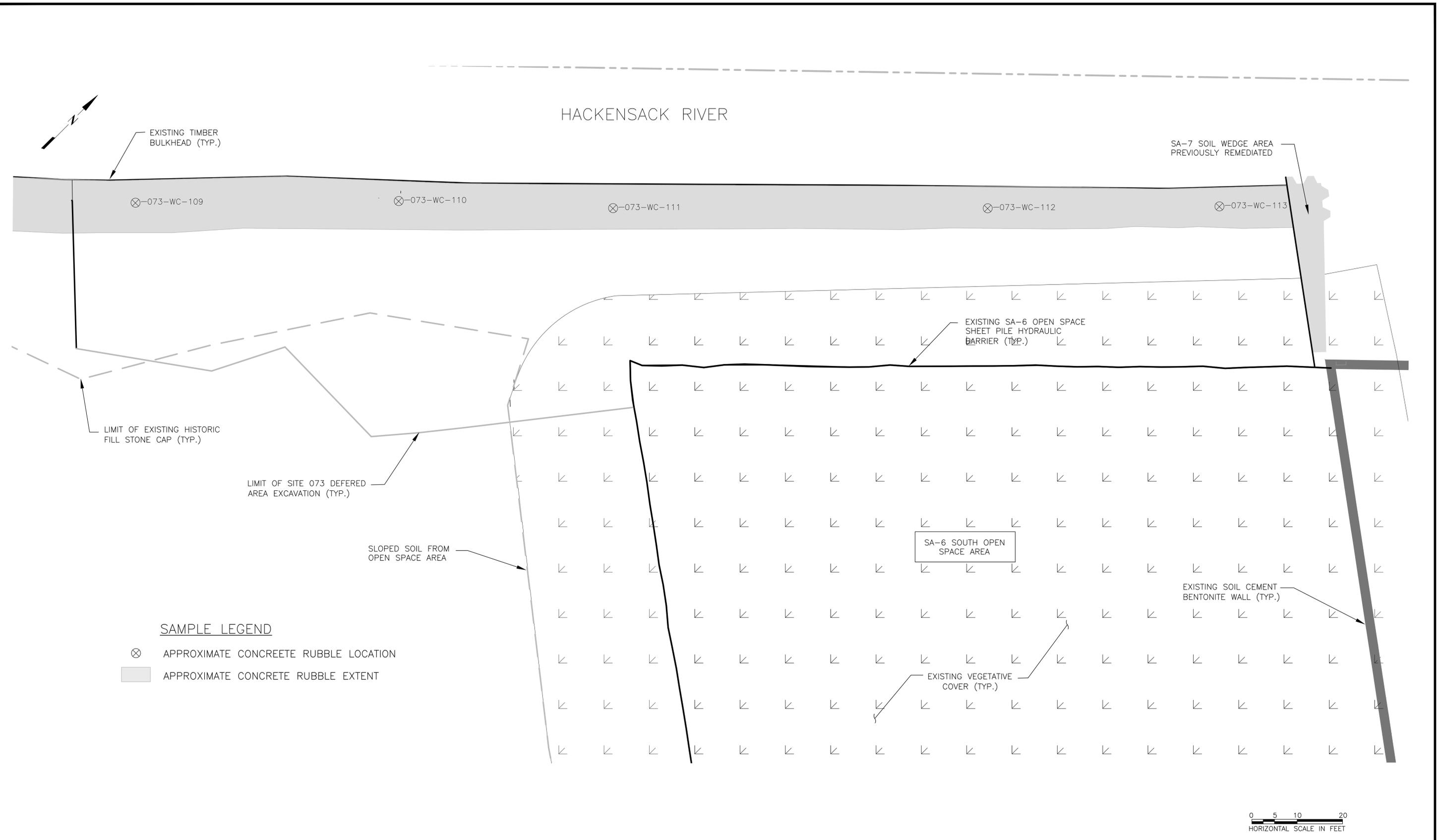
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FIGURE 5
TRUCK ROUTE MAP
STUDY AREA 6 SOUTH SITE 073
JERSEY CITY, NEW JERSEY

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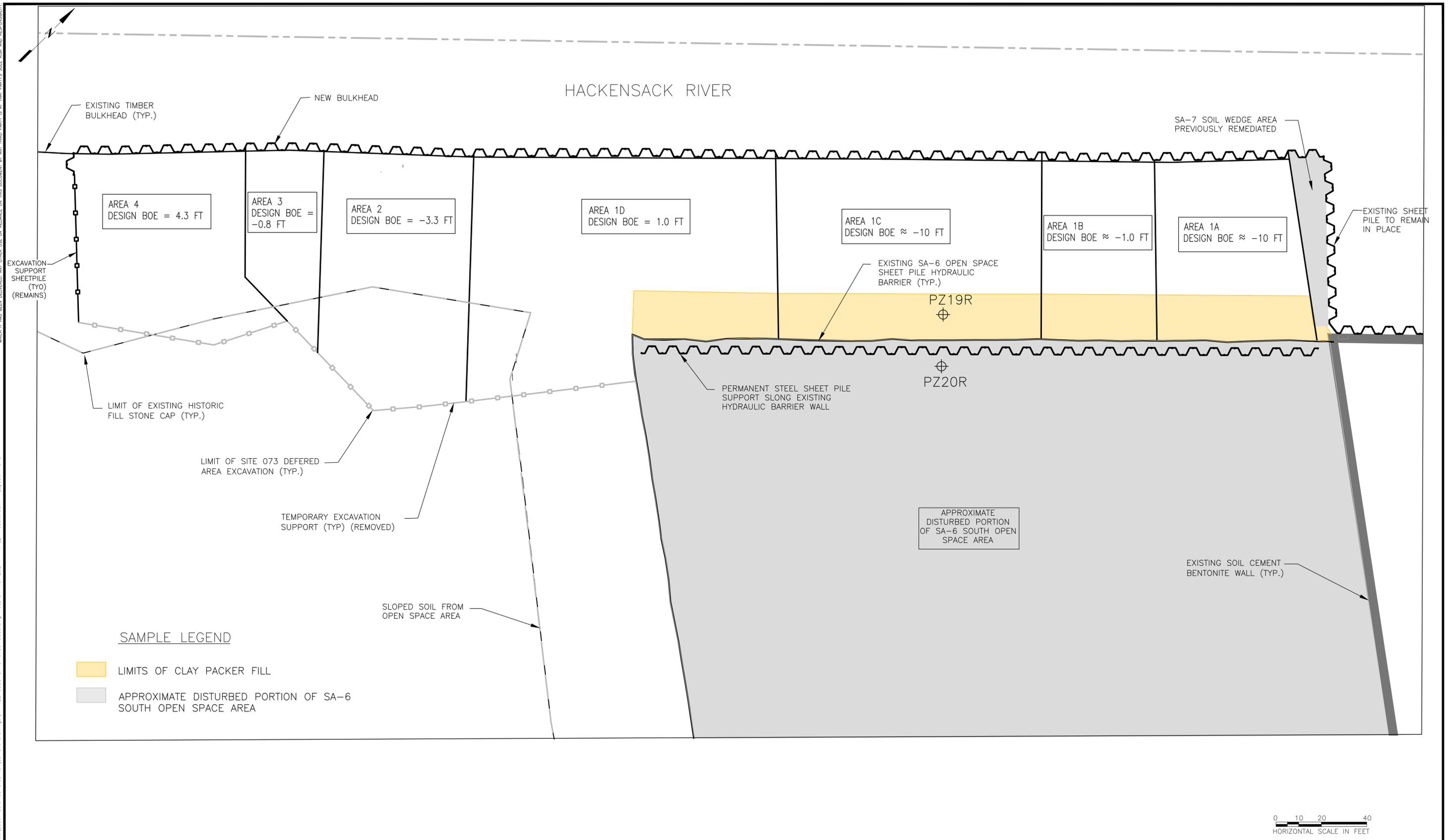
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200 AMERICAN METRO BLVD, SUITE 113
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FIGURE 6
2019 CONCRETE RUBBLE
SAMPLE LOCATIONS
STUDY AREA 6 SOUTH SITE 073
JERSEY CITY, NEW JERSEY

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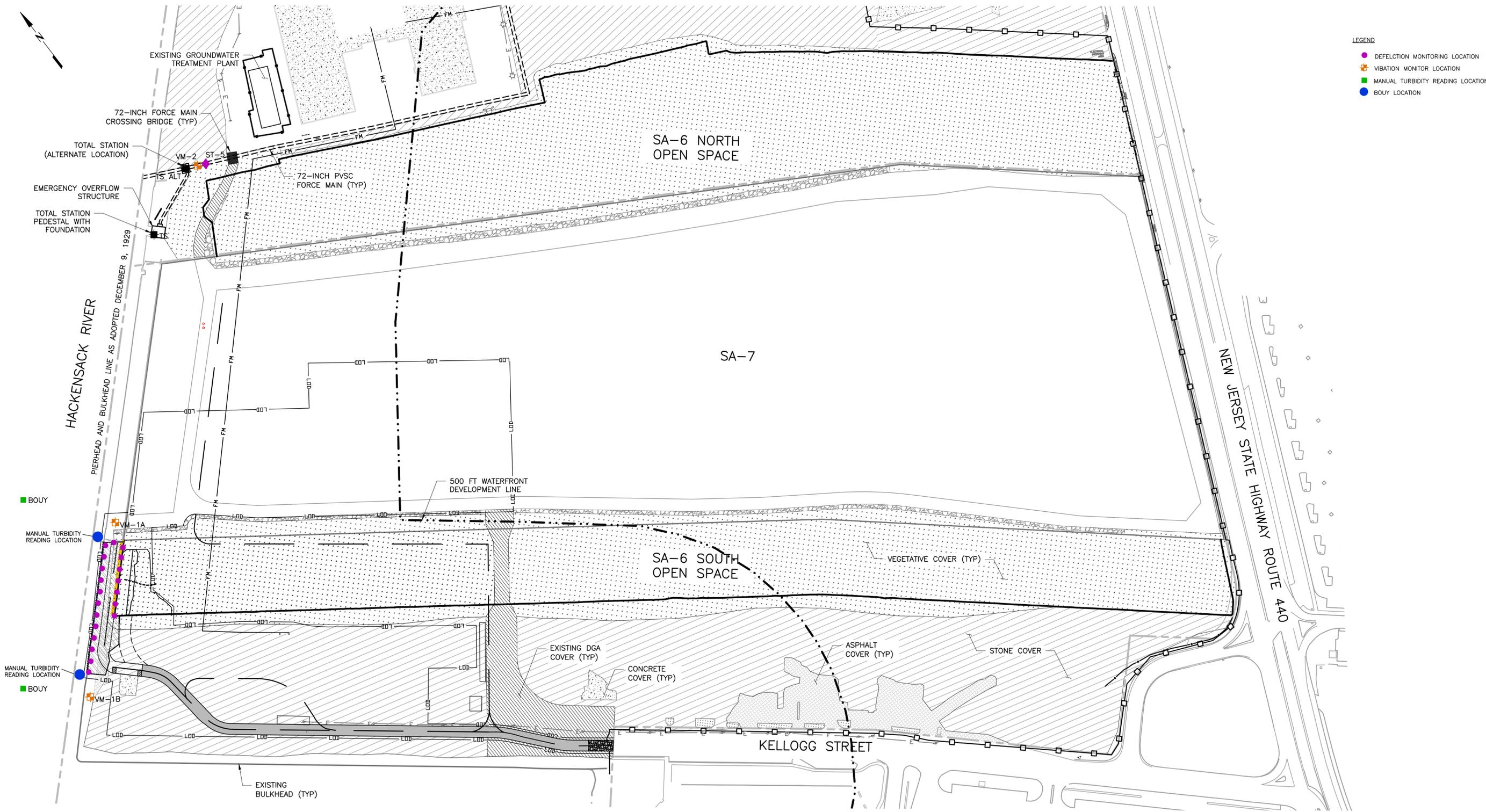
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ENVIRONMENT & INFRASTRUCTURE SOLUTIONS

200 AMERICAN METRO BLVD, SUITE 113
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FIGURE 8
EXCAVATION AREAS AND
PIEZOMETER LOCATIONS
STUDY AREA 6 SOUTH SITE 073
JERSEY CITY, NEW JERSEY

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- LEGEND**
- DEFLECTION MONITORING LOCATION
 - VIBRATION MONITOR LOCATION
 - MANUAL TURBIDITY READING LOCATION
 - BOUY LOCATION

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FIGURE 9
MONITORING LOCATIONS
STUDY AREA 6 SOUTH
JERSEY CITY, NEW JERSEY

FIGURE 10
SA-6 North/South Combined Chromium Remediation Schedule

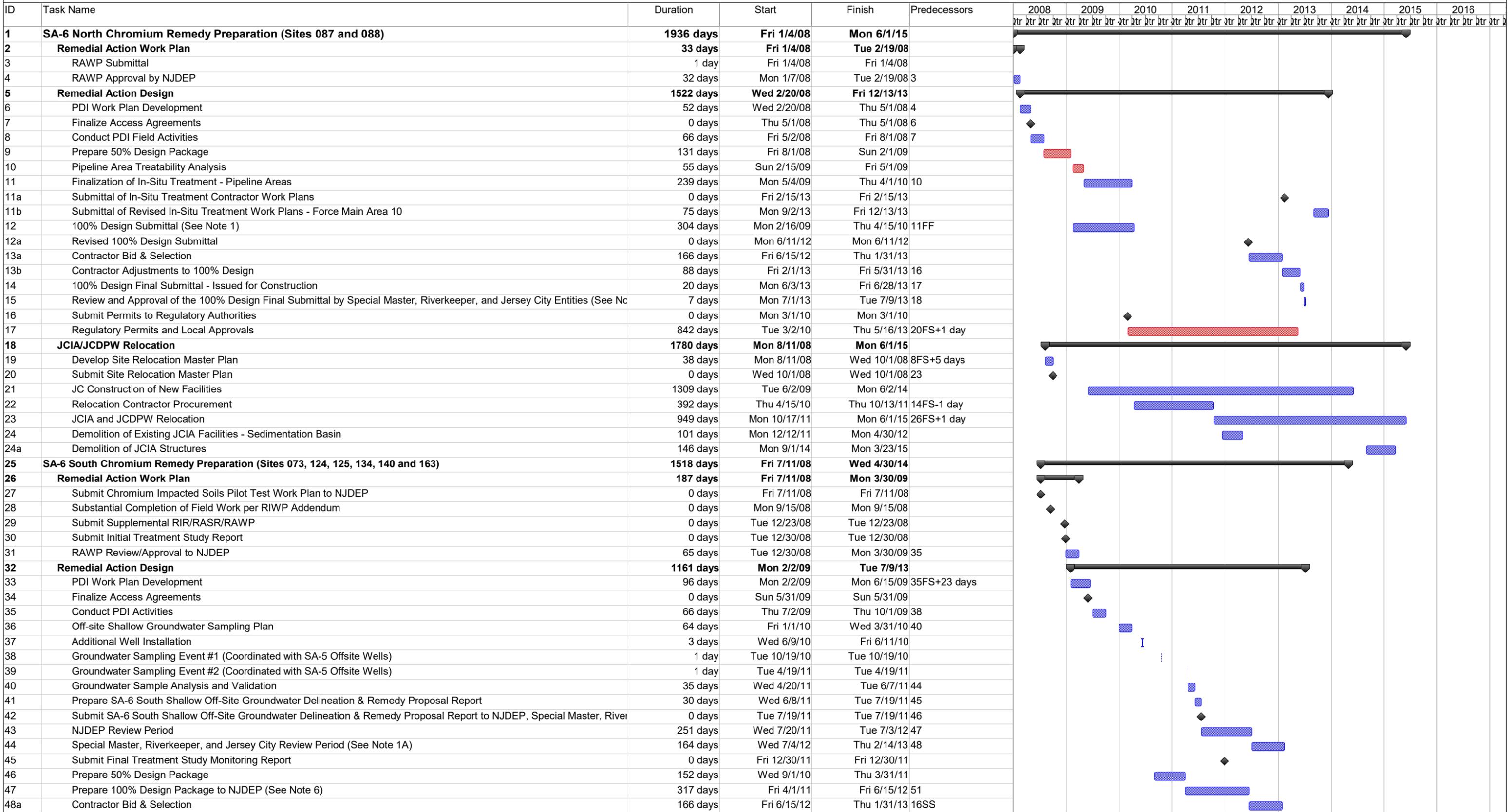


FIGURE 10 SA-6 North/South Combined Chromium Remediation Schedule

ID	Task Name	Duration	Start	Finish	Predecessors	2008		2009		2010		2011		2012		2013		2014		2015		2016	
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
48b	Contractor Adjustments to 100% Design	88 days	Fri 2/1/13	Fri 5/31/13	53																		
49	100% Design Final Submittal - Issued for Construction	20 days	Mon 6/3/13	Fri 6/28/13	54																		
50	Review and Approval of the 100% Design Final Submittal by Special Master, Riverkeeper, and Jersey City Entities	7 days	Mon 7/1/13	Tue 7/9/13	55																		
51	Submit Permitting Packages	0 days	Thu 5/31/12	Thu 5/31/12																			
52	Regulatory Permits and Local Approvals	254 days	Thu 5/31/12	Thu 5/16/13	57SS																		
53	Prepare and Submit Site 163 Supplemental Investigation Data (RIR/RAWP)	0 days	Fri 5/18/12	Fri 5/18/12																			
54	RAWP Review/Approval to NJDEP	25 days	Sat 5/19/12	Fri 6/22/12	59																		
55	Prepare and Submit In-Situ Treatment Work Plan Site 163	0 days	Mon 10/1/12	Mon 10/1/12	60																		
56	Submit Addendum to SA-6 South 100% Design for Site 163	0 days	Mon 10/1/12	Mon 10/1/12	61																		
57	SA-6 South Relocation	616 days	Mon 12/26/11	Wed 4/30/14																			
58	New GWTP Construction Completion	502 days	Mon 3/5/12	Thu 1/30/14																			
59	Demolition of 80 Kellogg	857 days	Mon 12/26/11	Wed 4/30/14																			
60	SA-6 North/South Field Implementation	894 days	Fri 3/1/13	Mon 8/1/16																			
60a	SA-6N In-Situ Treatment Areas 7, 8 and 10 (See Notes 13 and 20)	664 days	Mon 6/17/13	Thu 12/31/15																			
60b	SA-6S (Site 163) In-Situ Treatment (See Notes 14 and 20)	555 days	Fri 11/15/13	Thu 12/31/15																			
61	Mobilization (Includes new GWTP, In-situ Treatment & Main Remedy)	87 days	Fri 3/1/13	Fri 6/28/13																			
61a	Mobilization	87 days	Fri 3/1/13	Fri 6/28/13																			
62	Surcharge Install/Instrumentation	706 days	Mon 6/17/13	Mon 2/29/16																			
62a	Prepare Open Space Areas for Surcharge/Install Instrumentation (See Note 15)	142 days	Mon 6/17/13	Tue 12/31/13	70SS+10 days																		
62b	Place Stockpile Surcharge SA6N Western Areas	185 days	Tue 4/8/14	Fri 2/13/15	72FS+108 days																		
62c	Place Stockpile Surcharge SA6N Eastern Areas	175 days	Tue 6/30/15	Mon 2/29/16	73FS+96 days																		
62d	Place Stockpile Surcharge SA6S Western Areas	91 days	Mon 6/16/14	Mon 2/23/15	72FS+208 days																		
62e	Place Stockpile Surcharge SA6S Eastern Areas	155 days	Mon 10/6/14	Fri 5/8/15	72FS+43 days																		
63	Barrier Wall Install	569 days	Mon 8/12/13	Thu 10/15/15																			
63a	SA 6N Installation of Barrier Wall	159 days	Mon 3/9/15	Thu 10/15/15	70FS+110 days																		
63b	SA 6S Installation of Barrier Wall	210 days	Mon 8/12/13	Fri 5/30/14	70SS+77 days																		
64	Excavation	507 days	Tue 10/22/13	Wed 9/30/15																			
64a	SA 6N Excavation	218 days	Mon 12/1/14	Wed 9/30/15																			
64b	SA 6S Excavation	295 days	Tue 10/22/13	Mon 12/8/14																			
65	Backfill	558 days	Mon 11/11/13	Wed 12/30/15																			
65a	SA 6N Backfill	283 days	Mon 12/1/14	Wed 12/30/15	81SS																		
65b	SA 6S Backfill	384 days	Mon 11/11/13	Thu 4/30/15	82SS+14 days																		
66	Capping and Cover Soil Placement	426 days	Mon 12/1/14	Fri 7/15/16																			
66a	SA 6N Capping and Cover Soil Placement	83 days	Thu 3/24/16	Fri 7/15/16	84FS+60 days																		
66b	SA 6S Capping and Cover Soil Placement	283 days	Mon 12/1/14	Wed 12/30/15																			
67	Restoration	234 days	Tue 9/1/15	Thu 7/21/16																			
67a	Restoration	234 days	Tue 9/1/15	Thu 7/21/16																			
68	Demobilization (See Note 16)	22 days	Fri 7/1/16	Mon 8/1/16																			
68a	Deferred Remediation of SA-6 South Along Bulkhead (See Note 11)	1 day	Fri 3/1/13	Fri 3/1/13																			
68b	Deferred Remediation of SA-6 North/South Along PSEG Gas Line (See Note 12)	1 day	Fri 3/1/13	Fri 3/1/13																			
69	SA-6 North Project Closeout	311 days	Thu 10/1/15	Wed 12/7/16																			
70	RA Closure Report	263 days	Thu 10/1/15	Fri 9/30/16																			
71	RAR Report Submittal	0 days	Fri 9/30/16	Fri 9/30/16	96																		
72	Prepare Groundwater Remedy Monitoring Report (See Note 17)	131 days	Thu 6/9/16	Wed 12/7/16																			
73	Open Space As-Built Documentation	0 days	Sat 6/18/16	Sat 6/18/16																			
74	NJDEP Acceptance Letter of Completion (See Note 3)	0 days	Sat 6/18/16	Sat 6/18/16	99																		
75	SA-6 South Project Closeout (See Note 8)	311 days	Thu 10/1/15	Wed 12/7/16																			
76	RA Closure Report	263 days	Thu 10/1/15	Fri 9/30/16																			
77	RAR Report Submittal	0 days	Fri 9/30/16	Fri 9/30/16	102																		
78	Prepare Groundwater Remedy Monitoring Report (See Note 17)	131 days	Thu 6/9/16	Wed 12/7/16																			
79	Open Space As-Built Documentation	0 days	Wed 6/8/16	Wed 6/8/16																			
80	NJDEP Acceptance Letter of Completion (See Note 3)	86 days	Thu 6/9/16	Wed 10/5/16	105SS+1 day																		
81	SA-6 North Long Term Protections	1830 days	Wed 10/1/08	Thu 10/1/15																			

Project: SA-6 Remediation Schedule
Revision 4
Date: 8/28/15

Task Milestone Summary Critical

FIGURE 10 SA-6 North/South Combined Chromium Remediation Schedule

ID	Task Name	Duration	Start	Finish	Predecessors	2008		2009		2010		2011		2012		2013		2014		2015		2016	
						Q1	Q2	Q3	Q4	Q1	Q2												
82	Initial Conservation Restriction	0 days	Wed 10/1/08	Wed 10/1/08			◆																
83	Option for JC to Purchase Property	0 days	Wed 10/1/08	Wed 10/1/08			◆																
84	Submit Open Space Design Standards for Park Design	294 days	Sun 2/15/09	Thu 4/1/10																			
85	Submit Revised Open Space Design Standards for Park Design	0 days	Tue 4/16/13	Tue 4/16/13													◆						
86	Submit Long Term Monitoring Plan (See Note 19)	0 days	Thu 10/1/15	Thu 10/1/15																	◆		
87	Amended Conservation Restriction (See Note 2)	1 day	Wed 2/10/10	Wed 2/10/10																			
88	Final Deed Notice for Open Space (See Note 3)	1 day	Wed 2/10/10	Wed 2/10/10																			
89	Final Transfer of Open Space Title to JC (See Note 4)	1 day	Wed 2/10/10	Wed 2/10/10																			
90	Placement of Open Space on Jersey City ROSI Inventory (See Note 4)	1 day	Wed 2/10/10	Wed 2/10/10																			
91	Submit Open Space Development Plans (See Note 5)	1 day	Wed 2/10/10	Wed 2/10/10																			
92	SA-6 South Long Term Protections	2569 days	Thu 6/5/08	Sat 3/31/18																			
93	Initial Conservation Restriction	0 days	Thu 3/19/09	Thu 3/19/09				◆															
94	Prepare Open Space Design Standards for Park Design (Combine with SA-6 North)	0 days	Tue 4/16/13	Tue 4/16/13	111FF																		
95	Submit Long Term Monitoring Plan (See Note 19)	0 days	Thu 10/1/15	Thu 10/1/15																	◆		
96	Development AOC Shallow GW Monitoring	261 days	Mon 1/2/17	Sun 12/31/17																			
97	Submit Development AOC Shallow GW Remedy Report	0 days	Sat 3/31/18	Sat 3/31/18																			
98	L-Well GW (One-Time) Monitoring Event (Inside Cap Area) (See Note 18)	3 days	Wed 6/3/15	Fri 6/5/15																			
99	L-Well GW (One-Time) Monitoring Event (Outside Cap Area) (See Note 18)	1 day	Wed 2/10/10	Wed 2/10/10																			
100	Submit L-Well GW Remedy Report	120 days	Mon 8/18/14	Fri 1/30/15																			
101	Amended Conservation Restriction (See Note 7)	1845 days	Thu 6/5/08	Thu 6/25/15																			
102	Final Deed Notice for Open Space (See Note 3)	0 days	Fri 1/30/15	Fri 1/30/15	126																		
103	Final Transfer of Open Space Title to JC (See Note 9)	0 days	Fri 1/30/15	Fri 1/30/15	126																		
104	Placement of Open Space on Jersey City ROSI Inventory (See Note 9)	0 days	Fri 1/30/15	Fri 1/30/15	126																		
105	Submit Open Space Development Plans (See Note 10)	0 days	Fri 1/30/15	Fri 1/30/15	126																		

Note 1: 100% Design Submittal includes Data Validation Plan and Health and Safety Plan.

Note 1A: The 30-day Special Master review period is provided as a placeholder. This 30-day period is not binding to the Special Master or Honeywell.

Note 2: The future event(s) that will trigger the deadline for the Amended Conservation Restriction, as set forth in Schedule A of the Conservation Restriction recorded on January 9, 2009, include: 1) upon completion of the construction of the hydraulic barrier walls the AOC 1 Open Space Area will be re-surveyed (the "As-Built Survey") and a metes and bounds description (the "As-Built Description") will be prepared based on the As-Built Survey; 2) following preparation of the As-Built Description Honeywell shall request that the Court amend the order entered on April 8, 2009, which, pursuant to paragraph 60(b)(i) of the Consent Decree, incorporates the Conservation Restriction ("the Conservation Restriction Order"), by substituting the As-Built Description for the metes and bounds description set forth in Exhibit A of the Conservation Restriction recorded on January 9, 2009, and thereby creating an amended Conservation Restriction; and 3) once the Conservation Restriction Order is amended by the Court, Honeywell shall record the Amended Conservation Restriction in the office of the Hudson County Register (TBD).

Note 3: Deed Notice is to be submitted 90 calendar days following completion of Chromium Remedy. The NJDEP will issue an Acceptance Letter of Completion after the final deed notice is recorded with the county clerk and submitted to the NJDEP for review (TBD).

Note 4: 120 calendar days following construction of adjacent roads and utility corridors within the AOC 1 Open Space Area (TBD).

Note 5: Open Space Development Plans to be submitted any time after approval of Open Space Design Standards (TBD).

Note 6: 100% Design includes:
 * Data Validation Plan
 * Health and Safety Plan
 * Post-Treatment Monitoring Plan
 * Post Remedial Treated Soil Monitoring Plan
 * Plan for Investigative Measures for Cap Integrity
 * L-Well Groundwater Monitoring Plan
 * Groundwater Level Control Plan
 * Development AOC Shallow Groundwater Monitoring Plan

Note 7: The future event(s) that will trigger the deadline for the Amended Conservation Restriction, as set forth in Schedule A of the Conservation Restriction recorded on March 25, 2010, include: 1) upon completion of the construction of the hydraulic barrier walls the Open Space AOC will be re-surveyed (the "As-Built Survey") and a metes and bounds description (the "As-Built Description") will be prepared based on the As-Built Survey; 2) following preparation of the As-Built Description Honeywell shall request that the Court amend the order, entered on March 21, 2011, which, pursuant to paragraph 74(b)(i) of the Consent Decree, incorporates the Conservation Restriction ("the Conservation Restriction Order"), by substituting the As-Built Description for the metes and bounds description set forth in Exhibit A of the Conservation Restriction recorded on March 25, 2010, and thereby creating an amended Conservation Restriction; and 3) once the Conservation Restriction Order is amended by the Court, Honeywell shall record the Amended Conservation Restriction in the office of the Hudson County Register (TBD).

Note 8: Honeywell reserves the right to combine project closeout activities.

Note 9: 120 calendar days following construction of adjacent roads and utility corridors within the Open Space AOC (TBD).

Note 10: Open Space Development Plans to be submitted any time after approval of Open Space Design Standards (TBD).

Note 11: The deferred remediation along the SA-6 South Bulkhead will be performed commensurate with the schedule for construction of the permanent Bayfront Bulkhead Project. This Bulkhead construction project is planned for the calendar year 2019 which results in the deferred remediation phase being implemented within approximately three years of completion of the main site remedy.

Note 12: The deferred remediation along the SA-6 North/South PSEG Gas Line will be performed commensurate with the schedule for construction of the Route 440 Road Widening Project. This Road Widening construction project is planned for calendar year 2019 which results in the deferred remedy phase being implemented within approximately three years of completion of the main site remedy.

Note 13: In-situ treatment was initiated in Areas 7 and 8 at SA-6 North. Additional time is allotted for the revised Area 10 footprint proximate to the 72-inch forcemain and for subsequent injection events if needed.

Note 14: In-situ treatment at SA-6 South was completed in Summer 2014. Additional time is allotted in the event that a subsequent injection event is needed.

Note 15: This activity includes all locations except the JCIA Facilities. The surcharge instrumentation will be installed at JCIA after relocation of the employees to the new municipal services complex.

Note 16: The chromium remedy contractor is planning demobilization as indicated. Depending on the weather, there may be some additional site restoration activities in the fall of 2016.

**FIGURE 10
SA-6 North/South Combined Chromium Remediation Schedule**

ID	Task Name	Duration	Start	Finish	Predecessors	2008	2009	2010	2011	2012	2013	2014	2015	2016
						Qtr								

Note 17: Report prepared pursuant to Paragraph 72, (c)(viii) of SA-6 North Consent Decree and Paragraph 86, (c)(xix) of the SA-6 South Consent Decree. both of which state, "A report reviewing measured groundwater levels for the groundwater remedy."

Note 18: The L-well locations outside of the Open Space (Cap Area) will be sampled after one full year of seasonal hydrologic fluctuations following completion of the Chromium Remedy, currently anticipated to be in the latter half of March 2017.

Note 19: A combined LTMP addressing both SA-6 North and South will be prepared and submitted.

Note 20: Confirmation soil sampling at in-situ treatment areas have been / will be completed as follows:

- SA-6 North TA-7 & TA-8:
 - 6-month: June 2014 (Completed)
 - 3-year: Approx. June 2016
- SA-6 North TA-10-1:
 - 6-month: Approx. March 2016 (weather permitting)
 - 3-year: No later than approx. Sept 2018 (or sooner pending approval)
- SA-6 South (Site 163)
 - 6-month: April 2015 (Completed)
 - 3-year: TBD (not needed if Site 163 re-injections not performed)

APPENDIX A

REPRESENTATIVE PHOTOGRAPHS

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 1
Former Timber Bulkhead Prior to Mobilization



Photo 2
Former Timber Bulkhead Prior to Mobilization



Photo 3
Landside Deferred Area Prior to Mobilization



Photo 4
Landside Deferred Area Prior to Mobilization



Photo 5
Office and trailer setup



Photo 6
Constructing gravel access road

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 7
Vibration & settlement monitoring of JCMUA 72" force main



Photo 8
Placing boat in river to deploy turbidity monitoring buoy and turbidity curtain



Photo 9
Installing and anchoring turbidity curtain



Photo 10
Mobilization and assembly of crawler crane for sheet pile installation



Photo 11
Unloading sheet pile on SA-6 South



Photo 12
Temporary Construction Water Treatment Plant

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 13
Weir tanks with secondary containment on SA-6 South



Photo 14
Roadway crossover protection over dual contained HDPE pipe on SA-7



Photo 15
Installing dewatering sumps in the Deferred Area



Photo 16
Installing depressurization wells



Photo 17
Installing depressurization wells, observation wells, header pipe, and electrical conduits for dewatering system inside the Deferred Area



Photo 18
Clean stockpile area on SA-7 – From left to right – Horizon C, Horizon B, Structural Fill, Horizon A

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 19
Removing Horizon A soil in the Open Space Area



Photo 20
Removing structural fill in the Open Space Area on SA-6 South



Photo 21
Excavating GDL cover soils in the Open Space Area on SA-6 South with long stick excavator



Photo 22
Removing GDL layer



Photo 23
Exposing edge of liner and GDL/orange demarcation layer in the Open Space Area



Photo 24
Installing reinforced hydraulic barrier wall

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 25
Installing brackets from existing hydraulic barrier wall to reinforce hydraulic barrier sheet pile wall



Photo 26
Removing common borrow to elevation +10 msl in the Deferred Area



Photo 27
Loading out impacted non-hazardous material from the Deferred Area



Photo 28
Applying dust suppression during concrete debris removal from existing bulkhead



Photo 29
Removing concrete and debris along bulkhead



Photo 30
Removing reusable concrete from the Deferred Area

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 31
Distributing DGA on lower working platform



Photo 32
Constructing crane platform



Photo 33
Installing permanent sheetpile along bulkhead



Photo 34
Installing permanent sheetpile along bulkhead



Photo 35
Installing and readjusting permanent sheetpile along bulkhead



Photo 36
Installing grout columns

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 37
Installing single sheet pile at northern end of the Deferred Area leak location



Photo 38
Pumping flowable fill behind new sheet pile



Photo 39
Jet grouting at north end of the Deferred Area



Photo 40
Installing temporary excavation support sheet piles



Photo 41
Coal tar and epoxy repairs on hydraulic barrier wall



Photo 42
Removing concrete from the Deferred Area

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 43
Resizing concrete



Photo 44
Processing concrete stockpile



Photo 45
Excavating 20 foot zone of upper platform to elevation +12 msl



Photo 46
Loading out non-hazardous soil



Photo 47
Excavating hazardous soil



Photo 48
Loading out hazardous soil

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 49
Excavating Area 1A in the Deferred Area



Photo 50
Bottom of Excavation Area 4 (-4.3 ft)



Photo 51
Bottom of Excavation Area 3 (-0.8 ft)



Photo 52
Bottom of Excavation Area 2 (-3.3 ft)



Photo 53
Excavating Area 1A-1



Photo 54
Bottom of Excavation Area 1A-1 (-10.2 ft)

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 55
Bottom of Excavation Area 1A-2 (-10.2 ft)



Photo 56
Bottom of Excavation Area 1C-1 (-10.2 ft)



Photo 57
Bottom of Excavation Area 1C-2 (-10.2 ft)



Photo 58
Facing south, excavator exposing top of meadow mat on the eastern side of Excavation Area 1C



Photo 59
Placing geotextile fabric in Excavation Area 3 before installing bridge lift



Photo 60
Installing bridge lift in Excavation Area 2

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 61
Placing 16-ounce geotextile fabric on completed bottom of excavation



Photo 62
Pushing out bridge lift in Excavation Area 1A-2



Photo 63
Abandoning depressurization well, DP-3



Photo 64
Removing temporary excavation support sheet piles



Photo 65
Removing structural fill next to hydraulic barrier wall prior to installing flowable fill

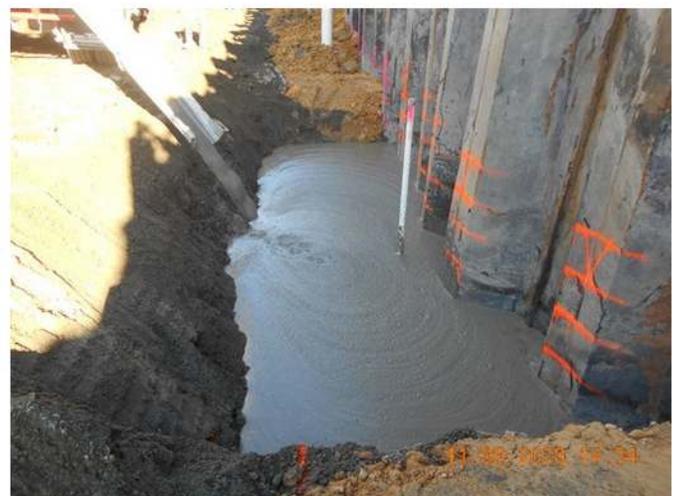


Photo 66
Pumping flowable fill next to hydraulic barrier wall

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 67
Placing lean clay next to hydraulic barrier wall



Photo 68
Installing lean clay along hydraulic barrier wall and placing common borrow in 1' lift within the Deferred Area



Photo 69
Placing lightweight fill in Excavation Areas 3 and 4



Photo 70
Compaction testing of structural fill in Excavation Area 3



Photo 71
Placing, compacting, and testing structural fill within the Deferred Area



Photo 72
Backfilling and compacting structural fill within the Deferred Area

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 73
Compacting common borrow within the Deferred Area



Photo 74
Compacting structural fill wedge along hydraulic barrier wall



Photo 75
Restoring and reconstructing impacted soils in the Open Space Area



Photo 76
Confirming elevations in the Open Space Area



Photo 77
Verifying points in the Open Space Area



Photo 78
Completing grading of the Open Space Area

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 79
Installing 124-PZ-20R in the Open Space Area



Photo 80
Installing liner boot around 124-PZ-20R within the Open Space Area



Photo 81
Covering and protecting subgrade in the Open Space Area



Photo 82
Deploying geotextile for the Open Space Area restoration



Photo 83
Preparing subgrade for liner installation; adding calciment for supplemental moisture control



Photo 84
Stitching gas venting layer (GVL) panels together

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 85
Installing GVL in the Open Space Area



Photo 86
Installing Linear Low Density Polyethylene (LLDPE) liner Panel #1



Photo 87
Fusion welding liner Panel #1 to liner Panel #2



Photo 88
Connecting existing GVL to new GVL using zip-ties



Photo 89
Extrusion welding of existing LLDPE liner to new LLDPE liner



Photo 90
Extrusion welding repairs on LLDPE liner

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 91
Installing GDL and deploying orange demarcation fabric



Photo 92
Placing GDL cover soils over orange demarcation fabric in the Open Space Area



Photo 93
Installing GDL cover soils within the Open Space Area



Photo 94
Placing warning tape atop the black root barrier geotextile



Photo 95
Installing and compacting structural fill within the Open Space Area



Photo 96
Placing Horizon B soil within the Open Space Area and verifying grades

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 97
Installing Horizon A topsoil within the Open Space Area



Photo 98
Drill seeding the Open Space Area



Photo 99
Installing erosion control blanket within the Open Space Area



Photo 100
Installing Redi-Rock wall



Photo 101
Placing clean 3/4" stone and wrapping in geotextile fabric behind Redi-Rock wall

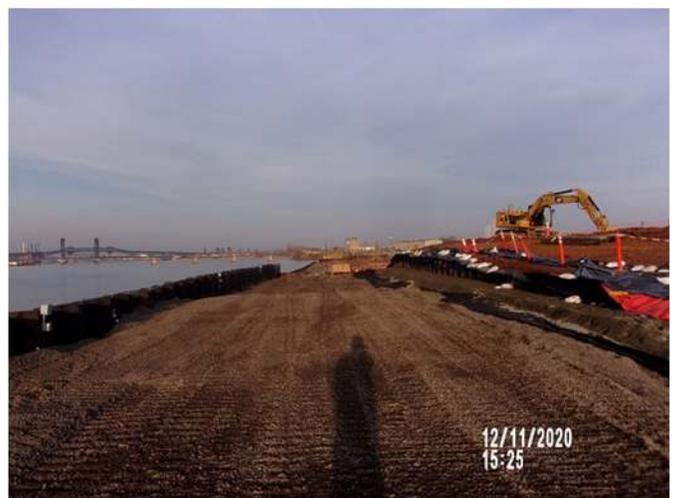


Photo 102
Installing lightweight fill in the Deferred Area

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 103
Installing lightweight fill in the Deferred Area



Photo 104
Installing and compacting DGA in the Deferred Area



Photo 105
Placing geotextile fabric over compacted DGA within the Deferred Area



Photo 106
Installing clean 3/4" stone within the Deferred Area



Photo 107
From left to right - Deferred Area, Redi-Rock wall, and Open Space Area



Photo 108
Final restoration of the Deferred Area and Open Space Area

SA-6 South Chromium Remedy - Bulkhead Deferred Area



Photo 109
Final restoration of the Deferred Area

APPENDIX B

ELECTRONIC DATA DELIVERABLE SUBMITTAL CONFIRMATION

From: DEP SRPEDD <SRPEDD@dep.nj.gov>

Sent: Tuesday, February 09, 2021 8:36 PM

To: Patel, Dakshesh <dakshesh.patel@woodplc.com>

Subject: G000000927, RPC030001, HCC73, HB264161, (Directory: 20210125) - Passed

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

The EDD submission via email from (dakshesh.patel@woodplc.com) on (2/8/2021 11:50:32 AM) with the subjectline "[EXTERNAL] RE: G000000927, RAP190001"

The following identifiers were in the DTST file:

- Directory: 20210125
- DESC: DEGEN OIL & CHEMICAL COMPANY
- SRPID: G000000927
- Submit Date: 2021/01/25

This submission has been issued an SRP Catalog ID: HB264161

Submission status: **Passed.**

Please do **not** resubmit.

EDD data deliverable must be submitted only once.

- To fulfill Key Document requirements attach only a copy of this email as an appendix to the document.

- Do **not** resubmit any approved EDD deliverable as part of a portal submission.

Email ID: OEM_58304
Sub ID: SUB_503648

APPENDIX C

RECORD DRAWINGS (CD ONLY)

APPENDIX D

BORING LOGS AND WELL DOCUMENTATION

wood. Honeywell SA-6 Bulkhead

LOCATION: SA-6 Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-09

DATE BEGAN: 10-28-2019

DATE FINISHED: 10-28-2019

INSPECTOR: Helen Becker-Cerbone

DRILLING CO: B&B Drilling

DRILLING METHOD: Direct Push

DRILL EQUIP: Geoprobe

SAMPLING TOOL: 4ft Macrocore

COMPLETION DEPTH: 14' bgs

GW DEPTH: 5.0' bgs

DRILLER: Ed Blewett

NORTH: 685639.2

EAST: 601528.1

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	3.0		0.0 - 0.5' FILL: TOPSOIL, with grass and roots		Location of boring moved 2' to the south from the original location
1.0						0.5 - 3.5' FILL: Grayish brown fine to coarse SAND, little Silt; dense, dry. Brownish red color at 1.5-1.8		073-WC-09-0103 (1.0-3.0) VOC grab (2.5-3.0) at 9:35
2.0								
3.0								
4.0		S2	NA	1.8		3.5 - 4.0' FILL: Grayish brown fine SAND and SILT, some medium Gravel; medium dense, damp. Brownish red color at 3.5-3.8'		
5.0						4.0 - 5.8' FILL: Brown fine SAND and SILT, some fine Gravel; dense, moist to wet at 5.0' bgs		
6.0						5.8 - 8.0' No recovery		073-WC-09-0510 (5.5-10.5) VOC grab (8.0-8.5) at 9:55
7.0								
8.0		S3	NA	4.0		8.0 - 9.0' FILL: Gray fine angular ASPHALT pieces, some Silt, little fine sand; medium dense, wet		
9.0						9.0 - 12.0' FILL: Gray fine to medium SAND, trace fine Gravel; dense, wet. Brownish red color at 11.5-11.7'		Very hard drilling (9.0-12.0)
10.0								

PREPARED BY: CM

CHECKED BY: HBC

wood. Honeywell SA-6 Bulkhead

LOCATION: SA-6 Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-09

DATE BEGAN: 10-28-2019

DATE FINISHED: 10-28-2019

INSPECTOR: Helen Becker-Cerbone

DRILLING CO: B&B Drilling

DRILLING METHOD: Direct Push

DRILL EQUIP: Geoprobe

SAMPLING TOOL: 4ft Macrocore

COMPLETION DEPTH: 14' bgs

GW DEPTH: 5.0' bgs

DRILLER: Ed Blewett

NORTH: 685639.2

EAST: 601528.1

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
10.0								
11.0								073-WC-09-1014 (10.5-13.5) VOC grab (10.5-11.0) at 10:15
12.0	S4	NA	2.0			12.0 - 13.5' SM: Dark reddish brown fine SAND and SILT; soft, moist		No recovery 12.0-16.0' bgs. Move boring location 2' south
13.0								
14.0						13.5 - 14.0' SM: Brown fine to medium SAND, some Silt; very dense, moist. End of boring at 14.0' bgs		Very hard drilling (13.5-14.0)
15.0								
16.0								
17.0								
18.0								
19.0								
20.0								

PREPARED BY: CM

CHECKED BY: HBC

wood. Honeywell SA-6 Bulkhead

LOCATION: SA-6 Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-10

DATE BEGAN: 10-28-2019

DATE FINISHED: 10-28-2019

INSPECTOR: Helen Becker-Cerbone

DRILLING CO: B&B Drilling

DRILLING METHOD: Direct Push

DRILL EQUIP: Geoprobe

SAMPLING TOOL: 4ft Macrocore

COMPLETION DEPTH: 20' bgs

GW DEPTH: 8.0' bgs

DRILLER: Ed Blewett

NORTH: 685604

EAST: 601494.4

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	3.4		0.0 - 0.3' TOPSOIL: Dark brown SILT, little fine sand, grass, roots; soft, damp		
1.0						0.3 - 2.0' FILL: Dark brown fine to coarse SAND, some Silt, little fine gravel; dense, damp		
2.0						2.0 - 4.0' FILL: CONCRETE, Black gravel zone (2.3-2.5')		
3.0								
4.0		S2	NA	3.5		4.0 - 5.0' FILL: CONCRETE		
5.0						5.0 - 5.5' FILL: Dark brown fine to coarse SAND, some Silt and fine gravel; dense, damp		
6.0						5.5 - 9.4' FILL: Dark brown over reddish brown fine to coarse SAND, little Silt and fine gravel; medium dense, moist to wet at 8.0' bgs		
7.0								073-WC-10-0610 (6.5-7.5 + 8.5-9.5) VOC grab (7.0-7.5) at 14:00
8.0		S3	NA	4.0		9.4 - 9.7' PT: Black organic material(wood and plant roots), fine to medium Sand, Silt, and fine gravel; dense, wet		
9.0						9.7 - 9.9' ML: Reddish brown SILT; dense, damp		
10.0								

PREPARED BY: CM

PAGE 1 OF 2

CHECKED BY: HBC

wood. Honeywell SA-6 Bulkhead

LOCATION: SA-6 Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-10

DATE BEGAN: 10-28-2019

DATE FINISHED: 10-28-2019

INSPECTOR: Helen Becker-Cerbone

DRILLING CO: B&B Drilling

DRILLING METHOD: Direct Push

DRILL EQUIP: Geoprobe

SAMPLING TOOL: 4ft Macrocore

COMPLETION DEPTH: 20' bgs

GW DEPTH: 8.0' bgs

DRILLER: Ed Blewett

NORTH: 685604

EAST: 601494.4

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
10.0								
						9.9 - 18.0' SW: Brownish gray fine to coarse SAND; loose, wet		
	12.0	S4	NA	4.0				
	13.0							
	14.0							
	15.0							073-WC-10-1418 (14.5-17.5) VOC grab (14.5-15.5) at 14:30
	16.0	S5	NA	3.0				
	17.0							
	18.0					18.0 - 20.0' ML: Brown SILT, little Clay; soft grading to stiff, low plasticity, wet. End of boring at 20.0' bgs.		
	19.0							
	20.0							
<p>PREPARED BY: <u>CM</u></p> <p>CHECKED BY: <u>HBC</u></p> <p style="text-align: center;">PAGE 2 OF 2</p>								

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-11

DATE BEGAN: 12-06-19

DATE FINISHED: 12-06-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 1.5" diameter

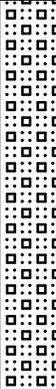
COMPLETION DEPTH: 20.0 ft bgs

GW DEPTH: 8.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	4.0		0.0 - 3.0' SW: Dark brown fine SAND, some fine gravel, trace silt	NM	Waste Class horizontal composite 073-WC-11-0203 (2.0-3.0) at 10:50 Mixed on 12-09-19: 073-WC-11 (2.0-3.0) from 12-06-19 073-WC-12A (1.0-2.0) from 12-09-19 073-WC-11A (2.0-3.0) from 12-09-19
1.0								
2.0								
3.0								
4.0						3.0 - 4.0' CONCRETE: Crushed CONCRETE		
5.0						4.0 - 5.0' No recovery		
6.0								
7.0								
8.0				0.0		5.0 - 9.0' CONCRETE: Solid CONCRETE		Air rotary through solid concrete
9.0		S2	NA	1.0		9.0 - 10.0' SP: Dark brown fine to coarse SAND, trace silt; medium dense, wet		Waste Class: 073-WC-114 (concrete) at 10:45 Hex Chrome: 073-WC-11-0910 (9.5-10.0) at 11:15
10.0								

PREPARED BY: BMA
CHECKED BY: QA/QC

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-11

DATE BEGAN: 12-06-19

DATE FINISHED: 12-06-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 1.5" diameter

COMPLETION DEPTH: 20.0 ft bgs

GW DEPTH: 8.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
10.0		S3	NA	5.0		10.0 - 11.5' SP: Dark brown fine to coarse SAND, trace silt; medium dense, wet		
11.0						11.5 - 14.0' SP: Reddish brown fine to coarse SAND, some silt; medium dense, wet		Hex Chrome: 073-WC-11-1112 (11.5-12.0) at 11:20 HOLD
12.0						14.0 - 15.0' SP: Reddish brown fine to medium SAND; medium dense, wet		Hex Chrome: 073-WC-11-1314 (13.0-13.5) at 11:22 HOLD
13.0						15.0 - 15.5' SP: Slough		Hex Chrome: 073-WC-11-1516 (15.0-15.5) at 11:35 HOLD
14.0		S4	NA	5.0		15.5 - 20.0' SP: Reddish brown fine to medium SAND, trace of silt; medium dense, wet		Hex Chrome: 073-WC-11-1718 (17.0-17.5) at 11:37 HOLD
15.0					End of boring at 20.0 ft bgs		Hex Chrome: 073-WC-11-1819 (18.5-19.0) at 11:40 HOLD	
16.0								
17.0								
18.0								
19.0								
20.0								

PREPARED BY: BMA
 CHECKED BY: QA/QC

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-11A

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

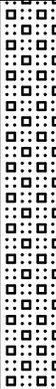
COMPLETION DEPTH: 11.0 ft bgs

GW DEPTH: 6.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	3.0		0.0 - 3.0' SW: Dark brown fine SAND, some fine gravel, trace silt	NM	Waste Class horizontal composite 073-WC-11-0203 (2.0-3.0) at 10:50 Mixed on 12-09-19: 073-WC-11 (2.0-3.0) from 12-06-19 073-WC-12A (1.0-2.0) from 12-09-19 073-WC-11A (2.0-3.0) from 12-09-19
						3.0 - 6.0' CONCRETE: Solid CONCRETE		Air rotary through solid concrete
6.0		S2	NA	5.0		6.0 - 7.5' SP: Dark brown fine to coarse SAND, trace silt; medium dense, wet		Waste Class horizontal composite 073-WC-11-0708 (7.0-8.0) at 11:40 Mixed on 12-09-19: 073-WC-11A (7.0-8.0) 073-WC-12A (7.0-8.0)
						7.5 - 10.0' SP: Reddish brown fine to coarse SAND, some silt; medium dense, wet		Waste Class horizontal composite 073-WC-11-0910 (9.0-10.0) at 11:50 Mixed on 12-09-19: 073-WC-11A (9.0-10.0) 073-WC-12A (9.0-10.0)

PREPARED BY: BMA
CHECKED BY: QA/QC

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-11A

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

COMPLETION DEPTH: 11.0 ft bgs

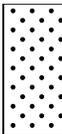
GW DEPTH: 6.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
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10.0 - 11.0' SP: Reddish brown fine to medium SAND; medium dense, wet
 End of boring at 11.0 ft bgs.

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-12

DATE BEGAN: 12-06-19

DATE FINISHED: 12-06-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 1.5" diameter

COMPLETION DEPTH: 20.0 ft bgs

GW DEPTH: 8.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	0.0		0.0 - 5.0' No recovery	NM	
5.0		S2	NA	1.0		5.0 - 9.0' CONCRETE: Solid CONCRETE		Air rotary through solid concrete
8.0								Waste Class: 073-WC-115 (concrete) at 11:55
9.0		S3	NA	1.0		9.0 - 9.5' SP: Reddish brown medium to coarse SAND; medium dense, wet		
10.0						9.5 - 10.0' SP: Dark brown fine to medium SAND; medium dense, wet		Hex Chrome: 073-WC-12-0910 (9.5-10.0) at 12:10

PREPARED BY: BMA
 CHECKED BY: QA/QC

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-12

DATE BEGAN: 12-06-19

DATE FINISHED: 12-06-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 1.5" diameter

COMPLETION DEPTH: 20.0 ft bgs

GW DEPTH: 8.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
10.0		S4	NA	2.5		10.0 - 12.5' SM: Reddish brown fine to coarse SAND AND SILT; medium dense, wet		Hex Chrome: 073-WC-12-1112 (11.0-11.5) at 12:15 HOLD
11.0								
12.0						12.5 - 15.0' No recovery		Hex Chrome: 073-WC-12-1213 (12.0-12.5) at 12:18 HOLD
13.0								
14.0								
15.0		S5	NA	3.0		15.0 - 16.5' SP: Redish brown fine to medium SAND; medium dense, wet		Hex Chrome: 073-WC-12-1516 (15.0-15.5) at 12:22 HOLD
16.0								
17.0						16.5 - 17.5' SP: Brown fine to medium SAND; medium dense, wet		Hex Chrome: 073-WC-12-1718 (16.5-17.0) at 12:24 HOLD
18.0						17.5 - 18.0' ML: Dark brown SILT; medium dense, wet		
18.0						18.0 - 20.0' No recovery.		Hex Chrome: 073-WC-11-1718 (17.5-18.0) at 12:26 HOLD
19.0						End of boring at 20.0 ft bgs.		
20.0								

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-12A

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

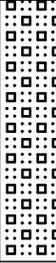
COMPLETION DEPTH: 11.0 ft bgs

GW DEPTH: 6.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	2.0		0.0 - 2.0' SW: Dark brown fine SAND, some fine gravel, trace silt; loose, moist	NM	Waste Class horizontal composite 073-WC-11-0203 (2.0-3.0) at 10:50 Mixed on 12-09-19: 073-WC-11 (2.0-3.0) from 12-06-19
1.0								
2.0						2.0 - 6.0' CONCRETE: Solid CONCRETE		073-WC-12A (1.0-2.0) from 12-09-19 073-WC-11A (2.0-3.0) from 12-09-19 Air rotary through solid concrete
3.0								
4.0								
5.0								Waste Class horizontal composite
6.0		S2	NA	5.0		6.0 - 6.5' SP: Reddish brown medium to coarse SAND; medium dense, wet		073-WC-11-0708 (7.0-8.0) at 11:40 Mixed on 12-09-19: 073-WC-11A (7.0-8.0)
7.0						6.5 - 7.5' SP: Dark brown fine to medium SAND; medium dense, wet		073-WC-12A (7.0-8.0)
8.0						7.5 - 11.0' SM: Reddish brown fine to coarse SAND AND SILT; medium dense, wet		Waste Class horizontal composite
9.0						End of boring at 11.0 ft bgs.		073-WC-11-0910 (9.0-10.0) at 11:50 Mixed on 12-09-19: 073-WC-11A (9.0-10.0)
10.0								073-WC-12A (9.0-10.0)

PREPARED BY: BMA
CHECKED BY: QA/QC

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-12A

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

COMPLETION DEPTH: 11.0 ft bgs

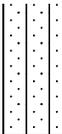
GW DEPTH: 6.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
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wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-13

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

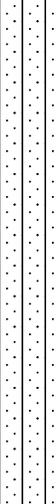
COMPLETION DEPTH: 11.0 ft bgs

GW DEPTH: Not encountered

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	2.0		0.0 - 0.5' ASPHALT: ASPHALT	NM	Waste Class horizontal composite
1.0						0.5 - 1.0' FILL: Dark reddish gray FILL material with silt and fine to medium gravel; loose, dry		073-WC-13 (1.0-2.0) at 12:10
2.0						1.0 - 1.8' ML: Dark reddish brown SILT, little sand, little fine gravel with concretions; dense, moist		Mixed on 12-09-19: 073-WC-13 (1.0-2.0) at 12:10
3.0						1.8 - 2.0' FILL: Yellow FILL material, little sand, some slag; loose, moist		073-WC-16A (1.0-2.0) at 12:10
4.0						2.0 - 6.0' CONCRETE: Decomposed/degraded CONCRETE		Air rotary through decomposed/degraded concrete
6.0		S2	NA	5.0		6.0 - 10.0' SM: Reddish brown and brown mottled fine to medium SAND AND CLAYEY SILT; medium dense, moist		Waste Class vertical composite
8.0								073-WC-13-0611 (6.0-11.0) at 12:40
9.0								Mixed on 12-09-19: 073-WC-13-0607 (6.0-7.0) at 12:40
10.0								073-WC-13-1011 (10.0-11.0) at 12:40

PREPARED BY: BMA
 CHECKED BY: QA/QC

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-13

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

COMPLETION DEPTH: 11.0 ft bgs

GW DEPTH: Not encountered

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
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	10.0					10.0 - 11.0' SP: Dark brown fine to coarse SAND, some silt; dense, moist		
	11.0							

PREPARED BY: BMA
 CHECKED BY: QA/QC

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-14

DATE BEGAN: 12-06-19

DATE FINISHED: 12-06-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 1.5" diameter

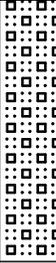
COMPLETION DEPTH: 13.0 ft bgs

GW DEPTH: 8.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	2.0		0.0 - 2.0' SW: Dark brown fine to medium SAND, some fine gravel, trace silt; loose, dry Bottom: CONCRETE in tip with green staining	NM	
1.0								
2.0						2.0 - 6.0' CONCRETE: Decomposed/degraded CONCRETE		
3.0								
4.0								
5.0								
6.0		S2	NA	3.0		6.0 - 8.0' SP: Reddish brown fine to coarse SAND; medium dense, dry (moist at the bottom)		
7.0								
8.0						8.0 - 9.0' SP: Dark brown fine to coarse SAND, some silt; medium dense, wet		Hex Chrome: 073-WC-14-0809 (8.0-8.5) at 13:20 on 12-06-19
9.0						9.0 - 10.0' No recovery		Hex Chrome: 073-WC-14-0809B (8.5-9.0) at 13:22 HOLD on 12-06-19
10.0								

PREPARED BY: BMA
CHECKED BY: QA/QC

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-14

DATE BEGAN: 12-06-19

DATE FINISHED: 12-06-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 1.5" diameter

COMPLETION DEPTH: 13.0 ft bgs

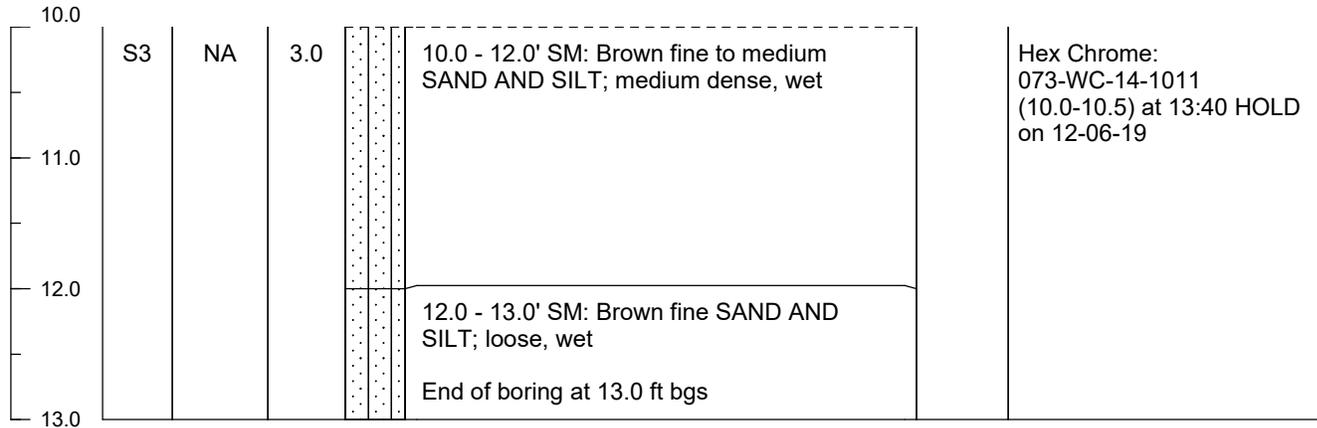
GW DEPTH: 8.0 ft bgs

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
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wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-14A

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

COMPLETION DEPTH: 3.0 ft bgs

GW DEPTH: Not encountered

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
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S1	NA	3.0			
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0.0 - 3.0' SW: Dark brown fine to medium SAND, some fine gravel, trace silt
 Bottom: CONCRETE in tip with green staining

End of boring at 3.0 ft bgs.

NM

Waste Class:
 073-WC-14-0103
 (1.0-3.0) at 13:00

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-15

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

COMPLETION DEPTH: 6.5 ft bgs

GW DEPTH: Not encountered

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	2.5		0.0 - 2.5' FILL: Black HISTORIC FILL, medium to coarse gravel, trace silt, pieces of glass and metal; loose, dry	NM	Hex Chrome: 073-WC-15-0002 (0.0-2.0) at 13:45
1.0						2.5 - 6.5' CONCRETE: Decomposed/degraded CONCRETE End of boring at 6.5 ft bgs		Air rotary through decomposed/degraded concrete
2.0								
3.0								
4.0								
5.0								
6.0								

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-16

DATE BEGAN: 12-06-19

DATE FINISHED: 12-06-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 1.5" diameter

COMPLETION DEPTH: 10.0 ft bgs

GW DEPTH: Not encountered

DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	0.0		0.0 - 2.0' No recovery	NM	
1.0								
2.0						2.0 - 6.0' CONCRETE: Decomposed/degraded CONCRETE		
3.0								
4.0								
5.0								
6.0		S2	NA	3.0		6.0 - 6.5' SW: Brown fine SAND, some fine gravel; dense, moist Yellow nodules (possible coper)		
7.0						6.5 - 8.0' SP: Brown fine to coarse SAND; medium dense, moist		
8.0						8.0 - 9.0' ML: Reddish brown SILT with some fine to medium sand; medium dense, moist		Hex Chrome: 073-WC-16-0809 (7.5-8.5) at 12:48
9.0						9.0 - 10.0' No recovery		Hex Chrome: 073-WC-16-0809A (8.0-9.0) at 125:50 HOLD
10.0						End of boring at 10.0 ft bgs.		

wood. Honeywell Study Area 6

LOCATION: SA-6S Bulkhead

PROJECT NO: 3480190654

BORING ID: 073-WC-16A

DATE BEGAN: 12-09-19

DATE FINISHED: 12-09-19

INSPECTOR: Mike Senna

DRILLING CO: Summit Drilling

DRILLING METHOD: Direct Push and Air Rotary

DRILL EQUIP: 7822DT

SAMPLING TOOL: 5' Macrocore with 3.0" diameter

COMPLETION DEPTH: 10.0 ft bgs

GW DEPTH: Not encountered

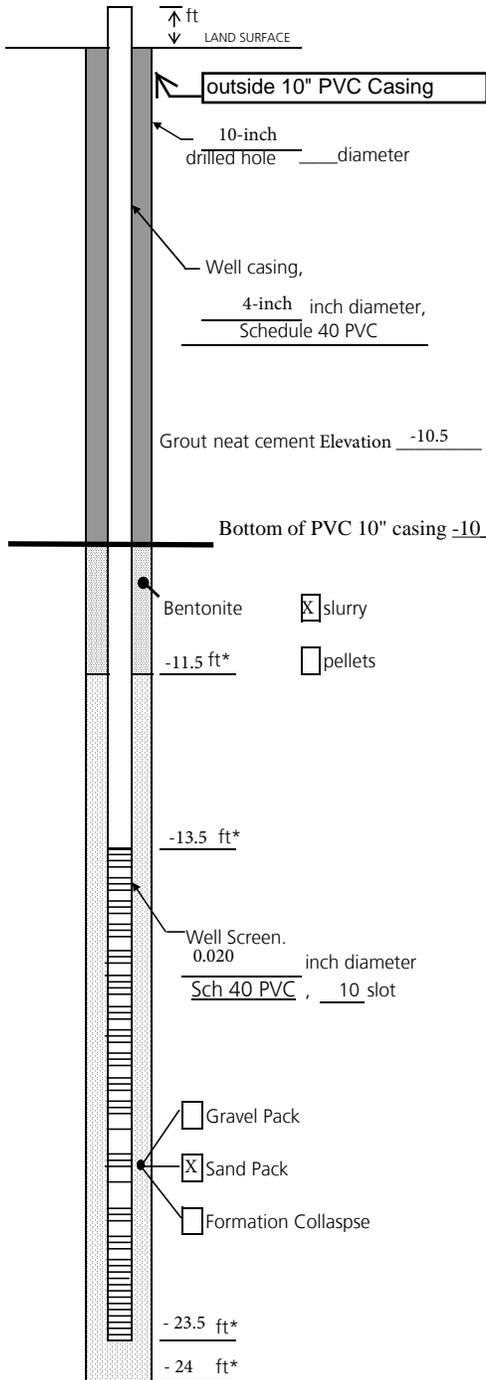
DRILLER:

NORTH:

EAST:

ELEV (FT.)	DEPTH (FT.)	RUN NO.	SPT BLOWS PER 0.5'	REC (FT.)	PROFILE	DESCRIPTION	VOLATILE ORGANIC VAPORS (PPM)	REMARKS
0.0		S1	NA	2.0		0.0 - 2.0' FILL: Dark brown FILL material with fine to medium GRAVEL AND SILT; loose, dry	NM	Waste Class horizontal composite
1.0								073-WC-13A (1.0-2.0) at 12:10
2.0						2.0 - 6.0' CONCRETE: Decomposed/degraded CONCRETE		Mixed on 12-09-19: 073-WC-13A (1.0-2.0) at 12:10
3.0						End of boring at 6.0 ft bgs.		073-WC-16A (1.0-2.0) at 12:10
4.0								
5.0								
6.0								

WELL CONSTRUCTION LOG



Project Honeywell SA-6 Deferred Area Well DP-1

County Hudson County

Permit No. E202008568 State NJ

Land-Surface Elevation and Datum: +8.0 ft NGVD29

_____ feet Surveyed

Estimated

Installation Date(s) 8/18/2020 through 8/21/2020

Drilling Method Combination cased rotary with open hole direct mud rotary

Drilling Contractor _____

Drilling Fluid Water and betonite slurry

Development Technique(s) and Date(s)

Surging with compressed air

Well Purpose Depressurization Well

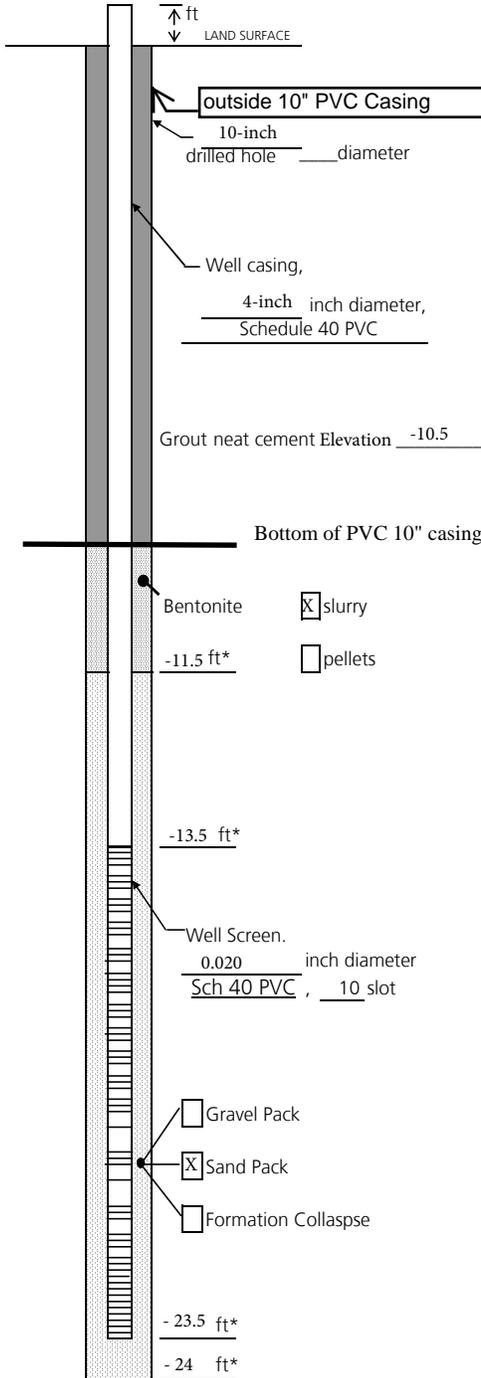
Remarks _____

Measuring Point is
 Top of Well Casing
 Unless Otherwise Noted.

* Depth Below Land Surface

Prepared by _____

WELL CONSTRUCTION LOG



Project Honeywell SA-6 Deferred Area Well DP-2

County Hudson County

Permit No. E202008569 State NJ

Land-Surface Elevation and Datum: +8.56 ft NGVD29

_____ feet Surveyed

Estimated

Installation Date(s) 8/19/20 through 8/24/20

Drilling Method Combination cased rotary and open hole direct mud rotary

Drilling Contractor _____

Drilling Fluid Water and eptonite slurry

Development Technique(s) and Date(s)

Surging with compressed air

Well Purpose Depressurization Well

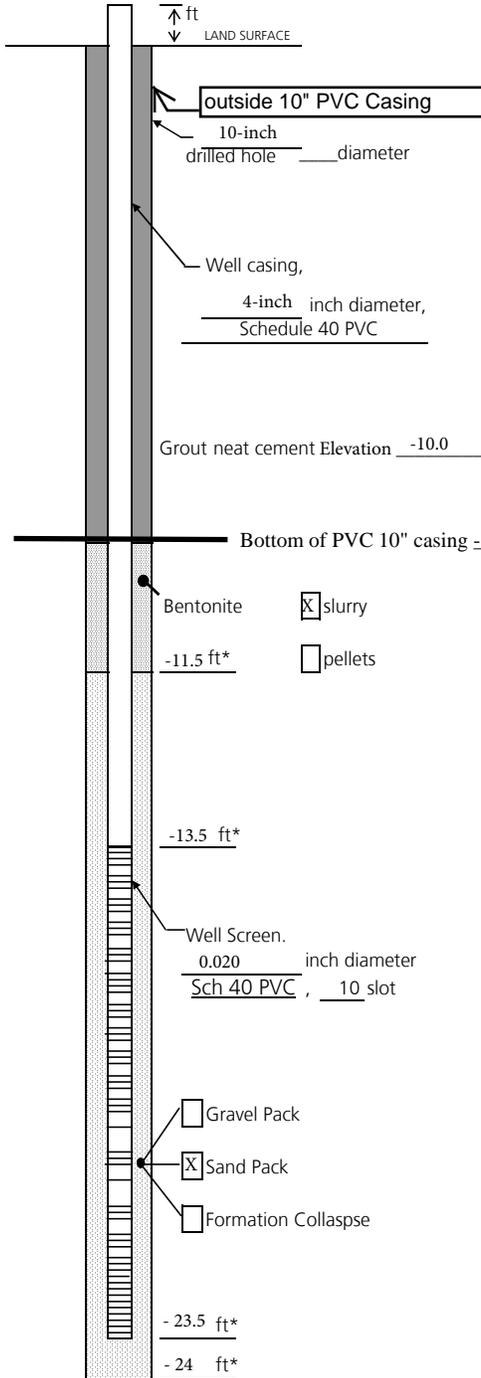
Remarks _____

Measuring Point is
 Top of Well Casing
 Unless Otherwise Noted.

* Depth Below Land Surface

Prepared by _____

WELL CONSTRUCTION LOG



Project Honeywell SA-6 Deferred Area Well DP-3
 County Hudson County
 Permit No. E202008570 State NJ
 Land-Surface Elevation and Datum: +9.0 ft NGVD29

_____ feet Surveyed
 Estimated
 Installation Date(s) 8/20/20 through 8/25/20
 Drilling Method _____

Drilling Contractor Combination cased rotary and open hole direct mud rotary
 Drilling Fluid Water and betonite slurry

Development Technique(s) and Date(s)

Surging with compressed air

Well Purpose Depressurization Well

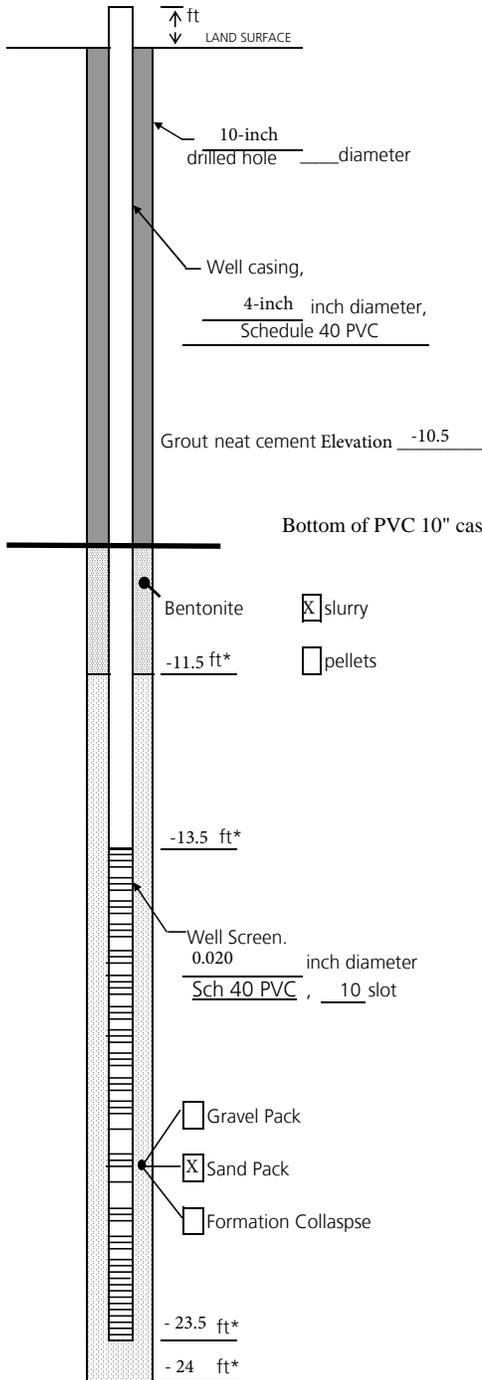
Remarks _____

Measuring Point is
 Top of Well Casing
 Unless Otherwise Noted.

* Depth Below Land Surface

Prepared by _____

WELL CONSTRUCTION LOG



Project Honeywell SA-6 Deferred Area Well DP-4
 County Hudson County
 Permit No E202008571 State NJ
 Land-Surface Elevation and Datum: +10.3 ft NGVD29

_____ feet Surveyed
 Estimated
 Installation Date(s) 8/20/20 through 8/25/2020

Drilling Method Combination cased rotary and open hole direct mud rotary

Drilling Contractor _____
 Drilling Fluid Water and betonite slurry

Bottom of PVC 10" casing -10 ft

Development Technique(s) and Date(s)
Surging with compressed air

Bentonite slurry
 pellets

-11.5 ft*

-13.5 ft*
 Well Screen.
 0.020 inch diameter
 Sch 40 PVC, 10 slot

Gravel Pack
 Sand Pack
 Formation Collapse

-23.5 ft*
 -24 ft*

Well Purpose Depressurization Well

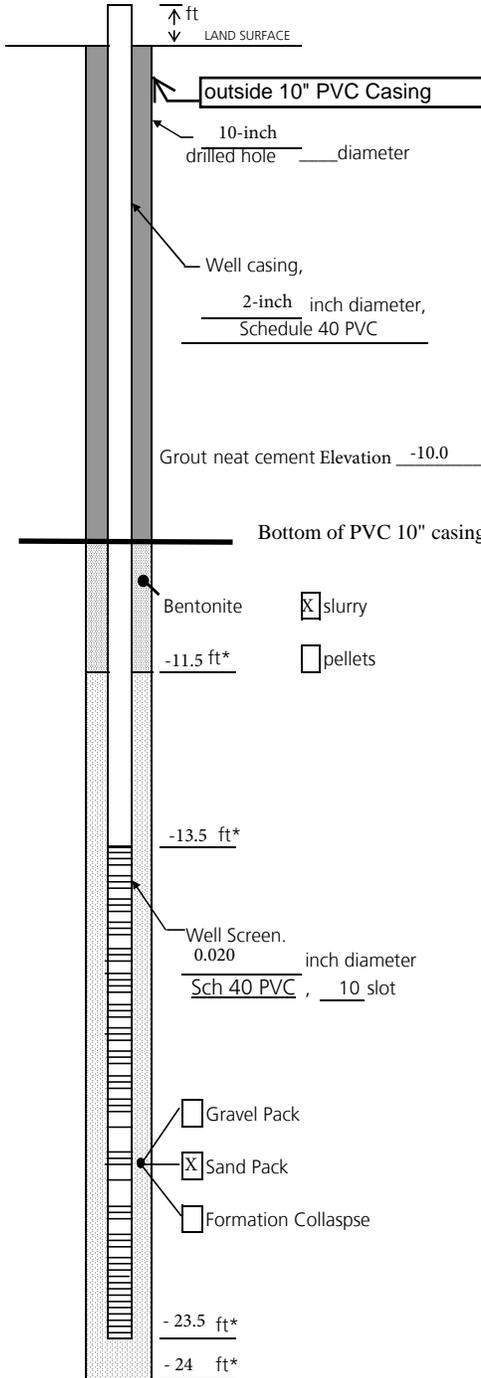
Remarks _____

Measuring Point is
 Top of Well Casing
 Unless Otherwise Noted.

