Lycee Francais de New York NEW YORK, NEW YORK Periodic Review Report

NYSDEC VCA Index Number D2-0001-01-05 VCP Site ID Number: V00425

> **Prepared for:** Lycee Francais de New York 505 East 75th Street New York, New York 10021

Prepared by: HDR Henningson, Durham, & Richardson Architecture and Engineering in association with HDR Engineering, Inc.

> One International Boulevard Mahwah, New Jersey 07495 201-335-9300 HDR File No. 10017526

> > **MARCH 2018**

Periodic Review Report

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1.0 INTRODUCTION

The Denihan Company entered into a Voluntary Cleanup Agreement (VCA) (Index# D2-0001-01-05, Site ID number V00425) with the NYSDEC to develop a 0.64 acre property located in New York City, New York. This VCA required The Denihan Company to investigate and remediate contaminated media at the Site. Remedial Action work on the Site began in January 2001 and was completed in August 2002. After completion of the remedial work, some contamination was left in the subsurface at this Site. A Site Management Plan (SMP, dated March 2008) was prepared to manage residual contamination at the Site in accordance with 6 NYCRR Part 375.

As required by the approved SMP, an annual inspection has been conducted and this Periodic Review Report (PRR) has been prepared in accordance with NYSDEC Draft DER-10 *Technical Guidance for Site Investigation and Remediation* requirements. This is the sixth PRR prepared for the Site. The reporting period includes February 1, 2015 through February 1, 2018, in accordance with the DEC December 19, 2017 Reminder Notice. The report includes the following elements, as described in the March 2008 SMP.

- Identification of all required Engineering Controls (ECs) and pending Institutional Controls (ICs);
- An evaluation of the Engineering and Institutional Control Plan and the Monitoring Plan for adequacy in meeting remedial goals;
- Assessment of the continued effectiveness of all Institutional and Engineering Controls for the Site;
- Certification of the EC/ICs;
- Results of the required periodic Site Inspections; and
- All deliverables generated during the reporting period, as specified in Section 2 *EC/IC Plan, Section 3 Monitoring Plan* and Section 4 Operation and Maintenance Plan of the approved SMP.

2.0 SITE OVERVIEW

Since residual on-site contamination may still be present at this Site, Engineering Controls and Institutional Controls have been and will continue to be implemented to protect public health and the environment. The Controlled Property has two primary Engineering Controls. These are a groundwater treatment system and an engineered vapor barrier system. The ICs will require notification of NYSDEC prior to any planned disturbance of the vapor barrier system.

As background it should be noted that as part of the indoor air quality program at Lycee Francais de New York (LFNY, the School), operation procedures for the building's air handling system are in place, implemented, reviewed, and maintained by the School maintenance staff and outside mechanical contractors. In addition, indoor air testing has been conducted and reported to NYSDEC / NYSDOH. No further indoor air testing is required at the property.

The deed restriction which formally documents IC/ECs at the School was filed in March 2010 (see Appendix A). The property remains in compliance with the requirements of the ICs:

- All Engineering Controls are being operated and maintained as specified in the SMP;
- All Engineering Controls are inspected and certified at a frequency and in a manner defined in the SMP;
- Groundwater and other environmental or public health monitoring is being performed as defined in the SMP; and
- Data and information pertinent to Site Management is reported at the frequency and in a manner defined in the SMP.

The remediation includes Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls are required under the Deed Restriction. Site restrictions include:

- Use of groundwater underlying the Site is prohibited without treatment rendering it safe for the intended use;
- All future activities on the Site that will disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil/materials management provisions in the SMP; and

• The owner of the property shall prohibit the Site from ever being used for purposes other than residential, commercial (profit and not-for-profit) or industrial use provided the long term Engineering and Institutional Controls remain in full force and effect as set forth in the Site Management Plan without express written waiver of such prohibition by the Department, or the Relevant Agency.

The Site has consistently been operated in conformance with these restrictions over each of the PRR reporting periods since 2008.

The EC/ICs should:

- Prevent ingestion of groundwater with contamination levels that exceed drinking water standards;
- Prevent contact with or inhalation of volatiles from contaminated groundwater;
- Pre-treat groundwater in accordance with New York City Department of Environmental Protection (NYCDEP) discharge limits;
- Restore groundwater to pre-disposal/pre-release conditions, to the extent practicable; and
- Prevent ingestion/direct contact with contaminated soil, fill material, or weathered bedrock.

As noted below and documented in this PRR, the ECs and ICs have remained in place and have functioned appropriately over this reporting period.

During 2015 and 2016, LFNY completed a major renovation of 1416 York Avenue, a lot adjacent to the Site, for purposes of enlarging existing classroom and administration space at the school. Two floors were added to the existing 1416 York Avenue building, and the front and rear facades were changed to match the design of the existing school building. It was confirmed via site observations and discussions with (and documentation from) the renovation contractor that the renovated space does not need active or passive dewatering, sumps, or other potential conduits to the subsurface.

Deep excavation was not necessary as part of the renovation work. Excavation for foundation work reached approximately 9 feet below the sidewalk grade in certain areas of the neighboring property, with a maximum excavation depth of about 14 feet below surface grade for a new elevator shaft. The existing 505 East 75th Street footprint (the Site) was not adversely affected by the renovation work, and existing ECs (i.e., the vapor barrier system around the Site's subsurface foundation and sidewalls) was not disturbed. There was a minor repair required for two small areas where part of the vapor barrier was temporarily exposed. It was documented that the membrane and hydroduct protection was folded back up and appropriately fastened to the foundation wall before the

renovation work was completed. Preprufe tape was used to secure the hydroduct. See Appendix H for vapor barrier repair documentation. The SMP continues to address residual contamination only at 505 East 75^{th} Street (the Site), and ICs / ECs will remain in place for that property.

3.0 IC/EC COMPLIANCE REPORT

Based on the annual site inspection of February 13, 2018 and site information reviewed during the reporting period, the engineering controls described in the SMP appear to be in place and functional.

3.1 Vapor Barrier System

Direct contact exposure to residual subsurface contamination (i.e., on-site soil/fill/bedrock) is prevented by the School building, concrete driveway, and surrounding concrete sidewalks. Exposure to vapors is prevented by an engineered vapor barrier system built on-Site. The vapor barrier system is a "positive-side" application, i.e., the barrier products were installed on the exteriors of the building foundation slab and all subsurface walls. The membrane was installed to provide a continuous system with no gaps or penetrations. No current direct contact exposure pathways to possible residual subsurface contamination have been identified for School occupants. No maintenance of the vapor barrier system is required under normal conditions; however, procedures for repairing the vapor barrier in the unlikely event that it is disturbed in the future are noted in the SMP.

The performance of the vapor barrier system was further evaluated by conducting periodic air sampling at the Site in 2008 and 2009. A description of the air sampling results was provided in the 2009 PRR.

3.2 Groundwater Treatment System

The groundwater treatment system is comprised of two liquid phase granular activated carbon (GAC) vessels, bag filters, piping, pump, meters, and pressure gauges. The system equipment and operations is maintained under a NYCDEP discharge permit. Direct contact exposure to contaminated groundwater (i.e., residual contamination originating at the Site or from up-gradient locations) is prevented by the School's foundation underdrain system which drains to sump pits located in the LL2 mechanical rooms. Foundation water is pumped mechanically to the City sewer system and is first treated by the groundwater treatment system contained in the southwest mechanical room. The room also contains the School's sanitary sewer pumps and storm water ejector pumps.

Access to the mechanical room is restricted to the School's maintenance staff and contractors, and the room is equipped with a dedicated ventilation system that insures a net negative pressure as compared with the common hallway from where the room is accessed. The mechanical room is typically accessed during off-hours (e.g., before or after normal School hours or on weekends). The foundation sump remains covered except for periodic maintenance of the pumps associated with the groundwater treatment system.

The performance of the groundwater treatment system is evaluated periodically by LFNY, ILG Mechanical Services, and HDR staff via monitoring sediment build-up in bag filters, system flows, and pressure readings, and by conducting annual groundwater sampling at the Site. A description of the 2015, 2016 and 2017 groundwater sampling results is provided in Section 4.0 of the PRR.

3.3 IC/EC Certification

The annual Site inspection, Site monitoring data, and Site operations and maintenance records have been evaluated as part of the EC/IC certification and have confirmed that the Site remedies continue to be protective of public health and the environment and are performing as designed. A signed IC/EC Certification is provided as Appendix B.

4.0 MONITORING PLAN COMPLIANCE REPORT

4.1 Components of the Monitoring Plan

Components of the Monitoring Plan are outlined below.

- 1. Indoor air monitoring (Air) conduct air sampling in 2008 / 2009 (3 events) **COMPLETED**
- 2. Groundwater discharge monitoring (Groundwater) conduct water sampling, treatment system O&M
- 3. Assess underdrain system (Groundwater) LL2 cleanout inspection, observe sump flows

4.2 Summary of Monitoring Completed

The following table outlines monitoring tasks completed and documented during the reporting period (February 1, 2015 through February 1, 2018). Table 1 was developed based on the following: review of groundwater treatment system operations, maintenance, and monitoring (OM&M) and discharge permit renewal activities; review of correspondences received from the School maintenance staff over the PRR reporting period; and an on-site records review conducted during the site inspection.

Monitoring	Required Frequency	Date	Comments
Task		Completed	
Groundwater Sampling	Annually (prior to NYCDEP discharge permit expiration). NOTE: carbon usage is evaluated by HDR based on flow of foundation water through the system and influent VOC concentrations.	07/28/2015 07/11/2016 07/12/2017	All analytes below the respective NYCDEP Limitations for Effluent to Sanitary or Combined Sewers.
Inspect Groundwater Treatment System (Form G, part 1)	Monthly	Written documentation available for: Feb-July 2015 Sept-Dec 2015 Feb-Dec 2016 Jan-Oct 2017	Inspection documentation was available on an approximate monthly basis. No issues were noted during the system inspections or OM&M activities, or during telephone / email correspondences with School staff.
Inspect Underdrain System (Form G, part 2)	Monthly	Feb-July 2015 Sept-Dec 2015 Jan-Apr 2016 Jun-Oct 2016 12/03/16 Feb-Dec 2017 Jan 2018	Inspection documentation was available on an approximate monthly basis. No issues have been noted over the reporting period.

Table 1
Monitoring Tasks

4.3 Comparison with Remedial Objective

Effluent from the groundwater treatment system, which discharges to the combined sewer located below 75th Street (between York Avenue and the FDR Drive) was sampled on July 28, 2015, July 11, 2016, and July 12, 2017. All analytical results were non-detect and/or within the NYCDEP effluent limitations for discharges to Sanitary or Combined Sewers. Copies of the 2015, 2016 and 2017 Wastewater Quality Control application, sample data, and NYCDEP approval are provided in Appendix C. The discharge permit for the groundwater treatment system is currently renewed on an annual basis.

Inspections of the groundwater treatment system and underdrain system have been performed on a routine basis. No issues were noted during the inspections. Copies of completed inspection checklist (Form G) are provided in Appendix D.

4.4 Monitoring Deficiencies

During the 2018 PRR site inspection, no significant monitoring deficiencies were noted:

- Although written documentation was not always kept at the frequencies noted in the SMP, the School maintenance staff has remained diligent on the inspections of SMP components and has remained in contact with HDR with regard to site conditions. No issues with the groundwater treatment system or underdrain system have been identified during the reporting period.
- Inspections of the groundwater treatment system, the southwest foundation pit, the northeast foundation pit and flow meter readings were documented on an approximate monthly basis (Form G). A total of 31 written inspection reports were available on file at the School covering the reporting period. It should be noted that carbon change-out activities are performed typically on an annual basis, and School staff access the mechanical room that houses the groundwater treatment system approximately once per day.
- Inspections of the underdrain cleanouts was documented on an approximate monthly basis. A total of 31 inspection reports were available in the School files.

4.5 Monitoring Plan - Conclusions / Recommendations

All groundwater sampling was conducted as required during the reporting period. The sampling results demonstrate that the engineering controls are performing properly and continue to be effective.

5.0 OPERATIONS & MAINTENANCE PLAN COMPLIANCE REPORT

The results of the annual site inspection and the Site monitoring data were evaluated to confirm that the operation and maintenance (O&M) activities are being conducted properly. A summary of HDR's findings is provided herein.

5.1 **O&M Plan Requirements**

The following provides an outline of the approved O&M Plan components.

Change-out of bag filters	annually (minimum)
Replacement of granular activated carbon	annually
Backwash of the two carbon vessels	two times per year
Replacement/ reconditioning of the submersible pump	once every two years
Other components (e.g., valves, piping, meters)	as needed
Routine maintenance form (form L)	as needed
Non-routine maintenance form (form M)	as needed
	Change-out of bag filters Replacement of granular activated carbon Backwash of the two carbon vessels Replacement/ reconditioning of the submersible pump Other components (e.g., valves, piping, meters) Routine maintenance form (form L) Non-routine maintenance form (form M)

5.2 Summary of O&M Completed

The following table outlines all of the O&M tasks completed during the reporting period (February 1, 2015 – February 1, 2018). Table 2 was developed based on the following: review of correspondences received from the School maintenance staff and ILG Mechanical Services (plumbing contractor) over the PRR reporting period; review of carbon changeout information and waste disposal documentation as received from Brookside Environmental (carbon changeout contractor); and an on-site records review conducted during the site inspection.

Table 2

O&M Task	Required	Date	Comments
	Frequency	Completed	
Change-out of bag filters (Form	Annually, or	Feb-July 2015	
L)	more frequent	Sept-Nov 2015	
	as needed	7/11/2016	
Replacement of granular	Annually	07/28/2015	Form L (Brookside)
activated carbon		07/28/2015	Form M (ILG)
		07/28/2015	Form L (HDR, ILG,
			Brookside)
		07/11/2016	Form L (HDR, ILG,
			Brookside)
		7/12/2017	Form L (ILG,
			Brookside)
Backwash of the two carbon	Two times per	April 2017	Form L (ILG)
vessels	year (or as		
	needed)		
Replacement/ reconditioning of	Once every	4/6/15	Form M
the submersible pump	two years	4/5/17	Form M
Other components (e.g., valves,	As needed	04/13&14/2015	Form M
piping, meters)			
Routine maintenance form (L)	As needed	See above	
Non-routine maintenance form	As needed	8/26/2015	Form M
(M)		12/7/2015	Form M

Operations & Maintenance Tasks

Documentation of completed O&M and site inspection tasks is provided in Appendix E. Copies of completed routine maintenance forms (Form L) are provided in Appendix F and copies of Non-routine maintenance forms (Form M) are provided in Appendix G.

5.3 Evaluation of Remedial System

All groundwater treatment system maintenance was performed as required. No downtime associated with the groundwater treatment system was reported during the reporting period. The treatment system continues to perform as designed and permitted.

5.4 **O&M Deficiencies**

During the 2018 PRR site inspection, no O&M deficiencies were noted.

- Form L was completed for bag filter change-outs and routine maintenance performed by outside contractors.
- Form L was completed for the 2015, 2016 and 2017 disconnect/re-connect of the groundwater treatment system for purposes of activated carbon replacement and replacement of activated carbon.
- Form M was completed for the following:
 - o ejector pump replacement in 2015
 - o defective valve replacement in 2015
 - o 07/28/2015 disconnect/reconnect of the groundwater treatment system.
 - Conduit pipe installed and sealed (2015)
 - replaced broken connection at filter tower #2 (2015)
 - replaced defective pump float (2017)

Based on flow, pressure readings, and carbon replacement, carbon backwashing (separate from GAC replacement events) was conducted once during the reporting period.

5.5 O&M Plan - Conclusions / Recommendations

The groundwater treatment system was continuously operational during the reporting period as reported by the School maintenance staff; no downtime / significant downtime was reported other than for carbon backwashing and replacement. All operations and maintenance work required to allow for proper functioning of the groundwater treatment system was performed as required. No problems or issues in engineering controls were identified during the reporting period. It was noted that a back-up pump is maintained on site in the event of pump failure. Recordkeeping associated with O&M tasks is satisfactory.

6.0 CONCLUSIONS / RECOMMENDATIONS

The deed restriction, which formally documents IC/ECs at the School, was filed in March 2010.

The requirements of the IC/EC component of the SMP have been met during the reporting period. There was no downtime associated with the groundwater treatment system, and sampling data indicate no impact to human health or the environment. The requirements of the Monitoring Plan component of the SMP have been met. Site maintenance staff who are responsible for conducting inspections were reminded of SMP monitoring requirements after completion of the annual site inspection (and also during an HDR on-site training session held on April 2, 2014).

System monitoring (i.e., groundwater sampling) has demonstrated no impact to human health or the environment, and all ECs appear to be functioning properly. As outlined in the SMP, it is understood that no additional air sampling is required under the SMP program. Groundwater treatment and effluent sampling will continue to be conducted as required by the NYCDEP. Overall, the 2018 site inspection and review of pertinent site information from the past years has documented compliance with the approved SMP.

Appendix A

Deed Restriction

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Para an	New York City D	epartment of Finance	Division of Land Re	ecords • Ta	x Map Office
Finance	APPLICATI	ON FOR MERG	ERS OR APP	ORTIO	NMENTS
SECTION A:	PROPERTY INFORM	NATION			
	Apportionment	Block: Number of Lots Requested	DO NOT WRI	TE IN THIS SPAC	CE - FOR OFFICE USE ONLY
New Lot(s): Usage (check one)	Residential Building Gross Sq/Ft:	Commercial Building Gro Sq/Ft: <u>14</u>	SS 3,565 SF.	<i>Mix</i> (Reside Building Gro Sq/Ft:	
Property 1. Owner's Nan	ne:Li	ycee Francais De Ne	ew York		
Property 2. Address:	506 East	LAST NAME 76th Street		FIRST NAME	10021
SECTION B: A			CITY	STATE	ZIP CODE
	jineer/Applicant's Name		1E	Sus	an
2. Address:	320 Wes	st 13th Street	New York	NY	10014
SECTION C: The applicant hereby of Signature of Arc	CERTIFICATION certilies that, in making this ap chitect/ Engineer/Appl	2171 4. Email	nt, sive is the owner, or ac	ting under the d	rection of the owner.
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TASF:	\$	0.00		THE CITY REGIST	
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DECLARATION of COVENANTS and RESTRICTIONS

THIS DECLARATION of Covenants and Restrictions is made as of the 2^{t} day of March, 2010, by Lycée Français de New York, a not-for-profit corporation organized and existing under the laws of the State of New York and located at 505 East 75th Street, New York, New York 10021.

WHEREAS, Lycée Français de New York is the owner of a parcel of property located at 503-509 East 75th Street and 502-512 East 76th Street (Block 1487, Lots 5 and 8 and Block 1487, Lot 43) in the City, County and State of New York, more particularly described in Exhibit "A" attached hereto and made part hereof (hereinafter referred to as the "Controlled Property"), which was conveyed by Albanese Partners, LLC to the Lycée Français de New York by deed dated January 4th, 2001 and recorded in the New York County Clerk's Office on February 8, 2001 in Reel 3235, pages 1681 and 1682; and

WHEREAS, the Controlled Property is the subject of a Voluntary Cleanup Agreement, dated May 10, 2001 as Site # V00425: Index # P2-0001-01-05 executed by The Denihan Company as part of the New York State Department of Environmental Conservation's (the "Department") Voluntary Cleanup Program; and

WHEREAS, subject to and in accordance with the Voluntary Cleanup Agreement, the Department approved the Work Plan, dated February, 2001, prepared by A.K.R.F., Inc.; and

WHEREAS, the Work Plan requires a site management plan for the Controlled Property, sets forth the selected remedy for the Controlled Property and requires that the Controlled Property be subject to restrictive covenants so that the selected remedy be protective of human health and the environment; and

WHEREAS, this Declaration of Covenants and Restrictions sets forth those required restrictive covenants and is made pursuant to Paragraph X of the Voluntary Cleanup Agreement.

NOW, THEREFORE, Lycée Français de New York, for itself and its successors and assigns, covenants and agrees as follows:

1. The Controlled Property is hereby made subject to this Declaration of Covenants and Restrictions.

2. Unless the prior written approval of the Department is first obtained or, if the Department shall no longer exist or no longer have jurisdiction with respect to the enforcement of this Declaration of Covenants and Restrictions, the prior written approval of any New York State (the "State") agency or agencies whose purpose shall be to protect the environment of the State and the health of the State's citizens (the "Relevant Agency") is first obtained:

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a. The owner of the Controlled Property shall prohibit the Site from ever being used for purposes other than residential, commercial (profit and not-for-profit) or industrial use provided the long term Engineering and Institutional Controls remain in full force and effect as set forth in the Site Management Plan without express written waiver of such prohibition by the Department or the Relevant Agency.

- b. The owner of the Controlled Property shall prohibit the use of groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission from the Relevant Agency.
- c. The owner of the Controlled Property must continue in full force and effect any institutional and engineering controls required by the Department including but not limited to groundwater and indoor air monitoring as may be required and maintain such controls unless the owner first obtains permission to discontinue such controls from the Relevant Agency.
- d. Any deed conveying all or a portion of the Site shall recite that the said conveyance is subject to this Declaration of Covenants and Restrictions.
- e. The owner agrees to submit to the Department or Relevant Agency a written statement that will certify, under penalty of perjury that (1) controls employed at the Site are unchanged from previous certification or that any changes to the controls were approved by the Department or Relevant Agency; and (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitutes a violation or failure to comply with the Site Management Plan. The Department or Relevant Agency reserves and retains the right to access the Site at any time to insure compliance with the Site Management Plan and to evaluate the continuing maintenance of any and all controls. This certification shall be submitted annually or in an alternate period of time acceptable to the Department or Relevant Agency. The statement must be certified by an expert that the Department or Relevant Agency deems acceptable.

3. This Declaration of Covenants and Restrictions is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Controlled Property. The owner, its successors and assigns consent to the enforcement by the Department or Relevant Agency of the restrictive covenants set forth herein and hereby covenant not to contest the authority of the Department or Relevant Agency to seek such enforcement.

4. Pursuant to Section X of the Voluntary Cleanup Agreement, any owner of the Site or Volunteer may petition the Department or Relevant Agency to terminate this Declaration of Covenants and Restrictions when the Controlled Property is protective of human health and the environment for residential, commercial (profit and not-for-profit) or industrial uses without reliance upon the restrictions set forth herein.

5. <u>Enforcement</u>

a. This Declaration of Covenants and Restrictions is enforceable in law or equity in perpetuity by the Department or Relevant Agency against any owner of the Controlled Property and any ground lessee, by the Corporation or any subsequent

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owner against any ground lessee or other owner, and by any ground lessee against any owner or other ground lessee. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Declaration of Covenants and Restrictions that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

- b. In the event that the Department, Relevant Agency, any owner or any ground lessee becomes aware of a breach or suspected breach of the terms of this Declaration of Covenants (hereinafter the "Notifying Party"), it shall notify the parties in breach or suspected breach (collectively hereinafter, the "Breaching Parties") of the nature of the breach or suspected breach. Such notice shall be in writing and except in the case of notice by the Department or Relevant Agency shall set forth how the Breaching Parties can cure such breach or suspected breach and give the Breaching Parties a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by the Notifying Party, the Notifying Party shall notify the Breaching Parties of any failure to adequately cure the breach or suspected breach. The Breaching Parties shall then have a reasonable amount of time from receipt of such notice to cure. At the expiration of said second period, the Notifying Party may commence any proceedings and take any other appropriate action reasonably necessary to remedy any breach of this Declaration of Covenants and Restrictions in accordance with applicable law to require compliance with the terms of this Declaration of Covenants and Restrictions. With respect to any enforcement action brought by the Department or Relevant Agency, the cure provisions set forth herein shall not apply, and nothing contained herein shall limit or otherwise restrict enforcement of this Declaration of Covenants and Restrictions by the Relevant Agency under applicable law.
- c. The failure of the Department, Relevant Agency, the current owner, any subsequent owner or any ground lessee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar its enforcement rights in the event of a subsequent breach of or noncompliance with any of the terms of this Declaration of Covenants and Restrictions.

6. The Controlled Property is the subject of an outstanding 2002 revenue bond financing by the New York City Industrial Development Agency (the "NYCIDA"). In connection with such bond financing, Lycée Français de New York leased the Controlled Property to the NYCIDA for a nominal rental and for a lease term commensurate with the term of the bond financing, and the NYCIDA subleased the Controlled Property back to Lycée Français de New York for an equivalent lease term and a rental equal to amounts due under the bond financing. Except to the extent that the NYCIDA shall acquire any future ownership or ground lease interest in the Controlled Property, the NYCIDA shall not, by reason of the above

3

bond financing or any refinancing thereof, be deemed an owner or ground lessee of the Controlled Property for purposes of this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the Owner of the Controlled Property has executed this instrument as of the day first set forth above.

> Lycée Français de New York, A New York Not For Profit Corporation

Name: <u>J. THE CÉ</u> Title: <u>Head</u> -----By

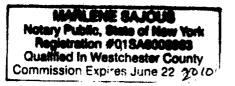
STATE OF NEW YORK ss: COUNTY OF New York)

10.0

On the $\frac{\gamma}{2}$ day of March; in the year 2010, before me, the undersigned, personally appeared <u>Yves Shire</u>, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacit(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Signature and Office of Individual Taking

Acknowledgment





Appendix A

Metes and Bounds Description of the Site

Lots 5 and 8

ALL that certain plot, piece or parcel of land, situate, lying and being in the Borough of Manhattan, County, City and State of New York, bounded and described as follows:

BEGINNING at a point on the northerly side of 75th Street, distant 98 feet easterly form the corner formed by the intersection of the easterly side of Avenue A, with the northerly side of 75th Street;

RUNNING THENCE northerly, parallel with Avenue A, 102 feet 2 inches to the centerline of the block;

THENCE easterly along said centerline of the block, 100 feet to a point;

THENCE southerly at right angles to the preceding course, 2 feet 2 inches to a point;

THENCE easterly, parallel with the northerly side of 75th Street, 25 feet to a point;

THENCE southerly, parallel with Avenue A, 100 feet to the northerly side of 75th Street;

THENCE westerly, and along the northerly side of 75th Street, 125 feet to the point or place of BEGINNING

As to Lot 43

ALL that certain plot, piece or parcel of land, situate, lying and being in the Borough of Manhattan, County, City and State of New York, bounded and described as follows:

BEGINNING at a point on the southerly side of East 76th Street, distant 98 feet easterly from the corner formed by the intersection of said southerly side of East 76th Street and the easterly side of York Avenue (Avenue A);

RUNNING THENCE easterly, along the southerly, at right angles to the southerly side of East 76th Street, 150 feet;

THENCE southerly, at right angles to the southerly side of East 76th Street, 102 feet 2 inches to the center line of the block;

THENCE westerly, along the centerline of the block, and parallel with East 76th Street, 25 feet;

THENCE southerly, at right angles to the preceding course, 2 feet 2 inches;

THENCE westerly, parallel with the East 76th Street, 25 feet;

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THENCE northerly, at right angles to the preceding course, 2 feet 2 inches to the centerline of the block;

THENCE westerly, along the centerline of the block, and parallel with East 76th Street, 100 feet;

THENCE northerly, at right angles to East 76th Street, 102 feet 2 inches to the point or place of BEGINNING.

Perimeter Description

ALL that certain plot, piece or parcel of land, situate, lying and being in the Borough of Manhattan, City, County and State of New York, bounded and described as follows:

BEGINNING at a point on the northerly side of East 75th Street distant 98 feet easterly from the corner formed by the intersection of the easterly side of York Avenue, with the northerly side of East 75th Street;

RUNNING THENCE northerly, parallel with York Avenue, 204 feet 4 inches (deed) 204.542 feet (surveyed) to the southerly side of East 76th Street;

THENCE easterly along the southerly side of East 76th Street 150 feet (deed) 150.031 feet (surveyed);

THENCE southerly, parallel with York Avenue, 102 feet 2 inches (deed) 102.271 (surveyed) to the centerline of the block;

THENCE westerly, parallel with East 76th Street, 25 feet (deed) and (surveyed);

THENCE southerly, parallel with York Avenue 102 feet 2 inches (deed) 102.271 feet (surveyed) to the northerly side of East 75th Street;

THENCE westerly, and along the northerly side of East 75th Street, 125 feet (deed) 125.021 (surveyed) to the point or place of BEGINNING.

DECLARATION
OF
COVENANTS AND RESTRICTIONS
BY
LYCÉE FRANÇAIS DE NEW YORK
Block: 1487 Lots: 5, 8, 43
RECORD AND RETURN TO: DENNETT LAW OFFICES, P.C. 505 Northern Boulevard, Suite 306 Great Neck, New York 11021 Attn: Richard A. Dennett (516) 504-1400

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Appendix B

Institutional and Engineering Controls Certification Form

Enclosure 1

Certification Instructions

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

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

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

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

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

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

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

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

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

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



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



Site No. V00425	Box 1	
Site Name East 75th East 76th Street Properties		
Site Address: 503-509 East 75th St.& 502-504 East 76th St. Zip Code: 10021- City/Town: New York County: New York Site Acreage: 1.3		
Reporting Period: February 01, 2015 to February 01, 2018		
	YES	NO
. Is the information above correct?	X	
If NO, include handwritten above or on a separate sheet.		
Has some or all of the site property been sold, subdivided, merged, or undergone tax map amendment during this Reporting Period?	a	X
Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		X
Have any federal, state, and/or local permits (e.g., building, discharge) been issue for or at the property during this Reporting Period?	d X	a
If you answered YES to questions 2 thru 4, include documentation or eviden that documentation has been previously submitted with this certification for		
i. Is the site currently undergoing development?		X
	Box 2	
	YES	NO
i. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	
Are all ICs/ECs in place and functioning as designed?	X	
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue		
Corrective Measures Work Plan must be submitted along with this form to address	s these is	sues.
Im Kar 1 - 3/01/1	в	

SITE NO. V00425

Description of Institutional Controls

Parcel	Owner	
2-1487-4.5.8	Lycee Francais	

487-4,5,8	

Institutional Control

Ground Water Use Restriction Landuse Restriction

The Remedial Action Report and Site Management Plan were approved by NYSDEC on March 31, 2008. A release from liability will be granted upon the filing of a site-specific deed restriction with the New York County Clerk.

The Site Management Plan (SMP) provides a detailed description of all engineering and institutional controls required to manage residual contamination at the Site. Engineering control systems installed at the Site include:

• Installation of an engineered vapor barrier to prevent human exposure to vapor from residual contaminated groundwater remaining under the Site; and

• Implementation and continued operation, maintenance, and monitoring of an on-site groundwater treatment system to treat residual contaminated groundwater at the Site in accordance with NYCDEP sewer discharge limits.

Institutional controls include:

a. The owner of the Controlled Property shall prohibit the Site from ever being used for purposes other than residential, commercial (profit and not-for-profit) or industrial use provided the long term Engineering and Institutional Controls remain in full force and effect as set forth in the Site Management Plan without express written waiver of such prohibition by the Department, or the Relevant Agency.

b. The owner of the Controlled Property shall prohibit the use of groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission from the Relevant Agency.

c. The owner of the Controlled Property must continue in full force and affect any institutional and engineering controls required by the Department including but not limited to groundwater and indoor air monitoring as maybe required and maintain such controls unless the owner first obtains permission to discontinue such controls from the Relevant Agency.

d. Any deed conveying all or a portion of the Site shall recite that the said conveyance is subject to the Declaration of Covenants and Restrictions.

e. The owner agrees to submit to the Department or Relevant Agency a written statement that will certify, under penalty of perjury that (1) controls employed a the Site are unchanged from previous certification or that any changes to the controls were approved by the Department of Relevant Agency: and (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the Site Management Plan. The Department or Relevant Agency reserves and retains the right to access the Site at any time to insure compliance with the Site Management Plan and to evaluate the continues maintenance of any and all controls. This certification shall be submitted annually or in an alternate period of time acceptable to the Department or Relevant Agency. The statement must be certified by an expert that the Department or Relevant Agency deems acceptable.

Box 4

Description of Engineering Controls

Engineering Control

Parcel 2-1487-4,5,8

Vapor Mitigation Groundwater Treatment System Box 3

	Box 5
	Periodic Review Report (PRR) Certification Statements
1.	I certify by checking "YES" below that:
	 a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
	b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.
	YES NO
	X
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:
	(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
	(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
	(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
	(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
	(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.
	YES NO
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.
	Corrective Measures Work Plan must be submitted along with this form to address these issues.
	Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS SITE NO. V00425	
SITE NO. 700425	Box 6
SITE OWNER OR DESIGNATED REPRESENTATIVE SIC certify that all information and statements in Boxes 1,2, and 3 are true. I us statement made herein is punishable as a Class "A" misdemeanor, pursuar Penal Law.	inderstand that a false
Terrence Kennedy FOF a 75 at NIX	
Terrence Renneur 505 e/5st.N	Y,NY 11021
print name print business address	
am certifying as	_(Owner or Remedial Party)
for the Site named in the Site Details Section of this form.	
Terrence Kennedy print name Owner's rep am certifying as for the Site named in the Site Details Section of this form. Signature of Owner, Remedial Party, or Designated Representative Rendering Certification	(Owner or Remedial Party)
For the Site named in the Site Details Section of this form.	$\frac{(\text{Owner or Remedial Party})}{3 \mid 0 \mid 1 \mid 5}$

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IC/E	EC CERTIFICATIONS	
Qualified Envi	ironmental Professional Signature	Box 7
punishable as a Class "A" misdemeanor, p	5 are true. I understand that a false statemetrus oursuant to Section 210.45 of the Penal Law. HDR	
Michael P. Musso a	t <u>I International Blvd</u> 10th print business address	Floor, Mahwah,
am certifying as a Qualified Environmental	(Decore)	
M. Jul P- Mipo	* LICE OF NEW YORK	11/2018
Signature of Qualified Environmental Profit the Owner or Remedial Party, Rendering		Date

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(1)

Appendix C

2015, 2016 and 2017 Wastewater Quality Control Application and Approval

August 21, 2015 File: 147 77030

Ms. Frances Leung, P.E. New York City Department of Environmental Protection Division of Pollution Control and Monitoring Industrial Pretreatment Program Inspection and Permit Section 96-05 Horace Harding Expressway, 1st Floor Corona, New York 11368

Re: NYCDEP Discharge Permit Renewal – Water Treatment System 505 East 75th Street New York, New York 10021 Lycee Francais de New York, DEP File Case # C-3274

Dear Ms. Leung:

This letter was prepared by HDR on behalf of Lycee Francais de New York to request a **one year renewal** of the existing NYCDEP Discharge Permit for the above-referenced project. Enclosed please find a data table with the laboratory results from recent groundwater treatment system effluent sampling (July 28, 2015). As illustrated on the table, all analytical results are non-detect and/or within NYCDEP effluent limitations for discharges to Sanitary or Combined Sewers. A copy of the laboratory report is enclosed.

On behalf of Lycee Francais de New York, HDR continues to coordinate the operation, maintenance, and monitoring (OM&M) of the water treatments system (i.e., tracking flow, carbon usage). One carbon change-out has occurred in the past 12 months, based on carbon use calculations and observed flows throughout the year. New granular activated carbon was most recently installed in July 2015. None of the conditions listed for the letters of approval issued on September 5, 2014 and November 3, 2014 have changed. Note that the treated groundwater will continue to discharge to the combined sewer located at East 75th Street, between York Avenue and the FDR Drive, in Manhattan. Depending on actual flow conditions, it is anticipated that one or two carbon change-outs will occur in the next twelve months.

Please call if you have any questions or require any additional information.

Sincerely,

Muhael P. Mupp, P.E.

Michael P. Musso, P.E.

Attachment

cc: Terrence Kennedy, Lycee Francais



hdrinc.com

Lycee Francais de New York East 75th/East 76th Street New York, New York 10021 File Case # C-3274

	Soutwest Pit Effluent	Units	NYCDEP Limitations for	
Analyte	7/28/2015		Effluent to Sanitary or	
	Water		Combined Sewers	
Non-polar material	not detected	mg/L	50	
рН	8.7 (field)	pH units	5 - 11	
Temperature (field reading 7/28/15)	24.7° C (field)	temp	< 150 F	
Flash Point	212° F	Deg F	> 140 F	
Cadmium	not detected	mg/L	2	
Chromium (VI) and (III)	not detected	mg/L	5	
Copper	0.0149	mg/L	5	
Lead	not detected	mg/L	2	
Mercury	not detected	mg/L	0.05	
Nickel	0.0307	mg/L	3	
Zinc	0.57	mg/L	5	
Benzene	not detected	ppb	134	
Carbon tetrachloride	not detected	ppb	none	
Chloroform	not detected	ppb	none	
1,4-Dichlorobenzene	not detected	ppb	none	
Ethylbenzene	not detected	ppb	380	
MTBE (Methyl tert-butyl ether)	not detected	ppb	50	
Naphthalene	not detected	ppb	47	
Phenol	not detected	ppb	none	
Tetrachloroethylene (PERC)	not detected	ppb	20	
Toluene	not detected	ppb	74	
1,2,4-Trichlorobenzene	not detected	ppb	none	
1,1,1-Trichloroethane	not detected	ppb	none	
Xylenes (Total)	not detected	ppb	74	
PCBs (Total) *	not detected	ppb	1	
Total Suspended Solids (TSS)	not detected	mg/L	350	
CBOD *	< 2	mg/L	none	
Chloride *	720	mg/L	none	
Total Nitrogen *	2.82	ppm	none	
Total Solids *	1810	mg/L	none	
* Observed flow << 10,000 gpd, therefore, sampling of this parameter was not required.				
J - analyte detected below quantitation limits		•		



August 06, 2015

Carol Zurlo HDR / LMS One Blue Hill Plaza Pearl River, NY 10965 TEL: (845) 735-8300 FAX (845) 735-7466

RE: LFNY - East 75th Street, NYC, NY

Order No.: 1507221

Dear Carol Zurlo:

American Analytical Laboratories, LLC. received 2 sample(s) on 7/29/2015 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report. The results reported herein relate only to the items tested or to the samples as received by the laboratory. This report may not be reproduced, except in full, without the approval of American Analytical Laboratories, LLC and is not considered complete without a cover page and chain of custody documentation. The limits (LOQ) provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report or the data is qualified either on the sample results or in the QC section of the report. This package has been reviewed by American Analytical Laboratories' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

Hou Blyer

Lori Beyer Lab Director American Analytical Laboratories, LLC.



Workorder Sample Summary

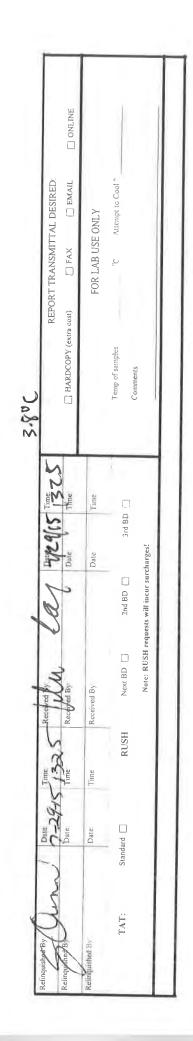
WO#: 1507221 06-Aug-15

CLIENT:HDR / LMSProject:LFNY - East 75th Street, NYC, NY

Lab SampleID	Client Sample ID	Tag No	Date Collected		Date Receiv	ved	Matrix
1507221-001A	SW Pit- Inf 7/28/15	5	7/28/2015 1:3		7/29/2015	10:30:00 AM	Liquid
1507221-002A	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid
1507221-002B	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid
1507221-002C	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid
1507221-002D	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid
1507221-002E	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid
Field Nan		Field Value	Field Units	Field Analys	st	Field Date	
pH, SN	14500H+ B	8.7	S.U.				
Tempe	rature, SM 2550B	24.7	deg C				
1507221-002F	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid
1507221-002G	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid
1507221-002H	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid
1507221-002I	SW Pit- Eff 7/28/15		7/28/2015 2:5	0:00 PM	7/29/2015	10:30:00 AM	Liquid

CERTIFICATIONS NY ELAP - 11418 PA DEP - 68-00573 NJ DEP - NY050 CT DOH - PH-0205	Project Information Analytical Information		15 STREET	State Zip	77030	Assell HOR VI		Sample Containers	Total #	bottles z ⊢ H 12ª	10 5 3 11 1 3 8						MATRIX CODES Comments / Remarks	MATRIX CODES PC = Paint Chip	MATRIX CODES PC = Paint Chip SL = Sludge FIN FIL	MATRIX CODES PC = Paint Chip SL = Sludge SD = Solid SD = Solid
STODY NY 11735 454-8027 al.com		Project Name	FAST 75	NXC	(47- 7	Sampler's Name / Company 5 Sel 1	Sampler's Signature	Sample Collection	Date Time Glass /	15 1326 (S.	1 1150								L = Liquid F S = Soil	
CHAIN OF CUSTOI 56 Toledo Street, Farmingdale NY 11735 (T) 631-454-6100 (F) 631-454-8027 www.american-analytical.com		Projec	Floon Street	ite Zip City	Project #	Samo	Sampl		Sample Matrix Code							SAMPI F TYPF		G = Grab	G = Grab C = Composite	G = Grab C = Composite B = Blank
CHA S6 T S6 T (T)	Client Information		val SIUD to	s	ZUND	5-9451	RHING.COV	Sample Information	Client Sample ID	W RIT INF 1123/15	2576					Turnaround Time (Business Days)			s 3 Day RUSH	
AMERICAN ANA NAVIO		Company Name HUR	Address I NTCR NET ICNA	City MAYLINGH +	Project Contact	Phone # 2.c [- 3.35 -	E-mail 2UNICIU A		(LAB USE ONLY)	1 IW-ICCLUY	5 200-1 Cec	1-V1				Turnaround T		Standard 7-10 Business Dave	Standard 7-10 Business Days	Standard 7-10 Business Days 5 Day RUSH 4 Day RUSH

CHAIN OF CUSTODY RECORD Omega COCID 413 PAGE 1 OF 1 American Analytical Laboratories, LLC 56 Toledo Street Farmingdale, New York 11735 TEL: (631) 454-6100 FAX: (631) 454-8027 Website: vww.American-	SUB CONTRATOR: PACE ANALYTICAL COMPANY Pace Analytical Services SPECIAL INSTRUCTIONS / COMMENTS:		NY 11747	FAX (631) 420-8436 EMAIL ANALYTICAL PARAMETERS	M5210 E	Client Sample ID Bottle Type MATRIX DATE COLLECTED Additional Sample Prescription, etc.	1507221-0021 SW Pit- Eff 7/28/15 500ML PU Liquid 7/28/2015 2:50:00 PM 1 V
	E ANALYTICAL COM	575 Broad Hollow Road	ille, NY 11747	(631) 694-3040 FAX (631) 420-8436			SW Pit- Eff 7/28/15 500
	SUB CONTRATOR: PAC	ADDRESS 575 B	CITY, STATE, ZIP Melville, NY 11747	PHONE (631) 694-3(ACCOUNT #	ITEM # SAMPLE ID	1 1507221-002I





Sample Log-In Check List

Clie	nt Name:	HDR / LMS - NY	Work Order Number	: 1507221			RcptNo: 1
Log	ged by:	Lori Beyer	7/29/2015 10:45:43 A	м		You Beyer	
Con	npleted By:	Lori Beyer	7/29/2015 10:51:01 A	м		b oui Bleyer boui Bleyer Kouer Ke	
Rev	iewed By:	Karen Kelly	7/29/2015			Kaven Ke	ley
<u>Cha</u>	in of Cus	stody					
1.	Is Chain of	Custody complete?		Yes 🖌		No 🗌	Not Present
2.	How was th	ne sample delivered?		<u>FedEx</u>			
Log	In			<u>Trackin</u>	ig No.:	803356412290	
-	Coolers are	e present?		Yes ៴		No 🗌	
				_	_		
4.		ontainer/cooler in good		Yes 🖌	_	No 🗌	
		als intact on shipping o		Yes 💌		No 🗌	Not Present
_	No.		Date:	Signed			
5.	was an att	empt made to cool the	samples?	Yes 🖣		No	
6.	Were all sa	amples received at a te	mperature of >0° C to 6.0°C	Yes 🖌		No 🗌	NA 🗌
7.	Sample(s)	in proper container(s)?		Yes ៴		No 🗌	
8.	Sufficient s	ample volume for indic	ated test(s)?	Yes ៴	/	No 🗌	
-			NG) properly preserved?	Yes 🖣	/	No 🗌	
-		rvative added to bottles		Yes 🗌		No 🖌	NA 🗌
11	Is the head	Ispace in the VOA vials	less than 1/4 inch or 6 mm?	Yes ៴		No 🗌	No VOA Vials
		sample containers rece		Yes	-	No 🗹	
		rwork match bottle labe		Yes 🖢			
10.		epancies on chain of c			_		
14.	Are matrice	es correctly identified o	n Chain of Custody?	Yes ៴		No 🗌	
15.	Is it clear w	hat analyses were req	uested?	Yes ៴		No 🗌	
16.		olding times able to be y customer for authoriz		Yes ៴		No 🗌	
Sne		dling (if applicable					
-		notified of all discrepar		Yes		No 🗌	NA 🖌
		n Notified:					
			Date				
	By WI	P	Via:	eMail		none 🗌 Fax	In Person
	Regar	-					
4.0							
-	Additional r						
<u>Coole</u>	er Informati						
	Cooler	No Temp °C C	ondition Seal Intact Sea	I No S	eal Da	te Signed I	Ву



Case Narrative

WO#:	1507221
Date:	8/6/2015

CLIENT:	HDR / LMS
Project:	LFNY - East 75th Street, NYC, NY

Samples were preserved and analyzed using the methods outlined in 40 CFR Part 136 for all parameters with the exception of MTBE. MTBE was analyzed by SW846 Method 8260 since this compound is not listed as an approved NYSDOH Certifiable parameter in 40 CFR methodologies. Sample "System Discharge" was received with the proper preservation requirements, chilled on ice and each container was properly preserved for each test required.

CBOD was subcontracted to a NYSDOH ELAP Certified laboratory.

pH and temperature were recorded in the field immediately after sample collection.

The test results meet the requirements of the NYSDOH and NELAC standards, except where noted. The information contained in this analytical report is the sole property of American Analytical Laboratories, LLC. or the client for which this report was issued. The results contained in this report are only representative of the samples received. The sample receipt checklist is included as part of this lab report. Conditions can vary at different times and at different sampling conditions. American Analytical is not responsible for the use or interpretation of the data included herein.



WO#: **1507221** Date: **8/6/2015**

Definitions:

Sample Result and QC Summary Qualifiers - Level I and Level II Reports ND - Not detected at the reporting limit/Limit of Quantitation

B - The analyte was detected in the associated method blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <5x the blank value as artifact.

E - The value is above the quantitation range

D - Analyte concentration was obtained from diluted analysis or from analysis using reduced sample volume.

J - The analyte was detected below the limit of quantitation but greater than the established Limit of Detection (LOD). There is greater uncertainty associated with these results and data should be considered as estimated.

- U The compound was analyzed for but not detected.
- H Holding time for preparation or analysis has been exceeded.
- S Spike recovery is outside accepted recovery limits.
- R RPD is outside accepted recovery range.
- P Secondary column exceeds 40% difference for GC test.

* - Calibration exceeds method requirement. Due to the large number of analytes for organic testing, the method allows 10% of analytes to have %RSD and/or %D to be >20%.

LOD - Limit of Detection; the lowest level the analyte can be determined to be statistically different from a blank.

LOQ - Limit of Quantitation; the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accurary.

m - Analyte was manually integrated for GC/MS.

+ - Concentration exceeds regulatory level for TCLP

CLIENT:	HDR / LMS
Lab Order:	1507221
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1507221-001A

Date: 06-Aug-15

Client Sample ID: SW Pit- Inf 7/28/15 Collection Date: 7/28/2015 1:30:00 PM Matrix: LIQUID

Certificate of Results

Analyses	Sample Result	LOD	LOQ Qua	l Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624			E624	SW50	30C	Analyst: LA
Tetrachloroethene	71	0.25	2.0	µg/L	1	7/29/2015 10:30:00 PM
Trichloroethene	30	0.25	2.0	µg/L	1	7/29/2015 10:30:00 PM
Surr: 4-Bromofluorobenzene	101	0	76-123	%REC	1	7/29/2015 10:30:00 PM
Surr: Dibromofluoromethane	106	0	71-132	%REC	1	7/29/2015 10:30:00 PM
Surr: Toluene-d8	101	0	80-120	%REC	1	7/29/2015 10:30:00 PM



CLIENT:	HDR / LMS
Lab Order:	1507221
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1507221-002A

Date: 06-Aug-15

Client Sample ID: SW Pit- Eff 7/28/15 Collection Date: 7/28/2015 2:50:00 PM Matrix: LIQUID

Certificate of Results Sample Result LOD LOQ Qual Units DF **Date/Time Analyzed** Analyses **VOLATILE EPA METHOD 624** SW5030C Analyst: LA E624 1,1,1-Trichloroethane ND 0.25 2.0 U µq/L 1 7/29/2015 10:57:00 PM ND 0.25 1,4-Dichlorobenzene 2.0 U µg/L 1 7/29/2015 10:57:00 PM Benzene ND 0.25 2.0 U µg/L 1 7/29/2015 10:57:00 PM Carbon tetrachloride ND 0.25 2.0 U 1 7/29/2015 10:57:00 PM µg/L Chloroform ND 0.25 2.0 U 1 7/29/2015 10:57:00 PM µg/L Ethylbenzene ND 0.25 2.0 1 7/29/2015 10:57:00 PM U µg/L m,p-Xylene ND 0.5 4.0 U 1 7/29/2015 10:57:00 PM µg/L o-Xylene ND 0.25 2.0 U 1 7/29/2015 10:57:00 PM µg/L Tetrachloroethene ND 0.25 2.0 U µg/L 1 7/29/2015 10:57:00 PM ND 0.25 2.0 7/29/2015 10:57:00 PM Toluene U µg/L 1 0.25 Trichloroethene ND 2.0 U µg/L 1 7/29/2015 10:57:00 PM Surr: 4-Bromofluorobenzene 104 0 76-123 %REC 1 7/29/2015 10:57:00 PM Surr: Dibromofluoromethane 110 0 71-132 %REC 1 7/29/2015 10:57:00 PM Surr: Toluene-d8 102 0 80-120 %REC 1 7/29/2015 10:57:00 PM **VOLATILE SW-846 METHOD 8260** SW8260C SW5030C Analyst: LA m,p-Xylene ND 1 4.0 U µg/L 1 7/29/2015 4:02:00 PM Methyl tert-butyl ether 0.5 2.0 7/29/2015 4:02:00 PM ND U µg/L 1 o-Xylene ND 0.5 2.0 U 1 7/29/2015 4:02:00 PM µg/L Surr: 4-Bromofluorobenzene 100 0 76-123 %REC 1 7/29/2015 4:02:00 PM Surr: Dibromofluoromethane 99.7 0 71-132 %REC 1 7/29/2015 4:02:00 PM Surr: Toluene-d8 102 0 80-120 %REC 1 7/29/2015 4:02:00 PM



CLIENT:	HDR / LMS
Lab Order:	1507221
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1507221-002B

Date: 06-Aug-15

Client Sample ID: SW Pit- Eff 7/28/15 Collection Date: 7/28/2015 2:50:00 PM Matrix: LIQUID

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE EPA METHO	D 625		E	625	SW3510	C	Analyst: MH
1,2,4-Trichlorobenzene	ND	0.5	5.0	U	µg/L	1	8/4/2015 2:14:00 AM
Naphthalene	ND	0.5	5.0	U	µg/L	1	8/4/2015 2:14:00 AM
Phenol	ND	0.5	5.0	U	µg/L	1	8/4/2015 2:14:00 AM
Surr: 2,4,6-Tribromophenol	77.7	0	17-145		%REC	1	8/4/2015 2:14:00 AM
Surr: 2-Fluorobiphenyl	82.5	0	18-131		%REC	1	8/4/2015 2:14:00 AM
Surr: 2-Fluorophenol	41.7	0	10-147		%REC	1	8/4/2015 2:14:00 AM
Surr: 4-Terphenyl-d14	79.2	0	14-140		%REC	1	8/4/2015 2:14:00 AM
Surr: Nitrobenzene-d5	80.8	0	13-133		%REC	1	8/4/2015 2:14:00 AM
Surr: Phenol-d6	24.5	0	10-146		%REC	1	8/4/2015 2:14:00 AM



CLIENT:	HDR / LMS
Lab Order:	1507221
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1507221-002C