* Depth Below Land Surface

Prepared by _____

WELL CONSTRUCTION LOG



Project Honeywell SA-6 Deferred Area Well OW-1
 County Hudson County
 Permit No. E202008574 State NJ
 Land-Surface Elevation and Datum: +8.2 ft NGVD29

_____ feet Surveyed
 Estimated

Installation Date(s) 8/18/20 through 8/24/20
 Drilling Method Combination cased rotary and

Drilling Contractor _____
 Drilling Fluid Water and bentonite slurry

Bottom of PVC 10" casing -10 ft

Development Technique(s) and Date(s)
Surging with compressed air

Bentonite slurry
 pellets

-13.5 ft*
 Well Screen, 0.020 inch diameter
 Sch 40 PVC, 10 slot

Gravel Pack
 Sand Pack
 Formation Collaspse

-23.5 ft*
 -24 ft*

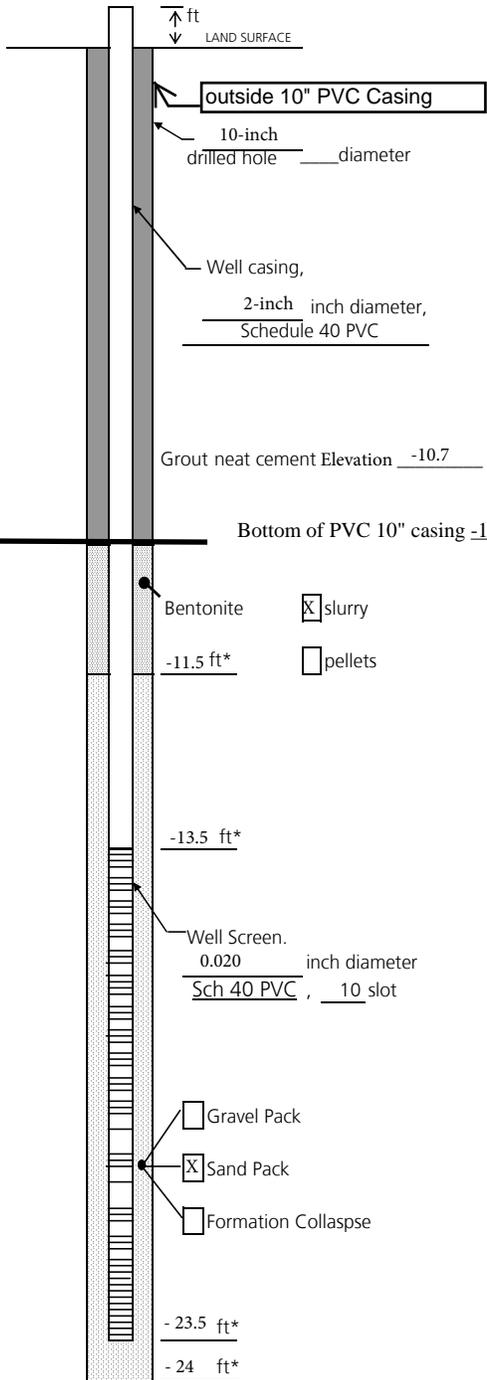
Well Purpose Observation Well

Remarks _____

Measuring Point is
 Top of Well Casing
 Unless Otherwise Noted.
 * Depth Below Land Surface

Prepared by _____

WELL CONSTRUCTION LOG



Project Honeywell SA-6 Deferred Area Well OW-2
 County Hudson County
 Permit No. E202008575 State NJ
 Land-Surface Elevation and Datum: +8.2 ftNGVD29
 Bottom of PVC 10" casing -10 ft
 _____ feet Surveyed
 Estimated
 Installation Date(s) 8/19/2020 through 8/24/2020
 Drilling Method Combination cased rotary and open hole direct mud rotary
 Drilling Contractor _____
 Drilling Fluid Water and betonite slurry
 Development Technique(s) and Date(s)
Surging with compressed air

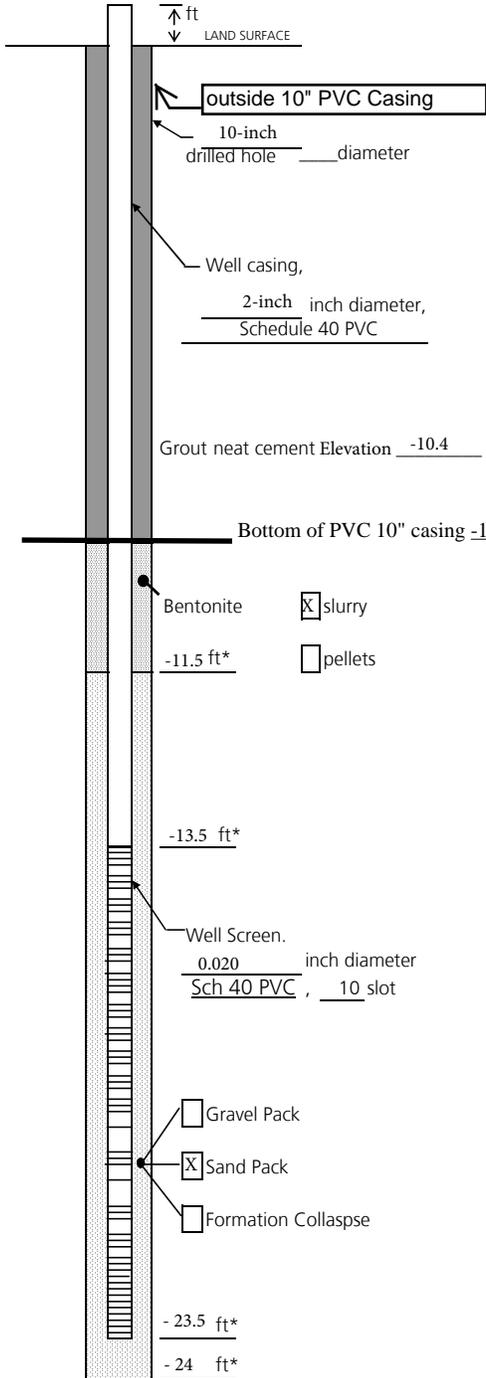
 Well Purpose Observation Well

 Remarks _____

 Prepared by _____

Measuring Point is
 Top of Well Casing
 Unless Otherwise Noted.
 * Depth Below Land Surface

WELL CONSTRUCTION LOG



Project Honeywell SA-6 Deferred Area Well OW-3

County Hudson County

Permit No. E202008576 State NJ

Land-Surface Elevation and Datum: +9.66 ft NGVD29

_____ feet Surveyed
 Estimated

Installation Date(s) 8/20/20 through 8/25/2020

Drilling Method Combination cased rotary and open hole direct mud rotary

Drilling Contractor _____

Drilling Fluid Water and betonite slurry

Bottom of PVC 10" casing -10 ft

Development Technique(s) and Date(s)

Surging with compressed air

Well Purpose ObservationWell

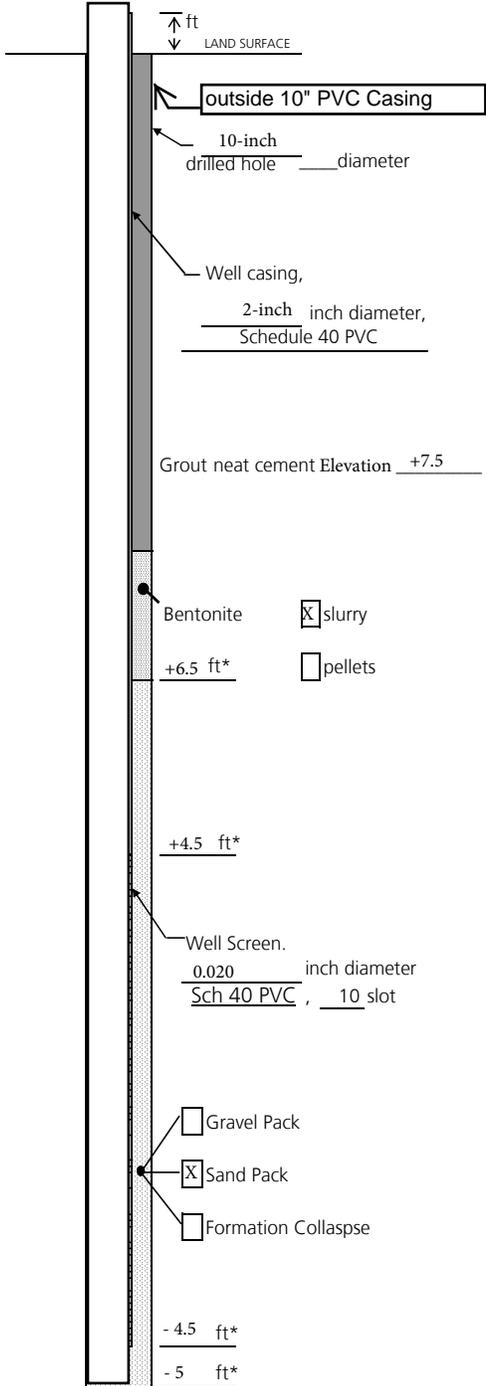
Remarks _____

Measuring Point is
 Top of Well Casing
 Unless Otherwise Noted.

* Depth Below Land Surface

Prepared by _____

WELL CONSTRUCTION LOG



Project Honeywell SA-6 Deferred Area Well OW-4

County Hudson County

Permit No. E202008577 State NJ

Land-Surface Elevation and Datum: +14.0 ft NGVD29

_____ feet Surveyed

Estimated

Installation Date(s) 8/26/20 through 8/26/20

Drilling Method Combination cased rotary and open hole direct mud rotary

Drilling Contractor _____

Drilling Fluid Water and bentonite slurry

Development Technique(s) and Date(s)

Surging with compressed air

Well Purpose Observation Well

Remarks _____

Measuring Point is
 Top of Well Casing
 Unless Otherwise Noted.

* Depth Below Land Surface

Prepared by _____

WELL DECOMMISSIONING REPORT

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell DBA Bayfront Redevelopment LLC

Address: 115 Tabor Road Mount Tabor, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6 South

Address: NJ State Highway 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601513 Northing (Y): 685619
Coordinate System: NJ State Plane (NAD83) - USFEET

**DATE WELL
DECOMMISSIONED:** November 18, 2020

WELL USE: DEWATERING

Other Use(s): _____

Local ID: DP-1

Reason for Decommissioning: No longer in use

Finished Well Depth (ft.): 38.5

Was a New Well Drilled? N

Formation Type: Unconsolidated

New Well Permit Number: _____

WELL DECOMMISSIONING INFORMATION

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole					
Casing	0	28.50	4	PVC	SCH 40 (Inner Casing)
Screen	28.50	38.50	4	PVC SCH 40	0.020 inch

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	38.50	4	0	15	282	25
Sand/Gravel							

ADDITIONAL INFORMATION

Obstructions: No

Authorization Official: _____

Obstruction Type: _____

Authorization Number: _____

Alternative Decomm. Method? No

Authorization Date: _____

Method Used _____

ATTACHMENTS: _____

Daniel C Dimler
JOURNEYMAN
Sealing Driller: LICENSE # 0001241

MORETRENCH AMERICAN CORP
100 STICKLE AVE
Company: Rockaway (Morris), NJ 07866

WELL DECOMMISSIONING REPORT

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell DBA Bayfront Redevelopment LLC

Address: 115 Tabor Road Mount Tabor, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6 South

Address: NJ State Highway 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601456 Northing (Y): 685552
Coordinate System: NJ State Plane (NAD83) - USFEET

**DATE WELL
DECOMMISSIONED:** November 18, 2020

WELL USE: DEWATERING

Other Use(s): _____

Local ID: DP-2

Reason for Decommissioning: No longer in use

Finished Well Depth (ft.): 38.5

Was a New Well Drilled? N

Formation Type: Unconsolidated

New Well Permit Number: _____

WELL DECOMMISSIONING INFORMATION

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole					
Casing	0	28.50	4	PVC	SCH 40 (Inner Casing)
Screen	28.50	38.50	4	PVC SCH 40	0.020 inch

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	38.50	4	0	15	282	25
Sand/Gravel							

ADDITIONAL INFORMATION

Obstructions: No

Authorization Official: _____

Obstruction Type: _____

Authorization Number: _____

Alternative Decomm. Method? No

Authorization Date: _____

Method Used _____

ATTACHMENTS: _____

Daniel C Dimler
JOURNEYMAN
Sealing Driller: LICENSE # 0001241

MORETRENCH AMERICAN CORP
100 STICKLE AVE
Company: Rockaway (Morris), NJ 07866

WELL DECOMMISSIONING REPORT

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell DBA Bayfront Redevelopment LLC

Address: 115 Tabor Road Mount Tabor, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6 South

Address: NJ State Highway 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601442 Northing (Y): 685528
Coordinate System: NJ State Plane (NAD83) - USFEET

**DATE WELL
DECOMMISSIONED:** November 18, 2020

WELL USE: DEWATERING

Other Use(s): _____

Local ID: DP-3

Reason for Decommissioning: No longer in use

Finished Well Depth (ft.): 38.5

Was a New Well Drilled? N

Formation Type: Unconsolidated

New Well Permit Number: _____

WELL DECOMMISSIONING INFORMATION

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole					
Casing	0	28.50	4	PVC	SCH 40 (Inner Casing)
Screen	28.50	38.50	4	PVC SCH 40	0.020 inch

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	38.50	4	0	15	282	25
Sand/Gravel							

ADDITIONAL INFORMATION

Obstructions: No

Authorization Official: _____

Obstruction Type: _____

Authorization Number: _____

Alternative Decomm. Method? No

Authorization Date: _____

Method Used _____

ATTACHMENTS: _____

Daniel C Dimler
JOURNEYMAN
Sealing Driller: LICENSE # 0001241

MORETRENCH AMERICAN CORP
100 STICKLE AVE
Company: Rockaway (Morris), NJ 07866

WELL DECOMMISSIONING REPORT

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell DBA Bayfront Redevelopment LLC

Address: 115 Tabor Road Mount Tabor, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6 South

Address: NJ State Highway 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601430 Northing (Y): 685506
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL DECOMMISSIONED: November 18, 2020

WELL USE: DEWATERING

Other Use(s): _____

Local ID: DP-4

Reason for Decommissioning: No longer in use

Finished Well Depth (ft.): 38.5

Was a New Well Drilled? N

Formation Type: Unconsolidated

New Well Permit Number: _____

WELL DECOMMISSIONING INFORMATION

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole					
Casing	0	28.50	4	PVC	SCH 40 (Inner Casing)
Screen	28.50	38.50	4	PVC SCH 40	0.020 inch

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	38.50	4	0	15	282	25
Sand/Gravel							

ADDITIONAL INFORMATION

Obstructions: No

Authorization Official: _____

Obstruction Type: _____

Authorization Number: _____

Alternative Decomm. Method? No

Authorization Date: _____

Method Used _____

ATTACHMENTS: _____

Daniel C Dimler
JOURNEYMAN
Sealing Driller: LICENSE # 0001241

MORETRENCH AMERICAN CORP
100 STICKLE AVE
Company: Rockaway (Morris), NJ 07866

WELL DECOMMISSIONING REPORT

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell DBA Bayfront Redevelopment LLC

Address: 115 Tabor Road Mount Tabor, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6

Address: NJ State Route 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601505 Northing (Y): 685597
Coordinate System: NJ State Plane (NAD83) - USFEET

**DATE WELL
DECOMMISSIONED:** November 18, 2020

WELL USE: MONITORING

Other Use(s): _____

Local ID: OW-1

Reason for Decommissioning: No longer in use

Finished Well Depth (ft.): 32.5

Was a New Well Drilled? N

Formation Type: Unconsolidated

New Well Permit Number: _____

WELL DECOMMISSIONING INFORMATION

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole					
Casing	0	22.50	2	PVC	SCH 40 (Inner Casing)
Screen	22.50	32.50	2	PVC SCH 40	0.020 inch

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	32.50	2	0	5	94	9
Sand/Gravel							

ADDITIONAL INFORMATION

Obstructions: No

Authorization Official: _____

Obstruction Type: _____

Authorization Number: _____

Alternative Decomm. Method? No

Authorization Date: _____

Method Used _____

ATTACHMENTS: _____

WELL DECOMMISSIONING REPORT

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell DBA Bayfront Redevelopment LLC

Address: 115 Tabor Road Mount Tabor, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6

Address: NJ State Route 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601488 Northing (Y): 685570
Coordinate System: NJ State Plane (NAD83) - USFEET

**DATE WELL
DECOMMISSIONED:** November 18, 2020

WELL USE: MONITORING

Other Use(s): _____

Local ID: OW-2

Reason for Decommissioning: No longer in use

Finished Well Depth (ft.): 32.5

Was a New Well Drilled? N

Formation Type: Unconsolidated

New Well Permit Number: _____

WELL DECOMMISSIONING INFORMATION

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole					
Casing	0	22.50	2	PVC	SCH 40 (Inner Casing)
Screen	22.50	32.50	2	PVC SCH 40	0.020 inch

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	32.50	2	0	5	94	9
Sand/Gravel							

ADDITIONAL INFORMATION

Obstructions: No

Authorization Official: _____

Obstruction Type: _____

Authorization Number: _____

Alternative Decomm. Method? No

Authorization Date: _____

Method Used _____

ATTACHMENTS: _____

WELL DECOMMISSIONING REPORT

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell DBA Bayfront Redevelopment LLC

Address: 115 Tabor Road Mount Tabor, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6

Address: NJ State Route 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601437 Northing (Y): 685534
Coordinate System: NJ State Plane (NAD83) - USFEET

**DATE WELL
DECOMMISSIONED:** November 18, 2020

WELL USE: MONITORING

Other Use(s): _____

Local ID: OW-3

Reason for Decommissioning: No longer in use

Finished Well Depth (ft.): 32.5

Was a New Well Drilled? N

Formation Type: Unconsolidated

New Well Permit Number: _____

WELL DECOMMISSIONING INFORMATION

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole					
Casing	0	22.50	2	PVC	SCH 40 (Inner Casing)
Screen	22.50	32.50	2	PVC SCH 40	0.020 inch

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	32.50	2	0	5	94	9
Sand/Gravel							

ADDITIONAL INFORMATION

Obstructions: No

Authorization Official: _____

Obstruction Type: _____

Authorization Number: _____

Alternative Decomm. Method? No

Authorization Date: _____

Method Used _____

ATTACHMENTS: _____

WELL DECOMMISSIONING REPORT

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell DBA Bayfront Redevelopment LLC

Address: 115 Tabor Road Mount Tabor, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6

Address: NJ State Route 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601486 Northing (Y): 685561
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL DECOMMISSIONED: November 19, 2020

WELL USE: MONITORING

Other Use(s): _____

Local ID: OW-4

Reason for Decommissioning: No longer in use

Finished Well Depth (ft.): 19

Was a New Well Drilled? N

Formation Type: Unconsolidated

New Well Permit Number: _____

WELL DECOMMISSIONING INFORMATION

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole					
Casing	0	9	2	PVC	SCH 40
Screen	9	19	2	PVC SCH 40	0.020 inch

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	19	2	0	5	94	9
Sand/Gravel							

ADDITIONAL INFORMATION

Obstructions: No

Authorization Official: _____

Obstruction Type: _____

Authorization Number: _____

Alternative Decomm. Method? No

Authorization Date: _____

Method Used _____

ATTACHMENTS: _____

WELL RECORD

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell dba Bayfront Redevelopment LLC

Address: 115 Tabor Road Morris Plains, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6 South

Address: NJ State Highway 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601513 Northing (Y): 685619
 Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 18, 2020

DATE WELL COMPLETED: August 21, 2020

WELL USE: DEWATERING

Other Use(s): _____

Local ID: DP-1

WELL CONSTRUCTION

Total Depth Drilled (ft.): 38.5 Finished Well Depth (ft.): 38.5 Well Surface: 2 ft. Above Grade

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18.50	14		
Borehole	18.50	38.50	10		
Casing	0	18.50	10	PVC	SCH 40 (OUTER CASING)
Casing	0	28.50	4	PVC	SCH 40 (INNER CASING)
Screen	28.50	38.50	4	PVC SCH 40	0.020 inch

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	26.50	10	4	40	752	67
Grout	0	18.50	14	10	35	658	58
Gravel Pack	26.50	38.50	10	4	#0		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Mud Rotary

RECORD OF TEST

Test Date: August 21, 2020

Pump Equipment: Air Lift

Well Yield: 8 gpm

Static Water Level: 12 ft. below land surface

Pumping Water Level: 32 ft. below land surface

ATTACHMENTS

PUMPING EQUIPMENT

Installed: Installed

Installer's Name: D Dimler, 0001241

Pump Type: Submersible

Depth to Pump: 36 ft. below land surface

Pump Capacity: 20 gpm

Total Design Head: 50 ft.

Pump Horsepower: .5 hp

If pump tested Discharge Rate: gpm

Duration of Test: hours

GEOLOGIC LOG

0 - 15: Brown SM - Silty sands, sand-silt mixtures

15 - 22: Black PT - Peat, muck, and other highly organic soils

22 - 38.5: Brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION: Well has two casings - both annular spaces are grouted.

Driller of Record: Daniel C Dimler, JOURNEYMAN LICENSE # 0001241

Company: MORETRENCH AMERICAN CORP

WELL RECORD

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell dba Bayfront Redevelopment LLC

Address: 115 Tabor Road Morris Plains, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6 South

Address: NJ State Highway 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601456 Northing (Y): 685552
 Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 19, 2020

DATE WELL COMPLETED: August 24, 2020

WELL USE: DEWATERING

Other Use(s): _____

Local ID: DP-2

WELL CONSTRUCTION

Total Depth Drilled (ft.): 38.5 Finished Well Depth (ft.): 38.5 Well Surface: 2 ft. Above Grade

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18.50	14		
Borehole	18.50	38.50	10		
Casing	0	18.50	10	PVC	SCH 40 (OUTER CASING)
Casing	0	28.50	4	PVC	SCH 40 (INNER CASING)
Screen	28.50	38.50	4	PVC SCH 40	0.020 inch

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	26.50	10	4	35	658	58
Grout	0	18.50	14	10	35	658	58
Gravel Pack	26.50	38.50	10	4	#0 Sand		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Mud Rotary

RECORD OF TEST

Test Date: August 24, 2020

Pump Equipment: Air Lift

Well Yield: 9 gpm

Static Water Level: 12 ft. below land surface

Pumping Water Level: 31 ft. below land surface

ATTACHMENTS

PUMPING EQUIPMENT

Installed: Installed

Installer's Name: Daniel Dimler, 0001241

Pump Type: Submersible

Depth to Pump: 36 ft. below land surface

Pump Capacity: 20 gpm

Total Design Head: 50 ft.

Pump Horsepower: .5 hp

If pump tested Discharge Rate: gpm

Duration of Test: hours

GEOLOGIC LOG

0 - 15: Brown SM - Silty sands, sand-silt mixtures

15 - 22: Black PT - Peat, muck, and other highly organic soils

22 - 38.5: Brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION: The well has two casings.

Driller of Record: Daniel C Dimler, JOURNEYMAN LICENSE # 0001241

Company: MORETRENCH AMERICAN CORP

WELL RECORD

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell dba Bayfront Redevelopment LLC

Address: 115 Tabor Road Morris Plains, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6 South

Address: NJ State Highway 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601442 Northing (Y): 685528
 Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 20, 2020

DATE WELL COMPLETED: August 25, 2020

WELL USE: DEWATERING

Other Use(s): _____

Local ID: DP-3

WELL CONSTRUCTION

Total Depth Drilled (ft.): 38.5 Finished Well Depth (ft.): 38.5 Well Surface: 2 ft. Above Grade

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18.50	14		
Borehole	18.50	38.50	10		
Casing	0	18.50	10	PVC	SCH 40 (OUTER CASING)
Casing	0	28.50	4	PVC	SCH 40 (INNER CASING)
Screen	28.50	38.50	4	PVC SCH 40	0.020 inch

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	26.50	10	4	35	658	58
Grout	0	18.50	14	10	35	658	58
Gravel Pack	26.50	38.50	10	4	#0 Sand		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Mud Rotary

RECORD OF TEST

Test Date: August 25, 2020

Pump Equipment: Air Lift

Well Yield: 8 gpm

Static Water Level: 12 ft. below land surface

Pumping Water Level: 32 ft. below land surface

ATTACHMENTS

PUMPING EQUIPMENT

Installed: Installed

Installer's Name: Daniel Dimler, 0001241

Pump Type: Submersible

Depth to Pump: 36 ft. below land surface

Pump Capacity: 20 gpm

Total Design Head: 50 ft.

Pump Horsepower: .5 hp

If pump tested Discharge Rate: gpm

Duration of Test: hours

GEOLOGIC LOG

0 - 15: Brown SM - Silty sands, sand-silt mixtures

15 - 22: Black PT - Peat, muck, and other highly organic soils

22 - 38.5: Brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION: The wells have two casings.

Driller of Record: Daniel C Dimler, JOURNEYMAN LICENSE # 0001241

Company: MORETRENCH AMERICAN CORP

WELL RECORD

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell dba Bayfront Redevelopment LLC

Address: 115 Tabor Road Morris Plains, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6 South

Address: NJ State Highway 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601430 Northing (Y): 685506
 Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 20, 2020

DATE WELL COMPLETED: August 25, 2020

WELL USE: DEWATERING

Other Use(s): _____

Local ID: DP-4

WELL CONSTRUCTION

Total Depth Drilled (ft.): 38.5 Finished Well Depth (ft.): 38.5 Well Surface: 2 ft. Above Grade

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18.50	14		
Borehole	18.50	38.50	10		
Casing	0	18.50	10	PVC	SCH 40 (OUTER CASING)
Casing	0	28.50	4	PVC	SCH 40 (INNER CASING)
Screen	28.50	38.50	4	PVC SCH 40	0.020 inch

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	26.50	10	4	35	564	58
Grout	0	18.50	14	10	35	564	58
Gravel Pack	26.50	38.50	10	4	#0 Sand		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Mud Rotary

RECORD OF TEST

Test Date: August 25, 2020

Pump Equipment: Air Lift

Well Yield: 5 gpm

Static Water Level: 12 ft. below land surface

Pumping Water Level: 33 ft. below land surface

ATTACHMENTS

PUMPING EQUIPMENT

Installed: Installed

Installer's Name: Daniel Dimler, 0001241

Pump Type: Submersible

Depth to Pump: 36 ft. below land surface

Pump Capacity: 20 gpm

Total Design Head: 50 ft.

Pump Horsepower: .5 hp

If pump tested Discharge Rate: gpm

Duration of Test: hours

GEOLOGIC LOG

0 - 15: Brown SM - Silty sands, sand-silt mixtures

15 - 22: Black PT - Peat, muck, and other highly organic soils

22 - 38.5: Brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION: Well has two casings.

Driller of Record: Daniel C Dimler, JOURNEYMAN LICENSE # 0001241

Company: MORETRENCH AMERICAN CORP

MONITORING WELL RECORD

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell dba Bayfront Redevelopment LLC

Address: 115 Tabor Road Morris Plains, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6

Address: NJ State Route 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601505 Northing (Y): 685597
 Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 18, 2020

DATE WELL COMPLETED: August 24, 2020

WELL USE: MONITORING

Other Use(s): _____ **Local ID:** OW-1

WELL CONSTRUCTION

Total Depth Drilled (ft.): 32.5 Finished Well Depth (ft.): 32.5 Well Surface: Above Grade

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18.50	14		
Borehole	18.50	32.50	10		
Casing	0	18.50	10	PVC	SCH 40 (OUTER CASING)
Casing	0	22.50	4	PVC	SCH 40 (INNER CASING)
Screen	22.50	32.50	2	PVC SCH 40	0.020 inch

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	22	10	2	40	752	67
Grout	0	18.50	14	10	35	658	58
Gravel Pack	22	32.50	10	2	#0 Sand		

Grouting Method: Pressure method (Tremie Pipe) Drilling Method: Mud Rotary

ADDITIONAL INFORMATION

Protective Casing: Yes Pump Capacity: _ gpm
 Static Water Level: 12 ft. below land surface Total Design Head: _ ft.
 Water Level Measure Tool: Electronic Water Level Indicator Drilling Fluid:
 Well Development Period: 1 hrs. Drill Rig: Commacchio MC15
 Method of Development: Surging Health and Safety Plan Submitted? No
 Pump Type:

ATTACHMENTS:

GEOLOGIC LOG

0 - 15: Brown SM - Silty sands, sand-silt mixtures
 15 - 21: Black PT - Peat, muck, and other highly organic soils
 21 - 32.5: Brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION: Wells have two casings.

Driller of Record: Daniel C Dimler, JOURNEYMAN LICENSE # 0001241 Company: MORETRENCH AMERICAN CORP

MONITORING WELL RECORD

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell dba Bayfront Redevelopment LLC

Address: 115 Tabor Road Morris Plains, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6

Address: NJ State Route 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601488 Northing (Y): 685570
 Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 19, 2020

DATE WELL COMPLETED: August 24, 2020

WELL USE: MONITORING

Other Use(s): _____ **Local ID:** OW-2

WELL CONSTRUCTION

Total Depth Drilled (ft.): 32.5 Finished Well Depth (ft.): 32.5 Well Surface: Above Grade

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18.50	14		
Borehole	18.50	32.50	10		
Casing	0	18.50	10	PVC	SCH 40 (OUTER CASING)
Casing	0	22.50	2	PVC	SCH 40 (INNER CASING)
Screen	22.50	32.50	2	PVC SCH 40	0.020 inch

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	22	10	2	40	752	67
Grout	0	18.50	14	10	35	658	58
Gravel Pack	22	32.50	10	2	#0 Sand		

Grouting Method: Pressure method (Tremie Pipe) Drilling Method: Mud Rotary

ADDITIONAL INFORMATION

Protective Casing: Yes Pump Capacity: _ gpm
 Static Water Level: 12 ft. below land surface Total Design Head: _ ft.
 Water Level Measure Tool: Electronic Water Level Indicator Drilling Fluid:
 Well Development Period: 1 hrs. Drill Rig: Comacchio MC15
 Method of Development: Surging Health and Safety Plan Submitted? No
 Pump Type:

ATTACHMENTS:

GEOLOGIC LOG

0 - 15: Brown SM - Silty sands, sand-silt mixtures
 15 - 22: Black PT - Peat, muck, and other highly organic soils
 22 - 32.5: Brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION: Well has two casings.

Driller of Record: Daniel C Dimler, JOURNEYMAN LICENSE # 0001241 Company: MORETRENCH AMERICAN CORP

MONITORING WELL RECORD

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell dba Bayfront Redevelopment LLC

Address: 115 Tabor Road Morris Plains, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6

Address: NJ State Route 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): 601437 Northing (Y): 685534
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 20, 2020

DATE WELL COMPLETED: August 25, 2020

WELL USE: MONITORING

Other Use(s): _____

Local ID: OW-3

WELL CONSTRUCTION

Total Depth Drilled (ft.): 32.5 Finished Well Depth (ft.): 32.5 Well Surface: Above Grade

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18.50	14		
Borehole	18.50	32.50	10		
Casing	0	18.50	10	PVC	SCH 40 (OUTER CASING)
Casing	0	22.50	2	PVC	SCH 40 (INNER CASING)
Screen	22.50	32.50	2	PVC SCH 40	0.020 inch

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	22	10	2	40	452	67
Grout	0	18.50	14	10	35	658	58
Gravel Pack	22	32.50	10	2	#0 Sand		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Mud Rotary

ADDITIONAL INFORMATION

Protective Casing: Yes

Static Water Level: 12 ft. below land surface

Water Level Measure Tool: Electronic Water Level Indicator

Well Development Period: 1 hrs.

Method of Development: Surging

Pump Type: _____

Pump Capacity: gpm

Total Design Head: ft.

Drilling Fluid: _____

Drill Rig: Comacchio MC15

Health and Safety Plan Submitted? No

ATTACHMENTS:

GEOLOGIC LOG

0 - 15: Brown SM - Silty sands, sand-silt mixtures

15 - 22: Black PT - Peat, muck, and other highly organic soils

22 - 32.5: Brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION: Well has two casings.

Driller of Record: Daniel C Dimler,
JOURNEYMAN LICENSE # 0001241

Company: MORETRENCH AMERICAN CORP

MONITORING WELL RECORD

PROPERTY OWNER: HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC HONEYWELL DBA BAYFRONT REDEVELOPMENT LLC

Company/Organization: Honeywell dba Bayfront Redevelopment LLC

Address: 115 Tabor Road Morris Plains, New Jersey 07950

WELL LOCATION: Honeywell Study Area 6

Address: NJ State Route 440 Property has been subdivided - new lot #

County: Hudson Municipality: Jersey City Lot: 8 Block: 21901.01

Easting (X): <u>601486</u> Northing (Y): <u>685561</u> Coordinate System: <u>NJ State Plane (NAD83) - USFEET</u>

DATE WELL STARTED: August 26, 2020

DATE WELL COMPLETED: August 26, 2020

WELL USE: MONITORING

Other Use(s): _____

Local ID: OW-4

WELL CONSTRUCTION

Total Depth Drilled (ft.): 19 Finished Well Depth (ft.): 19 Well Surface: Above Grade

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	19	10		
Casing	0	9	2	PVC	SCH 40
Screen	9	19	2	PVC SCH 40	0.020 inch

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	7	10	2	15	282	25
Gravel Pack	7	19	10	2	#0 Sand		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Mud Rotary

ADDITIONAL INFORMATION

Protective Casing: Yes

Static Water Level: 17 ft. below land surface

Water Level Measure Tool: Electronic Water Level Indicator

Well Development Period: .5 hrs.

Method of Development: Surging

Pump Type: _____

Pump Capacity: _ gpm

Total Design Head: _ ft.

Drilling Fluid: _____

Drill Rig: Comacchio MC15

Health and Safety Plan Submitted? No

ATTACHMENTS:

GEOLOGIC LOG

0 - 19: Brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION:

Driller of Record: Daniel C Dimler, JOURNEYMAN LICENSE # 0001241

Company: MORETRENCH AMERICAN CORP



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
 (For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 South Chromium Remedy

List all AKAs: Degen Oil (Site 073)

Street Address: 427 Route 440

Municipality: Jersey City (Township, Borough or City)

County: Hudson County Zip Code: 07305

Program Interest (PI) Number(s): G00000927 Case Tracking Number(s): _____

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Bayfront Redevelopment, LLC

2. Well Location (Street Address) 200 Kellogg Street

3. Well Location (Municipal Block and Lot) Block# 21901.01 Lot # 8

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E202011784

2. Site Well Number (As shown on application or plans): 124-PZ-19R

3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:

Latitude: North _____ Longitude: West _____

4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:

North _____ East _____

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): _____

Elevation Top of Outer casing: ' _____ Elevation of ground: _____

Check one: NAVD 88 NGVD 29 On Site Datum Other

6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: _____ Date _____

Surveyor's Name: Jeffrey D. Bunce License Number: GS41045

Firm Name: Colliers Engineering & Design Certificate of Authorization #: 24GA27986500

Mailing Address 400 Valley Road Road Suite 304

City/Town: Mt. Arlington State New Jersey Zip Code: 07856

Phone Number 973-810-0090 Ext.: _____ Fax: 973-398-3199



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
 (For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Study Area SA-6 South Chromium Remedy

List all AKAs: Degen Oil (Site 073)

Street Address: 427 Route 440

Municipality: Jersey City (Township, Borough or City)

County: Hudson County Zip Code: 07305

Program Interest (PI) Number(s): G00000927 Case Tracking Number(s): _____

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Bayfront Redevelopment, LLC

2. Well Location (Street Address) 200 Kellogg Street

3. Well Location (Municipal Block and Lot) Block# 21901.01 Lot # 5

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E202011785

2. Site Well Number (As shown on application or plans): 124-PZ-20R

3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:

Latitude: North _____ Longitude: West _____

4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:

North _____ East _____

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): _____

Elevation Top of Outer casing: ' _____ Elevation of ground: _____

Check one: NAVD 88 NGVD 29 On Site Datum Other

6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: _____ Date _____

Surveyor's Name: Jeffrey D. Bunce License Number: GS41045

Firm Name: Colliers Engineering & Design Certificate of Authorization #: 24GA27986500

Mailing Address 400 Valley Road Road Suite 304

City/Town: Mt. Arlington State New Jersey Zip Code: 07856

Phone Number 973-810-0090 Ext.: _____ Fax: 973-398-3199

APPENDIX E

DEWATERING LOGS

Construction Water Discharge Data
Study Area 6
Honeywell International Inc.
Jersey City, New Jersey

STUDY AREA 6 CONSTRUCTION WATER DISCHARGE DATA (TO PVSC)						
DATE	Hours of Operation	Discharge Flow Meter Start (Gal')	Discharge Flow Meter Finish (Gal)	Discharged Volume (Gal)	Daily Discharge Volume (Gal)	Discharged Volume (Gal) Total
09/01/20	5:00:00	230	24,228	23,998		
09/01/20	10:10:00	23,998	59,482	35,484	59,482	59,482
09/02/20	3:00:00	59,482	61,483	2,001		
09/02/20	1:45:00	61,483	63,516	2,033		
09/02/20	2:10:00	63,516	81,000	17,484		
09/02/20	1:43:00	81,000	88,894	7,894		
09/02/20	3:43:00	88,894	97,842	8,948	38,360	97,842
09/03/20	0:55:00	97,842	100,200	2,358		
09/03/20	3:30:00	100,200	112,766	12,566	14,924	112,766
09/04/20	4:04:00	112,766	124,353	11,587		
09/04/20	2:38:00	124,353	135,565	11,212	22,799	135,565
09/08/20	1:30:00	135,565	156,229	20,664	20,664	156,229
09/09/20	1:30:00	156,229	184,405	28,176		
09/09/20	5:00:00	184,405	194,380	9,975		
09/09/20	10:45:00	194,380	221,198	26,818	64,969	221,198
09/10/20	3:00:00	221,198	225,782	4,584		
09/10/20	3:30:00	225,782	253,046	27,264	31,848	253,046
09/11/20	2:00:00	253,046	267,895	14,849		
09/11/20	10:55:00	267,895	294,944	27,049	41,898	294,944
09/12/20	7:00:00	294,944	307,320	12,376		
09/12/20	11:00:00	307,320	336,903	29,583	41,959	336,903
09/13/20	8:30:00	336,903	349,251	12348		
09/13/20	9:30:00	349,251	373,318	24067	36,415	373,318
09/14/20	8:00:00	373,318	388,293	14,975		
09/14/20	11:45:00	388,293	419,483	31,190	46,165	419,483
09/15/20	9:00:00	419,483	423,462	3,979		

Construction Water Discharge Data
Study Area 6
Honeywell International Inc.
Jersey City, New Jersey

STUDY AREA 6 CONSTRUCTION WATER DISCHARGE DATA (TO PVSC)						
DATE	Hours of Operation	Discharge Flow Meter Start (Gal')	Discharge Flow Meter Finish (Gal)	Discharged Volume (Gal)	Daily Discharge Volume (Gal)	Discharged Volume (Gal) Total
09/15/20	5:15:00	423,462	454,247	30,785	34,764	454,247
09/16/20	9:41:00	454,247	472,004	17,757		
09/16/20	9:11:00	472,004	498,915	26,911	44,668	498,915
09/17/20	10:00:00	498,915	560,095	61,180	61,180	560,095
09/18/20	2:00:00	560,095	575,111	15,016	15,016	575,111
09/21/20	8:15:00	575,111	597,722	22,611	22,611	597,722
09/22/20	8:00:00	597,722	619,278	21,556	21,556	619,278
09/23/20	8:00:00	619,278	642,412	23,134	23,134	642,412
09/24/20	8:00:00	642,412	649,265	6,853	6,853	649,265
09/25/20	5:30:00	649,265	657,091	7,826	7,826	657,091
09/28/20	8:30:00	657,091	667,037	9,946	9,946	667,037
09/29/20	8:30:00	667,037	689,685	22,648	22,648	689,685
10/01/20	8:30:00	689,685	701,782	12,097	12,097	701,782
10/02/20	8:30:00	701,782	717,696	15,914	15,914	717,696
10/09/20	8:30:00	717,696	726,992	9,296	9,296	726,992
10/10/20	8:30:00	726,992	730,152	3,160	3,160	730,152
10/11/20	8:30:00	730,152	737,499	7,347	7,347	737,499
10/12/20	10:00:00	737,499	748,373	10,874		
10/12/20	2:00:00	748,373	796,044	47,671	58,545	796,044
10/13/20	9:00:00	796,044	817,142	21,098		
10/13/20	3:00:00	817,142	849,626	32,484	53,582	849,626
10/14/20	11:00:00	849,626	906,876	57,250	57,250	906,876
10/15/20	8:00:00	906,876	918,958	12,082		
10/15/20	8:00:00	918,958	936,494	17,536	29,618	936,494
10/16/20	17:00:00	936,494	966,335	29,841	29,841	966,335
10/17/20	17:00:00	966,335	994,191	27,856	27,856	994,191

Construction Water Discharge Data
Study Area 6
Honeywell International Inc.
Jersey City, New Jersey

STUDY AREA 6 CONSTRUCTION WATER DISCHARGE DATA (TO PVSC)						
DATE	Hours of Operation	Discharge Flow Meter Start (Gal')	Discharge Flow Meter Finish (Gal)	Discharged Volume (Gal)	Daily Discharge Volume (Gal)	Discharged Volume (Gal) Total
10/18/20	17:00:00	994,191	1,020,084	25,893	25,893	1,020,084
10/19/20	17:00:00	1,020,084	1,035,271	15,187	15,187	1,035,271
10/20/20	17:00:00	1,035,271	1,061,507	26,236	26,236	1,061,507
10/21/20	17:00:00	1,061,507	1,084,020	22,513	22,513	1,084,020
10/22/20	17:00:00	1,084,020	1,101,142	17,122	17,122	1,101,142
10/23/20	17:00:00	1,101,142	1,111,677	10,535	10,535	1,111,677
10/26/20	17:00:00	1,111,677	1,136,206	24,529	24,529	1,136,206
10/27/20	17:00:00	1,136,206	1,158,813	22,607	22,607	1,158,813
10/28/20	17:00:00	1,158,813	1,181,895	23,082	23,082	1,181,895
10/29/20	17:00:00	1,181,895	1,195,950	14,055	14,055	1,195,950
11/03/20	17:00:00	1,195,950	1,250,310	54,360	54,360	1,250,310
11/04/20	17:00:00	1,250,310	1,276,197	25,887	25,887	1,276,197
11/05/20	17:00:00	1,276,197	1,297,010	20,813	20,813	1,297,010
11/06/20	17:00:00	1,297,010	1,320,270	23,260	23,260	1,320,270
11/09/20	8:00:00	1,320,270	1,345,932	25,662	25,662	1,345,932
11/10/20	8:00:00	1,345,932	1,360,695	14,763	14,763	1,360,695
11/11/20	8:00:00	1,360,695	1,381,710	21,015	21,015	1,381,710
11/12/20	8:00:00	1,381,710	1,390,939	9,229	9,229	1,390,939
11/13/20	8:00:00	1,390,939	1,403,712	12,773	12,773	1,403,712
11/16/20	8:00:00	1,403,712	1,442,262	38,550	38,550	1,442,262
11/17/20	8:00:00	1,442,262	1,475,568	33,306	33,306	1,475,568
11/18/20	8:00:00	1,475,568	1,500,136	24,568	24,568	1,500,136
11/19/20	8:00:00	1,500,136	1,510,399	10,263	10,263	1,510,399
11/20/20	8:00:00	1,510,399	1,527,333	16,934	16,934	1,527,333
11/23/20	8:00:00	1,527,333	1,543,603	16,270	16,270	1,543,603
11/24/20	8:00:00	1,543,603	1,563,426	19,823	19,823	1,563,426

Construction Water Discharge Data
Study Area 6
Honeywell International Inc.
Jersey City, New Jersey

STUDY AREA 6 CONSTRUCTION WATER DISCHARGE DATA (TO PVSC)						
DATE	Hours of Operation	Discharge Flow Meter Start (Gal¹)	Discharge Flow Meter Finish (Gal)	Discharged Volume (Gal)	Daily Discharge Volume (Gal)	Discharged Volume (Gal) Total
11/25/20	8:00:00	1,563,426	1,569,596	6,170	6,170	1,569,596
11/30/20	8:00:00	1,569,596	1,577,761	8,165	8,165	1,577,761
12/01/20	8:00:00	1,577,761	1,585,621	7,860	7,860	1,585,621
12/02/20	8:00:00	1,585,621	1,602,591	16,970	16,970	1,602,591
12/03/20	8:00:00	1,602,591	1,612,187	9,596	9,596	1,612,187
12/07/20	8:00:00	1,612,187	1,625,869	13,682	13,682	1,625,869
12/09/20	8:00:00	1,625,869	1,636,321	10,452	10,452	1,636,321
12/10/20	8:00:00	1,636,321	1,648,765	12,444	12,444	1,648,765
12/11/20	8:00:00	1,648,765	1,651,097	2,332	2,332	1,651,097
12/12/20	8:00:00	1,651,097	1,652,490	1,393	1,393	1,652,490
12/14/20	8:00:00	1,652,490	1,653,078	588	588	1,653,078
12/16/20	8:00:00	1,653,078	1,654,264	1,186	1,186	1,654,264

¹Gal = gallon

APPENDIX F

DISPOSAL MANIFESTS (CD ONLY)

APPENDIX G

BACKFILL DOCUMENTATION

S & S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

98 Sand Park Road, Cedar Grove, NJ 07009
Tel (973) 857-7188 Fax (973) 239-8380

Kamil Sor, Ph.D.
Orhun Sor, P.E.
Atilla Sencar, P.E.

This report is the confidential property of the Client, and information contained may not be published or reproduced without our written permission.

Client:	Tilcon New York, Inc.				
Project:	Mount Hope, NJ (NJDEP-SRS)				
Subject:	Laboratory Analysis of Aggregate Sample (Quarry Fines)-NJ				
Job No.:	07E34	Report Number:	20-E-64	Date:	5/21/2020

We present herewith the laboratory test results of an aggregate sample delivered to our laboratory (identified as Quarry Fines) on April 28, 2020. The sample was collected by a representative of Tilcon NY, on the same day.

As requested, the aggregate sample was analyzed for the U.S. EPA Target Compound List (TCL)+30/Target Analyte List (TAL) parameters, Extractable Petroleum Hydrocarbons (EPH), pH, and Hexavalent Chromium. The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751). The copies of the IAL/S&S sample chain-of-custody forms, the preliminary IAL laboratory summary report and NJDEP-SRS comparison tables are attached.

Review of the laboratory data and comparison of the sample test results to the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) indicated that the aggregate sample **meet** the **NJDEP-RDCSRS**.

If there are any questions or if we can be of further assistance in this matter, please contact us.

Very truly yours,
S & S ENVIRONMENTAL SCIENCES, INC.



Kamil Sor, Ph.D.
President

KS/ag

Attachments:

- (1) Sample Chain-of-Custody Forms, Laboratory Summary Reports, and NJDEP-SRS Comparison Tables

cc: (1) Client

Steve O'Reilly
email: soreilly@tilconny.com

S&S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

88 Sand Park Rd, Cedar Grove, NJ 07009
Tel (973) 857-7188 Fax (973) 239-8380

NJDEP Lab Certification No. 07073

SAMPLE CHAIN OF CUSTODY

CLIENT:	TILCON	DATE:	4-28-20
ADDRESS:		SSES JOB NO.	
CONTACT:		TEL. #:	
PROJECT:	Mt Hope, NJ	PROJECT LAB ID #:	20-049

SAMPLE NUMBER	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	NO. OF BOTTLES	ANALYSES REQUESTED
20-049	4-28-20	900	Gravel		NY-NJ Cleanfill

Comments:

PRESERVATIVE	
Cooled at 4°C?	^
HCl	
HNO ₃	
H ₂ SO ₄	
NaOH	
Na ₂ S ₂ O ₃	
Other	

pH Meter No.:	Reading	T°C	Time	Analyst
pH				
pH Dup.				

Sampled By: S.O.

RELINQUISHED BY:

RECEIVED BY:

DATE AND TIME:

4.28.20 11:15



Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information		Reporting Information		Rush TAT Charge		Deliverables		EDDs		Concentrations Expected:					
Company: S & S	REPORT TO:	Address:	Address:	24 hr - 100%... 48 hr - 75%... 72 hr - 50%... 96 hr - 35%... 5 day - 25%... 6-9 day - 10%	<input type="checkbox"/> Results Only (Level I) <input checked="" type="checkbox"/> Reduced (Level II/III) <input type="checkbox"/> Regulatory Full (Level IV)	<input type="checkbox"/> ASP Category A <input type="checkbox"/> ASP Category B*	<input type="checkbox"/> NJ SRP <input type="checkbox"/> NYSDEC Equis <input type="checkbox"/> lab approved custom EDD <input type="checkbox"/> NO EDD REQ'D	Low Med High	Known Hazard: <input type="checkbox"/> YES <input type="checkbox"/> NO		Describe:				
Address:	Attn: Sone	Fax #:	FAX #:	Turn-Around Time (TAT)		Regulatory Requirement									
Telephone #: 973-237-6001	INVOICE TO:	Project Manager: P. IC	Address:	Standard (10 business days) Verbal Rush/date needed <i>(only if pre-approved)**</i>		New Jersey		New York							
Project Name: Mount Hope	Attn:	EMAIL Address:	Attn:	Hard Copy: Std 3 week Other - call for price		<input type="checkbox"/> GWQS <input checked="" type="checkbox"/> SRS <input type="checkbox"/> Ecological <input type="checkbox"/> DW <input type="checkbox"/> SPLP		<input type="checkbox"/> AWQS (TOGS Table 1) <input type="checkbox"/> GWEL (TOGS Table 5) <input type="checkbox"/> Part 375-6.8(a) - Unrestricted <input checked="" type="checkbox"/> Part 375-6.8(b) - Restricted <input checked="" type="checkbox"/> CP-51 Table 2 of 3 (selection required) Other States / Criteria							
Project Location (State): NJ	PO # 20-049	Quote #:	Quote #:	Petroleum Hydrocarbons - Selection is REQUIRED		TAT for PHC, if other than 2 weeks:									
Bottle Order #:	Sample Matrix	DW - Drinking Water WW - Waste Water GW - Groundwater SW - Surface Water LIQ - Liquid (specify) M - Multiphasic		OI - Oil S - Soil SED - Sediment SOL - Solid (specify) SL - Sludge W - Wipe		<input type="checkbox"/> NJ EPH-DRO - Category 1 <input type="checkbox"/> NJ EPH-C40 - Category 2 <input type="checkbox"/> NJ EPH-Fractionated - Cat 2		<input type="checkbox"/> CT ETPH <input type="checkbox"/> DRO-8015		OTHER Regulatory Requirements - specify in comments					
Sampled by: S. O.	COMPLETED BY IAL:		Field Sampling <input type="checkbox"/> Equipment Rental <input type="checkbox"/>		ANALYTICAL PARAMETERS (please note if contingent)										
SAMPLE INFORMATION		Client ID	Depth (ft only)	Date	Time	Matrix	# containers	IAL #							
		20-049		6-28-20	9:00	Soil	5	1	TALITCL	+30 (X)	EPH	PH	Cr6+		
Samples previously analyzed by IAL? YES / NO		Preservative Code:	Container Code:	Preservative (use code)		Container Type (use code)		FOR LAB USE ONLY							
Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).		1 = None 2 = HCl 3 = HNO3 4 = MeOH 5 = NaOH 6 = H2SO4 7 = Other	A = Amber Glass B = Plastic C = Vial D = Glass E = EnCore T = Terracore	Special Instructions/QC Requirements & Comments: Inv SRS Parameters NY-NJ Clean 6/21		Retinquished by (Signature and Company)		Date	Time	Received by (Signature and Company)		Date	Time	SDG #: 2898	Cooler Temp: 6 °C
Carrier (check one): <input type="checkbox"/> IAL Courier <input type="checkbox"/> Client Courier <input type="checkbox"/> FedEx/UPS***		***Tracking #:		Signature		Date		Signature		Date		Time			

SAMPLE RECEIPT VERIFICATION

CASE NO: E 20 02898

CLIENT: S+S

COOLER TEMPERATURE: 2° - 6°C: [checked] (See Chain of Custody)

Comments

COC: COMPLETE / INCOMPLETE KEY

[checked] = YES/NA [X] = NO

VOA received: [checked] 259 Encore [] IGW - Methanol [] Terra Core [] No Preservative

- [checked] Bottles Intact
[checked] no-Missing Bottles
[checked] no-Extra Bottles
[checked] Sufficient Sample Volume
[checked] no-headspace/bubbles in VO's
[checked] Labels intact/correct
[checked] pH Check (exclude VO's)1
[checked] Correct bottles/preservative
[checked] Sufficient Holding/Prep Time1
[] Multiphasic Sample
[] Sample to be Subcontracted
[checked] Chain of Custody is Clear

1 All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL AP DATE 4/28/20

CORRECTIVE ACTION REQUIRED: YES [] (SEE BELOW) NO [checked]

If COC is NOT clear, STOP until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [] Date/ Time: NO []

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ

DATE 4/29/20

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

PARAMETER(Units)	Lab ID:	02898-001
	Client ID:	20-049
	Matrix:	Soil
	Sampled Date	4/28/20
	Conc	Q MDL
Volatiles (Units)		<i>(mg/Kg)</i>
Dichlorodifluoromethane	ND	0.000419
Chloromethane	ND	0.00046
Vinyl chloride	ND	0.000458
Bromomethane	ND	0.000646
Chloroethane	ND	0.000514
Trichlorofluoromethane	ND	0.000434
Acrolein	ND	0.00524
1,1-Dichloroethene	ND	0.000441
Acetone	ND	0.00276
Carbon disulfide	ND	0.000273
Methylene chloride	ND	0.0021
Acrylonitrile	ND	0.00464
tert-Butyl alcohol (TBA)	ND	0.0011
trans-1,2-Dichloroethene	ND	0.000432
Methyl tert-butyl ether (MTBE)	ND	0.000321
1,1-Dichloroethane	ND	0.000394
cis-1,2-Dichloroethene	ND	0.000374
2-Butanone (MEK)	ND	0.00103
Bromochloromethane	ND	0.000314
Chloroform	ND	0.000608
1,1,1-Trichloroethane	ND	0.000306
Carbon tetrachloride	ND	0.000298
1,2-Dichloroethane (EDC)	ND	0.000409
Benzene	ND	0.000234
Trichloroethene	ND	0.000315
1,2-Dichloropropane	ND	0.000253
1,4-Dioxane	ND	0.039
Bromodichloromethane	ND	0.000216
cis-1,3-Dichloropropene	ND	0.000232
4-Methyl-2-pentanone (MIBK)	ND	0.000793
Toluene	ND	0.000247
trans-1,3-Dichloropropene	ND	0.00028
1,1,2-Trichloroethane	ND	0.000332
Tetrachloroethene	ND	0.000404
2-Hexanone	ND	0.00166
Dibromochloromethane	ND	0.000297
1,2-Dibromoethane (EDB)	ND	0.000214
Chlorobenzene	ND	0.000246
Ethylbenzene	ND	0.000298
Total Xylenes	ND	0.00116
Styrene	ND	0.00036
Bromoform	ND	0.000375
Isopropylbenzene	ND	0.000367
1,1,2,2-Tetrachloroethane	ND	0.000473
n-Propylbenzene	ND	0.0003

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

Lab ID:	02898-001	
Client ID:	20-049	
Matrix:	Soil	
Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q MDL
Volatiles (Units)		
	<i>(mg/Kg)</i>	
1,3,5-Trimethylbenzene	ND	0.000488
tert-Butylbenzene	ND	0.000345
1,2,4-Trimethylbenzene	ND	0.000558
sec-Butylbenzene	ND	0.000359
1,3-Dichlorobenzene	ND	0.000319
4-Isopropyltoluene	ND	0.000415
1,4-Dichlorobenzene	ND	0.000319
n-Butylbenzene	ND	0.000446
1,2-Dichlorobenzene	ND	0.0003
1,2-Dibromo-3-chloropropane	ND	0.000596
1,2,4-Trichlorobenzene	ND	0.000423
1,2,3-Trichlorobenzene	ND	0.000427
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.000477
Methyl acetate	ND	0.000332
Cyclohexane	ND	0.000491
Methylcyclohexane	ND	0.000314
1,3-Dichloropropene (cis- and trans-)	ND	0.00028
TOTAL TIC's:		
	ND	
Semivolatiles (Units)		
	<i>(mg/Kg)</i>	
N-Nitrosodimethylamine	ND	0.028
Benzaldehyde	ND	0.027
Phenol	ND	0.032
Aniline	ND	0.021
Bis(2-chloroethyl) ether	ND	0.026
2-Chlorophenol	ND	0.026
Benzyl alcohol	ND	0.032
2-Methylphenol	ND	0.020
2,2'-Oxybis(1-Chloropropane)	ND	0.032
4-Methylphenol **	ND	0.023
N-Nitrosodi-n-propylamine	ND	0.023
Acetophenone	ND	0.028
Hexachloroethane	ND	0.027
Nitrobenzene	ND	0.022
Isophorone	ND	0.024
2-Nitrophenol	ND	0.030
2,4-Dimethylphenol	ND	0.020
Bis(2-chloroethoxy) methane	ND	0.027
Benzoic acid	ND	0.028
2,4-Dichlorophenol	ND	0.026
Naphthalene	ND	0.026
4-Chloroaniline	ND	0.023
Hexachlorobutadiene	ND	0.021
Caprolactam	ND	0.025

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

PARAMETER(Units)	Lab ID:	02898-001
	Client ID:	20-049
	Matrix:	Soil
	Sampled Date	4/28/20
	Conc	Q MDL
Semivolatiles (Units)		(mg/Kg)
4-Chloro-3-methylphenol	ND	0.023
2-Methylnaphthalene	ND	0.021
Hexachlorocyclopentadiene	ND	0.028
2,4,6-Trichlorophenol	ND	0.026
2,4,5-Trichlorophenol	ND	0.028
1,1'-Biphenyl	ND	0.028
2-Chloronaphthalene	ND	0.025
2-Nitroaniline	ND	0.025
Dimethyl phthalate	ND	0.024
2,6-Dinitrotoluene	ND	0.032
Acenaphthylene	ND	0.026
3-Nitroaniline	ND	0.025
Acenaphthene	ND	0.027
2,4-Dinitrophenol	ND	0.031
4-Nitrophenol	ND	0.030
2,4-Dinitrotoluene	ND	0.029
Dibenzofuran	ND	0.025
Diethyl phthalate	ND	0.020
Fluorene	ND	0.028
4-Chlorophenyl phenyl ether	ND	0.027
4-Nitroaniline	ND	0.021
1,2,4,5-Tetrachlorobenzene	ND	0.023
2,3,4,6-Tetrachlorophenol	ND	0.028
4,6-Dinitro-2-methylphenol	ND	0.032
N-Nitrosodiphenylamine	ND	0.031
1,2-Diphenylhydrazine	ND	0.032
4-Bromophenyl phenyl ether	ND	0.023
Hexachlorobenzene	ND	0.023
Atrazine	ND	0.025
Pentachlorophenol	ND	0.022
Phenanthrene	ND	0.031
Anthracene	ND	0.032
Carbazole	ND	0.029
Di-n-butyl phthalate	ND	0.028
Fluoranthene	ND	0.032
Benzidine	ND	0.025
Pyrene	ND	0.030
Butyl benzyl phthalate	ND	0.031
3,3'-Dichlorobenzidine	ND	0.029
Benzo[a]anthracene	ND	0.020
Chrysene	ND	0.031
Bis(2-ethylhexyl) phthalate	ND	0.030
Di-n-octyl phthalate	ND	0.031
Benzo[b]fluoranthene	ND	0.032
Benzo[k]fluoranthene	ND	0.028

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

Lab ID:	02898-001	
Client ID:	20-049	
Matrix:	Soil	
Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q MDL
Semivolatiles (Units)		
	<i>(mg/Kg)</i>	
Benzo[a]pyrene	ND	0.029
Indeno[1,2,3-cd]pyrene	ND	0.032
Dibenz[a,h]anthracene	ND	0.030
Benzo[g,h,i]perylene	ND	0.032
Dinitrotoluene (2,4- and 2,6-)	ND	0.032
TOTAL TIC's:		
	ND	
PCB's (Units)		
	<i>(mg/Kg)</i>	
Aroclor-1016	ND	0.00131
Aroclor-1221	ND	0.00131
Aroclor-1232	ND	0.00131
Aroclor-1242	ND	0.00131
Aroclor-1248	ND	0.00131
Aroclor-1254	ND	0.00131
Aroclor-1260	ND	0.00131
Aroclor-1262	ND	0.00131
Aroclor-1268	ND	0.00131
PCBs	ND	0.00131
Pesticides (Units)		
	<i>(mg/Kg)</i>	
alpha-BHC	ND	0.000327
beta-BHC	ND	0.000327
gamma-BHC (Lindane)	ND	0.000327
delta-BHC	ND	0.000327
Heptachlor	ND	0.000327
Aldrin	ND	0.000327
Heptachlor epoxide	ND	0.000327
Endosulfan I	ND	0.000327
4,4'-DDE	ND	0.000327
Dieldrin	ND	0.000327
Endrin	ND	0.000327
Endosulfan II	ND	0.000327
4,4'-DDD	ND	0.000327
Endrin aldehyde	ND	0.000327
Endosulfan sulfate	ND	0.000327
4,4'-DDT	ND	0.000327
Endrin ketone	ND	0.000327
Methoxychlor	ND	0.000327
alpha-Chlordane	ND	0.000327
gamma-Chlordane	ND	0.000327
Toxaphene	ND	0.00392
Endosulfan (I and II)	ND	0.000327
Chlordane (alpha and gamma)	ND	0.000327

ND = Analyzed for but Not Detected at the MDL

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

Lab ID:		02898-001		
Client ID:		20-049		
Matrix:		Soil		
Sampled Date		4/28/20		
PARAMETER(Units)	Conc	Q	MDL	
Herbicides (Units)		<i>(mg/Kg)</i>		
Dalapon	ND		0.0066	
Dicamba	ND		0.0066	
2,4-D	ND		0.0066	
2,4,5-TP (Silvex)	ND		0.0066	
2,4,5-T	ND		0.0066	
2,4-DB	ND		0.0066	
Dinoseb	ND		0.0066	
NJ-EPH-C40 (Units)		<i>(mg/Kg)</i>		
C9-C40	ND		19.5	
Alcohols (Units)		<i>(mg/Kg)</i>		
Methanol	ND		1.91	
Metals (Units)		<i>(mg/Kg)</i>		
Aluminum	2040		2.08	
Antimony	0.360	J	0.208	
Arsenic	1.14		0.156	
Barium	8.52		0.260	
Beryllium	0.674		0.156	
Cadmium	ND		0.313	
Calcium	3740		15.6	
Chromium	3.72		0.260	
Cobalt	3.70		0.156	
Copper	9.66		0.365	
Iron	9670		15.6	
Lead	2.02		0.260	
Magnesium	2260		15.6	
Manganese	65.7		0.365	
Mercury	ND		0.010	
Nickel	4.31		0.365	
Potassium	1240		20.8	
Selenium	4.01		1.56	
Silver	ND		0.313	
Sodium	161		20.8	
Thallium	0.455	J	0.260	
Vanadium	7.69		0.260	
Zinc	10.6		1.04	

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

Lab ID:	02898-001		
Client ID:	20-049		
Matrix:	Soil		
Sampled Date	4/28/20		
PARAMETER(Units)	Conc	Q	MDL
General Analytical (Units)			
Hexavalent Chromium(mg/Kg)	ND		0.379
pH/Corrosivity(SU)	8.47		NA
Trivalent (III) Chromium(mg/Kg)	3.72		0.379
Subcontracted Data (Units)			
	<i>(mg/Kg)</i>		
	*		*

ND = Analyzed for but Not Detected at the MDL

*Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-208555-1

Job Description: E20-02898

For:

Integrated Analytical Laboratories LLC

PO BOX 8026

Parsippany, New Jersey 07054

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	E20-02898-001		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-208555-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	04/28/2020 09:00:00		
Matrix				Soil		
				Result	Q	MDL
SOIL BY 9012B						
Cyanide, Total (mg/kg)	47	680	20	0.12	U F1	0.12

F1 : MS and/or MSD recovery exceeds control limits.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:

Jill Miller

Senior Project Manager

(484)685-0871

Sample #: Field ID: Lab ID: Date Sampled: Depth(ft):	NJDEP SOIL REMEDIATION				20-049			
	STANDARDS							
	Residential	Non-Res	Default IGW	02898-001				
	SRS	SRS	Screening	04/28/2020				
CAS	(mg/Kg)	(mg/Kg)	Level	Conc	Q	RL	MDL	
(mg/Kg)	(mg/Kg)	(mg/Kg)						
Volatiles (mg/Kg)								
Dichlorodifluoromethane	75-71-8	490	230000	39	ND	0.00108	0.000419	
Chloromethane	74-87-3	4	12	NS	ND	0.00108	0.00046	
Vinyl chloride	75-01-4	0.7	2	0.005	ND	0.00108	0.000458	
Bromomethane	74-83-9	25	59	0.04	ND	0.00108	0.000646	
Chloroethane	75-00-3	220	1100	NS	ND	0.00108	0.000514	
Trichlorofluoromethane	75-69-4	23000	340000	34	ND	0.00108	0.000434	
Acrolein	107-02-8	0.5	1	0.5	ND	0.022	0.00524	
1,1-Dichloroethene	75-35-4	11	150	0.008	ND	0.00108	0.000441	
Acetone	67-64-1	70000	NS	19	ND	0.011	0.00276	
Carbon disulfide	75-15-0	7800	110000	6	ND	0.00108	0.000273	
Methylene chloride	75-09-2	46	230	0.01	ND	0.00216	0.0021	
Acrylonitrile	107-13-1	0.9	3	0.5	ND	0.022	0.00464	
tert-Butyl alcohol (TBA)	75-65-0	1400	11000	0.3	ND	0.00432	0.0011	
trans-1,2-Dichloroethene	156-60-5	300	720	0.6	ND	0.00108	0.000432	
Methyl tert-butyl ether (MTBE)	1634-04-4	110	320	0.2	ND	0.00108	0.000321	
1,1-Dichloroethane	75-34-3	8	24	0.2	ND	0.00108	0.000394	
cis-1,2-Dichloroethene	156-59-2	230	560	0.3	ND	0.00108	0.000374	
2-Butanone (MEK)	78-93-3	3100	44000	0.9	ND	0.00432	0.00103	
Bromochloromethane	74-97-5	NS	NS	NS	ND	0.00108	0.000314	
Chloroform	67-66-3	0.6	2	0.4	ND	0.00108	0.000608	
1,1,1-Trichloroethane	71-55-6	160000	NS	0.3	ND	0.00108	0.000306	
Carbon tetrachloride	56-23-5	2	4	0.005	ND	0.00108	0.000298	
1,2-Dichloroethane (EDC)	107-06-2	0.9	3	0.005	ND	0.00108	0.000409	
Benzene	71-43-2	2	5	0.005	ND	0.00108	0.000234	
Trichloroethene	79-01-6	3	10	0.01	ND	0.00108	0.000315	
1,2-Dichloropropane	78-87-5	2	5	0.005	ND	0.00108	0.000253	
1,4-Dioxane	123-91-1	NS	NS	NS	ND	0.216	0.039	
Bromodichloromethane	75-27-4	1	3	0.005	ND	0.00108	0.000216	
cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	ND	0.00108	0.000232	
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	NS	ND	0.00216	0.000793	
Toluene	108-88-3	6300	91000	7	ND	0.00108	0.000247	
trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	ND	0.00108	0.00028	
1,1,2-Trichloroethane	79-00-5	2	6	0.02	ND	0.00108	0.000332	
Tetrachloroethene	127-18-4	43	1500	0.005	ND	0.00108	0.000404	
2-Hexanone	591-78-6	NS	NS	NS	ND	0.00216	0.00166	
Dibromochloromethane	124-48-1	3	8	0.005	ND	0.00108	0.000297	
1,2-Dibromoethane (EDB)	106-93-4	0.008	0.04	0.005	ND	0.00108	0.000214	
Chlorobenzene	108-90-7	510	7400	0.6	ND	0.00108	0.000246	

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Ethylbenzene	100-41-4	7800	110000	13	ND	0.00108	0.000298
Total Xylenes	1330-20-7	12000	170000	19	ND	0.00216	0.00116
Styrene	100-42-5	90	260	3	ND	0.00108	0.00036
Bromoform	75-25-2	81	280	0.03	ND	0.00108	0.000375
Isopropylbenzene	98-82-8	NS	NS	NS	ND	0.00108	0.000367
1,1,2,2-Tetrachloroethane	79-34-5	1	3	0.007	ND	0.00108	0.000473
n-Propylbenzene	103-65-1	NS	NS	NS	ND	0.00108	0.0003
1,3,5-Trimethylbenzene	108-67-8	NS	NS	NS	ND	0.00108	0.000488
tert-Butylbenzene	98-06-6	NS	NS	NS	ND	0.00108	0.000345
1,2,4-Trimethylbenzene	95-63-6	NS	NS	NS	ND	0.00108	0.000558
sec-Butylbenzene	135-98-8	NS	NS	NS	ND	0.00108	0.000359
1,3-Dichlorobenzene	541-73-1	5300	59000	19	ND	0.00108	0.000319
4-Isopropyltoluene	99-87-6	NS	NS	NS	ND	0.00108	0.000415
1,4-Dichlorobenzene	106-46-7	5	13	2	ND	0.00108	0.000319
n-Butylbenzene	104-51-8	NS	NS	NS	ND	0.00108	0.000446
1,2-Dichlorobenzene	95-50-1	5300	59000	17	ND	0.00108	0.0003
1,2-Dibromo-3-chloropropane	96-12-8	0.08	0.2	0.005	ND	0.00108	0.000596
1,2,4-Trichlorobenzene	120-82-1	73	820	0.7	ND	0.00108	0.000423
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	ND	0.00108	0.000427
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS	NS	NS	ND	0.00108	0.000477
Methyl acetate	79-20-9	78000	NS	22	ND	0.00216	0.000332
Cyclohexane	110-82-7	NS	NS	NS	ND	0.00108	0.000491
Methylcyclohexane	108-87-2	NS	NS	NS	ND	0.00108	0.000314
1,3-Dichloropropene (cis- and trans-)	542-75-6	2	7	0.005	ND	0.00108	0.00028
TOTAL TIC's:		NS	NS	NS	ND		NA

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Semivolatiles (mg/Kg)					Conc	Q	RL	MDL
N-Nitrosodimethylamine	62-75-9	0.7	0.7	0.7	ND		0.033	0.028
Benzaldehyde	100-52-7	6100	68000	NS	ND		0.033	0.027
Phenol	108-95-2	18000	210000	8	ND		0.033	0.032
Aniline	62-53-3	NS	NS	NS	ND		0.033	0.021
Bis(2-chloroethyl) ether	111-44-4	0.4	2	0.2	ND		0.033	0.026
2-Chlorophenol	95-57-8	310	2200	0.8	ND		0.033	0.026
Benzyl alcohol	100-51-6	NS	NS	NS	ND		0.033	0.032
2-Methylphenol	95-48-7	310	3400	NS	ND		0.033	0.020
2,2'-Oxybis(1-Chloropropane)	108-60-1	23	67	5	ND		0.033	0.032
4-Methylphenol **	106-44-5	31	340	NS	ND		0.033	0.023
N-Nitrosodi-n-propylamine	621-64-7	0.2	0.3	0.2	ND		0.033	0.023
Acetophenone	98-86-2	2	5	3	ND		0.033	0.028
Hexachloroethane	67-72-1	12	48	0.2	ND		0.033	0.027
Nitrobenzene	98-95-3	5	14	0.2	ND		0.033	0.022
Isophorone	78-59-1	510	2000	0.2	ND		0.033	0.024
2-Nitrophenol	88-75-5	NS	NS	NS	ND		0.033	0.030
2,4-Dimethylphenol	105-67-9	1200	14000	1	ND		0.033	0.020
Bis(2-chloroethoxy) methane	111-91-1	NS	NS	NS	ND		0.033	0.027
Benzoic acid	65-85-0	NS	NS	NS	ND		0.328	0.028
2,4-Dichlorophenol	120-83-2	180	2100	0.2	ND		0.033	0.026
Naphthalene	91-20-3	6	17	25	ND		0.033	0.026
4-Chloroaniline	106-47-8	NS	NS	NS	ND		0.033	0.023
Hexachlorobutadiene	87-68-3	6	25	0.9	ND		0.033	0.021
Caprolactam	105-60-2	31000	340000	12	ND		0.033	0.025
4-Chloro-3-methylphenol	59-50-7	NS	NS	NS	ND		0.033	0.023
2-Methylnaphthalene	91-57-6	230	2400	8	ND		0.033	0.021
Hexachlorocyclopentadiene	77-47-4	45	110	320	ND		0.033	0.028
2,4,6-Trichlorophenol	88-06-2	19	74	0.2	ND		0.033	0.026
2,4,5-Trichlorophenol	95-95-4	6100	68000	68	ND		0.033	0.028
1,1'-Biphenyl	92-52-4	61	240	140	ND		0.033	0.028
2-Chloronaphthalene	91-58-7	NS	NS	NS	ND		0.033	0.025
2-Nitroaniline	88-74-4	39	23000	NS	ND		0.033	0.025
Dimethyl phthalate	131-11-3	NS	NS	NS	ND		0.033	0.024
2,6-Dinitrotoluene	606-20-2	0.7	3	NS	ND		0.033	0.032
Acenaphthylene	208-96-8	NS	300000	NS	ND		0.033	0.026
3-Nitroaniline	99-09-2	NS	NS	NS	ND		0.033	0.025
Acenaphthene	83-32-9	3400	37000	110	ND		0.033	0.027
2,4-Dinitrophenol	51-28-5	120	1400	0.3	ND		0.033	0.031
4-Nitrophenol	100-02-7	NS	NS	NS	ND		0.033	0.030
2,4-Dinitrotoluene	121-14-2	0.7	3	NS	ND		0.033	0.029
Dibenzofuran	132-64-9	NS	NS	NS	ND		0.033	0.025
Diethyl phthalate	84-66-2	49000	550000	88	ND		0.033	0.020
Fluorene	86-73-7	2300	24000	170	ND		0.033	0.028
4-Chlorophenyl phenyl ether	7005-72-3	NS	NS	NS	ND		0.033	0.027
4-Nitroaniline	100-01-6	NS	NS	NS	ND		0.033	0.021

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1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	NS	ND	0.033	0.023
2,3,4,6-Tetrachlorophenol	58-90-2	NS	NS	NS	ND	0.033	0.028
4,6-Dinitro-2-methylphenol	534-52-1	6	68	0.3	ND	0.033	0.032
N-Nitrosodiphenylamine	86-30-6	99	390	0.4	ND	0.033	0.031
1,2-Diphenylhydrazine	122-66-7	0.7	2	0.7	ND	0.033	0.032
4-Bromophenyl phenyl ether	101-55-3	NS	NS	NS	ND	0.033	0.023
Hexachlorobenzene	118-74-1	0.3	1	0.2	ND	0.033	0.023
Atrazine	1912-24-9	210	2400	0.2	ND	0.033	0.025
Pentachlorophenol	87-86-5	0.9	3	0.3	ND	0.033	0.022
Phenanthrene	85-01-8	NS	300000	NS	ND	0.033	0.031
Anthracene	120-12-7	17000	30000	2400	ND	0.033	0.032
Carbazole	86-74-8	24	96	NS	ND	0.033	0.029
Di-n-butyl phthalate	84-74-2	6100	68000	760	ND	0.033	0.028
Fluoranthene	206-44-0	2300	24000	1300	ND	0.033	0.032
Benzidine	92-87-5	0.7	0.7	0.7	ND	0.033	0.025
Pyrene	129-00-0	1700	18000	840	ND	0.033	0.030
Butyl benzyl phthalate	85-68-7	1200	14000	230	ND	0.033	0.031
3,3'-Dichlorobenzidine	91-94-1	1	4	0.2	ND	0.033	0.029
Benzo[a]anthracene	56-55-3	5	17	0.8	ND	0.033	0.020
Chrysene	218-01-9	450	1700	80	ND	0.033	0.031
Bis(2-ethylhexyl) phthalate	117-81-7	35	140	1200	ND	0.033	0.030
Di-n-octyl phthalate	117-84-0	2400	27000	3300	ND	0.033	0.031
Benzo[b]fluoranthene	205-99-2	5	17	2	ND	0.033	0.032
Benzo[k]fluoranthene	207-08-9	45	170	25	ND	0.033	0.028
Benzo[a]pyrene	50-32-8	0.5	2	0.2	ND	0.033	0.029
Indeno[1,2,3-cd]pyrene	193-39-5	5	17	7	ND	0.033	0.032
Dibenz[a,h]anthracene	53-70-3	0.5	2	0.8	ND	0.033	0.030
Benzo[g,h,i]perylene	191-24-2	380000	30000	NS	ND	0.033	0.032
Dinitrotoluene (2,4- and 2,6-)	25321-14-6	0.7	3	0.2	ND	0.033	0.032
TOTAL TIC's:		NS	NS	NS	ND		NA

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PCB's (mg/Kg)					Conc	Q	RL	MDL
Aroclor-1016	12674-11-2	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1221	11104-28-2	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1232	11141-16-5	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1242	53469-21-9	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1248	12672-29-6	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1254	11097-69-1	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1260	11096-82-5	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1262	37324-23-5	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1268	11100-14-4	NS	NS	NS	ND		0.00327	0.00131
PCBs	1336-36-3	0.2	1	0.2	ND		0.00327	0.00131

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Pesticides (mg/Kg)					Conc	Q	RL	MDL
alpha-BHC	319-84-6	0.1	0.5	0.002	ND		0.000654	0.000327
beta-BHC	319-85-7	0.4	2	0.002	ND		0.000654	0.000327
gamma-BHC (Lindane)	58-89-9	0.4	2	0.002	ND		0.000654	0.000327
delta-BHC	319-86-8	NS	NS	NS	ND		0.000654	0.000327
Heptachlor	76-44-8	0.1	0.7	0.5	ND		0.000654	0.000327
Aldrin	309-00-2	0.04	0.2	0.2	ND		0.000654	0.000327
Heptachlor epoxide	1024-57-3	0.07	0.3	0.01	ND		0.000654	0.000327
Endosulfan I	959-98-8	NS	NS	NS	ND		0.000654	0.000327
4,4'-DDE	72-55-9	2	9	18	ND		0.000654	0.000327
Dieldrin	60-57-1	0.04	0.2	0.003	ND		0.000654	0.000327
Endrin	72-20-8	23	340	1	ND		0.000654	0.000327
Endosulfan II	33213-65-9	NS	NS	NS	ND		0.000654	0.000327
4,4'-DDD	72-54-8	3	13	4	ND		0.000654	0.000327
Endrin aldehyde	7421-93-4	NS	NS	NS	ND		0.000654	0.000327
Endosulfan sulfate	1031-07-8	470	6800	2	ND		0.000654	0.000327
4,4'-DDT	50-29-3	2	8	11	ND		0.000654	0.000327
Endrin ketone	53494-70-5	NS	NS	NS	ND		0.000654	0.000327
Methoxychlor	72-43-5	390	5700	160	ND		0.000654	0.000327
alpha-Chlordane	5103-71-9	NS	NS	NS	ND		0.000654	0.000327
gamma-Chlordane	5103-74-2	NS	NS	NS	ND		0.000654	0.000327
Toxaphene	8001-35-2	0.6	3	0.3	ND		0.00818	0.00392
Endosulfan (I and II)	115-29-7	470	6800	4	ND		0.000654	0.000327
Chlordane (alpha and gamma)	57-74-9	0.2	1	0.05	ND		0.000654	0.000327

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NJ-EPH-C40 (mg/Kg)					Conc	Q	RL	MDL
C9-C40	IALC9C40	NS	NS	NS	ND		48.7	19.5

Standards are based upon published regulatory information.
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Metals (mg/Kg)					Conc	Q	RL	MDL
Aluminum	7429-90-5	78000	NS	6000	2040		5.21	2.08
Antimony	7440-36-0	31	450	6	0.360	J	0.521	0.208
Arsenic	7440-38-2	19	19	19	1.14		0.521	0.156
Barium	7440-39-3	16000	59000	2100	8.52		0.521	0.260
Beryllium	7440-41-7	16	140	0.7	0.674		0.521	0.156
Cadmium	7440-43-9	78	78	2	ND		0.521	0.313
Calcium	7440-70-2	NS	NS	NS	3740		52.1	15.6
Chromium	7440-47-3	NS	NS	NS	3.72		0.521	0.260
Cobalt	7440-48-4	1600	590	90	3.70		0.521	0.156
Copper	7440-50-8	3100	45000	11000	9.66		0.521	0.365
Iron	7439-89-6	NS	NS	NS	9670		52.1	15.6
Lead	7439-92-1	400	800	90	2.02		0.521	0.260
Magnesium	7439-95-4	NS	NS	NS	2260		52.1	15.6
Manganese	7439-96-5	11000	5900	65	65.7		0.521	0.365
Mercury	7439-97-6	23	65	0.1	ND		0.025	0.010
Nickel	7440-02-0	1600	23000	48	4.31		0.521	0.365
Potassium	7440-09-7'	NS	NS	NS	1240		52.1	20.8
Selenium	7782-49-2	390	5700	11	4.01		3.65	1.56
Silver	7440-22-4	390	5700	1	ND		0.521	0.313
Sodium	7440-23-5	NS	NS	NS	161		52.1	20.8
Thallium	7440-28-0	withdrawn	withdrawn	3	0.455	J	0.521	0.260
Vanadium	7440-62-2	78	1100	NS	7.69		0.521	0.260
Zinc	7440-66-6	23000	110000	930	10.6		5.21	1.04

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General Analytical					Conc	Q	RL	MDL
Hexavalent Chromium-mg/Kg	18540-29-9	240	20	NS	ND		1.00	0.379
pH/Corrosivity-SU	SRP 6	NS	NS	NS	8.47		NA	NA
Trivalent (III) Chromium-mg/Kg	16065-83-1	120000	NS	NS	3.72		1.00	0.379

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Subcontracted Data				Conc	Q	RL	MDL
		NS	NS	NS	?	?	NA
NJDEP Soil Remediation Standards: Remediation Standards N.J.A.C. 7:26D, May 2012; Amended Sept 2017							
BOLD Conc	Indicates a concentration that exceeds applicable criteria.						
BOLD RL	Indicates RL that exceeds applicable criteria.						
BOLD MDL	Indicates MDL that exceeds applicable criteria.						
NS = No Standard Available							
~ = Sample not analyzed for							
ND = Analyzed for but Not Detected at the MDL							
J = Concentration detected at a value below the RL and above the MDL for target compounds . For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.							
? = Results not available							
Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section							

Standards are based upon published regulatory information.
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S & S ENVIRONMENTAL SCIENCES, INC.

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Orhun Sor, P.E.
Atilla Sencar, P.E.

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Client:	Tilcon New York, Inc.				
Project:	Pompton Lakes, NJ (NJDEP-SRS)				
Subject:	Laboratory Analysis of Aggregate Sample (Quarry Fines)				
Job No.:	06E41	Report Number:	20-E-62	Date:	5/21/2020

We present herewith the laboratory test results of an aggregate sample (identified as Quarry Fines) delivered to our laboratory on April 28, 2020. The sample was collected by a representative of Tilcon NY, on the same day.

As requested, the aggregate sample was analyzed for the U.S. EPA Target Compound List (TCL)+30/Target Analyte List (TAL) parameters, Extractable Petroleum Hydrocarbons (EPH), pH, and Hexavalent Chromium. The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751). The copies of the IAL/S&S sample chain-of-custody forms, the preliminary IAL laboratory summary report and NJDEP-SRS comparison tables are attached.

Review of the laboratory data and comparison of the sample test results to the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) indicated that the aggregate sample **meet** the **NJDEP-RDCSRS**.

If there are any questions or if we can be of further assistance in this matter, please contact us.

Very truly yours

S & S ENVIRONMENTAL SCIENCES, INC.



Kamil Sor, Ph.D.