Date: 06-Aug-15

Client Sample ID: SW Pit- Eff 7/28/15 Collection Date: 7/28/2015 2:50:00 PM Matrix: LIQUID

Certificate of Results

Analyses	Sample Result LOD LOQ Qual Units		DF	Date/Time Analyzed			
PCB'S AS AROCLORS	S BY EPA METHOD 608		E	E608 SW		0C	Analyst: SB
Aroclor 1016	ND	0.02	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Aroclor 1221	ND	0.02	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Aroclor 1232	ND	0.02	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Aroclor 1242	ND	0.02	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Aroclor 1248	ND	0.02	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Aroclor 1254	ND	0.03	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Aroclor 1260	ND	0.03	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Aroclor 1262	ND	0.03	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Aroclor 1268	ND	0.03	0.051	U	µg/L	1	8/6/2015 5:19:00 AM
Surr: DCB	61.7	0	20-148		%REC	1	8/6/2015 5:19:00 AM
Surr: DCB	57.9	0	20-148		%REC	1	8/6/2015 5:19:00 AM
Surr: TCX	67.2	0	18-144		%REC	1	8/6/2015 5:19:00 AM
Surr: TCX	62.7	0	18-144		%REC	1	8/6/2015 5:19:00 AM



CLIENT:	HDR / LMS	Client Sample ID:	SW Pit-	Eff 7/28/15
Lab Order:	1507221	Collection Date:	7/28/20	15 2:50:00 PM
Project:	LFNY - East 75th Street, NYC, NY	Matrix:	LIQUIE)
Lab ID:	1507221-002D			
	Certif	icate of Results		
Analyses	Sample Result LOD	LOQ Qual Units	DF	Date/Time Analyzed

NON-POLAR MATERIAL BY EPA M	IETHOD 166	64A	E16	64A			Analyst: PAV
SGT-HEM (Non-Polar Material)	ND	1	2.00	U	mg/L	1	8/4/2015 11:40:00 AM



CLIENT:	HDR / LMS
Lab Order:	1507221
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1507221-002E

Client Sample ID: SW Pit- Eff 7/28/15 Collection Date: 7/28/2015 2:50:00 PM Matrix: LIQUID

Date: 06-Aug-15

		Certii	icate of	i Kes	ults		
Analyses	Sample Result	LOD	LOQ	Qua	l Units	DF	Date/Time Analyzed
FIELD PARAMETERS			F	LD			Analyst:
pH, SM4500H+ B	8.7				S.U.		
Temperature, SM 2550B	24.7				deg C		
CHLORIDE		I	M4500-C	1-B-9	7,-11		Analyst: PAV
Chloride	720	1	2.00		mg/L	1	8/5/2015 10:00:00 AM
HEXAVALENT CHROMIUM		I	М3500-С	R B-0	9,-11		Analyst: PAV
Chromium, Hexavalent	ND	2	10.0	U	µg/L	1	7/29/2015 11:40:00 AM
IGNITABILITY/FLASHPOINT	SW-846 1010		SW1	010A			Analyst: STP
Ignitability	ND	65	140	U	°F	1	7/31/2015 4:37:42 PM
TOTAL SOLIDS			M2540	B-97,	-11		Analyst: JP
Residue, Total	1810	2.5	2.50		mg/L	1	7/30/2015 2:00:00 PM

Certificate of Results



CLIENT:	HDR / LMS	Client Sample ID:	SW Pit- Eff 7/28/15
Lab Order:	1507221	Collection Date:	7/28/2015 2:50:00 PM
Project:	LFNY - East 75th Street, NYC, NY	Matrix:	LIQUID
Lab ID:	1507221-002F		
	Certificat	e of Results	

Analyses	Sample Result	LOD	LOQ	Qua	l Units	DF	Date/Time Analyzed
TOTAL SUSPENDED SOLIDS			M2540	D-97,	-11		Analyst: JP
Suspended Solids (Residue, Non- Filterable)	- ND	2.5	3.00	U	mg/L	1	7/30/2015 12:10:00 PM



CLIENT:	HDR / LMS
Lab Order:	1507221
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1507221-002G

Client Sample ID: SW Pit- Eff 7/28/15 Collection Date: 7/28/2015 2:50:00 PM

Date: 06-Aug-15

Matrix: LIQUID

		Certii	icate of I	kesi	llts		
Analyses	Sample Result	LOD	LOQ (Qual	Units	DF	Date/Time Analyzed
NITRATE-NITRITE AS N			E353.2 R	EV2	.0		Analyst: STP
Nitrogen, Nitrate-Nitrite	1.80	0.1	0.200	D	mg/L	2	8/5/2015 1:36:08 PM
TOTAL KJELDAHL NITROGEN	4		E351.2 R	EV2	.0		Analyst: STP
Nitrogen, Kjeldahl, Total	1.02	0.2	0.400		mg/L	1	8/5/2015 11:33:42 AM
TOTAL NITROGEN			TNIT	RO			Analyst: STP
Total Nitrogen	2.82	0.1	0.400		ppm	1	8/5/2015 1:56:45 PM

Certificate of Results



CLIENT:	HDR / LMS
Lab Order:	1507221
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1507221-002H

Date: 06-Aug-15

Client Sample ID: SW Pit- Eff 7/28/15 Collection Date: 7/28/2015 2:50:00 PM Matrix: LIQUID

Certificate of Results

Analyses	Sample Resul	lt LOD	D LOQ	Qual	Unit	s DF	Date/Time Analyzed
MERCURY			E245.1	REV3	.0	E245.1 REV3.0	Analyst: JP
Mercury	ND).0002	0.000250	U	mg/L	1	8/4/2015 9:51:48 AM
TOTAL METALS			E200.7	REV4	.4	E200.7 REV4.4	Analyst: JP
Cadmium	ND	0.005	0.0100	U	mg/L	1	8/4/2015 9:25:01 AM
Chromium	ND	0.005	0.0200	U	mg/L	1	8/4/2015 9:25:01 AM
Copper	0.0149	0.005	0.0200	J	mg/L	1	8/4/2015 9:25:01 AM
Lead	ND	0.005	0.0150	U	mg/L	1	8/4/2015 9:25:01 AM
Nickel	0.0307	0.005	0.0200		mg/L	1	8/4/2015 9:25:01 AM
Zinc	0.570	0.005	0.0200		mg/L	1	8/4/2015 9:25:01 AM





QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5799

Sample ID LCS-5799	SampType: LCS	TestCo	de: 8260_W	Units: µg/L		Prep Da	te: 7/29/20	015	RunNo: 993	35	
Client ID: LCSW	Batch ID: 5799	Test	lo: SW8260C	SW5030C		Analysis Da	te: 7/29/20	015	SeqNo: 184	4284	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	44	2.0	50.00	0	87.8	54	134				
1,1,2,2-Tetrachloroethane	39	2.0	50.00	0	77.2	38	133				
1,1,2-Trichloroethane	42	2.0	50.00	0	84.8	53	132				
1,1-Dichloroethane	44	2.0	50.00	0	88.7	46	138				
1,1-Dichloroethene	46	2.0	50.00	0	92.1	47	137				
1,2-Dichlorobenzene	41	2.0	50.00	0	81.7	47	134				
1,2-Dichloroethane	43	2.0	50.00	0	86.8	52	136				
1,2-Dichloropropane	44	2.0	50.00	0	87.7	47	145				
1,3-Dichlorobenzene	42	2.0	50.00	0	83.1	47	136				
1,4-Dichlorobenzene	41	2.0	50.00	0	82.6	44	134				
2-Chloroethyl vinyl ether	ND	2.0	50.00	0	0	40	130				SU
Acetone	2.4	4.0	50.00	0	4.84	45	120				BJS
Benzene	44	2.0	50.00	0	88.3	51	138				
Bromodichloromethane	43	2.0	50.00	0	86.7	48	143				
Bromoform	39	2.0	50.00	0	77.9	34	138				
Bromomethane	55	4.0	50.00	0	110	28	152				
Carbon tetrachloride	44	2.0	50.00	0	88.4	52	138				
Chlorobenzene	42	2.0	50.00	0	83.6	48	133				
Chloroethane	55	2.0	50.00	0	110	51	147				
Chloroform	43	2.0	50.00	0	86.1	54	136				
Chloromethane	51	2.0	50.00	0	102	58	146				
cis-1,3-Dichloropropene	41	2.0	50.00	0	82.3	52	138				
Dibromochloromethane	42	2.0	50.00	0	83.7	53	131				
Ethylbenzene	43	2.0	50.00	0	85.2	53	134				
Methylene chloride	15	2.0	50.00	0	30.7	10	120				В
Tetrachloroethene	31	2.0	50.00	0	61.9	44	126				

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5799

Sample ID LCS-5799	SampType: LCS	TestCo	de: 8260_W	Units: µg/L	Units: µg/L Prep Date: 7/29/2015				RunNo: 9935		
Client ID: LCSW	Batch ID: 5799	Test	No: SW8260C	SW5030C	Analysis Date: 7/29/2015				SeqNo: 18	4284	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	43	2.0	50.00	0	85.9	54	134				
trans-1,2-Dichloroethene	43	2.0	50.00	0	86.8	44	138				
trans-1,3-Dichloropropene	42	2.0	50.00	0	83.4	46	137				
Trichloroethene	42	2.0	50.00	0	83.6	52	134				
Trichlorofluoromethane	56	2.0	50.00	0	111	56	151				
Vinyl chloride	57	2.0	50.00	0	114	55	151				
Surr: 4-Bromofluorobenzene	49		50.00		97.6	76	123				
Surr: Dibromofluoromethane	51		50.00		102	71	132				
Surr: Toluene-d8	51		50.00		102	80	120				

Sample ID MB-5799	SampType: MBLK	TestCod	e: 8260_W	Units: µg/L		Prep Da	te: 7/29/20)15	RunNo: 99	35	
Client ID: PBW	Batch ID: 5799	TestN	o: SW8260C	SW5030C		Analysis Da	te: 7/29/20)15	SeqNo: 184	4285	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	2.0									U
1,1,1-Trichloroethane	ND	2.0									U
1,1,2,2-Tetrachloroethane	ND	2.0									U
1,1,2-Trichloro-1,2,2-trifluoroethan	e ND	2.0									U
1,1,2-Trichloroethane	ND	2.0									U
1,1-Dichloroethane	ND	2.0									U
1,1-Dichloroethene	ND	2.0									U
1,1-Dichloropropene	ND	2.0									U
1,2,3-Trichlorobenzene	ND	2.0									U
1,2,3-Trichloropropane	ND	2.0									U
1,2,4,5-Tetramethylbenzene	ND	2.0									U

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5799

Sample ID MB-5799	SampType: MBLK	TestCode: 82	260_W	Units: µg/L		Prep Da	ite: 7/29/20	15	RunNo: 993	35	
Client ID: PBW	Batch ID: 5799	TestNo: S	W8260C	SW5030C		Analysis Da	ite: 7/29/20	15	SeqNo: 184	4285	
Analyte	Result	PQL SP	K value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	2.0									U
1,2,4-Trimethylbenzene	ND	2.0									U
1,2-Dibromo-3-chloropropane	ND	2.0									U
1,2-Dibromoethane	ND	2.0									U
1,2-Dichlorobenzene	ND	2.0									U
1,2-Dichloroethane	ND	2.0									U
1,2-Dichloropropane	ND	2.0									U
1,3,5-Trimethylbenzene	ND	2.0									U
1,3-Dichlorobenzene	ND	2.0									U
1,3-dichloropropane	ND	2.0									U
1,4-Dichlorobenzene	ND	2.0									U
1,4-Dioxane	ND	2.0									U
2,2-Dichloropropane	ND	2.0									U
2-Butanone	ND	4.0									U
2-Chloroethyl vinyl ether	ND	2.0									U
2-Chlorotoluene	ND	2.0									U
2-Hexanone	ND	4.0									U
2-Propanol	ND	2.0									U
4-Chlorotoluene	ND	2.0									U
4-Isopropyltoluene	ND	2.0									U
4-Methyl-2-pentanone	ND	4.0									U
Acetone	1.3	4.0									J
Benzene	ND	2.0									U
Bromobenzene	ND	2.0									U
Bromochloromethane	ND	2.0									U
Bromodichloromethane	ND	2.0									U

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5799

Sample ID MB-5799	SampType: MBLK	TestCo	de: 8260_W	Units: µg/L		Prep Da	ate: 7/29/2 0)15	RunNo: 99	35	
Client ID: PBW	Batch ID: 5799	Test	No: SW8260C	SW5030C		Analysis Da	ate: 7/29/20	015	SeqNo: 184	4285	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	2.0									U
Bromomethane	ND	4.0									U
Carbon disulfide	ND	2.0									U
Carbon tetrachloride	ND	2.0									U
Chlorobenzene	ND	2.0									U
Chlorodifluoromethane	ND	2.0									U
Chloroethane	ND	2.0									U
Chloroform	ND	2.0									U
Chloromethane	ND	2.0									U
cis-1,2-Dichloroethene	ND	2.0									U
cis-1,3-Dichloropropene	ND	2.0									U
Cyclohexane	ND	2.0									U
Dibromochloromethane	ND	2.0									U
Dibromomethane	ND	2.0									U
Dichlorodifluoromethane	ND	2.0									U
Diisopropyl ether	ND	2.0									U
Ethanol	ND	10									U
Ethylbenzene	ND	2.0									U
Freon-114	ND	2.0									U
Hexachlorobutadiene	ND	2.0									U
Isopropylbenzene	ND	2.0									U
m,p-Xylene	ND	4.0									U
Methyl Acetate	ND	2.0									U
Methyl tert-butyl ether	ND	2.0									U
Methylene chloride	4.0	2.0									
n-Butylbenzene	ND	2.0									U

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client:

HDR / LMS

Project:

LFNY - East 75th Street, NYC, NY

BatchID: 5799

Sample ID MB-5799	SampType: MBLK	TestCode: 8260_W	Units: µg/L		Prep Date: 7/2	29/2015	RunNo: 993	5	
Client ID: PBW	Batch ID: 5799	TestNo: SW8260C	SW5030C	Ar	nalysis Date: 7/2	29/2015	SeqNo: 184	285	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit HighL	imit RPD Ref Val	%RPD	RPDLimit	Qual
n-Propylbenzene	ND	2.0							U
Naphthalene	ND	2.0							U
o-Xylene	ND	2.0							U
p-Diethylbenzene	ND	2.0							U
p-Ethyltoluene	ND	2.0							U
sec-Butylbenzene	ND	2.0							U
Styrene	ND	2.0							U
t-Butyl alcohol	ND	10							U
tert-Butylbenzene	ND	2.0							U
Tetrachloroethene	ND	2.0							U
Toluene	ND	2.0							U
trans-1,2-Dichloroethene	ND	2.0							U
trans-1,3-Dichloropropene	ND	2.0							U
Trichloroethene	ND	2.0							U
Trichlorofluoromethane	ND	2.0							U
Vinyl acetate	ND	2.0							U
Vinyl chloride	ND	2.0							U
Surr: 4-Bromofluorobenzene	49	50.00		97.8	76	123			
Surr: Dibromofluoromethane	49	50.00		97.3	71	132			
Surr: Toluene-d8	50	50.00		100	80	120			

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client:

HDR / LMS

Project:

LFNY - East 75th Street, NYC, NY

BatchID:	5801
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Sample ID LCS-5801	SampType: LCS	TestCo	de: 624_W	Units: µg/L		Prep Dat	te: 7/29/20	15	RunNo: 993	36	
Client ID: LCSW	Batch ID: 5801	Test	No: E624	SW5030C		Analysis Dat	te: 7/29/20	15	SeqNo: 184	4292	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	42	2.0	50.00	0	84.2	54	134				
1,1,2,2-Tetrachloroethane	37	2.0	50.00	0	75.0	38	133				
1,1,2-Trichloroethane	42	2.0	50.00	0	83.4	53	132				
1,1-Dichloroethane	44	2.0	50.00	0	88.0	46	138				
1,1-Dichloroethene	43	2.0	50.00	0	85.1	47	137				
1,2-Dichlorobenzene	39	2.0	50.00	0	79.0	47	134				
1,2-Dichloroethane	45	2.0	50.00	0	90.4	52	136				
1,2-Dichloropropane	61	2.0	50.00	0	121	47	145				
1,3-Dichlorobenzene	39	2.0	50.00	0	78.1	47	136				
1,4-Dichlorobenzene	39	2.0	50.00	0	78.9	44	134				
2-Chloroethyl vinyl ether	ND	2.0	50.00	0	0	40	130				SU
Benzene	43	2.0	50.00	0	86.5	51	138				
Bromodichloromethane	42	2.0	50.00	0	83.7	48	143				
Bromoform	41	2.0	50.00	0	82.1	34	138				
Bromomethane	16	2.0	50.00	0	32.0	28	152				m
Carbon tetrachloride	41	2.0	50.00	0	82.1	52	138				
Chlorobenzene	39	2.0	50.00	0	78.6	48	133				
Chloroethane	53	2.0	50.00	0	106	51	147				
Chloroform	44	2.0	50.00	0	87.5	54	136				
Chloromethane	31	2.0	50.00	0	63.0	58	146				
cis-1,3-Dichloropropene	41	2.0	50.00	0	82.7	52	138				
Dibromochloromethane	44	2.0	50.00	0	88.3	53	131				
Ethylbenzene	39	2.0	50.00	0	77.3	53	134				
Methylene chloride	15	2.0	50.00	0	30.1	10	120				В
Tetrachloroethene	30	2.0	50.00	0	60.1	44	126				
Toluene	40	2.0	50.00	0	80.0	54	134				

R RPD outside accepted recovery limits Qualifiers:



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5801

Sample ID LCS-5801	SampType: LCS	TestCo	de: 624_W	Units: µg/L	Prep Date: 7/29/2015			RunNo: 9936			
Client ID: LCSW	Batch ID: 5801	Test	No: E624	SW5030C	Analysis Date: 7/29/2015			15	SeqNo: 184292		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	43	2.0	50.00	0	85.8	44	138				
trans-1,3-Dichloropropene	41	2.0	50.00	0	82.2	46	137				
Trichloroethene	39	2.0	50.00	0	77.4	52	134				
Trichlorofluoromethane	51	2.0	50.00	0	102	56	151				
Vinyl chloride	45	2.0	50.00	0	90.1	55	151				
Surr: 4-Bromofluorobenzene	51		50.00		101	76	123				
Surr: Dibromofluoromethane	58		50.00		116	71	132				
Surr: Toluene-d8	50		50.00		101	80	120				

Sample ID MB-5801 Client ID: PBW	SampType: MBLK Batch ID: 5801	TestCode: 624_W Units: μg/L TestNo: E624 SW5030C		Prep Date: 7/29/2015 Analysis Date: 7/29/2015	RunNo: 9936 SeqNo: 184293
Analyte	Result	PQL SPK valu	e SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
1,1,1-Trichloroethane	ND	2.0			U
1,1,2,2-Tetrachloroethane	ND	2.0			U
1,1,2-Trichloroethane	ND	2.0			U
1,1-Dichloroethane	ND	2.0			U
1,1-Dichloroethene	ND	2.0			U
1,2-Dichlorobenzene	ND	2.0			U
1,2-Dichloroethane	ND	2.0			U
1,2-Dichloropropane	ND	2.0			U
1,3-Dichlorobenzene	ND	2.0			U
1,4-Dichlorobenzene	ND	2.0			U
2-Chloroethyl vinyl ether	ND	2.0			U
Benzene	ND	2.0			U

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client:

HDR / LMS LENV East 75th Street N

Project: LFNY - I

LFNY - East 75th Street, NYC, NY

BatchID: 5801

Sample ID MB 5901		TeetCarl	a. 604 M	Linitor und		Drop Data	7/20/2	N4 E	Bunkley 00	06	
Sample ID MB-5801	SampType: MBLK		e: 624_W	Units: µg/L		Prep Date:			RunNo: 993		
Client ID: PBW	Batch ID: 5801	TestN	o: E624	SW5030C		Analysis Date:	7/29/2	015	SeqNo: 184	1293	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	2.0									U
Bromoform	ND	2.0									U
Bromomethane	ND	2.0									U
Carbon tetrachloride	ND	2.0									U
Chlorobenzene	ND	2.0									U
Chloroethane	ND	2.0									U
Chloroform	ND	2.0									U
Chloromethane	ND	2.0									U
cis-1,3-Dichloropropene	ND	2.0									U
Dibromochloromethane	ND	2.0									U
Ethylbenzene	ND	2.0									U
Methylene chloride	4.3	2.0									
Tetrachloroethene	ND	2.0									U
Toluene	ND	2.0									U
trans-1,2-Dichloroethene	ND	2.0									U
trans-1,3-Dichloropropene	ND	2.0									U
Trichloroethene	ND	2.0									U
Trichlorofluoromethane	ND	2.0									U
Vinyl chloride	ND	2.0									U
Surr: 4-Bromofluorobenzene	52		50.00		104	76	123				
Surr: Dibromofluoromethane	55		50.00		110	71	132				
Surr: Toluene-d8	51		50.00		103	80	120				



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5819

Sample ID MB-5819	SampType: MBLK	TestCod	e: 625_W	Units: µg/L		Prep Da	ate: 7/31/2	015	RunNo: 996	67	
Client ID: PBW	Batch ID: 5819	TestN	o: E625	SW3510C		Analysis Da	ate: 8/3/20 ⁻	15	SeqNo: 184	4818	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	5.0									U
2,4,6-Trichlorophenol	ND	5.0									U
2,4-Dichlorophenol	ND	5.0									U
2,4-Dimethylphenol	ND	5.0									U
2,4-Dinitrophenol	ND	10									U
2,4-Dinitrotoluene	ND	5.0									U
2,6-Dinitrotoluene	ND	5.0									U
2-Chloronaphthalene	ND	5.0									U
2-Chlorophenol	ND	5.0									U
2-Nitrophenol	ND	10									U
4,6-Dinitro-2-methylphenol	ND	10									U
4-Bromophenyl phenyl ether	ND	5.0									U
4-Chloro-3-methylphenol	ND	5.0									U
4-Chlorophenyl phenyl ether	ND	5.0									U
4-Nitrophenol	ND	10									U
Acenaphthene	ND	5.0									U
Acenaphthylene	ND	5.0									U
Anthracene	ND	5.0									U
Benzo(a)anthracene	ND	5.0									U
Benzo(a)pyrene	ND	5.0									U
Benzo(b)fluoranthene	ND	5.0									U
Benzo(g,h,i)perylene	ND	5.0									U
Benzo(k)fluoranthene	ND	5.0									U
Bis(2-chloroethoxy)methane	ND	5.0									U
Bis(2-chloroethyl)ether	ND	5.0									U
Bis(2-chloroisopropyl)ether	ND	5.0									U

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5819

Sample ID MB-5819	SampType: MBLK	TestCoo	de: 625_W	Units: µg/L		Prep Da	ate: 7/31/2	015	RunNo: 99	67	
Client ID: PBW	Batch ID: 5819	TestN	lo: E625	SW3510C		Analysis Da	ate: 8/3/20	15	SeqNo: 184	4818	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bis(2-ethylhexyl)phthalate	ND	5.0									U
Butyl benzyl phthalate	ND	5.0									U
Chrysene	ND	5.0									U
Di-n-butyl phthalate	ND	5.0									U
Di-n-octyl phthalate	ND	5.0									U
Dibenzo(a,h)anthracene	ND	5.0									U
Diethyl phthalate	ND	5.0									U
Dimethyl phthalate	3.2	5.0									J
Fluoranthene	ND	5.0									U
Fluorene	ND	5.0									U
Hexachlorobenzene	ND	5.0									U
Hexachlorobutadiene	ND	5.0									U
Hexachlorocyclopentadiene	ND	10									U
Hexachloroethane	ND	5.0									U
Indeno(1,2,3-c,d)pyrene	ND	5.0									U
Isophorone	ND	5.0									U
N-Nitrosodi-n-propylamine	ND	5.0									U
N-Nitrosodimethylamine	ND	5.0									U
N-Nitrosodiphenylamine	ND	5.0									U
Naphthalene	ND	5.0									U
Nitrobenzene	ND	5.0									U
Pentachlorophenol	ND	10									U*
Phenanthrene	ND	5.0									U
Phenol	ND	5.0									U
Pyrene	ND	5.0									U
Surr: 2,4,6-Tribromophenol	33		40.00		82.3	17	145				

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

1507221 WO#:

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5819

Sample ID MB-5819	SampType: MBLK	TestCo	de: 625_W	Units: µg/L		Prep Date:	7/31/20	15	RunNo: 996	67	
Client ID: PBW	Batch ID: 5819	TestN	No: E625	SW3510C		Analysis Date:	8/3/201	5	SeqNo: 184	4818	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorobiphenyl	15		20.00		72.6	18	131				
Surr: 2-Fluorophenol	18		40.00		44.8	10	147				
Surr: 4-Terphenyl-d14	18		20.00		91.2	14	140				
Surr: Nitrobenzene-d5	17		20.00		85.6	13	133				
Surr: Phenol-d6	9.4		40.00		23.6	10	146				
Sample ID LCS-5819	SampType: LCS	TestCo	de: 625_W	Units: µg/L		Prep Date:	7/31/20)15	RunNo: 996	67	
Client ID: LCSW	Batch ID: 5819	Test	lo: E625	SW3510C		Analysis Date:	8/3/201	5	SeqNo: 184	4819	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	29	5.0	40.00	0	72.3	20	124				
2,4,6-Trichlorophenol	37	5.0	40.00	0	91.3	31	131				
2,4-Dichlorophenol	33	5.0	40.00	0	82.5	20	120				
2,4-Dimethylphenol	32	5.0	40.00	0	79.0	13	123				
2,4-Dinitrophenol	25	10	40.00	0	62.2	11	126				
2,4-Dinitrotoluene	ND	5.0		0	0	22	137				U
2,6-Dinitrotoluene	ND	5.0		0	0	20	130				U
2-Chloronaphthalene	38	5.0	40.00	0	94.2	24	123				
2-Chlorophenol	30	5.0	40.00	0	75.4	20	120				
2-Nitrophenol	35	10	40.00	0	87.5	22	120				
4,6-Dinitro-2-methylphenol	31	10	40.00	0	78.1	10	132				
4-Bromophenyl phenyl ether	38	5.0	40.00	0	95.7	21	133				
4-Chloro-3-methylphenol	30	5.0	40.00	0	75.1	29	122				
4-Chlorophenyl phenyl ether	35	5.0	40.00	0	88.6	32	128				
4-Nitrophenol	11	10	40.00	0	27.6	10	100				

RPD outside accepted recovery limits R Qualifiers:

Spike Recovery outside accepted recovery limits S



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

BatchID: 5819

Sample ID LCS-5819	SampType: LCS	TestCo	de: 625_W	Units: µg/L		Prep Da	te: 7/31/20	15	RunNo: 996	67	
Client ID: LCSW	Batch ID: 5819	TestN	lo: E625	SW3510C		Analysis Da	te: 8/3/201	5	SeqNo: 184	4819	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	37	5.0	40.00	0	92.6	24	125				
Acenaphthylene	38	5.0	40.00	0	93.8	23	125				
Anthracene	38	5.0	40.00	0	95.6	32	130				
Benzo(a)anthracene	39	5.0	40.00	0	98.7	27	130				
Benzo(a)pyrene	39	5.0	40.00	0	97.7	32	125				
Benzo(b)fluoranthene	38	5.0	40.00	0	94.6	30	125				
Benzo(g,h,i)perylene	42	5.0	40.00	0	106	27	141				
Benzo(k)fluoranthene	39	5.0	40.00	0	96.6	34	134				
Bis(2-chloroethoxy)methane	36	5.0	40.00	0	89.7	23	122				
Bis(2-chloroethyl)ether	38	5.0	40.00	0	94.0	32	126				
Bis(2-chloroisopropyl)ether	32	5.0	40.00	0	80.9	27	127				
Bis(2-ethylhexyl)phthalate	ND	5.0		0	0	30	136				U
Butyl benzyl phthalate	ND	5.0		0	0	28	141				U
Chrysene	39	5.0	40.00	0	98.4	27	130				
Di-n-butyl phthalate	ND	5.0		0	0	27	146				U
Di-n-octyl phthalate	ND	5.0		0	0	26	136				U
Dibenzo(a,h)anthracene	42	5.0	40.00	0	104	24	140				
Diethyl phthalate	ND	5.0		0	0	21	142				U
Dimethyl phthalate	2.7	5.0		0	0	24	123				J
Fluoranthene	37	5.0	40.00	0	91.5	30	139				
Fluorene	37	5.0	40.00	0	92.5	22	133				
Hexachlorobenzene	38	5.0	40.00	0	93.9	24	142				
Hexachlorobutadiene	26	5.0	40.00	0	65.9	22	130				
Hexachlorocyclopentadiene	26	10	40.00	0	64.2	16	101				
Hexachloroethane	22	5.0	40.00	0	54.8	20	133				
Indeno(1,2,3-c,d)pyrene	43	5.0	40.00	0	108	24	133				m

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

Sample ID LCS-5819 Client ID: LCSW	SampType: LCS Batch ID: 5819		de: 625_W No: E625	Units: µg/L SW3510C	Prep Date: 7/31/2015 Analysis Date: 8/3/2015			RunNo: 9967 SeqNo: 184819			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isophorone	ND	5.0		0	0	22	131				U
N-Nitrosodi-n-propylamine	ND	5.0		0	0	29	134				U
N-Nitrosodimethylamine	ND	5.0		0	0	12	100				U
N-Nitrosodiphenylamine	33	5.0	40.00	0	82.8	11	140				
Naphthalene	32	5.0	40.00	0	80.7	25	123				
Nitrobenzene	ND	5.0		0	0	22	138				U
Pentachlorophenol	27	10	40.00	0	68.2	18	140				*
Phenanthrene	39	5.0	40.00	0	97.7	25	132				
Phenol	11	5.0	40.00	0	27.8	10	100				
Pyrene	40	5.0	40.00	0	101	24	136				
Surr: 2,4,6-Tribromophenol	35		40.00		86.8	17	145				
Surr: 2-Fluorobiphenyl	17		20.00		84.8	18	131				
Surr: 2-Fluorophenol	18		40.00		44.4	10	147				
Surr: 4-Terphenyl-d14	19		20.00		92.9	14	140				
Surr: Nitrobenzene-d5	17		20.00		86.7	13	133				
Surr: Phenol-d6	9.9		40.00		24.7	10	146				



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

Sample ID 1507242-006CMS Client ID: BatchQC	SampType: MS Batch ID: 5848		TestCode: ICPSCAN_W Units: mg/L TestNo: E200.7 Rev4. E200.7 Rev4.			Prep Dat Analysis Dat	te: 8/3/20 1 te: 8/4/20 1		RunNo: 9975 SeqNo: 184947		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	1.01	0.0250	1.000	0	101	70	130				
Barium	1.06	0.0200	1.000	0.09298	96.7	70	130				
Cadmium	1.10	0.0100	1.000	0	110	70	130				
Chromium	1.05	0.0200	1.000	0	105	70	130				
Lead	1.07	0.0150	1.000	0	107	70	130				
Selenium	1.16	0.0250	1.000	0	116	70	130				
Silver	0.953	0.0200	1.000	0	95.3	70	130				

Sample ID 1507242-006CMSD	SampType: MSD	TestCoo	le: ICPSCAN	_W Units: mg/L		Prep Dat	e: 8/3/20 1	5	RunNo: 9975		
Client ID: BatchQC	Batch ID: 5848	TestN	TestNo: E200.7 Rev4. E200.7 Rev4.			Analysis Dat	e: 8/4/20 1	5	SeqNo: 184948		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	1.02	0.0250	1.000	0	102	70	130	1.015	0.526	20	
Barium	1.06	0.0200	1.000	0.09298	96.2	70	130	1.060	0.468	20	
Cadmium	1.09	0.0100	1.000	0	109	70	130	1.101	0.697	20	
Chromium	1.04	0.0200	1.000	0	104	70	130	1.046	0.643	20	
Lead	1.06	0.0150	1.000	0	106	70	130	1.067	0.606	20	
Selenium	1.18	0.0250	1.000	0	118	70	130	1.160	1.35	20	
Silver	0.948	0.0200	1.000	0	94.8	70	130	0.9528	0.517	20	



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LENY East 75th Streat N

LFNY - East 75th Street, NYC, NY

Sample ID MBW080315A	SampType: MBLK	TestCoo	de: ICPSCAN_	W Units: mg/L		Prep Da	te: 8/3/20	15	RunNo: 99	75	
Client ID: PBW	Batch ID: 5848	TestN	lo: E200.7 Rev	4. E200.7 Rev4.		Analysis Da	te: 8/4/20	15	SeqNo: 18	5010	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.0200									U
Antimony	ND	0.0200									U
Arsenic	ND	0.0250									U
Barium	ND	0.0200									U
Beryllium	ND	0.0200									U
Cadmium	ND	0.0100									U
Calcium	ND	0.0250									U
Chromium	ND	0.0200									U
Cobalt	ND	0.0200									U
Copper	ND	0.0200									U
Iron	ND	0.0200									U
Lead	ND	0.0150									U
Magnesium	ND	0.0200									U
Manganese	ND	0.0200									U
Nickel	ND	0.0200									U
Potassium	ND	0.200									U
Selenium	ND	0.0250									U
Silicon	ND	0.0300									U
Silver	ND	0.0200									U
Sodium	ND	0.0300									U
Thallium	ND	0.0150									U
Vanadium	ND	0.0200									U
Zinc	ND	0.0200									U



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

Sample ID LCSW080315A	SampType: LCS	TestCo	de: ICPSCAN_	W Units: mg/L		Prep Dat	e: 8/3/20 1	15	RunNo: 99	75	
Client ID: LCSW	Batch ID: 5848	Test	No: E200.7 Rev	4. E200.7 Rev4.		Analysis Dat	e: 8/4/20 1	15	SeqNo: 18	5011	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	1.93	0.0200	2.000	0	96.7	85	115				
Antimony	1.98	0.0200	2.000	0	98.9	85	115				
Arsenic	1.86	0.0250	2.000	0	92.8	85	115				
Barium	1.88	0.0200	2.000	0	94.1	85	115				
Beryllium	1.90	0.0200	2.000	0	95.1	85	115				
Cadmium	1.96	0.0100	2.000	0	98.0	85	115				
Calcium	1.93	0.0250	2.000	0	96.6	85	115				
Chromium	1.97	0.0200	2.000	0	98.6	85	115				
Cobalt	1.91	0.0200	2.000	0	95.3	85	115				
Copper	1.90	0.0200	2.000	0	94.9	85	115				
Iron	1.87	0.0200	2.000	0	93.4	85	115				
Lead	1.99	0.0150	2.000	0	99.3	85	115				
Magnesium	1.86	0.0200	2.000	0	92.8	85	115				
Manganese	1.84	0.0200	2.000	0	91.8	85	115				
Nickel	1.91	0.0200	2.000	0	95.3	85	115				
Potassium	18.5	0.200	20.00	0	92.6	85	115				
Selenium	2.10	0.0250	2.000	0	105	85	115				
Silver	1.85	0.0200	2.000	0	92.5	85	115				
Sodium	1.87	0.0300	2.000	0	93.6	85	115				
Thallium	1.86	0.0150	2.000	0	93.1	85	115				
Vanadium	1.86	0.0200	2.000	0	92.9	85	115				
Zinc	1.88	0.0200	2.000	0	93.9	85	115				



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

	IDR / LMS FNY - East 75th Street, NYC, NY		BatchID: 5	5856
Sample ID MB-5856 Client ID: PBW	SampType: MBLK Batch ID: 5856	TestCode: 608_PCB_W Units: %REC TestNo: E608 SW3510C	Prep Date: 8/4/2015 Analysis Date: 8/6/2015	RunNo: 10051 SeqNo: 186104
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Surr: DCB Surr: TCX	0.32 0.33	0.5000 0.5000	63.92014866.718144	
Sample ID LCS-5856	SampType: LCS	TestCode: 608_PCB_W Units: %REC	Prep Date: 8/4/2015	RunNo: 10051
Client ID: LCSW	Batch ID: 5856	TestNo: E608 SW3510C	Analysis Date: 8/6/2015	SeqNo: 186105
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Surr: DCB Surr: TCX	0.33 0.35	0.5000 0.5000	66.92014870.018144	
Sample ID LCSD-58		TestCode: 608_PCB_W Units: %REC	Prep Date: 8/4/2015	RunNo: 10051
Client ID: LCSS02	Batch ID: 5856	TestNo: E608 SW3510C	Analysis Date: 8/6/2015	SeqNo: 186106
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Surr: DCB	0.31	0.5000	61.3 20 148	0 0
Surr: TCX	0.32	0.5000	64.9 18 144	0 0



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

Sample ID MB-5856	SampType: MBLK	TestCode: 608_PCB_W	Units: µg/L		Prep Date	e: 8/4/2015	RunNo: 10050	
Client ID: PBW	Batch ID: 5856	TestNo: E608	SW3510C		Analysis Date	e: 8/6/2015	SeqNo: 186084	
Analyte	Result	PQL SPK value S	PK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Aroclor 1016	ND	0.050						U
Aroclor 1221	ND	0.050						U
Aroclor 1232	ND	0.050						U
Aroclor 1242	ND	0.050						U
Aroclor 1248	ND	0.050						U
Aroclor 1254	ND	0.050						U
Aroclor 1260	ND	0.050						U
Aroclor 1262	ND	0.050						U
Aroclor 1268	ND	0.050						U
Surr: DCB	0.28	0.5000		56.8	20	148		
Surr: TCX	0.30	0.5000		59.7	18	144		
Sample ID LCS-5856	SampType: LCS	TestCode: 608_PCB_W	Units: µg/L		Prep Date	e: 8/4/2015	RunNo: 10050	
Client ID: LCSW	Batch ID: 5856	TestNo: E608	SW3510C		Analysis Date	e: 8/6/2015	SeqNo: 186085	
Analyte	Result	PQL SPK value S	PK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Aroclor 1242	2.8	0.050 5.000	0	55.4	30	130		
Surr: DCB	0.31	0.5000		61.6	20	148		
Surr: TCX	0.32	0.5000		64.8	18	144		



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project: HDR / LMS LFNY - East 75th Street, NYC, NY

Sample ID LCSD-5856 Client ID: LCSS02	SampType: LCSD Batch ID: 5856		TestCode: 608_PCB_W Units: μg/L TestNo: E608 SW3510C		Prep Date: 8/4/2015 Analysis Date: 8/6/2015				RunNo: 10050 SeqNo: 186086		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1242	2.4	0.050	5.000	0	48.3	30	130	2.772	13.8	20	
Surr: DCB	0.28		0.5000		56.7	20	148		0	0	
Surr: TCX	0.30		0.5000		60.0	18	144		0	0	



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project:	HDR / LMS LFNY - Eas	S st 75th Street, NYC, NY				BatchID:	5873	
Sample ID	1507247-001HMSD	SampType: MSD	TestCode: HG	_W Units: mg/L	Prep I	Date: 8/3/2015	RunNo: 9986	
Client ID:	BatchQC	Batch ID: 5873	TestNo: E24	45.1 Rev3. E245.1 Rev3.	Analysis I	Date: 8/4/2015	SeqNo: 185361	
Analyte		Result	PQL SPK	value SPK Ref Val	%REC LowLim	t HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Mercury		0.00392	0.000250 0.00	04000 0	98.0 7	0 130 0.003940	0.509 20	
Sample ID	MBW080415A	SampType: MBLK	TestCode: HG	_W Units: mg/L	Prep [Date: 8/3/2015	RunNo: 9986	
Client ID:	PBW	Batch ID: 5873	TestNo: E24	45.1 Rev3. E245.1 Rev3.	Analysis I	Date: 8/4/2015	SeqNo: 185408	
Analyte		Result	PQL SPK	value SPK Ref Val	%REC LowLim	t HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Mercury		ND	0.000250					U
Sample ID	LCSW080415A	SampType: LCS	TestCode: HG	_W Units: mg/L	Prep [Date: 8/3/2015	RunNo: 9986	
Client ID:	LCSW	Batch ID: 5873	TestNo: E24	45.1 Rev3. E245.1 Rev3.	Analysis [Date: 8/4/2015	SeqNo: 185409	
Analyte		Result	PQL SPK	value SPK Ref Val	%REC LowLim	t HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Mercury		0.00398	0.000250 0.00	04000 0	99.5 8	5 115		
Sample ID	1507247-001HMS	SampType: MS	TestCode: HG	_W Units: mg/L	Prep [Date: 8/3/2015	RunNo: 9986	
Client ID:	BatchQC	Batch ID: 5873	TestNo: E24	45.1 Rev3. E245.1 Rev3.	Analysis I	Date: 8/4/2015	SeqNo: 185413	
Analyte		Result	PQL SPK	value SPK Ref Val	%REC LowLim	t HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Mercury		0.00394	0.000250 0.00	04000 0	98.5 7	0 130		



QC SUMMARY REPORT

WO#: 1507221

Client: Project:	HDR / LMS LFNY - Eas	5 st 75th Street, NYC, NY						F	BatchID: I	R10007		
Sample ID PB		SampType: MBLK Batch ID: R10007		de: NO3-NO2 No: E353.2 Re	_ 0		Prep Da Analysis Da		15	RunNo: 10 SeqNo: 18		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	e-Nitrite	ND	0.100									U
Sample ID LC	SL	SampType: LCS	TestCo	de: NO3-NO2	_W Units: mg/L		Prep Da	te:		RunNo: 10	007	
Client ID: LC:	SW	Batch ID: R10007	Test	No: E353.2 Re	ev2.		Analysis Da	te: 8/5/201	15	SeqNo: 18	5829	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	e-Nitrite	0.482	0.100	0.5000	0	96.4	80	120				
Sample ID 150	7221-002GMS	SampType: MS	TestCo	de: NO3-NO2	_W Units: mg/L		Prep Da	te:		RunNo: 10	007	
Client ID: SW	Pit- Eff 7/28/15	Batch ID: R10007	Test	No: E353.2 Re	ev2.		Analysis Da	te: 8/5/201	15	SeqNo: 18	5841	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	e-Nitrite	2.31	0.400	0.5000	1.802	102	80	120				D
Sample ID 150	7221-002GMSD	SampType: MSD	TestCo	de: NO3-NO2	_W Units: mg/L		Prep Da	te:		RunNo: 10	007	
Client ID: SW	Pit- Eff 7/28/15	Batch ID: R10007	Test	No: E353.2 Re	ev2.		Analysis Da	te: 8/5/201	15	SeqNo: 18	5842	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate	e-Nitrite	2.48	0.400	0.5000	1.802	136	80	120	2.312	7.17	20	DS



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project:	HDR / LMS LFNY - Eas	s st 75th Street, NYC, NY						E	BatchID:	R9900		
Sample ID MB Client ID: PB		SampType: MBLK Batch ID: R9900		de: TSS_W No: M2540 D-	Units: mg/L 97,-		Prep Dat Analysis Dat		015	RunNo: 99 SeqNo: 18		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Soli Filterable)	ds (Residue, Non	ND	3.00									U

Qualifiers: R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project:	HDR / LMS LFNY - Eas	S st 75th Street, NYC, NY						E	BatchID:	R9920		
Sample ID 150 Client ID: Bate	7247-001EDUP	SampType: DUP Batch ID: R9920		de: IGN_140_' No: SW1010A			Prep Da Analysis Da	nte: nte: 7/31/20	115	RunNo: 99 SeqNo: 18	-	
Analyte		Result	PQL		SPK Ref Val	%REC			RPD Ref Va	·	RPDLimit	Qual
Ignitability		ND	140						(0 0	0	U

Qualifiers: R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

06-Aug-15

Client: Project:	HDR / LMS LFNY - East 75th S	Street, NYC, NY	<i>č</i>					I	BatchID: I	R9929		
Sample ID MBW07 Client ID: PBW	•	Гуре: MBLK h ID: R9929		de: Cr6_W	Units: µg/L B-0		Prep Da Analysis Da		015	RunNo: 99 SeqNo: 18		
Analyte		Result	PQL		SPK Ref Val	%REC			RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexaval	ent	ND	10.0									U
Sample ID LCSW0 Client ID: LCSW	·	Гуре: LCS h ID: R9929		de: Cr6_W No: M3500-Cr	Units: µg/L B-0		Prep Da Analysis Da		015	RunNo: 99 SeqNo: 18	-	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexaval	ent	97.1	10.0	100.0	0	97.1	80	120				

Qualifiers: R RPD outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1507221

Client:HDR / LNProject:LFNY - E	IS ast 75th Street, NYC, NY		BatchID:	R9992
Sample ID MBW080415A Client ID: PBW	SampType: MBLK Batch ID: R9992	TestCode: 1664_SGT-N Units: mg/L TestNo: E1664A	Prep Date: Analysis Date: 8/4/2015	RunNo: 9992 SeqNo: 185529
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
SGT-HEM (Non-Polar Material)	ND	2.00		U
Sample ID LCSW080415A Client ID: LCSW	SampType: LCS Batch ID: R9992	TestCode: 1664_SGT-N Units: mg/L TestNo: E1664A	Prep Date: Analysis Date: 8/4/2015	RunNo: 9992 SeqNo: 185530
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
SGT-HEM (Non-Polar Material)	148	2.00 150.0 0	98.5 80 120	



QC SUMMARY REPORT

WO#: 1507221

	HDR / I LFNY -	LMS East 75th Street, NYC, NY						I	BatchID: F	R9992		
Sample ID MBW08 Client ID: PBW	0415A	SampType: MBLK Batch ID: R9992		de: 1664_OG_ No: E1664A	_ W Units: mg/L		Prep Da Analysis Da		15	RunNo: 99 SeqNo: 18		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Oil & Grease)		ND	2.00									U
Sample ID LCSW0 Client ID: LCSW	80415A	SampType: LCS Batch ID: R9992		de: 1664_OG_ No: E1664A	_W Units: mg/L		Prep Da Analysis Da		15	RunNo: 99 SeqNo: 18		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Oil & Grease)		136	2.00	150.0	0	90.8	80	120				



QC SUMMARY REPORT

WO#: 1507221

Client: Project:	HDR / LMS LFNY - Eas	S st 75th Street, NYC, NY						E	BatchID: F	R9997		
Sample ID	MB080515A	SampType: MBLK	TestCoo	de: CL_W	Units: mg/L		Prep Da	te:		RunNo: 99	97	
Client ID:	PBW	Batch ID: R9997	TestN	No: M4500-C 1	I-B-		Analysis Da	te: 8/5/201	15	SeqNo: 18	5632	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		ND	2.00									U
Sample ID	LCS080515A	SampType: LCS	TestCoo	de: CL_W	Units: mg/L		Prep Da	te:		RunNo: 99	97	
Client ID:	LCSW	Batch ID: R9997	TestN	No: M4500-C 1	I-B-		Analysis Da	te: 8/5/201	15	SeqNo: 18	5633	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		97.0	2.00	100.0	0	97.0	70	130				
Sample ID	1507215-001EMS	SampType: MS	TestCoo	de: CL_W	Units: mg/L		Prep Da	te:		RunNo: 99	97	
Client ID:	BatchQC	Batch ID: R9997	TestN	No: M4500-C 1	I-B-		Analysis Da	te: 8/5/20 1	15	SeqNo: 18	5635	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		333	2.00	100.0	235.9	97.0	70	130				
Sample ID	1507215-001EMSD	SampType: MSD	TestCo	de: CL_W	Units: mg/L		Prep Da	te:		RunNo: 99	97	
Client ID:	BatchQC	Batch ID: R9997	TestN	No: M4500-C 1	I-B-		Analysis Da	te: 8/5/201	15	SeqNo: 18	5636	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		332	2.00	100.0	235.9	96.0	70	130	332.9	0.301	20	



QC SUMMARY REPORT

WO#: 1507221

Client:HDR / LNProject:LFNY - E	AS Cast 75th Street, NYC, NY						I	BatchID: F	R9999		
Sample ID PBL150804A	SampType: MBLK	TestCo	de: TKN_W	Units: mg/L		Prep Da	te:		RunNo: 99	99	
Client ID: PBW	Batch ID: R9999	Test	No: E351.2 Re	ev2.		Analysis Da	te: 8/5/20 °	15	SeqNo: 18	5663	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	0.400									U
Sample ID LCSL150804A	SampType: LCS	TestCo	de: TKN_W	Units: mg/L		Prep Da	te:		RunNo: 99	99	
Client ID: LCSW	Batch ID: R9999	Test	lo: E351.2 Re	ev2.		Analysis Da	te: 8/5/20	15	SeqNo: 18	5664	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	2.90	0.400	3.000	0	96.6	80	120				
Sample ID 1507221-002GMS	SampType: MS	TestCo	de: TKN_W	Units: mg/L		Prep Da	te:		RunNo: 99	99	
Client ID: SW Pit- Eff 7/28/15	Batch ID: R9999	Test	No: E351.2 Re	ev2.		Analysis Da	te: 8/5/20 ⁻	15	SeqNo: 18	5678	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	4.04	0.400	3.000	1.020	101	80	120				
Sample ID 1507221-002GMSE	D SampType: MSD	TestCo	de: TKN_W	Units: mg/L		Prep Da	te:		RunNo: 99	99	
Client ID: SW Pit- Eff 7/28/15	Batch ID: R9999	Test	lo: E351.2 Re	ev2.		Analysis Da	te: 8/5/20	15	SeqNo: 18	5679	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	3.95	0.400	3.000	1.020	97.6	80	120	4.039	2.30	20	

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 575 Broad Hollow Road
 Melville, NY 11747

 TEL: (631) 694-3040
 FAX: (631) 420-8436

 NYSDOH ID#10478
 www.pacelabs.com

American Analytical Laboratories 56 Toledo Street

Farmingdale, NY 11735

Attn To: Lori Beyer

Collected :7/28/2015 2:50:00 PM Received :7/29/2015 1:25:00 PM 1507221-002I Collected By CLIENT

LABORATORY RESULTS

Results for the samples and analytes requested The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Lab No. : 1507K99-001A

Client Sample ID: SW PIT-EFF 7/28/15

Sample Information:

Type : Aqueous

Origin:

Analytical Method: SM5210B	Prep	Method; SM	5210B	Prep Date: 7/30/2015 9:00:23 AM	Analyst: VaS
Parameter(s)	Results Qualifier	D.F.	Units	Analyzed:	Container:
Carbonaceous Biological Oxygen Demand	< 2	1	mg/L	07/30/2015 9:45 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

c = Calibration acceptability criteria exceeded for this analyte

R = Reporting limit below calibration range. Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 8/5/2015

Count K. Druken

Project Manager

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

ace Analytical

PACE ANALYTICAL 575 Broad Hollow Road Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 Website: <u>www.pacelabs.com</u>

Sample Receipt Checklist

Client Name AMAN-ECO	Date and Time Received: 7/29/2015 1:25:00 PM
Work Order Number: 1507K99 RcptNo: *	1 Received by Jaclyn Kuri
Completed by: Jackyn Kuri	Reviewed by: COMMOC & Mallin
Completed Date: <u>7/29/2015 1:52:06 PM</u>	Reviewed Date: <u>8/5/2015 1:29:19 PM</u>
Carrier name: <u>Client</u>	
Chain of custody present?	Yes 🗹 No 🗌
Chain of custody signed when relinquished and received?	Yes 🗹 No 🗌
Chain of custody agrees with sample labels?	Yes 🗹 No 🗌
Are matrices correctly identified on Chain of custody?	Yes 🖌 No 🗌
Is it clear what analyses were requested?	Yes Mo
Custody seals intact on sample bottles?	Yes No Not Present
Samples in proper container/bottle?	Yes 🗹 No 🗌
Were correct preservatives used and noted?	Yes 🗹 No 🗌 NA
Preservative added to bottles:	
Sample Condition?	Intact 🗹 Broken 🗌 Leaking
Sufficient sample volume for indicated test?	Yes 🗹 No
Were container labels complete (ID, Pres, Date)?	
All samples received within holding time?	Yes 🗹 No 🗌
Was an attempt made to cool the samples?	Yes 🗹 No 🗌 NA
All samples received at a temp. of > 0° C to 6.0° C?	Yes 🗹 No NA
Response when temperature is outside of range:	
Sample Temp. taken and recorded upon receipt?	Yes 🗹 No 🗌 To 3.8 °
Water - Were bubbles absent in VOC vials?	Yes No No Vials
Water - Was there Chlorine Present?	Yes No NA 🗹
Water - pH acceptable upon receipt?	Yes 🗹 No 🗌 No Water
Are Samples considered acceptable?	Yes 🗹 No 🛄
Custody Seals present?	Yes No 🗹
Airbill or Sticker?	Air Bil Sticker Not Present
Airbill No:	
Case Number: SDG:	SAS:
Any No response should be detailed in the comments section	ion below, if applicable.
Client Contacted? 🗌 Yes 🗌 No 🗹 NA	Person Contacted:
Contact Mode: Phone: Fax:	Email: In Person:
Client Instructions:	
Date Contacted: Cont	tacted By:

CorrectiveAction:

Regarding: Comments:



 S75 Broad Hollow Road
 Melville, NY 11/4/

 TEL:
 (631) 694-3040
 FAX:
 (631) 420-8436

 NYSDOH ID#10478
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WorkOrder : 1507K99

Certifications

CERTIFICATION #
10478
NY1 58
PH-0435
208
MNY026
2987
LAO00340
68-00350

Page 3 of 3

ELABORATOR	E	63103603V	WITH WITH WITH	AND CE WITH		(LLC. 56 Toledo Street Farmingdale, New York 11735 TEL: (631) 454-6100 FAX: (631) 454-8027 Websile: www.American-
SUB CONTRATOR, PACE ANALYTICAL	TTICAL CO	COMPANY:	Pace Analyt	Pace Analytical Services	4S	SPECIAL INSTRUCTIONS / COMMENTS:	Analytical.com
ADDRESS: 575 Broad Hollow Road	low Road					CBOD	
CITY, STATE, ZIP. Melville, NY 11747	1747				T		
PHONE: (631) 694-3040 FAX:	FAX: (631) 420-8436	136 EMAIL:				ANALYTICAL PARAMETERS	
ACCOUNT #:					M5210 E		
ITEM # SAMPLE D Client 9	Client Sample ID	Bottle Type	MATRUX	DATE COLLECTED	NUMBER OF CONTAINERS		COMMENTS Methaol Preserved Weights HOT Sample Notation Additional Sample Description, etc
1 1507221-0021 SW Pit- Eff 7/28/15 500ML PU	ff 7/28/15 50	OML PU	Liquid	7/28/2015 2:50:00 PM	M 1 V		1507149-0014

() m -)	Date: Date	しょう	Received By	101	子とうにく「影っく	レト語	REPORT TRANSMITTAL DESIRED:
	Date:	Time:	Rectified By:	2	Date:	The:	HARDCOPY (actra cost) FAX EMAIL ONLINE
uished By:	Date:	Time:	Received By:		Date:	Time:	FOR LAB USE ONLY
TAT: S	Standard	RUSH	Next 3D	2nd BD	3rd BD		Temp of samplesC Attempt to Cool ? Comments:
			Note: RUSH red	Note: RUSH requests will incur surcharges!	rcharges!		