President

KS/ag

Attachments:

- (1) Sample Chain-of-Custody Forms, Laboratory Summary Reports, and NJDEP-SRS Comparison Tables

cc: (1) Client

Steve O'Reilly

email: soreilly@tilconny.com

SAMPLE RECEIPT VERIFICATION

CASE NO: E 20 02897

CLIENT: 575

COOLER TEMPERATURE: 2° - 6°C: [checked]

(See Chain of Custody)

Comments

COC: COMPLETE / INCOMPLETE

KEY

[checked] = YES/NA
[unchecked] = NO

VOA received: [checked] Encore (259)
[unchecked] Terra Core

[unchecked] IGW - Methanol
[unchecked] No Preservative

[checked] Bottles Intact
[checked] no-Missing Bottles
[checked] no-Extra Bottles

[checked] Sufficient Sample Volume
[checked] no-headspace/bubbles in VO's
[checked] Labels intact/correct
[checked] pH Check (exclude VO's)
[checked] Correct bottles/preservative
[checked] Sufficient Holding/Prep Time
[unchecked] Multiphasic Sample
[unchecked] Sample to be Subcontracted
[checked] Chain of Custody is Clear

All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL AP

DATE 4/28/20

CORRECTIVE ACTION REQUIRED: YES [unchecked] NO [checked]

If COC is NOT clear, STOP until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [unchecked] Date/ Time: NO [unchecked]

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL mf

DATE 4/29/20

208 556

CLIENT & PROJECT REPORTING & BILLING

Name: Integrated Analytical Laboratories LLC
 Contact: Thomas Malanga
 Fax #: _____
 Email to: tmalanga@ialonline.com
 Address: 273 Franklin Road
 Report to: Thomas Malanga
 Randolph, NJ 07869
 Address: _____
 Telephone #: 973-361-4252
 Fax #: 973-989-5288
 Project Name: E20-02897
 Invoice to: Thomas Malanga
 Project Location (State): NJ
 Address: _____
 Project Manager: _____
 Reference ID#: PO# _____

Turnaround Time
 Verbal/Fax
 24 hr* 48 hr* 72 hr* 1 wk* 2 wk 3 wk
 Other: 6 Business Days
 Report Format: Reduced / Level III
Special Requirements
 Hard Copy
 72 hr* 1 wk* 2 wk* 3 wk
 Other: _____
 *Prior to sample arrival, Lab notification is required.

ANALYTICAL PARAMETERS / PRESERVATIVES
 Preservative
 1 = HCl; 2 = NaOH; 3 = HNO₃
 4 = H₂SO₄; 5 = MeOH; 6 = Other

1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6
Total Cyanide (9012B)													
Run													

SAMPLE INFORMATION

Sample ID: E20-02897-001
 Sample Depth (in Feet): _____
 Matrix: Soil
 # of Containers: 1
 Date: 4/28/20
 Sampling Time: 10:05

 460-208556 Chain of Custody

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

EMAIL CONFIRMATION REQUIRED

CUSTOMY LOG

Signature/Company	Date	Time	Signature/Company
Relinquished by: <i>[Signature]</i>	5/1/20	11:36	Received by: <i>[Signature]</i>
Relinquished by:			Received by:
Relinquished by:			Received by:

Lab Case # _____

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

PARAMETER(Units)	Lab ID:	02897-001
	Client ID:	20-048
	Matrix:	Soil
	Sampled Date	4/28/20
	Conc	Q MDL
Volatiles (Units)	(mg/Kg)	
Dichlorodifluoromethane	ND	0.000369
Chloromethane	ND	0.000405
Vinyl chloride	ND	0.000403
Bromomethane	ND	0.000568
Chloroethane	ND	0.000452
Trichlorofluoromethane	ND	0.000382
Acrolein	ND	0.00461
1,1-Dichloroethene	ND	0.000388
Acetone	ND	0.00242
Carbon disulfide	0.00198	0.00024
Methylene chloride	ND	0.00184
Acrylonitrile	ND	0.00408
tert-Butyl alcohol (TBA)	ND	0.000968
trans-1,2-Dichloroethene	ND	0.00038
Methyl tert-butyl ether (MTBE)	ND	0.000282
1,1-Dichloroethane	ND	0.000347
cis-1,2-Dichloroethene	ND	0.000329
2-Butanone (MEK)	ND	0.000903
Bromochloromethane	ND	0.000276
Chloroform	ND	0.000535
1,1,1-Trichloroethane	ND	0.000269
Carbon tetrachloride	ND	0.000262
1,2-Dichloroethane (EDC)	ND	0.00036
Benzene	ND	0.000206
Trichloroethene	ND	0.000277
1,2-Dichloropropane	ND	0.000222
1,4-Dioxane	ND	0.035
Bromodichloromethane	ND	0.00019
cis-1,3-Dichloropropene	ND	0.000204
4-Methyl-2-pentanone (MIBK)	ND	0.000697
Toluene	ND	0.000218
trans-1,3-Dichloropropene	ND	0.000246
1,1,2-Trichloroethane	ND	0.000292
Tetrachloroethene	ND	0.000355
2-Hexanone	ND	0.00146
Dibromochloromethane	ND	0.000261
1,2-Dibromoethane (EDB)	ND	0.000188
Chlorobenzene	ND	0.000217
Ethylbenzene	ND	0.000262
Total Xylenes	ND	0.00102
Styrene	ND	0.000316
Bromoform	ND	0.00033
Isopropylbenzene	ND	0.000323
1,1,2,2-Tetrachloroethane	ND	0.000416
n-Propylbenzene	ND	0.000264

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

Lab ID:	02897-001		
Client ID:	20-048		
Matrix:	Soil		
Sampled Date	4/28/20		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	<i>(mg/Kg)</i>		
1,3,5-Trimethylbenzene	ND		0.000429
tert-Butylbenzene	ND		0.000303
1,2,4-Trimethylbenzene	ND		0.000491
sec-Butylbenzene	ND		0.000315
1,3-Dichlorobenzene	ND		0.00028
4-Isopropyltoluene	ND		0.000365
1,4-Dichlorobenzene	ND		0.00028
n-Butylbenzene	ND		0.000392
1,2-Dichlorobenzene	ND		0.000264
1,2-Dibromo-3-chloropropane	ND		0.000524
1,2,4-Trichlorobenzene	ND		0.000372
1,2,3-Trichlorobenzene	ND		0.000375
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00042
Methyl acetate	ND		0.000292
Cyclohexane	ND		0.000432
Methylcyclohexane	ND		0.000276
1,3-Dichloropropene (cis- and trans-)	ND		0.000246
TOTAL TIC's:	ND		
Semivolatiles (Units)	<i>(mg/Kg)</i>		
N-Nitrosodimethylamine	ND		0.028
Benzaldehyde	ND		0.026
Phenol	ND		0.032
Aniline	ND		0.021
Bis(2-chloroethyl) ether	ND		0.026
2-Chlorophenol	ND		0.026
Benzyl alcohol	ND		0.031
2-Methylphenol	ND		0.019
2,2'-Oxybis(1-Chloropropane)	ND		0.031
4-Methylphenol **	ND		0.023
N-Nitrosodi-n-propylamine	ND		0.023
Acetophenone	ND		0.027
Hexachloroethane	ND		0.026
Nitrobenzene	ND		0.021
Isophorone	ND		0.024
2-Nitrophenol	ND		0.030
2,4-Dimethylphenol	ND		0.019
Bis(2-chloroethoxy) methane	ND		0.026
Benzoic acid	ND		0.027
2,4-Dichlorophenol	ND		0.026
Naphthalene	ND		0.026
4-Chloroaniline	ND		0.023
Hexachlorobutadiene	ND		0.021
Caprolactam	ND		0.025

ND = Analyzed for but Not Detected at the MDL
Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

PARAMETER(Units)	Lab ID:	02897-001
	Client ID:	20-048
	Matrix:	Soil
	Sampled Date	4/28/20
	Conc	Q MDL
Semivolatiles (Units)	(mg/Kg)	
4-Chloro-3-methylphenol	ND	0.022
2-Methylnaphthalene	ND	0.021
Hexachlorocyclopentadiene	ND	0.028
2,4,6-Trichlorophenol	ND	0.026
2,4,5-Trichlorophenol	ND	0.028
1,1'-Biphenyl	ND	0.027
2-Chloronaphthalene	ND	0.025
2-Nitroaniline	ND	0.025
Dimethyl phthalate	ND	0.024
2,6-Dinitrotoluene	ND	0.031
Acenaphthylene	ND	0.026
3-Nitroaniline	ND	0.024
Acenaphthene	ND	0.027
2,4-Dinitrophenol	ND	0.031
4-Nitrophenol	ND	0.030
2,4-Dinitrotoluene	ND	0.029
Dibenzofuran	ND	0.024
Diethyl phthalate	ND	0.019
Fluorene	ND	0.028
4-Chlorophenyl phenyl ether	ND	0.027
4-Nitroaniline	ND	0.020
1,2,4,5-Tetrachlorobenzene	ND	0.023
2,3,4,6-Tetrachlorophenol	ND	0.028
4,6-Dinitro-2-methylphenol	ND	0.031
N-Nitrosodiphenylamine	ND	0.031
1,2-Diphenylhydrazine	ND	0.032
4-Bromophenyl phenyl ether	ND	0.023
Hexachlorobenzene	ND	0.023
Atrazine	ND	0.025
Pentachlorophenol	ND	0.022
Phenanthrene	ND	0.031
Anthracene	ND	0.032
Carbazole	ND	0.029
Di-n-butyl phthalate	ND	0.027
Fluoranthene	ND	0.031
Benzidine	ND	0.025
Pyrene	ND	0.029
Butyl benzyl phthalate	ND	0.030
3,3'-Dichlorobenzidine	ND	0.029
Benzo[a]anthracene	ND	0.019
Chrysene	ND	0.030
Bis(2-ethylhexyl) phthalate	ND	0.029
Di-n-octyl phthalate	ND	0.030
Benzo[b]fluoranthene	ND	0.031
Benzo[k]fluoranthene	ND	0.027

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

Lab ID:	02897-001		
Client ID:	20-048		
Matrix:	Soil		
Sampled Date	4/28/20		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles (Units)			
	<i>(mg/Kg)</i>		
Benzo[a]pyrene	ND		0.028
Indeno[1,2,3-cd]pyrene	ND		0.031
Dibenz[a,h]anthracene	ND		0.030
Benzo[g,h,i]perylene	ND		0.031
Dinitrotoluene (2,4- and 2,6-)	ND		0.031
TOTAL TIC's:			
	ND		
PCB's (Units)			
	<i>(mg/Kg)</i>		
Aroclor-1016	ND		0.00132
Aroclor-1221	ND		0.00132
Aroclor-1232	ND		0.00132
Aroclor-1242	ND		0.00132
Aroclor-1248	ND		0.00132
Aroclor-1254	ND		0.00132
Aroclor-1260	ND		0.00132
Aroclor-1262	ND		0.00132
Aroclor-1268	ND		0.00132
PCBs	ND		0.00132
Pesticides (Units)			
	<i>(mg/Kg)</i>		
alpha-BHC	ND		0.000329
beta-BHC	ND		0.000329
gamma-BHC (Lindane)	ND		0.000329
delta-BHC	ND		0.000329
Heptachlor	ND		0.000329
Aldrin	ND		0.000329
Heptachlor epoxide	ND		0.000329
Endosulfan I	ND		0.000329
4,4'-DDE	ND		0.000329
Dieldrin	ND		0.000329
Endrin	ND		0.000329
Endosulfan II	ND		0.000329
4,4'-DDD	ND		0.000329
Endrin aldehyde	ND		0.000329
Endosulfan sulfate	ND		0.000329
4,4'-DDT	ND		0.000329
Endrin ketone	ND		0.000329
Methoxychlor	ND		0.000329
alpha-Chlordane	ND		0.000329
gamma-Chlordane	ND		0.000329
Toxaphene	ND		0.00395
Endosulfan (I and II)	ND		0.000329
Chlordane (alpha and gamma)	ND		0.000329

ND = Analyzed for but Not Detected at the MDL.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

Lab ID:	02897-001		
Client ID:	20-048		
Matrix:	Soil		
Sampled Date	4/28/20		
PARAMETER(Units)	Conc	Q	MDL
Herbicides (Units)			
	<i>(mg/Kg)</i>		
Dalapon	ND		0.00658
Dicamba	ND		0.00658
2,4-D	ND		0.00658
2,4,5-TP (Silvex)	ND		0.00658
2,4,5-T	ND		0.00658
2,4-DB	ND		0.00658
Dinoseb	ND		0.00658
NJ-EPH-C40 (Units)			
	<i>(mg/Kg)</i>		
C9-C40	21.1	J	19.9
Alcohols (Units)			
	<i>(mg/Kg)</i>		
Methanol	ND		1.97
Metals (Units)			
	<i>(mg/Kg)</i>		
Aluminum	4640		2.17
Antimony	ND		0.217
Arsenic	0.687		0.163
Barium	41.1		0.272
Beryllium	0.316	J	0.163
Cadmium	ND		0.326
Calcium	3920		16.3
Chromium	16.3		0.272
Cobalt	8.86		0.163
Copper	50.4		0.380
Iron	13500		16.3
Lead	3.21		0.272
Magnesium	4030		16.3
Manganese	94.9		0.380
Mercury	ND		0.013
Nickel	23.0		0.380
Potassium	3050		21.7
Selenium	3.37	J	1.63
Silver	ND		0.326
Sodium	116		21.7
Thallium	ND		0.272
Vanadium	23.6		0.272
Zinc	19.4		1.09

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

Lab ID:	02897-001		
Client ID:	20-048		
Matrix:	Soil		
Sampled Date	4/28/20		
PARAMETER(Units)	Conc	Q	MDL
General Analytical (Units)			
Hexavalent Chromium(mg/Kg)	ND		0.380
pH/Corrosivity(SU)	8.38		NA
Trivalent (III) Chromium(mg/Kg)	16.3		0.380
Subcontracted Data (Units)			
	<i>(mg/Kg)</i>		
	*		*

ND = Analyzed for but Not Detected at the MDL

*Subcontracted Results for Total Cyanide (9012B) by Test America - Edison are available in the Subcontracted Report section

Sample #: Field ID: Lab ID: Date Sampled: Depth(ft):	NJDEP SOIL REMEDIATION STANDARDS				20-048			
	CAS	Residential	Non-Res	Default IGW	Conc	Q	RL	MDL
		SRS (mg/Kg)	SRS (mg/Kg)	Screening Level (mg/Kg)				
Volatiles (mg/Kg)								
Dichlorodifluoromethane	75-71-8	490	230000	39	ND	0.00095	0.000369	
Chloromethane	74-87-3	4	12	NS	ND	0.00095	0.000405	
Vinyl chloride	75-01-4	0.7	2	0.005	ND	0.00095	0.000403	
Bromomethane	74-83-9	25	59	0.04	ND	0.00095	0.000568	
Chloroethane	75-00-3	220	1100	NS	ND	0.00095	0.000452	
Trichlorofluoromethane	75-69-4	23000	340000	34	ND	0.00095	0.000382	
Acrolein	107-02-8	0.5	1	0.5	ND	0.019	0.00461	
1,1-Dichloroethene	75-35-4	11	150	0.008	ND	0.00095	0.000388	
Acetone	67-64-1	70000	NS	19	ND	0.0095	0.00242	
Carbon disulfide	75-15-0	7800	110000	6	0.00198	0.00095	0.00024	
Methylene chloride	75-09-2	46	230	0.01	ND	0.0019	0.00184	
Acrylonitrile	107-13-1	0.9	3	0.5	ND	0.019	0.00408	
tert-Butyl alcohol (TBA)	75-65-0	1400	11000	0.3	ND	0.0038	0.000968	
trans-1,2-Dichloroethene	156-60-5	300	720	0.6	ND	0.00095	0.00038	
Methyl tert-butyl ether (MTBE)	1634-04-4	110	320	0.2	ND	0.00095	0.000282	
1,1-Dichloroethane	75-34-3	8	24	0.2	ND	0.00095	0.000347	
cis-1,2-Dichloroethene	156-59-2	230	560	0.3	ND	0.00095	0.000329	
2-Butanone (MEK)	78-93-3	3100	44000	0.9	ND	0.0038	0.000903	
Bromochloromethane	74-97-5	NS	NS	NS	ND	0.00095	0.000276	
Chloroform	67-66-3	0.6	2	0.4	ND	0.00095	0.000535	
1,1,1-Trichloroethane	71-55-6	160000	NS	0.3	ND	0.00095	0.000269	
Carbon tetrachloride	56-23-5	2	4	0.005	ND	0.00095	0.000262	
1,2-Dichloroethane (EDC)	107-06-2	0.9	3	0.005	ND	0.00095	0.00036	
Benzene	71-43-2	2	5	0.005	ND	0.00095	0.000206	
Trichloroethene	79-01-6	3	10	0.01	ND	0.00095	0.000277	
1,2-Dichloropropane	78-87-5	2	5	0.005	ND	0.00095	0.000222	
1,4-Dioxane	123-91-1	NS	NS	NS	ND	0.190	0.035	
Bromodichloromethane	75-27-4	1	3	0.005	ND	0.00095	0.00019	
cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	ND	0.00095	0.000204	
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	NS	ND	0.0019	0.000697	
Toluene	108-88-3	6300	91000	7	ND	0.00095	0.000218	
trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	ND	0.00095	0.000246	
1,1,2-Trichloroethane	79-00-5	2	6	0.02	ND	0.00095	0.000292	
Tetrachloroethene	127-18-4	43	1500	0.005	ND	0.00095	0.000355	
2-Hexanone	591-78-6	NS	NS	NS	ND	0.0019	0.00146	
Dibromochloromethane	124-48-1	3	8	0.005	ND	0.00095	0.000261	
1,2-Dibromoethane (EDB)	106-93-4	0.008	0.04	0.005	ND	0.00095	0.000188	
Chlorobenzene	108-90-7	510	7400	0.6	ND	0.00095	0.000217	

Standards are based upon published regulatory information.
 Users are encouraged to consult appropriate regulatory sources for current values and updates.
 IAL assumes no responsibility for the accuracy of these values.

Ethylbenzene	100-41-4	7800	110000	13	ND	0.00095	0.000262
Total Xylenes	1330-20-7	12000	170000	19	ND	0.0019	0.00102
Styrene	100-42-5	90	260	3	ND	0.00095	0.000316
Bromoforn	75-25-2	81	280	0.03	ND	0.00095	0.00033
Isopropylbenzene	98-82-8	NS	NS	NS	ND	0.00095	0.000323
1,1,2,2-Tetrachloroethane	79-34-5	1	3	0.007	ND	0.00095	0.000416
n-Propylbenzene	103-65-1	NS	NS	NS	ND	0.00095	0.000264
1,3,5-Trimethylbenzene	108-67-8	NS	NS	NS	ND	0.00095	0.000429
tert-Butylbenzene	98-06-6	NS	NS	NS	ND	0.00095	0.000303
1,2,4-Trimethylbenzene	95-63-6	NS	NS	NS	ND	0.00095	0.000491
sec-Butylbenzene	135-98-8	NS	NS	NS	ND	0.00095	0.000315
1,3-Dichlorobenzene	541-73-1	5300	59000	19	ND	0.00095	0.00028
4-Isopropyltoluene	99-87-6	NS	NS	NS	ND	0.00095	0.000365
1,4-Dichlorobenzene	106-46-7	5	13	2	ND	0.00095	0.00028
n-Butylbenzene	104-51-8	NS	NS	NS	ND	0.00095	0.000392
1,2-Dichlorobenzene	95-50-1	5300	59000	17	ND	0.00095	0.000264
1,2-Dibromo-3-chloropropane	96-12-8	0.08	0.2	0.005	ND	0.00095	0.000524
1,2,4-Trichlorobenzene	120-82-1	73	820	0.7	ND	0.00095	0.000372
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	ND	0.00095	0.000375
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS	NS	NS	ND	0.00095	0.00042
Methyl acetate	79-20-9	78000	NS	22	ND	0.0019	0.000292
Cyclohexane	110-82-7	NS	NS	NS	ND	0.00095	0.000432
Methylcyclohexane	108-87-2	NS	NS	NS	ND	0.00095	0.000276
1,3-Dichloropropene (cis- and trans-)	542-75-6	2	7	0.005	ND	0.00095	0.000246
TOTAL TIC's:		NS	NS	NS	ND		NA

1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	NS	NS	NS	0.023
2,3,4,6-Tetrachlorophenol	58-90-2	NS	NS	NS	NS	NS	0.028
4,6-Dinitro-2-methylphenol	534-52-1	6	68	0.3	0.3	0.032	0.031
N-Nitrosodiphenylamine	86-30-6	99	390	0.4	0.4	0.032	0.031
1,2-Diphenylhydrazine	122-66-7	0.7	2	0.7	0.7	0.032	0.032
4-Bromophenyl phenyl ether	101-55-3	NS	NS	NS	NS	0.032	0.023
Hexachlorobenzene	118-74-1	0.3	1	0.2	0.2	0.032	0.023
Atrazine	1912-24-9	210	2400	0.2	0.2	0.032	0.025
Pentachlorophenol	87-86-5	0.9	3	0.3	0.3	0.032	0.022
Phenanthrene	85-01-8	NS	300000	NS	NS	0.032	0.031
Anthracene	120-12-7	17000	30000	2400	2400	0.032	0.032
Carbazole	86-74-8	24	96	NS	NS	0.032	0.029
Di-n-butyl phthalate	84-74-2	6100	68000	760	760	0.032	0.027
Fluoranthene	206-44-0	2300	24000	1300	1300	0.032	0.031
Benzidine	92-87-5	0.7	0.7	0.7	0.7	0.032	0.025
Pyrene	129-00-0	1700	18000	840	840	0.032	0.029
Butyl benzyl phthalate	85-68-7	1200	14000	230	230	0.032	0.030
3,3'-Dichlorobenzidine	91-94-1	1	4	0.2	0.2	0.032	0.029
Benzo[a]anthracene	56-55-3	5	17	0.8	0.8	0.032	0.019
Chrysene	218-01-9	450	1700	80	80	0.032	0.030
Bis(2-ethylhexyl) phthalate	117-81-7	35	140	1200	1200	0.032	0.029
Di-n-octyl phthalate	117-84-0	2400	27000	3300	3300	0.032	0.030
Benzo[k]fluoranthene	205-99-2	5	17	2	2	0.032	0.031
Benzo[k]fluoranthene	207-08-9	45	170	25	25	0.032	0.027
Benzo[a]pyrene	50-32-8	0.5	2	0.2	0.2	0.032	0.028
Indeno[1,2,3-cd]pyrene	193-39-5	5	17	7	7	0.032	0.031
Dibenz[a,h]anthracene	53-70-3	0.5	2	0.8	0.8	0.032	0.030
Benzo[g,h,i]perylene	191-24-2	380000	30000	NS	NS	0.032	0.031
Dinitrotoluene (2,4- and 2,6-)	25321-14-6	0.7	3	0.2	0.2	0.032	0.031
TOTAL TIC's:		NS	NS	NS	NS	0.032	NA

Pesticides (mg/Kg)	319-84-6	0.1	0.5	0.002	Conc	Q	RL	MDL
alpha-BHC	319-84-6	0.1	0.5	0.002	ND		0.000658	0.000329
beta-BHC	319-85-7	0.4	2	0.002	ND		0.000658	0.000329
gamma-BHC (Lindane)	58-89-9	0.4	2	0.002	ND		0.000658	0.000329
delta-BHC	319-86-8	NS	NS	NS	ND		0.000658	0.000329
Heptachlor	76-44-8	0.1	0.7	0.5	ND		0.000658	0.000329
Aldrin	309-00-2	0.04	0.2	0.2	ND		0.000658	0.000329
Heptachlor epoxide	1024-57-3	0.07	0.3	0.01	ND		0.000658	0.000329
Endosulfan I	959-98-8	NS	NS	NS	ND		0.000658	0.000329
4,4'-DDE	72-55-9	2	9	18	ND		0.000658	0.000329
Dieldrin	60-57-1	0.04	0.2	0.003	ND		0.000658	0.000329
Endrin	72-20-8	23	340	1	ND		0.000658	0.000329
Endosulfan II	33213-65-9	NS	NS	NS	ND		0.000658	0.000329
4,4'-DDD	72-54-8	3	13	4	ND		0.000658	0.000329
Endrin aldehyde	7421-93-4	NS	NS	NS	ND		0.000658	0.000329
Endosulfan sulfate	1031-07-8	470	6800	2	ND		0.000658	0.000329
4,4'-DDT	50-29-3	2	8	11	ND		0.000658	0.000329
Endrin ketone	53494-70-5	NS	NS	NS	ND		0.000658	0.000329
Methoxychlor	72-43-5	390	5700	160	ND		0.000658	0.000329
alpha-Chlordane	5103-71-9	NS	NS	NS	ND		0.000658	0.000329
gamma-Chlordane	5103-74-2	NS	NS	NS	ND		0.000658	0.000329
Toxaphene	8001-35-2	0.6	3	0.3	ND		0.00823	0.00395
Endosulfan (I and II)	115-29-7	470	6800	4	ND		0.000658	0.000329
Chlordane (alpha and gamma)	57-74-9	0.2	1	0.05	ND		0.000658	0.000329

Standards are based upon published regulatory information.
 Users are encouraged to consult appropriate regulatory sources for current values and updates.
 IAL assumes no responsibility for the accuracy of these values.

NJ-EPH-C40 (mg/Kg) C9-C40	IALC9C40	NS	NS	NS	Conc 21.1	Q J	RL 49.9	MDL 19.9

General Analytical		18540-29-9	240	20	NS	Conc	Q	RL	MDL
Hexavalent Chromium-mg/Kg		SRP 6	NS	NS	NS	ND		1.00	0.380
pH/Corrosivity-SU		16065-83-1	120000	NS	NS	8.38		NA	NA
Trivalent (III) Chromium-mg/Kg						16.3		1.00	0.380

Standards are based upon published regulatory information.
 Users are encouraged to consult appropriate regulatory sources for current values and updates.
 IAL assumes no responsibility for the accuracy of these values.

Subcontracted Data	NS	NS	NS	Conc	Q	RL	MDL
NJDEP Soil Remediation Standards: Remediation Standards N.J.A.C. 7:26D, May 2012; Amended Sept 2017				?		?	NA
BOLD Conc							
Indicates a concentration that exceeds applicable criteria.							
BOLD RL							
Indicates RL that exceeds applicable criteria.							
BOLD MDL							
Indicates MDL that exceeds applicable criteria.							
NS = No Standard Available							
~ = Sample not analyzed for							
ND = Analyzed for but Not Detected at the MDL							
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.							
? = Results not available							
Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section							



State of New Jersey
Department of Labor and Workforce Development

Certificate No. 004630
Expiration Date 3/31/2020

MINE REGISTRATION CERTIFICATE

ISSUED TO: TILCON NY INC-MT. HOPE QUARRY
625 MT. HOPE ROAD
LOCATION: WHARTON, NJ

BLK NO(S): SEE BELOW
LOT NO(S): SEE BELOW
COUNTY: MORRIS

Issued pursuant to the provisions of N.J.S.A. 34:6-98.1 et. seq. Failure to comply with the provisions of the Act, and the Rules promulgated thereunder, shall be good cause for the revocation of this Certificate.

Robert Asaro-Angelo

Commissioner

THIS CERTIFICATE MUST BE POSTED AT ALL TIMES

<u>BLK NO(S)</u>	<u>LOT NO(S)</u>
20001	5.01, 5.02, 7
70001	2
20101	6



State of New Jersey
Department of Labor and Workforce Development

Certificate No. 004717
Expiration Date 3/31/2021

MINE REGISTRATION CERTIFICATE

ISSUED TO: TILCON NY INC-POMPTON LAKE QUARRY
FOOT OF BROAD ST
BLK NO(S): 5105, 5105
LOCATION: POMPTON LAKES, NJ
LOT NO(S): 84, 14.2
COUNTY: PASSAIC

Issued pursuant to the provisions of N.J.S.A. 34:6-98.1 et. seq. Failure to comply with the provisions of the Act, and the Rules promulgated thereunder, shall be good cause for the revocation of this Certificate.

Robert Asaro-Angelo

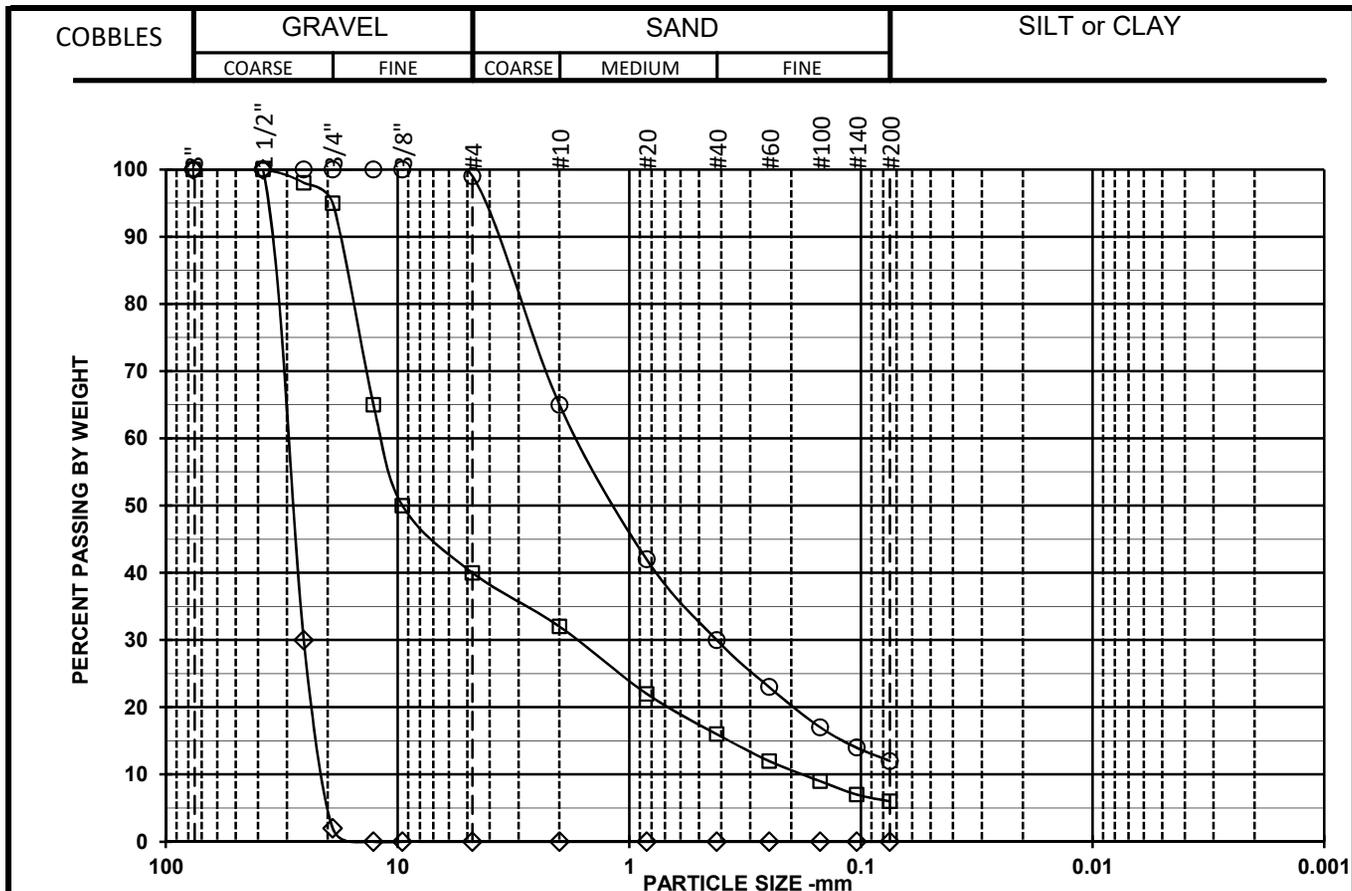
Commissioner

THIS CERTIFICATE MUST BE POSTED AT ALL TIMES

JZN #22148-000
Deferred Area Study Area 6 South
LABORATORY TESTING DATA SUMMARY

BORING NO.	SAMPLE NO.	DEPTH (ft)	IDENTIFICATION TESTS			COMPACTION						REMARKS	
			WATER CONTENT (%)	USCS SYMB. (1)	SIEVE MINUS NO. 200 (%)	ASTM STD.	PREPARATION				OPT. WATER CONTENT (%)		MAX. DRY UNIT WGT. (pcf)
							-3/8"	-3/4"	wet	dry			
BS-1	DGA		0.3	GW-GM	6	D698		X	X		7.5	140.8	
BS-2	DGA			GP-GM		D698		X	X		5.8	136.0	
BS-3	DGA			SP-SM		D698		X	X		5.2	136.5	
BS-4	ASTM #4		0.1	GP	0								
BS-5	Quarry Screenings		0.2	SP-SM	12	D698	X		X		10.0	128.4	
BS-6	Quarry Screenings			SM		D698	X		X		11.0	120.2	
BS-7	Quarry Screenings			SM		D698	X		X		9.8	119.6	

Note: (1) USCS symbol based on visual observation and Sieve reported.



Symbol	□	◇	○
Boring	BS-1	BS-4	BS-5
Sample	DGA	ASTM #4	Quarry
Depth			Screenings
% +3"	0	0	0
% Gravel	60	100	1
% SAND	34	0	87
%C SAND	8	0	34
%M SAND	16	0	35
%F SAND	10	0	18
% FINES	6	0	12
D ₁₀₀ (mm)	38.1	38.1	12.7
D ₆₀ (mm)	11.5	30.2	1.66
D ₃₀ (mm)	1.7	25	0.42
D ₁₀ (mm)	0.18	21	
Cc	1.4	1	
Cu	63.9	1.4	

Sieve	Percent Finer Data		
Size/ID #			
6"	100	100	100
4"	100	100	100
3"	100	100	100
1 1/2"	100	100	100
1"	98	30	100
3/4"	95	2	100
1/2"	65	0	100
3/8"	50	0	100
#4	40	0	99
#10	32	0	65
#20	22	0	42
#40	16	0	30
#60	12	0	23
#100	9	0	17
#140	7	0	14
#200	6	0	12
5µ m			
2µ m			
1µ m			

Open Symbols: Sieve analysis by ASTM D6913
 Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□	0.3				GW-GM		Crushed gravel, Well-graded gravel with silt and sand	05/18/20
◇	0.1				GP		Gray, Poorly graded gravel	05/26/20
○	0.2				SP-SM		Crushed gravel, Poorly graded sand with silt	05/25/20

JZN	#22148-000	Deferred Area Study Area 6 South
TerraSense, LLC	#7926-20012	

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928

COMPACTION CURVE

Test Method: ASTM D698

Compaction Procedure: C

Specimen Preparation Method: **Moist**

Type of Rammer: **Mechanical**

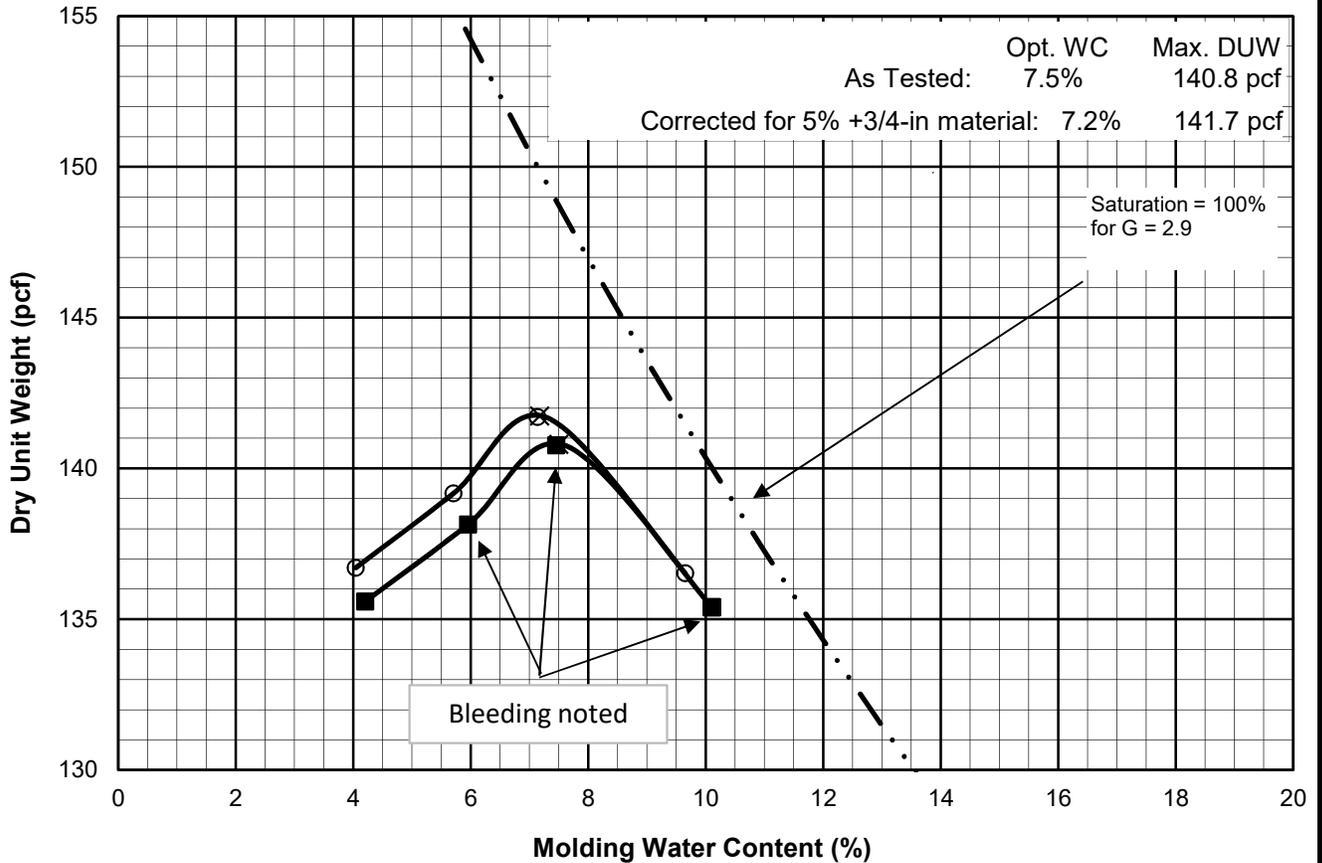
Rammer Face: **Sectional**

NOTATION:

○ Representative of entire sample

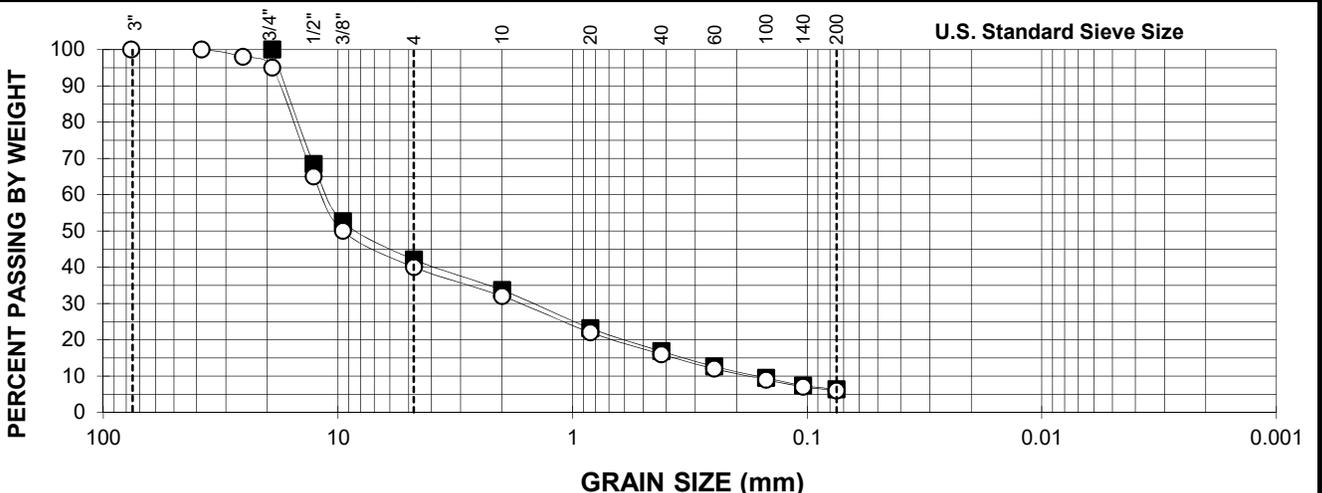
■ Compaction Test specimen

X Selected Optimum Point



PARTICLE-SIZE DISTRIBUTION CURVE

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



Description and/or Classification	LL	PL	PI	% Fines	Specific Gravity
GW-GM, crushed gravel, Well-graded gravel with silt and sand				6	2.9 (Assumed)

Deferred Area Study Area 6 South		ID BS-1 Sample DGA
JZN	Project No. 22148-000	COMPACTION AND INDEX PROPERTY DATA
TerraSense, LLC	Project No. 7926-20012	

COMPACTION CURVE

Test Method: ASTM D698

Compaction Procedure: **C**

Specimen Preparation Method: **Moist**

Type of Rammer: **Mechanical**

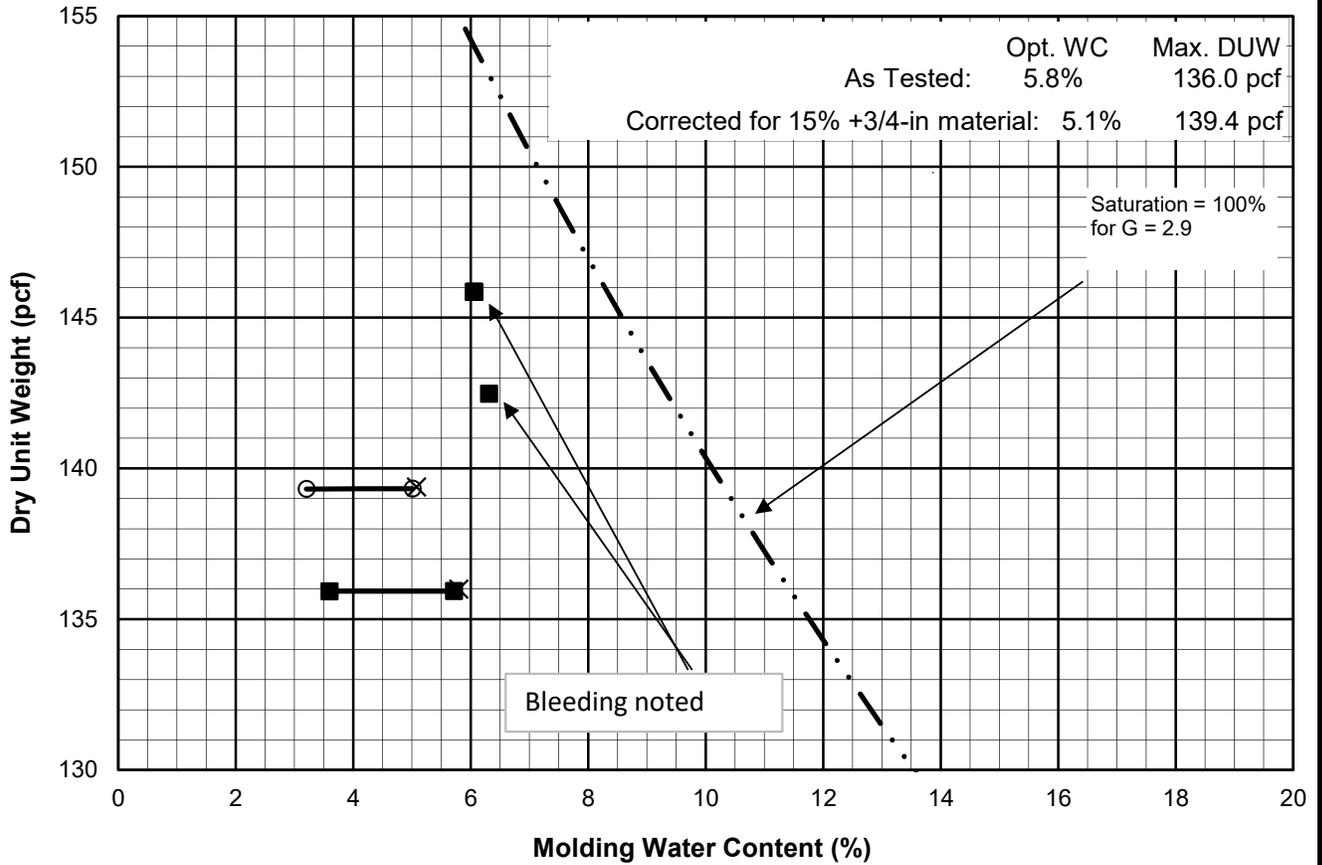
Rammer Face: **Sectional**

NOTATION:

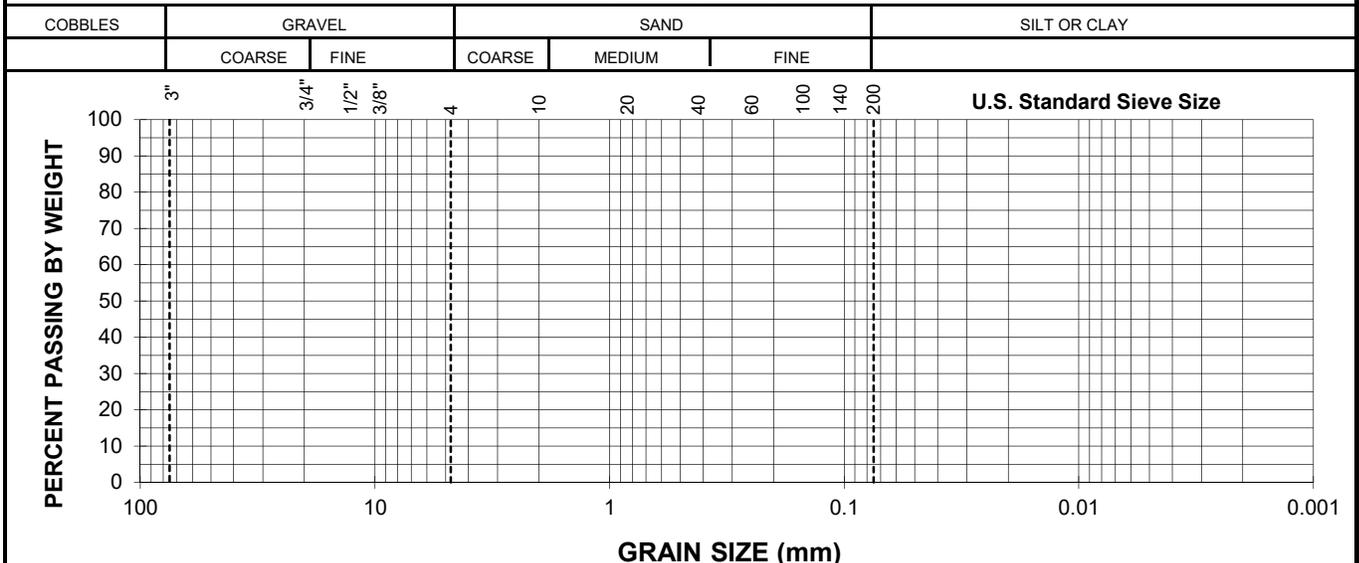
○ Representative of entire sample

■ Compaction Test specimen

X Selected Optimum Point



PARTICLE-SIZE DISTRIBUTION CURVE



Description and/or Classification	LL	PL	PI	% Fines	Specific Gravity
GP-GM, gray, Poorly-graded gravel with silt and sand					2.9 (Assumed)

Deferred Area Study Area 6 South		ID DGA Sample BS-2
JZN	Project No. 22148-000	COMPACTION AND INDEX PROPERTY DATA
TerraSense, LLC	Project No. 7926-20012	

COMPACTION CURVE

Test Method: ASTM D698

Compaction Procedure: C

Specimen Preparation Method: **Moist**

Type of Rammer: **Mechanical**

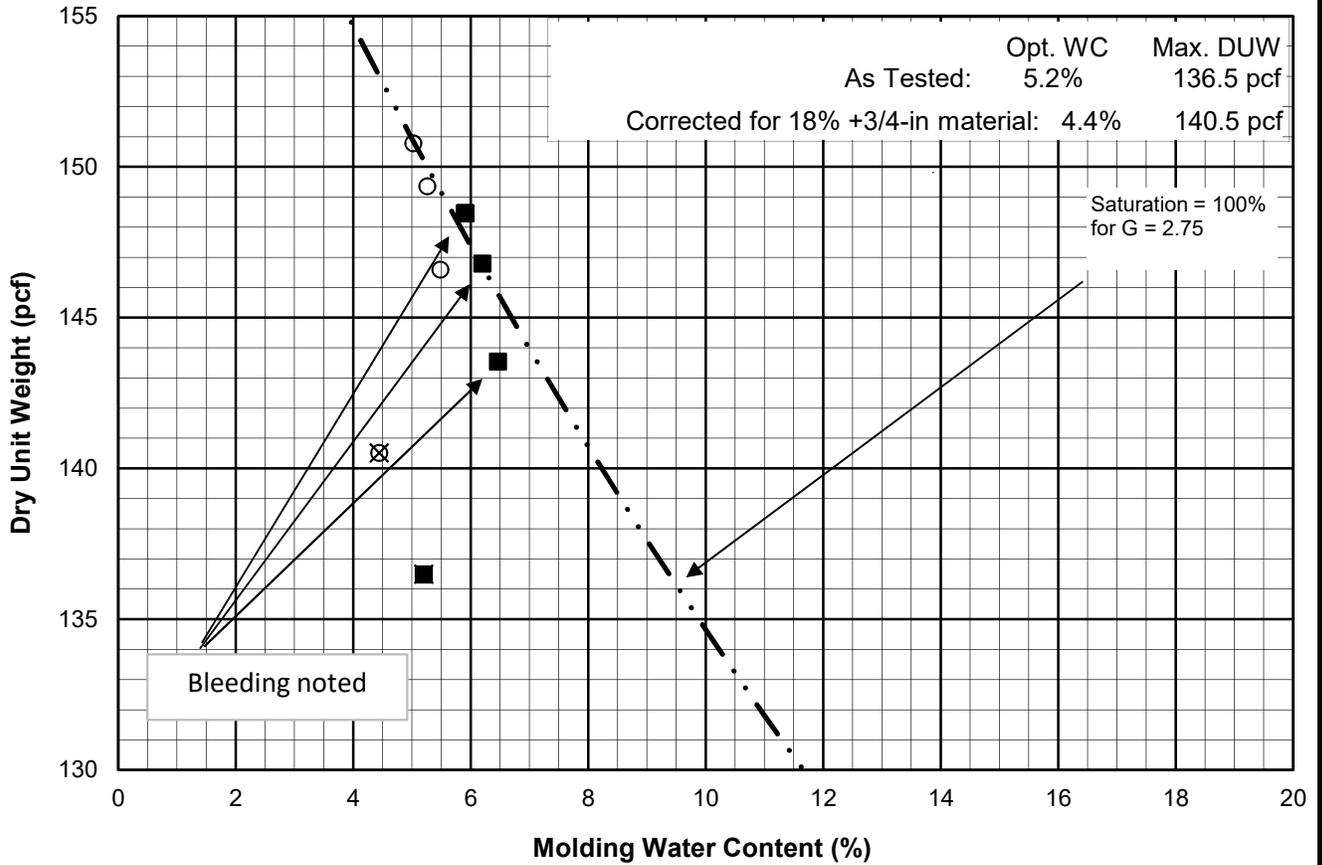
Rammer Face: **Sectional**

NOTATION:

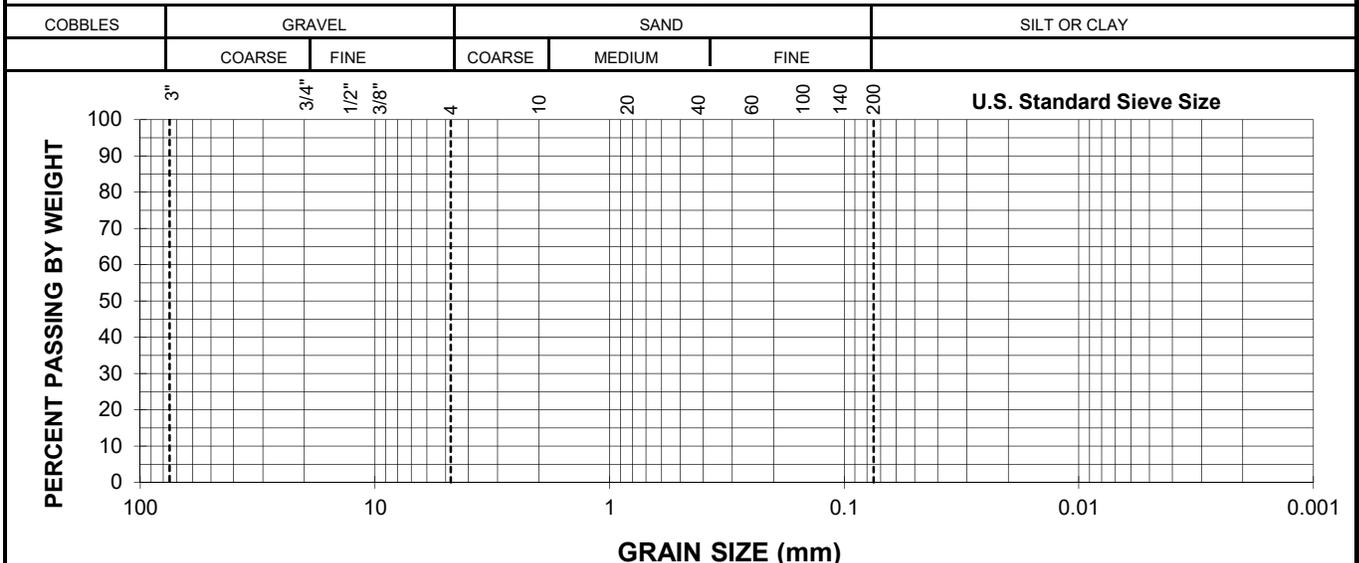
○ Representative of entire sample

■ Compaction Test specimen

X Selected Optimum Point



PARTICLE-SIZE DISTRIBUTION CURVE



Description and/or Classification	LL	PL	PI	% Fines	Specific Gravity
SP-SM, gray, Poorly-graded sand with silt and gravel					2.75 (Assumed)

Deferred Area Study Area 6 South		ID DGA Sample BS-3
JZN	Project No. 22148-000	COMPACTION AND INDEX PROPERTY DATA
TerraSense, LLC	Project No. 7926-20012	

COMPACTION CURVE

Test Method: ASTM D698

Compaction Procedure: **B**

Specimen Preparation Method: **Moist**

Type of Rammer: **Mechanical**

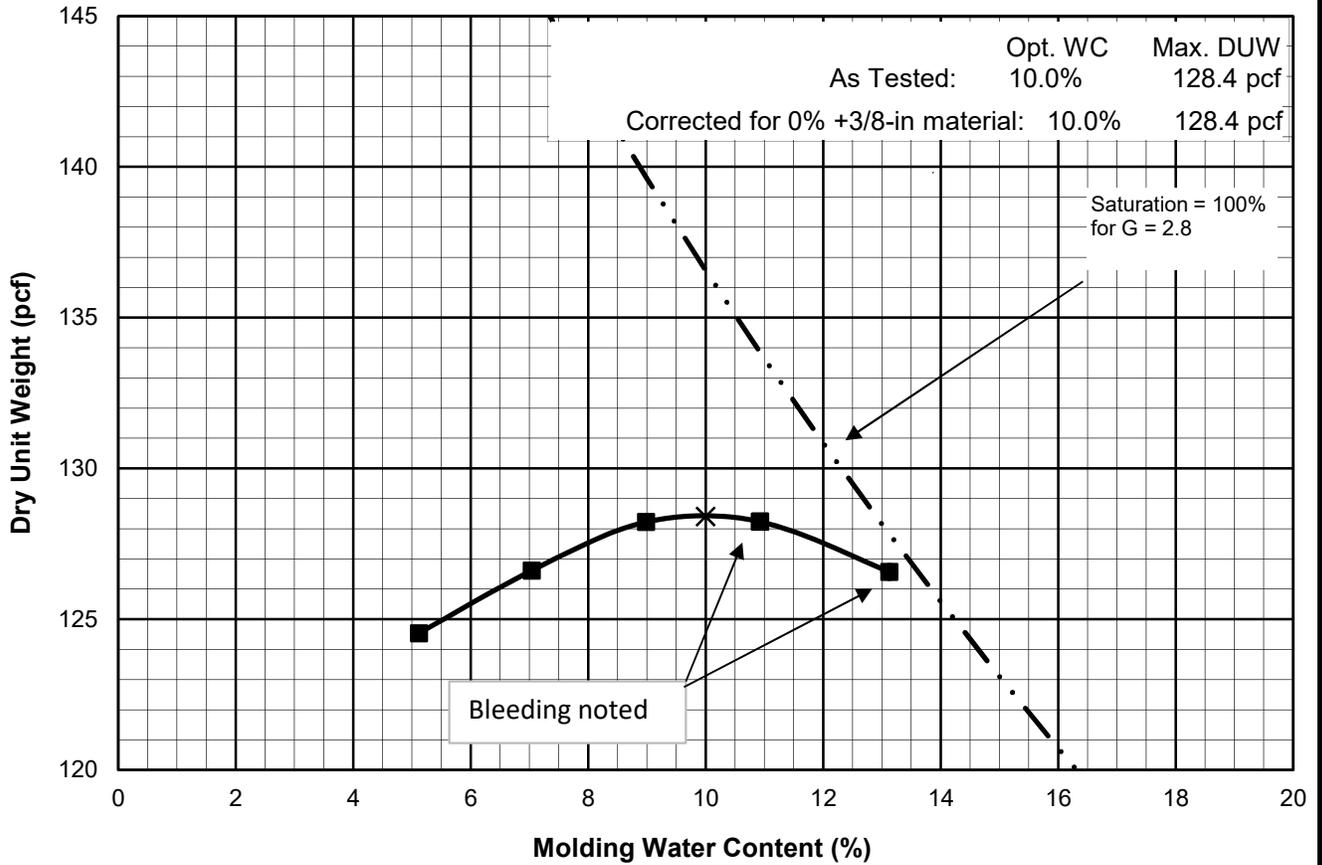
Rammer Face: **Circular**

NOTATION:

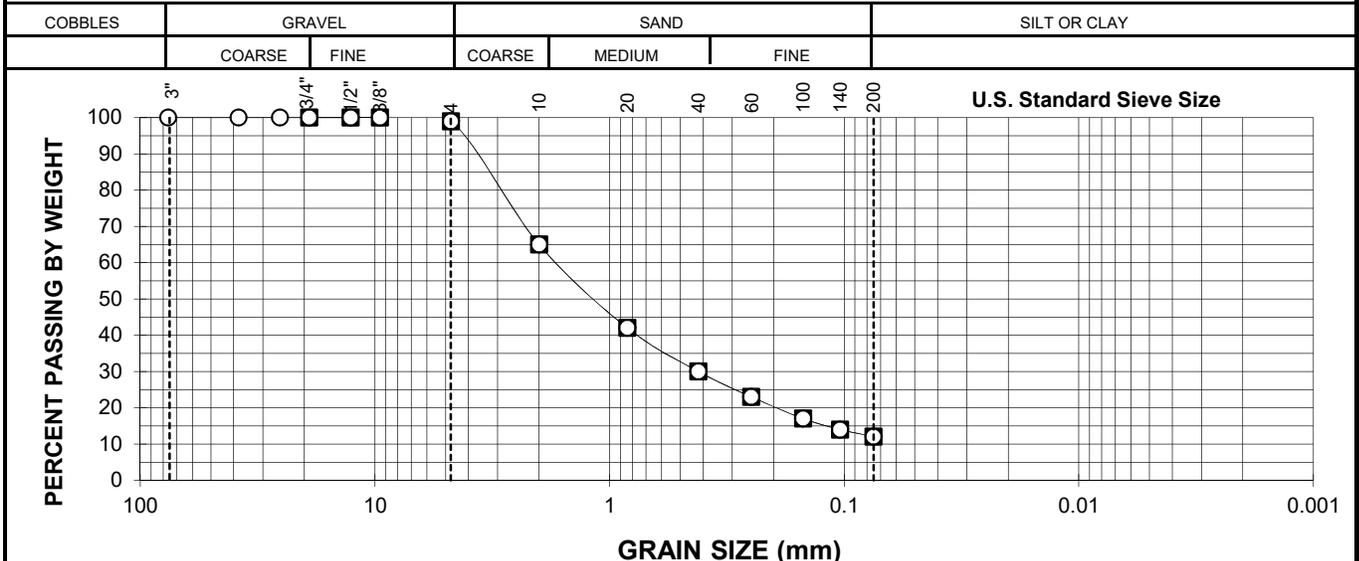
○ Representative of entire sample

■ Compaction Test specimen

X Selected Optimum Point



PARTICLE-SIZE DISTRIBUTION CURVE



Description and/or Classification	LL	PL	PI	% Fines	Specific Gravity
SP-SM, crushed gravel, Poorly-graded sand with silt				12	2.8 (Assumed)

Deferred Area Study Area 6 South		ID BS-5
		Sample Quarry Screenings
JZN	Project No. 22148-000	COMPACTION AND INDEX PROPERTY DATA
TerraSense, LLC	Project No. 7926-20012	

COMPACTION CURVE

Test Method: ASTM D698

Compaction Procedure: **B**

Specimen Preparation Method: **Moist**

Type of Rammer: **Mechanical**

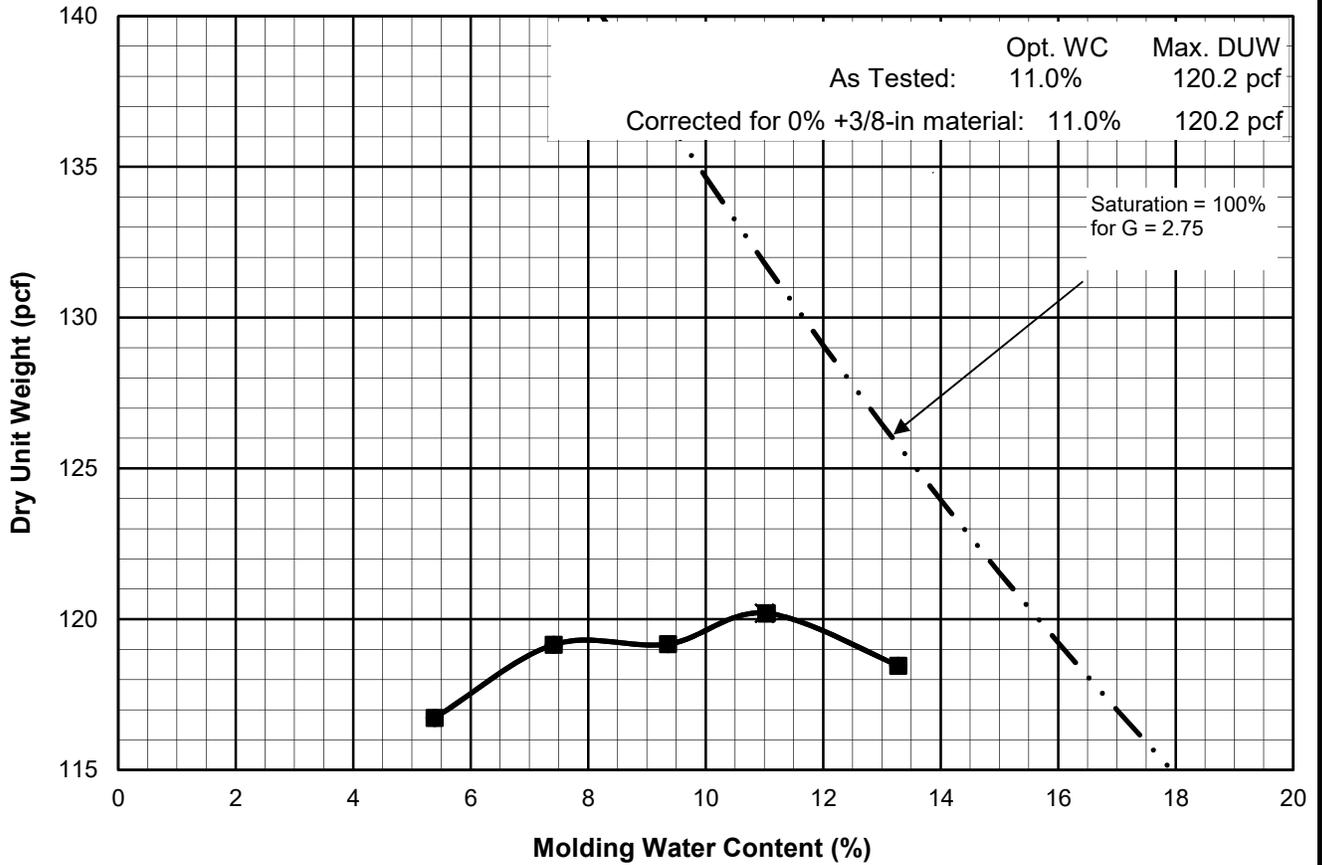
Rammer Face: **Circular**

NOTATION:

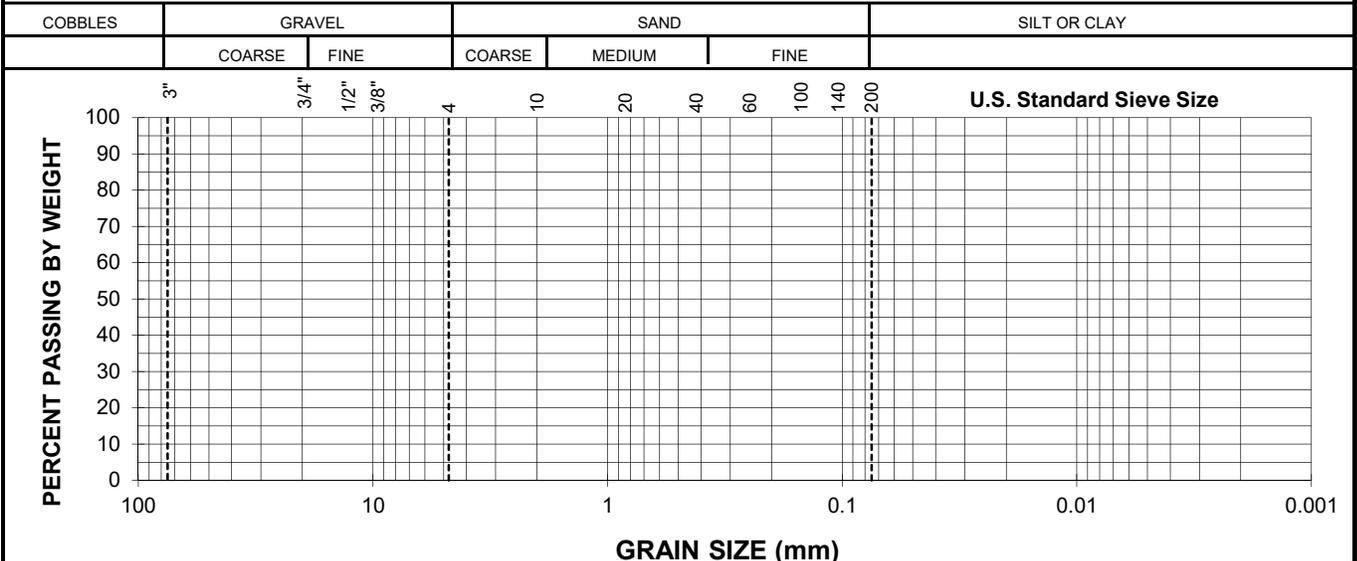
○ Representative of entire sample

■ Compaction Test specimen

X Selected Optimum Point



PARTICLE-SIZE DISTRIBUTION CURVE



Description and/or Classification	LL	PL	PI	% Fines	Specific Gravity
SM, gray, Silty sand					2.75 (Assumed)

Deferred Area Study Area 6 South		ID BS-6
		Sample Quarry Screenings
JZN	Project No. 22148-000	COMPACTION AND INDEX PROPERTY DATA
TerraSense, LLC	Project No. 7926-20012	

COMPACTION CURVE

Test Method: ASTM D698

Compaction Procedure: **B**

Specimen Preparation Method: **Moist**

Type of Rammer: **Mechanical**

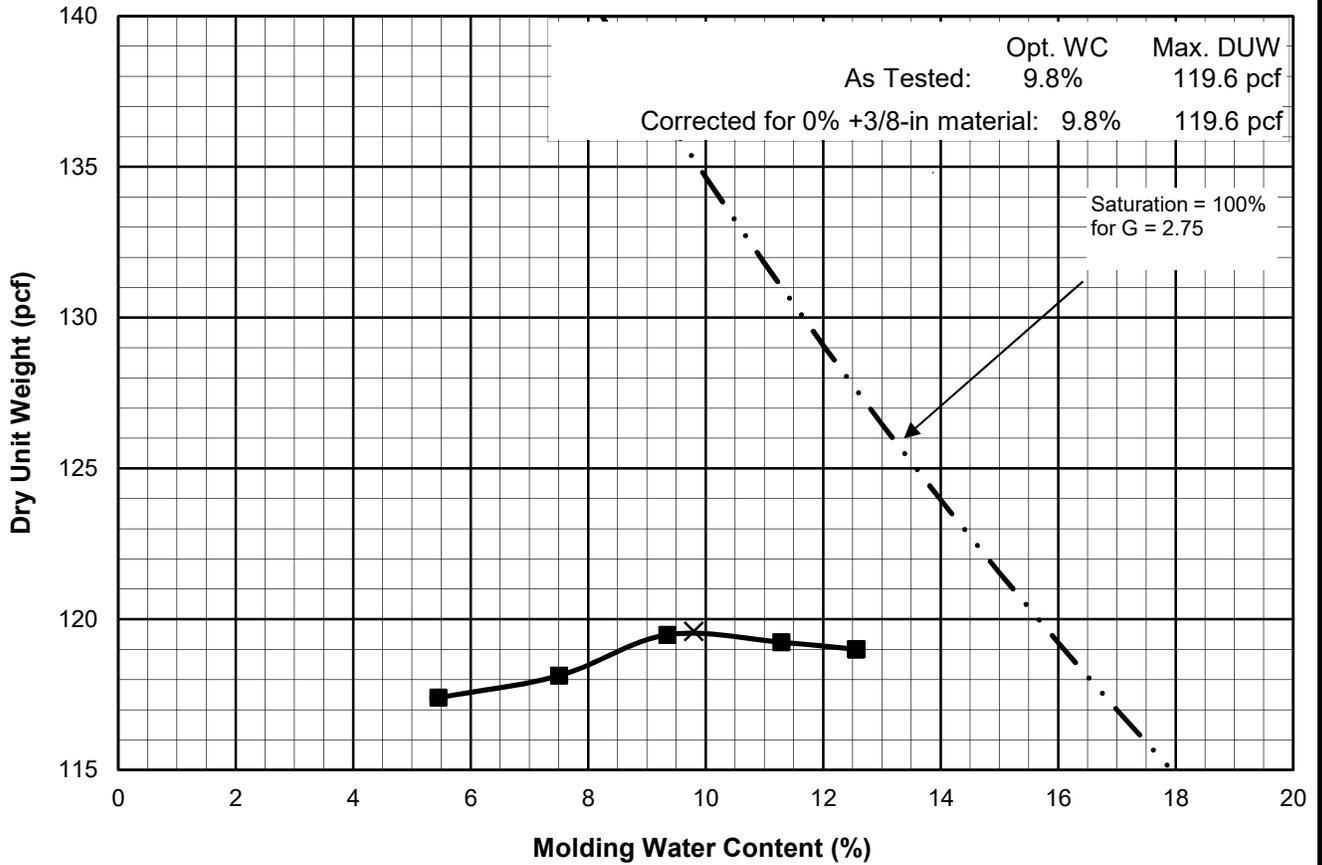
Rammer Face: **Circular**

NOTATION:

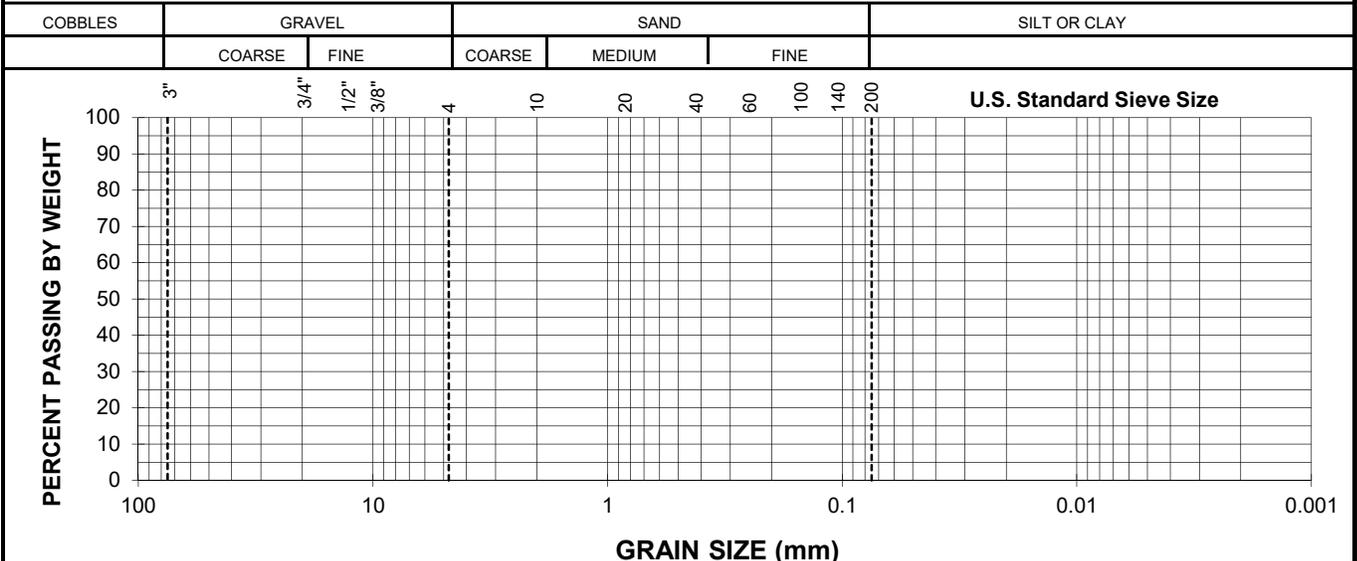
○ Representative of entire sample

■ Compaction Test specimen

X Selected Optimum Point



PARTICLE-SIZE DISTRIBUTION CURVE



Description and/or Classification	LL	PL	PI	% Fines	Specific Gravity
SM, gray, Silty sand					2.75 (Assumed)

Deferred Area Study Area 6 South		ID Quarry Screenings Sample BS-7
JZN	Project No. 22148-000	COMPACTION AND INDEX PROPERTY DATA
TerraSense, LLC	Project No. 7926-20012	



3348 Route 208, Campbell Hall, NY 10916
 Phone: 845-496-1600 Fax: 845-496-1398
 12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Item:	Lean Clay	Project Number:	200608
Source:	Dunrite	Lab Number:	20-0618C
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	6/3/2020	Sampled By:	Client
Date Tested:	6/17/2020-06/18/2020	Tested By:	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD
Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	100.0	
#4	4.75	100.0	
#10	2.00	100.0	
#40	0.425	84.1	
#200	0.075	43.1	
Hydrometer Analysis Results	0.050	37.0	
	0.020	28.7	
	0.010	27.2	
	0.005	23.8	
	0.002	19.0	

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)
 DISPERSION METHOD: Mechanical, 1 min.
 SAND & GRAVEL PARTICLES: Hard Subrounded Particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	0.0%
Fraction Passing #10:		
Sand	(#10 to 0.05 mm)	63.0%
Silt	(0.05 mm to 0.002 mm)	18.0%
Clay	(Less than 0.002 mm)	19.0%
Total		100.0%
USDA Soil Textural Class		Sandy Loam

Emily J. Rodriguez

REPORT REVIEWED BY: _____

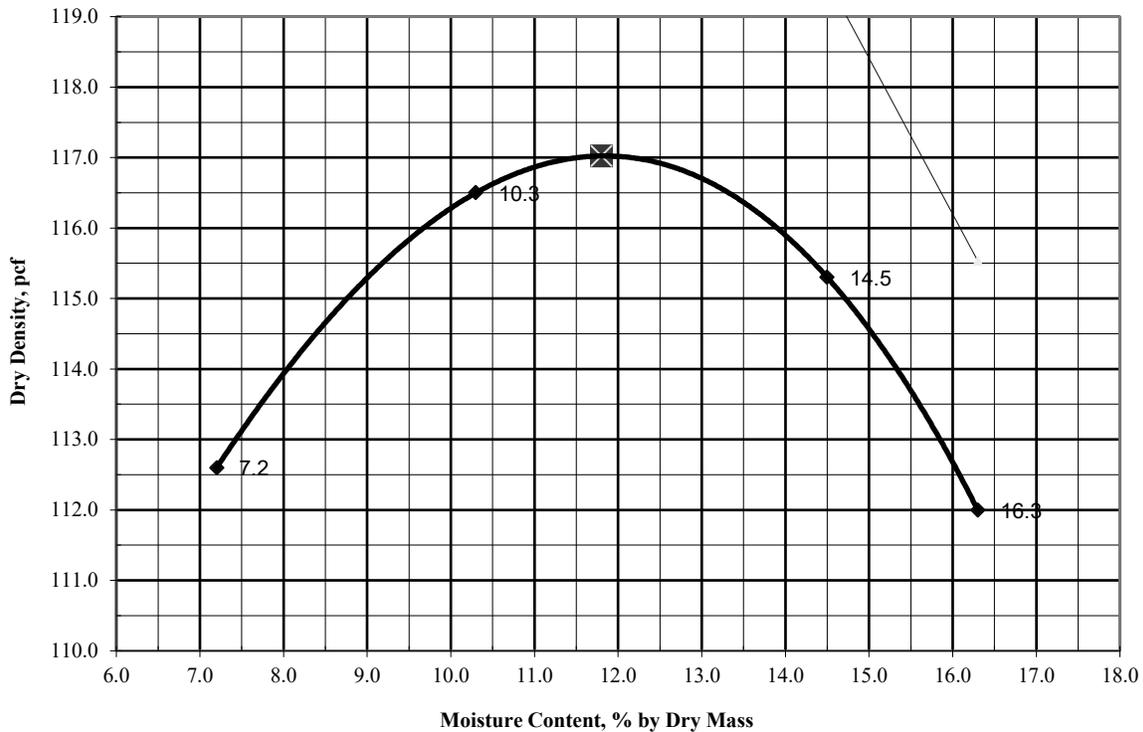
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 12960 Commerce Lake Drive, A14, Fort Myers, FL 33
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

CLIENT:	Sevenson Environmental Services Inc.	PROJECT NO.:	200608
PROJECT:	Honeywell Project Jersey City, NJ	LAB NUMBER:	20-0618C
TEST METHOD:	ASTM D 698 'Standard Proctor'	Method:	B
SOIL ID NUMBER:	4		
ITEM:	Lean Clay		
SOURCE:	Dunrite		
SOIL DESCRIPTION:	Tan/White Clayey Silt with Sand		
DATE SAMPLED:	6/3/2020	SAMPLED BY:	Client
DATE TESTED:	6/16/2020	TESTED BY:	Jake McCarey

REPORT OF MOISTURE DENSITY RELATIONSHIP



Individual Test Points	
Percent Moisture	Dry Density
7.2	112.6
10.3	116.5
14.5	115.3
16.3	112.0

Uncorrected Maximum Dry Density: 117.0 lb/cu. ft.
 Uncorrected Optimum Moisture Content: 11.8 %
 Specific Gravity of Soils *: 2.65
 Percent Oversize Particles: 0.8 %
 Specific Gravity of Oversize*: 2.67

Corrected* Maximum Dry Density: 117.0 lb/cu. ft.
Corrected* Opt. Moisture Content: 11.8 %

***Corrected for oversize, when oversize particles exceed 5% of sample.*

Emily J. Rodriguez

Report Reviewed By:

*Specific Gravity of Soils Estimated and Specific Gravity of Oversize Estimated.

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 12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Material:	Lean Clay	Project #:	200608
Source:	Dunrite	Lab No.:	20-0618C
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	6/3/2020	Sampled By:	Client
Date Tested:	6/23/20	Tested By:	John Brinsfield

REPORT OF ATTERBERG LIMITS TEST RESULTS
TEST METHOD: ASTM D4318; LL Method B

Lab Number:	20-0618C	Specification
Liquid Limit:	28	
Plastic Limit:	14	
Plasticity Index:	14	

Notes: Values shown are percent moisture.
 Customary procedure is to round results to the nearest whole number.
 Sample was air-dried

Comments:

Emily J. Rodriguez

Report Reviewed By: _____

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 12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Material:	Lean Clay	Project Number:	200608
Source:	Dunrite	Lab Number:	20-0618C
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	6/3/2020	Sampled By:	Client
Date Tested:	6/22/20-6/30/20	Tested By:	John Brinsfield

Report of Triaxial Permeability Test Using Back Pressure
Test Method: ASTM D5084

Proctor Test Data	
ASTM Proctor Test Method:	D698
Maximum Dry Density, PCF:	117
Optimum Moisture Content, Percent of Dry Weight:	11.8

Sample Preparation Method:
Chopped to pass 3/8-inch sieve. Compacted in 1-inch lifts, scarified between lifts.

Test Sample Dimensions	Before Test	After Test
Height, cm:	7.64	7.68
Diameter, cm:	7.29	7.21
Moisture Content, %:	11.90	19.49
Dry Density, PCF:	111.10	108.16

Permeability Test Conditions	
Type of Water Used:	Tap
Maximum Back Pressure, PSI:	61.7
Hydraulic Gradient:	28.5
Effective Stress, PSI (min):	3.09
Effective Stress, PSI (max):	6.17
Initial Degree of Saturation, %:	63.5
Final Degree of Saturation, %:	96.2

Specific Gravity = 2.67

Permeability Test Results

Coefficient of Permeability @ 20⁰C (68⁰F): **2.59E-06** cm/sec
 Specification:

Comments:

Emily J. Rodriguez

Report Reviewed By:

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ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-210992-1

Client Project/Site: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Attn: Mr. Michael F Marrone



*Authorized for release by:
6/25/2020 8:26:01 AM*

Allison Bennett, Project Manager I
(732)593-2517

allison.bennett@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



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Lab Chronicle	14
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Sample Summary	17
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Definitions/Glossary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
A	The tentatively identified compound is a suspected aldol-condensation product.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit

Definitions/Glossary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Glossary (Continued)

Abbreviation **These commonly used abbreviations may or may not be present in this report.**

NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins TestAmerica, Edison

Client: Severson Environmental Services, Inc.

Project Location: 1247 HON SA-6 South Deferred Area

Project Number: 460-210992-1

Laboratory Sample ID(s): 460-210992-1

Sampling Date(s): 06/11/2020

List DKQP Methods Used: 8260C, 8270D, 8081B, 8082A, 6020B, 7471B, 7196A, 9012B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
1B	<u>EPH Method:</u> Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody documents(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? b) Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> See case narrative
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spike and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet requirements for "Data of Known Quality."



Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Job ID: 460-210992-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

CASE NARRATIVE

Client: Severson Environmental Services, Inc.

Project: 1247 HON SA-6 South Deferred Area

Report Number: 460-210992-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The sample was received on 6/11/2020 2:00 PM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 6.0° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP (TOTAL)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Volatile Organic Compounds (GC/MS) DKQP (Total) in accordance with EPA SW-846 Method 8260C (DKQP). The samples were prepared on 06/13/2020 and analyzed on 06/22/2020.

The continuing calibration verification (CCV) associated with batch 460-701367 recovered above the upper control limit for Dichlorodifluoromethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 460-702889 recovered above the upper control limit for Acrolein and Acrylonitrile. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-702889 recovered outside control limits for the following analytes: Acrolein and Acrylonitrile. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the Volatile Organic Compounds (GC/MS) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP (TOTAL)

Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Job ID: 460-210992-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Semivolatile Organic Compounds (GC/MS) DKQP (Total) in accordance with EPA SW-846 Method 8270D (DKQP). The samples were prepared on 06/18/2020 and analyzed on 06/19/2020.

The continuing calibration verification (CCV) analyzed in batch 460-702339 was outside the method criteria for the following analyte(s): 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) and/or lab control sample duplicate (LCSD) associated with preparation batch 460-702274 and analytical batch 460-702339 was outside DKQP recovery criteria but with laboratory generated limits for the following analytes: 3,3'-Dichlorobenzidine, Acetophenone, bis (2-chloroisopropyl) ether and N-Nitrosodi-n-propylamine. The data has been reported.

Several analytes failed the recovery criteria low for the MS/MSD of sample 460-210993-1 in batch 460-702339. 2,4-Dinitrophenol exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the Semivolatile Organic Compounds (GC/MS) DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits.

ORGANOCHLORINE PESTICIDES (GC) DKQP (TOTAL)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Organochlorine Pesticides (GC) DKQP (Total) in accordance with EPA SW-846 Method 8081B (DKQP). The samples were prepared on 06/18/2020 and analyzed on 06/19/2020.

No difficulties were encountered during the Organochlorine Pesticides (GC) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP (TOTAL)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Polychlorinated Biphenyls (PCBs) DKQP (Total) in accordance with EPA SW-846 Method 8082A (DKQP). The samples were prepared on 06/18/2020 and analyzed on 06/19/2020.

Aroclor 1260 failed the recovery criteria high for the MS of sample 460-210958-1 in batch 460-702562.

Aroclor 1016 and Aroclor 1260 failed the recovery criteria high for the MSD of sample 460-210958-1 in batch 460-702562.

Refer to the QC report for details.

No other difficulties were encountered during the Polychlorinated Biphenyls (PCBs) DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits.

METALS DKQP (TOTAL)(ICP/MS)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Metals DKQP (Total)(ICP/MS) in accordance with EPA SW-846 Method 6020B (DKQP). The samples were prepared and analyzed on 06/18/2020.

Several analytes failed the recovery criteria low for the MS of sample 460-211215-1 in batch 460-702189. Aluminum, Chromium, Manganese and Vanadium failed the recovery criteria high.

Arsenic, Cadmium, Cobalt, Lead, Manganese, Nickel and Zinc exceeded the RPD limit for the duplicate of sample 460-211215-1.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Job ID: 460-210992-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

Refer to the QC report for details.

No other difficulties were encountered during the Metals DKQP (Total)(ICP/MS) analysis.

All other quality control parameters were within the acceptance limits.

MERCURY (HG) DKQP (TOTAL)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Mercury (Hg) DKQP (Total) in accordance with EPA SW-846 Method 7471B (DKQP). The samples were prepared and analyzed on 06/17/2020.

No difficulties were encountered during the Mercury (Hg) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

CYANIDE (CN) DKQP (TOTAL)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Cyanide (CN) DKQP (Total) in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared and analyzed on 06/23/2020.

No difficulties were encountered during the Cyanide (CN) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM VI DKQP (TOTAL)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Hexavalent Chromium VI DKQP (Total) in accordance with EPA SW-846 Method 7196A (DKQP). The samples were prepared and analyzed on 06/23/2020.

No difficulties were encountered during the Hexavalent Chromium VI DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits.

CORROSIVITY (PH)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for corrosivity (pH) in accordance with EPA SW-846 Method 9045D. The samples were analyzed on 06/21/2020.

No difficulties were encountered during the corrosivity (pH) analysis.

All quality control parameters were within the acceptance limits.

LLOYD KAHN METHOD (TOTAL ORGANIC CARBON)

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for Lloyd Kahn Method (total organic carbon) in accordance with Lloyd Kahn Method. The samples were analyzed on 06/23/2020.

No difficulties were encountered during the TOC analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Sample Solite Lightweight Fill 06112020 (460-210992-1) was analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 06/18/2020.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Client Sample ID: Solite Lightweight Fill 06112020

Lab Sample ID: 460-210992-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 93.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00051	U	0.0022	0.00051	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
1,1,2,2-Tetrachloroethane	0.00047	U	0.0022	0.00047	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
1,1,2-Trichloroethane	0.00039	U	0.0022	0.00039	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
1,1-Dichloroethane	0.00046	U	0.0022	0.00046	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
1,1-Dichloroethene	0.00050	U	0.0022	0.00050	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0022	0.0010	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
1,2-Dibromoethane	0.00040	U	0.0022	0.00040	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
1,2-Dichloroethane	0.00065	U	0.0022	0.00065	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
1,2-Dichloropropane	0.00093	U	0.0022	0.00093	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
2-Butanone	0.0060	U	0.011	0.0060	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
2-Chloroethyl vinyl ether	0.0036	U	0.0044	0.0036	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
2-Hexanone	0.0038	U	0.011	0.0038	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
4-Methyl-2-pentanone	0.0034	U	0.011	0.0034	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Acetone	0.57		0.013	0.013	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Acrolein	0.062	U *	0.22	0.062	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Acrylonitrile	0.0036	U *	0.022	0.0036	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Benzene	0.00057	U	0.0022	0.00057	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Bromodichloromethane	0.00057	U	0.0022	0.00057	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Bromoform	0.00094	U	0.0022	0.00094	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Bromomethane	0.0010	U	0.0022	0.0010	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Carbon disulfide	0.00059	U	0.0022	0.00059	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Carbon tetrachloride	0.00085	U	0.0022	0.00085	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Chlorobenzene	0.00039	U	0.0022	0.00039	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Chloroethane	0.0012	U	0.0022	0.0012	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Chloroform	0.00070	U	0.0022	0.00070	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Chloromethane	0.00096	U	0.0022	0.00096	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
cis-1,2-Dichloroethene	0.00034	U	0.0022	0.00034	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
cis-1,3-Dichloropropene	0.00060	U	0.0022	0.00060	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Dibromochloromethane	0.00043	U	0.0022	0.00043	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Dichlorodifluoromethane	0.00075	U	0.0022	0.00075	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Ethylbenzene	0.00044	U	0.0022	0.00044	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Methyl acetate	0.0095	U	0.011	0.0095	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Methylene Chloride	0.0010	U	0.0022	0.0010	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
MTBE	0.00028	U	0.0022	0.00028	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Styrene	0.00061	U	0.0022	0.00061	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
TBA	0.0073	U	0.022	0.0073	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Tetrachloroethene	0.00032	U	0.0022	0.00032	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Toluene	0.00099	J	0.0022	0.00052	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
trans-1,2-Dichloroethene	0.00054	U	0.0022	0.00054	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
trans-1,3-Dichloropropene	0.00059	U	0.0022	0.00059	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Trichloroethene	0.00032	U	0.0022	0.00032	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Trichlorofluoromethane	0.00090	U	0.0022	0.00090	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Vinyl chloride	0.0012	U	0.0022	0.0012	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1
Xylenes, Total	0.00038	U	0.0022	0.00038	mg/Kg	☼	06/13/20 07:24	06/22/20 09:05	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown Alkane	0.14	J	mg/Kg	☼	1.72		06/13/20 07:24	06/22/20 09:05	1
Unknown	0.043	J	mg/Kg	☼	1.88		06/13/20 07:24	06/22/20 09:05	1
Cyclohexane	0.51	J N	mg/Kg	☼	3.11	110-82-7	06/13/20 07:24	06/22/20 09:05	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Client Sample ID: Solite Lightweight Fill 06112020

Lab Sample ID: 460-210992-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 93.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 130	06/13/20 07:24	06/22/20 09:05	1
Bromofluorobenzene	104		70 - 130	06/13/20 07:24	06/22/20 09:05	1
Dibromofluoromethane (Surr)	103		70 - 130	06/13/20 07:24	06/22/20 09:05	1
Toluene-d8 (Surr)	102		70 - 130	06/13/20 07:24	06/22/20 09:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.0047	U	0.35	0.0047	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
1,2,4-Trichlorobenzene	0.0091	U	0.035	0.0091	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
1,2-Dichlorobenzene	0.0060	U	0.35	0.0060	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
1,2-Diphenylhydrazine	0.0065	U	0.35	0.0065	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
1,3-Dichlorobenzene	0.0047	U	0.35	0.0047	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
1,4-Dichlorobenzene	0.013	U	0.35	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2,4,5-Trichlorophenol	0.036	U	0.35	0.036	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2,4,6-Trichlorophenol	0.045	U	0.14	0.045	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2,4-Dichlorophenol	0.023	U	0.14	0.023	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2,4-Dimethylphenol	0.016	U	0.35	0.016	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2,4-Dinitrophenol	0.17	U	0.28	0.17	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2,4-Dinitrotoluene	0.038	U	0.072	0.038	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2,6-Dinitrotoluene	0.026	U	0.072	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2-Chloronaphthalene	0.016	U	0.35	0.016	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2-Chlorophenol	0.013	U	0.35	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2-Methylnaphthalene	0.0099	U	0.35	0.0099	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2-Methylphenol	0.013	U	0.35	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2-Nitroaniline	0.013	U	0.35	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
2-Nitrophenol	0.035	U	0.35	0.035	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
3,3'-Dichlorobenzidine	0.053	U *	0.14	0.053	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
3-Nitroaniline	0.040	U	0.35	0.040	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
4,6-Dinitro-2-methylphenol	0.057	U	0.28	0.057	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
4-Bromophenyl phenyl ether	0.014	U	0.35	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
4-Chloro-3-methylphenol	0.020	U	0.35	0.020	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
4-Chloroaniline	0.025	U	0.35	0.025	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
4-Chlorophenyl phenyl ether	0.012	U	0.35	0.012	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
4-Methylphenol	0.022	U	0.35	0.022	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
4-Nitroaniline	0.041	U	0.35	0.041	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
4-Nitrophenol	0.058	U	0.72	0.058	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Acenaphthene	0.026	U	0.35	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Acenaphthylene	0.0037	U	0.35	0.0037	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Acetophenone	0.017	U *	0.35	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Anthracene	0.011	U	0.35	0.011	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Atrazine	0.0089	U	0.14	0.0089	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Benzaldehyde	0.015	U	0.35	0.015	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Benzidine	0.035	U	0.35	0.035	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Benzo[a]anthracene	0.012	U	0.035	0.012	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Benzo[a]pyrene	0.0094	U	0.035	0.0094	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Benzo[b]fluoranthene	0.0091	U	0.035	0.0091	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Benzo[g,h,i]perylene	0.010	U	0.35	0.010	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Benzo[k]fluoranthene	0.0069	U	0.035	0.0069	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
bis (2-chloroisopropyl) ether	0.0064	U *	0.35	0.0064	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Bis(2-chloroethoxy)methane	0.028	U	0.35	0.028	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Client Sample ID: Solite Lightweight Fill 06112020

Lab Sample ID: 460-210992-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 93.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.012	U	0.035	0.012	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Bis(2-ethylhexyl) phthalate	0.019	U	0.35	0.019	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Butyl benzyl phthalate	0.017	U	0.35	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Caprolactam	0.055	U	0.35	0.055	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Carbazole	0.013	U	0.35	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Chrysene	0.0060	U	0.35	0.0060	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Dibenz(a,h)anthracene	0.015	U	0.035	0.015	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Dibenzofuran	0.0050	U	0.35	0.0050	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Diethyl phthalate	0.0051	U	0.35	0.0051	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Dimethyl phthalate	0.080	U	0.35	0.080	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Di-n-butyl phthalate	0.062	U	0.35	0.062	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Di-n-octyl phthalate	0.019	U	0.35	0.019	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Fluoranthene	0.012	U	0.35	0.012	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Fluorene	0.0048	U	0.35	0.0048	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Hexachlorobenzene	0.017	U	0.035	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Hexachlorobutadiene	0.0075	U	0.072	0.0075	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Hexachlorocyclopentadiene	0.031	U	0.35	0.031	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Hexachloroethane	0.012	U	0.035	0.012	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Indeno[1,2,3-cd]pyrene	0.014	U	0.035	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Isophorone	0.10	U	0.14	0.10	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Naphthalene	0.0061	U	0.35	0.0061	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Nitrobenzene	0.0085	U	0.035	0.0085	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
N-Nitrosodimethylamine	0.033	U	0.35	0.033	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
N-Nitrosodi-n-propylamine	0.026	U *	0.035	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
N-Nitrosodiphenylamine	0.0068	U	0.35	0.0068	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Pentachlorophenol	0.072	U	0.28	0.072	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Phenanthrene	0.0062	U	0.35	0.0062	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Phenol	0.013	U	0.35	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1
Pyrene	0.0088	U	0.35	0.0088	mg/Kg	☼	06/18/20 17:05	06/19/20 05:00	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Aldol condensation product	1.6	A J	mg/Kg	☼	2.95		06/18/20 17:05	06/19/20 05:00	1
Sulfur	0.30	J N	mg/Kg	☼	7.61	13798-23-7	06/18/20 17:05	06/19/20 05:00	1
Unknown	0.80	J	mg/Kg	☼	9.80		06/18/20 17:05	06/19/20 05:00	1
Cyclic octaatomic sulfur	0.43	J N	mg/Kg	☼	9.83	10544-50-0	06/18/20 17:05	06/19/20 05:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	41		30 - 130	06/18/20 17:05	06/19/20 05:00	1
2-Fluorobiphenyl	38		30 - 130	06/18/20 17:05	06/19/20 05:00	1
2-Fluorophenol	43		30 - 130	06/18/20 17:05	06/19/20 05:00	1
Nitrobenzene-d5	37		30 - 130	06/18/20 17:05	06/19/20 05:00	1
Phenol-d5	40		30 - 130	06/18/20 17:05	06/19/20 05:00	1
Terphenyl-d14	39		30 - 130	06/18/20 17:05	06/19/20 05:00	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0012	U	0.0072	0.0012	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
4,4'-DDE	0.00084	U	0.0072	0.00084	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
4,4'-DDT	0.0013	U	0.0072	0.0013	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Aldrin	0.0011	U	0.0072	0.0011	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Client Sample ID: Solite Lightweight Fill 06112020

Lab Sample ID: 460-210992-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 93.5

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.00073	U	0.0021	0.00073	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
beta-BHC	0.00080	U	0.0021	0.00080	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Chlordane (n.o.s.)	0.017	U	0.072	0.017	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Chlordane (technical)	0.017	U	0.072	0.017	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
cis-Chlordane	0.0011	U	0.0072	0.0011	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
delta-BHC	0.00044	U	0.0021	0.00044	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Dieldrin	0.00093	U	0.0021	0.00093	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Endosulfan I	0.0011	U	0.0072	0.0011	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Endosulfan II	0.0018	U	0.0072	0.0018	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Endosulfan sulfate	0.00090	U	0.0072	0.00090	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Endrin	0.0010	U	0.0072	0.0010	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Endrin aldehyde	0.0017	U	0.0072	0.0017	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Endrin ketone	0.0014	U	0.0072	0.0014	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
gamma-BHC (Lindane)	0.00066	U	0.0021	0.00066	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Heptachlor	0.00084	U	0.0072	0.00084	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Heptachlor epoxide	0.0011	U	0.0072	0.0011	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Methoxychlor	0.0016	U	0.0072	0.0016	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
Toxaphene	0.026	U	0.072	0.026	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1
trans-Chlordane	0.0013	U	0.0072	0.0013	mg/Kg	☼	06/18/20 09:16	06/19/20 06:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	77		30 - 150	06/18/20 09:16	06/19/20 06:24	1
DCB Decachlorobiphenyl	81		30 - 150	06/18/20 09:16	06/19/20 06:24	1
Tetrachloro-m-xylene	58		30 - 150	06/18/20 09:16	06/19/20 06:24	1
Tetrachloro-m-xylene	57		30 - 150	06/18/20 09:16	06/19/20 06:24	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.0095	U	0.072	0.0095	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Aroclor 1221	0.0095	U	0.072	0.0095	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Aroclor 1232	0.0095	U	0.072	0.0095	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Aroclor 1242	0.0095	U	0.072	0.0095	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Aroclor 1248	0.0095	U	0.072	0.0095	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Aroclor 1254	0.0098	U	0.072	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Aroclor 1260	0.0098	U	0.072	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Aroclor 1262	0.0098	U	0.072	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Aroclor 1268	0.0098	U	0.072	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1
Polychlorinated biphenyls, Total	0.0098	U	0.072	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	105		30 - 150	06/18/20 09:10	06/19/20 20:23	1
DCB Decachlorobiphenyl	116		30 - 150	06/18/20 09:10	06/19/20 20:23	1
Tetrachloro-m-xylene	90		30 - 150	06/18/20 09:10	06/19/20 20:23	1
Tetrachloro-m-xylene	97		30 - 150	06/18/20 09:10	06/19/20 20:23	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6120		19.8	6.8	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Antimony	0.29	U	0.99	0.29	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Arsenic	7.0		0.99	0.32	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Client Sample ID: Solite Lightweight Fill 06112020

Lab Sample ID: 460-210992-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 93.5

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	24.6		2.0	0.66	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Beryllium	0.16	U	0.40	0.16	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Cadmium	0.33	U	0.99	0.33	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Chromium	41.4		2.0	0.59	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Cobalt	8.6		2.0	0.60	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Copper	14.8		2.0	0.57	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Lead	3.3		0.59	0.19	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Manganese	32.1		4.0	1.2	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Nickel	22.8		2.0	0.64	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Selenium	0.29	U	4.9	0.29	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Silver	0.61	U	0.99	0.61	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Thallium	0.12	U	0.40	0.12	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Vanadium	12.9		2.0	0.56	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10
Zinc	21.4		7.9	3.9	mg/Kg	☼	06/18/20 03:50	06/18/20 11:48	10

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.018	0.0041	mg/Kg	☼	06/17/20 03:08	06/17/20 07:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.38	U	2.2	0.38	mg/Kg	☼	06/23/20 08:30	06/23/20 13:40	1
Cyanide, Total	0.13	U	0.25	0.13	mg/Kg	☼	06/23/20 06:26	06/23/20 14:27	1
pH	9.2	HF	0.1	0.1	SU			06/21/20 15:09	1
Corrosivity	9.2	HF	0.1	0.1	SU			06/21/20 15:09	1
TOC Result 1	4690		107	86.9	mg/Kg	☼		06/23/20 16:28	1
Percent Moisture	6.5		1.0	1.0	%			06/18/20 16:13	1
Percent Solids	93.5		1.0	1.0	%			06/18/20 16:13	1

Lab Chronicle

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Client Sample ID: Solite Lightweight Fill 06112020

Lab Sample ID: 460-210992-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	702817	06/21/20 15:09	AAP	TAL EDI
Total/NA	Analysis	Moisture		1	702244	06/18/20 16:13	MMC	TAL EDI

Client Sample ID: Solite Lightweight Fill 06112020

Lab Sample ID: 460-210992-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			701096	06/13/20 07:24	DBM	TAL EDI
Total/NA	Analysis	8260C		1	702889	06/22/20 09:05	AAT	TAL EDI
Total/NA	Prep	3546			702274	06/18/20 17:05	DMS	TAL EDI
Total/NA	Analysis	8270D		1	702339	06/19/20 05:00	MME	TAL EDI
Total/NA	Prep	3546			702163	06/18/20 09:16	ZXB	TAL EDI
Total/NA	Analysis	8081B		1	702358	06/19/20 06:24	FAM	TAL EDI
Total/NA	Prep	3546			702161	06/18/20 09:10	ZXB	TAL EDI
Total/NA	Analysis	8082A		1	702562	06/19/20 20:23	KMH	TAL EDI
Total/NA	Prep	3050B			702081	06/18/20 03:50	GMC	TAL EDI
Total/NA	Analysis	6020B		10	702189	06/18/20 11:48	MDC	TAL EDI
Total/NA	Prep	7471B			701817	06/17/20 03:08	TJS	TAL EDI
Total/NA	Analysis	7471B		1	701885	06/17/20 07:28	TJS	TAL EDI
Total/NA	Prep	3060A			703006	06/23/20 08:30	RAK	TAL EDI
Total/NA	Analysis	7196A		1	703260	06/23/20 13:40	RAK	TAL EDI
Total/NA	Prep	9012B			703164	06/23/20 06:26	IAA	TAL EDI
Total/NA	Analysis	9012B		1	703276	06/23/20 14:27	AJP	TAL EDI
Total/NA	Analysis	Lloyd Kahn		1	703497	06/23/20 16:28	AJP	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Laboratory: Eurofins TestAmerica, Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	12028	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7196A	3060A	Solid	Cr (VI)
8081B	3546	Solid	Chlordane (n.o.s.)
8082A	3546	Solid	Polychlorinated biphenyls, Total
9045D		Solid	Corrosivity
Lloyd Kahn		Solid	TOC Result 1
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081B	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7471B	Mercury (CVAA)	SW846	TAL EDI
7196A	Chromium, Hexavalent	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable	SW846	TAL EDI
9045D	pH	SW846	TAL EDI
Lloyd Kahn	Organic Carbon, Total (TOC)	EPA	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI
3050B	Preparation, Metals	SW846	TAL EDI
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	TAL EDI
3546	Microwave Extraction	SW846	TAL EDI
5035	Closed System Purge and Trap	SW846	TAL EDI
7471B	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210992-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-210992-1	Solite Lightweight Fill 06112020	Solid	06/11/20 14:00	06/11/20 14:00	

- 1
- 2
- 3
- 4
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- 9
- 10
- 11

Client Information		Sampler: Toni Polk		Lab PM: Bennett, Allison L		Carrier Tracking No(s):		COC No:	
Client Contact: Mike Marrone		Phone: 716 308 1990		E-Mail: allison.bennett@testamericainc.com		Page: 1 of 1		Job #: 210992	
Company: Sevenson Environmental Services, Inc.		Due Date Requested:		Analysis Requested		Total Number of Containers		Preservation Codes:	
Address: 2749 Lockport Road		TAT Requested (days): Normal		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Arsenic Acid H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
City: Niagara Falls		PO #: 1247MM		Matrix (W=water, S=solid, O=wastewater, BI=tissue, A=air)		8082A_DKQP - SRS PCBs (16oz Jar)		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
State/Zip: NY, 14305		WO #: _____		Sample Type (C=Comp, G=grab)		7196A_DKQP - Hexavalent Chromium - 7196 (16oz Jar)			
Phone: 716 284 0431		Project #: 1247		Sample Time		8081_DKQP - SRS Pesticides (16oz Jar)			
Email: mmarrone@sevenson.com		SSOW#: _____		Sample Date		8270D_DKQP - SRS BNA + 20 TICs (Soil Jar 16oz)			
Project Name: SA-6 South Deferred Area		Sample Date: 6/11/20		Sample Time: 1400		9045D - pH (16oz Soil Jar)			
Site: 1247 - SA-6 Deferred Area		Sample Date: _____		Preservation Code: G S		8082B_DKQP - SRS Metals w/o Hg (16oz Jar)			
Sample Identification		Sample Date: _____		Sample Time: _____		8260C_DKQP - SRS VOCs + 10 TICs (Encore 5g, Plastic 20mL Unpreserved)			
Solite Lightweight Fill 06112020		Sample Date: _____		Sample Time: _____		9012B - Cyanide Total (16oz Jar)			
460-210992 Chain of Custody		Sample Date: _____		Sample Time: _____		7471B_DKQP - Hg (16 oz Jar)			
		Sample Date: _____		Sample Time: _____		8081_DKQP - SRS Pesticides (16oz Jar)			
Possible Hazard Identification		Sample Date: _____		Sample Time: _____		8270D_DKQP - SRS BNA + 20 TICs (Soil Jar 16oz)			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Date: _____		Sample Time: _____		Lloyd_Kahn_Mod - TOC by Lloyd Kahn (4oz Soil Jar)			
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Date: _____		Sample Time: _____		9012B - Cyanide Total (16oz Jar)			
Empty Kit Relinquished by:		Sample Date: _____		Sample Time: _____		8081_DKQP - SRS Pesticides (16oz Jar)			
Relinquished by:		Date/Time: 6/11/20 1400		Date/Time: _____		7471B_DKQP - Hg (16 oz Jar)			
Relinquished by: _____		Date/Time: _____		Date/Time: _____		8082A_DKQP - SRS PCBs (16oz Jar)			
Relinquished by: _____		Date/Time: _____		Date/Time: _____		8260C_DKQP - SRS VOCs + 10 TICs (Encore 5g, Plastic 20mL Unpreserved)			
Custody Seals Intact: 1177803		Custody Seal No.: 1177803		Cooler Temperature(s) °C and Other Remarks: URI @ 60°C		9045D - pH (16oz Soil Jar)			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: _____		8082B_DKQP - SRS Metals w/o Hg (16oz Jar)			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		8081_DKQP - SRS Pesticides (16oz Jar)			
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		Special Instructions/QC Requirements:		7196A_DKQP - Hexavalent Chromium - 7196 (16oz Jar)			
Method of Shipment:		Date/Time: _____		Date/Time: _____		8270D_DKQP - SRS BNA + 20 TICs (Soil Jar 16oz)			
Received by:		Date/Time: 6/11/20 1400		Date/Time: _____		8082A_DKQP - SRS PCBs (16oz Jar)			
Received by: _____		Date/Time: _____		Date/Time: _____		9012B - Cyanide Total (16oz Jar)			
Received by: _____		Date/Time: _____		Date/Time: _____		7471B_DKQP - Hg (16 oz Jar)			
Company: ETA		Company: _____		Company: _____		8081_DKQP - SRS Pesticides (16oz Jar)			
Company: _____		Company: _____		Company: _____		8270D_DKQP - SRS BNA + 20 TICs (Soil Jar 16oz)			
Company: _____		Company: _____		Company: _____		Lloyd_Kahn_Mod - TOC by Lloyd Kahn (4oz Soil Jar)			
Company: _____		Company: _____		Company: _____		9045D - pH (16oz Soil Jar)			
Company: _____		Company: _____		Company: _____		9012B - Cyanide Total (16oz Jar)			
Company: _____		Company: _____		Company: _____		8081_DKQP - SRS Pesticides (16oz Jar)			
Company: _____		Company: _____		Company: _____		8270D_DKQP - SRS BNA + 20 TICs (Soil Jar 16oz)			
Company: _____		Company: _____		Company: _____		8082A_DKQP - SRS PCBs (16oz Jar)			
Company: _____		Company: _____		Company: _____		8082B_DKQP - SRS Metals w/o Hg (16oz Jar)			
Company: _____		Company: _____		Company: _____		8260C_DKQP - SRS VOCs + 10 TICs (Encore 5g, Plastic 20mL Unpreserved)			
Company: _____		Company: _____		Company: _____		9045D - pH (16oz Soil Jar)			
Company: _____		Company: _____		Company: _____		Field Filtered Sample (Yes or No)			
Company: _____		Company: _____		Company: _____		Perform MS/MSD (Yes or No)			
Company: _____		Company: _____		Company: _____		Matrix (W=water, S=solid, O=wastewater, BI=tissue, A=air)			
Company: _____		Company: _____		Company: _____		Sample Type (C=Comp, G=grab)			
Company: _____		Company: _____		Company: _____		Sample Time			
Company: _____		Company: _____		Company: _____		Sample Date			
Company: _____		Company: _____		Company: _____		Preservation Code: G S			
Company: _____		Company: _____		Company: _____		Due Date Requested:			
Company: _____		Company: _____		Company: _____		TAT Requested (days): Normal			
Company: _____		Company: _____		Company: _____		PO #: 1247MM			
Company: _____		Company: _____		Company: _____		WO #: _____			
Company: _____		Company: _____		Company: _____		Project #: 1247			
Company: _____		Company: _____		Company: _____		SSOW#: _____			
Company: _____		Company: _____		Company: _____		Project Name: SA-6 South Deferred Area			
Company: _____		Company: _____		Company: _____		Site: 1247 - SA-6 Deferred Area			
Company: _____		Company: _____		Company: _____		Address: 2749 Lockport Road			
Company: _____		Company: _____		Company: _____		City: Niagara Falls			
Company: _____		Company: _____		Company: _____		State/Zip: NY, 14305			
Company: _____		Company: _____		Company: _____		Phone: 716 284 0431			
Company: _____		Company: _____		Company: _____		Email: mmarrone@sevenson.com			
Company: _____		Company: _____		Company: _____		Project Name: SA-6 South Deferred Area			
Company: _____		Company: _____		Company: _____		Site: 1247 - SA-6 Deferred Area			

SHORT HOLD

Login Sample Receipt Checklist

Client: Severson Environmental Services, Inc.

Job Number: 460-210992-1

Login Number: 210992

List Number: 1

Creator: Rivera, Kenneth

List Source: Eurofins TestAmerica, Edison

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

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Solite Lightweight Fill 06112020			
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1			
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00			
Matrix				Soil			
Dilution Factor				1			
Unit	mg/kg	mg/kg	mg/kg				mg/kg
				Result	Q		MDL
SOIL BY 8260C							
1,1,1-Trichloroethane	160000	NA	0.3	0.00051	U		0.00051
1,1,2,2-Tetrachloroethane	1	3	0.007	0.00047	U		0.00047
1,1,2-Trichloroethane	2	6	0.02	0.00039	U		0.00039
1,1-Dichloroethane	8	24	0.2	0.00046	U		0.00046
1,1-Dichloroethene	11	150	0.008	0.00050	U		0.00050
1,2-Dibromo-3-Chloropropane	0.08	0.2	0.005	0.0010	U		0.0010
1,2-Dibromoethane	0.008	0.04	0.005	0.00040	U		0.00040
1,2-Dichloroethane	0.9	3	0.005	0.00065	U		0.00065
1,2-Dichloropropane	2	5	0.005	0.00093	U		0.00093
2-Butanone	3100	44000	0.9	0.0060	U		0.0060
2-Chloroethyl vinyl ether	NA	NA	NA	0.0036	U		0.0036
2-Hexanone	NA	NA	NA	0.0038	U		0.0038
4-Methyl-2-pentanone	NA	NA	NA	0.0034	U		0.0034
Acetone	70000	NA	19	0.57			0.013
Acrolein	0.5	1	0.5	0.062	U *		0.062
Acrylonitrile	0.9	3	0.5	0.0036	U *		0.0036
Benzene	2	5	0.005	0.00057	U		0.00057
Bromodichloromethane	1	3	0.005	0.00057	U		0.00057
Bromoform	81	280	0.03	0.00094	U		0.00094
Bromomethane	25	59	0.04	0.0010	U		0.0010
Carbon disulfide	7800	110000	6	0.00059	U		0.00059
Carbon tetrachloride	2	4	0.005	0.00085	U		0.00085
Chlorobenzene	510	7400	0.6	0.00039	U		0.00039
Chloroethane	220	1100	NA	0.0012	U		0.0012
Chloroform	0.6	2	0.4	0.00070	U		0.00070
Chloromethane	4	12	NA	0.00096	U		0.00096
cis-1,2-Dichloroethene	230	560	0.3	0.00034	U		0.00034
cis-1,3-Dichloropropene	NA	NA	NA	0.00060	U		0.00060
Dibromochloromethane	3	8	0.005	0.00043	U		0.00043
Dichlorodifluoromethane	490	230000	39	0.00075	U		0.00075
Ethylbenzene	7800	110000	13	0.00044	U		0.00044
Methyl acetate	78000	NA	22	0.0095	U		0.0095
Methylene Chloride	46	230	0.01	0.0010	U		0.0010
MTBE	110	320	0.2	0.00028	U		0.00028
Styrene	90	260	3	0.00061	U		0.00061
TBA	1400	11000	0.3	0.0073	U		0.0073
Tetrachloroethene	43	1500	0.005	0.00032	U		0.00032
Toluene	6300	91000	7	0.00099	J		0.00052
trans-1,2-Dichloroethene	300	720	0.6	0.00054	U		0.00054
trans-1,3-Dichloropropene	NA	NA	NA	0.00059	U		0.00059
Trichloroethene	3	10	0.01	0.00032	U		0.00032

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Solite Lightweight Fill 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00		
Matrix				Soil		
Dilution Factor				1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg		
				Result	Q	MDL
Trichlorofluoromethane	23000	340000	34	0.00090	U	0.00090
Vinyl chloride	0.7	2	0.005	0.0012	U	0.0012
Xylenes, Total	12000	170000	19	0.00038	U	0.00038
Total Conc	NA	NA	NA	0.57099		
Total Estimated Conc. (TICs)	NA	NA	NA	0.693		

* : LCS or LCSD is outside acceptance limits.

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517

TestAmerica Laboratories, Inc.**Eurofins TestAmerica, Edison**

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	Solite Lightweight Fill 06112020		
Lab Sample ID	460-210992-1		
Sampling Date	06/11/2020 14:00:00		
Matrix	Soil		
Dilution Factor	1		
Unit	mg/kg		
	Result	Q	RT mm:ss
SOIL TICS BY 8260C			
Unknown Alkane	0.14	J	01:43
Unknown	0.043	J	01:53
Cyclohexane	0.51	J N	03:06

RT mm:ss Retention Time in mm:ss format

J : Indicates an Estimated Value for TICs

N : This flag indicates the presumptive evidence of a compound.

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tb1A	NJ_SRS7_26D_Tb1B	NJDEP	Solite Lightweight Fill 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00		
Matrix				Soil		
Dilution Factor				1		
Unit	mg/kg	mg/kg	mg/kg			mg/kg
				Result	Q	MDL
SOIL BY 8270D						
1,1'-Biphenyl	61	240	140	0.0047	U	0.0047
1,2,4-Trichlorobenzene	73	820	0.7	0.0091	U	0.0091
1,2-Dichlorobenzene	5300	59000	17	0.0060	U	0.0060
1,2-Diphenylhydrazine	0.7	2	0.7	0.0065	U	0.0065
1,3-Dichlorobenzene	5300	59000	19	0.0047	U	0.0047
1,4-Dichlorobenzene	5	13	2	0.013	U	0.013
2,4,5-Trichlorophenol	6100	68000	68	0.036	U	0.036
2,4,6-Trichlorophenol	19	74	0.2	0.045	U	0.045
2,4-Dichlorophenol	180	2100	0.2	0.023	U	0.023
2,4-Dimethylphenol	1200	14000	1	0.016	U	0.016
2,4-Dinitrophenol	120	1400	0.3	0.17	U	0.17
2,4-Dinitrotoluene	0.7	3	NA	0.038	U	0.038
2,6-Dinitrotoluene	0.7	3	NA	0.026	U	0.026
2-Chloronaphthalene	NA	NA	NA	0.016	U	0.016
2-Chlorophenol	310	2200	0.8	0.013	U	0.013
2-Methylnaphthalene	230	2400	8	0.0099	U	0.0099
2-Methylphenol	310	3400	NA	0.013	U	0.013
2-Nitroaniline	39	23000	NA	0.013	U	0.013
2-Nitrophenol	NA	NA	NA	0.035	U	0.035
3,3'-Dichlorobenzidine	1	4	0.2	0.053	U *	0.053
3-Nitroaniline	NA	NA	NA	0.040	U	0.040
4,6-Dinitro-2-methylphenol	6	68	0.3	0.057	U	0.057
4-Bromophenyl phenyl ether	NA	NA	NA	0.014	U	0.014
4-Chloro-3-methylphenol	NA	NA	NA	0.020	U	0.020
4-Chloroaniline	NA	NA	NA	0.025	U	0.025
4-Chlorophenyl phenyl ether	NA	NA	NA	0.012	U	0.012
4-Methylphenol	31	340	NA	0.022	U	0.022
4-Nitroaniline	NA	NA	NA	0.041	U	0.041
4-Nitrophenol	NA	NA	NA	0.058	U	0.058
Acenaphthene	3400	37000	110	0.026	U	0.026
Acenaphthylene	NA	300000	NA	0.0037	U	0.0037
Acetophenone	2	5	3	0.017	U *	0.017
Anthracene	17000	30000	2400	0.011	U	0.011
Atrazine	210	2400	0.2	0.0089	U	0.0089
Benzaldehyde	6100	68000	NA	0.015	U	0.015
Benzidine	0.7	0.7	0.7	0.035	U	0.035
Benzo[a]anthracene	5	17	0.8	0.012	U	0.012
Benzo[a]pyrene	0.5	2	0.2	0.0094	U	0.0094
Benzo[b]fluoranthene	5	17	2	0.0091	U	0.0091
Benzo[g,h,i]perylene	380000	30000	NA	0.010	U	0.010
Benzo[k]fluoranthene	45	170	25	0.0069	U	0.0069

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Solite Lightweight Fill 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00		
Matrix				Soil		
Dilution Factor				1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg		
				Result	Q	MDL
bis (2-chloroisopropyl) ether	23	67	5	0.0064	U *	0.0064
Bis(2-chloroethoxy)methane	NA	NA	NA	0.028	U	0.028
Bis(2-chloroethyl)ether	0.4	2	0.2	0.012	U	0.012
Bis(2-ethylhexyl) phthalate	35	140	1200	0.019	U	0.019
Butyl benzyl phthalate	1200	14000	230	0.017	U	0.017
Caprolactam	31000	340000	12	0.055	U	0.055
Carbazole	24	96	NA	0.013	U	0.013
Chrysene	450	1700	80	0.0060	U	0.0060
Dibenz(a,h)anthracene	0.5	2	0.8	0.015	U	0.015
Dibenzofuran	NA	NA	NA	0.0050	U	0.0050
Diethyl phthalate	49000	550000	88	0.0051	U	0.0051
Dimethyl phthalate	NA	NA	NA	0.080	U	0.080
Di-n-butyl phthalate	6100	68000	760	0.062	U	0.062
Di-n-octyl phthalate	2400	27000	3300	0.019	U	0.019
Fluoranthene	2300	24000	1300	0.012	U	0.012
Fluorene	2300	24000	170	0.0048	U	0.0048
Hexachlorobenzene	0.3	1	0.2	0.017	U	0.017
Hexachlorobutadiene	6	25	0.9	0.0075	U	0.0075
Hexachlorocyclopentadiene	45	110	320	0.031	U	0.031
Hexachloroethane	12	48	0.2	0.012	U	0.012
Indeno[1,2,3-cd]pyrene	5	17	7	0.014	U	0.014
Isophorone	510	2000	0.2	0.10	U	0.10
Naphthalene	6	17	25	0.0061	U	0.0061
Nitrobenzene	5	14	0.2	0.0085	U	0.0085
N-Nitrosodimethylamine	0.7	0.7	0.7	0.033	U	0.033
N-Nitrosodi-n-propylamine	0.2	0.3	0.2	0.026	U *	0.026
N-Nitrosodiphenylamine	99	390	0.4	0.0068	U	0.0068
Pentachlorophenol	0.9	3	0.3	0.072	U	0.072
Phenanthrene	NA	300000	NA	0.0062	U	0.0062
Phenol	18000	210000	8	0.013	U	0.013
Pyrene	1700	18000	840	0.0088	U	0.0088
Total Conc	NA	NA	NA	0.0		
Total Estimated Conc. (TICs)	NA	NA	NA	3.13		

* : LCS or LCSD is outside acceptance limits.

U : Indicates the analyte was analyzed for but not detected.

TestAmerica Laboratories, Inc.**Eurofins TestAmerica, Edison**

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Solite Lightweight Fill 06112020	
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1	
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00	
Matrix				Soil	
Dilution Factor				1	
Unit	mg/kg	mg/kg	mg/kg	mg/kg	
				Result	MDL

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

TestAmerica Laboratories, Inc.**Eurofins TestAmerica, Edison**

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	Solite Lightweight Fill 06112020		
Lab Sample ID	460-210992-1		
Sampling Date	06/11/2020 14:00:00		
Matrix	Soil		
Dilution Factor	1		
Unit	mg/kg		
	Result	Q	RT mm:ss
SOIL TICS BY 8270D			
Aldol condensation product	1.6	A J	02:57
Sulfur	0.30	J N	07:36
Unknown	0.80	J	09:48
Cyclic octaatomic sulfur	0.43	J N	09:50

RT mm:ss Retention Time in mm:ss format

A : The tentatively identified compound is a suspected aldol-condensation product.

J : Indicates an Estimated Value for TICs

N : This flag indicates the presumptive evidence of a compound.

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Solite Lightweight Fill 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00		
Matrix				Soil		
Dilution Factor				1		
Unit	mg/kg	mg/kg	mg/kg			mg/kg
				Result	Q	MDL
SOIL BY 8081B						
4,4'-DDD	3	13	4	0.0012	U	0.0012
4,4'-DDE	2	9	18	0.00084	U	0.00084
4,4'-DDT	2	8	11	0.0013	U	0.0013
Aldrin	0.04	0.2	0.2	0.0011	U	0.0011
alpha-BHC	0.1	0.5	0.002	0.00073	U	0.00073
beta-BHC	0.4	2	0.002	0.00080	U	0.00080
Chlordane (n.o.s.)	NA	NA	0.05	0.017	U	0.017
Chlordane (technical)	0.2	1	NA	0.017	U	0.017
cis-Chlordane	NA	NA	NA	0.0011	U	0.0011
delta-BHC	NA	NA	NA	0.00044	U	0.00044
Dieldrin	0.04	0.2	0.003	0.00093	U	0.00093
Endosulfan I	NA	NA	NA	0.0011	U	0.0011
Endosulfan II	NA	NA	NA	0.0018	U	0.0018
Endosulfan sulfate	470	6800	2	0.00090	U	0.00090
Endrin	23	340	1	0.0010	U	0.0010
Endrin aldehyde	NA	NA	NA	0.0017	U	0.0017
Endrin ketone	NA	NA	NA	0.0014	U	0.0014
gamma-BHC (Lindane)	0.4	2	0.002	0.00066	U	0.00066
Heptachlor	0.1	0.7	0.5	0.00084	U	0.00084
Heptachlor epoxide	0.07	0.3	0.01	0.0011	U	0.0011
Methoxychlor	390	5700	160	0.0016	U	0.0016
Toxaphene	0.6	3	0.3	0.026	U	0.026
trans-Chlordane	NA	NA	NA	0.0013	U	0.0013

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Solite Lightweight Fill 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00		
Matrix				Soil		
Dilution Factor				1		
Unit	mg/kg	mg/kg	mg/kg			mg/kg
				Result	Q	MDL
SOIL BY 8082A						
Aroclor 1016	NA	NA	NA	0.0095	U	0.0095
Aroclor 1221	NA	NA	NA	0.0095	U	0.0095
Aroclor 1232	NA	NA	NA	0.0095	U	0.0095
Aroclor 1242	NA	NA	NA	0.0095	U	0.0095
Aroclor 1248	NA	NA	NA	0.0095	U	0.0095
Aroclor 1254	NA	NA	NA	0.0098	U	0.0098
Aroclor 1260	NA	NA	NA	0.0098	U	0.0098
Aroclor 1262	NA	NA	NA	0.0098	U	0.0098
Aroclor 1268	NA	NA	NA	0.0098	U	0.0098
Total PCBs	0.2	1	0.2	0.0098	U	0.0098

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Solite Lightweight Fill 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00		
Matrix				Soil		
Unit						
				Result	Q	MDL
SOIL BY 6020B(MG/KG)						
Aluminum	78000	NA	6000	6120		6.8
Antimony	31	450	6	0.29	U	0.29
Arsenic	19	19	19	7.0		0.32
Barium	16000	59000	2100	24.6		0.66
Beryllium	16	140	0.7	0.16	U	0.16
Cadmium	78	78	2	0.33	U	0.33
Chromium	NA	NA	NA	41.4		0.59
Cobalt	1600	590	90	8.6		0.60
Copper	3100	45000	11000	14.8		0.57
Lead	400	800	90	3.3		0.19
Manganese	11000	5900	65	32.1		1.2
Nickel	1600	23000	48	22.8		0.64
Selenium	390	5700	11	0.29	U	0.29
Silver	390	5700	1	0.61	U	0.61
Thallium	NA	NA	3	0.12	U	0.12
Vanadium	78	1100	NA	12.9		0.56
Zinc	23000	110000	930	21.4		3.9
SOIL BY 7471B(MG/KG)						
Mercury	23	65	0.1	0.013	J	0.0041

Highlighted Concentrations shown in bold type face exceed limits

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

TestAmerica Laboratories, Inc.**Eurofins TestAmerica, Edison**

SUMMARY OF ANALYTICAL RESULTS: 460-210992-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Solite Lightweight Fill 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210992-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00		
Matrix				Soil		
				Result	Q	MDL
SOIL BY 7196A						
Cr (VI) (mg/kg)	NA	NA	NA	0.38	U	0.38
SOIL BY 9012B						
Cyanide, Total (mg/kg)	47	680	20	0.13	U	0.13
SOIL BY 9045D						
Corrosivity (su)	NA	NA	NA	9.2	HF	0.1
pH (su)	NA	NA	NA	9.2	HF	0.1
SOIL BY LLOYD KAHN						
TOC Result 1 (mg/kg)	NA	NA	NA	4690		86.9

HF : Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-210993-1

Client Project/Site: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Attn: Mr. Michael F Marrone



*Authorized for release by:
6/25/2020 8:51:50 AM*

Allison Bennett, Project Manager I
(732)593-2517

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LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



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Definitions/Glossary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
A	The tentatively identified compound is a suspected aldol-condensation product.
F1	MS and/or MSD recovery exceeds control limits.
J	Indicates an Estimated Value for TICs
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit

Eurofins TestAmerica, Edison

Definitions/Glossary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins TestAmerica, Edison

Client: Severson Environmental Services, Inc.

Project Location: 1247 HON SA-6 South Deferred Area

Project Number: 460-210993-1

Laboratory Sample ID(s): 460-210993-1, 460-210993-2

Sampling Date(s): 06/11/2020

List DKQP Methods Used: 8260C, 8270D, 8081B, 8082A, 6020B, 7471B, 7196A, 9012B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
1B	<u>EPH Method:</u> Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody documents(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	<p>a) Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?</p> <p>b) Were these reporting limits met?</p>	<p><input checked="" type="checkbox"/>Yes <input type="checkbox"/>No <input type="checkbox"/> See case narrative</p> <p><input type="checkbox"/>Yes <input checked="" type="checkbox"/>No <input type="checkbox"/>N/A <input type="checkbox"/> See case narrative</p>
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spike and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet requirements for "Data of Known Quality."



Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Job ID: 460-210993-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

CASE NARRATIVE

Client: Severson Environmental Services, Inc.

Project: 1247 HON SA-6 South Deferred Area

Report Number: 460-210993-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 6/11/2020 2:00 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 6.0° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP (TOTAL)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Volatile Organic Compounds (GC/MS) DKQP (Total) in accordance with EPA SW-846 Method 8260C (DKQP). The samples were prepared on 06/13/2020 and analyzed on 06/22/2020.

The continuing calibration verification (CCV) associated with batch 460-701367 recovered above the upper control limit for Dichlorodifluoromethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 460-702889 recovered above the upper control limit for Acrolein and Acrylonitrile. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-702889 recovered outside control limits for the following analytes: Acrolein and Acrylonitrile. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the Volatile Organic Compounds (GC/MS) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Job ID: 460-210993-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP (TOTAL)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Semivolatile Organic Compounds (GC/MS) DKQP (Total) in accordance with EPA SW-846 Method 8270D (DKQP). The samples were prepared on 06/18/2020 and analyzed on 06/19/2020.

The continuing calibration verification (CCV) analyzed in batch 460-702339 was outside the method criteria for the following analyte(s): 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) and/or lab control sample duplicate (LCSD) associated with preparation batch 460-702274 and analytical batch 460-702339 was outside DKQP recovery criteria but with laboratory generated limits for the following analytes: 3,3'-Dichlorobenzidine, Acetophenone, bis (2-chloroisopropyl) ether and N-Nitrosodi-n-propylamine. The data has been reported.

Several analytes failed the recovery criteria low for the MS/MSD of sample Dun Rite Lean Clay 06112020MS/MSD (460-210993-1) in batch 460-702339. 2,4-Dinitrophenol exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the Semivolatile Organic Compounds (GC/MS) DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits.

ORGANOCHLORINE PESTICIDES (GC) DKQP (TOTAL)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Organochlorine Pesticides (GC) DKQP (Total) in accordance with EPA SW-846 Method 8081B (DKQP). The samples were prepared on 06/17/2020 and 06/18/2020 and analyzed on 06/18/2020 and 06/19/2020.

Decachlorobiphenyl surrogate recovery for this sample was outside control limits but Tetrachloro-m-xylene surrogate recovery within control limits; therefore the data have been qualified and reported.(460-211149-A-17-J)

The continuing calibration verification (CCV) for Methoxychlor recovered outside the lower control limit on the primary column but within control limits on the secondary column. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported on the secondary column. (CCVIS 460-702077/6)

Refer to the QC report for details.

No other difficulties were encountered during the Organochlorine Pesticides (GC) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP (TOTAL)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Polychlorinated Biphenyls (PCBs) DKQP (Total) in accordance with EPA SW-846 Method 8082A (DKQP). The samples were prepared on 06/17/2020 and 06/18/2020 and analyzed on 06/18/2020 and 06/19/2020.

Aroclor 1260 failed the recovery criteria high for the MS of sample 460-210958-1 in batch 460-702562.

Aroclor 1016 and Aroclor 1260 failed the recovery criteria high for the MSD of sample 460-210958-1 in batch 460-702562.

Aroclor 1016 and Aroclor 1260 failed the recovery criteria high for the MSD of sample 460-211149-17 in batch 460-702122.

Refer to the QC report for details.

No other difficulties were encountered during the Polychlorinated Biphenyls (PCBs) DKQP (Total) analysis.

Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Job ID: 460-210993-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

All other quality control parameters were within the acceptance limits.

METALS DKQP (TOTAL)(ICP/MS)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Metals DKQP (Total)(ICP/MS) in accordance with EPA SW-846 Method 6020B (DKQP). The samples were prepared and analyzed on 06/18/2020.

Several analytes failed the recovery criteria low for the MS of sample 460-211215-1 in batch 460-702189. Aluminum, Chromium, Manganese and Vanadium failed the recovery criteria high.

Arsenic, Cadmium, Cobalt, Lead, Manganese, Nickel and Zinc exceeded the RPD limit for the duplicate of sample 460-211215-1.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the Metals DKQP (Total)(ICP/MS) analysis.

All other quality control parameters were within the acceptance limits.

MERCURY (HG) DKQP (TOTAL)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Mercury (Hg) DKQP (Total) in accordance with EPA SW-846 Method 7471B (DKQP). The samples were prepared and analyzed on 06/17/2020.

Mercury failed the recovery criteria high for the MS/MSD of sample 460-211136-2 in batch 460-701885.

Refer to the QC report for details.

No other difficulties were encountered during the Mercury (Hg) DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits.

CYANIDE (CN) DKQP (TOTAL)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Cyanide (CN) DKQP (Total) in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared and analyzed on 06/23/2020.

No difficulties were encountered during the Cyanide (CN) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM VI DKQP (TOTAL)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Hexavalent Chromium VI DKQP (Total) in accordance with EPA SW-846 Method 7196A (DKQP). The samples were prepared and analyzed on 06/23/2020.

No difficulties were encountered during the Hexavalent Chromium VI DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits

CORROSIVITY (PH)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for corrosivity (pH) in accordance with EPA SW-846 Method 9045D. The samples were analyzed on 06/21/2020.

No difficulties were encountered during the corrosivity (pH) analysis.

Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Job ID: 460-210993-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

All quality control parameters were within the acceptance limits.

LLOYD KAHN METHOD (TOTAL ORGANIC CARBON)

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for Lloyd Kahn Method (total organic carbon) in accordance with Lloyd Kahn Method. The samples were analyzed on 06/23/2020.

No difficulties were encountered during the TOC analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Samples Dun Rite Lean Clay 06112020 (460-210993-1) and EME Horizon A Topsoil 06112020 (460-210993-2) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 06/18/2020.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: Dun Rite Lean Clay 06112020

Lab Sample ID: 460-210993-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 90.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00037	U	0.0016	0.00037	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
1,1,2,2-Tetrachloroethane	0.00034	U	0.0016	0.00034	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
1,1,2-Trichloroethane	0.00028	U	0.0016	0.00028	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
1,1-Dichloroethane	0.00032	U	0.0016	0.00032	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
1,1-Dichloroethene	0.00035	U	0.0016	0.00035	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
1,2-Dibromo-3-Chloropropane	0.00072	U	0.0016	0.00072	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
1,2-Dibromoethane	0.00028	U	0.0016	0.00028	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
1,2-Dichloroethane	0.00047	U	0.0016	0.00047	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
1,2-Dichloropropane	0.00067	U	0.0016	0.00067	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
2-Butanone	0.0043	U	0.0079	0.0043	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
2-Chloroethyl vinyl ether	0.0025	U	0.0031	0.0025	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
2-Hexanone	0.0027	U	0.0079	0.0027	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
4-Methyl-2-pentanone	0.0024	U	0.0079	0.0024	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Acetone	0.0090	U	0.0094	0.0090	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Acrolein	0.044	U *	0.16	0.044	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Acrylonitrile	0.0026	U *	0.016	0.0026	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Benzene	0.00041	U	0.0016	0.00041	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Bromodichloromethane	0.00040	U	0.0016	0.00040	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Bromoform	0.00067	U	0.0016	0.00067	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Bromomethane	0.00075	U	0.0016	0.00075	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Carbon disulfide	0.00042	U	0.0016	0.00042	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Carbon tetrachloride	0.00061	U	0.0016	0.00061	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Chlorobenzene	0.00028	U	0.0016	0.00028	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Chloroethane	0.00082	U	0.0016	0.00082	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Chloroform	0.00050	U	0.0016	0.00050	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Chloromethane	0.00068	U	0.0016	0.00068	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
cis-1,2-Dichloroethene	0.00024	U	0.0016	0.00024	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
cis-1,3-Dichloropropene	0.00043	U	0.0016	0.00043	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Dibromochloromethane	0.00031	U	0.0016	0.00031	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Dichlorodifluoromethane	0.00053	U	0.0016	0.00053	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Ethylbenzene	0.00031	U	0.0016	0.00031	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Methyl acetate	0.0068	U	0.0079	0.0068	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Methylene Chloride	0.00073	U	0.0016	0.00073	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
MTBE	0.00020	U	0.0016	0.00020	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Styrene	0.00044	U	0.0016	0.00044	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
TBA	0.0052	U	0.016	0.0052	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Tetrachloroethene	0.00022	U	0.0016	0.00022	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Toluene	0.00037	U	0.0016	0.00037	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
trans-1,2-Dichloroethene	0.00039	U	0.0016	0.00039	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
trans-1,3-Dichloropropene	0.00042	U	0.0016	0.00042	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Trichloroethene	0.00023	U	0.0016	0.00023	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Trichlorofluoromethane	0.00064	U	0.0016	0.00064	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Vinyl chloride	0.00086	U	0.0016	0.00086	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1
Xylenes, Total	0.00027	U	0.0016	0.00027	mg/Kg	☼	06/13/20 07:33	06/22/20 09:29	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		mg/Kg	☼			06/13/20 07:33	06/22/20 09:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 130	06/13/20 07:33	06/22/20 09:29	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: Dun Rite Lean Clay 06112020

Lab Sample ID: 460-210993-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 90.9

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	96		70 - 130	06/13/20 07:33	06/22/20 09:29	1
Dibromofluoromethane (Surr)	101		70 - 130	06/13/20 07:33	06/22/20 09:29	1
Toluene-d8 (Surr)	98		70 - 130	06/13/20 07:33	06/22/20 09:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.0048	U F1	0.36	0.0048	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
1,2,4-Trichlorobenzene	0.0094	U F1	0.036	0.0094	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
1,2-Dichlorobenzene	0.0062	U F1	0.36	0.0062	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
1,2-Diphenylhydrazine	0.020	J F1	0.36	0.0067	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
1,3-Dichlorobenzene	0.0048	U F1	0.36	0.0048	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
1,4-Dichlorobenzene	0.014	U F1	0.36	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2,4,5-Trichlorophenol	0.037	U	0.36	0.037	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2,4,6-Trichlorophenol	0.047	U	0.15	0.047	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2,4-Dichlorophenol	0.023	U F1	0.15	0.023	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2,4-Dimethylphenol	0.016	U F1	0.36	0.016	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2,4-Dinitrophenol	0.18	U F2	0.29	0.18	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2,4-Dinitrotoluene	0.039	U F1	0.074	0.039	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2,6-Dinitrotoluene	0.026	U F1	0.074	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2-Chloronaphthalene	0.017	U F1	0.36	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2-Chlorophenol	0.013	U F1	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2-Methylnaphthalene	0.010	U F1	0.36	0.010	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2-Methylphenol	0.014	U F1	0.36	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2-Nitroaniline	0.014	U	0.36	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
2-Nitrophenol	0.036	U F1	0.36	0.036	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
3,3'-Dichlorobenzidine	0.055	U F1 *	0.15	0.055	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
3-Nitroaniline	0.041	U	0.36	0.041	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
4,6-Dinitro-2-methylphenol	0.059	U	0.29	0.059	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
4-Bromophenyl phenyl ether	0.015	J F1	0.36	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
4-Chloro-3-methylphenol	0.020	U	0.36	0.020	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
4-Chloroaniline	0.025	U	0.36	0.025	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
4-Chlorophenyl phenyl ether	0.017	J F1	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
4-Methylphenol	0.023	U F1	0.36	0.023	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
4-Nitroaniline	0.042	U	0.36	0.042	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
4-Nitrophenol	0.059	U	0.74	0.059	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Acenaphthene	0.026	U F1	0.36	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Acenaphthylene	0.0080	J F1	0.36	0.0038	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Acetophenone	0.018	U F1 *	0.36	0.018	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Anthracene	0.019	J F1	0.36	0.011	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Atrazine	0.0092	U F1	0.15	0.0092	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Benzaldehyde	0.016	U	0.36	0.016	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Benzidine	0.036	U F1	0.36	0.036	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Benzo[a]anthracene	0.013	U F1	0.036	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Benzo[a]pyrene	0.0097	U F1	0.036	0.0097	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Benzo[b]fluoranthene	0.0095	J F1	0.036	0.0094	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Benzo[g,h,i]perylene	0.011	U F1	0.36	0.011	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Benzo[k]fluoranthene	0.0084	J F1	0.036	0.0071	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
bis (2-chloroisopropyl) ether	0.0066	U F1 *	0.36	0.0066	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Bis(2-chloroethoxy)methane	0.028	U F1	0.36	0.028	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: Dun Rite Lean Clay 06112020

Lab Sample ID: 460-210993-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 90.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.013	U F1	0.036	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Bis(2-ethylhexyl) phthalate	0.019	U F1	0.36	0.019	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Butyl benzyl phthalate	0.017	U F1	0.36	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Caprolactam	0.057	U	0.36	0.057	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Carbazole	0.014	U F1	0.36	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Chrysene	0.010	J F1	0.36	0.0062	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Dibenz(a,h)anthracene	0.016	U F1	0.036	0.016	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Dibenzofuran	0.016	J F1	0.36	0.0051	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Diethyl phthalate	0.013	J F1	0.36	0.0053	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Dimethyl phthalate	0.083	U F1	0.36	0.083	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Di-n-butyl phthalate	0.064	U F1	0.36	0.064	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Di-n-octyl phthalate	0.019	U F1	0.36	0.019	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Fluoranthene	0.013	U F1	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Fluorene	0.014	J F1	0.36	0.0049	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Hexachlorobenzene	0.017	J F1	0.036	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Hexachlorobutadiene	0.0077	U F1	0.074	0.0077	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Hexachlorocyclopentadiene	0.032	U	0.36	0.032	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Hexachloroethane	0.012	U F1	0.036	0.012	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Indeno[1,2,3-cd]pyrene	0.014	U F1	0.036	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Isophorone	0.11	U F1	0.15	0.11	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Naphthalene	0.0063	U F1	0.36	0.0063	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Nitrobenzene	0.0087	U F1	0.036	0.0087	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
N-Nitrosodimethylamine	0.034	U	0.36	0.034	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
N-Nitrosodi-n-propylamine	0.026	U F1 *	0.036	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
N-Nitrosodiphenylamine	0.012	J F1	0.36	0.0070	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Pentachlorophenol	0.075	U	0.29	0.075	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Phenanthrene	0.018	J F1	0.36	0.0064	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Phenol	0.013	U	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1
Pyrene	0.012	J F1	0.36	0.0091	mg/Kg	☼	06/18/20 17:05	06/19/20 03:29	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Aldol condensation product	2.3	A J	mg/Kg	☼	3.12		06/18/20 17:05	06/19/20 03:29	1
Benzoic acid	270	J	ug/Kg	☼	5.43	65-85-0	06/18/20 17:05	06/19/20 03:29	1
n-Octadecane	33	J F1	ug/Kg	☼	8.64	593-45-3	06/18/20 17:05	06/19/20 03:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	58		30 - 130	06/18/20 17:05	06/19/20 03:29	1
2-Fluorobiphenyl	50		30 - 130	06/18/20 17:05	06/19/20 03:29	1
2-Fluorophenol	67		30 - 130	06/18/20 17:05	06/19/20 03:29	1
Nitrobenzene-d5	54		30 - 130	06/18/20 17:05	06/19/20 03:29	1
Phenol-d5	64		30 - 130	06/18/20 17:05	06/19/20 03:29	1
Terphenyl-d14	53		30 - 130	06/18/20 17:05	06/19/20 03:29	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0013	U	0.0074	0.0013	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
4,4'-DDE	0.00087	U	0.0074	0.00087	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
4,4'-DDT	0.0014	U	0.0074	0.0014	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Aldrin	0.0011	U	0.0074	0.0011	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
alpha-BHC	0.00075	U	0.0022	0.00075	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: Dun Rite Lean Clay 06112020

Lab Sample ID: 460-210993-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 90.9

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	0.00083	U	0.0022	0.00083	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Chlordane (n.o.s.)	0.018	U	0.074	0.018	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Chlordane (technical)	0.018	U	0.074	0.018	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
cis-Chlordane	0.0012	U	0.0074	0.0012	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
delta-BHC	0.00045	U	0.0022	0.00045	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Dieldrin	0.00096	U	0.0022	0.00096	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Endosulfan I	0.0011	U	0.0074	0.0011	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Endosulfan II	0.0019	U	0.0074	0.0019	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Endosulfan sulfate	0.00092	U	0.0074	0.00092	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Endrin	0.0011	U	0.0074	0.0011	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Endrin aldehyde	0.0017	U	0.0074	0.0017	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Endrin ketone	0.0014	U	0.0074	0.0014	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
gamma-BHC (Lindane)	0.00068	U	0.0022	0.00068	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Heptachlor	0.00087	U	0.0074	0.00087	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Heptachlor epoxide	0.0011	U	0.0074	0.0011	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Methoxychlor	0.0017	U	0.0074	0.0017	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
Toxaphene	0.027	U	0.074	0.027	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1
trans-Chlordane	0.0013	U	0.0074	0.0013	mg/Kg	☼	06/18/20 09:16	06/19/20 06:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	81		30 - 150	06/18/20 09:16	06/19/20 06:37	1
DCB Decachlorobiphenyl	88		30 - 150	06/18/20 09:16	06/19/20 06:37	1
Tetrachloro-m-xylene	69		30 - 150	06/18/20 09:16	06/19/20 06:37	1
Tetrachloro-m-xylene	66		30 - 150	06/18/20 09:16	06/19/20 06:37	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.0098	U	0.074	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Aroclor 1221	0.0098	U	0.074	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Aroclor 1232	0.0098	U	0.074	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Aroclor 1242	0.0098	U	0.074	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Aroclor 1248	0.0098	U	0.074	0.0098	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Aroclor 1254	0.010	U	0.074	0.010	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Aroclor 1260	0.010	U	0.074	0.010	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Aroclor 1262	0.010	U	0.074	0.010	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Aroclor 1268	0.010	U	0.074	0.010	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1
Polychlorinated biphenyls, Total	0.010	U	0.074	0.010	mg/Kg	☼	06/18/20 09:10	06/19/20 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	105		30 - 150	06/18/20 09:10	06/19/20 20:39	1
DCB Decachlorobiphenyl	117		30 - 150	06/18/20 09:10	06/19/20 20:39	1
Tetrachloro-m-xylene	97		30 - 150	06/18/20 09:10	06/19/20 20:39	1
Tetrachloro-m-xylene	106		30 - 150	06/18/20 09:10	06/19/20 20:39	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5390		21.0	7.2	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Antimony	0.31	U	1.0	0.31	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Arsenic	1.6		1.0	0.34	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Barium	31.0		2.1	0.70	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: Dun Rite Lean Clay 06112020

Lab Sample ID: 460-210993-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 90.9

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.17	U	0.42	0.17	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Cadmium	0.35	U	1.0	0.35	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Chromium	10.2		2.1	0.63	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Cobalt	0.63	U	2.1	0.63	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Copper	5.1		2.1	0.60	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Lead	7.2		0.63	0.20	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Manganese	5.0		4.2	1.3	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Nickel	1.6	J	2.1	0.68	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Selenium	0.30	U	5.2	0.30	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Silver	0.65	U	1.0	0.65	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Thallium	0.13	U	0.42	0.13	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Vanadium	15.6		2.1	0.60	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10
Zinc	5.3	J	8.4	4.1	mg/Kg	☼	06/18/20 03:50	06/18/20 11:51	10

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.018	0.0042	mg/Kg	☼	06/17/20 03:33	06/17/20 08:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.58	J	2.2	0.38	mg/Kg	☼	06/23/20 08:30	06/23/20 11:40	1
Cyanide, Total	0.12	U	0.23	0.12	mg/Kg	☼	06/23/20 06:26	06/23/20 14:28	1
pH	4.8	HF	0.1	0.1	SU			06/21/20 15:11	1
Corrosivity	4.8	HF	0.1	0.1	SU			06/21/20 15:11	1
TOC Result 1	241		110	89.5	mg/Kg	☼		06/23/20 16:14	1
Percent Moisture	9.1		1.0	1.0	%			06/18/20 16:13	1
Percent Solids	90.9		1.0	1.0	%			06/18/20 16:13	1

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00042	U	0.0018	0.00042	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
1,1,2,2-Tetrachloroethane	0.00039	U	0.0018	0.00039	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
1,1,2-Trichloroethane	0.00032	U	0.0018	0.00032	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
1,1-Dichloroethane	0.00037	U	0.0018	0.00037	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
1,1-Dichloroethene	0.00041	U	0.0018	0.00041	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
1,2-Dibromo-3-Chloropropane	0.00083	U	0.0018	0.00083	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
1,2-Dibromoethane	0.00032	U	0.0018	0.00032	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
1,2-Dichloroethane	0.00053	U	0.0018	0.00053	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
1,2-Dichloropropane	0.00076	U	0.0018	0.00076	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
2-Butanone	0.0049	U	0.0090	0.0049	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
2-Chloroethyl vinyl ether	0.0029	U	0.0036	0.0029	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
2-Hexanone	0.0031	U	0.0090	0.0031	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
4-Methyl-2-pentanone	0.0028	U	0.0090	0.0028	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Acetone	0.010	U	0.011	0.010	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Acrolein	0.050	U *	0.18	0.050	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Acrylonitrile	0.0030	U *	0.018	0.0030	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00047	U	0.0018	0.00047	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Bromodichloromethane	0.00046	U	0.0018	0.00046	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Bromoform	0.00077	U	0.0018	0.00077	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Bromomethane	0.00085	U	0.0018	0.00085	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Carbon disulfide	0.00048	U	0.0018	0.00048	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Carbon tetrachloride	0.00070	U	0.0018	0.00070	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Chlorobenzene	0.00032	U	0.0018	0.00032	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Chloroethane	0.00094	U	0.0018	0.00094	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Chloroform	0.00058	U	0.0018	0.00058	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Chloromethane	0.00078	U	0.0018	0.00078	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
cis-1,2-Dichloroethene	0.00027	U	0.0018	0.00027	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
cis-1,3-Dichloropropene	0.00049	U	0.0018	0.00049	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Dibromochloromethane	0.00035	U	0.0018	0.00035	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Dichlorodifluoromethane	0.00061	U	0.0018	0.00061	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Ethylbenzene	0.00036	U	0.0018	0.00036	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Methyl acetate	0.0078	U	0.0090	0.0078	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Methylene Chloride	0.00084	U	0.0018	0.00084	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
MTBE	0.00023	U	0.0018	0.00023	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Styrene	0.00050	U	0.0018	0.00050	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
TBA	0.0059	U	0.018	0.0059	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Tetrachloroethene	0.00026	U	0.0018	0.00026	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Toluene	0.00042	U	0.0018	0.00042	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
trans-1,2-Dichloroethene	0.00044	U	0.0018	0.00044	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
trans-1,3-Dichloropropene	0.00048	U	0.0018	0.00048	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Trichloroethene	0.00026	U	0.0018	0.00026	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Trichlorofluoromethane	0.00073	U	0.0018	0.00073	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Vinyl chloride	0.00098	U	0.0018	0.00098	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1
Xylenes, Total	0.00031	U	0.0018	0.00031	mg/Kg	☼	06/13/20 07:34	06/22/20 09:52	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		mg/Kg	☼			06/13/20 07:34	06/22/20 09:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 130	06/13/20 07:34	06/22/20 09:52	1
Bromofluorobenzene	102		70 - 130	06/13/20 07:34	06/22/20 09:52	1
Dibromofluoromethane (Surr)	103		70 - 130	06/13/20 07:34	06/22/20 09:52	1
Toluene-d8 (Surr)	100		70 - 130	06/13/20 07:34	06/22/20 09:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.0048	U	0.36	0.0048	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
1,2,4-Trichlorobenzene	0.0092	U	0.036	0.0092	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
1,2-Dichlorobenzene	0.0061	U	0.36	0.0061	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
1,2-Diphenylhydrazine	0.0066	U	0.36	0.0066	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
1,3-Dichlorobenzene	0.0048	U	0.36	0.0048	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
1,4-Dichlorobenzene	0.014	U	0.36	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2,4,5-Trichlorophenol	0.037	U	0.36	0.037	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2,4,6-Trichlorophenol	0.046	U	0.14	0.046	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2,4-Dichlorophenol	0.023	U	0.14	0.023	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2,4-Dimethylphenol	0.016	U	0.36	0.016	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	0.18	U	0.29	0.18	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2,4-Dinitrotoluene	0.039	U	0.073	0.039	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2,6-Dinitrotoluene	0.026	U	0.073	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2-Chloronaphthalene	0.017	U	0.36	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2-Chlorophenol	0.013	U	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2-Methylnaphthalene	0.010	U	0.36	0.010	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2-Methylphenol	0.013	U	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2-Nitroaniline	0.013	U	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
2-Nitrophenol	0.036	U	0.36	0.036	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
3,3'-Dichlorobenzidine	0.054	U *	0.14	0.054	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
3-Nitroaniline	0.040	U	0.36	0.040	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
4,6-Dinitro-2-methylphenol	0.058	U	0.29	0.058	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
4-Bromophenyl phenyl ether	0.014	U	0.36	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
4-Chloro-3-methylphenol	0.020	U	0.36	0.020	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
4-Chloroaniline	0.025	U	0.36	0.025	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
4-Chlorophenyl phenyl ether	0.013	U	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
4-Methylphenol	0.022	U	0.36	0.022	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
4-Nitroaniline	0.041	U	0.36	0.041	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
4-Nitrophenol	0.058	U	0.73	0.058	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Acenaphthene	0.026	U	0.36	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Acenaphthylene	0.0037	U	0.36	0.0037	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Acetophenone	0.018	U *	0.36	0.018	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Anthracene	0.011	U	0.36	0.011	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Atrazine	0.0091	U	0.14	0.0091	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Benzaldehyde	0.016	U	0.36	0.016	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Benzidine	0.036	U	0.36	0.036	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Benzo[a]anthracene	0.013	U	0.036	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Benzo[a]pyrene	0.0096	U	0.036	0.0096	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Benzo[b]fluoranthene	0.0093	U	0.036	0.0093	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Benzo[g,h,i]perylene	0.011	U	0.36	0.011	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Benzo[k]fluoranthene	0.0070	U	0.036	0.0070	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
bis (2-chloroisopropyl) ether	0.0065	U *	0.36	0.0065	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Bis(2-chloroethoxy)methane	0.028	U	0.36	0.028	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Bis(2-chloroethyl)ether	0.012	U	0.036	0.012	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Bis(2-ethylhexyl) phthalate	0.019	U	0.36	0.019	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Butyl benzyl phthalate	0.017	U	0.36	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Caprolactam	0.056	U	0.36	0.056	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Carbazole	0.014	U	0.36	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Chrysene	0.0061	U	0.36	0.0061	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Dibenz(a,h)anthracene	0.016	U	0.036	0.016	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Dibenzofuran	0.0050	U	0.36	0.0050	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Diethyl phthalate	0.0052	U	0.36	0.0052	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Dimethyl phthalate	0.082	U	0.36	0.082	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Di-n-butyl phthalate	0.063	U	0.36	0.063	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Di-n-octyl phthalate	0.019	U	0.36	0.019	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Fluoranthene	0.013	U	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Fluorene	0.0049	U	0.36	0.0049	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Hexachlorobenzene	0.017	U	0.036	0.017	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Hexachlorobutadiene	0.0076	U	0.073	0.0076	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	0.031	U	0.36	0.031	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Hexachloroethane	0.012	U	0.036	0.012	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Indeno[1,2,3-cd]pyrene	0.014	U	0.036	0.014	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Isophorone	0.10	U	0.14	0.10	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Naphthalene	0.0062	U	0.36	0.0062	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Nitrobenzene	0.0086	U	0.036	0.0086	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
N-Nitrosodimethylamine	0.033	U	0.36	0.033	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
N-Nitrosodi-n-propylamine	0.026	U *	0.036	0.026	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
N-Nitrosodiphenylamine	0.0069	U	0.36	0.0069	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Pentachlorophenol	0.074	U	0.29	0.074	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Phenanthrene	0.0063	U	0.36	0.0063	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Phenol	0.013	U	0.36	0.013	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1
Pyrene	0.0089	U	0.36	0.0089	mg/Kg	☼	06/18/20 17:05	06/19/20 06:33	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.43	J	mg/Kg	☼	1.69		06/18/20 17:05	06/19/20 06:33	1
Aldol condensation product	1.9	A J	mg/Kg	☼	2.95		06/18/20 17:05	06/19/20 06:33	1
Unknown	0.66	J	mg/Kg	☼	11.28		06/18/20 17:05	06/19/20 06:33	1
2-Pentacosanone	0.74	J N	mg/Kg	☼	13.11	75207-54-4	06/18/20 17:05	06/19/20 06:33	1
1,19-Eicosadiene	0.46	J N	mg/Kg	☼	13.75	14811-95-1	06/18/20 17:05	06/19/20 06:33	1
Unknown	2.1	J	mg/Kg	☼	14.02		06/18/20 17:05	06/19/20 06:33	1
Unknown	0.99	J	mg/Kg	☼	14.11		06/18/20 17:05	06/19/20 06:33	1
Unknown	0.48	J	mg/Kg	☼	14.15		06/18/20 17:05	06/19/20 06:33	1
Vitamin E	0.41	J N	mg/Kg	☼	14.28	59-02-9	06/18/20 17:05	06/19/20 06:33	1
Unknown	0.40	J	mg/Kg	☼	14.85		06/18/20 17:05	06/19/20 06:33	1
Unknown	1.5	J	mg/Kg	☼	14.92		06/18/20 17:05	06/19/20 06:33	1
2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,4,4a,5,6,6a,6b,7,8,8	1.1	J N	mg/Kg	☼	15.24	53013-35-7	06/18/20 17:05	06/19/20 06:33	1
Unknown	1.9	J	mg/Kg	☼	15.39		06/18/20 17:05	06/19/20 06:33	1
Phenanthrene, 1,2,3,4,4a,9,10,10a-octahydro-7-methoxy-1,1,4a	4.2	J N	mg/Kg	☼	15.61	15340-83-7	06/18/20 17:05	06/19/20 06:33	1
4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9	0.68	J N	mg/Kg	☼	15.74	1000194-62-4	06/18/20 17:05	06/19/20 06:33	1
Unknown	1.3	J	mg/Kg	☼	15.89		06/18/20 17:05	06/19/20 06:33	1
Unknown	0.50	J	mg/Kg	☼	16.08		06/18/20 17:05	06/19/20 06:33	1
4H-Dibenz[a,k]anthracene, 5,6-dihydro-	0.77	J N	mg/Kg	☼	16.30	7198-87-0	06/18/20 17:05	06/19/20 06:33	1
Unknown	0.43	J	mg/Kg	☼	16.42		06/18/20 17:05	06/19/20 06:33	1
Stigmast-4-en-3-one	0.54	J N	mg/Kg	☼	16.62	1058-61-3	06/18/20 17:05	06/19/20 06:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	41		30 - 130	06/18/20 17:05	06/19/20 06:33	1
2-Fluorobiphenyl	41		30 - 130	06/18/20 17:05	06/19/20 06:33	1
2-Fluorophenol	45		30 - 130	06/18/20 17:05	06/19/20 06:33	1
Nitrobenzene-d5	39		30 - 130	06/18/20 17:05	06/19/20 06:33	1
Phenol-d5	41		30 - 130	06/18/20 17:05	06/19/20 06:33	1
Terphenyl-d14	43		30 - 130	06/18/20 17:05	06/19/20 06:33	1

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 92.2

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0012	U	0.0073	0.0012	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
4,4'-DDE	0.00086	U	0.0073	0.00086	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
4,4'-DDT	0.0013	U	0.0073	0.0013	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Aldrin	0.0011	U	0.0073	0.0011	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
alpha-BHC	0.00074	U	0.0022	0.00074	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
beta-BHC	0.00081	U	0.0022	0.00081	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Chlordane (n.o.s.)	0.018	U	0.073	0.018	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Chlordane (technical)	0.018	U	0.073	0.018	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
cis-Chlordane	0.0012	U	0.0073	0.0012	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
delta-BHC	0.00044	U	0.0022	0.00044	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Dieldrin	0.00094	U	0.0022	0.00094	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Endosulfan I	0.0011	U	0.0073	0.0011	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Endosulfan II	0.0019	U	0.0073	0.0019	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Endosulfan sulfate	0.00091	U	0.0073	0.00091	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Endrin	0.0010	U	0.0073	0.0010	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Endrin aldehyde	0.0017	U	0.0073	0.0017	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Endrin ketone	0.0014	U	0.0073	0.0014	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
gamma-BHC (Lindane)	0.00067	U	0.0022	0.00067	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Heptachlor	0.00086	U	0.0073	0.00086	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Heptachlor epoxide	0.0011	U	0.0073	0.0011	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Methoxychlor	0.0017	U	0.0073	0.0017	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
Toxaphene	0.026	U	0.073	0.026	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1
trans-Chlordane	0.0013	U	0.0073	0.0013	mg/Kg	☼	06/17/20 09:33	06/18/20 09:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	70		30 - 150	06/17/20 09:33	06/18/20 09:12	1
DCB Decachlorobiphenyl	101		30 - 150	06/17/20 09:33	06/18/20 09:12	1
Tetrachloro-m-xylene	66		30 - 150	06/17/20 09:33	06/18/20 09:12	1
Tetrachloro-m-xylene	66		30 - 150	06/17/20 09:33	06/18/20 09:12	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.0097	U	0.073	0.0097	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Aroclor 1221	0.0097	U	0.073	0.0097	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Aroclor 1232	0.0097	U	0.073	0.0097	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Aroclor 1242	0.0097	U	0.073	0.0097	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Aroclor 1248	0.0097	U	0.073	0.0097	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Aroclor 1254	0.010	U	0.073	0.010	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Aroclor 1260	0.010	U	0.073	0.010	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Aroclor 1262	0.010	U	0.073	0.010	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Aroclor 1268	0.010	U	0.073	0.010	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1
Polychlorinated biphenyls, Total	0.010	U	0.073	0.010	mg/Kg	☼	06/17/20 09:28	06/18/20 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	106		30 - 150	06/17/20 09:28	06/18/20 14:06	1
DCB Decachlorobiphenyl	109		30 - 150	06/17/20 09:28	06/18/20 14:06	1
Tetrachloro-m-xylene	109		30 - 150	06/17/20 09:28	06/18/20 14:06	1
Tetrachloro-m-xylene	107		30 - 150	06/17/20 09:28	06/18/20 14:06	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 92.2

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6340		20.7	7.1	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Antimony	0.30	U	1.0	0.30	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Arsenic	2.7		1.0	0.33	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Barium	11.1		2.1	0.69	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Beryllium	0.17	U	0.41	0.17	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Cadmium	0.35	U	1.0	0.35	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Chromium	8.3		2.1	0.62	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Cobalt	0.70	J	2.1	0.62	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Copper	3.5		2.1	0.59	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Lead	4.1		0.62	0.20	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Manganese	15.8		4.1	1.3	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Nickel	2.3		2.1	0.67	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Selenium	0.30	U	5.2	0.30	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Silver	0.64	U	1.0	0.64	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Thallium	0.13	U	0.41	0.13	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Vanadium	14.1		2.1	0.59	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10
Zinc	5.1	J	8.3	4.0	mg/Kg	☼	06/18/20 03:50	06/18/20 11:54	10

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.018	0.0043	mg/Kg	☼	06/17/20 03:33	06/17/20 08:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	1.1	J	2.2	0.39	mg/Kg	☼	06/23/20 08:30	06/23/20 11:52	1
Cyanide, Total	0.13	U	0.26	0.13	mg/Kg	☼	06/23/20 06:26	06/23/20 14:29	1
pH	4.6	HF	0.1	0.1	SU			06/21/20 15:12	1
Corrosivity	4.6	HF	0.1	0.1	SU			06/21/20 15:12	1
TOC Result 1	30500		109	88.2	mg/Kg	☼		06/23/20 16:21	1
Percent Moisture	7.8		1.0	1.0	%			06/18/20 16:13	1
Percent Solids	92.2		1.0	1.0	%			06/18/20 16:13	1

Lab Chronicle

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: Dun Rite Lean Clay 06112020

Lab Sample ID: 460-210993-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	702817	06/21/20 15:11	AAP	TAL EDI
Total/NA	Analysis	Moisture		1	702244	06/18/20 16:13	MMC	TAL EDI

Client Sample ID: Dun Rite Lean Clay 06112020

Lab Sample ID: 460-210993-1

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			701096	06/13/20 07:33	DBM	TAL EDI
Total/NA	Analysis	8260C		1	702889	06/22/20 09:29	AAT	TAL EDI
Total/NA	Prep	3546			702274	06/18/20 17:05	DMS	TAL EDI
Total/NA	Analysis	8270D		1	702339	06/19/20 03:29	MME	TAL EDI
Total/NA	Prep	3546			702163	06/18/20 09:16	ZXB	TAL EDI
Total/NA	Analysis	8081B		1	702358	06/19/20 06:37	FAM	TAL EDI
Total/NA	Prep	3546			702161	06/18/20 09:10	ZXB	TAL EDI
Total/NA	Analysis	8082A		1	702562	06/19/20 20:39	KMH	TAL EDI
Total/NA	Prep	3050B			702081	06/18/20 03:50	GMC	TAL EDI
Total/NA	Analysis	6020B		10	702189	06/18/20 11:51	MDC	TAL EDI
Total/NA	Prep	7471B			701824	06/17/20 03:33	TJS	TAL EDI
Total/NA	Analysis	7471B		1	701885	06/17/20 08:01	TJS	TAL EDI
Total/NA	Prep	3060A			703006	06/23/20 08:30	RAK	TAL EDI
Total/NA	Analysis	7196A		1	703260	06/23/20 11:40	RAK	TAL EDI
Total/NA	Prep	9012B			703164	06/23/20 06:26	IAA	TAL EDI
Total/NA	Analysis	9012B		1	703276	06/23/20 14:28	AJP	TAL EDI
Total/NA	Analysis	Lloyd Kahn		1	703497	06/23/20 16:14	AJP	TAL EDI

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	702817	06/21/20 15:12	AAP	TAL EDI
Total/NA	Analysis	Moisture		1	702244	06/18/20 16:13	MMC	TAL EDI

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			701096	06/13/20 07:34	DBM	TAL EDI
Total/NA	Analysis	8260C		1	702889	06/22/20 09:52	AAT	TAL EDI
Total/NA	Prep	3546			702274	06/18/20 17:05	DMS	TAL EDI
Total/NA	Analysis	8270D		1	702339	06/19/20 06:33	MME	TAL EDI
Total/NA	Prep	3546			701907	06/17/20 09:33	ZXB	TAL EDI
Total/NA	Analysis	8081B		1	702077	06/18/20 09:12	FAM	TAL EDI

Eurofins TestAmerica, Edison

Lab Chronicle

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Client Sample ID: EME Horizon A Topsoil 06112020

Lab Sample ID: 460-210993-2

Date Collected: 06/11/20 14:00

Matrix: Solid

Date Received: 06/11/20 14:00

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			701901	06/17/20 09:28	ZXB	TAL EDI
Total/NA	Analysis	8082A		1	702122	06/18/20 14:06	KMH	TAL EDI
Total/NA	Prep	3050B			702081	06/18/20 03:50	GMC	TAL EDI
Total/NA	Analysis	6020B		10	702189	06/18/20 11:54	MDC	TAL EDI
Total/NA	Prep	7471B			701824	06/17/20 03:33	TJS	TAL EDI
Total/NA	Analysis	7471B		1	701885	06/17/20 08:03	TJS	TAL EDI
Total/NA	Prep	3060A			703006	06/23/20 08:30	RAK	TAL EDI
Total/NA	Analysis	7196A		1	703260	06/23/20 11:52	RAK	TAL EDI
Total/NA	Prep	9012B			703164	06/23/20 06:26	IAA	TAL EDI
Total/NA	Analysis	9012B		1	703276	06/23/20 14:29	AJP	TAL EDI
Total/NA	Analysis	Lloyd Kahn		1	703497	06/23/20 16:21	AJP	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900



Accreditation/Certification Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Laboratory: Eurofins TestAmerica, Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	12028	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7196A	3060A	Solid	Cr (VI)
8081B	3546	Solid	Chlordane (n.o.s.)
8082A	3546	Solid	Polychlorinated biphenyls, Total
9045D		Solid	Corrosivity
Lloyd Kahn		Solid	TOC Result 1
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081B	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7471B	Mercury (CVAA)	SW846	TAL EDI
7196A	Chromium, Hexavalent	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable	SW846	TAL EDI
9045D	pH	SW846	TAL EDI
Lloyd Kahn	Organic Carbon, Total (TOC)	EPA	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI
3050B	Preparation, Metals	SW846	TAL EDI
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	TAL EDI
3546	Microwave Extraction	SW846	TAL EDI
5035	Closed System Purge and Trap	SW846	TAL EDI
7471B	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-210993-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-210993-1	Dun Rite Lean Clay 06112020	Solid	06/11/20 14:00	06/11/20 14:00	
460-210993-2	EME Horizon A Topsoil 06112020	Solid	06/11/20 14:00	06/11/20 14:00	

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

Login Sample Receipt Checklist

Client: Severson Environmental Services, Inc.