September 3, 2015



Emily Lloyd Commissioner

John G. Petito, P.E. Acting Deputy Commissioner

Bureau of Wastewater Treatment 96-05 Horace Harding Expressway – 2nd Floor Corona, NY 11368

Tel. (718) 595-5046 Fax (718) 595-6950 Henningson, Durham & Richardson Architecture and Engineering, P.C. 1 International Boulevard, 10th Floor Suite 1000 Mahwah, NJ 07495-0027 Attn: Michael P. Musso, P.E.

Re: Groundwater Discharge, Lycee Francais de New York, File # C-3274

Dear Mr. Musso:

This Letter of Approval is an extension of the Letter of Approval issued on November 3, 2014.

This is in response to the August 27, 2015 submission requesting permission to discharge up to **6,000 gallons per day (gpd)** of groundwater generated at 505 East 75th Street, New York, NY 10021 (under a New York State Department of Environmental Conservation Site Management Plan). The groundwater will be treated through bag filters and granular activated carbon units, per provided schematic and information, before discharging to the onsite combined sewer at the above mentioned property. The sewer leads to the combined sewer located at 75th Street between York Avenue and the FDR Drive in New York, NY.

Based upon the information, schematic and analytical data submitted, you are hereby conditionally authorized, to discharge up to 6,000 gpd of the groundwater, treated through the above system, per provided schematic and information, as specified in your submissions, for a period of one year, to the combined sewer at the above mentioned location. This Letter of Approval shall expire at midnight on September 2, 2016.

This conditional approval, however, is subject to your obtaining a groundwater discharge Approval, specifying allowable flow rates, from the Chief of Permitting and Compliance, Bureau of Water and Sewer Operations, if discharges are to exceed 10,000 gpd. You are also required to follow manufacturer specifications for the operation and maintenance of the selected equipment. This Letter of Approval is contingent upon the permittee's compliance with any other Federal, State or Local laws applicable to the permitted activity.

<u>Under no circumstances shall muddy groundwater be discharged into the public sewer.</u>

Payment shall be made to and permit obtained from the Bureau of Customer Service for groundwater discharge into the New York City Wastewater System in accordance with the Water and Wastewater Rate Schedule established by the New York City Water Board.

You are required to hold the groundwater to the maximum extent practicable during heavy wet weather events. Refer to File # C-3274 in any correspondence to this office.

This Letter of Approval is an Order of the Commissioner of the Department of Environmental Protection. Please be advised that failure to comply with this Letter of Approval may result in the issuance of Notices of Violation (returnable to the New York City Environmental Control Board) and/or revocation of the Letter of Approval. Notices of Violation carry penalties of up to \$10,000 a day, per violation.

If you have any questions concerning this matter, please contact Sean Hulbert, Assistant Chemical Engineer, at (718) 595-4715.

Sincerely,

manus Levy

Frances Leung, P.E., Chief Industrial Inspections and Permitting Section

August 12, 2016 File: 147 77030

Ms. Frances Leung, P.E. New York City Department of Environmental Protection Division of Pollution Control and Monitoring Industrial Pretreatment Program Inspection and Permit Section 96-05 Horace Harding Expressway, 1st Floor Corona, New York 11368

Re: NYCDEP Discharge Permit Renewal – Water Treatment System 505 East 75th Street New York, New York 10021 Lycee Francais de New York, DEP File Case # C-3274

Dear Ms. Leung:

This letter was prepared by HDR on behalf of Lycee Francais de New York to request a **one year renewal** of the existing NYCDEP Discharge Permit for the above-referenced project. Enclosed please find a data table with the laboratory results from recent groundwater treatment system effluent sampling (July 11, 2016). As illustrated on the table, all analytical results are non-detect and/or within NYCDEP effluent limitations for discharges to Sanitary or Combined Sewers. A copy of the laboratory report is enclosed.

On behalf of Lycee Francais de New York, HDR continues to coordinate the operation, maintenance, and monitoring (OM&M) of the water treatments system (i.e., tracking flow, carbon usage). One carbon change-out has occurred in the past 12 months, based on carbon use calculations and observed flows throughout the year. New granular activated carbon was most recently installed in July 2016. None of the conditions listed for the letters of approval issued on September 3, 2015 and October 5, 2015 have changed. Note that the treated groundwater will continue to discharge to the combined sewer located at East 75th Street, between York Avenue and the FDR Drive, in Manhattan. Depending on actual flow conditions, it is anticipated that one carbon change-out will occur in the next twelve months.

Please call if you have any questions or require any additional information.

Sincerely,

Muhael P. Mupo, P.E.

Michael P. Musso, P.E.

Attachments

cc: Terrence Kennedy, Lycee Francais



hdrinc.com

Lycee Francais de New York East 75th/East 76th Street New York, New York 10021 File Case # C-3274

Analyte	Soutwest Pit Effluent 7/11/2016 Water	Units	NYCDEP Limitations for Effluent to Sanitary or Combined Sewers
Non-polar material	not detected	mg/L	50
pH (field reading 7/11/16)	8.9 (field)	pH units	5 - 12
Temperature (field reading 7/11/16)	77.36 (field)	Deg F	< 150 F
Flash Point	not detected	Deg F	> 140 F
Cadmium	not detected	mg/L	2
Chromium (VI)	not detected	mg/L	5
Copper	not detected	mg/L	5
Lead	not detected	mg/L	2
Mercury	not detected	mg/L	0.05
Nickel	not detected	mg/L	3
Zinc	not detected	mg/L	5
Benzene	not detected	ppb	134
Carbon tetrachloride	not detected	ppb	none
Chloroform	not detected	ppb	none
1,4-Dichlorobenzene	not detected	ppb	none
Ethylbenzene	not detected	ppb	380
MTBE (Methyl tert-butyl ether)	not detected	ppb	50
Naphthalene	not detected	ppb	47
Phenol	not detected	ppb	none
Tetrachloroethylene (PERC)	not detected	ppb	20
Toluene	not detected	ppb	74
1,2,4-Trichlorobenzene	not detected	ppb	none
1,1,1-Trichloroethane	not detected	ppb	none
Xylenes (Total)	not detected	ppb	74
PCBs (Total) *	not detected	ppb	1
Total Suspended Solids (TSS)	123	mg/L	350
CBOD *	< 2	mg/L	none
Chloride *	600	mg/L	none
Total Nitrogen *	0.273	ppm	none
Total Solids *	1460	mg/L	none
* Observed flow << 10,000 gpd, therefore, s	ampling of this parameter was	not required.	



July 25, 2016

Carol Zurlo HDR One International Blvd., 10 Floor Mahwah, NJ 07495 TEL: (201) 335-9412 FAX (845) 735-7466

RE: LFNY - East 75th Street, NYC, NY

Order No.: 1607057

Dear Carol Zurlo:

American Analytical Laboratories, LLC. received 2 sample(s) on 7/12/2016 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report. The results reported herein relate only to the items tested or to the samples as received by the laboratory. This report may not be reproduced, except in full, without the approval of American Analytical Laboratories, LLC and is not considered complete without a cover page and chain of custody documentation. The limits (LOQ) provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report or the data is qualified either on the sample results or in the QC section of the report. This package has been reviewed by American Analytical Laboratories' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

Sou Beyer

Lori Beyer Lab Director American Analytical Laboratories, LLC.



Workorder Sample Summary

WO#: 1607057 25-Jul-16

CLIENT:HDRProject:LFNY - East 75th Street, NYC, NY

Lab SampleID	Client Sample ID	Tag No	Date Collecte	ed	Date Received	Matrix
1607057-001A	SW Pit- Inf 7/11/16		7/11/2016 11	1:20:00 AM	7/12/2016 10:30:00 AM	Liquid
1607057-002A	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid
1607057-002B	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid
1607057-002C	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid
1607057-002D	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid
1607057-002E	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid
Field Nam	-	Field Value	Field Units	Field Analys	t Field Date	
pH, SM	14500H+ B	8.9	S.U.			
Temper	rature, SM 2550B	25.2	deg C			
1607057-002F	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid
1607057-002G	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid
1607057-002H	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid
1607057-002I	SW Pit- Eff 7/11/16		7/11/2016 1:	:15:00 PM	7/12/2016 10:30:00 AM	Liquid

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1 1 American Analytical Laboratories, 56 Toledo Street LLC. 56 Toledo Street Farmingdale, New York 11735 TEL: (631) 454-6100 FAX: (631) 454-8027 Website: www.American-				COMMENTS Mathanol Preserved Weights HOT Sample Notation Additional Sample Description, etc.		REPORT TRANSMITTAL DESIRED: HARDCOPY (eura cos) FAX BMAIL 001.1NE
ACCORO	nalytical Services CBOD CBOD		ANALYTICAL PARAMETERS	NUMBER OF CONTAINERS CONTAINERS	7/11/2016 1:15:00 PM I V	~ Ly Put 1.2 6 Time. 3.2 0 - HAR
A CCAE OLITHO H AC	AL COMPANY: Pace A Road		(631) 420-8436 EMAIL:	ID Bottle Type MATRUX	11/16 500ML PU Liquid	- 11 Times Received Br.
E ABORATORIES	SUB CONTRATOR: PACE ANALYTICAL ADDRESS: 575 Broad Hollow Road		1) 694-3040 FAX:	SAMPLE ID Client Sample ID	1607057-002I SW Pit- Eff 7/11/16	Relinquisted by Date:
Illind	SUB CONT ADDRESS:	CITY,	PHONE: (63 ACCOUNT #:	ITEM		Reine



Sample Log-In Check List

Clier	nt Name:	HDR - NJ		Work Order Nu	umber: 160	7057		RcptNo: 1	
Log	ged by:	Lori Beyer		7/12/2016 10:30):00 AM		You Blye		
Corr	pleted By:	Lori Beyer		7/12/2016 11:48	3:28 AM		Pori Belger Pori Belger Karen Ke		
Revi	iewed By:	Karen Kelly		7/12/2016			Karen Ke	lly	
<u>Cha</u>	in of Cus	stody]
1.	Is Chain of	Custody comp	olete?		Y	es 🗸	No 🗌	Not Present	
2.	How was th	ne sample deliv	vered?			<u>edEx</u> acking No	b.: 803741769285	2	
<u>Log</u>	<u>In</u>					_		_	
3.	Coolers are	e present?			Y	es 🗸	No	NA 🗌	
4.	Shinning co	ontainer/cooler	in good conditior	12	v	es 🗸	No 🗌		
			hipping container			es 🗌		Not Present	
	No.		Seal Date:			ined By:			
		empt made to	cool the samples	?		es 🗹	No 🗌		
6.	Were all sa	amples receive	d at a temperatur	e of >0° C to 6.0°	°C Y	es 🗸	No 🗌		
7.	Sample(s)	in proper conta	ainer(s)?		Y	es 🗸	No 🗌		
8.	Sufficient s	ample volume	for indicated test	(s)?	Y	es 🗸	No 🗌		
9.	Are sample	es (except VOA	and ONG) prope	erly preserved?	Y	es 🗸	No 🗌		
10.	Was prese	rvative added	to bottles?		Y	es 🗌	No 🔽	NA 🗌	
11.	Is the head	Ispace in the V	OA vials less tha	n 1/4 inch or 6 mr	n? Y	es 🗹	No 🗌	No VOA Vials \Box	
12.	Were any s	sample contain	ers received brok	xen?	Y	es 🗌	No 🗹		
13.		rwork match b			Y	es 🗸	No 🗌		
11	,		nain of custody) Intified on Chain d	of Custody?	Y	es 🔽	No 🗌		
			vere requested?			es 🔽			
-		olding times ab				es 🔽			
	(If no, notify	y customer for	authorization.)						
-		dling (if app							
17.	Was client	notified of all c	liscrepancies with	this order?	Y	es 🗌	No 🗌	NA 🔽	
	Perso	n Notified:			Date:				
	By WI	hom:			Via: 🗌 e	Mail 🗌	Phone 🗌 Fax	In Person	
	Regar	rding:							
	Client	Instructions:							
18.	Additional r	remarks:							
<u>Coole</u>	er Informati	<u>ion</u>							
	Cooler	No Temp	C Condition	Seal Intact	Seal No	Seal I	Date Signed	Ву	



Case Narrative

WO#:	1607057
Date:	7/25/2016

CLIENT:HDRProject:LFNY - East 75th Street, NYC, NY

Samples were preserved and analyzed using the methods outlined in 40 CFR Part 136 for all parameters with the exception of MTBE. MTBE was analyzed by SW846 Method 8260 since this compound is not listed as an approved NYSDOH Certifiable parameter in 40 CFR methodologies. Sample "System Discharge" was received with the proper preservation requirements, chilled on ice and each container was properly preserved for each test required.

CBOD was subcontracted to a NYSDOH ELAP Certified laboratory.

pH and temperature were recorded in the field immediately after sample collection.

The test results meet the requirements of the NYSDOH and NELAC standards, except where noted. The information contained in this analytical report is the sole property of American Analytical Laboratories, LLC. or the client for which this report was issued. The results contained in this report are only representative of the samples received. The sample receipt checklist is included as part of this lab report. Conditions can vary at different times and at different sampling conditions. American Analytical is not responsible for the use or interpretation of the data included herein.



WO#: **1607057** Date: **7/25/2016**

Definitions:

Sample Result and QC Summary Qualifiers - Level I and Level II Reports ND - Not detected at the reporting limit/Limit of Quantitation

B - The analyte was detected in the associated method blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <5x the blank value as artifact.

E - The value is above the quantitation range

D - Analyte concentration was obtained from diluted analysis or from analysis using reduced sample volume.

J - The analyte was detected below the limit of quantitation but greater than the established Limit of Detection (LOD). There is greater uncertainty associated with these results and data should be considered as estimated.

U - The compound was analyzed for but not detected.

H - Holding time for preparation or analysis has been exceeded.

- S Spike recovery is outside accepted recovery limits.
- R RPD is outside accepted recovery range.
- P Secondary column exceeds 40% difference for GC test.

* - Calibration exceeds method requirement. Due to the large number of analytes for organic testing, the method allows 10% of analytes to have %RSD and/or %D to be >20%.

LOD - Limit of Detection; the lowest level the analyte can be determined to be statistically different from a blank.

LOQ - Limit of Quantitation; the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accurary.

m - Analyte was manually integrated for GC/MS.

+ - Concentration exceeds regulatory level for TCLP

CLIENT:	HDR
Lab Order:	1607057
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1607057-001A

Date: 25-Jul-16

Client Sample ID: SW Pit- Inf 7/11/16 Collection Date: 7/11/2016 11:20:00 AM Matrix: LIQUID

		Certif	icate of Resu	ılts		
Analyses	Sample Result	LOD	LOQ Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624			E624	E624		Analyst: LA
Tetrachloroethene	86	0.20	2.0	µg/L	1	7/13/2016 7:06:00 PM
Trichloroethene	29	0.20	2.0	µg/L	1	7/13/2016 7:06:00 PM
Surr: 4-Bromofluorobenzene	101	0.20	62-132	%Rec	1	7/13/2016 7:06:00 PM
Surr: Dibromofluoromethane	103	0.20	72-131	%Rec	1	7/13/2016 7:06:00 PM
Surr: Toluene-d8	101	0.20	58-131	%Rec	1	7/13/2016 7:06:00 PM



CLIENT:	HDR
Lab Order:	1607057
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1607057-002A

Date: 25-Jul-16

Client Sample ID: SW Pit-Eff 7/11/16 Collection Date: 7/11/2016 1:15:00 PM Matrix: LIQUID

		Certif	icate of	Resu	ilts		
Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624			E	624	E624		Analyst: LA
1,1,1-Trichloroethane	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
1,4-Dichlorobenzene	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
Benzene	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
Carbon tetrachloride	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
Chloroform	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
Ethylbenzene	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
Tetrachloroethene	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
Toluene	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
Trichloroethene	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
m,p-Xylene	ND	0.40	4.0	U	µg/L	1	7/13/2016 7:34:00 PM
Methyl tert-butyl ether	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
o-Xylene	ND	0.20	2.0	U	µg/L	1	7/13/2016 7:34:00 PM
Surr: 4-Bromofluorobenzene	101	0.20	62-132		%Rec	1	7/13/2016 7:34:00 PM
Surr: Dibromofluoromethane	103	0.20	72-131		%Rec	1	7/13/2016 7:34:00 PM
Surr: Toluene-d8	101	0.20	58-131		%Rec	1	7/13/2016 7:34:00 PM

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CLIENT:	HDR
Lab Order:	1607057
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1607057-002B

Date: 25-Jul-16

Client Sample ID: SW Pit- Eff 7/11/16 Collection Date: 7/11/2016 1:15:00 PM Matrix: LIQUID

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
SEMIVOLATILE EPA METHOD	625		E	625	SW3510	с	Analyst: MH
1,2,4-Trichlorobenzene	ND	0.50	5.0	U	µg/L	1	7/14/2016 2:05:00 PM
Naphthalene	ND	0.50	5.0	U	µg/L	1	7/14/2016 2:05:00 PM
Phenol	ND	0.50	5.0	U	µg/L	1	7/14/2016 2:05:00 PM
Surr: 2,4,6-Tribromophenol	55.4	0	28-138		%Rec	1	7/14/2016 2:05:00 PM
Surr: 2-Fluorobiphenyl	79.7	0	20-138		%Rec	1	7/14/2016 2:05:00 PM
Surr: 2-Fluorophenol	38.7	0	11-130		%Rec	1	7/14/2016 2:05:00 PM
Surr: 4-Terphenyl-d14	28.1	0	28-141		%Rec	1	7/14/2016 2:05:00 PM
Surr: Nitrobenzene-d5	78.0	0	18-143		%Rec	1	7/14/2016 2:05:00 PM
Surr: Phenol-d6	26.4	0	11-149		%Rec	1	7/14/2016 2:05:00 PM



CLIENT:	HDR
Lab Order:	1607057
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1607057-002C

Date: 25-Jul-16

Client Sample ID: SW Pit- Eff 7/11/16 Collection Date: 7/11/2016 1:15:00 PM Matrix: LIQUID

Certificate of Results								
Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed	
PCB'S AS AROCLORS BY EPA METHOD 608			E608			510C	Analyst: SB	
Aroclor 1016	ND	0.020	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Aroclor 1221	ND	0.020	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Aroclor 1232	ND	0.020	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Aroclor 1242	ND	0.020	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Aroclor 1248	ND	0.020	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Aroclor 1254	ND	0.030	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Aroclor 1260	ND	0.030	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Aroclor 1262	ND	0.030	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Aroclor 1268	ND	0.030	0.050	U	µg/L	1	7/21/2016 6:22:00 PM	
Surr: DCB	62.9	0	12-143		%Rec	1	7/21/2016 6:22:00 PM	
Surr: DCB	71.9	0	12-143		%Rec	1	7/21/2016 6:22:00 PM	
Surr: TCX	61.6	0	17-143		%Rec	1	7/21/2016 6:22:00 PM	
Surr: TCX	57.5	0	17-143		%Rec	1	7/21/2016 6:22:00 PM	



Analyses	Sample Result LOD	LOQ Qual Units	DF	Date/Time Analyzed				
Certificate of Results								
Lab ID:	1607057-002D							
Project:	LFNY - East 75th Street, NYC, NY	Matrix	: LIQU	ID				
Lab Order:	1607057	Collection Date	: 7/11/2	016 1:15:00 PM				
CLIENT:	HDR	Client Sample ID	: SW Pi	t- Eff 7/11/16				

NON-POLAR MATERIAL BY EPA M	ETHOD 166	64A	E16	64A			Analyst: PAV
SGT-HEM (Non-Polar Material)	ND	1.00	2.00	U	mg/L	1	7/15/2016 2:00:52 PM



CLIENT:	HDR
Lab Order:	1607057
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1607057-002E

Client Sample ID: SW Pit- Eff 7/11/16 Collection Date: 7/11/2016 1:15:00 PM Matrix: LIQUID

Date: 25-Jul-16

Certificate of Results							
Analyses	Sample Result	LOD	LOQ	Qua	l Units	DF	Date/Time Analyzed
FIELD PARAMETERS			F	LD			Analyst:
pH, SM4500H+ B	8.9				S.U.		
Temperature, SM 2550B	25.2				deg C		
CHLORIDE		M4500-C1-B-97,-11					Analyst: JP
Chloride	600	1.00	2.00		mg/L	1	7/25/2016
HEXAVALENT CHROMIUM		N	13500-C	R B-0	9,-11		Analyst: PAV
Chromium, Hexavalent	ND	2.50	10.0	U	µg/L	1	7/12/2016 12:25:52 PM
IGNITABILITY/FLASHPOINT	SW-846 1010		SW1	010A	L		Analyst: STP
Ignitability	ND	65.0	140	U	°F	1	7/20/2016 11:37:26 AM
TOTAL SOLIDS			M2540	B-97,	-11		Analyst: PAV
Residue, Total	1460	2.50	2.50		mg/L	1	7/15/2016 3:00:00 PM

Certificate of Results



CLIENT:	HDR	Client Sample ID: SW Pit- Eff 7/11/16
Lab Order:	1607057	Collection Date: 7/11/2016 1:15:00 PM
Project:	LFNY - East 75th Street, NYC, NY	Matrix: LIQUID
Lab ID:	1607057-002F	

Analyses	Sample Result LOD	LOQ Qual Units	DF	Date/Time Analyzed
TOTAL SUSPENDED SOLIDS		M2540 D-97,-11		Analyst: PAV
Suspended Solids (Residue, Non- Filterable)	- 123 2.50	3.00 mg/L	1	7/15/2016 3:00:00 PM



CLIENT:	HDR
Lab Order:	1607057
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1607057-002G

Client Sample ID: SW Pit- Eff 7/11/16 Collection Date: 7/11/2016 1:15:00 PM Matrix: LIQUID

Date: 25-Jul-16

Certificate of Results								
Analyses	Sample Result	LOD	LOQ	Qua	l Units	DF	Date/Time Analyzed	
NITRATE-NITRITE AS N			E353.2	REV	2.0		Analyst: STP	
Nitrogen, Nitrate-Nitrite	0.273	0.0500	0.100		mg/L	1	7/20/2016 12:55:26 PM	
TOTAL KJELDAHL NITROGE	EN	E351.2 REV2.0					Analyst: STP	
Nitrogen, Kjeldahl, Total	ND	0.200	0.400	U	mg/L	1	7/20/2016 3:49:29 PM	
TOTAL NITROGEN		TNITRO					Analyst: STP	
Total Nitrogen	0.273	0.100	0.400	J	ppm	1	7/20/2016 4:05:17 PM	
Kjeldahl Nitrogen	ND	0.200	0.400	U	ppm	1	7/20/2016 4:05:17 PM	
Nitrate, Nitrogen	0.273	0.0500	0.100		ppm	1	7/20/2016 4:05:17 PM	
Nitrite, Nitrogen	ND	0.0500	0.100	U	ppm	1	7/20/2016 4:05:17 PM	

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CLIENT:	HDR
Lab Order:	1607057
Project:	LFNY - East 75th Street, NYC, NY
Lab ID:	1607057-002H

Client Sample ID: SW Pit- Eff 7/11/16 Collection Date: 7/11/2016 1:15:00 PM Matrix: LIQUID

		Certif	icate of	f Resu	ilts		
Analyses	Sample Resul	t LOD	LOQ	Qual	Unit	s DF	Date/Time Analyzed
MERCURY			E245.1	REV3	.0	E245.1 REV3.0	Analyst: JP
Mercury	ND	0.0001500	0.000300	U	mg/L	1	7/18/2016 2:07:16 PM
TOTAL METALS			E200.7	REV4	.4	E200.7 REV4.4	Analyst: JP
Cadmium	ND	0.00500	0.0100	U	mg/L	1	7/15/2016 10:13:41 AM
Chromium	ND	0.00500	0.0200	U	mg/L	1	7/15/2016 10:13:41 AM
Copper	ND	0.00500	0.0200	U	mg/L	1	7/15/2016 10:13:41 AM
Lead	ND	0.00500	0.0150	U	mg/L	1	7/15/2016 10:13:41 AM
Nickel	ND	0.00500	0.0200	U	mg/L	1	7/15/2016 10:13:41 AM
Zinc	ND	0.00500	0.0200	U	mg/L	1	7/15/2016 10:13:41 AM

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



Date: 25-Jul-16

Face Analytical 575 Broad Hollow Road, Melville, NY 11747 TEL: (631) 694-3040 NYSDOH ID#10478 American Analytical Laboratories	LABORATORY RESULTS Results for the samples and analytes ren The lab is not directly responsible for the integrity of I the lab and is responsible only for the certified tests re	he sample before receipt at
56 Toledo Street Farmingdale, NY 11735	Lab No. : 1607865-001A Client Sample ID: SW-PIT-EFF 7/11/16	Sample Information: Type : Aqueous
Collected :7/11/2016 1:15:00 PM Received :7/12/2016 1:20:00 PM 1607057-00 Collected By CLIENT	021	Origin:

Analytical Method:	SM22 5210B		Prepl	Method: SM	5210B	Prep Date: 7/12/2016 3:00:07 PM	Analyst: VaS
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Carbonaceous Biologic	al Oxygen	< 2		1	mg/L	07/12/2016 3:35 PM	Container-01 of 01

Demand

NOTES:

Start date 7/12/16 @3:00pm. End date 7/17/16 @ 10:55am.