Job Number: 460-210993-1

Login Number: 210993

List Number: 1

Creator: Rivera, Kenneth

List Source: Eurofins TestAmerica, Edison

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

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Dun Rite Lean Clay 06112020			EME Horizon A Topsoil 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210993-1			460-210993-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00			06/11/2020 14:00:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
SOIL BY 8260C									
1,1,1-Trichloroethane	160000	NA	0.3	0.00037	U	0.00037	0.00042	U	0.00042
1,1,2,2-Tetrachloroethane	1	3	0.007	0.00034	U	0.00034	0.00039	U	0.00039
1,1,2-Trichloroethane	2	6	0.02	0.00028	U	0.00028	0.00032	U	0.00032
1,1-Dichloroethane	8	24	0.2	0.00032	U	0.00032	0.00037	U	0.00037
1,1-Dichloroethene	11	150	0.008	0.00035	U	0.00035	0.00041	U	0.00041
1,2-Dibromo-3-Chloropropane	0.08	0.2	0.005	0.00072	U	0.00072	0.00083	U	0.00083
1,2-Dibromoethane	0.008	0.04	0.005	0.00028	U	0.00028	0.00032	U	0.00032
1,2-Dichloroethane	0.9	3	0.005	0.00047	U	0.00047	0.00053	U	0.00053
1,2-Dichloropropane	2	5	0.005	0.00067	U	0.00067	0.00076	U	0.00076
2-Butanone	3100	44000	0.9	0.0043	U	0.0043	0.0049	U	0.0049
2-Chloroethyl vinyl ether	NA	NA	NA	0.0025	U	0.0025	0.0029	U	0.0029
2-Hexanone	NA	NA	NA	0.0027	U	0.0027	0.0031	U	0.0031
4-Methyl-2-pentanone	NA	NA	NA	0.0024	U	0.0024	0.0028	U	0.0028
Acetone	70000	NA	19	0.0090	U	0.0090	0.010	U	0.010
Acrolein	0.5	1	0.5	0.044	U *	0.044	0.050	U *	0.050
Acrylonitrile	0.9	3	0.5	0.0026	U *	0.0026	0.0030	U *	0.0030
Benzene	2	5	0.005	0.00041	U	0.00041	0.00047	U	0.00047
Bromodichloromethane	1	3	0.005	0.00040	U	0.00040	0.00046	U	0.00046
Bromoform	81	280	0.03	0.00067	U	0.00067	0.00077	U	0.00077
Bromomethane	25	59	0.04	0.00075	U	0.00075	0.00085	U	0.00085
Carbon disulfide	7800	110000	6	0.00042	U	0.00042	0.00048	U	0.00048
Carbon tetrachloride	2	4	0.005	0.00061	U	0.00061	0.00070	U	0.00070
Chlorobenzene	510	7400	0.6	0.00028	U	0.00028	0.00032	U	0.00032
Chloroethane	220	1100	NA	0.00082	U	0.00082	0.00094	U	0.00094
Chloroform	0.6	2	0.4	0.00050	U	0.00050	0.00058	U	0.00058
Chloromethane	4	12	NA	0.00068	U	0.00068	0.00078	U	0.00078
cis-1,2-Dichloroethene	230	560	0.3	0.00024	U	0.00024	0.00027	U	0.00027
cis-1,3-Dichloropropene	NA	NA	NA	0.00043	U	0.00043	0.00049	U	0.00049
Dibromochloromethane	3	8	0.005	0.00031	U	0.00031	0.00035	U	0.00035
Dichlorodifluoromethane	490	230000	39	0.00053	U	0.00053	0.00061	U	0.00061
Ethylbenzene	7800	110000	13	0.00031	U	0.00031	0.00036	U	0.00036
Methyl acetate	78000	NA	22	0.0068	U	0.0068	0.0078	U	0.0078
Methylene Chloride	46	230	0.01	0.00073	U	0.00073	0.00084	U	0.00084
MTBE	110	320	0.2	0.00020	U	0.00020	0.00023	U	0.00023
Styrene	90	260	3	0.00044	U	0.00044	0.00050	U	0.00050
TBA	1400	11000	0.3	0.0052	U	0.0052	0.0059	U	0.0059
Tetrachloroethene	43	1500	0.005	0.00022	U	0.00022	0.00026	U	0.00026
Toluene	6300	91000	7	0.00037	U	0.00037	0.00042	U	0.00042
trans-1,2-Dichloroethene	300	720	0.6	0.00039	U	0.00039	0.00044	U	0.00044
trans-1,3-Dichloropropene	NA	NA	NA	0.00042	U	0.00042	0.00048	U	0.00048
Trichloroethene	3	10	0.01	0.00023	U	0.00023	0.00026	U	0.00026

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Dun Rite Lean Clay 06112020			EME Horizon A Topsoil 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210993-1			460-210993-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00			06/11/2020 14:00:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
Trichlorofluoromethane	23000	340000	34	0.00064	U	0.00064	0.00073	U	0.00073
Vinyl chloride	0.7	2	0.005	0.00086	U	0.00086	0.00098	U	0.00098
Xylenes, Total	12000	170000	19	0.00027	U	0.00027	0.00031	U	0.00031
Total Conc	NA	NA	NA	0.0			0.0		
Total Estimated Conc. (TICs)	NA	NA	NA	0.0*T			0.0*T		

*T There are no TICs reported for the sample

* : LCS or LCSD is outside acceptance limits.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Dun Rite Lean Clay 06112020			Dun Rite Lean Clay 06112020			EME Horizon A Topsoil 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210993-1			460-210993-1			460-210993-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00			06/11/2020 14:00:00			06/11/2020 14:00:00		
Matrix				Soil			Soil			Soil		
Dilution Factor				1			1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8270D												
1,1'-Biphenyl	61	240	140	0.0048	U F1	0.0048	NR			0.0048	U	0.0048
1,2,4-Trichlorobenzene	73	820	0.7	0.0094	U F1	0.0094	NR			0.0092	U	0.0092
1,2-Dichlorobenzene	5300	59000	17	0.0062	U F1	0.0062	NR			0.0061	U	0.0061
1,2-Diphenylhydrazine	0.7	2	0.7	0.020	J F1	0.0067	NR			0.0066	U	0.0066
1,3-Dichlorobenzene	5300	59000	19	0.0048	U F1	0.0048	NR			0.0048	U	0.0048
1,4-Dichlorobenzene	5	13	2	0.014	U F1	0.014	NR			0.014	U	0.014
2,4,5-Trichlorophenol	6100	68000	68	0.037	U	0.037	NR			0.037	U	0.037
2,4,6-Trichlorophenol	19	74	0.2	0.047	U	0.047	NR			0.046	U	0.046
2,4-Dichlorophenol	180	2100	0.2	0.023	U F1	0.023	NR			0.023	U	0.023
2,4-Dimethylphenol	1200	14000	1	0.016	U F1	0.016	NR			0.016	U	0.016
2,4-Dinitrophenol	120	1400	0.3	0.18	U F2	0.18	NR			0.18	U	0.18
2,4-Dinitrotoluene	0.7	3	NA	0.039	U F1	0.039	NR			0.039	U	0.039
2,6-Dinitrotoluene	0.7	3	NA	0.026	U F1	0.026	NR			0.026	U	0.026
2-Chloronaphthalene	NA	NA	NA	0.017	U F1	0.017	NR			0.017	U	0.017
2-Chlorophenol	310	2200	0.8	0.013	U F1	0.013	NR			0.013	U	0.013
2-Methylnaphthalene	230	2400	8	0.010	U F1	0.010	NR			0.010	U	0.010
2-Methylphenol	310	3400	NA	0.014	U F1	0.014	NR			0.013	U	0.013
2-Nitroaniline	39	23000	NA	0.014	U	0.014	NR			0.013	U	0.013
2-Nitrophenol	NA	NA	NA	0.036	U F1	0.036	NR			0.036	U	0.036
3,3'-Dichlorobenzidine	1	4	0.2	0.055	F1 *	0.055	NR			0.054	U *	0.054
3-Nitroaniline	NA	NA	NA	0.041	U	0.041	NR			0.040	U	0.040
4,6-Dinitro-2-methylphenol	6	68	0.3	0.059	U	0.059	NR			0.058	U	0.058
4-Bromophenyl phenyl ether	NA	NA	NA	0.015	J F1	0.014	NR			0.014	U	0.014
4-Chloro-3-methylphenol	NA	NA	NA	0.020	U	0.020	NR			0.020	U	0.020
4-Chloroaniline	NA	NA	NA	0.025	U	0.025	NR			0.025	U	0.025
4-Chlorophenyl phenyl ether	NA	NA	NA	0.017	J F1	0.013	NR			0.013	U	0.013
4-Methylphenol	31	340	NA	0.023	U F1	0.023	NR			0.022	U	0.022
4-Nitroaniline	NA	NA	NA	0.042	U	0.042	NR			0.041	U	0.041
4-Nitrophenol	NA	NA	NA	0.059	U	0.059	NR			0.058	U	0.058
Acenaphthene	3400	37000	110	0.026	U F1	0.026	NR			0.026	U	0.026
Acenaphthylene	NA	300000	NA	0.0080	J F1	0.0038	NR			0.0037	U	0.0037
Acetophenone	2	5	3	0.018	F1 *	0.018	NR			0.018	U *	0.018
Anthracene	17000	30000	2400	0.019	J F1	0.011	NR			0.011	U	0.011
Atrazine	210	2400	0.2	0.0092	U F1	0.0092	NR			0.0091	U	0.0091
Benzaldehyde	6100	68000	NA	0.016	U	0.016	NR			0.016	U	0.016
Benzidine	0.7	0.7	0.7	0.036	U F1	0.036	NR			0.036	U	0.036
Benzo[a]anthracene	5	17	0.8	0.013	U F1	0.013	NR			0.013	U	0.013
Benzo[a]pyrene	0.5	2	0.2	0.0097	U F1	0.0097	NR			0.0096	U	0.0096
Benzo[b]fluoranthene	5	17	2	0.0095	J F1	0.0094	NR			0.0093	U	0.0093
Benzo[g,h,i]perylene	380000	30000	NA	0.011	U F1	0.011	NR			0.011	U	0.011
Benzo[k]fluoranthene	45	170	25	0.0084	J F1	0.0071	NR			0.0070	U	0.0070

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Dun Rite Lean Clay 06112020		Dun Rite Lean Clay 06112020		EME Horizon A Topsoil 06112020				
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210993-1		460-210993-1		460-210993-2				
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00		06/11/2020 14:00:00		06/11/2020 14:00:00				
Matrix				Soil		Soil		Soil				
Dilution Factor				1		1		1				
Unit	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg				
				Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
bis (2-chloroisopropyl) ether	23	67	5	0.0066	F1 *	0.0066	NR			0.0065	U *	0.0065
Bis(2-chloroethoxy)methane	NA	NA	NA	0.028	U F1	0.028	NR			0.028	U	0.028
Bis(2-chloroethyl)ether	0.4	2	0.2	0.013	U F1	0.013	NR			0.012	U	0.012
Bis(2-ethylhexyl) phthalate	35	140	1200	0.019	U F1	0.019	NR			0.019	U	0.019
Butyl benzyl phthalate	1200	14000	230	0.017	U F1	0.017	NR			0.017	U	0.017
Caprolactam	31000	340000	12	0.057	U	0.057	NR			0.056	U	0.056
Carbazole	24	96	NA	0.014	U F1	0.014	NR			0.014	U	0.014
Chrysene	450	1700	80	0.010	J F1	0.0062	NR			0.0061	U	0.0061
Dibenz(a,h)anthracene	0.5	2	0.8	0.016	U F1	0.016	NR			0.016	U	0.016
Dibenzofuran	NA	NA	NA	0.016	J F1	0.0051	NR			0.0050	U	0.0050
Diethyl phthalate	49000	550000	88	0.013	J F1	0.0053	NR			0.0052	U	0.0052
Dimethyl phthalate	NA	NA	NA	0.083	U F1	0.083	NR			0.082	U	0.082
Di-n-butyl phthalate	6100	68000	760	0.064	U F1	0.064	NR			0.063	U	0.063
Di-n-octyl phthalate	2400	27000	3300	0.019	U F1	0.019	NR			0.019	U	0.019
Fluoranthene	2300	24000	1300	0.013	U F1	0.013	NR			0.013	U	0.013
Fluorene	2300	24000	170	0.014	J F1	0.0049	NR			0.0049	U	0.0049
Hexachlorobenzene	0.3	1	0.2	0.017	J F1	0.017	NR			0.017	U	0.017
Hexachlorobutadiene	6	25	0.9	0.0077	U F1	0.0077	NR			0.0076	U	0.0076
Hexachlorocyclopentadiene	45	110	320	0.032	U	0.032	NR			0.031	U	0.031
Hexachloroethane	12	48	0.2	0.012	U F1	0.012	NR			0.012	U	0.012
Indeno[1,2,3-cd]pyrene	5	17	7	0.014	U F1	0.014	NR			0.014	U	0.014
Isophorone	510	2000	0.2	0.11	U F1	0.11	NR			0.10	U	0.10
Naphthalene	6	17	25	0.0063	U F1	0.0063	NR			0.0062	U	0.0062
Nitrobenzene	5	14	0.2	0.0087	U F1	0.0087	NR			0.0086	U	0.0086
N-Nitrosodimethylamine	0.7	0.7	0.7	0.034	U	0.034	NR			0.033	U	0.033
N-Nitrosodi-n-propylamine	0.2	0.3	0.2	0.026	F1 *	0.026	NR			0.026	U *	0.026
N-Nitrosodiphenylamine	99	390	0.4	0.012	J F1	0.0070	NR			0.0069	U	0.0069
Pentachlorophenol	0.9	3	0.3	0.075	U	0.075	NR			0.074	U	0.074
Phenanthrene	NA	300000	NA	0.018	J F1	0.0064	NR			0.0063	U	0.0063
Phenol	18000	210000	8	0.013	U	0.013	NR			0.013	U	0.013
Pyrene	1700	18000	840	0.012	J F1	0.0091	NR			0.0089	U	0.0089
Total Conc	NA	NA	NA	0.2089			NR			0.0		
Total Estimated Conc. (TICs)	NA	NA	NA	2.3			NR			21.49		
Total Estimated Conc. (TICs)	NA	NA	NA	NR			0.303			NR		

NR: Not Analyzed

*: LCS or LCSD is outside acceptance limits.

F1 : MS and/or MSD recovery exceeds control limits.

F2 : MS/MSD RPD exceeds control limits

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Dun Rite Lean Clay 06112020	Dun Rite Lean Clay 06112020	EME Horizon A Topsoil 06112020
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210993-1	460-210993-1	460-210993-2
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00	06/11/2020 14:00:00	06/11/2020 14:00:00
Matrix				Soil	Soil	Soil
Dilution Factor				1	1	1
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				Result Q MDL	Result Q MDL	Result Q MDL

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	Dun Rite Lean Clay 06112020			Dun Rite Lean Clay 06112020			EME Horizon A Topsoil 06112020		
Lab Sample ID	460-210993-1			460-210993-1			460-210993-2		
Sampling Date	06/11/2020 14:00:00			06/11/2020 14:00:00			06/11/2020 14:00:00		
Matrix	Soil			Soil			Soil		
Dilution Factor	1			1			1		
Unit	mg/kg			mg/kg			mg/kg		
	Result	Q	RT mm:ss	Result	Q	RT mm:ss	Result	Q	RT mm:ss
SOIL TICS BY 8270D									
Unknown	NR			NR			0.43	J	01:41
Aldol condensation product	NR			NR			1.9	A J	02:57
Aldol condensation product	2.3	A J	03:07	NR			NR		
Benzoic acid	NR			0.27	J	05:26	NR		
n-Octadecane	NR			0.033	J F1	08:39	NR		
Unknown	NR			NR			0.66	J	11:17
2-Pentacosanone	NR			NR			0.74	J N	13:07
1,19-Eicosadiene	NR			NR			0.46	J N	13:45
Unknown	NR			NR			2.1	J	14:01
Unknown	NR			NR			0.99	J	14:07
Unknown	NR			NR			0.48	J	14:09
Vitamin E	NR			NR			0.41	J N	14:17
Unknown	NR			NR			0.40	J	14:51
Unknown	NR			NR			1.5	J	14:55
2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,4,4a,5,6,6a,6b,7,8,8	NR			NR			1.1	J N	15:14
Unknown	NR			NR			1.9	J	15:23
Phenanthrene, 1,2,3,4,4a,9,10,10a-octahydro-7-methoxy-1,1,4a	NR			NR			4.2	J N	15:36
4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,	NR			NR			0.68	J N	15:45
Unknown	NR			NR			1.3	J	15:53
Unknown	NR			NR			0.50	J	16:05
4H-Dibenz[a,k]anthracene, 5,6-dihydro-	NR			NR			0.77	J N	16:18
Unknown	NR			NR			0.43	J	16:25
Stigmast-4-en-3-one	NR			NR			0.54	J N	16:37

NR: Not Analyzed

RT mm:ss Retention Time in mm:ss format

A : The tentatively identified compound is a suspected aldol-condensation product.

F1 : MS and/or MSD recovery exceeds control limits.

J : Indicates an Estimated Value for TICS

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

N : This flag indicates the presumptive evidence of a compound.

Lab Contact:

TestAmerica Laboratories, Inc.**Eurofins TestAmerica, Edison**

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	Dun Rite Lean Clay 06112020			Dun Rite Lean Clay 06112020			EME Horizon A Topsoil 06112020		
Lab Sample ID	460-210993-1			460-210993-1			460-210993-2		
Sampling Date	06/11/2020 14:00:00			06/11/2020 14:00:00			06/11/2020 14:00:00		
Matrix	Soil			Soil			Soil		
Dilution Factor	1			1			1		
Unit	mg/kg			mg/kg			mg/kg		
	Result	Q	RT mm:ss	Result	Q	RT mm:ss	Result	Q	RT mm:ss

Allison Bennett

Project Manager I

(732)593-2517

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Dun Rite Lean Clay 06112020			EME Horizon A Topsoil 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210993-1			460-210993-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00			06/11/2020 14:00:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
SOIL BY 8081B									
4,4'-DDD	3	13	4	0.0013	U	0.0013	0.0012	U	0.0012
4,4'-DDE	2	9	18	0.00087	U	0.00087	0.00086	U	0.00086
4,4'-DDT	2	8	11	0.0014	U	0.0014	0.0013	U	0.0013
Aldrin	0.04	0.2	0.2	0.0011	U	0.0011	0.0011	U	0.0011
alpha-BHC	0.1	0.5	0.002	0.00075	U	0.00075	0.00074	U	0.00074
beta-BHC	0.4	2	0.002	0.00083	U	0.00083	0.00081	U	0.00081
Chlordane (n.o.s.)	NA	NA	0.05	0.018	U	0.018	0.018	U	0.018
Chlordane (technical)	0.2	1	NA	0.018	U	0.018	0.018	U	0.018
cis-Chlordane	NA	NA	NA	0.0012	U	0.0012	0.0012	U	0.0012
delta-BHC	NA	NA	NA	0.00045	U	0.00045	0.00044	U	0.00044
Dieldrin	0.04	0.2	0.003	0.00096	U	0.00096	0.00094	U	0.00094
Endosulfan I	NA	NA	NA	0.0011	U	0.0011	0.0011	U	0.0011
Endosulfan II	NA	NA	NA	0.0019	U	0.0019	0.0019	U	0.0019
Endosulfan sulfate	470	6800	2	0.00092	U	0.00092	0.00091	U	0.00091
Endrin	23	340	1	0.0011	U	0.0011	0.0010	U	0.0010
Endrin aldehyde	NA	NA	NA	0.0017	U	0.0017	0.0017	U	0.0017
Endrin ketone	NA	NA	NA	0.0014	U	0.0014	0.0014	U	0.0014
gamma-BHC (Lindane)	0.4	2	0.002	0.00068	U	0.00068	0.00067	U	0.00067
Heptachlor	0.1	0.7	0.5	0.00087	U	0.00087	0.00086	U	0.00086
Heptachlor epoxide	0.07	0.3	0.01	0.0011	U	0.0011	0.0011	U	0.0011
Methoxychlor	390	5700	160	0.0017	U	0.0017	0.0017	U	0.0017
Toxaphene	0.6	3	0.3	0.027	U	0.027	0.026	U	0.026
trans-Chlordane	NA	NA	NA	0.0013	U	0.0013	0.0013	U	0.0013

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Dun Rite Lean Clay 06112020			EME Horizon A Topsoil 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210993-1			460-210993-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00			06/11/2020 14:00:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
SOIL BY 8082A									
Aroclor 1016	NA	NA	NA	0.0098	U	0.0098	0.0097	U	0.0097
Aroclor 1221	NA	NA	NA	0.0098	U	0.0098	0.0097	U	0.0097
Aroclor 1232	NA	NA	NA	0.0098	U	0.0098	0.0097	U	0.0097
Aroclor 1242	NA	NA	NA	0.0098	U	0.0098	0.0097	U	0.0097
Aroclor 1248	NA	NA	NA	0.0098	U	0.0098	0.0097	U	0.0097
Aroclor 1254	NA	NA	NA	0.010	U	0.010	0.010	U	0.010
Aroclor 1260	NA	NA	NA	0.010	U	0.010	0.010	U	0.010
Aroclor 1262	NA	NA	NA	0.010	U	0.010	0.010	U	0.010
Aroclor 1268	NA	NA	NA	0.010	U	0.010	0.010	U	0.010
Total PCBs	0.2	1	0.2	0.010	U	0.010	0.010	U	0.010

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-210993-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	Dun Rite Lean Clay 06112020			EME Horizon A Topsoil 06112020		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-210993-1			460-210993-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	06/11/2020 14:00:00			06/11/2020 14:00:00		
Matrix				Soil			Soil		
Unit									
				Result	Q	MDL	Result	Q	MDL
SOIL BY 6020B(MG/KG)									
Aluminum	78000	NA	6000	5390		7.2	6340		7.1
Antimony	31	450	6	0.31	U	0.31	0.30	U	0.30
Arsenic	19	19	19	1.6		0.34	2.7		0.33
Barium	16000	59000	2100	31.0		0.70	11.1		0.69
Beryllium	16	140	0.7	0.17	U	0.17	0.17	U	0.17
Cadmium	78	78	2	0.35	U	0.35	0.35	U	0.35
Chromium	NA	NA	NA	10.2		0.63	8.3		0.62
Cobalt	1600	590	90	0.63	U	0.63	0.70	J	0.62
Copper	3100	45000	11000	5.1		0.60	3.5		0.59
Lead	400	800	90	7.2		0.20	4.1		0.20
Manganese	11000	5900	65	5.0		1.3	15.8		1.3
Nickel	1600	23000	48	1.6	J	0.68	2.3		0.67
Selenium	390	5700	11	0.30	U	0.30	0.30	U	0.30
Silver	390	5700	1	0.65	U	0.65	0.64	U	0.64
Thallium	NA	NA	3	0.13	U	0.13	0.13	U	0.13
Vanadium	78	1100	NA	15.6		0.60	14.1		0.59
Zinc	23000	110000	930	5.3	J	4.1	5.1	J	4.0
SOIL BY 7471B(MG/KG)									
Mercury	23	65	0.1	0.046		0.0042	0.027		0.0043

Highlighted Concentrations shown in bold type face exceed limits

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:

Allison Bennett

Project Manager I

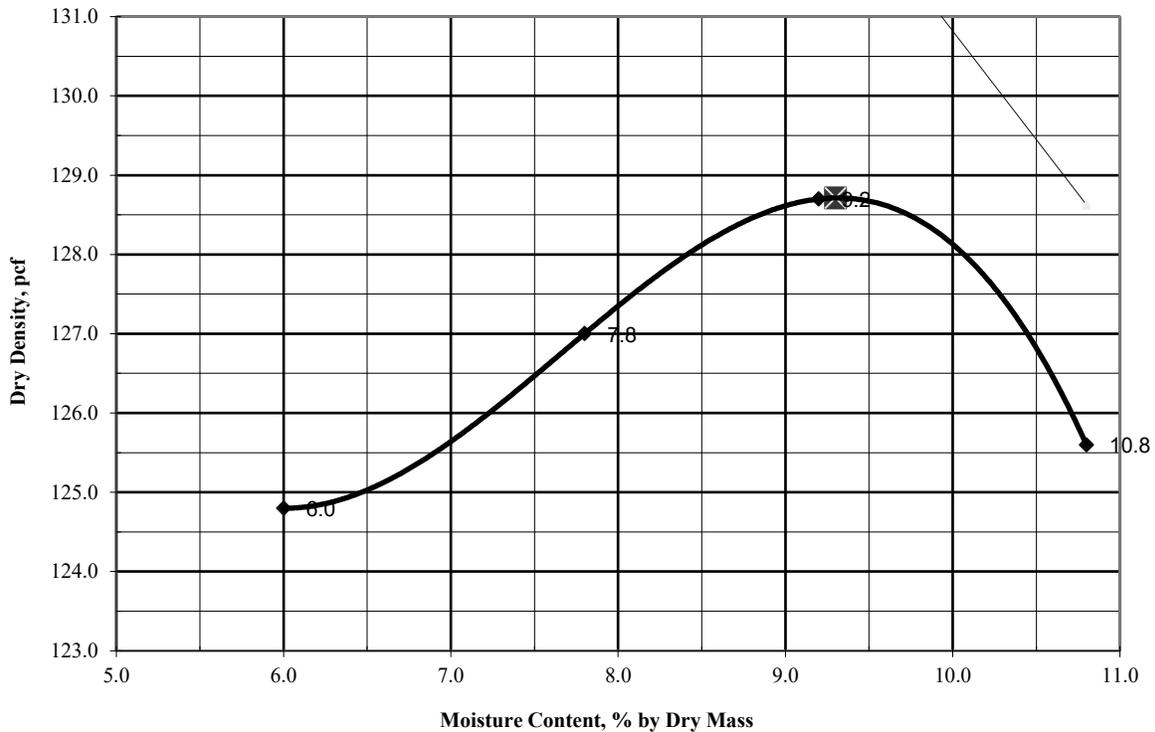
(732)593-2517



3348 Route 208, Campbell Hall, NY 10916
 Phone: 845-496-1600 Fax: 845-496-1398
 12960 Commerce Lake Drive, A14, Fort Myers, FL 33
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

CLIENT:	Sevenson Environmental Services Inc.	PROJECT NO.:	200608
PROJECT:	Honeywell Project Jersey City, NJ	LAB NUMBER:	20-0920B
TEST METHOD:	ASTM D 698 'Standard Proctor'	Method:	C
SOIL ID NUMBER:	5		
ITEM:	Common Borrow		
SOURCE:	On-Site Existing Material; Open Face Area		
SOIL DESCRIPTION:	Dk Brown Silty Sand w/ Nat Gravel: 61% Sand; 22% Gravel; 17% Silt		
DATE SAMPLED:	8/19/2020	SAMPLED BY:	Carson Blake
DATE TESTED:	8/20/2020	TESTED BY:	Robert Sanborn

REPORT OF MOISTURE DENSITY RELATIONSHIP



Individual Test Points	
Percent Moisture	Dry Density
6.0	124.8
7.8	127.0
9.2	128.7
10.8	125.6

Uncorrected Maximum Dry Density: 128.7 lb/cu. ft.
 Uncorrected Optimum Moisture Content: 9.3 %
 Specific Gravity of Soils *: 2.65
 Percent Oversize Particles: 2.9 %
 Specific Gravity of Oversize*: 2.67

Corrected* Maximum Dry Density: 128.7 lb/cu. ft.
Corrected* Opt. Moisture Content: 9.3 %

***Corrected for oversize, when oversize particles exceed 5% of sample.*

Emily J. Rodriguez

Report Reviewed By:

*Specific Gravity of Soils Estimated and Specific Gravity of Oversize Estimated.

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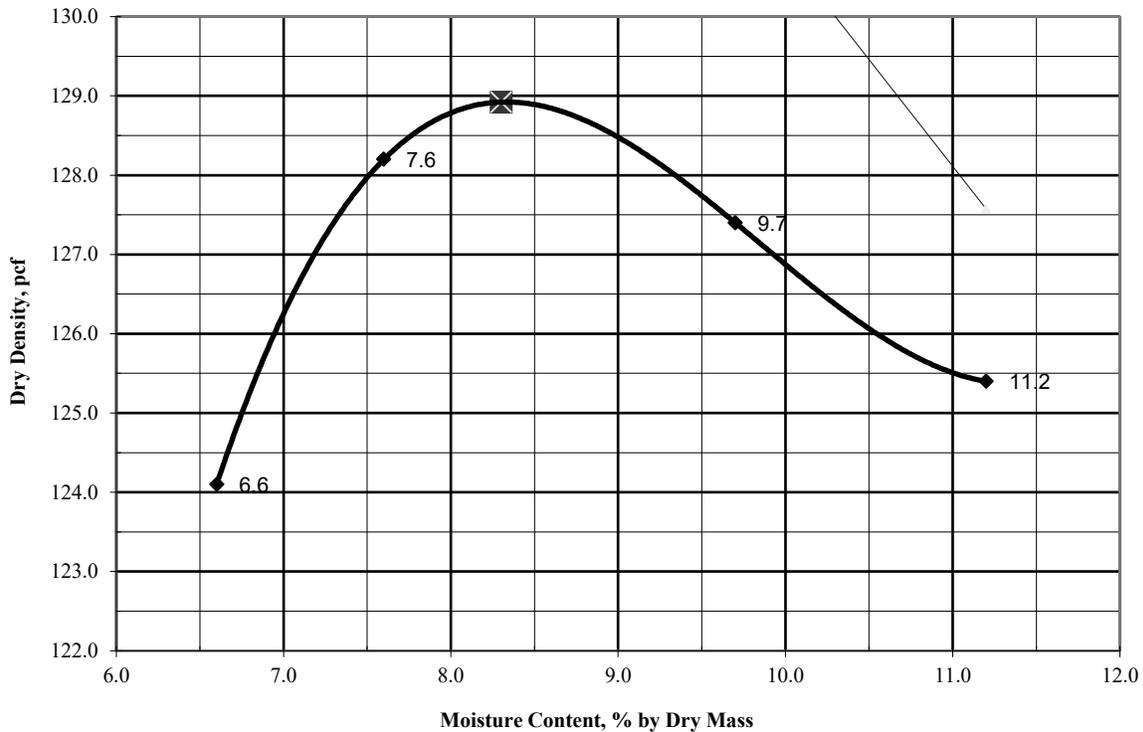
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 1813 State Route 7, Harpursville, NY 13787

CLIENT:	Sevenson Environmental Services Inc.	PROJECT NO.:	200608
PROJECT:	Honeywell Project Jersey City, NJ	LAB NUMBER:	20-0920C
TEST METHOD:	ASTM D 1557 'Modified Proctor'	Method:	C
SOIL ID NUMBER:	6		
ITEM:	Common Borrow		
SOURCE:	On-Site Existing Material		
SOIL DESCRIPTION:	Dk Brown Silty Sand w/ Nat Gravel: 61% Sand; 22% Gravel; 17% Silt		
DATE SAMPLED:	8/19/2020	SAMPLED BY:	Carson Blake
DATE TESTED:	8/20/2020	TESTED BY:	Robert Sanborn

REPORT OF MOISTURE DENSITY RELATIONSHIP



Individual Test Points	
Percent Moisture	Dry Density
6.6	124.1
7.6	128.2
9.7	127.4
11.2	125.4

Uncorrected Maximum Dry Density: 128.9 lb/cu. ft.
 Uncorrected Optimum Moisture Content: 8.3 %
 Specific Gravity of Soils *: 2.65
 Percent Oversize Particles: 2.9 %
 Specific Gravity of Oversize*: 2.67

Corrected* Maximum Dry Density: 128.9 lb/cu. ft.
Corrected* Opt. Moisture Content: 8.3 %

**Corrected for oversize, when oversize particles exceed 5% of sample.
 **Sieve Analysis from sample 20-0920B

Emily J. Rodriguez

Report Reviewed By:

*Specific Gravity of Soils Estimated and Specific Gravity of Oversize Estimated.

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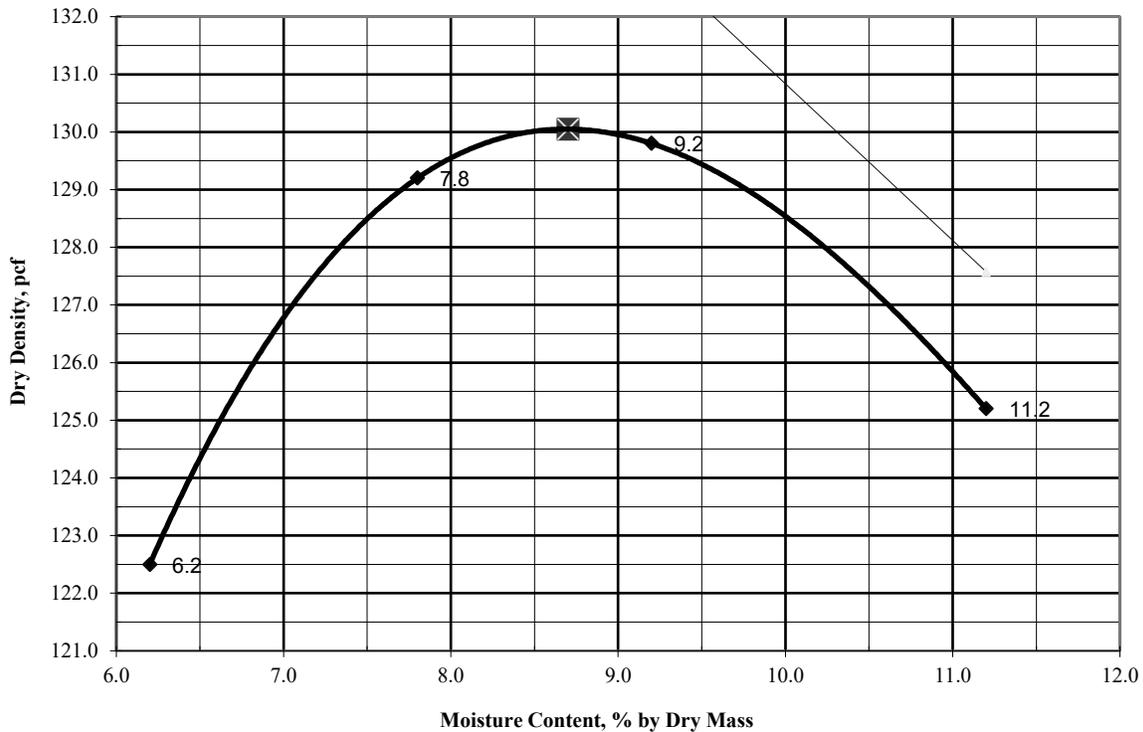
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 12960 Commerce Lake Drive, A14, Fort Myers, FL 33
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

CLIENT:	Sevenson Environmental Services Inc.	PROJECT NO.:	200608
PROJECT:	Honeywell Project Jersey City, NJ	LAB NUMBER:	20-0920D
TEST METHOD:	ASTM D 698 'Standard Proctor'	Method:	C
SOIL ID NUMBER:	7		
ITEM:	Common Borrow		
SOURCE:	On-Site Existing Material		
SOIL DESCRIPTION:	Dk Brown Silty Sand w/ Nat Gravel: 61% Sand; 22% Gravel; 17% Silt		
DATE SAMPLED:	8/19/2020	SAMPLED BY:	Carson Blake
DATE TESTED:	2:00:00 AM	TESTED BY:	Steven Bordengo

REPORT OF MOISTURE DENSITY RELATIONSHIP



Individual Test Points	
Percent Moisture	Dry Density
6.2	122.5
7.8	129.2
9.2	129.8
11.2	125.2

Uncorrected Maximum Dry Density: 130.0 lb/cu. ft.
 Uncorrected Optimum Moisture Content: 8.7 %
 Specific Gravity of Soils *: 2.65
 Percent Oversize Particles: 2.9 %
 Specific Gravity of Oversize*: 2.67

Corrected* Maximum Dry Density: 130.0 lb/cu. ft.
Corrected* Opt. Moisture Content: 8.7 %

***Corrected for oversize, when oversize particles exceed 5% of sample.*

Emily J. Rodriguez

Report Reviewed By:

*Specific Gravity of Soils Estimated and Specific Gravity of Oversize Estimated.

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 Phone: 845-496-1600 Fax: 845-496-1398
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 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Item:	Common Borrow	Project Number:	200608
Source:	On-Site Existing Material; Open Face Area	Lab Number:	20-0920B
Date Sampled:	8/19/2020	Sampled By:	Carson Blake
Date Tested:	8/20/2020	Tested By:	Steven Bordengo

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE
Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
20-0920B	Common Borrow	Stockpile	No Specification

Sieve Size		% Retained	% Passing	Spec. % Pass
mm	Inches			
100.0 mm	4"	0.0	100	
75.0 mm	3"	0.0	100	
63.0 mm	2 1/2"	0.0	100	
50.0 mm	2"	0.0	100	
37.5 mm	1 1/2"	0.0	100	
25.0 mm	1"	0.3	100	
19.0 mm	3/4"	2.6	97	
12.5 mm	1/2"	5.9	91	
6.3 mm	1/4"	9.1	82	
4.75 mm	#4	3.8	78	
2.00 mm	#10	17.0	61	
0.850 mm	#20	15.3	46	
0.600 mm	#30	4.4	42	
0.425 mm	#40	4.3	37	
0.150 mm	#100	13.8	24	
0.075 mm	#200	6.8	17	
Pan		16.7		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By:

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ANALYTICAL REPORT

Job Number: 460-216412-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, NY 14305
Attention: Mr. Michael F Marrone



Approved for release.
Allison L Bennett
Project Manager I
8/25/2020 4:01 PM

Allison L Bennett, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(732)593-2517
Allison.Bennett@Eurofinset.com
08/25/2020

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

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

Eurofins TestAmerica, Edison

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CASE NARRATIVE

Client: Severson Environmental Services, Inc.

Project: 1247 HON SA-6 South Deferred Area

Report Number: 460-216412-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The sample was received on 8/19/2020 4:30 PM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0° C.

Receipt Exceptions

The following sample was received at the laboratory without a sample collection time documented on the chain of custody and was entered from the associated sample container: 1247 EME Horizon A Topsoil (460-216412-1).

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

HEXAVALENT CHROMIUM VI DKQP (TOTAL)

Sample 1247 EME Horizon A Topsoil (460-216412-1) was analyzed for Hexavalent Chromium VI DKQP (Total) in accordance with EPA SW-846 Method 7196A (DKQP). The samples were prepared on 08/21/2020 and analyzed on 08/24/2020.

No difficulties were encountered during the Hexavalent Chromium VI DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Sample 1247 EME Horizon A Topsoil (460-216412-1) was analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 08/20/2020.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins TestAmerica, Edison
Project Location: 1247 HON SA-6 South Deferred Area
Laboratory Sample ID(s): 460-216412-1
List DKQP Methods Used: 7196A

Client: Severson Environmental Services, Inc.
Project Number: 460-216412-1
Sampling Date(s): 08/19/2020

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
1B	<u>EPH Method:</u> Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody documents(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? b) Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> See case narrative
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spike and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet requirements for "Data of Known Quality."

Sample Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-216412-1	1247 EME Horizon A Topsoil	Solid	08/19/20 10:24	08/19/20 16:30	

Detection Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Method Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Method	Method Description	Protocol	Laboratory
7196A	Chromium, Hexavalent	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

Date Collected: 08/19/20 10:24

Matrix: Solid

Date Received: 08/19/20 16:30

Percent Solids: 84.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.41	U	2.3	0.41	mg/Kg	☼	08/21/20 14:38	08/24/20 13:56	1

QC Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 460-718708/1-A

Matrix: Solid

Analysis Batch: 719198

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 718708

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.35	U	2.0	0.35	mg/Kg		08/21/20 14:38	08/24/20 12:24	1

Lab Sample ID: LCSi 460-718708/3-A

Matrix: Solid

Analysis Batch: 719198

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 718708

Analyte	Spike Added	LCSi Result	LCSi Qualifier	Unit	D	%Rec	Limits
Cr (VI)	708	675.7		mg/Kg		95	80 - 120

Lab Sample ID: LCSSRM 460-718708/2-A

Matrix: Solid

Analysis Batch: 719198

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 718708

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	Limits
Cr (VI)	15.6	15.10		mg/Kg		97.0	84.2 - 114.5

Lab Sample ID: 460-216396-I-1-G MSS

Matrix: Solid

Analysis Batch: 719198

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 718708

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	Limits
Cr (VI)	0.38	U	43.9	45.85		mg/Kg	☼	104	75 - 125

Lab Sample ID: 460-216396-I-1-H MSI

Matrix: Solid

Analysis Batch: 719198

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 718708

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	Limits
Cr (VI)	0.38	U	777	679.3		mg/Kg	☼	87	75 - 125

Lab Sample ID: 460-216396-I-1-F DU

Matrix: Solid

Analysis Batch: 719198

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 718708

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.38	U	0.38	U	mg/Kg	☼	NC	20

Definitions/Glossary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

General Chemistry

Analysis Batch: 718356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-216412-1	1247 EME Horizon A Topsoil	Total/NA	Solid	Moisture	
460-216408-A-5 DU	Duplicate	Total/NA	Solid	Moisture	

Prep Batch: 718708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-216412-1	1247 EME Horizon A Topsoil	Total/NA	Solid	3060A	
MB 460-718708/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 460-718708/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSSRM 460-718708/2-A	Lab Control Sample	Total/NA	Solid	3060A	
460-216396-I-1-G MSS	Matrix Spike	Total/NA	Solid	3060A	
460-216396-I-1-H MSI	Matrix Spike	Total/NA	Solid	3060A	
460-216396-I-1-F DU	Duplicate	Total/NA	Solid	3060A	

Analysis Batch: 719198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-216412-1	1247 EME Horizon A Topsoil	Total/NA	Solid	7196A	718708
MB 460-718708/1-A	Method Blank	Total/NA	Solid	7196A	718708
LCSI 460-718708/3-A	Lab Control Sample	Total/NA	Solid	7196A	718708
LCSSRM 460-718708/2-A	Lab Control Sample	Total/NA	Solid	7196A	718708
460-216396-I-1-G MSS	Matrix Spike	Total/NA	Solid	7196A	718708
460-216396-I-1-H MSI	Matrix Spike	Total/NA	Solid	7196A	718708
460-216396-I-1-F DU	Duplicate	Total/NA	Solid	7196A	718708

Lab Chronicle

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

Date Collected: 08/19/20 10:24

Matrix: Solid

Date Received: 08/19/20 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	718356	08/20/20 13:53	MMC	TAL EDI

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

Date Collected: 08/19/20 10:24

Matrix: Solid

Date Received: 08/19/20 16:30

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			718708	08/21/20 14:38	MBE	TAL EDI
Total/NA	Analysis	7196A		1	719198	08/24/20 13:56	RPR	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Laboratory: Eurofins TestAmerica, Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	12028	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7196A	3060A	Solid	Cr (VI)
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job Number: 460-216412-1

SDG No.: _____

Project: 1247 HON SA-6 South Deferred Area

Client Sample ID
1247 EME Horizon A Topsoil

Lab Sample ID
460-216412-1

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-216412-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 08/19/2020 10:24

Reporting Basis: DRY

Date Received: 08/19/2020 16:30

% Solids: 84.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18540-29-9	Cr (VI)	0.41	2.3	0.41	mg/Kg	U		1	7196A

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1
 SDG No.: _____
 Analyst: RPR Batch Start Date: 08/24/2020
 Reporting Units: ug/L Analytical Batch No.: 719198

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	09:32	Cr (VI)	506.1	500	101	90-110		WThcrIM3_00051
8	ICB	09:32	Cr (VI)	8.1				U	
19	CCV	12:24	Cr (VI)	506.1	500	101	90-110		WThcrIM3_00051
20	CCB	12:24	Cr (VI)	8.1				U	
31	CCV	13:56	Cr (VI)	506.1	500	101	90-110		WThcrIM3_00051
32	CCB	13:56	Cr (VI)	8.1				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-216412-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 719198 Date: 08/24/2020 12:24 Prep Batch: 718708 Date: 08/21/2020 14:38							
7196A	MB 460-718708/1-A	Cr (VI)	0.35	U	mg/Kg	2.0	1

5-IN
 POST DIGESTION SPIKE SAMPLE RECOVERY
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 719198		Date: 08/24/2020 12:24	Prep Batch: 718708		Date: 08/21/2020 14:38						
7196A	460-216396-I-1-E	Cr (VI)	0.38	U	mg/Kg						
7196A	460-216396-I-1-E PDS	Cr (VI)	49.11		mg/Kg	43.9	112	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Note - Results and Reporting Limits have been adjusted for dry weight.

5-IN
 MATRIX SPIKE SOLUBLE SAMPLE RECOVERY
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 719198 Date: 08/24/2020 12:24 Prep Batch: 718708 Date: 08/21/2020 14:38											
7196A	460-216396-I-1-G	Cr (VI)	0.38	U	mg/Kg						
7196A	460-216396-I-1-G MSS	Cr (VI)	45.85		mg/Kg	43.9	104	75-125			
Batch ID: 719198 Date: 08/24/2020 12:24 Prep Batch: 718708 Date: 08/21/2020 14:38											
7196A	460-216396-I-1-H	Cr (VI)	0.38	U	mg/Kg						
7196A	460-216396-I-1-H MSI	Cr (VI)	679.3		mg/Kg	777	87	75-125			

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Note - Results and Reporting Limits have been adjusted for dry weight.

6-IN
 DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 719198 Date: 08/24/2020 12:24 Prep Batch: 718708 Date: 08/21/2020 14:38								
7196A		460-216396-I-1-F	Cr (VI)	0.38	mg/Kg			U
7196A		460-216396-I-1-F DU	Cr (VI)	0.38	mg/Kg	NC	20	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LCS-CERTIFIED REFERENCE MATERIAL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1
 SDG No.: _____
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 719198 Date: 08/24/2020 12:24			Prep Batch: 718708 Date: 08/21/2020 14:38			LCS Source: WThcrsLCS_00104					
7196A	LCSSRM 460-718708/2- A	Cr (VI)	15.10		mg/Kg	15.6	97.0	84.2-11 4.5			

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE INSOLUBLE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1
 SDG No.: _____
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 719198 Date: 08/24/2020 12:24			Prep Batch: 718708 Date: 08/21/2020 14:38			LCS Source: WThcrPbCr_00005					
7196A	LCSI 460-718708/3- A	Cr (VI)	675.7		mg/Kg	708	95	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job Number: 460-216412-1
SDG Number: _____
Matrix: Solid Instrument ID: WetHexSpec
Method: 7196A MDL Date: 10/31/2019 15:04
Prep Method: 3060A

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Cr (VI)		2	0.349

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job Number: 460-216412-1
SDG Number: _____
Matrix: Solid Instrument ID: WetHexSpec
Method: 7196A XMDL Date: 10/31/2019 15:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Cr (VI)		10	8.14

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job Number: 460-216412-1
SDG Number: _____
Matrix: Solid Instrument ID: NOEQUIP
Method: Moisture RL Date: 02/15/2007 17:07

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		1	
Percent Solids		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job Number: 460-216412-1
SDG Number: _____
Matrix: Solid Instrument ID: NOEQUIP
Method: Moisture XRL Date: 01/01/2007 16:49

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		1	
Percent Solids		1	

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-216412-1

SDG No.: _____

Prep Method: 3060A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 460-718708/1-A	08/21/2020 14:38	718708	2.50		100
LCSSRM 460-718708/2-A	08/21/2020 14:38	718708	2.50		100
LCSI 460-718708/3-A	08/21/2020 14:38	718708	2.50		100
460-216396-I-1-F DU	08/21/2020 14:38	718708	2.50		100
460-216396-I-1-G MSS	08/21/2020 14:38	718708	2.50		100
460-216396-I-1-H MSI	08/21/2020 14:38	718708	2.50		100
460-216412-1	08/21/2020 14:38	718708	2.53		100

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Instrument ID: WetHexSpec Method: 7196A

Start Date: 08/24/2020 09:32 End Date: 08/24/2020 14:21

Prep Types

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Batch Number: 718708 Batch Start Date: 08/21/20 14:38 Batch Analyst: Esteban, Maria

Batch Method: 3060A Batch End Date: 08/22/20 20:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WThcrIM 00077	WThcrPbCr 00005	WThcrsLCS 00104	
MB 460-718708/1		3060A, 7196A		2.50 g	100 mL				
LCSSRM 460-718708/2		3060A, 7196A		2.50 g	100 mL			5 mL	
LCSI 460-718708/3		3060A, 7196A		2.50 g	100 mL		0.011 g		
460-216396-I-1 DU		3060A, 7196A	T	2.50 g	100 mL				
460-216396-I-1 MSS		3060A, 7196A	T	2.50 g	100 mL	1 mL			
460-216396-I-1 MSI		3060A, 7196A	T	2.50 g	100 mL		0.011 g		
460-216412-A-1	1247 EME Horizon A Topsoil	3060A, 7196A	T	2.53 g	100 mL				

Batch Notes	
Alkaline Digestion Solution pH	13.21 SU
Alkaline Digestion Solution ID	C 0718-20 exp 9/20/20
Balance ID	86
Buffer Reagent ID	C 0462-20 exp 12/15/20
First End time	08/21/2020 20:00
Magnesium Chloride ID	Across/ A402852
Oven, Bath or Block Temperature 1	94.0 Degrees C
pH Meter Calibration Slope	Lead chromate Acros/BCBL8355V exp. 09/03/20
First Start time	08/21/2020 19:00
Ending Temperature	95.0 Degrees C
Thermometer ID	N2
Temperature - Uncorrected - End	96.0 Degrees C
Uncorrected Temperature	96.0 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Batch Number: 719198 Batch Start Date: 08/24/20 08:08 Batch Analyst: Rana, Riya P

Batch Method: 7196A Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	ColorBlk	UnCorResp	Initial pH	Final pH	WThcrIM 00077
IC 460-719198/1		7196A		100 mL		0.000 Absorbance	7.99 SU	2.15 SU	
IC 460-719198/2		7196A		100 mL		0.040 Absorbance	7.95 SU	2.00 SU	0.05 mL
IC 460-719198/3		7196A		100 mL		0.080 Absorbance	7.98 SU	2.02 SU	0.1 mL
IC 460-719198/4		7196A		100 mL		0.409 Absorbance	7.88 SU	2.17 SU	0.5 mL
IC 460-719198/5		7196A		100 mL		0.611 Absorbance	7.92 SU	2.08 SU	0.75 mL
IC 460-719198/6		7196A		100 mL		1.008 Absorbance	7.97 SU	2.29 SU	1.25 mL
ICV 460-719198/7		7196A		100 mL		0.410 Absorbance	7.91 SU	2.07 SU	
ICB 460-719198/8		7196A		100 mL		0.000 Absorbance	7.90 SU	2.04 SU	
MB 460-718708/1-A		7196A		100 mL		0.000 Absorbance	7.93 SU	2.05 SU	
LCSSRM 460-718708/2-A		7196A		100 mL		0.306 Absorbance	7.80 SU	2.25 SU	
LCSI 460-718708/3-A		7196A		100 mL		0.274 Absorbance	7.96 SU	2.37 SU	
460-216396-I-1-F DU		7196A	T	100 mL	0.000 Absorbance	0.003 Absorbance	7.92 SU	2.03 SU	
460-216396-I-1-G MSS		7196A	T	100 mL	0.000 Absorbance	0.845 Absorbance	7.89 SU	2.20 SU	
460-216396-I-1-H MSI		7196A	T	100 mL	0.000 Absorbance	0.251 Absorbance	7.97 SU	2.29 SU	
460-216396-I-1-E PDS		7196A	T	50 mL	0.000 Absorbance	0.905 Absorbance	7.83 SU	2.01 SU	0.5 mL
CCV 460-719198/19		7196A		100 mL		0.410 Absorbance	7.91 SU	2.07 SU	
CCB 460-719198/20		7196A		100 mL		0.000 Absorbance	7.90 SU	2.04 SU	
460-216412-A-1-A	1247 EME Horizon A Topsoil	7196A	T	100 mL	0.024 Absorbance	0.022 Absorbance	7.93 SU	2.11 SU	
CCV 460-719198/31		7196A		100 mL		0.410 Absorbance	7.91 SU	2.07 SU	
CCB 460-719198/32		7196A		100 mL		0.000 Absorbance	7.90 SU	2.04 SU	

Lab Sample ID	Client Sample ID	Method Chain	Basis	WThcrIM3 00051	AnalysisComment				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Batch Number: 719198 Batch Start Date: 08/24/20 08:08 Batch Analyst: Rana, Riya P

Batch Method: 7196A Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WThcrIM3 00051	AnalysisComment				
IC 460-719198/1		7196A							
IC 460-719198/2		7196A							
IC 460-719198/3		7196A							
IC 460-719198/4		7196A							
IC 460-719198/5		7196A							
IC 460-719198/6		7196A							
ICV 460-719198/7		7196A		0.5 mL					
ICB 460-719198/8		7196A							
MB 460-718708/1-A		7196A							
LCSSRM 460-718708/2-A		7196A							
LCSI 460-718708/3-A		7196A							
460-216396-I-1-F DU		7196A	T		2.03				
460-216396-I-1-G MSS		7196A	T		2.05				
460-216396-I-1-H MSI		7196A	T		2.09				
460-216396-I-1-E PDS		7196A	T		2.01				
CCV 460-719198/19		7196A		0.5 mL					
CCB 460-719198/20		7196A							
460-216412-A-1-A	1247 EME Horizon A Topsoil	7196A	T		2.09				
CCV 460-719198/31		7196A		0.5 mL					
CCB 460-719198/32		7196A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Batch Number: 719198 Batch Start Date: 08/24/20 08:08 Batch Analyst: Rana, Riya P

Batch Method: 7196A Batch End Date: _____

Batch Notes	
Acid Used for pH Adjustment ID	10% H2SO4 C-0490-20 exp 12/25/20
Spectrophotometer Cell Path Length	1 cm
Color Reagent ID	C-0692-20 exp 09/14/20
Phosphoric Acid ID	HNO3 (1:1) C-0491-20 exp 12/25/20

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-216412-1

SDG No.: _____

Batch Number: 718356 Batch Start Date: 08/20/20 13:53 Batch Analyst: Crocco, Michael

Batch Method: Moisture Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-216408-A-5 DU		Moisture	T	47	1.02 g	6.69 g	6.28 g		
460-216412-A-1	1247 EME Horizon A Topsoil	Moisture	T	60	1.00 g	6.77 g	5.90 g		

Batch Notes	
Balance ID	104
Date and Time Samples in Desiccator	08/21/2020 06:20
Date and Time Samples out of Desiccator	08/21/2020 07:54
Date samples were placed in the oven	08/20/2020
Oven Temp In	111 Degrees C
Time samples were place in the oven	14:18
Date samples were removed from oven	08/21/2020
Oven Temp Out	112 Degrees C
Time Samples were removed from oven	06:20
Oven ID	1
Thermometer ID	206109
Temperature - Start - Uncorrected	111 Degrees C
Temperature - End - Uncorrected	112 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Chain of Custody Record

Euofins TestAmerica, Edison
 777 New Durham Road
 Edison, NJ 08817
 Phone (732) 549-3900 Fax (732) 549-3679

Client Information		Lab PM: Bennett, Allison L		Carrier Tracking No(s): Test America/Euofins Courier Service		COC No: _____	
Client Contact: Mike Marrone		Phone: 716 525 5142		E-Mail: allison.bennett@testamericainc.com		Page: Page 1 of 1	
Company: Sevenson Environmental Services, Inc.		Due Date Requested: _____		Analysis Requested		Job #: 1247	
Address: 2749 Lockport Road		TAT Requested (days): 3BD TAT					
City: Niagara Falls		PO #: 1247 MM					
State, Zip: NY, 14305		WO #: _____					
Project Name: 1247 HON SA-6 South Deferred Area		Project #: _____		Field Filtered Sample (Yes or No)		Preservation Codes:	
Site: Deferred Area Backfill Sampling		SSOW#: _____					
Sample Identification		Sample Date		Sample Time		Sample Type	
1247 EME Horizon A Topsoil		8/19/20		2:15:15		G Solid	
							
460-216412 Chain of Custody							
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant	
Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
Empty Kit Relinquished by: _____		Date: _____		Time: _____		Method of Shipment: _____	
Relinquished by: Tom Dave		Date/Time: 8/19 10:25		Company: ETA		Date/Time: 8/19/20 10:25	
Relinquished by: Mike Marrone		Date/Time: 8/19/20 16:30		Company: ETA		Date/Time: 8/19/20 16:30	
Relinquished by: _____		Date/Time: _____		Company: _____		Date/Time: _____	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: W6		Cooler Temperature(s) °C and Other Remarks: 5-22/11-3.0		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	

3-Day RUSH

Login Sample Receipt Checklist

Client: Severson Environmental Services, Inc.

Job Number: 460-216412-1

Login Number: 216412
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins TestAmerica, Edison

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

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-216412-1

Client Project/Site: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Attn: Mr. Michael F Marrone



Authorized for release by:
8/25/2020 4:01:14 PM

Allison Bennett, Project Manager I
(732)593-2517
Allison.Bennett@Eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



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Definitions/Glossary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins TestAmerica, Edison
Project Location: 1247 HON SA-6 South Deferred Area
Laboratory Sample ID(s): 460-216412-1
List DKQP Methods Used: 7196A

Client: Severson Environmental Services, Inc.
Project Number: 460-216412-1
Sampling Date(s): 08/19/2020

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
1B	<u>EPH Method:</u> Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody documents(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? b) Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> See case narrative
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spike and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet requirements for "Data of Known Quality."



Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Job ID: 460-216412-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

CASE NARRATIVE

Client: Severson Environmental Services, Inc.

Project: 1247 HON SA-6 South Deferred Area

Report Number: 460-216412-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The sample was received on 8/19/2020 4:30 PM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0° C.

Receipt Exceptions

The following sample was received at the laboratory without a sample collection time documented on the chain of custody and was entered from the associated sample container: 1247 EME Horizon A Topsoil (460-216412-1).

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

HEXAVALENT CHROMIUM VI DKQP (TOTAL)

Sample 1247 EME Horizon A Topsoil (460-216412-1) was analyzed for Hexavalent Chromium VI DKQP (Total) in accordance with EPA SW-846 Method 7196A (DKQP). The samples were prepared on 08/21/2020 and analyzed on 08/24/2020.

No difficulties were encountered during the Hexavalent Chromium VI DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Sample 1247 EME Horizon A Topsoil (460-216412-1) was analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 08/20/2020.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

Date Collected: 08/19/20 10:24

Matrix: Solid

Date Received: 08/19/20 16:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.1		1.0	1.0	%			08/20/20 13:53	1
Percent Solids	84.9		1.0	1.0	%			08/20/20 13:53	1

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

Date Collected: 08/19/20 10:24

Matrix: Solid

Date Received: 08/19/20 16:30

Percent Solids: 84.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.41	U	2.3	0.41	mg/Kg	☼	08/21/20 14:38	08/24/20 13:56	1



Lab Chronicle

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

Date Collected: 08/19/20 10:24

Matrix: Solid

Date Received: 08/19/20 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	718356	08/20/20 13:53	MMC	TAL EDI

Client Sample ID: 1247 EME Horizon A Topsoil

Lab Sample ID: 460-216412-1

Date Collected: 08/19/20 10:24

Matrix: Solid

Date Received: 08/19/20 16:30

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			718708	08/21/20 14:38	MBE	TAL EDI
Total/NA	Analysis	7196A		1	719198	08/24/20 13:56	RPR	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Laboratory: Eurofins TestAmerica, Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	12028	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7196A	3060A	Solid	Cr (VI)
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Method	Method Description	Protocol	Laboratory
7196A	Chromium, Hexavalent	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900



Sample Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-216412-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-216412-1	1247 EME Horizon A Topsoil	Solid	08/19/20 10:24	08/19/20 16:30	

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

Login Sample Receipt Checklist

Client: Severson Environmental Services, Inc.

Job Number: 460-216412-1

Login Number: 216412

List Number: 1

Creator: Rivera, Kenneth

List Source: Eurofins TestAmerica, Edison

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



TestAmerica Laboratories, Inc.**Eurofins TestAmerica, Edison**

Lab Job ID: 460-216412-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	1247 EME Horizon A Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-216412-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/19/2020 10:24:00		
Matrix				Soil		
				Result	Q	MDL
SOIL BY 7196A						
Cr (VI) (mg/kg)	NA	NA	NA	0.41	U	0.41

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517



3348 Route 208, Campbell Hall, NY 10916
 Phone: 845-496-1600 Fax: 845-496-1398
 12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental	Project:	Honeywell Project Jersey City, NJ
Material:	Horizon A Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0998
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	9/9/2020	Sampled By:	Client
Date Tested:	9/11/2020	Tested By:	Brian Mattioli

Report of pH of Soil
Test Method: ASTM D4972 Method A

pH Test Result: 5.8 (in Distilled Water)

5.3 (In Calcium Chloride Solution)

Specification

Comments:

Emily J. Rodriguez

Report Reviewed By: _____

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 The results in this report relate only to the items inspected or tested.

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-217093-1

Client Project/Site: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Attn: Mr. Michael F Marrone



Authorized for release by:
9/4/2020 8:00:56 AM

Allison Bennett, Project Manager I
(732)593-2517
Allison.Bennett@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



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Definitions/Glossary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
A	The tentatively identified compound is a suspected aldol-condensation product.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

Eurofins TestAmerica, Edison

Definitions/Glossary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins TestAmerica, Edison

Client: Severson Environmental Services, Inc.

Project Location: 1247 HON SA-6 South Deferred Area

Project Number: 460-217093-1

Laboratory Sample ID(s): 460-217093-1, 460-217093-2

Sampling Date(s): 08/27/2020

List DKQP Methods Used: 8260C, 8270D, 8081B, 8082A, 6020B, 7471B, 7196A, 9012B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
1B	<u>EPH Method:</u> Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody documents(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? b) Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See case narrative <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> See case narrative
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spike and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet requirements for "Data of Known Quality."



Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Job ID: 460-217093-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

CASE NARRATIVE

Client: Severson Environmental Services, Inc.

Project: 1247 HON SA-6 South Deferred Area

Report Number: 460-217093-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/28/2020 4:40 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP (TOTAL)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Volatile Organic Compounds (GC/MS) DKQP (Total) in accordance with EPA SW-846 Method 8260C (DKQP). The samples were prepared on 08/28/2020 and analyzed on 08/30/2020.

The continuing calibration verification (CCV) analyzed in batch 460-720629 was outside the method criteria for the following analytes: Bromoform (biased low) and Bromomethane, Acrolein and Acrylonitrile (biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-720629 recovered outside control limits for the following analytes: Bromoform, Acrolein, Acrylonitrile and Bromomethane. These analytes were not detected in the associated samples; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the Volatile Organic Compounds (GC/MS) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP (TOTAL)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Semivolatile Organic

Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Job ID: 460-217093-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

Compounds (GC/MS) DKQP (Total) in accordance with EPA SW-846 Method 8270D (DKQP). The samples were prepared on 09/01/2020 and analyzed on 09/02/2020.

The continuing calibration verification (CCV) analyzed in batch 460-720914 was outside the method criteria for the following analyte(s): 4,6-Dinitro-2-methylphenol, Hexachlorocyclopentadiene and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) and/or lab control sample duplicate (LCSD) associated with preparation batch 460-721052 and analytical batch 460-720914 was outside DKQP recovery criteria but with laboratory generated limits for the following analytes: 3,3'-Dichlorobenzidine. The data has been reported.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 460-721052 and analytical batch 460-720914 recovered outside control limits for the following analytes: Atrazine and Caprolactam. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the Semivolatile Organic Compounds (GC/MS) DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits.

ORGANOCHLORINE PESTICIDES (GC) DKQP (TOTAL)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Organochlorine Pesticides (GC) DKQP (Total) in accordance with EPA SW-846 Method 8081B (DKQP). The samples were prepared on 08/29/2020 and analyzed on 08/31/2020.

No difficulties were encountered during the Organochlorine Pesticides (GC) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP (TOTAL)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Polychlorinated Biphenyls (PCBs) DKQP (Total) in accordance with EPA SW-846 Method 8082A (DKQP). The samples were prepared on 08/29/2020 and analyzed on 08/31/2020.

No difficulties were encountered during the Polychlorinated Biphenyls (PCBs) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

METALS DKQP (TOTAL)(ICP/MS)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Metals DKQP (Total) (ICP/MS) in accordance with EPA SW-846 Method 6020B (DKQP). The samples were prepared on 08/29/2020 and analyzed on 08/30/2020.

Several analytes failed the recovery criteria low for the MS of sample 460-217089-1 in batch 460-720689. Vanadium failed the recovery criteria high.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the Metals DKQP (Total)(ICP/MS) analysis.

Case Narrative

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Job ID: 460-217093-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

All other quality control parameters were within the acceptance limits.

MERCURY (HG) DKQP (TOTAL)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Mercury (Hg) DKQP (Total) in accordance with EPA SW-846 Method 7471B (DKQP). The samples were prepared and analyzed on 09/02/2020.

No difficulties were encountered during the Mercury (Hg) DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM VI DKQP (TOTAL)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Hexavalent Chromium VI DKQP (Total) in accordance with EPA SW-846 Method 7196A (DKQP). The samples were prepared and analyzed on 09/01/2020.

Cr (VI) exceeded the RPD limit for the duplicate of sample 460-216731-1.

Refer to the QC report for details.

No other difficulties were encountered during the Hexavalent Chromium VI DKQP (Total) analysis.

All other quality control parameters were within the acceptance limits.

CYANIDE (CN) DKQP (TOTAL)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Cyanide (CN) DKQP (Total) in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared and analyzed on 09/02/2020.

No difficulties were encountered during the Cyanide (CN) DKQP (Total) analysis.

All quality control parameters were within the acceptance limits.

CORROSIVITY (PH)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for corrosivity (pH) in accordance with EPA SW-846 Method 9045D. The samples were analyzed on 08/31/2020.

No difficulties were encountered during the corrosivity (pH) analysis.

All other quality control parameters were within the acceptance limits.

LLOYD KAHN METHOD (TOTAL ORGANIC CARBON)

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for Lloyd Kahn Method (total organic carbon) in accordance with Lloyd Kahn Method. The samples were analyzed on 09/03/2020.