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D|F. = Dilution Factor D = Results for Dilution

- c = Calibration acceptability criteria exceeded for this analyte.Value estimated
- H = Received/analyzed outside of analytical holding time
- J = Estimated value below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

- r = Reporting limit below calibration range. Value estimated.
- S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Date Reported : 7/19/2016

Client Services Manager : Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

P = Duplicate RPD outside of control limit

Pace Analytical"

PACE ANALYTICAL 575 Broad Hollow Road Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 Website: www.pacelabs.com

Sample Receipt Checklist

Not Present NA Leaking	la <u>6 4:05:53 PM</u> ■
7/19/201 Not Present	6 4:05:53 PM
Not Present NA	
Not Present NA	
NA	
Leaking	
Leaking	
NA	
NA	Ē
11/2	Land
To 2	.8 °
No Vials	
NA	
No Water	
Not Present	\checkmark
=====	

CorrectiveAction:



 575 Broad Hollow Road
 Melville, NY 11747

 TEL: (631) 694-3040
 FAX: (631) 420-8436

 NYSDOH ID#10478
 www.pacelabs.com

<u>WorkOrder :</u> 1607865

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEWJERSEY	NY1 58
CONNECTICUT	PH-0435
MARYLAND	208
MAS S ACHUS ETTS	M-NY026
NEW HAMPS HIRE	2987
RHODE IS LAND	LAO00340
PENNSYLVANIA	68-00350

Page 3 of 3

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				American Analytical Laboratories, LLC.
				56 Toledo Street
				Farmingdale, New York 11735
				TEL: (631) 454-6100
				FAX: (631) 454-8027

l						((Website: www.American-
subc	CONTRATOR	SUB CONTRATOR: PACE ANALYTICAL COMPANY:	COMPANY:	Pace Analyt	Pace Analytical Services	SPECIAL INS	SPECIAL INSTRUCTIONS / DMMENTS	ulon want from the
ADDRESS;		575 Broad Hollow Road	-			// CBOD	/	
CITY,	STATE, ZIP: Melvi	CITY, STATE, ZIP: Melville, NY 11747)		
PHON	^Е (631) 694-30	PHONE: (631) 694-3040 FAX: (631) 420-8436)-8436 EMAL:			AN	ANALYTICAL PARAMETERS	
ACCO	ACCOUNT #;					M5210 B		
						NU		COMMENTS Methanol Preserved Weights HOT Sample Notation Additional Sample Description,
ITEM	SAMPLE ID	Client Sample ID	Bottle Type	MATRIX	DATE COLLECTED	MBER OF		
	1607057-002I	1 1607057-0021 SW Pit- Eff 7/11/16 500ML PU	500ML PU	Liquid	7/11/2016 1:15:00 PM 1	1 1		INTRAS





QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9906

Sample ID: LCS-9906	SampType: LCS	TestCo	de: 624_W	Units: µg/L		Prep Da	te: 7/13/20	016	RunNo: 174	179	
Client ID: LCSW	Batch ID: 9906	Test	lo: E624	E624		Analysis Da	te: 7/13/20)16	SeqNo: 319	9347	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	41	2.0	50.00	0	81.5	54	134				
1,1,2,2-Tetrachloroethane	39	2.0	50.00	0	77.4	38	133				
1,1,2-Trichloroethane	42	2.0	50.00	0	83.6	53	132				
1,1-Dichloroethane	42	2.0	50.00	0	84.4	46	138				
1,1-Dichloroethene	39	2.0	50.00	0	77.6	47	137				
1,2-Dichlorobenzene	41	2.0	50.00	0	81.1	47	134				
1,2-Dichloroethane	46	2.0	50.00	0	92.2	52	136				
1,2-Dichloropropane	43	2.0	50.00	0	86.0	47	145				
1,3-Dichlorobenzene	40	2.0	50.00	0	80.2	47	136				
1,4-Dichlorobenzene	40	2.0	50.00	0	80.3	44	134				
2-Chloroethyl vinyl ether	ND	2.0	50.00	0	0	40	130				SU
Benzene	44	2.0	50.00	0	88.3	51	138				
Bromodichloromethane	44	2.0	50.00	0	87.2	48	143				
Bromoform	39	2.0	50.00	0	77.2	34	138				
Bromomethane	38	2.0	50.00	0	76.3	28	152				
Carbon tetrachloride	41	2.0	50.00	0	81.4	52	138				
Chlorobenzene	40	2.0	50.00	0	80.8	48	133				
Chloroethane	36	2.0	50.00	0	72.4	51	147				
Chloroform	46	2.0	50.00	0	91.2	54	136				
Chloromethane	41	2.0	50.00	0	81.1	58	146				
cis-1,3-Dichloropropene	44	2.0	50.00	0	88.5	52	138				
Dibromochloromethane	45	2.0	50.00	0	89.5	53	131				
Ethylbenzene	41	2.0	50.00	0	82.6	53	134				
Methylene chloride	18	4.0	50.00	0	35.4	13	100				В
Tetrachloroethene	32	2.0	50.00	0	63.3	44	126				
Toluene	43	2.0	50.00	0	85.3	54	134				

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9906

Sample ID: LCS-9906	SampType: LCS	TestCoo	de: 624_W	Units: µg/L		Prep Da	ite: 7/13/20	16	RunNo: 174	179	
Client ID: LCSW	Batch ID: 9906	TestN	lo: E624	E624		Analysis Da	te: 7/13/20	16	SeqNo: 319	9347	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	40	2.0	50.00	0	79.8	44	138				
trans-1,3-Dichloropropene	43	2.0	50.00	0	86.9	46	137				
Trichloroethene	38	2.0	50.00	0	75.4	52	134				
Trichlorofluoromethane	39	2.0	50.00	0	78.8	56	151				
Vinyl chloride	40	2.0	50.00	0	79.3	55	151				
Xylenes, Total	120	6.0	50.00	0	240	35	125				S
Acetone	23	4.0	50.00	0	46.1	45	120				В
m,p-Xylene	80	4.0	100.0	0	80.3	35	125				
Methyl tert-butyl ether	41	2.0	50.00	0	81.7	52	122				
o-Xylene	40	2.0	50.00	0	79.1	40	120				
Surr: 4-Bromofluorobenzene	49		50.00		97.9	62	132				
Surr: Dibromofluoromethane	57		50.00		115	72	131				
Surr: Toluene-d8	51		50.00		102	58	131				
Sample ID: MB-9906	SampType: MBLK	TestCoo	de: 624_W	Units: µg/L		Prep Da	ite: 7/13/20	16	RunNo: 17 4	479	
Client ID: PBW	Batch ID: 9906	TestN	lo: E624	E624		Analysis Da	te: 7/13/20	16	SeqNo: 319	9348	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	2.0									U
1,1,2,2-Tetrachloroethane	ND	2.0									U
1,1,2-Trichloroethane	ND	2.0									U
1,1-Dichloroethane	ND	2.0									U
1,1-Dichloroethene	ND	2.0									U
1,2-Dichlorobenzene	ND	2.0									U
1,2-Dichloroethane	ND	2.0									U

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9906

Sample ID: MB-9906	SampType: MBLK	TestCo	le: 624_W	Units: µg/L		Prep Da	ate: 7/13/20	016	RunNo: 174	179	
Client ID: PBW	Batch ID: 9906	Test	lo: E624	E624		Analysis Da	ate: 7/13/20	016	SeqNo: 319	9348	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	2.0									U
1,3-Dichlorobenzene	ND	2.0									U
1,4-Dichlorobenzene	ND	2.0									U
2-Chloroethyl vinyl ether	ND	2.0									U
Benzene	ND	2.0									U
Bromodichloromethane	ND	2.0									U
Bromoform	ND	2.0									U
Bromomethane	ND	2.0									U
Carbon tetrachloride	ND	2.0									U
Chlorobenzene	ND	2.0									U
Chloroethane	ND	2.0									U
Chloroform	ND	2.0									U
Chloromethane	ND	2.0									U
cis-1,3-Dichloropropene	ND	2.0									U
Dibromochloromethane	ND	2.0									U
Ethylbenzene	ND	2.0									U
Methylene chloride	6.0	4.0									
Tetrachloroethene	ND	2.0									U
Toluene	ND	2.0									U
trans-1,2-Dichloroethene	ND	2.0									U
trans-1,3-Dichloropropene	ND	2.0									U
Trichloroethene	ND	2.0									U
Trichlorofluoromethane	ND	2.0									U
Vinyl chloride	ND	2.0									U
Xylenes, Total	ND	6.0									U
Acetone	2.6	4.0									J

Qualifiers: S Spike Recovery outside accepted recovery limits



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: 9906

Sample ID: MB-9906	SampType: MBLK	TestCoo	le: 624_W	Units: µg/L		Prep Da	te: 7/13/20	16	RunNo: 174	479	
Client ID: PBW	Batch ID: 9906	TestN	lo: E624	E624		Analysis Da	te: 7/13/20	16	SeqNo: 319	9348	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
m,p-Xylene	ND	4.0									U
Methyl tert-butyl ether	ND	2.0									U
o-Xylene	ND	2.0									U
Surr: 4-Bromofluorobenzene	50		50.00		99.5	62	132				
Surr: Dibromofluoromethane	54		50.00		108	72	131				
Surr: Toluene-d8	50		50.00		101	58	131				



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9910

Sample ID: MB-9910	SampType: MBLK	TestCoo	le: 8270_W	Units: µg/L		Prep Da	ate: 7/14/20	016	RunNo: 174	468	
Client ID: PBW	Batch ID: 9910	TestN	lo: E625	SW3510C		Analysis Da	ate: 7/14/20	016	SeqNo: 319	9253	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Biphenyl	ND	5.0									U
1,2,4-Trichlorobenzene	ND	5.0									U
1,2-Dichlorobenzene	ND	5.0									U
1,3-Dichlorobenzene	ND	5.0									U
1,4-Dichlorobenzene	ND	5.0									U
2,4,5-Trichlorophenol	ND	5.0									U
2,4,6-Trichlorophenol	ND	5.0									U
2,4-Dichlorophenol	ND	5.0									U
2,4-Dimethylphenol	ND	10									U
2,4-Dinitrophenol	ND	10									U
2,4-Dinitrotoluene	ND	5.0									U
2,6-Dinitrotoluene	ND	5.0									U
2-Chloronaphthalene	ND	5.0									U
2-Chlorophenol	ND	5.0									U
2-Methylnaphthalene	ND	5.0									U
2-Methylphenol	ND	5.0									U
2-Nitroaniline	ND	5.0									U
2-Nitrophenol	ND	10									U
3+4-Methylphenol	ND	5.0									U
3-Nitroaniline	ND	10									U
4,6-Dinitro-2-methylphenol	ND	10									U
4-Bromophenyl phenyl ether	ND	5.0									U
4-Chloro-3-methylphenol	ND	5.0									U
4-Chloroaniline	ND	5.0									U
4-Chlorophenyl phenyl ether	ND	5.0									U
4-Nitroaniline	ND	5.0									U

Qualifiers: S Spike Recovery outside accepted recovery limits



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: 9910

Sample ID: MB-9910	SampType: MBLK		le: 8270_W	Units: µg/L			te: 7/14/20		RunNo: 174		
Client ID: PBW	Batch ID: 9910	TestN	lo: E625	SW3510C		Analysis Da	te: 7/14/20	16	SeqNo: 319	9253	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Nitrophenol	ND	10									U
Acenaphthene	ND	5.0									U
Acenaphthylene	ND	5.0									U
Acetophenone	ND	5.0									U
Aniline	ND	5.0									U
Anthracene	ND	5.0									U
Azobenzene	ND	5.0									U
Benzo(a)anthracene	ND	5.0									U
Benzo(a)pyrene	ND	5.0									U
Benzo(b)fluoranthene	ND	5.0									U
Benzo(g,h,i)perylene	ND	5.0									U
Benzo(k)fluoranthene	ND	5.0									U
Benzoic acid	ND	10									U
Benzyl alcohol	ND	5.0									U
Bis(2-chloroethoxy)methane	ND	5.0									U
Bis(2-chloroethyl)ether	ND	5.0									U
Bis(2-chloroisopropyl)ether	ND	5.0									U
Bis(2-ethylhexyl)phthalate	ND	10									U
Butyl benzyl phthalate	ND	10									U
Carbazole	ND	5.0									U
Chrysene	ND	5.0									U
Di-n-butyl phthalate	ND	5.0									U
Di-n-octyl phthalate	ND	5.0									U
Dibenzo(a,h)anthracene	ND	5.0									U
Dibenzofuran	ND	5.0									U
Diethyl phthalate	ND	5.0									U

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9910

Sample ID: MB-9910	SampType: MBLK	TestCod	le: 8270_W	Units: µg/L		Prep Da	te: 7/14/20	16	RunNo: 174	468	
Client ID: PBW	Batch ID: 9910	TestN	lo: E625	SW3510C		Analysis Da	te: 7/14/20	16	SeqNo: 319	9253	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dimethyl phthalate	ND	5.0									U
Fluoranthene	ND	5.0									U
Fluorene	ND	5.0									U
Hexachlorobenzene	ND	5.0									U
Hexachlorobutadiene	ND	5.0									U
Hexachlorocyclopentadiene	ND	10									U
Hexachloroethane	ND	5.0									U
Indeno(1,2,3-c,d)pyrene	ND	5.0									U
Isophorone	ND	5.0									U
N-Nitrosodi-n-propylamine	ND	5.0									U
N-Nitrosodimethylamine	ND	5.0									U
N-Nitrosodiphenylamine	ND	5.0									U
Naphthalene	ND	5.0									U
Nitrobenzene	ND	5.0									U
Parathion	ND	10									U
Pentachlorophenol	ND	10									U
Phenanthrene	ND	5.0									U
Phenol	ND	5.0									U
Pyrene	ND	5.0									U
Pyridine	ND	5.0									U
Surr: 2,4,6-Tribromophenol	27		40.00		68.5	28	138				
Surr: 2-Fluorobiphenyl	16		20.00		79.4	20	138				
Surr: 2-Fluorophenol	20		40.00		49.7	11	130				
Surr: 4-Terphenyl-d14	18		20.00		87.5	28	141				
Surr: Nitrobenzene-d5	15		20.00		75.5	18	143				
Surr: Phenol-d6	12		40.00		29.7	11	149				

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client: HDR Project: LFNY	- East 75th Street, NYC, NY						BatchID	D: 9910
Sample ID: MB-9910	SampType: MBLK	TestCo	de: 8270_W	Units: µg/L		Prep Dat	e: 7/14/2016	RunNo: 17468
Client ID: PBW	Batch ID: 9910	Test	No: E625	SW3510C		Analysis Dat	e: 7/14/2016	SeqNo: 319253
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD R	Ref Val %RPD RPDLimit Qual
Sample ID: LCS-9910	SampType: LCS	TestCo	de: 8270_W	Units: µg/L		Prep Dat	e: 7/14/2016	RunNo: 17468
Client ID: LCSW	Batch ID: 9910	Test	No: E625	SW3510C		Analysis Dat	e: 7/14/2016	SeqNo: 319271
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD R	Ref Val %RPD RPDLimit Qual
Biphenyl	38	5.0	40.00	0	94.0	47	124	
1,2,4-Trichlorobenzene	36	5.0	40.00	0	90.6	20	128	
1,2-Dichlorobenzene	37	5.0	40.00	0	91.5	23	130	
1,3-Dichlorobenzene	35	5.0	40.00	0	86.9	20	131	
1,4-Dichlorobenzene	36	5.0	40.00	0	90.0	20	134	
2,4,5-Trichlorophenol	ND	5.0		0	0	47	120	U
2,4,6-Trichlorophenol	39	5.0	40.00	0	96.8	37	137	
2,4-Dichlorophenol	36	5.0	40.00	0	90.5	34	121	
2,4-Dimethylphenol	36	10	40.00	0	91.2	20	120	
2,4-Dinitrophenol	29	10	40.00	0	73.2	12	141	
2,4-Dinitrotoluene	37	5.0	40.00	0	92.6	28	149	
2,6-Dinitrotoluene	33	5.0	40.00	0	83.3	34	138	
2-Chloronaphthalene	38	5.0	40.00	0	94.6	37	140	
2-Chlorophenol	35	5.0	40.00	0	87.8	29	122	
2-Methylnaphthalene	ND	5.0		0	0	47	120	U
2-Methylphenol	ND	5.0		0	0	25	120	U
2-Nitroaniline	ND	5.0		0	0	47	128	U
2-Nitrophenol	35	10	40.00	0	87.7	32	124	
3+4-Methylphenol	ND	5.0		0	0	10	130	U
3-Nitroaniline	ND	10		0	0	38	120	U

Qualifiers: S Spike Recovery outside accepted recovery limits



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: 9910

Sample ID: LCS-9910	SampType: LCS	TestCo	de: 8270_W	Units: µg/L		Prep Da	te: 7/14/20	16	RunNo: 174	468	
Client ID: LCSW	Batch ID: 9910	TestN	lo: E625	SW3510C		Analysis Da	te: 7/14/20	16	SeqNo: 319	9271	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,6-Dinitro-2-methylphenol	31	10	40.00	0	77.3	14	140				
4-Bromophenyl phenyl ether	37	5.0	40.00	0	92.0	38	140				
4-Chloro-3-methylphenol	36	5.0	40.00	0	90.8	28	124				
4-Chloroaniline	ND	5.0		0	0	15	102				U
4-Chlorophenyl phenyl ether	38	5.0	40.00	0	95.7	39	138				
4-Nitroaniline	ND	5.0		0	0	36	125				U
4-Nitrophenol	17	10	40.00	0	41.4	10	110				
Acenaphthene	37	5.0	40.00	0	93.7	34	144				
Acenaphthylene	38	5.0	40.00	0	94.6	32	144				
Acetophenone	36	5.0	40.00	0	90.1	40	120				
Aniline	ND	5.0		0	0	20	120				U
Anthracene	37	5.0	40.00	0	93.0	34	141				
Azobenzene	39	5.0	40.00	0	98.1	40	120				
Benzo(a)anthracene	40	5.0	40.00	0	99.5	36	143				
Benzo(a)pyrene	39	5.0	40.00	0	97.0	32	137				
Benzo(b)fluoranthene	38	5.0	40.00	0	94.3	38	141				
Benzo(g,h,i)perylene	39	5.0	40.00	0	96.7	29	147				
Benzo(k)fluoranthene	41	5.0	40.00	0	102	38	141				
Benzoic acid	13	10	40.00	0	31.3	10	110				
Benzyl alcohol	ND	5.0		0	0	25	115				U
Bis(2-chloroethoxy)methane	36	5.0	40.00	0	90.3	29	135				
Bis(2-chloroethyl)ether	45	5.0	40.00	0	113	29	144				
Bis(2-chloroisopropyl)ether	38	5.0	40.00	0	94.4	29	141				
Bis(2-ethylhexyl)phthalate	40	10	40.00	0	99.6	20	153				
Butyl benzyl phthalate	43	10	40.00	0	107	29	149				
Carbazole	ND	5.0		0	0	40	125				U

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID:	9910

Sample ID: LCS-9910	SampType: LCS	TestCo	de: 8270_W	Units: µg/L		Prep Da	te: 7/14/20	16	RunNo: 174	168	
Client ID: LCSW	Batch ID: 9910	Test	No: E625	SW3510C		Analysis Da	te: 7/14/20	16	SeqNo: 319	9271	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chrysene	38	5.0	40.00	0	94.4	34	139				
Di-n-butyl phthalate	39	5.0	40.00	0	97.1	34	157				
Di-n-octyl phthalate	41	5.0	40.00	0	102	33	148				
Dibenzo(a,h)anthracene	40	5.0	40.00	0	100	36	146				
Dibenzofuran	37	5.0	40.00	0	92.7	40	120				
Diethyl phthalate	38	5.0	40.00	0	95.7	41	146				
Dimethyl phthalate	37	5.0	40.00	0	92.8	28	136				
Fluoranthene	39	5.0	40.00	0	96.5	34	144				
Fluorene	39	5.0	40.00	0	97.1	40	139				
Hexachlorobenzene	37	5.0	40.00	0	93.6	37	137				
Hexachlorobutadiene	36	5.0	40.00	0	90.7	23	138				
Hexachlorocyclopentadiene	37	10	40.00	0	91.6	12	134				
Hexachloroethane	36	5.0	40.00	0	91.0	16	135				
Indeno(1,2,3-c,d)pyrene	42	5.0	40.00	0	104	37	145				
Isophorone	36	5.0	40.00	0	90.3	30	130				
N-Nitrosodi-n-propylamine	36	5.0	40.00	0	90.5	30	136				
N-Nitrosodimethylamine	21	5.0	40.00	0	52.8	11	100				
N-Nitrosodiphenylamine	35	5.0	40.00	0	88.7	25	143				
Naphthalene	37	5.0	40.00	0	92.4	28	133				
Nitrobenzene	35	5.0	40.00	0	88.0	34	131				
Parathion	ND	10		0	0	35	125				U
Pentachlorophenol	35	10	40.00	0	88.0	15	150				
Phenanthrene	38	5.0	40.00	0	95.0	36	137				
Phenol	16	5.0	40.00	0	39.1	10	100				
Pyrene	38	5.0	40.00	0	95.5	36	146				
Pyridine	ND	5.0		0	0	11	105				U

Qualifiers: S Spike Recovery outside accepted recovery limits



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: 9910

Sample ID: LCS-9910 Client ID: LCSW	SampType: LCS Batch ID: 9910		e: 8270_W o: E625	Units: µg/L SW3510C	Prep Date: 7/14/2016 Analysis Date: 7/14/2016				RunNo: 17 4 SeqNo: 31 9		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	35		40.00		88.0	28	138				
Surr: 2-Fluorobiphenyl	18		20.00		88.6	20	138				
Surr: 2-Fluorophenol	23		40.00		56.7	11	130				
Surr: 4-Terphenyl-d14	18		20.00		92.3	28	141				
Surr: Nitrobenzene-d5	17		20.00		84.6	18	143				
Surr: Phenol-d6	15		40.00		37.2	11	149				

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9910

Sample ID: MB-9910	SampType: MBLK	TestCoo	de: 625_W	Units: µg/L					RunNo: 174	477	
Client ID: PBW	Batch ID: 9910	TestN	lo: E625	SW3510C					SeqNo: 319	9329	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	5.0									U
2,4,6-Trichlorophenol	ND	5.0									U
2,4-Dichlorophenol	ND	5.0									U
2,4-Dimethylphenol	ND	5.0									U
2,4-Dinitrophenol	ND	10									U
2,4-Dinitrotoluene	ND	5.0									U
2,6-Dinitrotoluene	ND	5.0									U
2-Chloronaphthalene	ND	5.0									U
2-Chlorophenol	ND	5.0									U
2-Nitrophenol	ND	10									U
4,6-Dinitro-2-methylphenol	ND	10									U
4-Bromophenyl phenyl ether	ND	5.0									U
4-Chloro-3-methylphenol	ND	5.0									U
4-Chlorophenyl phenyl ether	ND	5.0									U
4-Nitrophenol	ND	10									U
Acenaphthene	ND	5.0									U
Acenaphthylene	ND	5.0									U
Anthracene	ND	5.0									U
Benzo(a)anthracene	ND	5.0									U
Benzo(a)pyrene	ND	5.0									U
Benzo(b)fluoranthene	ND	5.0									U
Benzo(g,h,i)perylene	ND	5.0									U
Benzo(k)fluoranthene	ND	5.0									U
Bis(2-chloroethoxy)methane	ND	5.0									U
Bis(2-chloroethyl)ether	ND	5.0									U
Bis(2-chloroisopropyl)ether	ND	5.0									U

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9910

Sample ID: MB-9910	SampType: MBLK	TestCoc	le: 625_W	Units: µg/L		Prep Date:	7/14/20	16	RunNo: 174	177	
Client ID: PBW	Batch ID: 9910	TestN	lo: E625	SW3510C		Analysis Date:	7/14/20	16	SeqNo: 319	9329	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bis(2-ethylhexyl)phthalate	ND	5.0									U
Butyl benzyl phthalate	0.16	5.0									J
Chrysene	ND	5.0									U
Di-n-butyl phthalate	ND	5.0									U
Di-n-octyl phthalate	ND	5.0									U
Dibenzo(a,h)anthracene	ND	5.0									U
Diethyl phthalate	ND	5.0									U
Dimethyl phthalate	ND	5.0									U
Fluoranthene	ND	5.0									U
Fluorene	ND	5.0									U
Hexachlorobenzene	ND	5.0									U
Hexachlorobutadiene	ND	5.0									U
Hexachlorocyclopentadiene	ND	10									U
Hexachloroethane	ND	5.0									U
Indeno(1,2,3-c,d)pyrene	ND	5.0									U
Isophorone	ND	5.0									U
N-Nitrosodi-n-propylamine	ND	5.0									U
N-Nitrosodimethylamine	ND	5.0									U
N-Nitrosodiphenylamine	ND	5.0									U
Naphthalene	ND	5.0									U
Nitrobenzene	ND	5.0									U
Pentachlorophenol	ND	10									U
Phenanthrene	ND	5.0									U
Phenol	ND	5.0									U
Pyrene	ND	5.0									U
Surr: 2,4,6-Tribromophenol	27		40.00		68.5	28	138				

Qualifiers: S Spike Recovery outside accepted recovery limits



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

2-Chloronaphthalene

4,6-Dinitro-2-methylphenol

4-Chloro-3-methylphenol

4-Bromophenyl phenyl ether

4-Chlorophenyl phenyl ether

2-Chlorophenol

2-Nitrophenol

4-Nitrophenol

Project:

LFNY - East 75th Street, NYC, NY

BatchID:	9910
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Sample ID: MB-9910	SampType: MBLK	TestCoo	le: 625_W	Units: µg/L		Prep Date	e: 7/14/20	16	RunNo: 17	477	
Client ID: PBW	Batch ID: 9910	TestN	lo: E625	SW3510C		Analysis Date	e: 7/14/20	16	SeqNo: 31	9329	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorobiphenyl	16		20.00		79.4	20	138				
Surr: 2-Fluorophenol	20		40.00		49.7	11	130				
Surr: 4-Terphenyl-d14	18		20.00		87.5	28	141				
Surr: Nitrobenzene-d5	15		20.00		75.5	18	143				
Surr: Phenol-d6	12		40.00		29.7	11	149				
Sample ID: LCS-9910	SampType: LCS	TestCoc	le: 625_W	Units: µg/L		Prep Date	e: 7/14/20	16	RunNo: 17	477	
Sample ID: LCS-9910 Client ID: LCSW	SampType: LCS Batch ID: 9910		le: 625_W lo: E625	Units: µg/L SW3510C		Prep Date Analysis Date			RunNo: 174 SeqNo: 319		
					%REC	Analysis Date					Qual
Client ID: LCSW	Batch ID: 9910	TestN	lo: E625	SW3510C	%REC 90.6	Analysis Date	e: 7/14/20	16	SeqNo: 31	9330	Qual
Client ID: LCSW Analyte	Batch ID: 9910 Result	TestN PQL	lo: E625 SPK value	SW3510C SPK Ref Val		Analysis Date	e: 7/14/20 HighLimit	16	SeqNo: 31	9330	Qual
Client ID: LCSW Analyte 1,2,4-Trichlorobenzene	Batch ID: 9910 Result 36	TestN PQL 5.0	lo: E625 SPK value 40.00	SW3510C SPK Ref Val 0	90.6	Analysis Date LowLimit 20	e: 7/14/20 HighLimit 128	16	SeqNo: 31	9330	Qual
Client ID: LCSW Analyte 1,2,4-Trichlorobenzene 2,4,6-Trichlorophenol	Batch ID: 9910 Result 36 39	TestN PQL 5.0 5.0	lo: E625 SPK value 40.00 40.00	SW3510C SPK Ref Val 0 0	90.6 96.8	Analysis Date LowLimit 20 37	e: 7/14/20 HighLimit 128 137	16	SeqNo: 31	9330	Qual
Client ID: LCSW Analyte 1,2,4-Trichlorobenzene 2,4,6-Trichlorophenol 2,4-Dichlorophenol	Batch ID: 9910 Result 36 39 36	TestN PQL 5.0 5.0 5.0	lo: E625 SPK value 40.00 40.00 40.00	SW3510C SPK Ref Val 0 0 0	90.6 96.8 90.5	Analysis Date LowLimit 20 37 34	e: 7/14/20 HighLimit 128 137 121	16	SeqNo: 31	9330	Qual
Client ID: LCSW Analyte 1,2,4-Trichlorobenzene 2,4,6-Trichlorophenol 2,4-Dichlorophenol 2,4-Dimethylphenol	Batch ID: 9910 Result 36 39 36 36	TestN PQL 5.0 5.0 5.0 5.0 5.0	lo: E625 SPK value 40.00 40.00 40.00 40.00	SW3510C SPK Ref Val 0 0 0 0	90.6 96.8 90.5 91.2	Analysis Date LowLimit 20 37 34 20	e: 7/14/20 HighLimit 128 137 121 120	16	SeqNo: 31	9330	Qual

38

35

35

31

37

36

38

17

5.0

5.0

10

10

5.0

5.0

5.0

10

40.00

40.00

40.00

40.00

40.00

40.00

40.00

40.00

W Sample container temperature is out of limit as specified at testcode

0

0

0

0

0

0

0

0

94.6

87.8

87.7

77.3

92.0

90.8

95.7

41.4

37

29

32

14

38

28

39

10

140

122

124

140

140

124

138

110



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID:	9910

Sample ID: LCS-9910	SampType: LCS	TestCoc	le: 625_W	Units: µg/L		Prep Da	te: 7/14/20	16	RunNo: 174	177	
Client ID: LCSW	Batch ID: 9910	TestN	lo: E625	SW3510C	Analysis Date: 7/14/2016			SeqNo: 319	9330		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	37	5.0	40.00	0	93.7	34	144				
Acenaphthylene	38	5.0	40.00	0	94.6	32	144				
Anthracene	37	5.0	40.00	0	93.0	34	141				
Benzo(a)anthracene	40	5.0	40.00	0	99.5	36	143				
Benzo(a)pyrene	39	5.0	40.00	0	97.0	32	137				
Benzo(b)fluoranthene	38	5.0	40.00	0	94.3	38	141				
Benzo(g,h,i)perylene	39	5.0	40.00	0	96.7	29	147				
Benzo(k)fluoranthene	41	5.0	40.00	0	102	38	141				
Bis(2-chloroethoxy)methane	36	5.0	40.00	0	90.3	29	135				
Bis(2-chloroethyl)ether	45	5.0	40.00	0	113	29	144				
Bis(2-chloroisopropyl)ether	38	5.0	40.00	0	94.4	29	141				
Bis(2-ethylhexyl)phthalate	40	5.0	40.00	0	99.6	20	153				
Butyl benzyl phthalate	43	5.0	40.00	0	107	29	149				В
Chrysene	38	5.0	40.00	0	94.4	34	139				
Di-n-butyl phthalate	39	5.0	40.00	0	97.1	34	157				
Di-n-octyl phthalate	41	5.0	40.00	0	102	33	148				
Dibenzo(a,h)anthracene	40	5.0	40.00	0	100	36	146				
Diethyl phthalate	38	5.0	40.00	0	95.7	41	146				
Dimethyl phthalate	37	5.0	40.00	0	92.8	28	136				
Fluoranthene	39	5.0	40.00	0	96.5	34	144				
Fluorene	39	5.0	40.00	0	97.1	40	139				
Hexachlorobenzene	37	5.0	40.00	0	93.6	37	137				
Hexachlorobutadiene	36	5.0	40.00	0	90.7	23	138				
Hexachlorocyclopentadiene	37	10	40.00	0	91.6	12	134				
Hexachloroethane	36	5.0	40.00	0	91.0	16	135				
Indeno(1,2,3-c,d)pyrene	42	5.0	40.00	0	104	37	145				

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9910

Sample ID: LCS-9910 Client ID: LCSW	SampType: LCS Batch ID: 9910		de: 625_W lo: E625	Units: µg/L SW3510C		Prep Dat Analysis Dat	te: 7/14/20 te: 7/14/20		RunNo: 174 SeqNo: 319		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isophorone	36	5.0	40.00	0	90.3	30	130				
N-Nitrosodi-n-propylamine	36	5.0	40.00	0	90.5	30	136				
N-Nitrosodimethylamine	21	5.0	40.00	0	52.8	11	100				
N-Nitrosodiphenylamine	35	5.0	40.00	0	88.7	25	143				
Naphthalene	37	5.0	40.00	0	92.4	28	133				
Nitrobenzene	35	5.0	40.00	0	88.0	34	131				
Pentachlorophenol	35	10	40.00	0	88.0	15	150				
Phenanthrene	38	5.0	40.00	0	95.0	36	137				
Phenol	16	5.0	40.00	0	39.1	10	100				
Pyrene	38	5.0	40.00	0	95.5	36	146				
Surr: 2,4,6-Tribromophenol	35		40.00		88.0	28	138				
Surr: 2-Fluorobiphenyl	18		20.00		88.6	20	138				
Surr: 2-Fluorophenol	23		40.00		56.7	11	130				
Surr: 4-Terphenyl-d14	18		20.00		92.3	28	141				
Surr: Nitrobenzene-d5	17		20.00		84.6	18	143				
Surr: Phenol-d6	15		40.00		37.2	11	149				



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

HDR LFNY - East 75th Street, NYC, NY

BatchID: 9946

Sample ID: LCSW071416A	SampType: LCS	TestCoo	le: ICPSCAN_	W Units: mg/L		Prep Da	te: 7/14/20	16	RunNo: 175	600	
Client ID: LCSW	Batch ID: 9946	TestN	lo: E200.7 Rev	/4. E200.7 Rev4.		Analysis Da	te: 7/15/20	16	SeqNo: 319	625	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.03	0.0200	2.000	0	102	85	115				
Antimony	2.04	0.0200	2.000	0	102	85	115				
Arsenic	2.04	0.0250	2.000	0	102	85	115				
Barium	2.08	0.0200	2.000	0	104	85	115				
Beryllium	2.02	0.0200	2.000	0	101	85	115				
Cadmium	1.99	0.0100	2.000	0	99.6	85	115				
Calcium	1.82	0.0250	2.000	0	90.8	85	115				
Chromium	2.07	0.0200	2.000	0	104	85	115				
Cobalt	2.01	0.0200	2.000	0	100	85	115				
Copper	2.04	0.0200	2.000	0	102	85	115				
Iron	2.03	0.0200	2.000	0	102	85	115				
Lead	2.03	0.0150	2.000	0	101	85	115				
Magnesium	1.97	0.0200	2.000	0	98.5	85	115				
Manganese	1.99	0.0200	2.000	0	99.7	85	115				
Molybdenum	2.04	0.0200	2.000	0	102	85	115				
Nickel	2.02	0.0200	2.000	0	101	85	115				
Potassium	19.9	0.200	20.00	0	99.4	85	115				
Selenium	2.05	0.0250	2.000	0	103	85	115				
Silver	2.02	0.0200	2.000	0	101	85	115				
Sodium	2.09	0.0300	2.000	0	104	85	115				
Thallium	1.97	0.0150	2.000	0	98.7	85	115				
Vanadium	2.01	0.0200	2.000	0	100	85	115				
Zinc	2.02	0.0200	2.000	0	101	85	115				

Qualifiers: S Spike Recovery outside accepted recovery limits



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: 9946

Sample ID: MBW071416A	SampType: MBLK	TestCod	e: ICPSCAN_	_W Units: mg/L		Prep Dat	te: 7/14/20	16	RunNo: 17	500	
Client ID: PBW	Batch ID: 9946	TestN	o: E200.7 Re	v4. E200.7 Rev4.		Analysis Dat	te: 7/15/20	16	SeqNo: 319	9664	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.0200									U
Antimony	ND	0.0200									U
Arsenic	ND	0.0250									U
Barium	ND	0.0200									U
Beryllium	ND	0.0200									U
Cadmium	ND	0.0100									U
Calcium	ND	0.0250									U
Chromium	ND	0.0200									U
Cobalt	ND	0.0200									U
Copper	ND	0.0200									U
Iron	ND	0.0200									U
Lead	ND	0.0150									U
Magnesium	ND	0.0200									U
Manganese	ND	0.0200									U
Nickel	ND	0.0200									U
Potassium	ND	0.200									U
Selenium	ND	0.0250									U
Silver	ND	0.0200									U
Sodium	ND	0.0300									U
Thallium	ND	0.0150									U
Vanadium	ND	0.0200									U
Zinc	ND	0.0200									U

W Sample container temperature is out of limit as specified at testcode



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: 9954

Sample ID: LCS-9954	SampType: LCS	TestCode: 608_PCB_W Units: %Rec	Prep Date: 7/18/2016	RunNo: 17673
Client ID: LCSW	Batch ID: 9954	TestNo: E608 SW3510C	Analysis Date: 7/21/2016	SeqNo: 322899
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Surr: DCB	0.30	0.5000	60.1 12 143	
Surr: TCX	0.29	0.5000	57.5 17 143	
Sample ID: LCSD-9954	SampType: LCSD	TestCode: 608_PCB_W Units: %Rec	Prep Date: 7/18/2016	RunNo: 17673
Client ID: LCSS02	Batch ID: 9954	TestNo: E608 SW3510C	Analysis Date: 7/21/2016	SeqNo: 322900
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Surr: DCB	0.30	0.5000	60.6 12 143	0 0
Surr: TCX	0.29	0.5000	57.8 17 143	0 0
Sample ID: MB-9954	SampType: MBLK	TestCode: 608_PCB_W Units: %Rec	Prep Date: 7/18/2016	RunNo: 17673
Client ID: PBW	Batch ID: 9954	TestNo: E608 SW3510C	Analysis Date: 7/21/2016	SeqNo: 322903
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Surr: DCB	0.31	0.5000	62.5 12 143	
Surr: TCX	0.29	0.5000	58.0 17 143	



QC SUMMARY REPORT

9954

BatchID:

WO#: 1607057

25-Jul-16

Client:

Aroclor 1242

Aroclor 1248

Project:

HDR LFNY - East 75th Street, NYC, NY

Sample ID: LCS-9954	SampType: LCS	TestCode: 608_PCB_W Units: µg/L	Prep Date: 7/18/2016	RunNo: 17672
Client ID: LCSW	Batch ID: 9954	TestNo: E608 SW3510C	Analysis Date: 7/21/2016	SeqNo: 322890
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Aroclor 1016	0.46	0.050 0.8000 0	57.6 25 125	
Aroclor 1260	0.51	0.050 0.8000 0	64.0 28 131	
Surr: DCB	0.36	0.5000	71.3 12 143	
Surr: TCX	0.28	0.5000	56.3 17 143	
Sample ID: LCSD-9954	SampType: LCSD	TestCode: 608_PCB_W Units: µg/L	Prep Date: 7/18/2016	RunNo: 17672
Client ID: LCSS02	Batch ID: 9954	TestNo: E608 SW3510C	Analysis Date: 7/21/2016	SeqNo: 322891
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Aroclor 1016	0.42	0.050 0.8000 0	52.4 25 125 0.4609	9.42 20
Aroclor 1260	0.45	0.050 0.8000 0	56.3 28 131 0.5124	12.8 20
Surr: DCB	0.34	0.5000	68.8 12 143	0 0
Surr: TCX	0.28	0.5000	55.5 17 143	0 0
Sample ID: MB-9954	SampType: MBLK	TestCode: 608_PCB_W Units: µg/L	Prep Date: 7/18/2016	RunNo: 17672
Client ID: PBW	Batch ID: 9954	TestNo: E608 SW3510C	Analysis Date: 7/21/2016	SeqNo: 322894
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Aroclor 1016	ND	0.050		U
Aroclor 1221	ND	0.050		U
Aroclor 1232	ND	0.050		U

Qualifiers: S Spike Recovery outside accepted recovery limits

ND

ND

0.050

0.050

U

U

W Sample container temperature is out of limit as specified at testcode



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: 9954

Sample ID: MB-9954	SampType: MBLK	TestCoc	le: 608_PCB_	W Units: μg/L		Prep Dat	te: 7/18/20	16	RunNo: 176	672	
Client ID: PBW	Batch ID: 9954	TestN	lo: E608	SW3510C		Analysis Dat	te: 7/21/20	16	SeqNo: 322	2894	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	ND	0.050									U
Aroclor 1260	ND	0.050									U
Aroclor 1262	ND	0.050									U
Aroclor 1268	ND	0.050									U
Surr: DCB	0.34		0.5000		68.7	12	143				
Surr: TCX	0.26		0.5000		52.1	17	143				



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client: Project:	HDR LFNY - I	East 75th Street, NYC, NY				BatchID: 9968											
Sample ID: MBW Client ID: PBW		SampType: MBLK Batch ID: 9968		de: HG_W No: E245.1 Re	Units: mg/L v3. E245.1 Rev3.		Prep Da Analysis Da	te: 7/18/20 te: 7/18/20		RunNo: 17: SeqNo: 320							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual					
Mercury		ND	0.000300									U					
Sample ID: LCSV	W071816A	SampType: LCS	TestCo	de: HG_W	Units: mg/L		Prep Da	te: 7/18/20	16	RunNo: 17	542						
Client ID: LCSV	N	Batch ID: 9968	Test	No: E245.1 Re	v3. E245.1 Rev3.		Analysis Dat	te: 7/18/20	16	SeqNo: 320	0637						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual					
Mercury		0.00367	0.000300	0.004000	0	91.8	85	115									

Qualifiers: S Spike Recovery outside accepted recovery limits



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client: Project:	HDR LFNY -	East 75th Street, NYC, NY					BatchID: R17421							
Sample ID:		SampType: MBLK		de: Cr6_W	Units: µg/L		Prep Dat			RunNo: 174				
Client ID:	PBW	Batch ID: R17421	TestN	lo: M3500-Cr	B-0	Analysis D		e: 7/12/20	016	SeqNo: 318	8475			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chromium, H	lexavalent	ND	10.0									U		
Sample ID: I	LCS-R17421	SampType: LCS	TestCoc	de: Cr6_W	Units: µg/L		Prep Dat	e:		RunNo: 174	421			
Client ID:	LCSW	Batch ID: R17421	TestN	lo: M3500-Cr	B-0		Analysis Dat	e: 7/12/20)16	SeqNo: 318	8476			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chromium, H	lexavalent	108	10.0	100.0	0	108	80	120						



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:	HDR														
Project:	LFNY -	East 75th Street, NYC, NY				BatchID: R17513									
Sample ID: LCS	-R17513	SampType: LCS	TestCo	de: 1664_SGT	-NP Units: mg/L		Prep Da	te:		RunNo: 17	513				
Client ID: LCS	w	Batch ID: R17513	Test	No: E1664A			Analysis Da	te: 7/15/20	16	SeqNo: 319	9790				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
SGT-HEM (Non-	Polar Material) 133	2.00	150.0	0	88.6	80	120							
Sample ID: MB-	R17513	SampType: MBLK	TestCo	de: 1664_SGT	-NP Units: mg/L		Prep Da	te:		RunNo: 175	513				
Client ID: PBW	1	Batch ID: R17513	Test	No: E1664A			Analysis Dat	te: 7/15/20	16	SeqNo: 319	9791				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
SGT-HEM (Non-	Polar Material) ND	2.00									U			

W Sample container temperature is out of limit as specified at testcode



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: R17579

Sample ID: MB-R17579	SampType: MBLK	TestCode: TS_W	Units: mg/L		Prep Date:		RunNo: 175		
Client ID: PBW	Batch ID: R17579	TestNo: M2540 B-	97,-		Analysis Date: 7/15/20)16	SeqNo: 321	236	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Residue, Total	ND	2.50							U



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: R17580

Sample ID: MB-R17580 Client ID: PBW	SampType: MBLK Batch ID: R17580		le: TSS_W lo: M2540 D-9	Units: mg/L 17,-		Prep Da Analysis Da		16	580 1239		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non- Filterable)	ND	3.00									U



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:HDRProject:LFNY - Ear	st 75th Street, NYC, NY		BatchID:	R17599
Sample ID: LCSL	SampType: LCS	TestCode: NO3-NO2_W Units: mg	L Prep Date:	RunNo: 17599
Client ID: LCSW	Batch ID: R17599	TestNo: E353.2 Rev2.	Analysis Date: 7/20/2016	SeqNo: 321462
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Nitrogen, Nitrate-Nitrite	0.463	0.100 0.5000 0	92.6 80 120	
Sample ID: 1607057-002GMS	SampType: MS	TestCode: NO3-NO2_W Units: mg	L Prep Date:	RunNo: 17599
Client ID: SW Pit- Eff 7/11/16	Batch ID: R17599	TestNo: E353.2 Rev2.	Analysis Date: 7/20/2016	SeqNo: 321466
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Nitrogen, Nitrate-Nitrite	0.747	0.100 0.5000 0.2730	94.8 80 120	
Sample ID: 1607057-002GMSD	SampType: MSD	TestCode: NO3-NO2_W Units: mg	L Prep Date:	RunNo: 17599
Client ID: SW Pit- Eff 7/11/16	Batch ID: R17599	TestNo: E353.2 Rev2.	Analysis Date: 7/20/2016	SeqNo: 321467
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Nitrogen, Nitrate-Nitrite	0.741	0.100 0.5000 0.2730	93.6 80 120 0.7470	0.806 20

Qualifiers: S Spike Recovery outside accepted recovery limits

W Sample container temperature is out of limit as specified at testcode



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QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client:

Project:

LFNY - East 75th Street, NYC, NY

BatchID: R17605

Sample ID: LCSL	SampType: LCS		de: TKN_W	Units: mg/L		Prep Da			RunNo: 176		
Client ID: LCSW	Batch ID: R17605	TestNo: E351.2 Rev2. PQL SPK value SPK Ref Val				Analysis Da			SeqNo: 321		0
Analyte	Result		SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	itrogen, Kjeldahl, Total 2.70		3.000	0	90.0	80	120				



QC SUMMARY REPORT

WO#: 1607057

25-Jul-16

Client: Project:	HDR LFNY	- East 75th Street, NYC, NY				BatchID: R17695								
Sample ID: MB	-R17695	SampType: MBLK	TestCo	de: CL_W	Units: mg/L		Prep Dat	ie:		RunNo: 176	695			
Client ID: PB	N	Batch ID: R17695	TestN	lo: M4500-C1	-В-		Analysis Dat	te: 7/25/20)16	SeqNo: 323	3295			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chloride		ND	2.00									U		
Sample ID: LCS	S-R17695	SampType: LCS	TestCoo	de: CL_W	Units: mg/L		Prep Dat	te:		RunNo: 176	695			
Client ID: LCS	SW	Batch ID: R17695	TestN	lo: M4500-C1	-В-		Analysis Dat	te: 7/25/20)16	SeqNo: 323	3296			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Chloride		96.5	2.00	100.0	0	96.5	70	130						

August 25, 2016

Henningson, Durham & Richardson Architecture and Engineering, P.C. 1 International Boulevard, 10th Floor Suite 1000 Mahwah, NJ 07495-0027 Attn: Michael P. Musso, P.E.

Re: Groundwater Discharge, Lycee Francais de New York File # C-3274

Dear Mr. Musso:

This Letter of Approval is an extension of the Letter of Approval issued on September 3, 2015.

This is in response to the August 15, 2016 submission requesting permission to discharge up to **6,000 gallons per day (gpd)** of groundwater generated at 505 East 75th Street, New York, NY 10021 (under a New York State Department of Environmental Conservation Site Management Plan). The groundwater will be treated through bag filters and granular activated carbon units, per provided schematic and information, before discharging to the onsite combined sewer at the above mentioned property. The sewer leads to the combined sewer located at 75th Street between York Avenue and the FDR Drive in New York, NY.

Based upon the information, schematic and analytical data submitted, you are hereby conditionally authorized, to discharge up to 6,000 gpd of the groundwater, treated through the above system, per provided schematic and information, as specified in your submissions, for a period of one year, to the combined sewer at the above mentioned location. This Letter of Approval shall expire at midnight on August 24, 2017.

This conditional approval, however, is subject to your obtaining a groundwater discharge Approval, specifying allowable flow rates, from the Chief of Permitting and Compliance, Bureau of Water and Sewer Operations, if discharges are to exceed 10,000 gpd. You are also required to follow manufacturer specifications for the operation and maintenance of the selected equipment. This Letter of Approval is contingent upon the permittee's compliance with any other Federal, State or Local laws applicable to the permitted activity.

<u>Under no circumstances shall muddy groundwater be discharged into the public sewer.</u>



Environmental

Protection

Pamela Elardo, P.E. Deputy Commissioner

Bureau of Wastewater Treatment 96-05 Horace Harding

Expressway – 2nd Floor Corona, NY 11368

Tel. (718) 595-6924 Fax (718) 595-4084 Payment shall be made to and permit obtained from the Bureau of Customer Service for groundwater discharge into the New York City Wastewater System in accordance with the Water and Wastewater Rate Schedule established by the New York City Water Board.

You are required to hold the groundwater to the maximum extent practicable during heavy wet weather events. Refer to File # C-3274 in any correspondence to this office.

This Letter of Approval is an Order of the Commissioner of the Department of Environmental Protection. Please be advised that failure to comply with this Letter of Approval may result in the issuance of Notices of Violation (returnable to the New York City Environmental Control Board) and/or revocation of the Letter of Approval. Notices of Violation carry penalties of up to \$10,000 a day, per violation.

If you have any questions concerning this matter, please contact Sean Hulbert, Assistant Chemical Engineer, at (718) 595-4715.

Sincerely,

Frances Leung, P.E., Chief Industrial Inspections and Permitting Section

August 7, 2017 File: 10016757

Ms. Frances Leung, P.E. New York City Department of Environmental Protection Division of Pollution Control and Monitoring Industrial Pretreatment Program Inspection and Permit Section 96-05 Horace Harding Expressway, 1st Floor Corona, New York 11368

Re: NYCDEP Discharge Permit Renewal – Water Treatment System 505 East 75th Street New York, New York 10021 Lycee Francais de New York, DEP File Case # C-3274

Dear Ms. Leung:

This letter was prepared by HDR on behalf of Lycee Francais de New York to request a **one year renewal** of the existing NYCDEP Discharge Permit for the above-referenced project. Enclosed please find a data table with the laboratory results from recent groundwater treatment system effluent sampling (July 12, 2017). As illustrated on the table, all analytical results are non-detect and/or within NYCDEP effluent limitations for discharges to Sanitary or Combined Sewers. The laboratory report was emailed directly to the NYCDEP by American Analytical Laboratories on August 2, 2017.

On behalf of Lycee Francais de New York, HDR continues to coordinate the operation, maintenance, and monitoring (OM&M) of the water treatments system (i.e., tracking flow, carbon usage). One carbon change-out has occurred in the past 12 months, based on carbon use calculations and observed flows throughout the year. New granular activated carbon was most recently installed in July 2017. Note that the treated groundwater will continue to discharge to the combined sewer located at East 75th Street, between York Avenue and the FDR Drive, in Manhattan. Depending on actual flow conditions, it is anticipated that one carbon change-out will occur in the next twelve months.

Please call if you have any questions or require any additional information.

Sincerely,

Muhael P. Mupo, P.E.

Michael P. Musso, P.E.