No difficulties were encountered during the TOC analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Samples EME Horizon B Topsoil (460-217093-1) and EME Horizon C Topsoil (460-217093-2) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 09/01/2020.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon B Topsoil

Lab Sample ID: 460-217093-1

Date Collected: 08/27/20 11:00

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00032	U	0.0014	0.00032	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
1,1,2,2-Tetrachloroethane	0.00029	U	0.0014	0.00029	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
1,1,2-Trichloroethane	0.00024	U	0.0014	0.00024	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
1,1-Dichloroethane	0.00028	U	0.0014	0.00028	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
1,1-Dichloroethene	0.00031	U	0.0014	0.00031	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
1,2-Dibromo-3-Chloropropane	0.00063	U	0.0014	0.00063	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
1,2-Dibromoethane	0.00025	U	0.0014	0.00025	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
1,2-Dichloroethane	0.00040	U	0.0014	0.00040	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
1,2-Dichloropropane	0.00058	U	0.0014	0.00058	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
2-Butanone	0.0037	U	0.0068	0.0037	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
2-Chloroethyl vinyl ether	0.0022	U	0.0027	0.0022	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
2-Hexanone	0.0023	U	0.0068	0.0023	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
4-Methyl-2-pentanone	0.0021	U	0.0068	0.0021	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Acetone	0.0078	U	0.0082	0.0078	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Acrolein	0.038	U *	0.14	0.038	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Acrylonitrile	0.0022	U *	0.014	0.0022	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Benzene	0.00035	U	0.0014	0.00035	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Bromodichloromethane	0.00035	U	0.0014	0.00035	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Bromoform	0.00058	U *	0.0014	0.00058	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Bromomethane	0.00065	U *	0.0014	0.00065	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Carbon disulfide	0.00036	U	0.0014	0.00036	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Carbon tetrachloride	0.00053	U	0.0014	0.00053	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Chlorobenzene	0.00024	U	0.0014	0.00024	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Chloroethane	0.00071	U	0.0014	0.00071	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Chloroform	0.0021		0.0014	0.00043	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Chloromethane	0.00059	U	0.0014	0.00059	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
cis-1,2-Dichloroethene	0.00021	U	0.0014	0.00021	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
cis-1,3-Dichloropropene	0.00037	U	0.0014	0.00037	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Dibromochloromethane	0.00026	U	0.0014	0.00026	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Dichlorodifluoromethane	0.00046	U	0.0014	0.00046	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Ethylbenzene	0.00027	U	0.0014	0.00027	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Methyl acetate	0.0059	U	0.0068	0.0059	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Methylene Chloride	0.00063	U	0.0014	0.00063	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
MTBE	0.00017	U	0.0014	0.00017	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Styrene	0.00038	U	0.0014	0.00038	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
TBA	0.0045	U	0.014	0.0045	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Tetrachloroethene	0.00019	U	0.0014	0.00019	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Toluene	0.00032	U	0.0014	0.00032	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
trans-1,2-Dichloroethene	0.00033	U	0.0014	0.00033	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
trans-1,3-Dichloropropene	0.00036	U	0.0014	0.00036	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Trichloroethene	0.00020	U	0.0014	0.00020	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Trichlorofluoromethane	0.00055	U	0.0014	0.00055	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Vinyl chloride	0.00074	U	0.0014	0.00074	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1
Xylenes, Total	0.00024	U	0.0014	0.00024	mg/Kg	☼	08/28/20 23:40	08/30/20 13:58	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		mg/Kg	☼			08/28/20 23:40	08/30/20 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	08/28/20 23:40	08/30/20 13:58	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon B Topsoil

Lab Sample ID: 460-217093-1

Date Collected: 08/27/20 11:00

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 91.6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	111		70 - 130	08/28/20 23:40	08/30/20 13:58	1
Dibromofluoromethane (Surr)	106		70 - 130	08/28/20 23:40	08/30/20 13:58	1
Toluene-d8 (Surr)	112		70 - 130	08/28/20 23:40	08/30/20 13:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.0048	U	0.36	0.0048	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
1,2,4-Trichlorobenzene	0.0093	U	0.036	0.0093	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
1,2-Dichlorobenzene	0.0062	U	0.36	0.0062	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
1,2-Diphenylhydrazine	0.0066	U	0.36	0.0066	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
1,3-Dichlorobenzene	0.0048	U	0.36	0.0048	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
1,4-Dichlorobenzene	0.014	U	0.36	0.014	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2,4,5-Trichlorophenol	0.037	U	0.36	0.037	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2,4,6-Trichlorophenol	0.046	U	0.15	0.046	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2,4-Dichlorophenol	0.023	U	0.15	0.023	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2,4-Dimethylphenol	0.016	U	0.36	0.016	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2,4-Dinitrophenol	0.18	U	0.29	0.18	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2,4-Dinitrotoluene	0.039	U	0.073	0.039	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2,6-Dinitrotoluene	0.026	U	0.073	0.026	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2-Chloronaphthalene	0.017	U	0.36	0.017	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2-Chlorophenol	0.013	U	0.36	0.013	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2-Methylnaphthalene	0.010	U	0.36	0.010	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2-Methylphenol	0.013	U	0.36	0.013	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2-Nitroaniline	0.013	U	0.36	0.013	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
2-Nitrophenol	0.036	U	0.36	0.036	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
3,3'-Dichlorobenzidine	0.055	U *	0.15	0.055	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
3-Nitroaniline	0.041	U	0.36	0.041	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
4,6-Dinitro-2-methylphenol	0.059	U	0.29	0.059	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
4-Bromophenyl phenyl ether	0.014	U	0.36	0.014	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
4-Chloro-3-methylphenol	0.020	U	0.36	0.020	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
4-Chloroaniline	0.025	U	0.36	0.025	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
4-Chlorophenyl phenyl ether	0.013	U	0.36	0.013	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
4-Methylphenol	0.023	U	0.36	0.023	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
4-Nitroaniline	0.041	U	0.36	0.041	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
4-Nitrophenol	0.059	U	0.73	0.059	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Acenaphthene	0.026	U	0.36	0.026	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Acenaphthylene	0.0037	U	0.36	0.0037	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Acetophenone	0.018	U	0.36	0.018	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Anthracene	0.011	U	0.36	0.011	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Atrazine	0.0091	U *	0.15	0.0091	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Benzaldehyde	0.016	U	0.36	0.016	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Benzidine	0.036	U	0.36	0.036	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Benzo[a]anthracene	0.013	U	0.036	0.013	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Benzo[a]pyrene	0.0096	U	0.036	0.0096	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Benzo[b]fluoranthene	0.0093	U	0.036	0.0093	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Benzo[g,h,i]perylene	0.011	U	0.36	0.011	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Benzo[k]fluoranthene	0.0071	U	0.036	0.0071	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
bis (2-chloroisopropyl) ether	0.0065	U	0.36	0.0065	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1
Bis(2-chloroethoxy)methane	0.028	U	0.36	0.028	mg/Kg	☆	09/01/20 09:15	09/02/20 04:37	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon B Topsoil

Lab Sample ID: 460-217093-1

Date Collected: 08/27/20 11:00

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.013	U	0.036	0.013	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Bis(2-ethylhexyl) phthalate	0.019	U	0.36	0.019	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Butyl benzyl phthalate	0.017	U	0.36	0.017	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Caprolactam	0.056	U *	0.36	0.056	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Carbazole	0.014	U	0.36	0.014	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Chrysene	0.0061	U	0.36	0.0061	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Dibenz(a,h)anthracene	0.016	U	0.036	0.016	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Dibenzofuran	0.0051	U	0.36	0.0051	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Diethyl phthalate	0.0052	U	0.36	0.0052	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Dimethyl phthalate	0.082	U	0.36	0.082	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Di-n-butyl phthalate	0.064	U	0.36	0.064	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Di-n-octyl phthalate	0.019	U	0.36	0.019	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Fluoranthene	0.013	U	0.36	0.013	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Fluorene	0.0049	U	0.36	0.0049	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Hexachlorobenzene	0.017	U	0.036	0.017	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Hexachlorobutadiene	0.0077	U	0.073	0.0077	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Hexachlorocyclopentadiene	0.032	U	0.36	0.032	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Hexachloroethane	0.012	U	0.036	0.012	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Indeno[1,2,3-cd]pyrene	0.014	U	0.036	0.014	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Isophorone	0.10	U	0.15	0.10	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Naphthalene	0.0062	U	0.36	0.0062	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Nitrobenzene	0.0087	U	0.036	0.0087	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
N-Nitrosodimethylamine	0.033	U	0.36	0.033	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
N-Nitrosodi-n-propylamine	0.026	U	0.036	0.026	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
N-Nitrosodiphenylamine	0.0069	U	0.36	0.0069	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Pentachlorophenol	0.074	U	0.29	0.074	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Phenanthrene	0.0063	U	0.36	0.0063	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Phenol	0.013	U	0.36	0.013	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1
Pyrene	0.0090	U	0.36	0.0090	mg/Kg	☼	09/01/20 09:15	09/02/20 04:37	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Aldol condensation product	1.0	A J	mg/Kg	☼	2.76		09/01/20 09:15	09/02/20 04:37	1
Unknown	1.6	J	mg/Kg	☼	15.38		09/01/20 09:15	09/02/20 04:37	1
Unknown	0.60	J	mg/Kg	☼	15.79		09/01/20 09:15	09/02/20 04:37	1
Unknown	0.38	J	mg/Kg	☼	16.14		09/01/20 09:15	09/02/20 04:37	1
Unknown	0.49	J	mg/Kg	☼	16.30		09/01/20 09:15	09/02/20 04:37	1
Unknown	0.79	J	mg/Kg	☼	17.21		09/01/20 09:15	09/02/20 04:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	62		30 - 130	09/01/20 09:15	09/02/20 04:37	1
2-Fluorobiphenyl	59		30 - 130	09/01/20 09:15	09/02/20 04:37	1
2-Fluorophenol	56		30 - 130	09/01/20 09:15	09/02/20 04:37	1
Nitrobenzene-d5	60		30 - 130	09/01/20 09:15	09/02/20 04:37	1
Phenol-d5	55		30 - 130	09/01/20 09:15	09/02/20 04:37	1
Terphenyl-d14	69		30 - 130	09/01/20 09:15	09/02/20 04:37	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0012	U	0.0073	0.0012	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
4,4'-DDE	0.00086	U	0.0073	0.00086	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon B Topsoil

Lab Sample ID: 460-217093-1

Date Collected: 08/27/20 11:00

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 91.6

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	0.0013	U	0.0073	0.0013	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Aldrin	0.0011	U	0.0073	0.0011	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
alpha-BHC	0.00074	U	0.0022	0.00074	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
beta-BHC	0.00082	U	0.0022	0.00082	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Chlordane (n.o.s.)	0.018	U	0.073	0.018	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Chlordane (technical)	0.018	U	0.073	0.018	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
cis-Chlordane	0.0012	U	0.0073	0.0012	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
delta-BHC	0.00045	U	0.0022	0.00045	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Dieldrin	0.00095	U	0.0022	0.00095	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Endosulfan I	0.0011	U	0.0073	0.0011	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Endosulfan II	0.0019	U	0.0073	0.0019	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Endosulfan sulfate	0.00092	U	0.0073	0.00092	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Endrin	0.0010	U	0.0073	0.0010	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Endrin aldehyde	0.0017	U	0.0073	0.0017	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Endrin ketone	0.0014	U	0.0073	0.0014	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
gamma-BHC (Lindane)	0.00068	U	0.0022	0.00068	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Heptachlor	0.00086	U	0.0073	0.00086	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Heptachlor epoxide	0.0011	U	0.0073	0.0011	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Methoxychlor	0.0017	U	0.0073	0.0017	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
Toxaphene	0.026	U	0.073	0.026	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1
trans-Chlordane	0.0013	U	0.0073	0.0013	mg/Kg	☼	08/29/20 19:54	08/31/20 11:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	70		30 - 150	08/29/20 19:54	08/31/20 11:25	1
DCB Decachlorobiphenyl	76		30 - 150	08/29/20 19:54	08/31/20 11:25	1
Tetrachloro-m-xylene	68		30 - 150	08/29/20 19:54	08/31/20 11:25	1
Tetrachloro-m-xylene	64		30 - 150	08/29/20 19:54	08/31/20 11:25	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.0097	U	0.073	0.0097	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Aroclor 1221	0.0097	U	0.073	0.0097	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Aroclor 1232	0.0097	U	0.073	0.0097	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Aroclor 1242	0.0097	U	0.073	0.0097	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Aroclor 1248	0.0097	U	0.073	0.0097	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Aroclor 1254	0.010	U	0.073	0.010	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Aroclor 1260	0.010	U	0.073	0.010	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Aroclor 1262	0.010	U	0.073	0.010	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Aroclor 1268	0.010	U	0.073	0.010	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1
Polychlorinated biphenyls, Total	0.010	U	0.073	0.010	mg/Kg	☼	08/29/20 19:51	08/31/20 11:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	121		30 - 150	08/29/20 19:51	08/31/20 11:43	1
DCB Decachlorobiphenyl	122		30 - 150	08/29/20 19:51	08/31/20 11:43	1
Tetrachloro-m-xylene	115		30 - 150	08/29/20 19:51	08/31/20 11:43	1
Tetrachloro-m-xylene	115		30 - 150	08/29/20 19:51	08/31/20 11:43	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6090		19.0	2.5	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon B Topsoil

Lab Sample ID: 460-217093-1

Date Collected: 08/27/20 11:00

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 91.6

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.14	U	0.95	0.14	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Arsenic	2.8		0.95	0.095	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Barium	10.7		1.9	0.14	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Beryllium	0.10	J	0.38	0.054	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Cadmium	0.11	U	0.95	0.11	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Chromium	8.2		1.9	0.17	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Cobalt	0.68	J	1.9	0.14	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Copper	4.4		1.9	0.21	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Lead	4.4		0.57	0.19	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Manganese	41.6		3.8	0.38	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Nickel	2.1		1.9	0.18	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Selenium	0.13	J	1.2	0.11	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Silver	0.085	U	0.95	0.085	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Thallium	0.039	U	0.38	0.039	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Vanadium	12.9		1.9	0.20	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1
Zinc	6.7	J	7.6	2.2	mg/Kg	☼	08/29/20 16:35	08/30/20 16:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0096	J	0.017	0.0040	mg/Kg	☼	09/02/20 03:14	09/02/20 08:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.38	U	2.2	0.38	mg/Kg	☼	09/01/20 09:10	09/01/20 15:11	1
Cyanide, Total	0.15	J	0.25	0.13	mg/Kg	☼	09/02/20 09:08	09/02/20 12:30	1
pH	7.5	HF	0.1	0.1	SU			08/31/20 14:20	1
Temperature	21.7	HF	0.1	0.1	Degrees C			08/31/20 14:20	1
Corrosivity	7.5	HF	0.1	0.1	SU			08/31/20 14:20	1
TOC Result 1	10100		109	88.8	mg/Kg	☼		09/03/20 10:34	1
Percent Moisture	8.4		1.0	1.0	%			09/01/20 07:48	1
Percent Solids	91.6		1.0	1.0	%			09/01/20 07:48	1

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 95.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00039	U	0.0017	0.00039	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
1,1,2,2-Tetrachloroethane	0.00036	U	0.0017	0.00036	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
1,1,2-Trichloroethane	0.00030	U	0.0017	0.00030	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
1,1-Dichloroethane	0.00035	U	0.0017	0.00035	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
1,1-Dichloroethene	0.00038	U	0.0017	0.00038	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
1,2-Dibromo-3-Chloropropane	0.00077	U	0.0017	0.00077	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
1,2-Dibromoethane	0.00030	U	0.0017	0.00030	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
1,2-Dichloroethane	0.00050	U	0.0017	0.00050	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
1,2-Dichloropropane	0.00071	U	0.0017	0.00071	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
2-Butanone	0.0045	U	0.0084	0.0045	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
2-Chloroethyl vinyl ether	0.0027	U	0.0034	0.0027	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
2-Hexanone	0.0029	U	0.0084	0.0029	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 95.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	0.0026	U	0.0084	0.0026	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Acetone	0.0096	U	0.010	0.0096	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Acrolein	0.047	U *	0.17	0.047	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Acrylonitrile	0.0027	U *	0.017	0.0027	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Benzene	0.00043	U	0.0017	0.00043	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Bromodichloromethane	0.00043	U	0.0017	0.00043	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Bromoform	0.00071	U *	0.0017	0.00071	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Bromomethane	0.00079	U *	0.0017	0.00079	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Carbon disulfide	0.00045	U	0.0017	0.00045	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Carbon tetrachloride	0.00065	U	0.0017	0.00065	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Chlorobenzene	0.00030	U	0.0017	0.00030	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Chloroethane	0.00087	U	0.0017	0.00087	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Chloroform	0.00053	U	0.0017	0.00053	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Chloromethane	0.00073	U	0.0017	0.00073	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
cis-1,2-Dichloroethene	0.00025	U	0.0017	0.00025	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
cis-1,3-Dichloropropene	0.00046	U	0.0017	0.00046	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Dibromochloromethane	0.00033	U	0.0017	0.00033	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Dichlorodifluoromethane	0.00057	U	0.0017	0.00057	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Ethylbenzene	0.00033	U	0.0017	0.00033	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Methyl acetate	0.0072	U	0.0084	0.0072	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Methylene Chloride	0.00078	U	0.0017	0.00078	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
MTBE	0.00021	U	0.0017	0.00021	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Styrene	0.00047	U	0.0017	0.00047	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
TBA	0.0055	U	0.017	0.0055	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Tetrachloroethene	0.00024	U	0.0017	0.00024	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Toluene	0.00039	U	0.0017	0.00039	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
trans-1,2-Dichloroethene	0.00041	U	0.0017	0.00041	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
trans-1,3-Dichloropropene	0.00045	U	0.0017	0.00045	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Trichloroethene	0.00024	U	0.0017	0.00024	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Trichlorofluoromethane	0.00068	U	0.0017	0.00068	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Vinyl chloride	0.00092	U	0.0017	0.00092	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1
Xylenes, Total	0.00029	U	0.0017	0.00029	mg/Kg	☼	08/28/20 23:39	08/30/20 14:25	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		mg/Kg	☼			08/28/20 23:39	08/30/20 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130	08/28/20 23:39	08/30/20 14:25	1
Bromofluorobenzene	104		70 - 130	08/28/20 23:39	08/30/20 14:25	1
Dibromofluoromethane (Surr)	103		70 - 130	08/28/20 23:39	08/30/20 14:25	1
Toluene-d8 (Surr)	109		70 - 130	08/28/20 23:39	08/30/20 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.0046	U	0.35	0.0046	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
1,2,4-Trichlorobenzene	0.0089	U	0.035	0.0089	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
1,2-Dichlorobenzene	0.0059	U	0.35	0.0059	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
1,2-Diphenylhydrazine	0.0063	U	0.35	0.0063	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
1,3-Dichlorobenzene	0.0046	U	0.35	0.0046	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
1,4-Dichlorobenzene	0.013	U	0.35	0.013	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 95.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	0.035	U	0.35	0.035	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2,4,6-Trichlorophenol	0.045	U	0.14	0.045	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2,4-Dichlorophenol	0.022	U	0.14	0.022	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2,4-Dimethylphenol	0.015	U	0.35	0.015	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2,4-Dinitrophenol	0.17	U	0.28	0.17	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2,4-Dinitrotoluene	0.037	U	0.070	0.037	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2,6-Dinitrotoluene	0.025	U	0.070	0.025	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2-Chloronaphthalene	0.016	U	0.35	0.016	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2-Chlorophenol	0.012	U	0.35	0.012	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2-Methylnaphthalene	0.0097	U	0.35	0.0097	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2-Methylphenol	0.013	U	0.35	0.013	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2-Nitroaniline	0.013	U	0.35	0.013	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
2-Nitrophenol	0.035	U	0.35	0.035	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
3,3'-Dichlorobenzidine	0.052	U *	0.14	0.052	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
3-Nitroaniline	0.039	U	0.35	0.039	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
4,6-Dinitro-2-methylphenol	0.056	U	0.28	0.056	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
4-Bromophenyl phenyl ether	0.014	U	0.35	0.014	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
4-Chloro-3-methylphenol	0.019	U	0.35	0.019	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
4-Chloroaniline	0.024	U	0.35	0.024	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
4-Chlorophenyl phenyl ether	0.012	U	0.35	0.012	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
4-Methylphenol	0.022	U	0.35	0.022	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
4-Nitroaniline	0.040	U	0.35	0.040	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
4-Nitrophenol	0.057	U	0.70	0.057	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Acenaphthene	0.025	U	0.35	0.025	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Acenaphthylene	0.0036	U	0.35	0.0036	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Acetophenone	0.017	U	0.35	0.017	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Anthracene	0.011	U	0.35	0.011	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Atrazine	0.0088	U *	0.14	0.0088	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Benzaldehyde	0.015	U	0.35	0.015	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Benzidine	0.034	U	0.35	0.034	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Benzo[a]anthracene	0.012	U	0.035	0.012	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Benzo[a]pyrene	0.0092	U	0.035	0.0092	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Benzo[b]fluoranthene	0.0090	U	0.035	0.0090	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Benzo[g,h,i]perylene	0.010	U	0.35	0.010	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Benzo[k]fluoranthene	0.0068	U	0.035	0.0068	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
bis (2-chloroisopropyl) ether	0.0063	U	0.35	0.0063	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Bis(2-chloroethoxy)methane	0.027	U	0.35	0.027	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Bis(2-chloroethyl)ether	0.012	U	0.035	0.012	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Bis(2-ethylhexyl) phthalate	0.018	U	0.35	0.018	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Butyl benzyl phthalate	0.016	U	0.35	0.016	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Caprolactam	0.054	U *	0.35	0.054	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Carbazole	0.013	U	0.35	0.013	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Chrysene	0.0059	U	0.35	0.0059	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Dibenz(a,h)anthracene	0.015	U	0.035	0.015	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Dibenzofuran	0.0049	U	0.35	0.0049	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Diethyl phthalate	0.0050	U	0.35	0.0050	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Dimethyl phthalate	0.079	U	0.35	0.079	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Di-n-butyl phthalate	0.061	U	0.35	0.061	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Di-n-octyl phthalate	0.018	U	0.35	0.018	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 95.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.012	U	0.35	0.012	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Fluorene	0.0047	U	0.35	0.0047	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Hexachlorobenzene	0.016	U	0.035	0.016	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Hexachlorobutadiene	0.0074	U	0.070	0.0074	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Hexachlorocyclopentadiene	0.030	U	0.35	0.030	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Hexachloroethane	0.012	U	0.035	0.012	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Indeno[1,2,3-cd]pyrene	0.014	U	0.035	0.014	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Isophorone	0.10	U	0.14	0.10	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Naphthalene	0.0060	U	0.35	0.0060	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Nitrobenzene	0.0083	U	0.035	0.0083	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
N-Nitrosodimethylamine	0.032	U	0.35	0.032	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
N-Nitrosodi-n-propylamine	0.025	U	0.035	0.025	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
N-Nitrosodiphenylamine	0.0066	U	0.35	0.0066	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Pentachlorophenol	0.071	U	0.28	0.071	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Phenanthrene	0.0061	U	0.35	0.0061	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Phenol	0.013	U	0.35	0.013	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1
Pyrene	0.0086	U	0.35	0.0086	mg/Kg	☼	09/01/20 09:15	09/02/20 02:24	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Aldol condensation product	12	A J	mg/Kg	☼	2.76		09/01/20 09:15	09/02/20 02:24	1
Dibenzylidene 4,4'-biphenylenediamine	0.75	J N	mg/Kg	☼	14.37	6311-48-4	09/01/20 09:15	09/02/20 02:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	60		30 - 130	09/01/20 09:15	09/02/20 02:24	1
2-Fluorobiphenyl	52		30 - 130	09/01/20 09:15	09/02/20 02:24	1
2-Fluorophenol	49		30 - 130	09/01/20 09:15	09/02/20 02:24	1
Nitrobenzene-d5	53		30 - 130	09/01/20 09:15	09/02/20 02:24	1
Phenol-d5	48		30 - 130	09/01/20 09:15	09/02/20 02:24	1
Terphenyl-d14	70		30 - 130	09/01/20 09:15	09/02/20 02:24	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0012	U	0.0070	0.0012	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
4,4'-DDE	0.00083	U	0.0070	0.00083	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
4,4'-DDT	0.0013	U	0.0070	0.0013	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Aldrin	0.0011	U	0.0070	0.0011	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
alpha-BHC	0.00071	U	0.0021	0.00071	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
beta-BHC	0.00079	U	0.0021	0.00079	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Chlordane (n.o.s.)	0.017	U	0.070	0.017	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Chlordane (technical)	0.017	U	0.070	0.017	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
cis-Chlordane	0.0011	U	0.0070	0.0011	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
delta-BHC	0.00043	U	0.0021	0.00043	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Dieldrin	0.00091	U	0.0021	0.00091	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Endosulfan I	0.0011	U	0.0070	0.0011	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Endosulfan II	0.0018	U	0.0070	0.0018	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Endosulfan sulfate	0.00088	U	0.0070	0.00088	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Endrin	0.0010	U	0.0070	0.0010	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Endrin aldehyde	0.0017	U	0.0070	0.0017	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1
Endrin ketone	0.0014	U	0.0070	0.0014	mg/Kg	☼	08/29/20 19:54	08/31/20 11:38	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 95.3

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	0.00065	U	0.0021	0.00065	mg/Kg	✧	08/29/20 19:54	08/31/20 11:38	1
Heptachlor	0.00083	U	0.0070	0.00083	mg/Kg	✧	08/29/20 19:54	08/31/20 11:38	1
Heptachlor epoxide	0.0010	U	0.0070	0.0010	mg/Kg	✧	08/29/20 19:54	08/31/20 11:38	1
Methoxychlor	0.0016	U	0.0070	0.0016	mg/Kg	✧	08/29/20 19:54	08/31/20 11:38	1
Toxaphene	0.025	U	0.070	0.025	mg/Kg	✧	08/29/20 19:54	08/31/20 11:38	1
trans-Chlordane	0.0012	U	0.0070	0.0012	mg/Kg	✧	08/29/20 19:54	08/31/20 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	65		30 - 150	08/29/20 19:54	08/31/20 11:38	1
DCB Decachlorobiphenyl	75		30 - 150	08/29/20 19:54	08/31/20 11:38	1
Tetrachloro-m-xylene	65		30 - 150	08/29/20 19:54	08/31/20 11:38	1
Tetrachloro-m-xylene	64		30 - 150	08/29/20 19:54	08/31/20 11:38	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.0093	U	0.070	0.0093	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Aroclor 1221	0.0093	U	0.070	0.0093	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Aroclor 1232	0.0093	U	0.070	0.0093	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Aroclor 1242	0.0093	U	0.070	0.0093	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Aroclor 1248	0.0093	U	0.070	0.0093	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Aroclor 1254	0.0097	U	0.070	0.0097	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Aroclor 1260	0.0097	U	0.070	0.0097	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Aroclor 1262	0.0097	U	0.070	0.0097	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Aroclor 1268	0.0097	U	0.070	0.0097	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1
Polychlorinated biphenyls, Total	0.0097	U	0.070	0.0097	mg/Kg	✧	08/29/20 19:51	08/31/20 12:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	108		30 - 150	08/29/20 19:51	08/31/20 12:00	1
DCB Decachlorobiphenyl	110		30 - 150	08/29/20 19:51	08/31/20 12:00	1
Tetrachloro-m-xylene	105		30 - 150	08/29/20 19:51	08/31/20 12:00	1
Tetrachloro-m-xylene	104		30 - 150	08/29/20 19:51	08/31/20 12:00	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12500		16.8	2.2	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Antimony	0.12	U	0.84	0.12	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Arsenic	4.6		0.84	0.084	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Barium	16.1		1.7	0.12	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Beryllium	0.19	J	0.34	0.048	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Cadmium	0.095	U	0.84	0.095	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Chromium	16.1		1.7	0.15	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Cobalt	1.0	J	1.7	0.12	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Copper	7.8		1.7	0.18	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Lead	7.4		0.50	0.17	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Manganese	13.8		3.4	0.34	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Nickel	3.3		1.7	0.16	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Selenium	0.18	J	1.0	0.099	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Silver	0.075	U	0.84	0.075	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Thallium	0.042	J	0.34	0.034	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1
Vanadium	26.5		1.7	0.17	mg/Kg	✧	08/29/20 16:35	08/30/20 16:26	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 95.3

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	5.0	J	6.7	1.9	mg/Kg	☼	08/29/20 16:35	08/30/20 16:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0086	J	0.018	0.0042	mg/Kg	☼	09/02/20 03:14	09/02/20 08:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.37	U	2.1	0.37	mg/Kg	☼	09/01/20 09:10	09/01/20 15:11	1
Cyanide, Total	0.12	U	0.24	0.12	mg/Kg	☼	09/02/20 09:08	09/02/20 12:34	1
pH	5.2	HF	0.1	0.1	SU			08/31/20 14:22	1
Temperature	21.6	HF	0.1	0.1	Degrees C			08/31/20 14:22	1
Corrosivity	5.2	HF	0.1	0.1	SU			08/31/20 14:22	1
TOC Result 1	85.3	U	105	85.3	mg/Kg	☼		09/03/20 11:13	1
Percent Moisture	4.7		1.0	1.0	%			09/01/20 07:48	1
Percent Solids	95.3		1.0	1.0	%			09/01/20 07:48	1

Lab Chronicle

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon B Topsoil

Lab Sample ID: 460-217093-1

Date Collected: 08/27/20 11:00

Matrix: Solid

Date Received: 08/28/20 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	720853	08/31/20 14:20	YAH	TAL EDI
Total/NA	Analysis	Moisture		1	721036	09/01/20 07:48	MMC	TAL EDI

Client Sample ID: EME Horizon B Topsoil

Lab Sample ID: 460-217093-1

Date Collected: 08/27/20 11:00

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			720449	08/28/20 23:40	AVM	TAL EDI
Total/NA	Analysis	8260C		1	720629	08/30/20 13:58	AAT	TAL EDI
Total/NA	Prep	3546			721052	09/01/20 09:15	OTS	TAL EDI
Total/NA	Analysis	8270D		1	720914	09/02/20 04:37	MME	TAL EDI
Total/NA	Prep	3546			720617	08/29/20 19:54	ZXB	TAL EDI
Total/NA	Analysis	8081B		1	720733	08/31/20 11:25	FAM	TAL EDI
Total/NA	Prep	3546			720616	08/29/20 19:51	ZXB	TAL EDI
Total/NA	Analysis	8082A		1	720748	08/31/20 11:43	JHP	TAL EDI
Total/NA	Prep	3050B			720605	08/29/20 16:35	GRB	TAL EDI
Total/NA	Analysis	6020B		1	720689	08/30/20 16:19	DLE	TAL EDI
Total/NA	Prep	7471B			721253	09/02/20 03:14	TJS	TAL EDI
Total/NA	Analysis	7471B		1	721350	09/02/20 08:49	TJS	TAL EDI
Total/NA	Prep	3060A			721050	09/01/20 09:10	RPR	TAL EDI
Total/NA	Analysis	7196A		1	721072	09/01/20 15:11	RPR	TAL EDI
Total/NA	Prep	9012B			721333	09/02/20 09:08	IAA	TAL EDI
Total/NA	Analysis	9012B		1	721391	09/02/20 12:30	AJP	TAL EDI
Total/NA	Analysis	Lloyd Kahn		1	721684	09/03/20 10:34	AJP	TAL EDI

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	720853	08/31/20 14:22	YAH	TAL EDI
Total/NA	Analysis	Moisture		1	721036	09/01/20 07:48	MMC	TAL EDI

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			720449	08/28/20 23:39	AVM	TAL EDI
Total/NA	Analysis	8260C		1	720629	08/30/20 14:25	AAT	TAL EDI
Total/NA	Prep	3546			721052	09/01/20 09:15	OTS	TAL EDI
Total/NA	Analysis	8270D		1	720914	09/02/20 02:24	MME	TAL EDI
Total/NA	Prep	3546			720617	08/29/20 19:54	ZXB	TAL EDI
Total/NA	Analysis	8081B		1	720733	08/31/20 11:38	FAM	TAL EDI

Eurofins TestAmerica, Edison

Lab Chronicle

Client: Severson Environmental Services, Inc.
 Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Client Sample ID: EME Horizon C Topsoil

Lab Sample ID: 460-217093-2

Date Collected: 08/27/20 11:30

Matrix: Solid

Date Received: 08/28/20 16:40

Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			720616	08/29/20 19:51	ZXB	TAL EDI
Total/NA	Analysis	8082A		1	720748	08/31/20 12:00	JHP	TAL EDI
Total/NA	Prep	3050B			720605	08/29/20 16:35	GRB	TAL EDI
Total/NA	Analysis	6020B		1	720689	08/30/20 16:26	DLE	TAL EDI
Total/NA	Prep	7471B			721253	09/02/20 03:14	TJS	TAL EDI
Total/NA	Analysis	7471B		1	721350	09/02/20 08:51	TJS	TAL EDI
Total/NA	Prep	3060A			721050	09/01/20 09:10	RPR	TAL EDI
Total/NA	Analysis	7196A		1	721072	09/01/20 15:11	RPR	TAL EDI
Total/NA	Prep	9012B			721333	09/02/20 09:08	IAA	TAL EDI
Total/NA	Analysis	9012B		1	721391	09/02/20 12:34	AJP	TAL EDI
Total/NA	Analysis	Lloyd Kahn		1	721684	09/03/20 11:13	AJP	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Laboratory: Eurofins TestAmerica, Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	12028	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7196A	3060A	Solid	Cr (VI)
8081B	3546	Solid	Chlordane (n.o.s.)
8082A	3546	Solid	Polychlorinated biphenyls, Total
9045D		Solid	Corrosivity
9045D		Solid	Temperature
Lloyd Kahn		Solid	TOC Result 1
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081B	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7471B	Mercury (CVAA)	SW846	TAL EDI
7196A	Chromium, Hexavalent	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable	SW846	TAL EDI
9045D	pH	SW846	TAL EDI
Lloyd Kahn	Organic Carbon, Total (TOC)	EPA	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI
3050B	Preparation, Metals	SW846	TAL EDI
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	TAL EDI
3546	Microwave Extraction	SW846	TAL EDI
5035	Closed System Purge and Trap	SW846	TAL EDI
7471B	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Severson Environmental Services, Inc.
Project/Site: 1247 HON SA-6 South Deferred Area

Job ID: 460-217093-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-217093-1	EME Horizon B Topsoil	Solid	08/27/20 11:00	08/28/20 16:40	
460-217093-2	EME Horizon C Topsoil	Solid	08/27/20 11:30	08/28/20 16:40	

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Chain of Custody Record

Client Information		Lab PM: Bennett, Allison L		Carrier Tracking No(s): Test America/Eurofins Courier Service		COC No: 1247	
Client Contact: Mike Marrone		E-Mail: allison.bennett@testamericainc.com		Page: Page 1 of 1		Job #: 27093	
Company: Severson Environmental Services, Inc.		Due Date Requested: 1 week TAT		Analysis Requested		Preservation Codes:	
Address: 2749 Lockport Road		TAT Requested (days): 1 week TAT		7196A - Hexavalent Chromium - 7196		A - HCL	
City: Niagara Falls		PO #: 1247 MM		8260C - SRS VOCs + 15 TCs		M - Hexane	
State, Zip: NY, 14305		WO #:		8260B - SRS VOCs + 15 TCs		N - None	
Phone: 716 308 1990		Project #:		7471B - Mercury		O - AsNaO2	
Email: mmarrone@severson.com		SSOW#:		8081B - SRS Pesticides		P - Na2CO3	
Project Name: 1247 HON SA-6 South Deferred Area		Sample Date		8082A - PCBs		Q - Na2SO3	
Site: Deferred Area Backfill Sampling		Sample Time		8270D - SRS BNA + 25 TCs		R - Na2SO3	
		Sample Type (C=Comp, G=grab)		9012B - Cyanide, Total		S - H2SO4	
		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		9045D - pH		T - TSP Dodecahydrate	
		Preservation Code:		Lloyd_kahn_Mod - TOC by Lloyd Kahn		U - Acetone	
		Sample Date		Total Number of containers		V - MCAA	
		Sample Time				W - pH 4-5	
		Sample Type				X - EDTA	
		Sample Matrix				L - EDA	
		Sample Preservation				Z - other (specify)	
		Sample Date				Other:	
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		Sample Matrix					
		Sample Preservation					
		Sample Date					
		Sample Time					
		Sample Matrix					
		Sample Preservation					
		Sample Date					
		Sample Time					
		Sample Matrix					
		Sample Preservation					
		Sample Date					
		Sample Time					
		Sample Matrix					
		Sample Preservation					
		Sample Date					
		Sample Time					
		Sample Matrix					
		Sample Preservation					

Login Sample Receipt Checklist

Client: Severson Environmental Services, Inc.

Job Number: 460-217093-1

Login Number: 217093

List Number: 1

Creator: Rivera, Kenneth

List Source: Eurofins TestAmerica, Edison

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



Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1			460-217093-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
SOIL BY 8260C									
1,1,1-Trichloroethane	160000	NA	0.3	0.00032	U	0.00032	0.00039	U	0.00039
1,1,2,2-Tetrachloroethane	1	3	0.007	0.00029	U	0.00029	0.00036	U	0.00036
1,1,2-Trichloroethane	2	6	0.02	0.00024	U	0.00024	0.00030	U	0.00030
1,1-Dichloroethane	8	24	0.2	0.00028	U	0.00028	0.00035	U	0.00035
1,1-Dichloroethene	11	150	0.008	0.00031	U	0.00031	0.00038	U	0.00038
1,2-Dibromo-3-Chloropropane	0.08	0.2	0.005	0.00063	U	0.00063	0.00077	U	0.00077
1,2-Dibromoethane	0.008	0.04	0.005	0.00025	U	0.00025	0.00030	U	0.00030
1,2-Dichloroethane	0.9	3	0.005	0.00040	U	0.00040	0.00050	U	0.00050
1,2-Dichloropropane	2	5	0.005	0.00058	U	0.00058	0.00071	U	0.00071
2-Butanone	3100	44000	0.9	0.0037	U	0.0037	0.0045	U	0.0045
2-Chloroethyl vinyl ether	NA	NA	NA	0.0022	U	0.0022	0.0027	U	0.0027
2-Hexanone	NA	NA	NA	0.0023	U	0.0023	0.0029	U	0.0029
4-Methyl-2-pentanone	NA	NA	NA	0.0021	U	0.0021	0.0026	U	0.0026
Acetone	70000	NA	19	0.0078	U	0.0078	0.0096	U	0.0096
Acrolein	0.5	1	0.5	0.038	U *	0.038	0.047	U *	0.047
Acrylonitrile	0.9	3	0.5	0.0022	U *	0.0022	0.0027	U *	0.0027
Benzene	2	5	0.005	0.00035	U	0.00035	0.00043	U	0.00043
Bromodichloromethane	1	3	0.005	0.00035	U	0.00035	0.00043	U	0.00043
Bromoform	81	280	0.03	0.00058	U *	0.00058	0.00071	U *	0.00071
Bromomethane	25	59	0.04	0.00065	U *	0.00065	0.00079	U *	0.00079
Carbon disulfide	7800	110000	6	0.00036	U	0.00036	0.00045	U	0.00045
Carbon tetrachloride	2	4	0.005	0.00053	U	0.00053	0.00065	U	0.00065
Chlorobenzene	510	7400	0.6	0.00024	U	0.00024	0.00030	U	0.00030
Chloroethane	220	1100	NA	0.00071	U	0.00071	0.00087	U	0.00087
Chloroform	0.6	2	0.4	0.0021	U	0.00043	0.00053	U	0.00053
Chloromethane	4	12	NA	0.00059	U	0.00059	0.00073	U	0.00073
cis-1,2-Dichloroethene	230	560	0.3	0.00021	U	0.00021	0.00025	U	0.00025
cis-1,3-Dichloropropene	NA	NA	NA	0.00037	U	0.00037	0.00046	U	0.00046
Dibromochloromethane	3	8	0.005	0.00026	U	0.00026	0.00033	U	0.00033
Dichlorodifluoromethane	490	230000	39	0.00046	U	0.00046	0.00057	U	0.00057
Ethylbenzene	7800	110000	13	0.00027	U	0.00027	0.00033	U	0.00033
Methyl acetate	78000	NA	22	0.0059	U	0.0059	0.0072	U	0.0072
Methylene Chloride	46	230	0.01	0.00063	U	0.00063	0.00078	U	0.00078
MTBE	110	320	0.2	0.00017	U	0.00017	0.00021	U	0.00021
Styrene	90	260	3	0.00038	U	0.00038	0.00047	U	0.00047
TBA	1400	11000	0.3	0.0045	U	0.0045	0.0055	U	0.0055
Tetrachloroethene	43	1500	0.005	0.00019	U	0.00019	0.00024	U	0.00024
Toluene	6300	91000	7	0.00032	U	0.00032	0.00039	U	0.00039
trans-1,2-Dichloroethene	300	720	0.6	0.00033	U	0.00033	0.00041	U	0.00041
trans-1,3-Dichloropropene	NA	NA	NA	0.00036	U	0.00036	0.00045	U	0.00045
Trichloroethene	3	10	0.01	0.00020	U	0.00020	0.00024	U	0.00024

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1			460-217093-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
Trichlorofluoromethane	23000	340000	34	0.00055	U	0.00055	0.00068	U	0.00068
Vinyl chloride	0.7	2	0.005	0.00074	U	0.00074	0.00092	U	0.00092
Xylenes, Total	12000	170000	19	0.00024	U	0.00024	0.00029	U	0.00029
Total Conc	NA	NA	NA	0.0021			0.0		
Total Estimated Conc. (TICs)	NA	NA	NA	0.0*T			0.0*T		

*T There are no TICs reported for the sample

* : LCS or LCSD is outside acceptance limits.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1			460-217093-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
SOIL BY 8270D									
1,1'-Biphenyl	61	240	140	0.0048	U	0.0048	0.0046	U	0.0046
1,2,4-Trichlorobenzene	73	820	0.7	0.0093	U	0.0093	0.0089	U	0.0089
1,2-Dichlorobenzene	5300	59000	17	0.0062	U	0.0062	0.0059	U	0.0059
1,2-Diphenylhydrazine	0.7	2	0.7	0.0066	U	0.0066	0.0063	U	0.0063
1,3-Dichlorobenzene	5300	59000	19	0.0048	U	0.0048	0.0046	U	0.0046
1,4-Dichlorobenzene	5	13	2	0.014	U	0.014	0.013	U	0.013
2,4,5-Trichlorophenol	6100	68000	68	0.037	U	0.037	0.035	U	0.035
2,4,6-Trichlorophenol	19	74	0.2	0.046	U	0.046	0.045	U	0.045
2,4-Dichlorophenol	180	2100	0.2	0.023	U	0.023	0.022	U	0.022
2,4-Dimethylphenol	1200	14000	1	0.016	U	0.016	0.015	U	0.015
2,4-Dinitrophenol	120	1400	0.3	0.18	U	0.18	0.17	U	0.17
2,4-Dinitrotoluene	0.7	3	NA	0.039	U	0.039	0.037	U	0.037
2,6-Dinitrotoluene	0.7	3	NA	0.026	U	0.026	0.025	U	0.025
2-Chloronaphthalene	NA	NA	NA	0.017	U	0.017	0.016	U	0.016
2-Chlorophenol	310	2200	0.8	0.013	U	0.013	0.012	U	0.012
2-Methylnaphthalene	230	2400	8	0.010	U	0.010	0.0097	U	0.0097
2-Methylphenol	310	3400	NA	0.013	U	0.013	0.013	U	0.013
2-Nitroaniline	39	23000	NA	0.013	U	0.013	0.013	U	0.013
2-Nitrophenol	NA	NA	NA	0.036	U	0.036	0.035	U	0.035
3,3'-Dichlorobenzidine	1	4	0.2	0.055	U *	0.055	0.052	U *	0.052
3-Nitroaniline	NA	NA	NA	0.041	U	0.041	0.039	U	0.039
4,6-Dinitro-2-methylphenol	6	68	0.3	0.059	U	0.059	0.056	U	0.056
4-Bromophenyl phenyl ether	NA	NA	NA	0.014	U	0.014	0.014	U	0.014
4-Chloro-3-methylphenol	NA	NA	NA	0.020	U	0.020	0.019	U	0.019
4-Chloroaniline	NA	NA	NA	0.025	U	0.025	0.024	U	0.024
4-Chlorophenyl phenyl ether	NA	NA	NA	0.013	U	0.013	0.012	U	0.012
4-Methylphenol	31	340	NA	0.023	U	0.023	0.022	U	0.022
4-Nitroaniline	NA	NA	NA	0.041	U	0.041	0.040	U	0.040
4-Nitrophenol	NA	NA	NA	0.059	U	0.059	0.057	U	0.057
Acenaphthene	3400	37000	110	0.026	U	0.026	0.025	U	0.025
Acenaphthylene	NA	300000	NA	0.0037	U	0.0037	0.0036	U	0.0036
Acetophenone	2	5	3	0.018	U	0.018	0.017	U	0.017
Anthracene	17000	30000	2400	0.011	U	0.011	0.011	U	0.011
Atrazine	210	2400	0.2	0.0091	U *	0.0091	0.0088	U *	0.0088
Benzaldehyde	6100	68000	NA	0.016	U	0.016	0.015	U	0.015
Benzidine	0.7	0.7	0.7	0.036	U	0.036	0.034	U	0.034
Benzo[a]anthracene	5	17	0.8	0.013	U	0.013	0.012	U	0.012
Benzo[a]pyrene	0.5	2	0.2	0.0096	U	0.0096	0.0092	U	0.0092
Benzo[b]fluoranthene	5	17	2	0.0093	U	0.0093	0.0090	U	0.0090
Benzo[g,h,i]perylene	380000	30000	NA	0.011	U	0.011	0.010	U	0.010
Benzo[k]fluoranthene	45	170	25	0.0071	U	0.0071	0.0068	U	0.0068

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1			460-217093-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
bis (2-chloroisopropyl) ether	23	67	5	0.0065	U	0.0065	0.0063	U	0.0063
Bis(2-chloroethoxy)methane	NA	NA	NA	0.028	U	0.028	0.027	U	0.027
Bis(2-chloroethyl)ether	0.4	2	0.2	0.013	U	0.013	0.012	U	0.012
Bis(2-ethylhexyl) phthalate	35	140	1200	0.019	U	0.019	0.018	U	0.018
Butyl benzyl phthalate	1200	14000	230	0.017	U	0.017	0.016	U	0.016
Caprolactam	31000	340000	12	0.056	U *	0.056	0.054	U *	0.054
Carbazole	24	96	NA	0.014	U	0.014	0.013	U	0.013
Chrysene	450	1700	80	0.0061	U	0.0061	0.0059	U	0.0059
Dibenz(a,h)anthracene	0.5	2	0.8	0.016	U	0.016	0.015	U	0.015
Dibenzofuran	NA	NA	NA	0.0051	U	0.0051	0.0049	U	0.0049
Diethyl phthalate	49000	550000	88	0.0052	U	0.0052	0.0050	U	0.0050
Dimethyl phthalate	NA	NA	NA	0.082	U	0.082	0.079	U	0.079
Di-n-butyl phthalate	6100	68000	760	0.064	U	0.064	0.061	U	0.061
Di-n-octyl phthalate	2400	27000	3300	0.019	U	0.019	0.018	U	0.018
Fluoranthene	2300	24000	1300	0.013	U	0.013	0.012	U	0.012
Fluorene	2300	24000	170	0.0049	U	0.0049	0.0047	U	0.0047
Hexachlorobenzene	0.3	1	0.2	0.017	U	0.017	0.016	U	0.016
Hexachlorobutadiene	6	25	0.9	0.0077	U	0.0077	0.0074	U	0.0074
Hexachlorocyclopentadiene	45	110	320	0.032	U	0.032	0.030	U	0.030
Hexachloroethane	12	48	0.2	0.012	U	0.012	0.012	U	0.012
Indeno[1,2,3-cd]pyrene	5	17	7	0.014	U	0.014	0.014	U	0.014
Isophorone	510	2000	0.2	0.10	U	0.10	0.10	U	0.10
Naphthalene	6	17	25	0.0062	U	0.0062	0.0060	U	0.0060
Nitrobenzene	5	14	0.2	0.0087	U	0.0087	0.0083	U	0.0083
N-Nitrosodimethylamine	0.7	0.7	0.7	0.033	U	0.033	0.032	U	0.032
N-Nitrosodi-n-propylamine	0.2	0.3	0.2	0.026	U	0.026	0.025	U	0.025
N-Nitrosodiphenylamine	99	390	0.4	0.0069	U	0.0069	0.0066	U	0.0066
Pentachlorophenol	0.9	3	0.3	0.074	U	0.074	0.071	U	0.071
Phenanthrene	NA	300000	NA	0.0063	U	0.0063	0.0061	U	0.0061
Phenol	18000	210000	8	0.013	U	0.013	0.013	U	0.013
Pyrene	1700	18000	840	0.0090	U	0.0090	0.0086	U	0.0086
Total Conc	NA	NA	NA	0.0			0.0		
Total Estimated Conc. (TICs)	NA	NA	NA	4.86			12.75		

* : LCS or LCSD is outside acceptance limits.

U : Indicates the analyte was analyzed for but not detected.

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil		EME Horizon C Topsoil			
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1		460-217093-2			
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00		08/27/2020 11:30:00			
Matrix				Soil		Soil			
Dilution Factor				1		1			
Unit	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg			
				Result	Q	MDL	Result	Q	MDL

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	460-217093-1			460-217093-2		
Sampling Date	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix	Soil			Soil		
Dilution Factor	1			1		
Unit	mg/kg			mg/kg		
	Result	Q	RT mm:ss	Result	Q	RT mm:ss
SOIL TICS BY 8270D						
Aldol condensation product	NR			12	A J	02:45
Aldol condensation product	1.0	A J	02:46	NR		
Dibenzylidene 4,4'-biphenylenediamine	NR			0.75	J N	14:22
Unknown	1.6	J	15:23	NR		
Unknown	0.60	J	15:48	NR		
Unknown	0.38	J	16:08	NR		
Unknown	0.49	J	16:18	NR		
Unknown	0.79	J	17:13	NR		

NR: Not Analyzed

RT mm:ss Retention Time in mm:ss format

A : The tentatively identified compound is a suspected aldol-condensation product.

J : Indicates an Estimated Value for TICS

N : This flag indicates the presumptive evidence of a compound.

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1			460-217093-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
SOIL BY 8081B									
4,4'-DDD	3	13	4	0.0012	U	0.0012	0.0012	U	0.0012
4,4'-DDE	2	9	18	0.00086	U	0.00086	0.00083	U	0.00083
4,4'-DDT	2	8	11	0.0013	U	0.0013	0.0013	U	0.0013
Aldrin	0.04	0.2	0.2	0.0011	U	0.0011	0.0011	U	0.0011
alpha-BHC	0.1	0.5	0.002	0.00074	U	0.00074	0.00071	U	0.00071
beta-BHC	0.4	2	0.002	0.00082	U	0.00082	0.00079	U	0.00079
Chlordane (n.o.s.)	NA	NA	0.05	0.018	U	0.018	0.017	U	0.017
Chlordane (technical)	0.2	1	NA	0.018	U	0.018	0.017	U	0.017
cis-Chlordane	NA	NA	NA	0.0012	U	0.0012	0.0011	U	0.0011
delta-BHC	NA	NA	NA	0.00045	U	0.00045	0.00043	U	0.00043
Dieldrin	0.04	0.2	0.003	0.00095	U	0.00095	0.00091	U	0.00091
Endosulfan I	NA	NA	NA	0.0011	U	0.0011	0.0011	U	0.0011
Endosulfan II	NA	NA	NA	0.0019	U	0.0019	0.0018	U	0.0018
Endosulfan sulfate	470	6800	2	0.00092	U	0.00092	0.00088	U	0.00088
Endrin	23	340	1	0.0010	U	0.0010	0.0010	U	0.0010
Endrin aldehyde	NA	NA	NA	0.0017	U	0.0017	0.0017	U	0.0017
Endrin ketone	NA	NA	NA	0.0014	U	0.0014	0.0014	U	0.0014
gamma-BHC (Lindane)	0.4	2	0.002	0.00068	U	0.00068	0.00065	U	0.00065
Heptachlor	0.1	0.7	0.5	0.00086	U	0.00086	0.00083	U	0.00083
Heptachlor epoxide	0.07	0.3	0.01	0.0011	U	0.0011	0.0010	U	0.0010
Methoxychlor	390	5700	160	0.0017	U	0.0017	0.0016	U	0.0016
Toxaphene	0.6	3	0.3	0.026	U	0.026	0.025	U	0.025
trans-Chlordane	NA	NA	NA	0.0013	U	0.0013	0.0012	U	0.0012

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1			460-217093-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix				Soil			Soil		
Dilution Factor				1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
				Result	Q	MDL	Result	Q	MDL
SOIL BY 8082A									
Aroclor 1016	NA	NA	NA	0.0097	U	0.0097	0.0093	U	0.0093
Aroclor 1221	NA	NA	NA	0.0097	U	0.0097	0.0093	U	0.0093
Aroclor 1232	NA	NA	NA	0.0097	U	0.0097	0.0093	U	0.0093
Aroclor 1242	NA	NA	NA	0.0097	U	0.0097	0.0093	U	0.0093
Aroclor 1248	NA	NA	NA	0.0097	U	0.0097	0.0093	U	0.0093
Aroclor 1254	NA	NA	NA	0.010	U	0.010	0.0097	U	0.0097
Aroclor 1260	NA	NA	NA	0.010	U	0.010	0.0097	U	0.0097
Aroclor 1262	NA	NA	NA	0.010	U	0.010	0.0097	U	0.0097
Aroclor 1268	NA	NA	NA	0.010	U	0.010	0.0097	U	0.0097
Total PCBs	0.2	1	0.2	0.010	U	0.010	0.0097	U	0.0097

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Allison Bennett
Project Manager I
(732)593-2517

Eurofins TestAmerica, Edison

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1			460-217093-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix				Soil			Soil		
Unit									
				Result	Q	MDL	Result	Q	MDL
SOIL BY 6020B(MG/KG)									
Aluminum	78000	NA	6000	6090		2.5	12500		2.2
Antimony	31	450	6	0.14	U	0.14	0.12	U	0.12
Arsenic	19	19	19	2.8		0.095	4.6		0.084
Barium	16000	59000	2100	10.7		0.14	16.1		0.12
Beryllium	16	140	0.7	0.10	J	0.054	0.19	J	0.048
Cadmium	78	78	2	0.11	U	0.11	0.095	U	0.095
Chromium	NA	NA	NA	8.2		0.17	16.1		0.15
Cobalt	1600	590	90	0.68	J	0.14	1.0	J	0.12
Copper	3100	45000	11000	4.4		0.21	7.8		0.18
Lead	400	800	90	4.4		0.19	7.4		0.17
Manganese	11000	5900	65	41.6		0.38	13.8		0.34
Nickel	1600	23000	48	2.1		0.18	3.3		0.16
Selenium	390	5700	11	0.13	J	0.11	0.18	J	0.099
Silver	390	5700	1	0.085	U	0.085	0.075	U	0.075
Thallium	NA	NA	3	0.039	U	0.039	0.042	J	0.034
Vanadium	78	1100	NA	12.9		0.20	26.5		0.17
Zinc	23000	110000	930	6.7	J	2.2	5.0	J	1.9
SOIL BY 7471B(MG/KG)									
Mercury	23	65	0.1	0.0096	J	0.0040	0.0086	J	0.0042

Highlighted Concentrations shown in bold type face exceed limits

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:

Allison Bennett

Project Manager I

(732)593-2517

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

Lab Job ID: 460-217093-1

Job Description: 1247 HON SA-6 South Deferred Area

For:

Sevenson Environmental Services, Inc.

2749 Lockport Road

Niagara Falls, New York 14305

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	EME Horizon B Topsoil			EME Horizon C Topsoil		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-217093-1			460-217093-2		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	08/27/2020 11:00:00			08/27/2020 11:30:00		
Matrix				Soil			Soil		
				Result	Q	MDL	Result	Q	MDL
SOIL BY 7196A									
Cr (VI) (mg/kg)	NA	NA	NA	0.38	U	0.38	0.37	U	0.37
SOIL BY 9012B									
Cyanide, Total (mg/kg)	47	680	20	0.15	J	0.13	0.12	U	0.12
SOIL BY 9045D									
Corrosivity (su)	NA	NA	NA	7.5	HF	0.1	5.2	HF	0.1
pH (su)	NA	NA	NA	7.5	HF	0.1	5.2	HF	0.1
Temperature (degrees c)	NA	NA	NA	21.7	HF	0.1	21.6	HF	0.1
SOIL BY LLOYD KAHN									
TOC Result 1 (mg/kg)	NA	NA	NA	10100		88.8	85.3	U	85.3

HF : Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
 J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
 U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
 Allison Bennett
 Project Manager I
 (732)593-2517



3348 Route 208, Campbell Hall, NY 10916
 Phone: 845-496-1600 Fax: 845-496-1398
 12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental	Project:	Honeywell Project Jersey City, NJ
Material:	Horizon B Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0959A
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	8/27/2020	Sampled By:	Client
Date Tested:	8/31/2020	Tested By:	John Brinsfield

Report of pH of Soil
Test Method: ASTM D4972 Method A

pH Test Result: 6.5 (in Distilled Water)

5.9 (In Calcium Chloride Solution)

Specification

Comments:

No specifications available at time of testing.

Emily J. Rodriguez

Report Reviewed By: _____

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 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Item:	Horizon B Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0959A
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	8/27/2020	Sampled By:	Client
Date Tested:	9/2/2020-09/03/2020	Tested By:	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD
 Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	94.9	
#4	4.75	923.0	
#10	2.00	86.2	
#40	0.425	44.7	
#200	0.075	15.1	
Hydrometer Analysis Results	0.050	14.7	
	0.020	13.3	
	0.010	11.8	
	0.005	10.2	
	0.002	8.2	

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)
 DISPERSION METHOD: Mechanical, 1 min.
 SAND & GRAVEL PARTICLES: Mix of Hard and Weak Subrounded Particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	13.8%
Fraction Passing #10:		
Sand	(#10 to 0.05 mm)	82.9%
Silt	(0.05 mm to 0.002 mm)	7.5%
Clay	(Less than 0.002 mm)	9.5%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Material:	Horizon B Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0959A
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	8/27/2020	Sampled By:	Client
Date Tested:	8/31/2020	Tested By:	John Brinsfield

Report of Organic Content of Soils by Loss on Ignition
Test Method: ASTM D2974 Method C

Inorganic Content: 97.3 % (Sand, silt, clay, etc.)
Organic Content: 2.7 %

Specification: _____

Comments: Sample was ashed at 440 ± 40°C

No specifications available at time of testing.

Report Reviewed By: _____

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 Revised: 3/8/2019



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 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Item:	Horizon B Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0959A
Date Sampled:	8/27/2020	Sampled By:	Client
Date Tested:	8/31/2020	Tested By:	John Brinsfield / Steven Bordengo

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE
Test Method(s): ASTM D6913

Lab Number	Sample Type	Sampling Location	Specification
20-0959A	Horizon B Topsoil	Stockpile	

Sieve Size		% Retained	% Passing	Spec. % Pass
mm	Inches			
100.0 mm	4"	0.0	100	
75.0 mm	3"	0.0	100	
63.0 mm	2 1/2"	0.0	100	
50.0 mm	2"	0.0	100	
37.5 mm	1 1/2"	0.0	100	
25.0 mm	1"	1.4	99	
19.0 mm	3/4"	0.3	98	
12.5 mm	1/2"	1.4	97	
6.3 mm	1/4"	3.5	93	
4.75 mm	#4	1.1	92	
2.00 mm	#10	6.1	86	
0.850 mm	#20	16.1	70	
0.600 mm	#30	10.9	59	
0.425 mm	#40	14.5	45	
0.150 mm	#100	27.2	18	
0.075 mm	#200	2.4	15	
Pan		15.1		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By:

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 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental	Project:	Honeywell Project Jersey City, NJ
Material:	Horizon C Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0959B
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	8/27/2020	Sampled By:	Client
Date Tested:	8/31/2020	Tested By:	John Brinsfield

Report of pH of Soil
Test Method: ASTM D4972 Method A

pH Test Result: 6.8 (in Distilled Water)

 6.3 (In Calcium Chloride Solution)

Specification

Comments:

Emily J. Rodriguez

Report Reviewed By: _____

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 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Item:	Horizon C Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0959B
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	8/27/2020	Sampled By:	Client
Date Tested:	9/2/2020-09/03/2020	Tested By:	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD
 Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	97.0	
#4	4.75	94.6	
#10	2.00	88.1	
#40	0.425	41.9	
#200	0.075	17.9	
Hydrometer Analysis Results	0.050	17.5	
	0.020	16.1	
	0.010	14.8	
	0.005	13.5	
	0.002	12.1	

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)
 DISPERSION METHOD: Mechanical, 1 min.
 SAND & GRAVEL PARTICLES: Hard Subrounded Particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	11.9%
Fraction Passing #10:		
Sand	(#10 to 0.05 mm)	80.1%
Silt	(0.05 mm to 0.002 mm)	6.1%
Clay	(Less than 0.002 mm)	13.7%
Total		100.0%
USDA Soil Textural Class		Sandy Loam

Emily J. Rodriguez

REPORT REVIEWED BY: _____

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 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Material:	Horizon C Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0959B
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	8/27/2020	Sampled By:	Client
Date Tested:	8/31/2020	Tested By:	John Brinsfield

Report of Organic Content of Soils by Loss on Ignition
Test Method: ASTM D2974 Method C

Inorganic Content: 99.4 % (Sand, silt, clay, etc.)
Organic Content: 0.6 %

Specification: _____

Comments: Sample was ashed at 440 ± 40°C

Emily J. Rodriguez

Report Reviewed By: _____

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 Revised: 3/8/2019



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Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Item:	Horizon C Topsoil	Project Number:	200608
Source:	Eme	Lab Number:	20-0959B
Date Sampled:	8/27/2020	Sampled By:	Client
Date Tested:	8/31/2020	Tested By:	John Brinsfield / Steven Bordengo

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE
Test Method(s): ASTM D6938

Lab Number	Sample Type	Sampling Location	Specification
20-0959B	Horizon C Topsoil	Stockpile	

Sieve Size		% Retained	% Passing	Spec. % Pass
mm	Inches			
100.0 mm	4"	0.0	100	
75.0 mm	3"	0.0	100	
63.0 mm	2 1/2"	0.0	100	
50.0 mm	2"	0.0	100	
37.5 mm	1 1/2"	0.0	100	
25.0 mm	1"	0.0	100	
19.0 mm	3/4"	0.0	100	
12.5 mm	1/2"	1.1	99	
6.3 mm	1/4"	3.2	96	
4.75 mm	#4	1.1	95	
2.00 mm	#10	6.5	88	
0.850 mm	#20	19.7	68	
0.600 mm	#30	12.4	56	
0.425 mm	#40	14.1	42	
0.150 mm	#100	21.3	21	
0.075 mm	#200	2.7	18	
Pan		17.9		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By:

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12960 Commerce Lake Drive, A14, Fort Myers, FL 33913

42 Day Farm Road, West Stockbridge, MA 01266

1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Material:	Lightweight Fill	Lab Number:	20-0618A
Source:	Solelite	Project Number:	200608
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	6/3/2020	Sampled By:	Client
Date Tested:	6/18/2020	Tested By:	John Brinsfield

REPORT OF UNIT WEIGHT AND VOIDS IN AGGREGATE
Test Method: ASTM C29

Procedure used: Rodding

		Specification
Bulk Density (Dry)	46.0	
Bulk Density (SSD)	51.0	
Void Content	44%	

Bulk Density values are in units of lbs/cu ft.

Comments:

No specifications available at time of testing.

Report Reviewed By: _____

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 1813 State Route 7, Harpursville, NY 13787
 12960 Commerce Lake Drive, Unit 14, Fort Myers, FL 33913
 42 Day Farm Road, West Stockbridge, MA 01266

Client:	Sevenson Environmental Services	Project:	Honeywell Project Jersey Cit
Material:	Lightweight Fill	Project Number:	200608
Source:	Solelite	Lab Number:	20-0618A
Location:	Stockpile	Item Number:	No Specification
Date Sampled:	6/3/2020	Sampled By:	Client
Date Tested:	6/19/2020	Tested By:	Jake McCarey

SPECIFIC GRAVITY AND ABSORPTION OF COARSE AGGREGATE
Test Method: AASHTO T85

Trial #	Bulk Specific Gravity	Bulk Specific Gravity SSD	Apparent Specific Gravity	Absorption %
	G _b	G _s	G _a	A
1	1.337	1.481	1.562	10.75
2	1.322	1.470	1.552	11.21
3	1.338	1.484	1.566	10.91
Average	1.332	1.478	1.560	10.96

Specification(s):

Notes:

Comments:

Emily J. Rodriguez

Report Reviewed By:

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 12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
 42 Day Farm Road, West Stockbridge, MA 01266
 1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Honeywell Project Jersey City, NJ
Item:	Lightweight Fill	Project Number:	200608
Source:	Solelite	Lab Number:	20-0618A
Date Sampled:	6/3/2020	Sampled By:	Client
Date Tested:	6/16/2020	Tested By:	Daniel Eastman

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE
Test Method(s): ASTM D6913

Lab Number	Sample Type	Sampling Location	Specification
20-0618A	Lightweight Fill	Stockpile	No Specification

Sieve Size		% Retained	% Passing	Spec. % Pass
mm	Inches			
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	3.7	96.3	
12.5 mm	1/2"	40.0	56.3	
6.3 mm	1/4"	44.4	11.9	
4.75 mm	#4	6.0	5.9	
2.00 mm	#10	2.3	3.6	
0.850 mm	#20	0.5	3.1	
0.600 mm	#30	0.1	3.0	
0.425 mm	#40	0.1	2.9	
0.150 mm	#100	0.4	2.5	
0.075 mm	#200	0.4	2.1	
Pan		2.1		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By:

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PO Box 437 MOUNT MARION, NY 12456 ~ 962 KINGS HIGHWAY, SAUGERTIES, NY 12477

PHONE (888) 528-7853 FAX (845) 246-2619

Website: www.nesolite.com



TO WHOM IT MAY CONCERN

FROM: Ron Vaughn

DATE: June 30, 2017

The test results for our 3/4" to #4 (344) material is listed below. These numbers represent the average of last year's production.

Gradation:

<u>SIEVE</u>	<u>% Passing</u>
1" (25 mm)	100
3/4" (19 mm)	98
1/2" (12.5 mm)	64
3/8" (9.5 mm)	39
#4 (4.75 mm)	8
#200 (.075 mm)	2

Specific Gravity : 1.50

Density (OD): 44 pcf (Minimum)
(Wet @10%) 48 pcf
(AASHTO T-99) 53 pcf (Dry - Maximum)
58 pcf (Wet)

Soundness (ASTM C88)

Magnesium Sulfate (5 Cycle) = 1.2% Loss

LA Abrasion (ASTM C131)

Grading B = 26.8% Loss

If you have any further questions, please do not hesitate to contact me.

Ronald E. Vaughn
Director of Technical Services

cc: RV/file

pH: 7.0 (AASHTO T289-1)

Chloride Content: 34 ppm
(AASHTO T291-I)

Resistivity 663,013 ohm-cm
(AASHTO T288-I)

Internal Angle of Friction in Degrees
Loose: 41.5 @ 41.5 pcf & 17.3% mc
Compacted: 46.6 @ 52.0 pcf & 17.3%
By: ASTM D4030

Sulfate Content: (AASHTO T290-I) =
<50 ppm

APPENDIX H

COMPACTION TESTING INFORMATION



— AN ATLAS COMPANY —

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: September 22, 2020

ATC Job No.: 0103000015

	AM (°f)	PM (°f)
Temperature:	55	72

Weather (AM): Sunny

Weather (PM): Sunny

Key Persons On-Site:

Paul Gallo - Sevenson (Superintendent)

Josh - Wood Engineering

	YES	NO
Spec's & Drawings Available On-Site:	x	

THE FOLLOWING WAS NOTED:

Depart Base: 7:30 AM
Arrived On-Site: 9:00 AM

Departed Site: 3:30 PM
Arrive Base: 5:00 PM

- >ATC arrived onsite as scheduled for Backfill Placement Observations and Nuclear Density Compaction Testing
- >Upon arrival onsite, ATC met Paul at the Site Trailer, who informed ATC that work was located nearby
- >Paul instructed ATC to follow the haul road to the excavation area and wait until they were ready for testing
- >Paul informed ATC that contractor was still excavating material and was not ready for backfill yet
- >Paul informed ATC that backfill would consist of two approximate 12" lifts of "bridge" material, uncompacted
- >Paul informed ATC that after the "bridge" material, contractor would backfill with Quarry Screenings
- >Paul informed ATC that contractor would be placing material in approximate 12" lifts and compacting each lift
- >ATC drove to Area 3 for the work being performed today
- >ATC observed contractor excavating in place material into a haul truck
- >As contractor reached bottom of excavation, Maser surveyed bottom to verify depth
- >Contractor then backfilled the excavated area with the two lifts of the "bridge" material
- >"Bridge" material appeared to be 6" pieces of crushed concrete
- >Paul then notified ATC that contractor was starting to backfill with the Quarry Screenings
- >ATC observed contractor placing 4, approximate 12" lifts in the excavated area
- >ATC observed contractor compact each lift with a trench roller and a walk behind vibra plate compactor
- >ATC tested each lift for compaction, recording 95% or greater of the provided proctor for Sample BS-7
- >Results were also given to Wood Engineering

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Richard Rigney



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____

Project No.: 01030 00015

Client: Sevenson Environmental Services, Inc.

Technician: Richard Rigney

Project: Honeywell Deferred Areas Remediation

DATE: September 22, 2020

General Contractor: Sevenson Environmental Services, Inc.

Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION (SEA LEVEL)	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL					
1	119.1	1	116.2	114.1	2.1	1.8	95.0	95.8	X			0	Area 3
2	119.1	2	117.1	115.0	2.1	1.8	95.0	96.6	X			+1	Area 3
3	119.1	3	120.7	118.6	2.1	1.8	95.0	99.6	X			+2	Area 3
4	119.1	4	119.9	115.8	4.1	3.5	95.0	97.2	X			+3	Area 3

Compaction Equipment Used: Vibratory: X Non-Vibratory Smooth Steel Drum Sheepsfoot X Brickfoot
 Rubber-tired Vibratory Plate X Walk Behind Steel Drum X Other:

Remarks: Paul informed ATC of Elevation only; All lifts were compacted with a trench roller and a walk behind plate tamper; Wood Engineering documented location of each compaction test

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
BS-7	119.6	9.8	X		Gauge Model #:	3440
(Provided by					Gauge Serial #	29762
TerraSense, LLC)					Standard Counts	
Method: A Backscatter	B Direct Transmission	<u> B </u>			Moisture	Density
					660	1723

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
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Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 9/22/2020



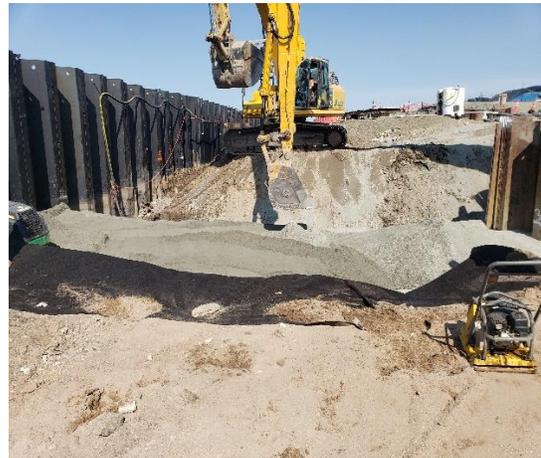
Site of Excavation and Backfill



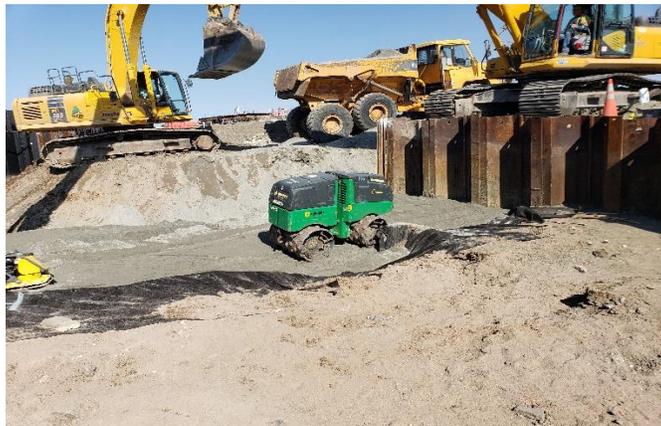
Compacting First Lift



Compacting with Roller and Tamper



Placing Backfill



3rd Lift



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: September 23, 2020

ATC Job No.: 0103000015

Temperature:	AM (°f)	PM (°f)
	65	80

Weather (AM): Sunny

Weather (PM): Sunny

Key Persons On-Site:

Paul Gallo - Sevenson (Super)

Josh - Wood Engineering

	YES	NO
Spec's & Drawings Available On-Site:	x	

THE FOLLOWING WAS NOTED:

Depart Base: 6:45 AM
Arrived On-Site: 8:15 AM

Departed Site: 1:45 PM
Arrive Base: 2:45 PM

- > ATC representative arrived on-site, as scheduled, to observe the following:
- > ATC arrived on-site and met with Paul- Sevenson to go over plans for the day.
- > Contractor backfilling at Area 4 with Quarry Screenings, using a Komatsu PC300LC excavator.
- > Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
- > Screenings used for backfilling was delivered to area by dump truck. After delivery, contractor graded the screenings into excavated areas using excavator.
- > ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Sample BS-7.
- > ATC notified Paul- Sevenson of low moisture percentages.
- > ATC received elevations from Wood Engineering.
- > See attached Field Density Sheets and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Robert Kolaski



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No: _____ Project No.: 01030 00015
 Client: Sevenson Environmental Services, Inc. Technician: Robert Kolaski
 Project: Honeywell Deferred Areas Remediation DATE: September 23, 2020
 General Contractor: Sevenson Environmental Services, Inc. Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	119.6	1	117.7	116.0	1.7	1.5	95.0	97.0	x			6'		Area 4 (Elevation- 4')
2	119.6	1	118.0	114.9	3.1	2.7	95.0	96.1	x			6'		Area 4 (Elevation- 4')
3	119.6	2	116.9	114.3	2.6	2.3	95.0	95.6	x			5'		Area 4 (Elevation- 5')
4	119.6	2	118.5	115.6	2.9	2.5	95.0	96.7	x			5'		Area 4 (Elevation- 5')
5	119.6	3	117.3	114.2	3.1	2.7	95.0	95.5	x			4'		Area 4 (Elevation- 6')
6	119.6	3	119.2	116.7	2.5	2.1	95.0	97.6	x			4'		Area 4 (Elevation- 6')
7	119.6	4	116.8	115.0	1.8	1.6	95.0	96.2	x			3'		Area 4 (Elevation- 7')
8	119.6	4	116.6	114.8	1.8	1.6	95.0	96.0	x			3'		Area 4 (Elevation- 7')
9	119.6	5	121.3	118.6	2.7	2.3	95.0	99.2	x			2'		Area 4 (Elevation- 8')
10	119.6	5	119.2	115.5	3.7	3.2	95.0	96.6	x			2'		Area 4 (Elevation- 8')

Compaction Equipment Used: Vibratory: Non-Vibratory Smooth Steel Drum Sheepsfoot Brickfoot
 Rubber-tired Vibratory Plate Walk Behind Steel Drum Other: _____
Remarks: Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
BS-7	119.6	9.8	_____	_____	Gauge Model #:	3440
(Provided by)	_____	_____	_____	_____	Gauge Serial #	26800
TerraSense, LLC)	_____	_____	_____	_____	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u>B</u>			Moisture	Density
					665	1619

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____

Project No.: 01030 00015

Client: Severson Environmental Services, Inc.

Technician: Robert Kolaski

Project: Honeywell Deferred Areas Remediation

DATE: September 23, 2020

General Contractor: Severson Environmental Services, Inc.

Grading Contractor: Severson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
11	119.6	6	117.2	115.0	2.2	1.9	95.0	96.2	x			1'		Area 4 (Elevation- 9')
12	119.6	6	118.8	116.7	2.1	1.8	95.0	97.6	x			1'		Area 4 (Elevation- 9')
13	119.6	7	120.5	118.5	2.0	1.7	95.0	99.1	x			0'		Area 4 (Elevation- 10')
14	119.6	7	118.9	115.9	3.0	2.6	95.0	96.9	x			0'		Area 4 (Elevation- 10')

Compaction Equipment Used: Vibratory: Non-Vibratory Smooth Steel Drum Sheepsfoot Brickfoot
 Rubber-tired Vibratory Plate Walk Behind Steel Drum Other: _____

Remarks: Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
BS-7	119.6	9.8	_____	_____	Gauge Model #:	3440
(Provided by	_____	_____	_____	_____	Gauge Serial #	26800
TerraSense, LLC)	_____	_____	_____	_____	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					665	1619

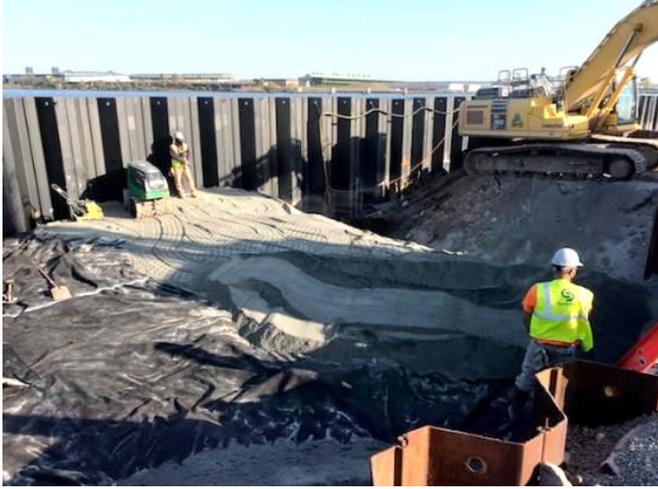
[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



— AN ATLAS COMPANY —

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tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 9/23/2020



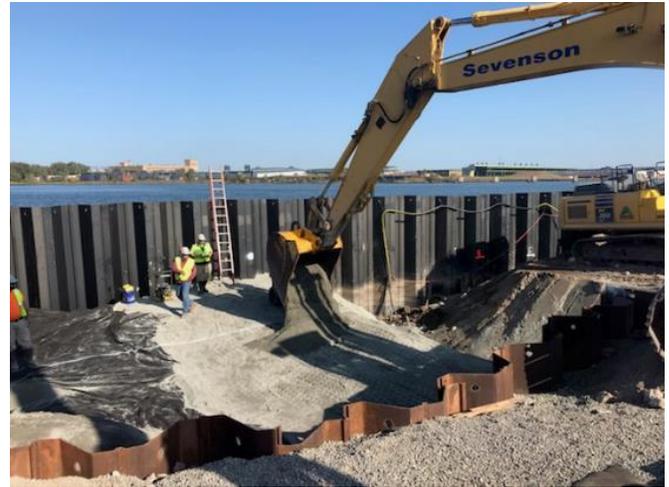
Area 4: Backfill Progress



Area 4: Compaction



Area 4: Soils Placement



Area 4: Soils Placement



Area 4: Grading Soils



Area 4: Compaction



—AN ATLAS COMPANY—

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tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 9/23/2020



Area 4: Compaction



Area 4: Compaction



Area 4: Grading Soils



Area 4: Compaction



Area 4: Backfill Progress



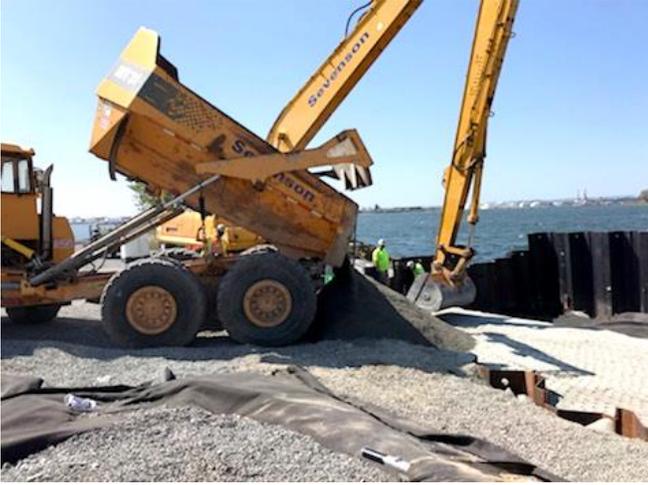
Area 4: Backfill Progress



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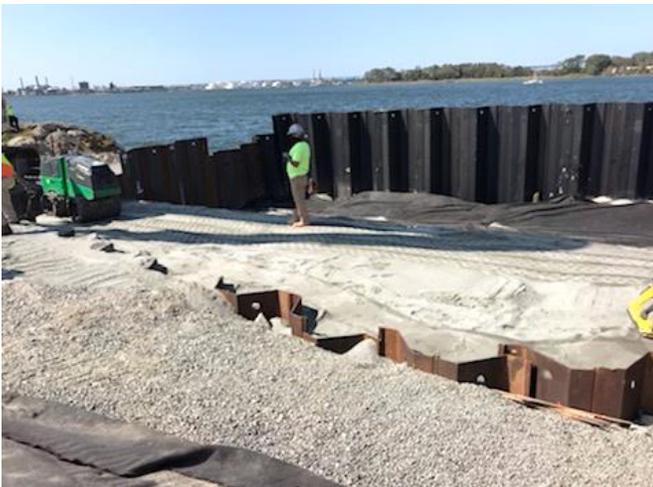
Project: Honeywell Deferred Areas Remediation
Date: 9/23/2020



Area 4: Soils Placement



Area 4: Geo-Fabric Placement



Area 4: Compaction



Area 4: Compaction



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: September 30, 2020

ATC Job No.: 0103000015

	AM (°f)	PM (°f)
Temperature:	60	65

Weather (AM): Cloudy

Weather (PM): Sunny

Key Persons On-Site:

Paul Gallo - Sevenson (Super)

Josh - Wood Engineering

Spec's & Drawings Available On-Site:

	YES	NO
	x	

THE FOLLOWING WAS NOTED:

Depart Base: 5:45 AM
 Arrived On-Site: 6:45 AM

Departed Site: 3:45 PM
 Arrive Base: 5:45 PM

- > ATC representative arrived on-site, as scheduled, to observe the following:
- > ATC arrived on-site and met with Paul- Sevenson to go over plans for the day.
- > Contractor backfilling at Area 2 with Quarry Screenings, using a Komatsu D39-PX bulldozer.
- > Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
- > Screenings used for backfilling was delivered to area by dump truck. After delivery, contractor graded the screenings into excavated areas using bulldozer.
- > ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Sample BS-7.
- > ATC notified Paul- Sevenson of low moisture percentages.
- > ATC received elevations from Wood Engineering.
- > See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Robert Kolaski



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____ **Project No.:** 01030 00015
Client: Sevenson Environmental Services, Inc. **Technician:** Robert Kolaski
Project: Honeywell Deferred Areas Remediation **DATE:** September 30, 2020
General Contractor: Sevenson Environmental Services, Inc. **Grading Contractor:** Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	119.6	1	119.4	115.5	3.9	3.4	95.0	96.6	x			10.5'		Area 2 (Elevation- Minus 2.5')
2	119.6	1	119.8	115.4	4.4	3.8	95.0	96.5	x			10.5'		Area 2 (Elevation- Minus 2.5')
3	119.6	2	120.5	116.8	3.7	3.2	95.0	97.7	x			9.5'		Area 2 (Elevation- Minus 1.5')
4	119.6	2	120.2	116.5	3.7	3.2	95.0	97.4	x			9.5'		Area 2 (Elevation- Minus 1.5')
5	119.6	3	116.7	114.3	2.4	2.1	95.0	95.6	x			8.5'		Area 2 (Elevation- Minus 0.5')
6	119.6	3	118.6	116.4	2.2	1.9	95.0	97.3	x			8.5'		Area 2 (Elevation- Minus 0.5')
7	119.6	4	116.3	114.0	2.3	2.0	95.0	95.3	x			7.5'		Area 2 (Elevation- 0.5')
8	119.6	4	118.9	116.6	2.3	2.0	95.0	97.5	x			7.5'		Area 2 (Elevation- 0.5')

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:
Remarks: Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
BS-7	119.6	9.8	_____	_____	Gauge Model #:	3440
(Provided by)	_____	_____	_____	_____	Gauge Serial #	26800
TerraSense, LLC)	_____	_____	_____	_____	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					<u> 677 </u>	<u> 1619 </u>

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 9/30/2020



Area 2: Pre-Backfill



Area 2: Soils Delivery



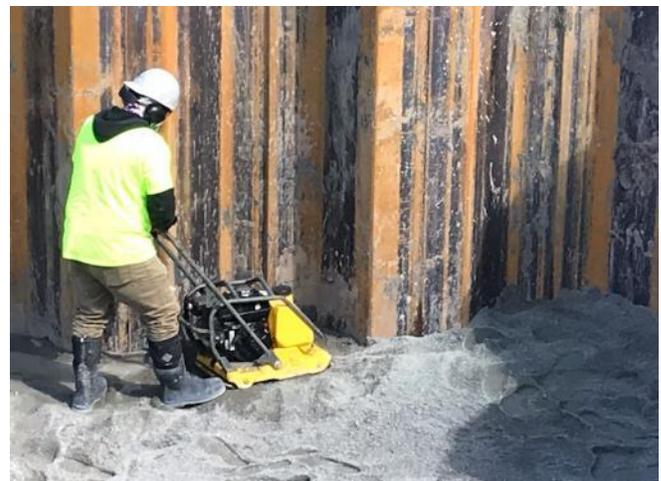
Area 2: Grading Soils



Area 2: Grading Soils



Area 2: Soils Delivery



Area 2: Compaction at Edges



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 9/30/2020



Area 2: Compaction



Area 2: Compaction



Area 2: Grading Soils



Area 2: Compaction



Area 2: End of Day Backfill Progress



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: October 1, 2020

ATC Job No.: 0103000015

AM (°f) | PM (°f)

Temperature:

60	65
----	----

Weather (AM): Cloudy

Weather (PM): Sunny

Key Persons On-Site:

Paul Gallo - Sevenson (Super)
Josh - Wood Engineering

	YES	NO
Spec's & Drawings Available On-Site:	x	

THE FOLLOWING WAS NOTED:

Depart Base: 5:45 AM
Arrived On-Site: 6:45 AM

Departed Site: 3:45 PM
Arrive Base: 5:15 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

- > ATC arrived on-site and met with Paul- Sevenson to go over plans for the day.
- > Contractor backfilling at Area 2 with Quarry Screenings, using a Komatsu D39-PX bulldozer.
- > Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
- > Screenings used for backfilling was delivered to area by dump truck. After delivery, contractor graded the screenings into excavated areas using bulldozer.
- > ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Sample BS-7.
- > ATC notified Paul- Sevenson of low moisture percentages.
- > ATC received elevations from Wood Engineering.

> See attached Field Density Sheets and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No: _____ Project No.: 01030 00015
 Client: Sevenson Environmental Services, Inc. Technician: Joe Franks
 Project: Honeywell Deferred Areas Remediation DATE: October 1, 2020
 General Contractor: Sevenson Environmental Services, Inc. Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	119.6	1	118.5	116.4	2.1	1.8	95.0	97.3	x			6.5'		Area 2 (Elevation- Minus 1.82')
2	119.6	1	119.9	113.7	2.3	1.6	95.0	95.1	x			6.5'		Area 2 (Elevation- Minus 1.82")
3	119.6	2	116.9	114.9	2.0	1.8	95.0	96.1	x			5.5'		Area 2 (Elevation- Minus 1.5')
4	119.6	2	120.2	117.4	2.8	2.4	95.0	98.2	x			5.5'		Area 2 (Elevation- Minus 1.5')
5	119.6	3	117.4	115.6	2.2	1.9	95.0	96.7	x			4.5'		Area 2 (Elevation- Minus 2.5')
6	119.6	3	118.3	116.1	2.4	2.1	95.0	97.1	x			4.5'		Area 2 (Elevation- Minus 2.5')
7	119.6	4	120.0	118.3	1.7	1.4	95.0	98.9	x			3.5'		Area 2 (Elevation- 3.5')
8	119.6	4	121.5	119.0	1.7	1.3	95.0	99.5	x			3.5'		Area 2 (Elevation- 3.5')
9	119.6	5	122.0	119.0	3.0	2.5	95.0	99.5	x					Area 2 (Elevation 4.5)
10	119.6	5	123.0	119.3	3.7	3.1	95.0	99.7	x					Area 2(Elevation 4.5)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:
Remarks: Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
BS-7	119.6	9.8	___	___	Gauge Model #:	3440
(Provided by)	___	___	___	___	Gauge Serial #	26909
TerraSense, LLC)	___	___	___	___	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					<u> 629 </u>	<u> 1789 </u>

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____ **Project No.:** 01030 00015

Client: Sevenson Environmental Services, Inc. **Technician:** Joe Franks

Project: Honeywell Deferred Areas Remediation **DATE:** October 1, 2020

General Contractor: Sevenson Environmental Services, Inc. **Grading Contractor:** Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
11	119.6	6	121.7	119.0	2.7	2.3	95.0	99.5	x			6.5'		Area 2 (Elevation- Minus 5.5')
12	119.6	6	120.8	118.8	2.0	1.7	95.0	99.3	x			6.5'		Area 2 (Elevation- Minus 5.5")

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:

Remarks: Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
BS-7	119.6	9.8	—	—	Gauge Model #:	3440
(Provided by)	—	—	—	—	Gauge Serial #	26909
TerraSense, LLC)	—	—	—	—	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					<u> 629 </u>	<u> 1789 </u>

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
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Project: Honeywell Deferred Areas Remediation
Date: 10/1/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
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tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: October 2, 2020

ATC Job No.: 0103000015

Spec's & Drawings Available On-Site:	YES	NO
	x	

	AM (°f)	PM (°f)
Temperature:	61	70

Weather (AM): Clear

Weather (PM): Partly Cloudy

Key Persons On-Site:

- Paul Gallo - Sevenson (Super)
- Josh - Wood Engineering
- _____
- _____
- _____

THE FOLLOWING WAS NOTED:

Depart Base: 6:00 AM
Arrived On-Site: 7:30 AM

Departed Site: 2:30 PM
Arrive Base: 3:30 PM

- > ATC representative arrived on-site, as scheduled, to observe the following:
- > ATC arrived on-site and met with Paul- Sevenson to go over plans for the day.
- > Contractor backfilling at Area 2 with Quarry Screenings, using a Komatsu D39-PX bulldozer.
- > Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
- > Screenings used for backfilling was delivered to area by dump truck. After delivery, contractor graded the screenings into excavated areas using bulldozer.
- > ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Sample BS-7.
- > ATC notified Paul- Sevenson of low moisture percentages.
- > ATC received elevations from Wood Engineering.
- > See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____ **Project No.:** 01030 00015
Client: Sevenson Environmental Services, Inc. **Technician:** Joe Franks
Project: Honeywell Deferred Areas Remediation **DATE:** October 2, 2020
General Contractor: Sevenson Environmental Services, Inc. **Grading Contractor:** Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	119.6	1	121.7	119.4	2.3	1.9	95.0	99.8	x					Area 2 (Elevation- Minus 5.5')
2	119.6	1	120.3	117.3	3.0	2.6	95.0	98.1	x					Area 2 (Elevation- Minus 5.5')
3	119.6	2	120.3	118.6	1.7	1.4	95.0	99.2	x					Area 2 (Elevation- Minus 6')
4	119.6	2	121.2	119.1	2.1	1.8	95.0	99.6	x					Area 2 (Elevation- Minus 6")
5	119.6	3	121.0	118.9	2.1	1.8	95.0	99.4	x					Area 2 (Elevation- Minus 6.5")
6	119.6	3	120.9	118.9	2.0	1.7	95.0	99.4	x					Area 2 (Elevation- Minus 6.5")
7	119.6	4	120.7	118.7	2.0	1.7	95.0	99.2	x					Area 2 (Elevation- 7")
8	119.6	4	121.5	119.4	2.1	1.8	95.0	99.8	x					Area 2 (Elevation- 8')
9	119.6	5	121.2	118.7	2.5	2.1	95.0	99.2	x					Area 2 (Elevation 9')
10	119.6	5	119.7	117.7	2.0	1.7	95.0	98.4	x					Area 2(Elevation 9.5')

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:
Remarks: Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
BS-7	119.6	9.8	___	___	Gauge Model #:	3440
(Provided by)	___	___	___	___	Gauge Serial #	26909
TerraSense, LLC)	___	___	___	___	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					<u> 629 </u>	<u> 1789 </u>

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 · fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 10/2/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: November 11, 2020

ATC Job No.: 0103000015

Spec's & Drawings Available On-Site:	YES	NO
	x	

	AM (°f)	PM (°f)
Temperature:	55	70

Weather (AM): Partly Cloudy

Weather (PM): Partly Cloudy

Key Persons On-Site:

- Paul Gallo - Sevenson (Super)
- Shea- Sevenson
- Toni- Sevenson
- Josh - Wood Engineering

THE FOLLOWING WAS NOTED:

Depart Base: 6:00 AM
Arrived On-Site: 7:30 AM

Departed Site: 2:30 PM
Arrive Base: 4:00 PM

- > ATC representative arrived on-site, as scheduled, to observe the following:
- > ATC arrived on-site and met with Toni- Sevenson to go over plans for the day.
- > Contractor backfilling at Area 1A-C with General Fill, using a Komatsu D39-PX bulldozer.
- > Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
- > Screenings used for backfilling was delivered to area by dump truck. After delivery, contractor graded the common reusable on site fill into excavated areas using bulldozer.
- > The above area was compacted minimum of two times.
- > The Elevation -2 contractor placed common Barrow fill material for second lift and continued to backfill.
- > ATC tested compaction, after each lift, using a Troxler nuclear density gauge.
- > ATC received elevations from Wood Engineering.
- > See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____ **Project No.:** 01030 00015
Client: Sevenson Environmental Services, Inc. **Technician:** Joe Franks
Project: Honeywell Deferred Areas Remediation **DATE:** November 11, 2020
General Contractor: Sevenson Environmental Services, Inc. **Grading Contractor:** Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1		1	135.4	118.1	17.0	14.4	95.0	92.5						Area 1A-C (-3)
2		1	137.7	117.5	16.3	13.8	95.0	92.8						Area 1A-C (-3)
3		1	127.9	110.2	17.2	16.1	95.0	86.3						Area 1A-C (-3)
4		1	136.3	120.4	15.9	13.1	95.0	94.2						Area 1A-C (-3)
5	128.7	2	139.8	127.1	12.8	10.0	95.0	98.8	x					Area 1A-C (-2)
6	128.7	2	137.7	124.3	13.8	10.8	95.0	96.6	x					Area 1A-C (-2)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:

Remarks: First Lift Tests Were Performed Using a Non Existent Proctor- On Site Fill Under Direction from Wood Engineering

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
					Gauge Model #:	3440
5	128.7	9.3	x		Gauge Serial #	26909
					Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					629	1789

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
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Project: Honeywell Deferred Areas Remediation
Date: 11/11/2020





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ATC Group Services LLC
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tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: November 13, 2020

ATC Job No.: 0103000015

Temperature:	AM (°f)	PM (°f)
	56	75

Weather (AM): Partly Cloudy

Weather (PM): Partly Cloudy

Key Persons On-Site:

Paul Gallo - Sevenson (Super)

Shea- Sevenson

Toni- Sevenson

Josh - Wood Engineering

Spec's & Drawings Available On-Site:	YES	NO
	x	

THE FOLLOWING WAS NOTED:

Depart Base: 6:00 AM
Arrived On-Site: 7:30 AM

Departed Site: 2:30 PM
Arrive Base: 4:00 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

> ATC arrived on-site and met with Toni- Sevenson to go over plans for the day.

> Contractor backfilling at Area 1A-C with General Fill, using a Komatsu D39-PX bulldozer.

> Backfill was done in 1' lift and compacted using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.

> Reusable Common Barrow was used for backfilling was delivered to area by dump truck. After delivery, contractor graded the common reusable on site fill into excavated areas using bulldozer.

> ATC verified compaction using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Sample BS-5.

> ATC received elevations from Wood Engineering.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



— AN ATLAS COMPANY —

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 · fax 609-386-7951

Permit No: _____ Project No.: 01030 00015
 Client: Sevenson Environmental Services, Inc. Technician: Joe Franks
 Project: Honeywell Deferred Areas Remediation DATE: November 13, 2020
 General Contractor: Sevenson Environmental Services, Inc. Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	128.7	1	130.6	126.6	4.7	3.7	95.0	97.7	x					Area 1A-C (+1)
2	128.7	1	131.0	126.0	5.0	3.9	95.0	97.0	x					Area 1A-C (+2)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:

Remarks: Highlighted Red Tests were done from Non Existant Proctor- ON Site Fill without no proctor taken- Under direction from Wood Engineering.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
BS-5	128.7	9.3	_____	_____	Gauge Model #:	3440
			_____	_____	Gauge Serial #	26909
			_____	_____	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					<u> 625 </u>	<u> 1795 </u>

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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Project: Honeywell Deferred Areas Remediation
Date: 11/13/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
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tel. 609-386-8800 · fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 11/16/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: November 17, 2020

ATC Job No.: 0103000015

Spec's & Drawings Available On-Site:	YES	NO
	x	

	AM (°f)	PM (°f)
Temperature:	43	55

Weather (AM): Partly Cloudy

Weather (PM): Partly Cloudy

Key Persons On-Site:

- Paul Gallo - Sevenson (Super)
- Shea- Sevenson
- Toni- Sevenson
- Josh - Wood Engineering

THE FOLLOWING WAS NOTED:

Depart Base: 6:15 AM
Arrived On-Site: 7:45 AM

Departed Site: 3:30 PM
Arrive Base: 5:00 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

- > ATC arrived on-site and met with Toni- Sevenson to go over plans for the day.
- > Contractor backfilling at Area 1A-C with General Fill, using a Komatsu D39-PX bulldozer.
- > Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
- > Reusable Common Barrow was used for backfilling and was delivered to area by dump truck. After delivery, contractor graded the common reusable on site fill into excavated areas using bulldozer.

> ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctors for Samples 5 and 7.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____ **Project No.:** 01030 00015
Client: Sevenson Environmental Services, Inc. **Technician:** Joe Franks
Project: Honeywell Deferred Areas Remediation **DATE:** November 17, 2020
General Contractor: Sevenson Environmental Services, Inc. **Grading Contractor:** Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	128.7	1	132.7	127.2	5.5	4.3	95.0	98.8	x					Area 1A-C (+1.5)
2	128.7	1	128.1	123.8	4.3	3.5	95.0	96.2	x					Area 1A-C (+1.5)
3	128.7	2	138.0	122.7	15.3	12.5	95.0	95.3	x					Area 1A-C (+2.5)
4	128.7	2	138.3	122.5	15.8	12.9	95.0	95.2	x					Area 1A-C (+2.5)
5	119.6	3	123.0	118.7	4.3	3.6	95.0	99.2	x					Area 1A-C (+3.0)
6	119.6	3	121.4	118.0	3.4	2.9	95.0	98.7	x					Area 1A-C (+3.0)
7	128.7	4	133.0	126.8	6.2	4.9	95.0	98.5	x					Area 1A-C (+3.5)
8	128.7	4	130.3	124.6	5.7	4.6	95.0	96.8	x					Area 1A-C (+3.5)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:

Remarks: _____

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
7	119.6	9.8	<u> x </u>	<u> </u>	Gauge Model #:	3440
5	128.7	9.3	<u> x </u>	<u> </u>	Gauge Serial #	26909
					Standard Counts	
Method:	A: Backscatter	B: Direct Transmission	<u> B </u>		Moisture	Density
					<u> 625 </u>	<u> 1795 </u>

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
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Project: Honeywell Deferred Areas Remediation
Date: 11/17/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: November 20, 2020

ATC Job No.: 0103000015

Spec's & Drawings Available On-Site:	YES	NO
	x	

	AM (°f)	PM (°f)
Temperature:	45	59

Weather (AM): Partly Cloudy

Weather (PM): Partly Cloudy

Key Persons On-Site:

- Paul Gallo - Sevenson (Super)
- Shea- Sevenson
- Toni- Sevenson
- Josh - Wood Engineering

THE FOLLOWING WAS NOTED:

Depart Base: 6:15 AM
Arrived On-Site: 7:45 AM

Departed Site: 3:30 PM
Arrive Base: 5:00 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

- > ATC arrived on-site and met with Toni- Sevenson to go over plans for the day.
- > Contractor backfilling at Area 1A-C with General Fill, using a Komatsu D39-PX bulldozer.
- > Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
- > Reusable Common Barrow was used for backfilling and was delivered to area by dump truck. After delivery, contractor graded the common reusable on site fill into excavated areas using bulldozer.

> ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Sample 5.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____

Project No.: 01030 00015

Client: Severson Environmental Services, Inc.

Technician: Joe Franks

Project: Honeywell Deferred Areas Remediation

DATE: November 20, 2020

General Contractor: Severson Environmental Services, Inc.

Grading Contractor: Severson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	128.7	1	126.8	123.1	3.7	3.0	95.0	95.6	x					Area 1A-C (+4.0)
2	128.7	2	132.1	125.9	6.2	4.9	95.0	97.8	x					Area 1A-C (+4.5)
3	128.7	3	125.9	122.4	3.5	2.9	95.0	95.1	x					Area 1A-C (+5.5)
4	128.7	4	125.2	124.1	1.1	0.9	95.0	96.4	x					Area 1A-C (+6.5)
5	128.7	4	129.3	127.3	2.0	1.6	95.0	98.9	x					Area 1A-C (+6.5)
6	128.7	5	128.4	126.0	2.4	1.9	95.0	97.9	x					Area 1A-C (+7.5)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:

Remarks: _____

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
5	128.7	9.3	x		Gauge Model #:	3440
					Gauge Serial #	26909
					Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					<u> 622 </u>	<u> 1781 </u>

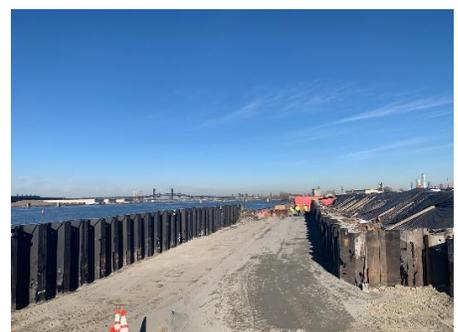
[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 · fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 11/20/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: December 8, 2020

ATC Job No.: 0103000015

Table with 2 columns: YES, NO. Row: Spec's & Drawings Available On-Site: x

Table with 2 columns: AM (°f), PM (°f). Row: Temperature: 34, 40

Weather (AM): Partly Cloudy

Weather (PM): Partly Cloudy

Key Persons On-Site:

- Paul Gallo - Sevenson (Super)
Shea- Sevenson
Toni- Sevenson
Josh - Wood Engineering

THE FOLLOWING WAS NOTED:

Depart Base: 6:30 AM
Arrived On-Site: 8:00 AM

Departed Site: 5:00 PM
Arrive Base: 6:30 PM

- > ATC representative arrived on-site, as scheduled, to observe the following:
> ATC arrived on-site and met with Toni- Sevenson to go over plans for the day.
> Contractor backfilling at Area 1A-C with General Fill, using a Komatsu D39-PX bulldozer.
> Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
> Screenings were stockpiled on site and placed in controlled lifts on the slope by front loader.
> The above area was compacted minimum of two times.
> The Elevation of the compaction started at elevation 8.5 and ended at 12.0 elevation.
> ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Sample BS-5.
> ATC received elevations from Wood Engineering.
> See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____

Project No.: 01030 00015

Client: Sevenson Environmental Services, Inc.

Technician: Joe Franks

Project: Honeywell Deferred Areas Remediation

DATE: December 8, 2020

General Contractor: Sevenson Environmental Services, Inc.

Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	128.7	1	134.7	127.6	7.1	5.6	95.0	99.1	x					Area 1A-C (-8.5)
2	128.7	2	132.7	126.5	6.2	4.9	95.0	98.3	x					Area 1A-C (-9.0)
3	128.7	3	129.4	122.4	7.0	5.7	95.0	95.1	x					Area 1A-C (-10.0)
4	128.7	4	135.4	128.1	7.3	5.7	95.0	99.5	x					Area 1A-C (-12)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:

Remarks: _____

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
5	128.7	9.3	x	_____	Gauge Model #:	3440
_____	_____	_____	_____	_____	Gauge Serial #	26909
_____	_____	_____	_____	_____	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>	Moisture	Density	576	1788

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
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Project: Honeywell Deferred Areas Remediation
Date: 12/8/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: December 8, 2020

ATC Job No.: 0103000015

Spec's & Drawings Available On-Site:	YES	NO
	x	

	AM (°f)	PM (°f)
Temperature:	34	40

Weather (AM): Partly Cloudy

Weather (PM): Partly Cloudy

Key Persons On-Site:

- Paul Gallo - Sevenson (Super)
- Shea- Sevenson
- Toni- Sevenson
- Josh - Wood Engineering

THE FOLLOWING WAS NOTED:

Depart Base: 6:30 AM
Arrived On-Site: 8:00 AM

Departed Site: 5:00 PM
Arrive Base: 6:30 PM

- > ATC representative arrived on-site, as scheduled, to observe the following:
- > ATC arrived on-site and met with Toni- Sevenson to go over plans for the day.
- > Contractor backfilling at Area 1A-C with General Fill, using a Komatsu D39-PX bulldozer.
- > Backfill was done in 1' lifts and compacted, after each lift, using a Bomag BMP8500 walk-behind roller and a Wacker Neuson WP1650 steel plate compactor was used along edges.
- > Screenings were stockpiled on site and placed in controlled lifts on the slope by front loader.
- > The above area was compacted minimum of two times.
- > The Elevation of the compaction started at elevation 8.5 and ended at 12.0 elevation.
- > ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Sample BS-5.
- > ATC received elevations from Wood Engineering.
- > See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____

Project No.: 01030 00015

Client: Sevenson Environmental Services, Inc.

Technician: Joe Franks

Project: Honeywell Deferred Areas Remediation

DATE: December 8, 2020

General Contractor: Sevenson Environmental Services, Inc.

Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	128.7	1	134.7	127.6	7.1	5.6	95.0	99.1	x					Area 1A-C (-8.5)
2	128.7	2	132.7	126.5	6.2	4.9	95.0	98.3	x					Area 1A-C (-9.0)
3	128.7	3	129.4	122.4	7.0	5.7	95.0	95.1	x					Area 1A-C (-10.0)
4	128.7	4	135.4	128.1	7.3	5.7	95.0	99.5	x					Area 1A-C (-12)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:

Remarks: _____

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
5	128.7	9.3	x		Gauge Model #:	3440
					Gauge Serial #	26909
					Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					576	1788

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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Project: Honeywell Deferred Areas Remediation
Date: 12/8/2020



DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: January 4, 2021

ATC Job No.: 0103000015

	AM (°f)	PM (°f)
Temperature:	40	45

Weather (AM): Clear

Weather (PM): Cloudy

Key Persons On-Site:

Paul Gallo - Sevenson (Super)

Shea- Sevenson

Toni- Sevenson

Josh - Wood Engineering

	YES	NO
Spec's & Drawings Available On-Site:	x	

THE FOLLOWING WAS NOTED:

Depart Base: 6:00 AM
 Arrived On-Site: 8:30 AM

Departed Site: 2:30 PM
 Arrive Base: 4:00 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

> ATC arrived on-site and met with Toni - Sevenson to go over testing for the day.

> Contractor backfilling at Area 1 Burrow with Screenings Structural fill, using a Cat Excavator.

> Backfill was done in 1' lifts and compacted with industrial plate tampers in multiple passes.

> ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 95% or greater of the provided proctor for Cover Soils provided by Wood Engineering.

> ATC received proctors and elevations from Wood Engineering. Also direction on compaction requirements in the field.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



— AN ATLAS COMPANY —

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No: _____ Project No.: 01030 00015
 Client: Sevenson Environmental Services, Inc. Technician: Joe Franks
 Project: Honeywell Deferred Areas Remediation DATE: January 4, 2021
 General Contractor: Sevenson Environmental Services, Inc. Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	126.4	1	131.2	123.9	7.8	5.9	95.0	98.0	x					Area 1 Burrow (-12)
2	126.4	2	129.2	120.6	6.1	5.1	95.0	95.2	x					Area 1 Burrow (-13)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum Other:

Remarks: Proctors were provided by Wood Engineering no Numbers were provided.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
_____	_____	_____	_____	_____	Gauge Model #:	3440
_____	126.4	9.7	X	_____	Gauge Serial #	26909
_____	_____	_____	_____	_____	Standard Counts	
_____	_____	_____	_____	_____	Moisture	Density
Method: A: Backscatter	B: Direct Transmission	<u> B </u>	_____	_____	<u> 617 </u>	<u> 1791 </u>

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
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tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 1/4/2021





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: December 15, 2020

ATC Job No.: 0103000015

Spec's & Drawings Available On-Site:	YES	NO
	x	

	AM (°f)	PM (°f)
Temperature:	36	

Weather (AM): Partly Cloudy

Weather (PM): _____

Key Persons On-Site:

Paul Gallo - Sevenson (Super)
Shea- Sevenson
Toni- Sevenson
Josh - Wood Engineering

THE FOLLOWING WAS NOTED:

Depart Base: 6:00 AM
Arrived On-Site: 8:00 AM

Departed Site: 10:00 AM
Arrive Base: 12:00 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

> ATC arrived on-site and met with Toni- Sevenson to go over plans for the day.

> Contractor backfilling at areas 2, 9, 19 with Cover Soil, using a Cat Excavator.

> Backfill was done in 1' lift and compacted with tracks of the excavator. No heavy compaction observed.

> ATC verified compaction, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 90% or greater of the provided proctor for Cover Soils provided by Wood Engineering Mike Sienna

> ATC received elevations from Wood Engineering.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____

Project No.: 01030 00015

Client: Sevenson Environmental Services, Inc.

Technician: Joe Franks

Project: Honeywell Deferred Areas Remediation

DATE: December 15, 2020

General Contractor: Sevenson Environmental Services, Inc.

Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	115.7	1	128.5	114.5	14.0	12.2	90.0	99.0	x					Area 2(-17.5)
2	115.7	1	124.6	113.4	11.2	9.9	90.0	98.0	x					Area 9 (- 16.0)
3	115.7	1	126.0	115.1	10.9	9.5	90.0	99.5	x					Area 19 (-19.0)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum x Other:

Remarks: _____

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
_____	_____	_____	_____	_____	Gauge Model #:	3440
_____	115.7	8.8	X	_____	Gauge Serial #	26909
_____	_____	_____	_____	_____	Standard Counts	
_____	_____	_____	_____	_____	Moisture	Density
Method: A: Backscatter	B: Direct Transmission	<u> B </u>	_____	_____	628	1798

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 · fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 12/15/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: December 16, 2020

ATC Job No.: 0103000015

Spec's & Drawings Available On-Site:	YES	NO
	x	

	AM (°f)	PM (°f)
Temperature:	30	30

Weather (AM): Cloudy

Weather (PM): Cloudy

Key Persons On-Site:

Paul Gallo - Sevenson (Super)

Shea- Sevenson

Toni- Sevenson

Josh - Wood Engineering

THE FOLLOWING WAS NOTED:

Depart Base: 6:15 AM
Arrived On-Site: 8:00 AM

Departed Site: 3:00 PM
Arrive Base: 4:45 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

> ATC arrived on-site and met with Ton - Sevenson to go over testing for the day.

> Contractor backfilling at Horizon C.2 and C.6 Areas with Cover Soil, using a Cat Excavator.

> Also backfilled material on the utility corridor area with Screenings.

> Backfill was done in 1' lifts and compacted with industrial plate tampers in multiple passes.

> ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 90% or greater of the provided proctor for Cover Soils and 95% or greater at Utility Corridor area.

> ATC received proctors and elevations from Wood Engineering as well as compaction requirements.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

GEORGE WIESNER

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____

Project No.: 01030 00015

Client: Severson Environmental Services, Inc.

Technician: Joe Franks

Project: Honeywell Deferred Areas Remediation

DATE: December 16, 2020

General Contractor: Severson Environmental Services, Inc.

Grading Contractor: Severson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	126.4	1	138.3	124.7	13.6	10.9	90.0	98.7	x					Horizon C .2 (-17.2)
2	126.4	2	140.3	126.1	14.2	11.3	90.0	99.8	x					Horizon C .2 (-17.5)
3	126.4	3	138.4	124.2	14.2	11.4	90.0	98.3	x					Horizon C .6 (-18.5)
4	114.8	1	116.8	111.8	5.0	4.5	95.0	97.4	x					Utility Corridor (-13)
5	114.8	2	123.5	113.5	10.0	8.8	95.0	98.9	x					Utility Corridor (-13.5)
6	114.8	3	115.7	111.5	4.2	3.8	95.0	97.1	x					Utility Corridor (-14.5)
7	114.8	4	118.2	114.0	4.2	3.7	95.0	99.3	x					Utility Corridor (-15)

Compaction Equipment Used: Vibratory: Non-Vibratory Smooth Steel Drum Sheepsfoot Brickfoot
 Rubber-tired Vibratory Plate Walk Behind Steel Drum Other: _____

Remarks: Proctors were provided by Wood Engineering

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
	126.4	9.7	x		Gauge Model #:	3440
	114.8	8.8	x		Gauge Serial #	26909
					Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u>B</u>			Moisture	Density
					602	1793

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



—AN ATLAS COMPANY—

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Project: Honeywell Deferred Areas Remediation
Date: 12/16/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
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tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: December 18, 2020

ATC Job No.: 0103000015

	AM (°f)	PM (°f)
Temperature:	30	30

Weather (AM): Cloudy

Weather (PM): Cloudy

Key Persons On-Site:

Paul Gallo - Sevenson (Super)

Shea- Sevenson

Toni- Sevenson

Josh - Wood Engineering

	YES	NO
Spec's & Drawings Available On-Site:	x	

THE FOLLOWING WAS NOTED:

Depart Base: 6:30 AM
Arrived On-Site: 8:15 AM

Departed Site: 3:00 PM
Arrive Base: 4:45 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

> ATC arrived on-site and met with Toni - Sevenson to go over testing for the day.

> Contractor backfilling at GDC Point 5.47 Areas with Cover Soil, using a Cat Excavator.

> Backfill was done in 1' lifts and compacted with industrial plate tampers in multiple passes.

> ATC verified compaction, after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction percentage of 90% or greater of the provided proctor for Cover Soils.

> ATC received proctors and elevations as well as compaction requirements from Wood Engineering.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

ROBERT HAWTHORNE

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No.: _____ **Project No.:** 01030 00015
Client: Sevenson Environmental Services, Inc. **Technician:** Joe Franks
Project: Honeywell Deferred Areas Remediation **DATE:** December 18, 2020
General Contractor: Sevenson Environmental Services, Inc. **Grading Contractor:** Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	126.4	1	117.8	104.8	13.5	11.9	90.0	90.2						GDC .547 (-17.2)
2	126.4	2	140.9	126.1	14.1	11.1	90.0	98.2						GDC .547 (-17.5)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum Other:

Remarks: Proctors were provided by Wood Engineering

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
	126.4	9.7	X		Gauge Model #:	3440
	114.8	8.8	x		Gauge Serial #	26909
TerraSense, LLC)					Standard Counts	
Method: A: Backscatter	B: Direct Transmission	B			Moisture	Density
					602	1793

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



— AN ATLAS COMPANY —

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 12/18/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: December 21, 2020

ATC Job No.: 0103000015

	AM (°f)	PM (°f)
Temperature:	30	40

Weather (AM): Cloudy

Weather (PM): Partly Cloudy

Key Persons On-Site:

Paul Gallo - Sevenson (Super)

Shea- Sevenson

Toni- Sevenson

Josh - Wood Engineering

	YES	NO
Spec's & Drawings Available On-Site:	x	

THE FOLLOWING WAS NOTED:

Depart Base: 8:00 AM
Arrived On-Site: 9:30 AM

Departed Site: 3:00 PM
Arrive Base: 4:30 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

> ATC arrived on-site and met with Toni - Sevenson to review testing for the day.

> Contractor backfilling at GDC and Utility Track Areas with Cover Soil and Screenings, using a Cat Excavator.

> Backfill material was placed in 1' lifts and compacted with industrial plate tampers in multiple passes.

> ATC verified compaction after each lift, using a Troxler nuclear density gauge. All tests were found to have a compaction of 90% or 95% or greater of the provided proctor for Cover Soils.

> ATC received proctor values, elevations and direction on compaction requirements from Wood Engineering. ATC notified Wood Engineering of the moisture and compaction results prior to ATC leaving the site today.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

ROBERT HAWTHORNE

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No: _____ Project No.: 01030 00015
 Client: Sevenson Environmental Services, Inc. Technician: Joe Franks
 Project: Honeywell Deferred Areas Remediation DATE: December 21, 2020
 General Contractor: Sevenson Environmental Services, Inc. Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	114.8	1	117.9	114.4	3.5	3.1	95.0	99.7	x					Utility Track Pt. 18 (-15.5)
2	114.8	2	112.2	109.4	2.8	2.6	95.0	95.3	x					Utility Track Pt. 18 (-16)
3	126.4	1	133.1	117.2	15.9	13.6	90.0	92.7	x					GDL Pt.55.6 (-17)
4	114.8	3	116.3	112.5	3.8	3.4	95.0	98.0	x					Utility Track Pt. 18 (-16.5)
5	114.8	4	118.9	113.9	5.0	4.4	95.0	99.2	x					Utility Track Pt. 18 (-17)
6	114.8	5	114.6	109.9	4.7	4.3	95.0	95.7	x					Utility Track Pt. 18 (-17.5)
7	114.8	6	118.8	114.2	4.6	4.0	95.0	99.5	x					Utility Track Pt. 18 (-19)
8	114.8	7	114.1	109.3	4.8	4.4	95.0	95.2	x					Utility Track Pt. 18 (-19.5)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum Other:

Remarks: Proctors were provided by Wood Engineering no Numbers were provided.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
	126.4	9.7	<u> X </u>	<u> </u>	Gauge Model #:	3440
	114.8	8.8	<u> x </u>	<u> </u>	Gauge Serial #	26909
			<u> </u>	<u> </u>	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					<u> 625 </u>	<u> 1795 </u>

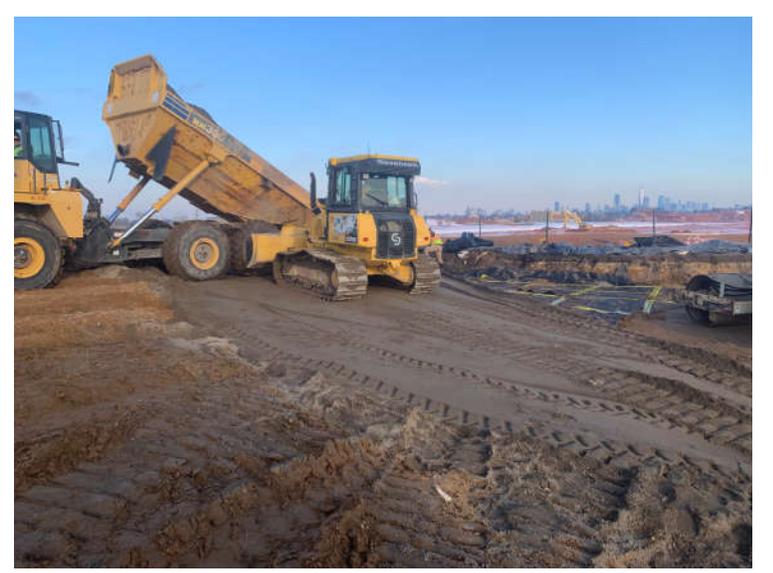
[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



— AN ATLAS COMPANY —

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 12/21/2020





—AN ATLAS COMPANY—

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

DAILY REPORT / PROJECT OBSERVATIONS

Permit No: _____

Client: Sevenson Environmental Services, Inc.

Project Name: Honeywell Deferred Areas Remediation

Location: Jersey City, NJ

Contractor: Sevenson Environmental Services, Inc.

Date: December 22, 2020

ATC Job No.: 0103000015

Temperature: AM (°f) | PM (°f)
35 | 40

Weather (AM): Cloudy

Weather (PM): Cloudy

Key Persons On-Site:

Paul Gallo - Sevenson (Super)

Shea- Sevenson

Toni- Sevenson

Josh - Wood Engineering

Table with 2 columns: YES, NO. Row: Spec's & Drawings Available On-Site: x

THE FOLLOWING WAS NOTED:

Depart Base: 6:30 AM
Arrived On-Site: 8:00 AM

Departed Site: 3:00 PM
Arrive Base: 4:30 PM

> ATC representative arrived on-site, as scheduled, to observe the following:

> ATC arrived on-site and met with Toni - Sevenson to review the testing for the day.

> Contractor began backfilling at Herizon C Area with Cover Soil, using a Cat Excavator.

> Backfill material was placed in 1' lifts and compacted with industrial plate tampers in multiple passes.

> ATC verified compaction after each lift, using a Troxler nuclear density gauge. All tests were found to meet the required compaction of 90% or greater based on the provided proctor for Cover Soils.

> ATC received proctor values, elevations and direction on compaction requirements from Wood Engineering. ATC notified Wood Engineering of the moisture and compaction results prior to ATC leaving the site today.

> See attached Field Density Sheet and Photos for further information.

Reviewed By:

ROBERT HAWTHORNE

FIELD REPORT

SIGNED:

Joe Franks



—AN ATLAS COMPANY—

FIELD DENSITY - NUCLEAR METHOD
ASTM D-6938

ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Permit No: _____ Project No.: 01030 00015
 Client: Sevenson Environmental Services, Inc. Technician: Joe Franks
 Project: Honeywell Deferred Areas Remediation DATE: December 22, 2020
 General Contractor: Sevenson Environmental Services, Inc. Grading Contractor: Sevenson Environmental Services, Inc.

TEST NO.	PROCTOR NO. *	LIFT NO.	WET DENSITY (PCF)	DRY DENSITY (PCF)	MOISTURE (PCF)	MOISTURE %	% OF MAX DENSITY		PASS	FAIL	** RETEST NO.	ELEVATION BELOW FINISH GRADE (FT.)	DEPTH BELOW PLAN SUBGRADE	LOCATION GRID COORDINATES OR ROADWAY STATION
							SPEC.	ACTUAL						
1	126.4	1	136.2	124.6	11.6	9.3	90.0	98.6	x					Herizon C Pt. 9 (-17.5)
2	114.8	2	125.3	118.1	7.2	6.1	90.0	102.9	x					Herizon C Pt. 9 (-18.0)

Compaction Equipment Used: Vibratory: x Non-Vibratory Smooth Steel Drum Sheepsfoot x Brickfoot
 Rubber-tired Vibratory Plate x Walk Behind Steel Drum Other:

Remarks: Proctors were provided by Wood Engineering no Numbers were provided.

*Proctor No.	Maximum Density (PCF)	Opt. Moisture (%)	Std. Proctor	Mod. Proctor	Gauge Make:	Troxler
	126.4	9.7	<u> X </u>	<u> </u>	Gauge Model #:	3440
	114.8	8.8	<u> x </u>	<u> </u>	Gauge Serial #	26909
			<u> </u>	<u> </u>	Standard Counts	
Method: A: Backscatter	B: Direct Transmission	<u> B </u>			Moisture	Density
					<u> 617 </u>	<u> 1791 </u>

[Soil Density Report Disclaimer](#) - "These test results should be regarded as indicators of the degree of compaction attained at these spot locations and depths only. The degree of compaction at greater depths in the fill and at other locations as well as the condition of the underlying soils has not been determined by this office."



— AN ATLAS COMPANY —

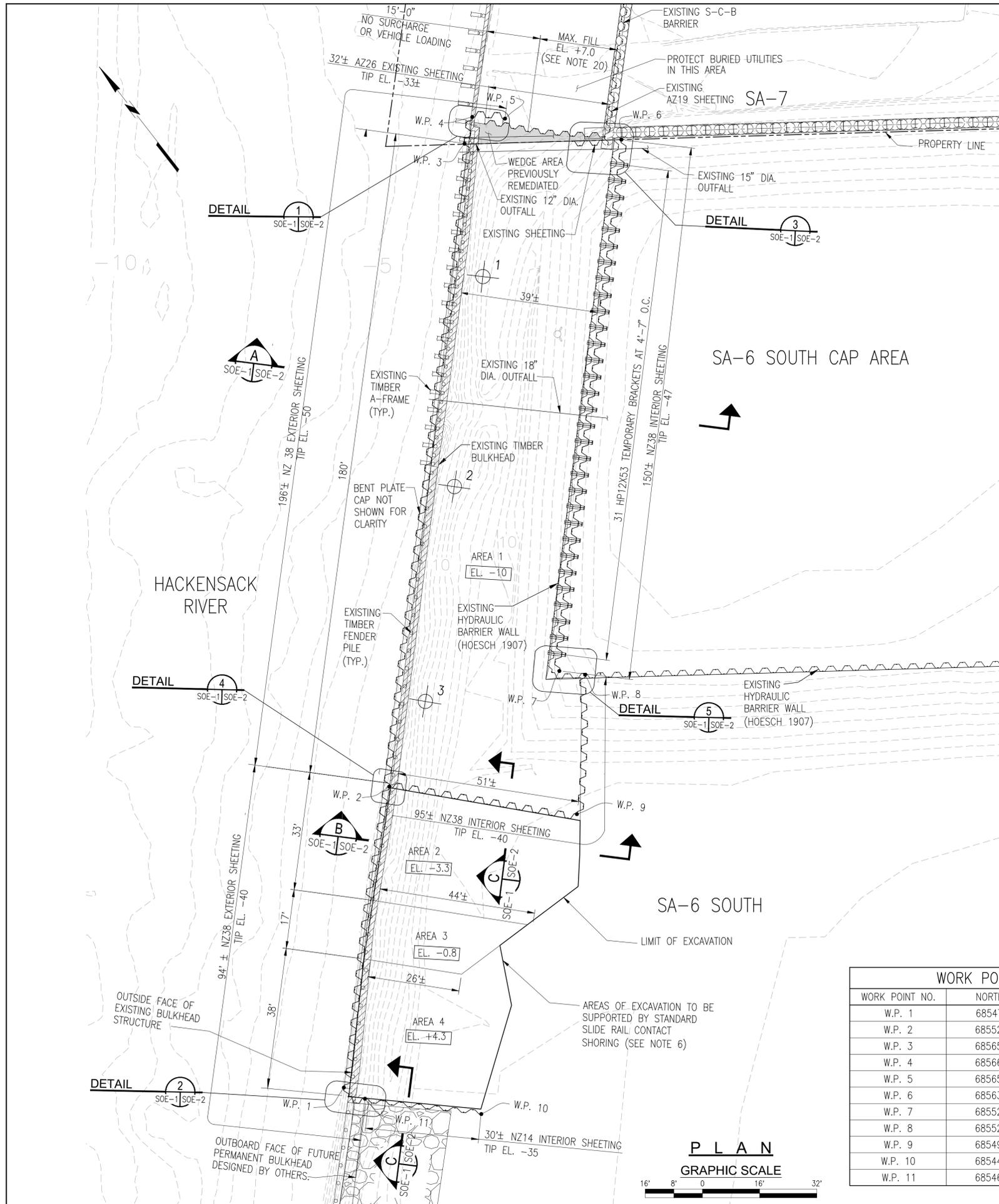
ATC Group Services LLC
3 Terri Lane; Suite 4
Burlington, New Jersey 08016
tel. 609-386-8800 • fax 609-386-7951

Project: Honeywell Deferred Areas Remediation
Date: 12/22/2020



APPENDIX I

SHEETPILE DOCUMENTATION



REFERENCES

1. MRCE JULY 17, 2013 "TEMPORARY SUPPORT OF EXCAVATION" FOR STUDY AREA 6 NORTH.
2. WOOD JULY 8, 2019 "BULKHEAD DEFERRED AREA REMEDIATION DRAWINGS" FOR STUDY AREA 6 SOUTH.
3. AMEC FEBRUARY 10, 2016 "AS BUILT HYDRAULIC BARRIER DRAWINGS" FOR STUDY AREA 6 SOUTH.
4. DURA-BOND STEEL DATED JULY 24 TO OCTOBER 2, 2013 "SHEETPILE LAYOUT FOR SA-6 SOUTH BARRIER WALL" FOR STUDY AREA 6 SOUTH.
5. ELEVATIONS ARE REFERENCED TO NGVD 29.

GENERAL

1. PLAN DEVELOPED BASED ON REFERENCE 1.
2. APPROXIMATE LIMITS OF EXCAVATION DEVELOPED BASED ON REFERENCE 2
3. EXISTING GRADE CONTOURS TAKEN FROM REFERENCE 2.
4. TIDAL INFORMATION, MEAN HIGH WATER (MHW) AND MEAN LOW WATER (MLW), AND 100 YEAR FLOOD TAKEN FROM REFERENCE 2.
5. EXISTING HYDRAULIC BARRIER WALL (HOESCH 1907) ALIGNMENT FROM INFORMATION PROVIDED IN REFERENCES 3 AND 4.
6. STANDARD SLIDE RAIL CONTACT SHORING TO BE DESIGNED FOR CONTRACTOR BY ENGINEER LICENSED IN STATE OF NEW JERSEY IN AREAS 2, 3, AND 4. SLIDE RAIL SYSTEM SHALL BE INDEPENDENT OF SHEETING.

MATERIALS

7. NORMAL WEIGHT FILL SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02315.
8. LIGHTWEIGHT FILL SHALL BE LIGHT WEIGHT COARSE EXPANDED SHALE AGGREGATE SUCH AS SOLITE PRODUCED BY NORTHEAST SOLITE CORPORATION, AND HAVE A MAXIMUM PARTICLE SIZE OF 3/4 INCH. THE AGGREGATE SHALL BE FREE FROM ORGANIC MATTER, CLAY, COAL, LIMESTONE, SHALE, OR OTHER DELETERIOUS MATERIALS.
9. GROUT COLUMN SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1,000 PSI.
10. STEEL SHEETING SHALL BE HOT ROLLED AND BE OF THE TYPES AND SIZES SHOWN ON DRAWINGS AND AS SPECIFIED HEREIN. SHEET PILES MUST BE CAPABLE OF INTERLOCKING WITH OTHER SHEET PILES UNLESS OTHERWISE NOTED IN THE CONTRACT DRAWINGS. STEEL SHEETING SHALL CONFORM WITH THE FOLLOWING REQUIREMENTS:
 - A. EXTERIOR SHEETING, INTERLOCKS AND ADDED INTERLOCKS: ASTM A-690, GRADE 50 OR APPROVED EQUAL.
 - B. INTERIOR SHEETING AND INTERLOCKS: ASTM A-572, GRADE 50 OR APPROVED EQUAL.
11. STEEL SHEET PILING SHALL BE COATED EACH SIDE WITH COAL TAR EPOXY, UNLESS OTHERWISE NOTED ON THE CONTRACT DRAWINGS. COAL TAR EPOXY SHALL BE SHOP APPLIED "BITUMASTIC 300 M" AS MANUFACTURED BY THE CARBOLINE COMPANY OR APPROVED EQUAL. COATING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS TO A MINIMUM DRY FILM THICKNESS OF 16 MILS, APPLIED IN TWO COATS OF 8 MILS EACH. SHEET PILING SHALL BE COATED TO THE FOLLOWING DEPTHS:
 - A. EXTERIOR SHEETING AREA 1: COATED OVER THE TOP 25 FT EACH
 - B. EXTERIOR SHEETING IN AREAS 2,3, AND 4: COATED OVER TOP 20 FT EACH SIDE.
 - C. INTERIOR SHEETING SHALL BE UNCOATED.
12. ALL INTERLOCKS (EXCEPT THOSE BETWEEN WORK POINTS 6 AND 7) SHALL BE SEALED WITH WADIT OR APPROVED EQUAL TO PREVENT WATER SEEPAGE FROM THE RIVER TO THE EXCAVATION DURING CONSTRUCTION ACTIVITIES.

13. TEMPORARY BRACKETS AND BENT PLATE CAP SHALL BE ASTM A-572, GRADE 50.
 14. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1. USE E-70 ELECTRODES.
 15. WIRE MESH AND TIES SHALL BE STAINLESS STEEL.
 16. FILTER FABRIC SHALL BE MIRAFI 140N NON-WOVEN GEOTEXTILE AS MANUFACTURED BY TENCATE GEOSYNTHETICS AMERICAS.
- DEWATERING, EXCAVATION, AND BACKFILLING:

17. CONTRACTOR TO MAINTAIN THE FOLLOWING DEWATERING CONDITIONS DURING EXCAVATION. RECORD PIEZOMETERS DAILY TO CONFIRM WATER LEVEL PRIOR TO EXCAVATING.
 - A. EXCAVATION AREA 1: DEWATER TO MAINTAIN WATER TABLE MINIMUM OF TWO FEET BELOW EXCAVATION SUBGRADE. DEWATER IN ADVANCE OF EXCAVATION. DO NOT EXCAVATE IN THE WET.
 - B. PRE-EXCAVATION TO THE EAST OF EXISTING HYDRAULIC BARRIER: DEWATER TO EL. 0 OR LOWER DURING EXCAVATION IN AREA 1.
- A. EXCAVATION AREAS 2 TO 4: DEWATERING SHOULD NOT BE REQUIRED FOR THESE AREAS.
18. REMOVE TIMBER AND STEEL REMAINS OF FORMER BULKHEAD DURING EXCAVATION. CUT PILES OFF AT FINAL SUBGRADE. SIZE, TRANSPORT, AND DISPOSE REMAINS OFF SITE.
19. ABANDONED OUTFALL PIPES (TO BE CONFIRMED) TO BE REMOVED OR DETACHED PRIOR TO PERMANENT SHEETING INSTALLATION. RECOVER OUTFALL PERMIT PLATES FOR OWNER RECORD.
20. DURING THE EXCAVATION AND BACKFILLING OPERATIONS OF THE NORTHERN PORTION OF AREA 1, WITHIN 20 FEET SOUTH OF EXISTING WEDGE WALL, NO SURCHARGE OR VEHICLES ARE ALLOWED WITHIN 15 FEET NORTH OF THE EXISTING NORTH WALL WHILE SUBGRADE IS BELOW EL. -5.0. CONTRACTOR MAY USE A LONG REACH EXCAVATOR TO BACKFILL THIS AREA. COMPACT SOIL ADJACENT TO THE EXISTING WEDGE WITH REMOTE CONTROL COMPACTOR TO PREVENT PERSONNEL OPERATIONS WITHIN 20 FEET OF WALL.
21. REMOVE EXISTING BERM AND EXCAVATE TO EL. +5.0. THEN, PLACE 6" DGA STONE OVER SEPARATION GEOTEXTILE TO BUILD WORK PLATFORM AND CONTROL DUST.

SUBMITTALS

22. SUBMIT CALCULATIONS AND EQUIPMENT CATALOGUE FOR CONSTRUCTION EQUIPMENT SURCHARGE ADJACENT TO EXISTING TIMBER BULKHEAD WITHIN LIMITS SHOWN IN EQUIPMENT LIMITS IN DWG. SOE-2.

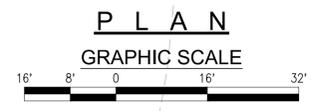
EXISTING UTILITIES

23. PROTECT UTILITY CONDUITS AT THE NORTH END (SA-7 PROPERTY).
24. SEAL AND ABANDON EXISTING OBSERVATION WELLS ON SLOPE. RECOVER PERMIT PLATES FOR OWNER RECORD.

LEGEND:

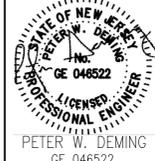
- EL. X ELEVATION OF BOTTOM OF EXCAVATION (FT.)
- 15 --- EXISTING GRADE CONTOUR ELEVATION (FT.)
- 1 NEW OPEN STAND PIPE PIEZOMETER. INSTALL BEFORE EXCAVATION BELOW ELEVATION +3.5
- W. P. WORKING POINT

WORK POINT TABLE		
WORK POINT NO.	NORTHERN	EASTERN
W.P. 1	685471.31	601328.45
W.P. 2	685529.77	601390.13
W.P. 3	685658.42	601517.07
W.P. 4	685662.97	601523.37
W.P. 5	685656.98	601530.31
W.P. 6	685632.33	601552.38
W.P. 7	685525.00	601447.51
W.P. 8	685520.73	601452.56
W.P. 9	685491.45	601426.82
W.P. 10	685441.87	601354.22
W.P. 11	685465.23	601331.19

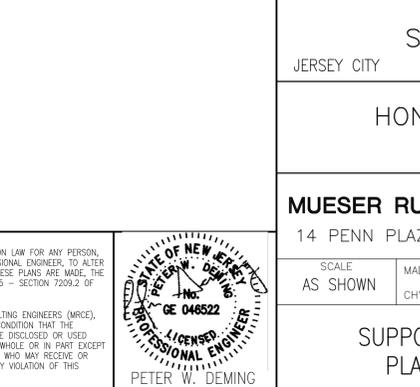
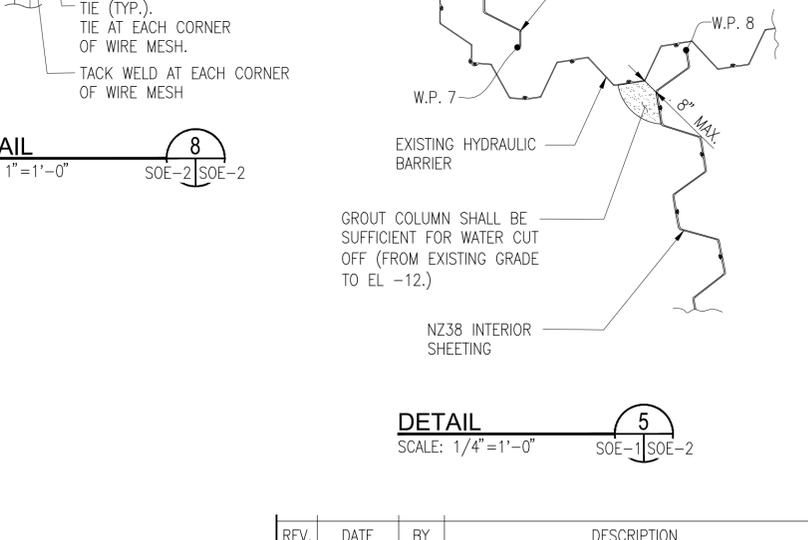
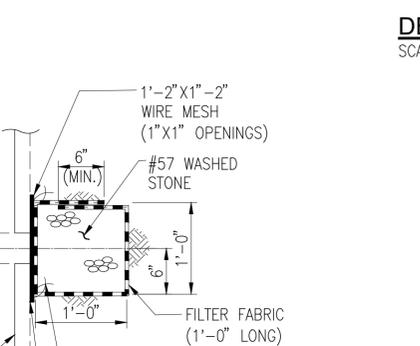
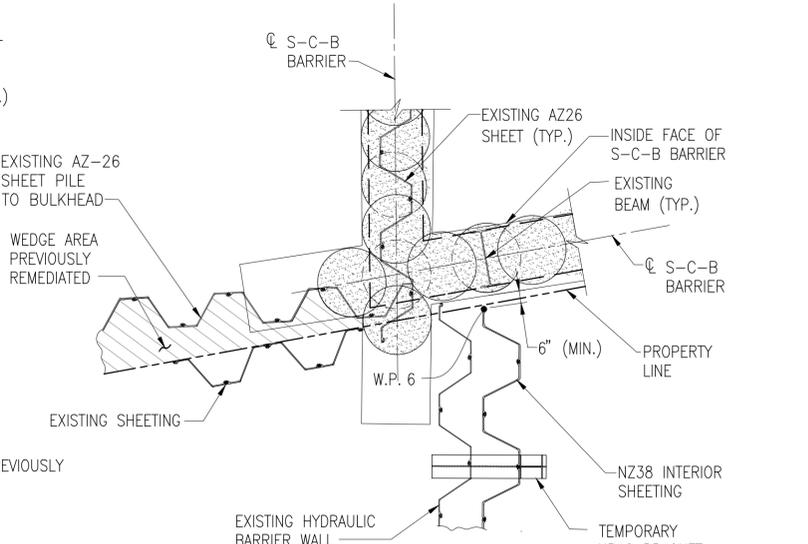
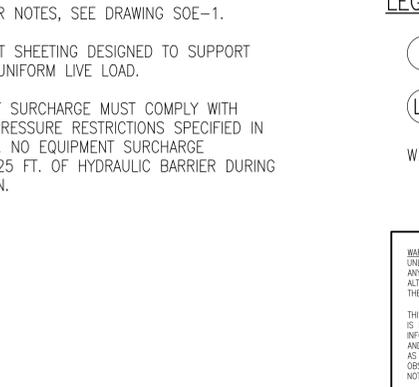
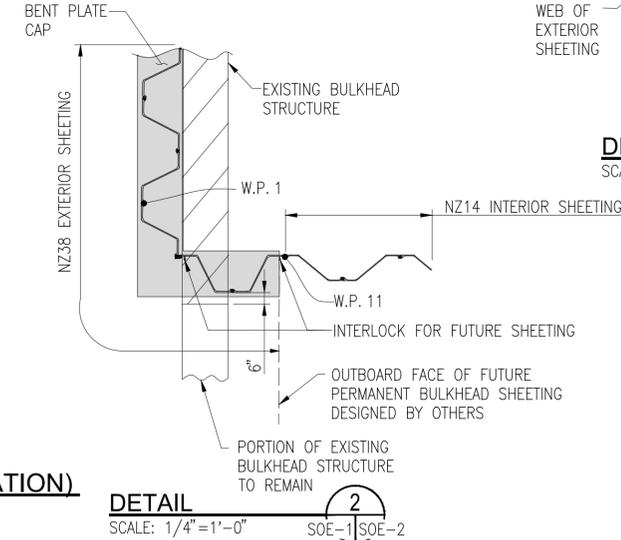
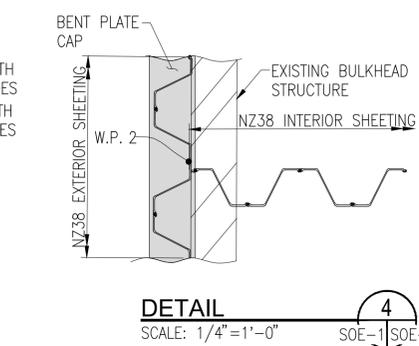
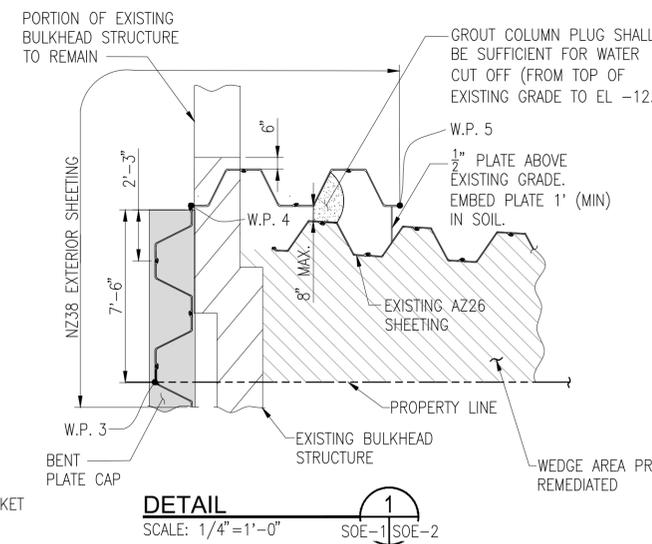
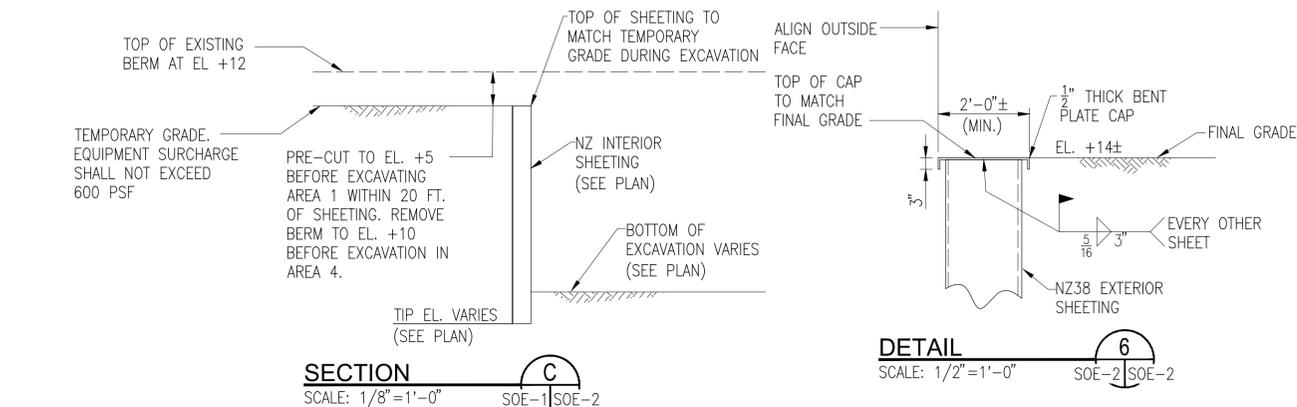
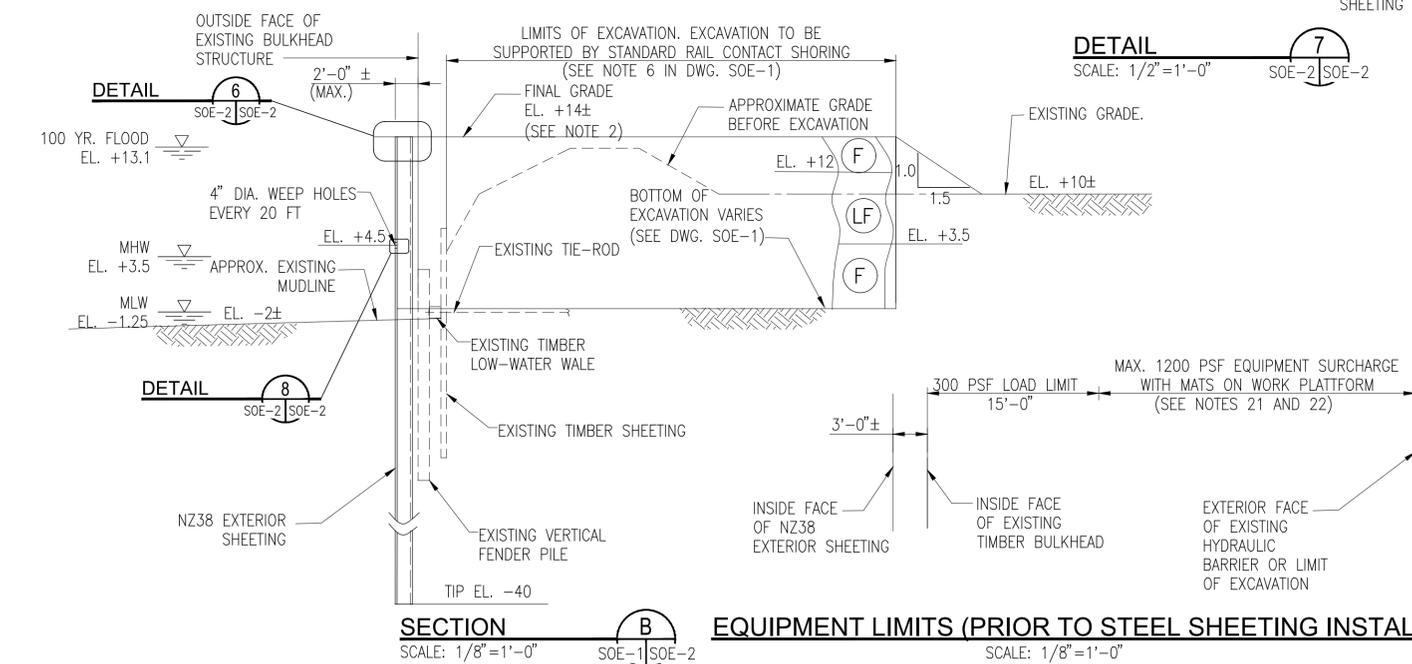
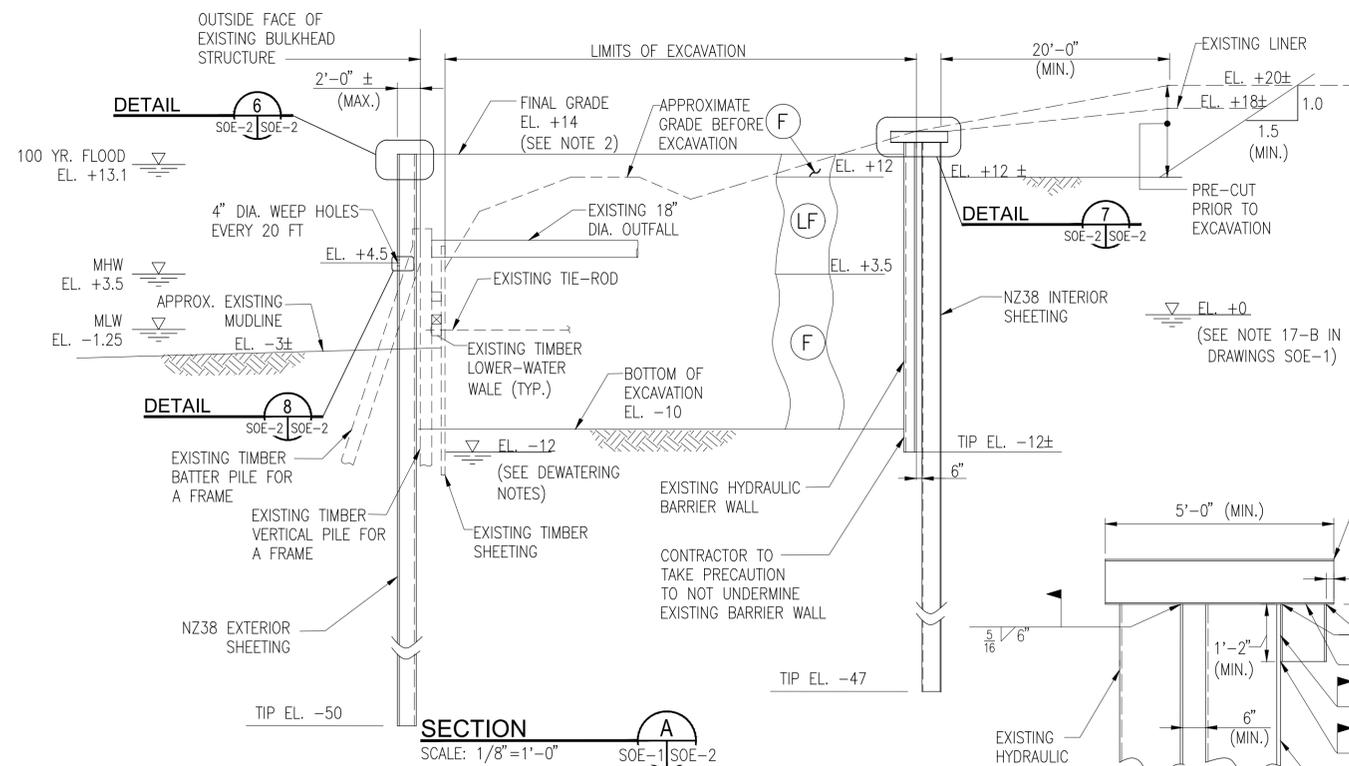


WARNING: IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER ANY ITEM ON THESE PLANS IN ANY WAY. IF ALTERATIONS TO THESE PLANS ARE MADE, THE ALTERATIONS SHALL BE MADE IN ACCORDANCE WITH ARTICLE 145 - SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW.

THIS DRAWING IS THE PROPERTY OF MUESER RUTLEDGE CONSULTING ENGINEERS (MRCE), IS FURNISHED SUBJECT TO RETURN ON DEMAND AND ON THE CONDITION THAT THE INFORMATION AND TECHNOLOGY EMBODIED HEREIN SHALL NOT BE DISCLOSED OR USED AND THE DRAWING SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING BY MRCE. ANY PERSON WHO MAY RECEIVE OR OBSERVE THIS DRAWING WILL BE HELD STRICTLY LIABLE FOR ANY VIOLATION OF THIS NOTICE, WHETHER WILLFUL OR NEGLIGENT.



REV.	DATE	BY	DESCRIPTION
CHROMIUM REMEDY STUDY AREA 6 SOUTH JERSEY CITY NEW JERSEY HONEYWELL INTERNATIONAL			
MUESER RUTLEDGE CONSULTING ENGINEERS 14 PENN PLAZA - 225 W. 34TH STREET, NY, NY 10122			
SCALE AS SHOWN	MADE BY: DU CH'KD BY: PWD	DATE: 09-16-19 DATE: 10-23-19	FILE NUMBER 12882A DRAWING NUMBER SOE-1
SUPPORT OF EXCAVATION PLAN AND NOTES			

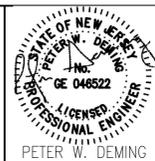


- NOTES:
- FOR OTHER NOTES, SEE DRAWING SOE-1.
 - PERMANENT SHEETING DESIGNED TO SUPPORT 200 PSF UNIFORM LIVE LOAD.
 - EQUIPMENT SURCHARGE MUST COMPLY WITH GROUND PRESSURE RESTRICTIONS SPECIFIED IN THE OSDS. NO EQUIPMENT SURCHARGE ALLOWED 25 FT. OF HYDRAULIC BARRIER DURING EXCAVATION.

- LEGEND:
- (F) NORMAL WEIGHT FILL
 - (LF) LIGHT WEIGHT FILL
 - W.P. WORKING POINT

WARNING: IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER ANY ITEM ON THESE PLANS IN ANY MANNER. IF ALTERATIONS TO THESE PLANS ARE MADE, THE ALTERATIONS SHALL BE MADE IN ACCORDANCE WITH ARTICLE 145 - SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW.

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REV.	DATE	BY	DESCRIPTION
CHROMIUM REMEDY STUDY AREA 6 SOUTH			
JERSEY CITY		NEW JERSEY	
HONEYWELL INTERNATIONAL			
MUESER RUTLEDGE CONSULTING ENGINEERS			
14 PENN PLAZA - 225 W. 34TH STREET, NY, NY 10122			
SCALE AS SHOWN	MADE BY: DU CH'KD BY: PWD	DATE: 09-16-19 DATE: 10-23-19	FILE NUMBER 12882A
SUPPORT OF EXCAVATION PLAN AND NOTES			DRAWING NUMBER SOE-2

APPENDIX J

DEFLECTION MONITORING (CD ONLY)

APPENDIX K

VIBRATION MONITORING (CD ONLY)

APPENDIX L

CAP GEOSYNTHETIC QUALITY ASSURANCE REPORT (CD ONLY)

APPENDIX M

EXCAVATION CERTIFICATION E-MAILS (CD ONLY)

APPENDIX N

DRAFT DEED NOTICES AND REMEDIAL ACTION PERMIT MODIFICATION

DRAFT DEED NOTICE #4

Return Address:
Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

DN#4 SA-7
Portions of Block 21901.01 Lots 8 and 9

Instrument Number

DRAFT DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature]

Perry Florio Attorney-at-Law of New Jersey
[Print name below signature]

Recorded by: _____
[Signature, Officer of County Recording Office]

[Print name below signature]

DEED NOTICE

This Deed Notice is made as of the ____ day of _____, 2021, by *City of Jersey City (“Owner”), with its principal office at 280 Grove Street, Jersey City, New Jersey 07302* (together with its successors and assigns, collectively “Owner”). The Property (also referenced herein as the “Restricted Area(s)”) shall consist of those lands particularly described by metes and bounds in Exhibit A-2 attached.

1. THE PROPERTY. City of Jersey City is the owner in fee simple of certain real property designated as ***Block 21901.01, Lots 8 and 9¹, on the tax map of the City of Jersey City, Hudson County***; the New Jersey Department of Environmental Protection’s (“NJDEP” or “Department”) Program Interest Number (“Preferred ID”) for the contaminated site which this property is

¹ All references to Block 21901.01 Lots 8 and 9 in this Deed Notice shall mean the applicable portions of the Block 21901.01 Lots 8 and 9 as shown in the metes and bounds description, regardless of whether the word “portion(s)” is specifically called out or not.

associated with is G000002548 and it is referred to by the NJDEP as **Hudson County Chromate Site Hudson County Chromate Site No. 115** (“Site”); and the property is more particularly described in Exhibit A, which is attached hereto and made a part hereof (the “Property”). The Property is part of the site referred to as Study Area 7 (Site 115) and the subject of an Administrative Consent Order (ACO) between Honeywell International Inc. (“Honeywell”) and the Department dated June 17, 1993, and a Court-Ordered Remedy pursuant to the U.S. District Court for the District of New Jersey (“Court”) Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Case No. 95-2097, entered on June 30, 2003. Study Area 7 was previously remediated by Honeywell and received a No Further Action/Covenant Not to Sue letter, dated December 23, 2010, which did not include Tract 1. To the extent that there is any conflict or inconsistency between the terms of this Deed Notice and the terms of the Consent Decree, the Consent Decree shall govern.

2. REMEDIATION.

i. The Department’s Bureau of State Case Management (BCM) is the entity within the Department that is responsible for the chromium oversight of the remediation of SA-7. The matter for SA-7 was Hudson County Chromate Site No. 115 PI No. G000002548. The Department has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property.

ii. N.J.A.C. 7:26C-7 requires the Owner, among other persons, including the responsible party Honeywell to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL CONTAMINATION. Honeywell, a corporation of the State of Delaware, licensed to do business in the State of New Jersey whose post office address is 115 Tabor Road, Morris Plains, New Jersey 07950, has remediated SA-7 to address chromium-related soil and shallow groundwater contamination, except for the Property and certain other deed noticed areas where engineering controls were implemented.

For SA-7, the Court-Ordered Remedy 100% Design was approved by the Court on March 14, 2005. Remediation was completed to comply with the court order to remove all materials containing hexavalent chromium in excess of 240 milligrams per kilogram (“mg/kg”). The remedial action achieved compliance with the Department’s current most stringent soil cleanup criteria of 20 mg/kg, with the exception of a small portion of the Property at the bulkhead along the Hackensack River where excavation was technically impractical (the Technically Impracticable Area (or “TI Area”). Completion of the excavation remedy at SA-7 was acknowledged by the Court in the Amended Order Modifying the Judgment, January 13, 2012, ECF No. 1116, in *Interfaith Community Organization v. Honeywell International Inc.*, Civ. No. 95-2097. Remedial actions for soils are also documented in a Remedial Action Report for Soils (“RAR”) submitted to the New Jersey Department of Environmental Protection during December 2010.

The Property is an approximately 22,457 square foot area on SA-7 between the bulkhead and the western hydraulic barrier installed at SA-7 that includes the western hydraulic barrier of SA-7. The Property is the “Technically Impracticable Area or TI Area” identified in the SA-7 RAR. NJDEP issued a conditional No Further Action letter for SA-7 soils on December 23, 2010, that excludes the TI Area. Soils within the Property do not meet the 20 mg/kg objective in the NJDEP Chromium Policy. Property soils exceeding 20 mg/kg hexavalent chromium are covered by at least 7 feet of clean soils. The Property will not be remediated by Honeywell; instead, the 7-foot thick clean soil cap will remain in place and will be subject to this Deed Notice. The Property also includes two steel sheetpile “wing walls” that project toward the bulkhead from the northern and southern corners of the hydraulic barrier intersections. These wing walls are part of the SA-7 Remedy in that they act to minimize re-contamination of the clean backfill material placed in the TI area from either the north or south. The Riverwalk feature including bulkhead improvements, additional fill soils and hardscape features will be constructed over the top of the Deed Notice Area. The provisions of the Long Term Monitoring Plan (“LTMP”), developed pursuant to the Consent Decree, will apply to the Property.

The soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. As a result of the remaining soil contamination, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13.

4. CONSIDERATION. In accordance with the Department’s issuance of the No Further Action/Covenant Not to Sue letter for soils at SA-7, and in consideration of the terms and conditions of that approval, and in accordance with the Consent Decree, and other good and valuable considerations, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the potential presence of contamination remaining at concentrations that do not allow for unrestricted use, the Owner has agreed, as part of the remedial action for the Property, to restrict the use of certain parts of the Property (the “Restricted Area”); a narrative description of these restrictions is provided in Exhibit C, which is attached hereto and made a part hereof. The Owner has also agreed to maintain a list of these restrictions on site for inspection by governmental officials, to the extent feasible. Owner will develop a binder containing a list of these restrictions which will be maintained either at onsite trailers or within the Groundwater Treatment Plant building, available for review and inspection by governmental enforcement officials if requested.

5B. RESTRICTED LAND USES. The following statutory land use restrictions apply to the Restricted Area:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a childcare

facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented; and

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single-family residence or a childcare facility.

5C. ENGINEERING CONTROLS. Due to the potential presence of contaminants that do not allow for unrestricted use, the Owner is also agreeing, as part of the remedial action for the Property, to certain engineering controls on the Property; a narrative description of these engineering controls is provided in Exhibit C, which is attached hereto and made a part hereof. The Owner has also agreed to maintain a list of these restrictions on site for inspection by governmental officials, to the extent feasible. Honeywell shall be responsible for monitoring and maintenance of engineering controls and biennial certification requirements as specified in the LTMP, and Paragraphs 8A and 8B herein.

5D. LONG TERM MONITORING PLAN. Honeywell has developed an LTMP which sets forth requirements for monitoring, maintenance, and repairing or replacing the soil chromium remedial measures including engineering controls within the Property, with limitations for the Property as described above, and requirements for notification and reporting pursuant to the Deed Notice, and Soil Remedial Action Permit. A copy of the LTMP is maintained by Honeywell at 115 Mount Tabor Road, Morris Plains, NJ 07950. This Deed Notice is appended to the LTMP.

5E. WORKER TRAINING MATERIALS. All maintenance workers engaged in maintenance at the Property shall be trained in maintenance procedures that do not jeopardize the integrity of the Chromium Remedy. Workers shall be trained using materials developed by Honeywell pursuant to the Consent Decree.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners, lessors, and lessees shall cause all leases, grants, and other written transfers of an interest in the Restricted Area to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at www.nj.gov/srp/forms within 30 calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the Owner's or subsequent owner's interest in the Restricted Area.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within 30 calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessors, lessees and operators while each is an owner, lessor, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners, lessors, and lessees shall notify any person, including, without limitation, tenants, employees of tenants, and contractors, intending to conduct invasive work or excavate within the Restricted Areas, of the nature and location of contamination in the Restricted Areas, and, of the precautions necessary to minimize potential human exposure to contaminants. Prior to the start of invasive work, Honeywell shall be notified of the activity by calling 855-727-2658.

ii. Except as provided in Paragraphs 7A(iv) and 7B, below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property without first obtaining a soil remedial action permit modification pursuant to N.J.A.C. 7:26C-7. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. A soil remedial action permit modification is required for any permanent alteration, improvement, or disturbance and the owner, lessor, lessee or operator shall submit the following within 30 days after the occurrence of the permanent alteration, improvement, or disturbance:

(A) A Remedial Action Workplan or Linear Construction Project notification and Final Report Form, whichever is applicable;

(B) A Remedial Action Report and Termination of Deed Notice Form; and

(C) A revised recorded Deed Notice with revised Exhibits, and Remedial Action Permit Modification or Remedial Action Permit Termination form and Remedial Action Report.

iv. No owner, lessor, lessee, or operator shall be required to obtain a Remedial Action Permit Modification for any temporary alteration, improvement, or disturbance, provided that the site is restored to the condition described in the Exhibits to this Deed Notice, and the owner, lessee, or operator complies with the following:

(A) Restores any disturbance of an engineering control to pre-disturbance conditions, consistent with the requirements of the LTMP, within 60 calendar days after the initiation of the alteration, improvement or disturbance;

(B) Ensures that all applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration;

(C) Ensures that human exposure to contamination in excess of the remediation criteria or standards does not occur; and

(D) Describes, in the next biennial certification the nature of the temporary alteration, improvement, or disturbance, the dates and duration of the temporary alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the temporary alteration, improvement, or disturbance, and the notice that the Owner gave to those persons prior to the disturbance.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or an immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that that person complies with each of the following:

i. Immediately notifies the Department of Environmental Protection of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337;

ii. Immediately notifies Honeywell of the emergency by calling 855-727-2658;

iii. If applicable, hires a Licensed Site Remediation Professional (unless the Restricted Areas includes an unregulated heating oil tank) to respond to the emergency;

iv. Limits both the actual disturbance and the time needed for the disturbance to the minimum reasonably necessary to adequately respond to the emergency;

v. Implements all measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination;

vi. Notifies the Department of Environmental Protection when the emergency or immediate environmental concern has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337;

vii. Restores the engineering control to the pre-emergency conditions, consistent with the requirements of the LTMP, as soon as possible; and

viii. Submits to the Department of Environmental Protection within 60 calendar days after completion of the restoration of the engineering control, a report including: (a) the nature and likely cause of the emergency; (b) the measures that have been taken to mitigate the effects of the emergency on human health and the environment; (c) the measures completed or implemented to restore the engineering control; and (d) any changes to the engineering control or site operation and maintenance plan to prevent reoccurrence of such conditions in the future.

8. TERMINATION OF DEED NOTICE.

i. This Deed Notice may be terminated only upon recording a Department-approved Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds and Mortgages of Hudson County, New Jersey, expressly terminating this Deed Notice.

ii. Within 30 calendar days after recording a Department-approved Termination of Deed Notice, the owner of the property should apply to the Department for termination of the soil remedial action permit pursuant to N.J.A.C. 7:26C-7.

9. ACCESS. The Owner and the subsequent owners, lessors, lessees and operators agree to allow the Department and Honeywell, their agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the subsequent owners, lessors, lessees and operators, during their ownership, tenancy, or operation, and the Owner fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner and the subsequent owners, lessors, and lessees shall also cause all leases, subleases, grants, and other written transfers of an interest in the Restricted Area to contain a provision expressly requiring that all holders thereof provide such access to the Department and Honeywell.

10. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this site.

ii. The restrictions provided herein may be enforceable solely by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

11. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as though the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

12A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property (for example, USGS Quad map, Hagstrom County Maps);

ii. Exhibit A-2: Metes and Bounds Description - A tax map of lots and blocks as wells as metes and bounds description of the Property, including reference to tax lot and block numbers for the Property;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; and the Property Map shall include diagrams of major surface topographical features such as buildings, roads, and parking lots.

12B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Area:

i. Exhibit B-1 Restricted Area Maps - A separate map for each restricted area that includes:

(A) As-built diagrams of each engineering control, including caps, fences, slurry walls, (and, if any) ground water monitoring wells, extent of the ground water classification exception area, pumping and treatment systems that may be required as part of a ground water engineering control in addition to the deed notice;

(B) As-built diagrams of any buildings, roads, parking lots and other structures that function as engineering controls; and

(C) Designation of all soil and all upland sediment sample locations within the restricted area that exceed any soil or sediment standard that are keyed into one of the tables described in the following paragraph.

ii. Exhibit B-2: Restricted Area Data Table – If applicable, a separate table for each restricted area that includes either (A) or (B) through (F):

(A) Only for historic fill extending over the entire site or a portion of the site and for which analytical data are limited or do not exist, a narrative that states that historic fill is present at the site, a description of the fill material (*e.g.*, ash, cinders, brick, dredge material), and a statement that such material may include, but is not limited to, contaminants such as PAHs and metals;

(B) Sample location designation from Restricted Area map (Exhibit B-1);

(C) Sample elevation based upon mean sea level;

(D) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(E) The restricted and unrestricted use standards for each contaminant in the table;
and

(F) The remaining concentration of each contaminant at each sample location at each elevation.

12C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1: Deed Notice as Institutional Control: Exhibit C-1 includes a narrative description of the restriction and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) Description and estimated size of the Restricted Area as described above;

(B) Description of the restrictions on the Property by operation of this Deed Notice;
and

(C) The objective of the restrictions.

ii. Exhibit C-2: Engineering Control: Clean Fill/Crushed Stone Cover. Exhibit C-2 includes a narrative description of the engineering control as follows:

(A) Description of the engineering control;

(B) The objective of the engineering control; and

(C) How the engineering control is intended to function.

EXHIBIT A

A-1: Site Vicinity Map

A-2: Metes and Bounds Description and Tax Map

A-3: Property Map

Portion of Block 21901.01, Lots 8 and 9
Jersey City, Hudson County, New Jersey

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Exhibit A-2
Metes and Bounds Description of the Deed Notice Area
and
Exhibit A-2 Tax Map

Portions of Block 21901.01, Lots 8 and 9
Jersey City, Hudson County, New Jersey

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DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

DEED NOTICE AREA 4
BLOCK 21901.01, LOTS 8 & 9
PROJECT NO. 10000292AB
MARCH 15, 2021
PAGE 1 | 2

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey City, in the County of Hudson and State of New Jersey, and being a portion of Lot 8 and Lot 9, Block 21901.01, designated as Deed Notice Area 4 as shown on an exhibit entitled, "Deed Notice Area 4, SA6 South, For Block 21901.01, Lot 8 & Lot 9, City of Jersey City, Hudson County, New Jersey," prepared by Colliers Engineering & Design, Inc., dated March 15, 2021, and being more particularly bounded and described as follows, to wit:

COMMENCING at the intersection of the westerly sideline of New Jersey State Highway Route 440 (112 foot wide right of way), said sideline being distant 61 feet westward at right angles to the centerline thereof, and the division line between Block 21901.01, Lots 3 and 4 as shown on a map entitled "Final Plat Major Subdivision for Bayfront Redevelopment, LLC, Block 21901, Lots 5 thru 10 (Including Block 6) & Block 24601, Lots 1 thru 12, City of Jersey City, Hudson County, New Jersey", prepared by Maser Consulting P.A., dated August 1, 2016 last revised September 21, 2018, and filed in the Hudson County Clerk's Office on November 21, 2018 as instrument no. 20181121130000200; thence-

Running along said division line the following two (2) courses:

- A. **N 49° 06' 51" W, 488.50 feet**; thence-
 - B. **N 59° 38' 29" W, 1,406.87 feet**, to the intersection of the same with the division line between Lots 3 and 9; thence-
 - C. **N 61° 12' 57" W, 51.44 feet**, along the division line between Lots 4 and 9 to a corner common to Block 21901.01, Lots 4, 8 and 9; thence-
 - D. **N 59° 55' 15" W, 61.50 feet**, along the division line between Lots 8 and 9, to the True Point of **BEGINNING**, and running; thence-
1. **S 45°51'07" W, 563.77 feet**, running through said Lot 8, and partly along the division line between Lots 4 and 8 to the intersection of the same with the division line between Lots 4 and 5; thence-
 2. **S 45°54'51" W, 4.10 feet**, along said division line between Lots 4 and 5; thence-

Running through said Lot 8, the following three (3) courses:

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

DEED NOTICE AREA 4
BLOCK 21901.01, LOTS 8 & 9
PROJECT NO. 10000292AB
MARCH 15, 2021
PAGE 2 | 2



3. **N 53° 42' 45" W, 40.04 feet**; thence —
4. **N 45° 37' 13" E, 5.46 feet**; thence —
5. **N 45° 57' 38" E, 511.35 feet**; thence-
6. **N 44° 21' 38" E, 59.22 feet**, through said Lot 8 and beyond, through Lot 9; thence-
Continuing through said Lot 9, the following two (2) courses:
 7. **S 50° 26' 45" E, 40.33 feet**; thence-
 8. **S 45° 51' 07" W, 5.91 feet**, to the point and place of **BEGINNING**

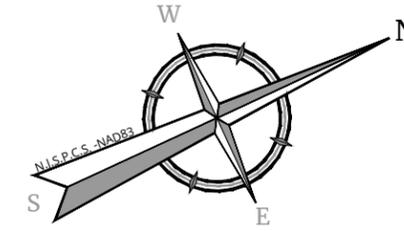
CONTAINING: 22,457 S.F. of land more or less or 0.516 acres of land more or less.

Glen Lloyd, PLS
New Jersey Professional Land Surveyor
License Number GS037598

March 16, 2021

MAP REFERENCE

1. A MAP ENTITLED "FINAL PLAT MAJOR SUBDIVISION FOR BAYFRONT REDEVELOPMENT, LLC, BLOCK 21901, LOTS 5 THRU 10 (INCLUDING BLOCK 6) & BLOCK 24601, LOTS 1 THRU 12, CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY", DATED AUGUST 1, 2016, LAST REVISED SEPTEMBER 21, 2018, BY MASER CONSULTING, P.A. AND FILED IN THE HUDSON COUNTY CLERK'S OFFICE ON NOVEMBER 21, 2018 AS INSTRUMENT NO. 20181121130000200.



NEW
BLOCK 21901.01
LOT 7

NEW
BLOCK 21901.01
LOT 6

NEW
BLOCK 21901.01
LOT 5

HACKENSACK RIVER

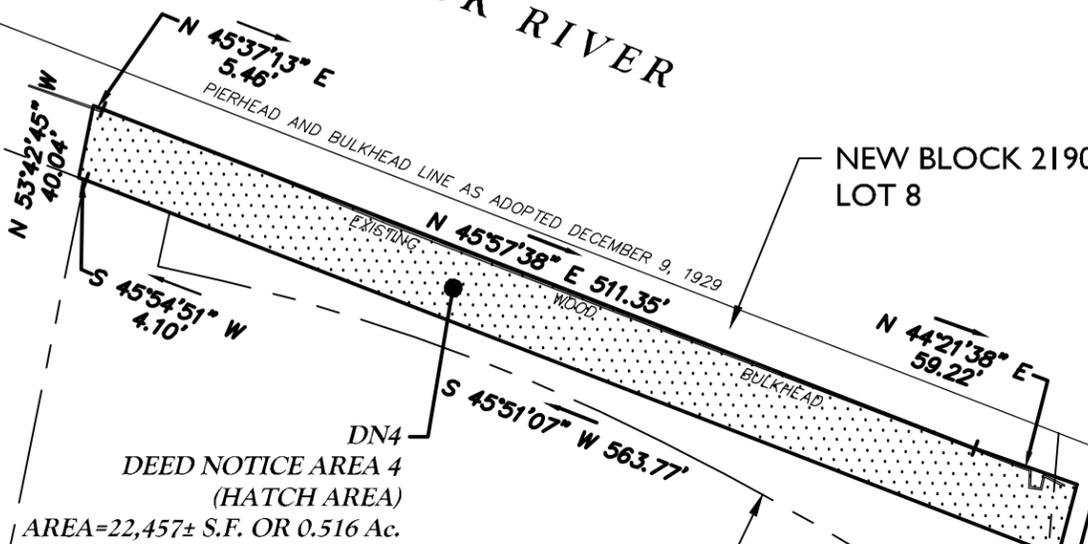
NEW BLOCK 21901.01
LOT 8

NEW
BLOCK 21901.01, LOT 4

NEW
BLOCK 21901.01
LOT 9

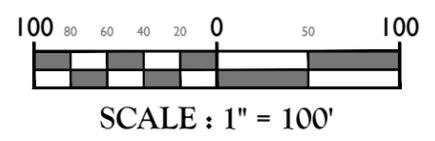
NEW
BLOCK 21901.01
LOT 4

NEW
BLOCK 21901.01
LOT 3



DN4
POINT OF
BEGINNING

NEW JERSEY STATE HIGHWAY
ROUTE 440
(112' WIDE R.O.W.)



Colliers
Engineering & Design
www.colliersengineering.com
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Doing Business as **MASER**
811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE.
Know what's below.
Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DESCRIPTION

DEED NOTICE AREA 4
SA6 SOUTH
FOR
BLOCK 21901.01
LOTS 8 & 9

CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

Colliers RED BANK (Headquarters)
331 Newmain Springs Road,
Suite 203
Red Bank, NJ 07701
Engineering & Design Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

SCALE: AS SHOWN	DATE: 3/15/21	DRAWN BY: HA	CHECKED BY: GJL
PROJECT NUMBER: 10000292AB	DRAWING NAME: V-EXBT-DN-4_REV		

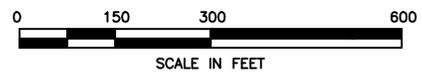
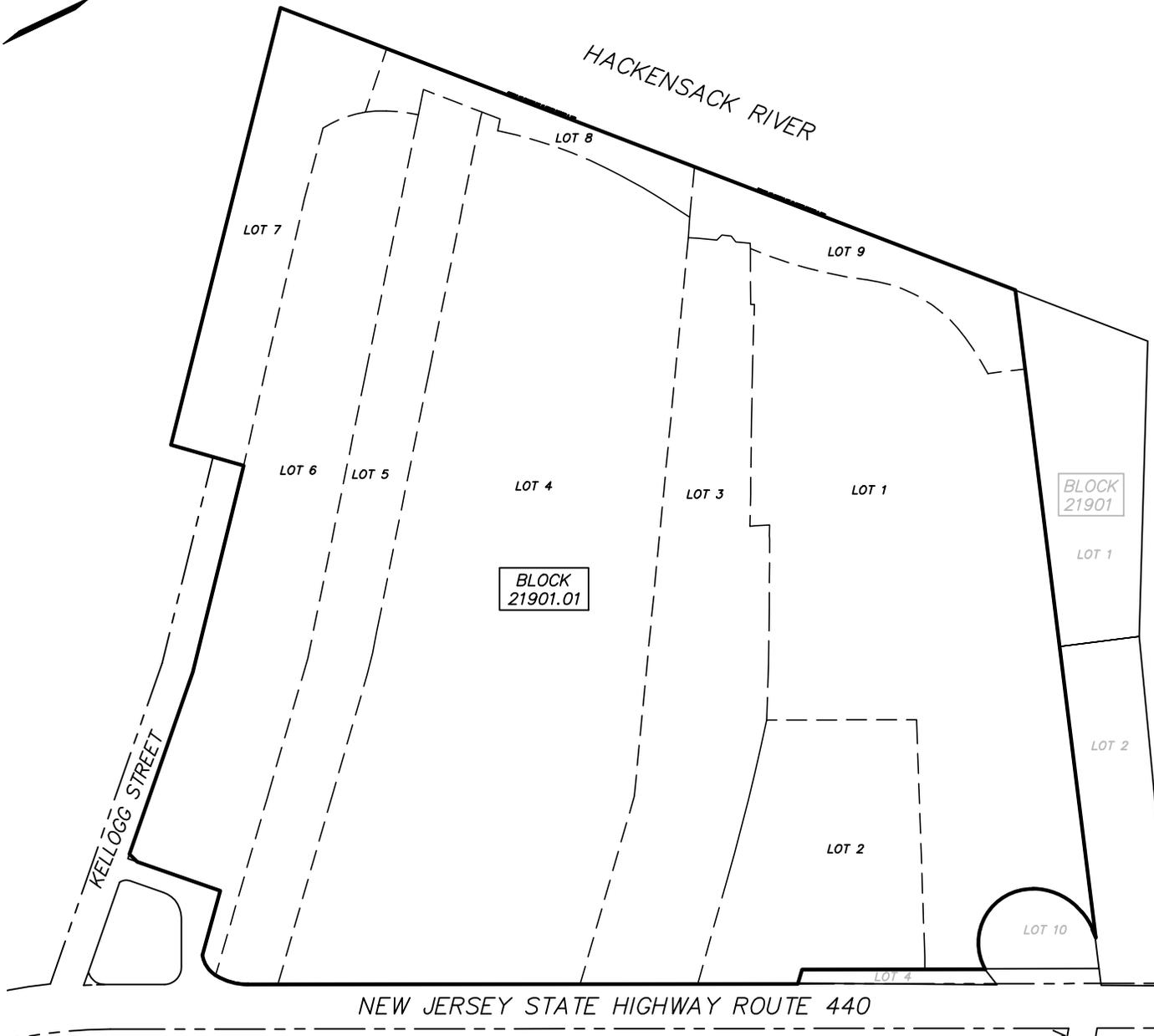
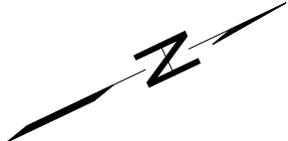
SHEET TITLE:
DEED NOTICE EXHIBIT

SHEET NUMBER:
1 of 1

2010\10000292Q\Survey\Exhibits\EXBT-DN-4_REV.dwg\V-01 EXHIBIT By: HAPPLEGATE

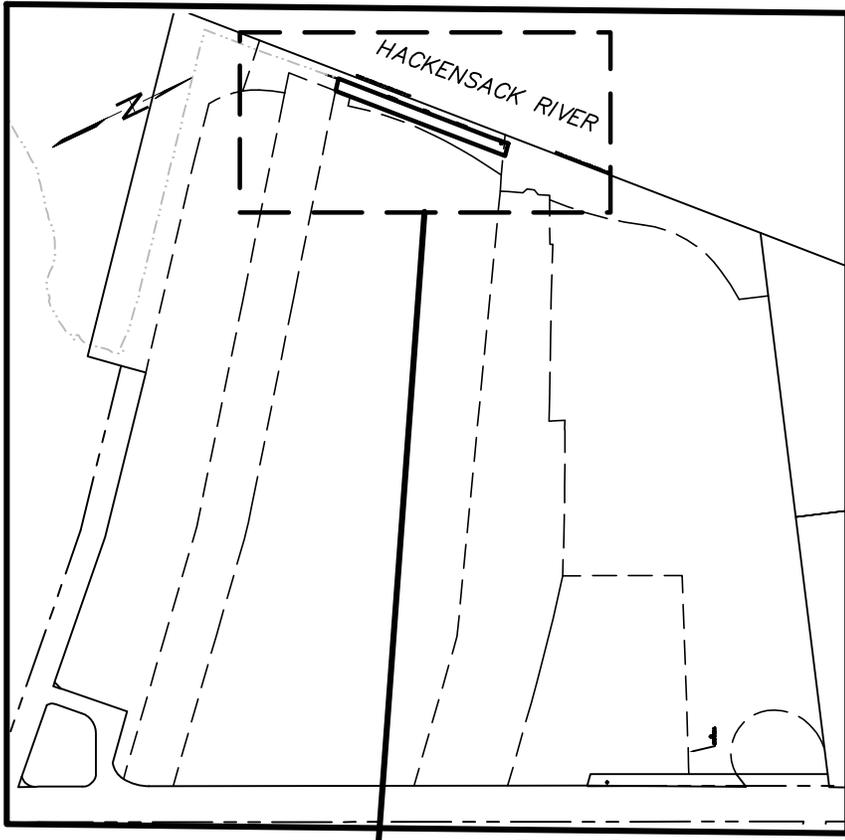
UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT, (i) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND PROPRIETARY TO AMEC FOSTER WHEELER AND (ii) NO PART OF THIS DOCUMENT IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF AMEC FOSTER WHEELER. AMEC FOSTER WHEELER AND ITS CLIENT ACCEPT NO LIABILITY FOR ANY ERRORS OR OMISSIONS IN THIS DOCUMENT OR FOR ANY DAMAGE, INCLUDING CONSEQUENTIAL DAMAGES, ARISING FROM THE USE OF THIS DOCUMENT BY ANY THIRD PARTY AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

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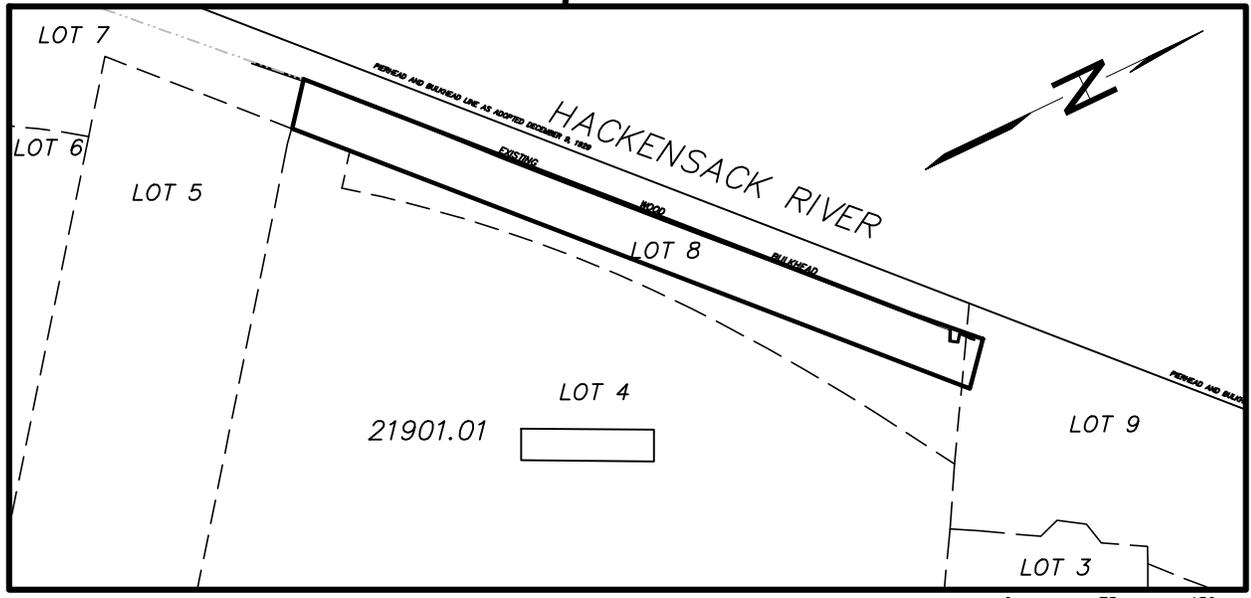
WOOD PROJECT No. 7772210089 DRAWING: 7772210089-5100-A200-4000		 ENVIRONMENT & INFRASTRUCTURE SOLUTIONS <small>200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619</small>	EXHIBIT A-2 TAX MAP BLOCK 21901.01 LOTS 8 & 9 DEED NOTICE # 4 SA-7 PI#G000002548 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 02/05/21	CHECKED/DATE: NW 02/11/21		

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- LEGEND
- 21901.01 BLOCK NUMBER
 - LOT 9 LOT NUMBER
 - BLOCK LINE
 - LOT LINE

KEY MAP
SCALE 1" = 600'



0 75 150 300
SCALE IN FEET

WOOD PROJECT No. 7772210089 DRAWING: 7772210089-5100-A300-4000		 ENVIRONMENT & INFRASTRUCTURE SOLUTIONS <small>200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619</small>	EXHIBIT A-3 PROPERTY AREA MAP BLOCK 21901.01, LOTS 8 & 9 DEED NOTICE # 4 SA-7 P#G000002548 JERSEY CITY, NEW JERSEY
PREPARED/DATE: STR 02/05/21	CHECKED/DATE: NW 02/11/21		

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EXHIBIT B

- B-1A: Restricted Area Map**
- B-1B: Engineering Controls Map**
- B-1C: As-Built Restoration Plan**
- B-2: Restricted Area Data Table**

Portions of Block 21901.01, Lots 8 and 9
Jersey City, Hudson County, New Jersey

Exhibit B-1 Restricted Area Maps include Exhibit B-1A (Restricted Area and Soil Sample Locations), Exhibit B-1B (Cap System Details), and Exhibit B-1C (As-Built Restoration Plan).

Exhibit B-2 is a Restricted Area Data Table indicating soil sample locations with concentrations of hexavalent chromium remaining above the level established in the New Jersey Department of Environmental Protection (NJDEP) Chromium Policy of 20 milligrams per kilogram (mg/kg).

Restricted Area Map Notes:

Exhibit B-1 indicates the engineering controls for the chromium remedy components. For soils with hexavalent chromium concentrations above 20 mg/kg, the engineering controls include a minimum of 7 to 14 feet of clean soil cover/crushed stone.

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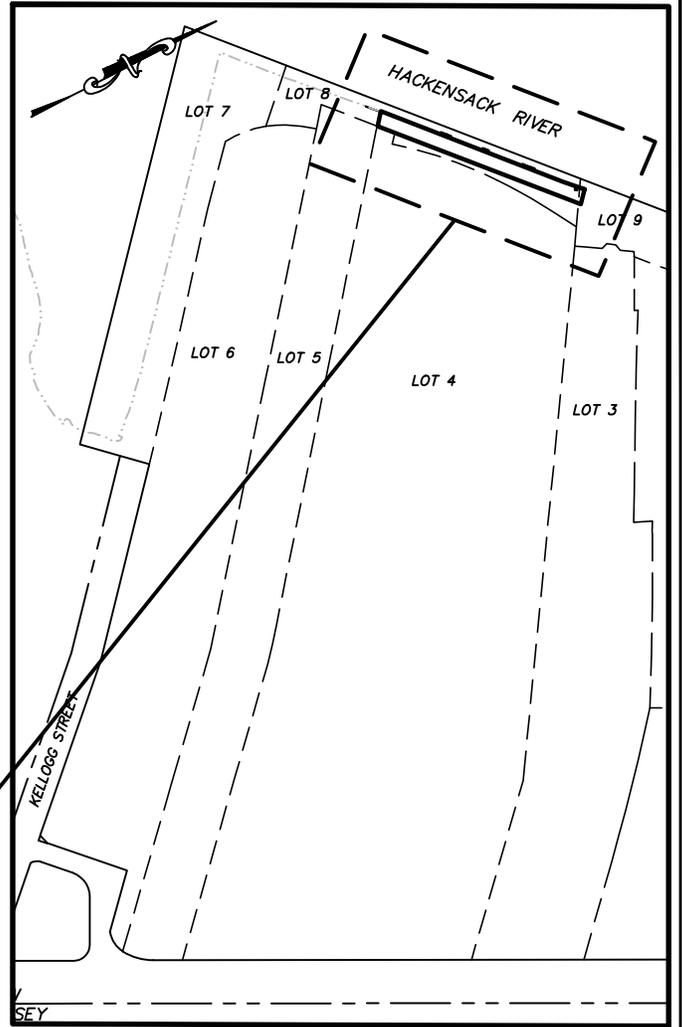
LEGEND



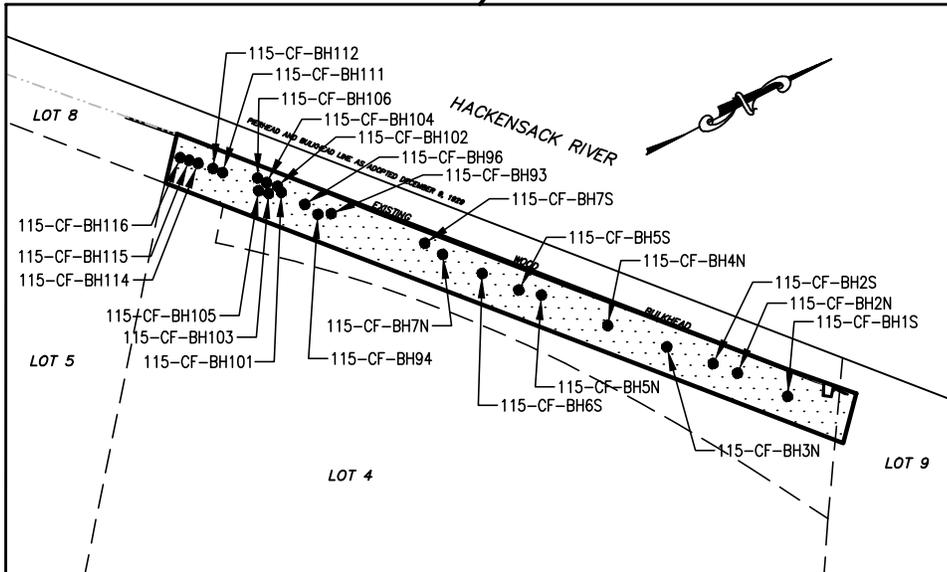
RESTRICTED AREA



SOIL BORINGS WITH HEXAVALENT CHROMIUM
> 20 (m/kg) MILLIGRAMS PER KILOGRAM



KEY MAP
SCALE: 1" = 500'



WOOD PROJECT No. 7772210089 DRAWING: 7772210089-5100-B100-4XXX	
PREPARED/DATE: STR 02/05/21	CHECKED/DATE: NW 02/11/21

wood.

ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

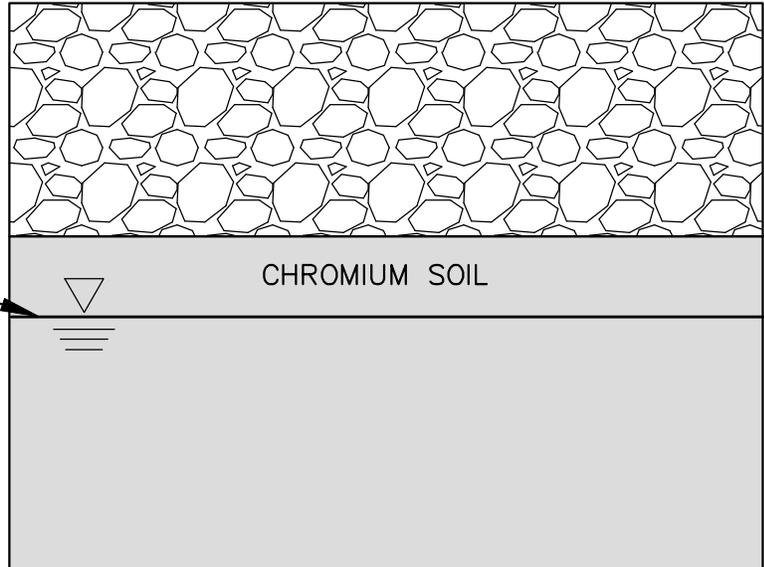
EXHIBIT B-1A
RESTRICTED AREA MAP
BLOCK 21901.01, LOTS 8 & 9
DEED NOTICE # 4 SA-7
PI#G000002548
JERSEY CITY, NEW JERSEY

C:\Users\scott.rubin\OneDrive\Documents\7772210089-5100-B100-4XXX.dwg Thu, 18 Feb 2021 10:03am scott.rubin

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7-14' CLEAN STONE

GROUNDWATER



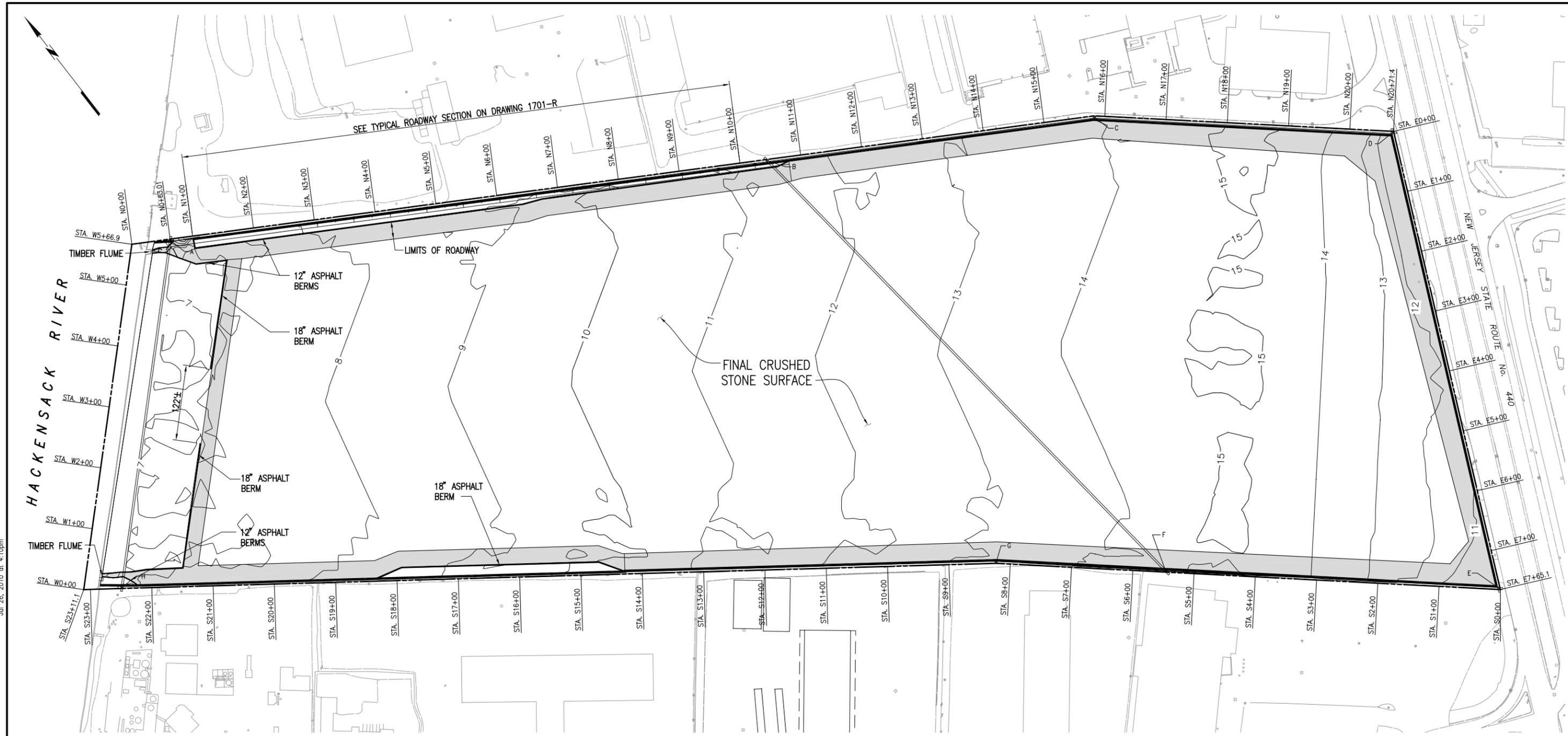
CAP SYSTEM DETAIL
NTS

C:\Users\scott.rudkin\temp\cadd\aed6\deed notice 4\7772210089-5100-B200-4000.dwg Fri, 12 Feb 2021 9:40am scott.rudkin

<p>WOOD PROJECT No. 7772210089 DRAWING: 7772210089-5100-B200-4000</p>		<p>wood.</p> <p>ENVIRONMENT & INFRASTRUCTURE SOLUTIONS 200 AMERICAN METRO BLVD, SUITE 113 HAMILTON, NEW JERSEY 08619</p>	<p>EXHIBIT B-1B CAP SYSTEM DETAILS BLOCK 21901, LOTS 8 & 9 DEED NOTICE # 4 SA-7 PI#G000002548 JERSEY CITY, NEW JERSEY</p>
<p>PREPARED/DATE: STR 02/05/21</p>	<p>CHECKED/DATE: NW 02/11/21</p>		

Jul 26, 2010 at 4:10pm

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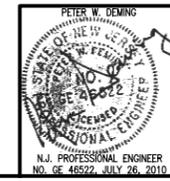
Legend:

-  - ASPHALT ROADWAY
 -  - 18" ASPHALT BERM
 -  - 12" ASPHALT BERM
 -  - 10
 -  - 9
- } - CONTOUR OF FINISHED GRADE

Notes:

1. For locations of perimeter pools and under drains see Drawing No. 1700-R.
2. For locations of underground utilities see Drawing No. 1701-R.
3. As-Built information was taken from final grades Drawing, SA7 and SA6 North/South, prepared by Entact, Dated 04/12/2010.

GRAPHIC SCALE



REV.	DATE	BY	DESCRIPTION
STUDY AREA 7			
JERSEY CITY		NEW JERSEY	
Honeywell			
101 COLUMBIA ROAD, MORRISTOWN, NEW JERSEY 07962			
PROJECT NO. 35037			
MUESER RUTLEDGE CONSULTING ENGINEERS			
14 PENN PLAZA - 225 W. 34TH STREET, NEW YORK, NY 10122			
SCALE	MADE BY	DATE	FILE NO.
GRAPHIC	B.B.	07-13-10	10210
	CH'KD BY	DATE	DRAWING NO.
	D.W.C.	07-13-10	1800-R
FINAL SITE PLAN			

EXHIBIT B-2
Restricted Area Data Table

Deed Notice #4 SA-7
Portion of Block 21901.01, Lots 8 and 9
Jersey City, New Jersey

Location	Elevation (feet msl)	Contaminant	CASR#	NJDEP Chromium SCC (mg/kg)	Soil Concentration (mg/kg)
115-CF-BH1S	-0.8	Hexavalent Chromium	18540-29-9	20	27.9
115-CF-BH2N	0.058	Hexavalent Chromium	18540-29-9	20	30.6
115-CF-BH2S	-0.311	Hexavalent Chromium	18540-29-9	20	21.2
115-CF-BH3N	0.051	Hexavalent Chromium	18540-29-9	20	36.3
115-CF-BH4N	-0.129	Hexavalent Chromium	18540-29-9	20	22.7 J
115-CF-BH5N	-0.525	Hexavalent Chromium	18540-29-9	20	36.4 J
115-CF-BH5S	-0.154	Hexavalent Chromium	18540-29-9	20	25.3 J
115-CF-BH6S	-1.639	Hexavalent Chromium	18540-29-9	20	46.9
115-CF-BH7N	-2.118	Hexavalent Chromium	18540-29-9	20	31.8
115-CF-BH7S	-1.981	Hexavalent Chromium	18540-29-9	20	20.9
115-CF-BH93	-2.579	Hexavalent Chromium	18540-29-9	20	34.6
115-CF-BH94	-2.556	Hexavalent Chromium	18540-29-9	20	21.7
115-CF-BH96	-3.164	Hexavalent Chromium	18540-29-9	20	28.7
115-CF-BH101	-5.224	Hexavalent Chromium	18540-29-9	20	45.6
115-CF-BH102	-5.657	Hexavalent Chromium	18540-29-9	20	36.8
115-CF-BH103	-5.617	Hexavalent Chromium	18540-29-9	20	42.2
115-CF-BH104	-5.645	Hexavalent Chromium	18540-29-9	20	32.2
115-CF-BH105	-5.563	Hexavalent Chromium	18540-29-9	20	113
115-CF-BH106	-5.597	Hexavalent Chromium	18540-29-9	20	26
115-CF-BH111	-5.291	Hexavalent Chromium	18540-29-9	20	75.1
115-CF-BH112	-5.533	Hexavalent Chromium	18540-29-9	20	105
115-CF-BH113	-5.696	Hexavalent Chromium	18540-29-9	20	68.9
115-CF-BH114	-5.646	Hexavalent Chromium	18540-29-9	20	83.7
115-CF-BH115	-5.718	Hexavalent Chromium	18540-29-9	20	39.9
115-CF-BH116	-5.477	Hexavalent Chromium	18540-29-9	20	61.1
115-CF-BH12E	-7	Hexavalent Chromium	18540-29-9	20	75.9
115-CF-BH12W	-7	Hexavalent Chromium	18540-29-9	20	53.8

Notes:

Results reported in mg/kg.

Data Qualifiers:

J-Data indicates the presence of a compound that meets the identification criteria. The concentration is an approximate value.

Abbreviations:

Feet bgs - Feet below ground surface

mg/kg - milligrams per kilogram

feet msl = feet mean sea level NAVD88 - North American Vertical Datum of 1988

NJDEP Chromium SCC - New Jersey Department of Environmental Protection Chromium Soil Cleanup Criteria, revised April 2010

EXHIBIT C

C-1: Institutional Controls

C-2: Engineering Controls

Portions of Block 21901.01, Lot 8 and 9
Jersey City, Hudson County, New Jersey

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Exhibit C-1

Deed Notice as Institutional Control

Portions of Block 21901.01, Lots 8 and 9
Jersey City, Hudson County, New Jersey

(A) Description and Estimated Size of the Restricted Area:

The Property is comprised of approximately 22,457 square foot area on SA-7 between the bulkhead and the western hydraulic barrier installed at SA-7 and includes the western hydraulic barrier wall of SA-7. The Property is the “Technically Impracticable Area or TI Area” identified in the SA-7 RAR. NJDEP issued a conditional No Further Action letter for SA-7 soils on December 23, 2010, that excludes the TI Area. Soils do not meet the 20 mg/kg objective in the NJDEP Chromium Policy. The Property soils exceeding 20 mg/kg hexavalent chromium are covered by at least 7 feet of clean soils. The Property will not be remediated by Honeywell; instead, the 7-foot thick clean soil cap will remain in place and will be subject to this Deed Notice. The Property also includes two steel sheetpile “wing walls” that project toward the bulkhead from the northern and southern corners of the hydraulic barrier intersections. These wing walls are part of the SA-7 Remedy in that they act to minimize re-contamination of the clean backfill material placed in the TI area from either the north or south. The Riverwalk feature including bulkhead improvements, additional fill soils and hardscape features will be constructed over top of the Property Deed Notice Area. The provisions of the LTMP, developed pursuant to the Consent Decree, will apply to Tract 1 of the Property.

(B) Description of the Restrictions on the Property:

The Property shall only be used for activities consistent with this Deed Notice, the Consent Decree, and the applicable zoning standards. Intrusive activities (i.e., excavation or digging) that breach the engineering controls (as described in Exhibit C-2) will not be permitted on the Property except in compliance with the terms of the Consent Decree and the applicable portions of the LTMP developed thereunder, and this Deed Notice. See subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information. A copy of the LTMP is maintained by Honeywell at 115 Tabor Road, Morris Plains, NJ 07950.

(C) Objective of the Restrictions:

The restrictions will prohibit contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy Criteria of 20 mg/kg.

Exhibit C-2

Engineering Control: Clean Fill

Portions of Block 21901.01, Lots 8 and 9
Jersey City, Hudson County, New Jersey

(A) Description of the Engineering Control:

The Engineering Controls consist include a minimum 7 to 14 feet of clean soil cover (crushed stone) as shown on Exhibit B-1.

(B) Objective of the Engineering Control

The objective of the controls is to prevent contact with soils containing hexavalent chromium above the level established in the NJDEP Chromium Policy of 20 mg/kg.

(C) Intended Function of the Engineering Control

The soil engineering controls are intended to function as a barrier to underlying and adjacent soils containing hexavalent chromium above 20 mg/kg within the Property. Monitoring requirements for the engineering controls are set forth in the applicable portions of the LTMP.

(D) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

Honeywell will perform monitoring as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

Same as (B)(1) above.

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering controls;

Same as (B)(1) above. Also, see the Consent Decree and subsections 7A Alterations, Improvements, Disturbances, and 7B Emergencies for additional information.

(4) The engineering controls are being inspected and maintained and their integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

Same as (B)(1) above.

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of the engineering controls. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/performance of the engineering controls; and

Records of the inspections are to be maintained as listed in (5). Other monitoring activities shall be performed as set forth in the applicable portions of the LTMP developed pursuant to the Consent Decree.

(6) Any new standards, regulations, or laws apply to the Property that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling; and

A review of any new standards, regulations, or laws will be conducted. Should the review indicate that other activities are necessary, those activities will be listed and executed.

(E) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continues to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

The monitoring report will be included in the biennial certification. Components of the monitoring report will include the following:

- ***A report of all conditions set forth in sections (A) and (B) above to assure that they have been adhered to, including an evaluation to determine whether or not the engineering controls are continuing to meet the original objective and intended function.***
- ***A report to determine whether or not the engineering controls continue to operate as designed.***
A report to determine whether or not the engineering controls continue to be protective of the public health and safety and of the environment.

DRAFT DEED NOTICE TERMINATION

Return Address:
Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

DRAFT

DEED NOTICE TERMINATION

FILED AT THE OFFICE OF THE
REGISTER OF HUDSON
COUNTY

IN DEED BOOK _____, Pages _____

AS TO

PORTIONS OF NEW BLOCK 21901.01 LOTS 8 AND 9 (PORTIONS OF FORMER BLOCK 24601 LOT 1 AND PORTIONS OF FORMER BLOCK 21901 LOTS 8 AND 10), JERSEY CITY TAX MAP OF THE HUDSON COUNTY

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____

Recorded by: _____
[Signature, Officer of County Recording Office]
[Print name below signature]

This Termination of Deed Notice is made as of [month day, year] by City of Jersey City.

1. DEED NOTICE RECORDED IN THE OFFICE OF THE REGISTER OF HUDSON COUNTY, AT BOOK 9258, PAGES 566-694. By way of a Declaration of Environmental Restriction (DER) or Deed Notice (hereinafter collectively Deed Notice) dated November 30, 2017, **Bayfront Redevelopment LLC** (“Bayfront”) advised of: (a) the existence of soil contamination in concentrations at the real property situated in the City of Jersey City and designated as Block(s) Portions Of Block 21901.01 Lots 8 and 9 (Portions of Former Block 24601 Lot 1 and Portions of Former Block 21901 Lots 8 and 10) ¹, (“the Property”) on the Tax Map of City of Jersey City that do not allow for the unrestricted use of the Property; (b) the existence of institutional and/or engineering controls selected as part of the remedial action for the Property; and (c) the continuing obligation of Bayfront (former Owner) and City of Jersey City (current owner), subsequent owners, and others to monitor and maintain those institutional and/or engineering controls. The Deed Notice was part of the remediation of contamination at the Property and was recorded in the Office of the Register of Hudson County on November 30, 2017 in Deed Book 9258, Pages 566-694 by Bayfront, the then owner of the Property. Pursuant to Paragraph 10, the Deed Notice was to remain in effect until such time as the Department

¹ All references to Block 21901.01 Lots 8 and 9 in this Deed Notice Termination shall mean those applicable portions of Former Block 24601 Lot 1 and Portions of Former Block 21901 Lots 8 and 10 as shown in the metes and bounds description, regardless of whether the word “portion(s)” is specifically called out or not.

approved the termination of the Deed Notice by executing a document expressly terminating the Deed Notice.

2. TRANSFER OF THE PROPERTY. By Deed dated January 15, 2019 and recorded in the Office of the Register of Hudson County on [month day, year] in Book 9373, Pages 596-, [name of person appearing on deed] transferred ownership of Block(s) _____, Lot(s) subject to the Deed Notice.

3. TERMINATION OF DEED NOTICE RECORDED IN THE OFFICE OF THE REGISTER OF HUDSON COUNTY AT BOOK 9258, PAGES 566-694 AS TO BLOCK 21901.01, LOTS 8 and 9. By way of letter dated [month day, year], [name of person/corporation etc.] requested approval from the Department to terminate the Deed Notice because conditions that required the execution and recording of the Deed Notice no longer exist on Block 21901.01, Lots 8 and 9. The Department approved the request by way of letter dated [month day, year]. Accordingly, the Department hereby executes this Termination of Deed Notice. Subject to the provisions of paragraph 5 below, the Department directs that the Deed Notice recorded in the Office of the Register of Hudson County in Deed Book 9258, Pages 566-694 shall be terminated and discharged. A metes and bounds description of Block 24601 Lot 1 and Portions of Former Block 21901 Lots 8 and 10 and a scaled map showing the boundaries of Block 21901.01, Lots 8 and 9 are attached hereto as Exhibits A and B, respectively.

4. EXECUTION OF NEW DEED NOTICE FOR BLOCK 21901.01, LOT 9. Although the Department has determined that a change in conditions warrants the termination of the Deed Notice as to Block 21901.01, Lot 8, the Department also has determined that soil contamination remains on Block 21901.01, Lot 9, in concentrations that do not allow for the unrestricted use of the Property. Thus, the approved remedial action includes a new Deed Notice for Block 21901.01, Lot 9. The new Deed Notice shall be executed and recorded by City of Jersey City.

5. EFFECTIVE DATE OF TERMINATION OF DEED NOTICE. This Termination of Deed Notice shall take effect on the date this Termination of Deed Notice or the date the new Deed Notice for Block(s) _____, Lot(s) _____ is recorded in the Office of the Register of Hudson, whichever is later, or, if this Termination of Deed Notice and the new Deed Notice are simultaneously recorded in the Office of the Register of Hudson, on the date of such simultaneous recording.

6. SIGNATURES IN WITNESS WHEREOF, City of Jersey and the New Jersey Department of Environmental Protection have executed this Termination of Deed Notice, as of the date first written above.

WITNESS:

CITY OF JERSEY CITY

[Signature]

[Signature]

[Print name]

[Print name]

[Print title]

STATE OF NEW JERSEY
COUNTY OF HUDSON

SS.:

I certify that on [month day, year], **Peter J. Baker** personally came before me, and this person acknowledged under oath, to my satisfaction, that:

- (a) this person is the Corporate Counsel of City of Jersey City, the municipal corporation named in this document;
- (b) this person is the attesting witness to the signing of this document by the proper officer who is the Business Administrator of the City of Jersey City;
- (c) this document was signed and delivered by the Municipal Corporation as its voluntary act and was duly authorized;
- (d) this person knows the proper seal of the Municipal Corporation which was affixed to this document; and
- (e) this person signed this proof to attest to the truth of these facts.

[Signature]

[Print Name and Title of Attesting Witness]

_____, Notary Public

[Signature]

[Print name]

WITNESS: New Jersey Department of Environmental Protection

[Signature]

By: _____
[Signature]

[Print name and title]

[Print name and title]

STATE OF NEW JERSEY SS.:
COUNTY OF MERCER

I certify that on *[Month day, year]*, *[Insert name of person executing document on behalf of the New Jersey Department Environmental Protection]* personally came before me, and this person acknowledged under oath, to my satisfaction, that this person:

(a) Is *[insert title]* and is authorized to execute this document on behalf of the New Jersey Department of Environmental Protection;

(b) Signed, sealed and delivered this document as his or her act and deed in his capacity as *[title]* of the New Jersey Department of Environmental Protection; and

(c) This document was signed and delivered by the New Jersey Department of Environmental Protection as its voluntary act, duly authorized.

_____, Notary Public
[Signature]

[Print name]

RECORD AND RETURN TO:
Waters, McPherson, McNeill, P.C.
P.O. Box 1560
300 Lighting Way
Secaucus, New Jersey 07096-1560

EXHIBIT A

Metes and Bounds Description

Former Block 24601 Lot 1 and Portions of Former Block 21901.01 Lots 8 and 10



Consulting, Municipal & Environmental Engineers
Planners ▪ Surveyors ▪ Landscape Architects

331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Tel: 732.383.1950 • Fax: 732.383.1984

DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292Q

DEED NOTICE AREA 4
BLOCK 24601 LOT 1
& BLOCK 21901 LOTS 8 & 10
APRIL 6, 2016
REVISED: JUNE 28, 2017

All that certain lot, tract or parcel of land situate lying and being in the City of Jersey, in the County of Hudson and State of New Jersey, and being a portion of Lot 1 Block 24601, and a portion of Lot 8 Block 21901, designated as Deed Notice Area 4 as shown on an exhibit entitled, "Deed Notice Area 4, SA6 South, Block 21901, Lot 8, Block 24601, Lot 1, City of Jersey City, Hudson County, New Jersey," prepared by Maser Consulting P.A., dated April 6, 2016, revised June 28, 2017 and being more particularly bounded and described as follows, to wit:

TRACT I:

COMMENCING at the intersection of the division line between Lots 8 and 10, Block 21901, with the northwesterly line of said Lot 8; thence-

A. **S 59°39'05" E, 23.69 feet**, along said division line to the **True** point of **BEGINNING**, and running; thence-

1. **N 44° 21' 38" E, 6.65 feet**, through a portion of Lot 10, Block 21901; thence-
2. **S 50° 26' 45" E, 40.33 feet**, through said Lot 10 to a point in said division line between Lots 8 and 10, Block 21901; thence-

Running through said Lot 8, Block 21901 the following two (2) courses, as shown on aforementioned exhibit map:

3. **S 45°51'07" W, 569.68 feet**; thence-
4. **S 45°54'51" W, 4.10 feet**, to the division line between Lot 1, Block 24601 and Lot 8, Block 21901; thence-
5. **N 53° 42' 45" W, 40.04 feet**, along said division line; thence –

Running through said Lot 8, Block 21901 the following three (3) courses, as shown on aforementioned exhibit map:

6. **N 45° 37' 13" E, 5.46 feet**; thence –
7. **N 45° 57' 38" E, 511.35 feet**; thence-



**DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292Q**

**DEED NOTICE AREA 4
BLOCK 24601 LOT 1
& BLOCK 21901 LOTS 8 & 10
APRIL 6, 2016
REVISED: JUNE 28, 2017**

8. N 44° 21' 38" E, 52.57 feet, to the point and place of **BEGINNING**.

CONTAINING: 22,457 S.F. of land more or less or 0.516 acres of land more or less.

TRACT II:

COMMENCING at the intersection of the division line between Lot 1, Block 24601 and Lot 8, Block 21901, with the northwesterly line of said Lot 8; thence-

A. S 53° 42' 45" E, 23.85 feet, along said division line to the **True** point of **BEGINNING**, and running; thence-

1. S 53° 42' 45" E, 40.04 feet, along said division line; thence-

Running through said Lot 1, Block 24601 the following ten (10) courses, as shown on aforementioned exhibit map:

2. S 45° 54' 51" W, 153.16 feet, thence –

3. S 53° 41' 21" E, 12.04 feet; thence-

4. S 36° 26' 04" W, 6.50 feet, thence –

5. S 38° 36' 29" W, 41.58 feet, thence –

6. S 40° 39' 53" W, 9.05 feet, thence-

7. N 88° 57' 37" W, 27.39 feet, thence -

8. S 26° 56' 10" W, 17.04 feet, thence -

9. S 54° 23' 40" W, 30.23 feet, thence –

10. N 46° 36' 39" W, 38.87 feet, thence –

11. N 45° 37' 13" E, 268.17 feet, to the point and place of **BEGINNING**.



DESCRIPTION OF PROPERTY
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
PROJECT NO. 10000292Q

DEED NOTICE AREA 4
BLOCK 24601 LOT 1
& BLOCK 21901 LOTS 8 & 10
APRIL 6, 2016
REVISED: JUNE 28, 2017

CONTAINING: 11,689 S.F. of land more or less or 0. 0.268 acres of land more or less.

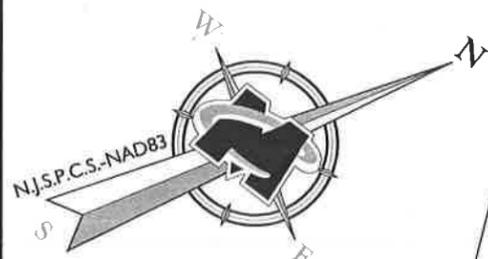


GLEN J. LLOYD, P.L.S.
NEW JERSEY PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER GS037598



DATE SIGNED

\\HQFAS1\General\Projects\2010\10000292Q\Survey\Description\Metes & Bounds-Deed Notice 4_REV_6-28-17.docx



HACKENSACK RIVER

LINE DATA		
SEGMENT	DIRECTION	LENGTH
L1	S 53° 41' 21" E	12.04'
L2	S 36° 26' 04" W	6.50'
L3	S 38° 36' 29" W	41.58'
L4	S 40° 39' 53" W	9.05'
L5	N 88° 57' 37" W	27.39'
L6	S 26° 56' 10" W	17.04'
L7	S 54° 23' 40" W	30.23'

**TRACT II
POINT OF
BEGINNING**

TRACT II
DEED NOTICE AREA 4
(HATCH AREA)
AREA=11,689± S.F. OR 0.268 Ac.

**TRACT I
POINT OF
BEGINNING**

TRACT I
DEED NOTICE AREA 4
(HATCH AREA)
AREA=22,457± S.F. OR 0.516 Ac.

BLOCK 24601
LOT 11
DB 8711 PG. 802

BLOCK 24601
LOT 1
DB 8442 PG. 1

BLOCK 21901
LOT 8
DB 7452 PG. 62

BLOCK 21901
LOT 10
DB 8531 PG. 196

BLOCK 24601
LOT 2
DB 8902 PG. 221

BLOCK 24601
LOT 3
DB 8231 PG. 60

BLOCK 21901
LOT 7
DB 7452 PG. 62

BLOCK 24601
LOT 4
DB 8231 PG. 60

BLOCK 24601
LOT 5
DB 8231 PG. 60

BLOCK 21901
LOT 6
DB 8642 PG. 118

BLOCK 21901
LOT 5
DB 8642 PG. 118

BLOCK LIMIT LINE

NEW JERSEY STATE HIGHWAY
ROUTE 440
(112' WDE R.O.W.)



SCALE : 1" = 100'

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- Norfolk, VA
- Albuquerque, NM
- Albany, NY
- Chestnut Ridge, NY
- Newburgh, NY
- Hawthorne, NY
- Lehigh Valley, PA
- Exton, PA
- Philadelphia, PA
- Tampa, FL
- Miami, FL
- Columbia, MD

State of N.J. Cert. of Authorization: 24GA2796500
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811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

Know what's below.
Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DESCRIPTION
1	2/2/17	DIVIDED DN-4 INTO TWO TRACTS
2	6/28/17	REVISE DN-4 TRACT I SOUTHEASTERLY LINE NEAR LOT 10

REV	DATE	DESCRIPTION
1	2/2/17	DIVIDED DN-4 INTO TWO TRACTS
2	6/28/17	REVISE DN-4 TRACT I SOUTHEASTERLY LINE NEAR LOT 10

DEED NOTICE AREA 4
SA6 SOUTH
FOR

BLOCK 21901, LOT 8
BLOCK 24601, LOT 1
CITY OF JERSEY CITY
HUDSON COUNTY
NEW JERSEY

MASER CONSULTING P.A.
RED BANK OFFICE
Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
Phone: 732.383.1950
Fax: 732.383.1984

SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	4/6/2016	HA	GJJ

SHEET TITLE:
DEED NOTICE EXHIBIT

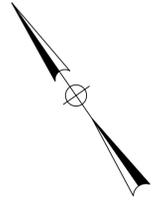
EXHIBIT B

Scaled Tax Map of the Property and Institutional/Engineering Control Boundaries
Block 21901.01 Lots 8 and 9

And
Former Exhibit B-1A Restricted Area Map

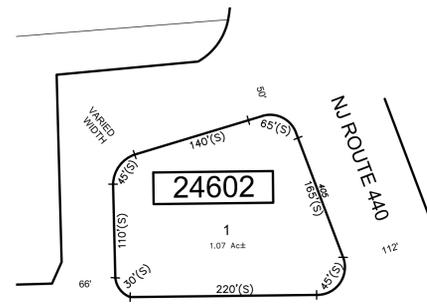
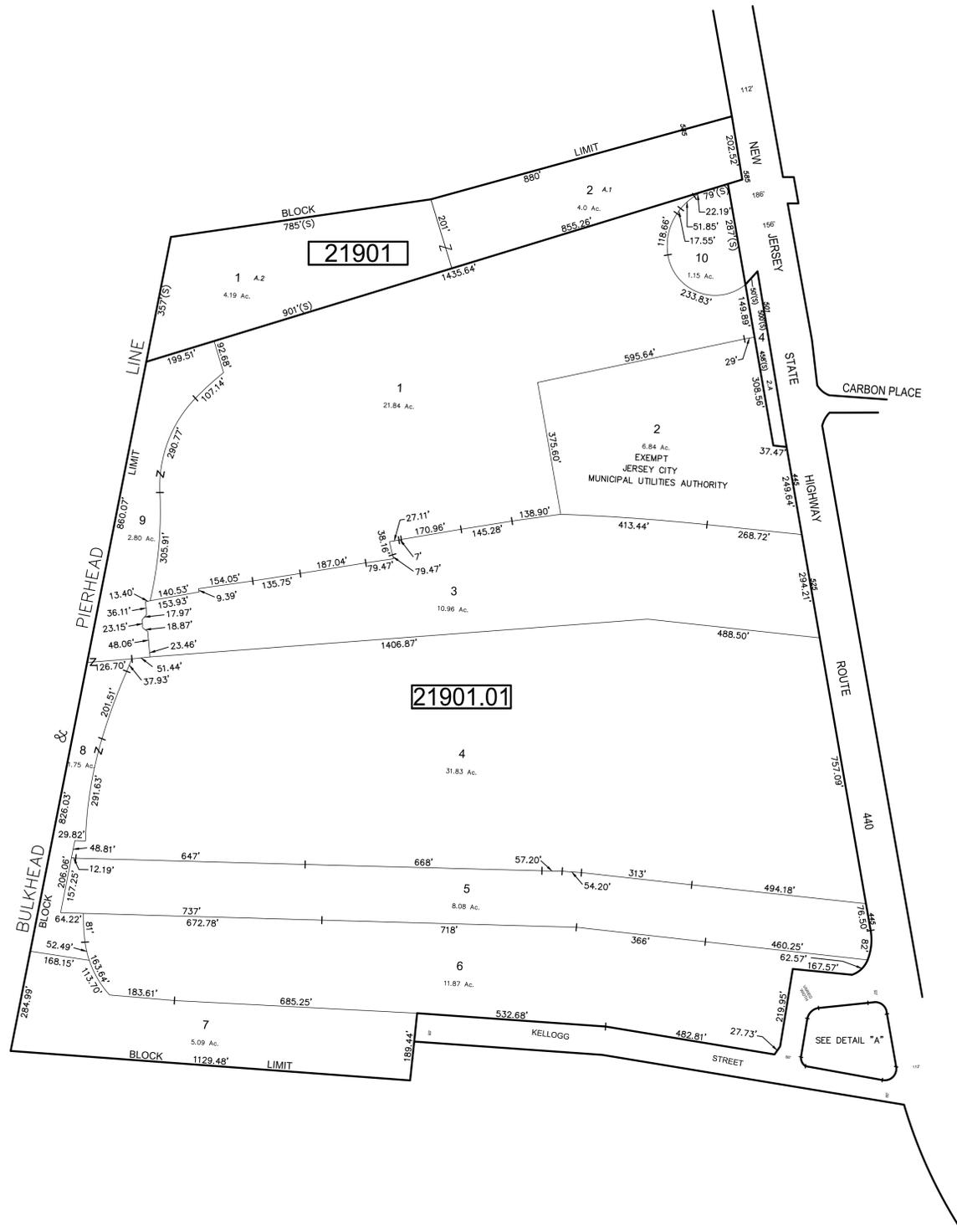
REVISIONS				
DATE	BY	LIC. NO.	BLOCK	LOT
10/2010	CHARLES A. ATKINSON	33994		

SEE SHEET 160



TOWN OF KEARNY
HUDSON COUNTY

HACKENSACK RIVER



SEE DETAIL "A"
SCALE: 1" = 100'

SEE SHEET 220

SEE SHEET 219.01

SEE SHEET 261

THIS MAP HAS BEEN DRAWN USING COMPUTER AIDED DRAFTING/DESIGN (CAD/D) AND COORDINATE GEOMETRY.

THIS MAP HAS BEEN GIVEN A FORMAL CERTIFICATION BY THE DIVISION OF TAXATION ON MAY, 2009, SIGNED BY SANTO C. DIDONATO, CTA AND ASSIGNED SERIAL NUMBER 959

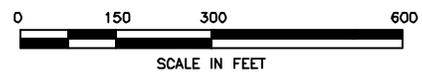
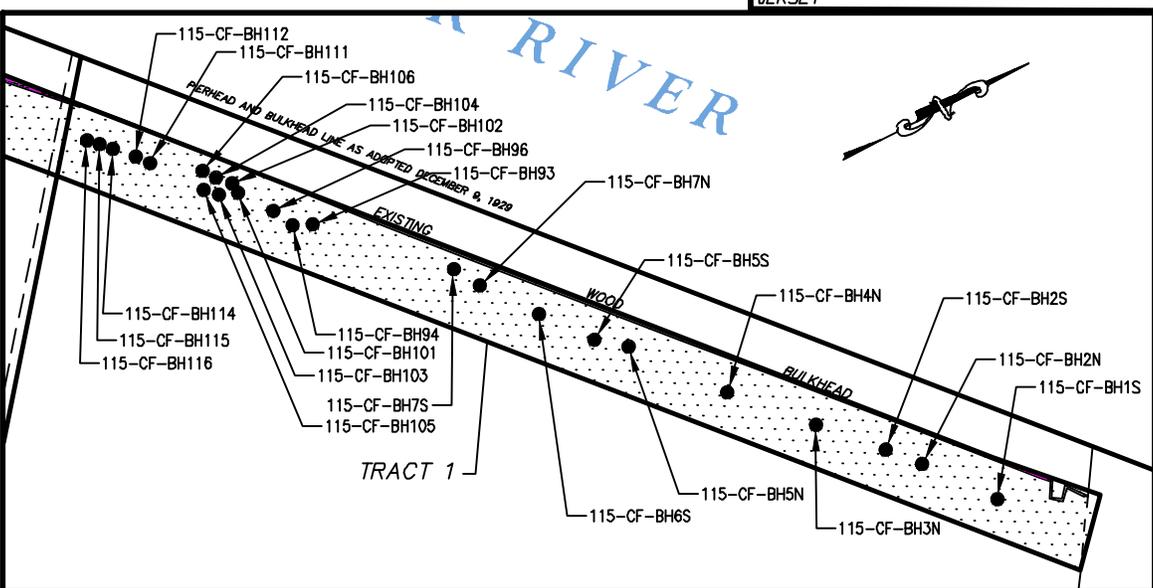
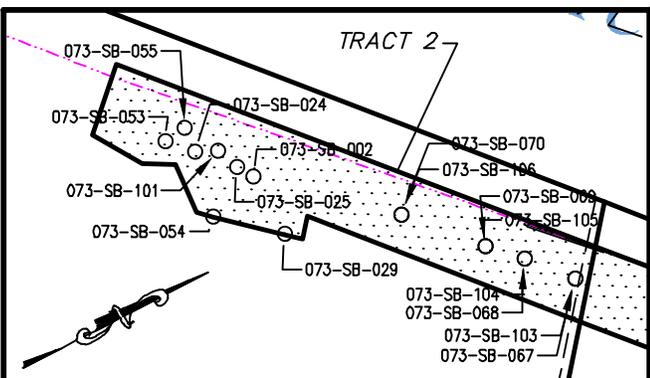
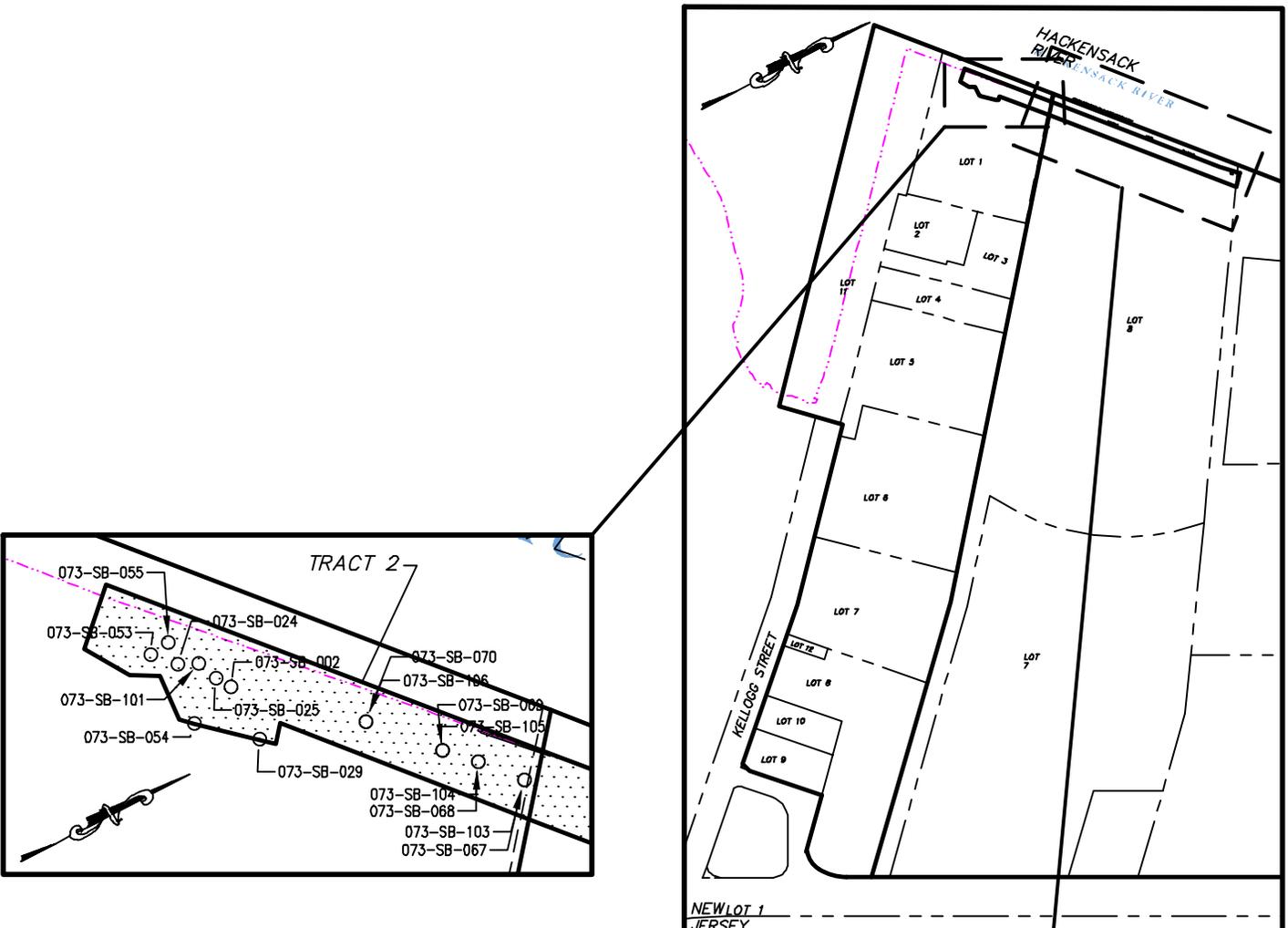
TAX MAP
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
SCALE: 1"= 200' AUGUST, 2006
RICHARD A. MORALLE, P.E., P.L.S.
T & M ASSOCIATES
11 TINDALL ROAD, MIDDLETOWN TOWNSHIP
NEW JERSEY, 07748

ARH - COA#24GA27973300

TO SHOW CONDITIONS AS OF JUNE 2020

THIS DRAWING IS A WRITTEN CONTRACT BETWEEN AMEC FOSTER WHEELER AND ITS CLIENT. IT IS THE PROPERTY OF AMEC FOSTER WHEELER AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN PERMISSION OF AMEC FOSTER WHEELER. ANY USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

PROJECT: HAMILTON, NEW JERSEY; DATE: 01/28/16; DRAWING: 3480150450-5100-B100-4000.dwg; TUES, 14 NOV 2017 - 1:24pm; USER: scott.rubin



Amec Foster Wheeler PROJECT No. 3480150450 DRAWING: 3480150450-5100-B100-4000	
PREPARED/DATE: STR 01/28/16	CHECKED/DATE: NW 01/31/17

amec foster wheeler

ENVIRONMENT & INFRASTRUCTURE, Inc.
200 AMERICAN METRO BLVD, SUITE 113
HAMILTON, NEW JERSEY 08619

EXHIBIT B-1A
RESTRICTED AREA MAP
BLOCK 24601 LOT 1 &
BLOCK 21901 LOTS 8 & 10
DEED NOTICE # 4 SA-6 SOUTH
SITE 073 DEFERRED AREA AND SA-7
JERSEY CITY, NEW JERSEY

**REMEDIAL ACTION PERMIT MODIFICATION
APPLICATION – SOIL**



New Jersey Department of Environmental Protection
 Site Remediation and Waste Management Program

REMEDIAL ACTION PERMIT MODIFICATION APPLICATION – SOIL

Date Stamp
 (For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: SA-7 Site 115 Deed Notice #4 A-TI

List All AKAs: Kellogg. St. Properties, etc.; Deed Notice #4 Tract 1

Street Address: Kellogg Street

Municipality: Jersey City (Township, Borough, or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): G000002548

Case Tracking Number(s):

Municipal Block(s) and Lot(s) of the site/property: Block 21901.01, Lots 8 and 9

Is this site a Federal case?..... Yes No

If "Yes", indicate the Federal Case Type:

RCRA GPRA 2020 CERCLA/NPL USDOD USDOE

Other (explain):

SECTION B. SOIL REMEDIAL ACTION PERMIT MODIFICATION APPLICATION

Note: This Soil Remedial Action Permit (RAP) Modification Application will not be processed until all past RAP annual fees have been paid in full, and all previously required RAP Transfer/Change of Property Ownership Applications have been applied for.

- Reason(s) for the Soil RAP Modification Application: *(check all that apply)*
 - Change in institutional control (Complete All Sections below except Section H)**
 - Change in engineering control (Complete All Sections below)**
 - Permittee address change (Complete Sections C, D, E, F, L, M, and N below)**
 - Adding an Additional Person Responsible for Conducting Remediation to the Soil RAP (Complete Sections C, D, E, F, H, L, M, N and Addendum A below)**
 - Other:** _____

2. The Soil RAP Modification Application fee must be enclosed with this application.

**Effective on or Before
 June 30, 2019**

**Effective
 July 1, 2019**

Soil RAP Fee – Modification\$1,220.00\$660.00

SECTION C. FEE BILLING CONTACT PERSON

Business Name: Honeywell

First Name of Contact: Maria Last Name of Contact: Kaouris

Title: Chromium Remediation Director

Phone Number: (973) 455-3302 Ext.: Fax:

Mailing Address: 115 Tabor Road

Municipality: Morris Plains State: New Jersey Zip Code: 07950

Email Address: Maria.Kaouris@honeywell.com

SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Addendum for additional Person Responsible for Conducting the Remediation has been completed.

Affiliation/Name of Organization: Honeywell

First Name of Contact: Benny Last Name of Contact: Dehghi

Title: Global Remediation Director

Phone Number: (310) 512-2296 Ext.: _____ Fax: _____

Mailing Address: 115 Tabor Road

Municipality: Morris Plains State: New Jersey Zip Code: 07950

Email Address: benny.dehghi@honeywell.com

Check if the Person Responsible for Conducting the Remediation has Primary Responsibility for Permit Compliance

SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Addendum for additional Owner of the Site has been completed.

Affiliation/Name of Organization: City of Jersey City

First Name of Contact: Mary Pat Last Name of Contact: Noonan

Title: Senior Project Manager, Jersey City Redevelopment Agency

Phone Number: (201) 761-0819 Ext.: _____ Fax: (201) 761-0831

Mailing Address: 66 York Street

Municipality: Jersey City State: New Jersey Zip Code: 07302

Email Address: marypat@jcnj.org

Check if the owner has Primary Responsibility for Permit Compliance

SECTION F. ATTACHED DOCUMENTS

Attach the following documents: *(Check all that apply)*

Note: All electronic copies should be provided in Adobe PDF file format on a compact disc (CD).

- Hard copy **and** electronic copy of the completed Soil RAP Modification Application using the current form on the NJDEP Website.
- Hard **and** electronic copy of the cover letter/report explaining the reason(s) for the Soil RAP Modification Application.
- Electronic copy of the Filed Deed Notice (must be a separate PDF file) and Deed Notice Termination document with book & page numbers, which should include all associated attachments/exhibits.
- Electronic copy of the completed Remediation Cost Review and RFS/FA Form with a detailed cost estimate, if applicable:

Only Check One:

- Original** Financial Assurance mechanism (*hard copy*), including any Amendments, attached.
- Date the original Financial Assurance mechanism was submitted to the NJDEP: _____
- An electronic copy of the Remediation Funding Source (RFS) mechanism, if using an existing RFS mechanism as the Financial Assurance, and an amendment to conform to the Financial Assurance format.
- Electronic copy of the homeowner or condominium association’s annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site, if applicable.

SECTION G. DEED NOTICE INFORMATION

1. Deed Notice filing date: _____
2. Name of County Office the Deed Notice was filed in: _____
3. Book Number the Deed Notice is filed in: _____ Page Numbers: First: _____ to Last: _____
4. Total Number of Pages filed: _____
5. Instrument/Control/File Number(s): _____
6. Block(s) and Lot(s) of the restricted area:
Block 21901.01, Lots 8 and 9
7. Is the restricted area the entire site/property? Yes No
If "**No**", what percent of the site/property is restricted? 1.6 %
8. Is this Deed Notice for Historic Fill material at the site?..... Yes No
If "**Yes**", is the Historic Fill material impacting the ground water at the site? Yes No
If the Historic Fill material ***is*** impacting the ground water at the site, has the CEA/WRA Fact Sheet Form been submitted to the NJDEP?..... Yes No
If the CEA/WRA Fact Sheet Form has not been submitted, **attach** the Form to this application.
If the Historic Fill material ***is not*** impacting the ground water at the site, then check one of the boxes below to explain why:
 Ground water sampled as per the guidance and below GWQS
 Ground water not sampled because no trigger in SI/RI
9. Is this Deed Notice for Polychlorinated Biphenyl (PCB) soil contamination greater than 1 part per million (ppm) remaining at the site?..... Yes No
If "**Yes**", document compliance/approval with the federal Toxic Substances Control Act (TSCA) program in Section K below and attach all supporting documentation.
10. Has the new Deed Notice restricted area been accurately mapped on NJ-GeoWeb?..... Yes No
If "**No**", submit a GIS compatible map of the Deed Notice restricted area by email to srpgis_dn@dep.nj.gov and provide the date the email was sent: _____

SECTION I. FINANCIAL ASSURANCE

1. Does the remedial action/Deed Notice include an engineering control? Yes No
 If "No", proceed to the next section.

2. Are any of the entities identified in Section D or E exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? Yes No
 If "Yes", check the exemption(s) that applies:

- | Person Responsible for Conducting the Remediation – Co-Permittee | Current Owner of the Site – Co-Permittee | |
|--|--|--|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Government entity |
| <input type="checkbox"/> | <input type="checkbox"/> | A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009 |
| <input type="checkbox"/> | <input type="checkbox"/> | A person that conducted remediation at their primary or secondary residence |
| <input type="checkbox"/> | <input type="checkbox"/> | Owner or operator of a child care center |
| <input type="checkbox"/> | <input type="checkbox"/> | Public school or private school |
| <input type="checkbox"/> | <input type="checkbox"/> | Owner or operator of a small business responsible for conducting remediation at the location of the business |

If all of the entities identified in Section D or E are exempt, proceed to the next section.

3. Is the current owner of the site either a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? Yes No

If "Yes" and the association is identified in Section E of this RAP Application, an electronic copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site should be attached as indicated in Section F above.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: \$ 7,900,000.00

5. Are you using an existing RFS mechanism for the site as the Financial Assurance? Yes No
 If "Yes", have all the following criteria been met? Yes No

- a. The amount of funds needed to operate, maintain, and monitor the engineering control(s) at the site for 30 years (*minimum of \$30,000 for a 30-year time frame*);
- b. The amount of funds in the RFS equals the amount of funds required to be posted for RFS and Financial Assurance; and
- c. The RFS is not in the form of a self-guarantee.

Identify the full amount of the current RFS \$ _____

6. Identify the full amount established as a Financial Assurance: \$ 46,915,000.00

As indicated in Section F above, an electronic copy of the completed Remediation Cost Review and RFS/FA Form should be attached. Also, please be sure to provide one of the following as indicated in Section F above: attach the original Financial Assurance mechanism (*hard copy*), including any Amendments, to the Soil RAP Application; the date the original Financial Assurance mechanism was submitted to the NJDEP; or an electronic copy of the existing RFS mechanism that is being used as the Financial Assurance and the amendment to conform to the Financial Assurance format.

7. What is the Financial Assurance Mechanism? (*check all that apply*)
- | | | |
|---|--|--------------------------------------|
| <input type="checkbox"/> Remediation Trust Fund | <input type="checkbox"/> Line of Credit | <input type="checkbox"/> Surety Bond |
| <input type="checkbox"/> Environmental Insurance Policy | <input checked="" type="checkbox"/> Letter of Credit | |

8. Contact information at the financial institution for the Financial Assurance:

Financial Institution: MFUG Union Bank
First Name of Contact: Customer Service Last Name of Contact: RE: S315125M
Title: Trade Service Operations
Phone Number: (800) 858-9120 Ext.: Fax: (323) 720-2773
Mailing Address: 1980 Saturn Street, V02-906
Municipality: Monterey State: CA Zip Code: 91755
Email Address: N/A

SECTION J. VAPOR INTRUSION SUMMARY

1. Are there any buildings with an Indeterminate Vapor Intrusion Pathway status as a result of this soil contamination and not ground water contamination? Yes No

If Yes, document this issue in Section K below and attach any supporting documentation.

2. Is there soil gas contamination above the Soil Gas Screening Levels beneath any buildings that require long-term monitoring as a result of this soil contamination and not ground water contamination? Yes No

If Yes, document this issue in Section K below.

Attach an electronic copy of the Vapor Intrusion Long-Term Monitoring Plan and a scaled site map clearly identifying the building(s).

3. Are any vapor intrusion engineering controls/mitigation systems currently installed at any buildings as a result of this soil contamination (and not ground water contamination) that remain on the site/property and included in the Deed Notice? Yes No

If Yes, indicate the type of vapor intrusion engineering control that was implemented: (check all that apply)

- Subsurface Depressurization System
Subsurface Ventilation System
Soil Vapor Extraction System
HVAC Positive Pressure
Other (specify):

Attach an electronic copy of the Operation, Maintenance, and Monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s). The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

SECTION K. OTHER INFORMATION PROVIDED

List any other pertinent information to support the Soil RAP Modification Application.

Deed Notice area #4 will be terminated to remove SA-6 South Site 073 after additional excavation activities were conducted in 2020. New Deed Notice #4 for only the SA-7 Site 115 portion of the cap will be filed after approval of the RAR Addendum.

SECTION L. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation:

Honeywell International Inc.

Representative First Name: Benny Representative Last Name: Dehghi

Title: Global Remediation Director

Phone Number: (310) 512-2296 Ext.: _____ Fax: _____

Mailing Address: 115 Tabor Road

City/Town: Morris Plains State: New Jersey Zip Code: 07950

Email Address: benny.dehghi@honeywell.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: Benny Dehghi/Global Remediation Director

SECTION M. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible who owns the site:

City of Jersey City

Representative First Name: Mary Pat Representative Last Name: Noonan

Title: Senior Project Manager, Jersey City Redevelopment Agency

Phone Number: (201) 761-0819 Ext.: _____ Fax: (201) 761-0831

Mailing Address: 66 York Street

City/Town: Jersey City State: New Jersey Zip Code: 07302

Email Address: marypat@jcnj.org

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: Mary Pat Noonan/Senior Project Manager

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION N. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____
First Name: _____ Last Name: _____
Phone Numbers: _____ Ext.: _____ Fax: _____
Mailing Address: _____
Municipality: _____ State: _____ Zip Code: _____
Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

(1) I certify, as a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C-1 et seq. to conduct business in New Jersey, that for the remediation described in this submission, and all attachments included in this submission, I personally: Managed, supervised, or performed the remediation conducted at this site that is described in this submission, and all attachments included in this submission; and/or periodically reviewed and evaluated the work performed by other persons that forms the basis for the information in this submission; and/or completed the work of another site remediation professional, licensed or not, after having: (1) reviewed all available documentation on which I relied; (2) conducted a site visit and observed the then-current conditions and verified the status of as much of the work as was reasonably observable; and (3) concluded, in the exercise of my independent professional judgment, that there was sufficient information upon which to complete any additional phase of remediation and prepare workplans and reports related thereto.

(2) I certify:

- That I have read this submission and all attachments to this submission;*
- That in performing the professional services as the licensed site remediation professional for the entire site or each area of concern, I adhered to the professional conduct standards and requirements governing licensed site remediation professionals provided in N.J.S.A. 58:10C-16;*
- That the remediation conducted at the entire site or each area of concern, that is described in this submission and all attachments to this submission, was conducted pursuant to and in compliance with the remediation requirements in N.J.S.A. 58:10C-14.c;*
- That the remediation described in this submission, and all attachments to this submission, was conducted pursuant to and in compliance with the regulations of the Site Remediation Professional Licensing Board at N.J.A.C. 7:26I; and*
- That the information contained in this submission and all attachments to this submission is true, accurate, and complete.*

(3) I certify, when this submission includes a response action outcome, that the entire site or each area of concern has been remediated in compliance with all applicable statutes, rules, and regulations and is protective of public health and safety and the environment.

(4) I certify that no other person is authorized or able to use any password, encryption method, or electronic signature that the Board or the Department have provided to me.

(5) I certify that I understand and acknowledge that:

- If I knowingly make a false statement, representation, or certification in any document or information I submit to the Department I may be subject to civil and administrative enforcement pursuant to N.J.S.A. 58:10C-17.a.1(a)through (f) by the Board, including but not limited to license suspension, revocation, or denial of renewal; and*
- If I purposely, knowingly, or recklessly make a false statement, representation, or certification in any application, form, record, document or other information submitted to the Department or required to be maintained pursuant to the Site Remediation Reform Act, I shall be guilty, upon conviction, of a crime of the third degree and shall, notwithstanding the provisions of subsection b. of N.J.S.2C:43-3, be subject to a fine of not less than \$5,000 nor more than \$75,000 per day of violation, or by imprisonment, or both.*

(6) I certify that I have read this certification prior to signing, certifying, and making this submission.

LSRP Signature: _____ Date: _____
LSRP Name: _____
Company Name: _____

ADDENDUM A

Additional Persons Responsible For Conducting Remediation

ADDENDUM TO SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

Check box if the Additional Person Responsible for Conducting the Remediation has Primary Responsibility for Permit Compliance

1. Does the remedial action/Deed Notice include an engineering control? Yes No
If **"No"**, proceed to the next section.

2. Are you exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? Yes No
If **"Yes"**, check the exemption(s) that applies:

- Government entity
- A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009
- A person that conducted remediation at their primary or secondary residence
- Owner or operator of a child care center
- Public school or private school
- Owner or operator of a small business responsible for conducting remediation at the location of the business

3. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: \$ _____

4. Are you using an existing RFS mechanism for the site as the Financial Assurance? Yes No
If **"Yes"**, have all the following criteria been met? Yes No

- a. The amount of funds needed to operate, maintain, and monitor the engineering control(s) at the site for 30 years (*minimum of \$30,000 for a 30-year time frame*);
- b. The amount of funds in the RFS equals the amount of funds required to be posted for RFA and Financial Assurance; and
- c. The RFS is not in the form of a self-guarantee.

Identify the full amount of the current RFS \$ _____

5. Identify the full amount established as a Financial Assurance: \$ _____

As indicated in Section F above, an electronic copy of the completed Remediation Cost Review and RFS/FA Form with a detailed cost estimate should be attached. Also, please be sure to provide one of the following as indicated in Section F above: attach the original Financial Assurance mechanism (*hard copy*), including any Amendments, to the Soil RAP Application; the date the original Financial Assurance mechanism was submitted to the NJDEP; or an electronic copy of the existing RFS mechanism that is being used as the Financial Assurance and the amendment to conform to the Financial Assurance format.

ADDENDUM A

6. What is the Financial Assurance Mechanism? *(check all that apply)*

- Remediation Trust Fund Line of Credit Surety Bond
 Environmental Insurance Policy Letter of Credit

7. Contact information at the financial institution for the Financial Assurance:

Financial Institution: _____
First Name of Contact: _____ Last Name of Contact: _____
Title: _____
Phone Number: _____ Ext: _____ Fax: _____
Mailing Address: _____
Municipality: _____ State: _____ Zip Code: _____
Email Address: _____

ADDENDUM TO SECTION L. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation:

Representative First Name: _____ Representative Last Name: _____
Title: _____
Phone Number: _____ Ext.: _____ Fax: _____
Mailing Address: _____
City/Town: _____ State: _____ Zip Code: _____
Email Address: _____

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____
Name/Title: _____

ADDENDUM B
Additional Property Owners

ADDENDUM TO SECTION E. CURRENT OWNER OF THE SITE – CO-PERMITTEE

Affiliation/Name of Organization: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

Check if the additional owner has Primary Responsibility for Permit Compliance

1. Does the remedial action/Deed Notice include an engineering control? Yes No

If **"No"**, proceed to next section.

2. Are you exempt from establishing Financial Assurance pursuant to N.J.A.C. 7:26C-7.10(c)? Yes No

If **"Yes"**, check the exemption that applies, and then proceed to the next section:

Government entity

A person not liable pursuant to the Spill Act that purchased contaminated property before May 7, 2009

A person that conducted remediation at their primary or secondary residence

Owner or operator of a child care center

Public school or private school

Owner or operator of a small business responsible for conducting remediation at the location of the business

3. Do you represent a homeowner association or a condominium association pursuant to the New Jersey Common Interest Association Act, N.J.S.A. 46:8A-1 et seq.? Yes No

If **"Yes"**, an electronic copy of the association's annual budget that includes funds for the operation, maintenance, and monitoring of the engineering control(s) at the site should be attached as indicated in Section F above.

4. Identify the estimated cost of the operation, maintenance, and monitoring of the engineering control(s) at the site: \$ _____

5. Are you using an existing RFS mechanism for the site as the Financial Assurance? Yes No

If **"Yes"**, have all the following criteria been met? Yes No

a. The amount of funds needed to operate, maintain, and monitor the engineering control(s) at the site for 30 years (*minimum of \$30,000 for a 30-year time frame*);

b. The amount of funds in the RFS equals the amount of funds required to be posted for RFA and Financial Assurance; and

c. The RFS is not in the form of a self-guarantee.

Identify the full amount of the current RFS \$ _____

6. Identify the full amount established as a Financial Assurance: \$ _____

As indicated in Section F above, an electronic copy of the completed Remediation Cost Review and RFS/FA Form with a detailed cost estimate should be attached. Also, please be sure to provide one of the following as indicated in Section F above: attach the original Financial Assurance mechanism (*hard copy*), including any Amendments, to the Soil RAP Application; the date the original Financial Assurance mechanism was submitted to the NJDEP; or an electronic copy of the existing RFS mechanism that is being used as the Financial Assurance and the amendment to conform to the Financial Assurance format.

ADDENDUM B

7. What is the Financial Assurance Mechanism? *(check all that apply)*

- Remediation Trust Fund Line of Credit Surety Bond
 Environmental Insurance Policy Letter of Credit

8. Contact information at the financial institution for the Financial Assurance:

Financial Institution: _____
First Name of Contact: _____ Last Name of Contact: _____
Title: _____
Phone Number: _____ Ext: _____ Fax: _____
Mailing Address: _____
Municipality: _____ State: _____ Zip Code: _____
Email Address: _____

ADDENDUM TO SECTION M. CURRENT OWNER OF THE SITE INFORMATION AND CERTIFICATION

Full Legal Name of the Person who owns the site:

Representative First Name: _____ Representative Last Name: _____
Title: _____
Phone Number: _____ Ext. _____ Fax: _____
Mailing Address: _____
City/Town: _____ State: _____ Zip Code: _____
Email Address: _____

This certification shall be signed by the person who owns the site and is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____
Name/Title: _____