Attachment

cc: Terrence Kennedy, Lycee Francais



Lycee Francais de New York East 75th/East 76th Street New York, New York 10021 File Case # C-3274

	Soutwest Pit Effluent	Units	NYCDEP Limitations for
Analyte	7/12/2017		Effluent to Sanitary or
	Water		Combined Sewers
Non-polar material	not detected	mg/L	50
pH (field reading 07/12/2017)	8.9 (field)	pH units	5 - 12
Temperature (field reading 07/12/2017)	75.56 (field)	Deg F	< 150 F
Flash Point	not detected	Deg F	> 140 F
Cadmium	not detected	mg/L	2
Chromium (VI)	not detected	mg/L	5
Copper	not detected	mg/L	5
Lead	not detected	mg/L	2
Mercury	not detected	mg/L	0.05
Nickel	not detected	mg/L	3
Zinc	0.0438	mg/L	5
Benzene	not detected	ppb	134
Carbon tetrachloride	not detected	ppb	none
Chloroform	not detected	ppb	none
1,4-Dichlorobenzene	not detected	ppb	none
Ethylbenzene	not detected	ppb	380
MTBE (Methyl tert-butyl ether)	not detected	ppb	50
Naphthalene	not detected	ppb	47
Phenol	not detected	ppb	none
Tetrachloroethylene (PERC)	not detected	ppb	20
Toluene	not detected	ppb	74
1,2,4-Trichlorobenzene	not detected	ppb	none
1,1,1-Trichloroethane	not detected	ppb	none
Xylenes (Total)	not detected	ppb	74
PCBs (Total) *	not detected	ppb	1
Total Suspended Solids (TSS)	35.9	mg/L	350
CBOD *	< 4.0	mg/L	none
Chloride *	585	mg/L	none
Total Nitrogen *	0.670	ppm	none
Total Solids *	1500	mg/L	none
* Observed flow << 10,000 gpd, therefore, sa	ampling of this parameter was	not required.	



July 21, 2017

Carol Zurlo HDR One International Blvd., 10 Floor Mahwah, NJ 07495 TEL: (201) 335-9412 FAX

RE: LFNY; East 75th Street, NYC.

Order No.: 1707056

Dear Carol Zurlo:

American Analytical Laboratories, LLC. received 2 sample(s) on 7/13/2017 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report. The results reported herein relate only to the items tested or to the samples as received by the laboratory. This report may not be reproduced, except in full, without the approval of American Analytical Laboratories, LLC and is not considered complete without a cover page and chain of custody documentation. The limits (LOQ) provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report or the data is qualified either on the sample results or in the QC section of the report. This package has been reviewed by American Analytical Laboratories' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

You Beyer

Lori Beyer Lab Director American Analytical Laboratories, LLC.



Workorder Sample Summary

WO#: 1707056 21-Jul-17

CLIENT:HDRProject:LFNY; East 75th Street, NYC.

Lab SampleID	Client Sample ID	Tag No	Date Collected		Date Receiv	ved	Matrix
1707056-001A	SW Pit Inf 7/12/17		7/12/2017 12:3	30:00 PM	7/13/2017	9:50:00 AM	Liquid
1707056-002A	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid
1707056-002B	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid
1707056-002C	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid
1707056-002D	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid
1707056-002E	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid
Field Nam		Field Value	Field Units	Field Analys	st	Field Date	
pH, SM	14500H+ B	8.9	S.U.				
Tempe	rature, SM 2550B	24.2	deg C				
1707056-002F	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid
1707056-002G	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid
1707056-002H	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid
1707056-002I	SW Pit Eff 7/12/17		7/12/2017 1:55	5:00 PM	7/13/2017	9:50:00 AM	Liquid

CERTIFICATIONS NY ELAP - 11418 PA DEP - 68-00573 NJ DEP - NY050 CT DOH - PH-0205	Analytical Test / Information				() 		10		5×1	2		8						Comments / Remarks		SCDOH Action Levels アアクハ P スリ・ス	TCLP Hazardous Waste	NYSDEC EQUIS Cooler Temp: // 0	DATE 7/13/17 PRINTED NAME	DATE PRINTED NAME
	Project Information		STREET	State Zip		1 HOR		Sample Containers Number of Each Preserved Bottle	Остания Остания	7	<u>r</u>	11/16	E					ELECTRONIC DELIVERABLES NYCRR Part 375 - please circle	Unres/ Comm/ Industrial/ Residential/ Res Residential/ PGW	Criteria	CP 51 - Gas / Fuel TCLF	TOGS NYSI	Date 7/18/17 PRINTED NAME 5 2 P RECEVED BY LAB (SIGNATURE) TIME 14 3 NOV	RECEIVED BY LAB (SIGNATURE)
CUSTODY ngdale NY 11735 F) 631-454-8027 nalvitical com		Project Name LFNY	Street EAST 75	City NXC	Project # / Purchase Order #	Sampler's Name / Company 550	Sampler's Signature	Sample Collection	Date Time Glass / Plastic	7/12/17/12390	1355	1320	-					MATRIX CODE	L = Liquid PC = Paint Chip	S = Soil SL = Sludge	O = Oil SD = Solid	W = Wipe M = Misc	NAME 5 5 6 RECE	NAME
OF reet, Farmi 4-6100 (10 Flock	State State Zin				uo	Sample Matrix Code Type	7 C L	7 1	7 1 1					 _	SAMPLE TYPE	G = Grab	C = Composite	B = Blank		117 PRINTED I	PRINTED
G	Client Information	X	ATIONAL BIND	12	Roi ZURIO	335 9451		Sample Information	Client Sample ID	SW FIT INF 7/12/1	SW PIT EFF 7/12/	SW PIT EFF 7/12/17						Turnaround Time (Business Days) d	Days 3 Day RUSH	2 Day RUSH	1 Day RUSH	Please contact laboratory for rush service availability	5	VATURE) DATE TIME
AMERICAN ANAVIORI		Company Name HO	Address		Project Contact CAR	Phone # 201	E-mail	LAB SAMPLE#	(LAB USE ONLY)	100-2502021	1 001	XX I	AA					Standard	7-10 Business Days	5 Day RUSH	4 Day RUSH	Please contact laboratory	RELINQUISHED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)

American Analytical Laboratories, LLC. 56 Toledo Street Farmingdale, New York 11735 TEL: (631) 454-6100 FAX: (631) 454-8027 Website: www.American-	11111111111111111111111111111111111111				COMMENTS	Methanol Preserved Weights HOT Sample Notation Additional Sample Description, etc			REPORT TRANSMITTAL DESIRED: :051)	E FOR LAB USE ONLY	Attempt to Cool ?
	SPECIAL INSTRUCTIONS / COMMENTS: CBOD			ANALYTICAL PARAMETERS					HARDCOPY (extra		Temp of samples Comments:
E WITH	\square)		5210 B	NUMBER OF CONTAINERS GEL DOTTO COTTO	7/12/2017 1:55:00 PM 1 V	4	L. Date: Date: 7-13-17 Time: 1.4D	Date: Time:	2nd BD 📋 3rd BD 📋 will incur surcharges!
HTIN ACCORO	Pace Analytical Services					MATRIX DATI	Liquid 7/12/		Record by Received By	Received By:	Next BD 🛛 2nd BD 🗍 🕅 Note: RUSH requests will incur surcharges ⁱ
est and a book	COMPANY:	ad		20-8436 ENTITE		Bottle Type	200ML PU		Time. Ha	Time:	RUSH
ATORIES	SUB CONTRATOR: PACE ANALYTICAL ADDRESS:	575 Broad Hollow Road	le, NY 11747	10 ¹⁰ (631) 420-8436		Client Sample ID	1707056-0021 SW Pit Eff 7/12/17		Date: 7-0-1 Date:	Date:	Standard
EL ABOR	CONTRATOR: PACE ESS:	S75 Br	Melville, NY 11747	(631) 694-3040		SAMPLE ID	1707056-002I		Relinquished By: Relingtoned By	Relinquished By:	TAT:
litud	SUB CONT ADDRESS:	S ALL	PLONE	ACCOL		ITEM			Relingy	Relinqu	



American Analytical Laboratories, LLC. 56 Toledo Street Farmingdale, New York 11735 TEL: (631) 454-6100 FAX: (631) 454-8027 Website: www.American-Analytical.com

Sample Log-In Check List

Clie	nt Name:	HDR - NJ	Work Order Numb	per: 1707056		RcptNo: 1
Log	ged by:	Lori Beyer	7/13/2017 9:50:00	AM	You Beye	
Com	npleted By:	Lori Beyer	7/13/2017 10:21:33	3 AM	Iori Bluje Iori Bluje Karen Ke	
Rev	iewed By:	Karen Kelly	7/13/2017		Karen Ke	ley
<u>Cha</u>	in of Cus	stody				
1.	Is Chain of	Custody complete	?	Yes 🗸] No 🗌	Not Present
2.	How was th	ne sample delivere	d?	<u>FedEx</u>	N 000744700044	
Log	In			Iracking	<u>9 No.: 803741769311</u>	<u>_</u>
-	Coolers are	e present?		Yes 🗸	No 🗌	
-						
4.	Shipping co	ontainer/cooler in	good condition?	Yes 🗹		_
	Custody se	als intact on shipp	bing container/cooler?	Yes 🖌		Not Present
	No.		Seal Date:	Signed		
5.	Was an att	empt made to coc	I the samples?	Yes 🗸	No 🗌	
6.	Were all sa	amples received a	a temperature of >0° C to 6.0°C	Yes 🔽] No □	
7	Sample(s)	in proper containe	r(s)?	Yes 🗸	No 🗆	
		ample volume for		Yes 🗸	No 🗆	
			d ONG) properly preserved?	Yes 🗸		
-		rvative added to b		Yes	No 🗹	
	·					
11.	Is the head	Ispace in the VOA	vials less than 1/4 inch or 6 mm?	Yes 🗸	No 🗌	No VOA Vials
12.	Were any s	sample containers	received broken?	Yes 🗌] No 🗹	
13.		rwork match bottle		Yes 🗸] No 🗌	
		epancies on chair				
			ed on Chain of Custody?	Yes 🗹		
-		hat analyses were		Yes 🔽		
16.		olding times able to y customer for aut		Yes 🗸	No 🗌	
Spe		dling (if applic				
-		• • • •	repancies with this order?	Yes] No 🗌	NA 🗹
	Perso	n Notified:	Dat	e .		
	By W	,	Via		Phone Fax	In Person
	Rega		Via			
	Ŭ	Instructions:				
10	Additional	-				
-						
0016	er Informati Cooler		Condition Seal Intact S	eal No Se	al Date Signed	By
	Cooler		Conultion Seal Intact S		al Date Signed	Uy



American Analytical Laboratories, LLC. 56 Toledo Street Farmingdale, New York 11735 TEL: (631) 454-6100 FAX: (631) 454-8027 Website: www.American-Analytical.com **Case Narrative**

WO#:1707056Date:7/21/2017

CLIENT:HDRProject:LFNY; East 75th Street, NYC.

Samples were preserved and analyzed using the methods outlined in 40 CFR Part 136 for all parameters. Samples were received with the proper preservation requirements, chilled on ice and each container was properly preserved for each test required.

CBOD was subcontracted to a NYSDOH ELAP Certified laboratory.

pH and temperature were recorded in the field immediately after sample collection.

The test results meet the requirements of the NYSDOH and NELAC standards, except where noted. The information contained in this analytical report is the sole property of American Analytical Laboratories, LLC. or the client for which this report was issued. The results contained in this report are only representative of the samples received. The sample receipt checklist is included as part of this lab report. Conditions can vary at different times and at different sampling conditions. American Analytical is not responsible for the use or interpretation of the data included herein.



American Analytical Laboratories, LLC. 56 Toledo Street Farmingdale, New York 11735 TEL: (631) 454-6100 FAX: (631) 454-8027 Website: www.American-Analytical.com

WO#: **1707056** Date: **7/21/2017**

Definitions:

Sample Result and QC Summary Qualifiers - Level I and Level II Reports ND - Not detected at the reporting limit/Limit of Quantitation

B - The analyte was detected in the associated method blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <5x the blank value as artifact.

E - The value is above the quantitation range

D - Analyte concentration was obtained from diluted analysis or from analysis using reduced sample volume.

J - The analyte was detected below the limit of quantitation but greater than the established Limit of Detection (LOD). There is greater uncertainty associated with these results and data should be considered as estimated.

U - The compound was analyzed for but not detected.

H - Holding time for preparation or analysis has been exceeded.

- S Spike recovery is outside accepted recovery limits.
- R RPD is outside accepted recovery range.
- P Secondary column exceeds 40% difference for GC test.

* - Calibration exceeds method requirement. Due to the large number of analytes for organic testing, the method allows 10% of analytes to have %RSD and/or %D to be >20%.

LOD - Limit of Detection; the lowest level the analyte can be determined to be statistically different from a blank.

LOQ - Limit of Quantitation; the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accuracy.

PQL - Practical Quantitation Limit; the lowest level that can be reliably achieved within the specific limits of Precision and accuracy. Listed on the QC Summary Forms.

m - Analyte was manually integrated for GC/MS.

+ - Concentration exceeds regulatory level for TCLP

CLIENT:	HDR
Lab Order:	1707056
Project:	LFNY; East 75th Street, NYC.
Lab ID:	1707056-001A

Client Sample ID: SW Pit Inf 7/12/17 Collection Date: 7/12/2017 12:30:00 PM Matrix: LIQUID

Date: 21-Jul-17

Certificate of Results								
Analyses	Sample Resu	lt LOD	LOQ Qua	d Units	DF	Date/Time Analyzed		
VOLATILE EPA METHOD 624			E624	E624		Analyst: LA		
Tetrachloroethene	88	0.20	2.0	µg/L	1	7/20/2017 8:08:00 PM		
Trichloroethene	27	0.20	2.0	µg/L	1	7/20/2017 8:08:00 PM		

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



CLIENT:	HDR
Lab Order:	1707056
Project:	LFNY; East 75th Street, NYC.
Lab ID:	1707056-002A

Date: 21-Jul-17

Client Sample ID: SW Pit Eff 7/12/17 Collection Date: 7/12/2017 1:55:00 PM Matrix: LIQUID

Certificate of Results								
Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed	
VOLATILE EPA METHOD 624			E	624	E624		Analyst: LA	
1,1,1-Trichloroethane	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
1,4-Dichlorobenzene	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
Benzene	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
Carbon tetrachloride	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
Chloroform	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
Ethylbenzene	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
Tetrachloroethene	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
Toluene	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
m,p-Xylene	ND	0.40	4.0	U	µg/L	1	7/20/2017 8:38:00 PM	
Methyl tert-butyl ether	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	
o-Xylene	ND	0.20	2.0	U	µg/L	1	7/20/2017 8:38:00 PM	

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



CLIENT:	HDR
Lab Order:	1707056
Project:	LFNY; East 75th Street, NYC.
Lab ID:	1707056-002B

Date: 21-Jul-17

Client Sample ID: SW Pit Eff 7/12/17 Collection Date: 7/12/2017 1:55:00 PM Matrix: LIQUID

Certificate of Results								
Analyses	Sample Result	LOD	LOQ	Qua	l Units	DF	Date/Time Analyzed	
SEMIVOLATILE EPA METH	10D 625		E	625	E625		Analyst: MH	
1,2,4-Trichlorobenzene	ND	0.50	5.0	U	µg/L	1	7/18/2017 11:10:00 AM	
Naphthalene	ND	0.50	5.0	U	µg/L	1	7/18/2017 11:10:00 AM	
Phenol	ND	0.50	5.0	U	µg/L	1	7/18/2017 11:10:00 AM	

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



CLIENT:	HDR
Lab Order:	1707056
Project:	LFNY; East 75th Street, NYC.
Lab ID:	1707056-002C

Client Sample ID: SW Pit Eff 7/12/17 Collection Date: 7/12/2017 1:55:00 PM Matrix: LIQUID

Date: 21-Jul-17

Certificate of Results								
Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed	
PCB'S AS AROCLORS	BY EPA METHOD 608		E	608	E608		Analyst: SB	
Aroclor 1016	ND	0.020	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	
Aroclor 1221	ND	0.020	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	
Aroclor 1232	ND	0.020	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	
Aroclor 1242	ND	0.020	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	
Aroclor 1248	ND	0.020	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	
Aroclor 1254	ND	0.030	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	
Aroclor 1260	ND	0.030	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	
Aroclor 1262	ND	0.030	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	
Aroclor 1268	ND	0.030	0.050	U	µg/L	1	7/18/2017 1:46:00 PM	

....

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American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



CLIENT:	HDR	Client Sample ID:	SW Pit Eff 7/12/17					
Lab Order:	1707056	Collection Date:	7/12/2017 1:55:00 PM					
Project:	LFNY; East 75th Street, NYC.	Matrix:	LIQUID					
Lab ID:	1707056-002D							
Certificate of Results								
Analyses	Sample Result LOD	LOQ Qual Units	DF Date/Time Analyzed					

NON-POLAR MATERIAL BY EPA METHOD 1664A				E1664A			Analyst: JaP
SGT-HEM (Non-Polar Material)	1.02	1.00	2.00	J	mg/L	1	7/20/2017 10:48:02 AM

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



CLIENT:	HDR
Lab Order:	1707056
Project:	LFNY; East 75th Street, NYC.
Lab ID:	1707056-002E

Client Sample ID: SW Pit Eff 7/12/17 Collection Date: 7/12/2017 1:55:00 PM Matrix: LIQUID

Date: 21-Jul-17

		Certin	icate of	r Kes	ults		
Analyses	Sample Result	LOD	LOQ	Qua	l Units	DF	Date/Time Analyzed
FIELD PARAMETERS			F	LD			Analyst:
pH, SM4500H+ B	8.9				S.U.		
Temperature, SM 2550B	24.2				deg C		
CHLORIDE		N	/4500-C	1-B-9	7,-11		Analyst: JaP
Chloride	585	1.30	2.00		mg/L	1	7/18/2017 11:00:00 AM
HEXAVALENT CHROMIUM		N	13500-C	R B-0	9,-11		Analyst: JaP
Chromium, Hexavalent	ND	2.50	10.0	U	µg/L	1	7/13/2017 11:30:00 AM
IGNITABILITY/FLASHPOINT	SW-846 1010		SW1	010A			Analyst: STP
Ignitability	ND	65.0	140	U	°F	1	7/18/2017 10:30:30 AM
TOTAL SOLIDS			M2540	B-97,	-11		Analyst: JaP
Residue, Total	1500	3.00	5.00		mg/L	1	7/14/2017 1:00:00 PM

Certificate of Results

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



CLIENT:	HDR	Client Sample ID:	SW Pit Eff 7/12/17
Lab Order:	1707056	Collection Date:	7/12/2017 1:55:00 PM
Project:	LFNY; East 75th Street, NYC.	Matrix:	LIQUID
Lab ID:	1707056-002F		
	Cer	rtificate of Results	

Analyses	Sample Result	LOD	LOQ Q	ual Units	DF	Date/Time Analyzed
TOTAL SUSPENDED SOLIDS			M2540 D-9	97,-11		Analyst: JaP
Suspended Solids (Residue, Non- Filterable)	35.9	3.00	5.00	mg/L	1	7/14/2017 1:00:00 PM

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



CLIENT:	HDR
Lab Order:	1707056
Project:	LFNY; East 75th Street, NYC.
Lab ID:	1707056-002G

Date: 21-Jul-17

Client Sample ID: SW Pit Eff 7/12/17 Collection Date: 7/12/2017 1:55:00 PM Matrix: LIQUID

		Certif	icate of	Res	ults		
Analyses	Sample Result	LOD	LOQ	Qua	Units	DF	Date/Time Analyzed
NITRATE-NITRITE AS N			E353.2	REV2	.0		Analyst: STP
Nitrogen, Nitrate-Nitrite	0.184	0.0500	0.100		mg/L	1	7/17/2017 11:39:40 AM
TOTAL KJELDAHL NITROG	EN		E351.2	REV2	.0		Analyst: STP
Nitrogen, Kjeldahl, Total	0.486	0.200	0.400		mg/L	1	7/20/2017 3:45:35 PM
TOTAL NITROGEN			TNI	TRO			Analyst: STP
Total Nitrogen	0.670	0.100	0.400		ppm	1	7/20/2017 4:01:58 PM
Kjeldahl Nitrogen	0.486	0.200	0.400		ppm	1	7/20/2017 4:01:58 PM
Nitrate, Nitrogen	0.184	0.0500	0.100		ppm	1	7/20/2017 4:01:58 PM
Nitrite, Nitrogen	ND	0.0500	0.100	U	ppm	1	7/20/2017 4:01:58 PM

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American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



CLIENT:	HDR
Lab Order:	1707056
Project:	LFNY; East 75th Street, NYC.
Lab ID:	1707056-002H

Client Sample ID: SW Pit Eff 7/12/17 Collection Date: 7/12/2017 1:55:00 PM Matrix: LIQUID

Date: 21-Jul-17

		Certif	icate of	f Resi	ilts		
Analyses	Sample Resul	lt LOD	LOQ	Qual	Unit	s DF	Date/Time Analyzed
MERCURY			E245.1	REV3	.0	E245.1 REV3.0	Analyst: JP
Mercury	ND	0.0001500	.000300	U	mg/L	1	7/13/2017 1:34:56 PM
TOTAL METALS			E200.7	REV4	.4	E200.7 REV4.4	Analyst: JP
Cadmium	ND	0.00500	0.0100	U	mg/L	1	7/18/2017 8:48:31 AM
Chromium	ND	0.00500	0.0200	U	mg/L	1	7/18/2017 8:48:31 AM
Copper	ND	0.00500	0.0200	U	mg/L	1	7/18/2017 8:48:31 AM
Lead	ND	0.00500	0.0150	U	mg/L	1	7/18/2017 8:48:31 AM
Nickel	ND	0.00500	0.0200	U	mg/L	1	7/18/2017 8:48:31 AM
Zinc	0.0438	0.00500	0.0200		mg/L	1	7/18/2017 8:48:31 AM

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American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735 Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com





Pace Analytical Services, LLC 575 Broad Hollow Road Melville, NY 11747 (631)694-3040

July 19, 2017

Lori Beyer American Analytical Laboratories 56 Toledo Street Farmingdale, NY 11735

RE: Project: 1079 Pace Project No.: 7023973

Dear Lori Beyer:

Enclosed are the analytical results for sample(s) received by the laboratory on July 13, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

goh Shu

John D. Stanton john.stanton@pacelabs.com (631)694-3040 Project Manager

Enclosures

cc: Phyllis Masi, American Analytical Laboratories Jennifer Mullady, American Analytical Laboratories



REPORT OF LABORATORY ANALYSIS

nalvtica www.pacelabs.com

CERTIFICATIONS

Project: 1079 Pace Project No.: 7023973

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747 New York Certification #: 10478 Primary Accrediting Body New Jersey Certification #: NY158 Pennsylvania Certification #: 68-00350 Connecticut Certification #: PH-0435 Maryland Certification #: 208 Rhode Island Certification #: LAO00340 Massachusetts Certification #: M-NY026 New Hampshire Certification #: 2987

REPORT OF LABORATORY ANALYSIS



ANALYTICAL RESULTS

1079 Project: 7023973 Pace Project No. Collected: 07/12/17 13:55 Received: 07/13/17 11:40 Lab ID: 7023973001 Matrix: Water Sample: 1707056-002l Results Units Report Limit DF Prepared Analyzed CAS No. Qual Parameters 5210B cBOD, 5 day Analytical Method: SM22 5210B Preparation Method: SM22 5210B 07/13/17 16:03 07/18/17 12:05 Carbonaceous BOD, 5 day <4.0 mg/L 4.0 2

REPORT OF LABORATORY ANALYSIS



QUALITY CONTROL DATA

	•					
	Analysis	Description:	5210B cBOD, \$	5 day		
001						
	Mat	trix: Water				
001						
	Blank	Reporting	le.			
Units	Result	Limit	Analyze	d Qualif	fiers	
mg/L	<2	2.0	2.0 07/18/17 10):29		
144988						
	Spike	LCS	LCS	% Rec		
Units	Conc.	Result	% Rec	Limits	Qualifiers	
mg/L	198	178	90	84.5-115.4		
	702389700	1 Dup				
Units	702389700 Result	1 Dup Result	RPD	Qualifier	S	
	mg/L 144988 Units	Analysis 1001 Mai 1001 Units Result mg/L <2 144988 Spike Units Conc.	Matrix: Water 1001 Units Blank Reporting Units Result Limit mg/L <2.0 144988 Spike LCS Units Conc. Result	Analysis Description: 5210B cBOD, 4 1001 Matrix: Water 1001 Blank Reporting Units Result Limit Analyze mg/L <2.0 2.0 07/18/17 10 144988 Spike LCS LCS Units Conc. Result % Rec	Analysis Description: 5210B cBOD, 5 day Matrix: Water Matrix: Water Units Result Limit Analyzed Quali mg/L <2.0 2.0 07/18/17 10:29 144988 Spike LCS LCS % Rec Units Conc. Result % Rec Limits	Analysis Description: 5210B cBOD, 5 day Matrix: Water Matrix: Water Units Result Limit Analyzed Qualifiers mg/L <2.0 2.0 07/18/17 10:29 144988 Spike LCS LCS % Rec Units Conc. Result % Rec Limits Qualifiers

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

QUALIFIERS

Project: 1079 Pace Project No.: 7023973

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS



QUALITY CONTROL DATA CROSS REFERENCE TABLE

 Project:
 1079

 Pace Project No.:
 7023973

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7023973001	1707056-0021	SM22 5210B	31338	SM22 5210B	32021

REPORT OF LABORATORY ANALYSIS

0F: 1 ADDRESS verican Analytical Laboratories, LLC. 56 Toledo Street Farmingdale, New York 11735 TEL: (631) 454-6100 FAX: (631) 454-8027 Website: www.American-	71341 JHCAL CON					OXMENTS Metharol Preserved Weights HOT Sample Description, Additional Sample Description, etc	
ORD Omega COCID 1079 PAGE. 1 WO#:7023973	SPECIAL INSTRUCTIONS / COMMENTS:	CBOD)	ANALYTICAL PARAMETERS	M5210 B		
CHAIN OF CUSTODY RECORD	Pace Analytical Services	/				NUMBER OF CONTAINERS DATE COLLECTED DATE COLLECTED	Liquid 7/12/2017 1:55:00 PM 1
CHAN CHAN CHAN				8436 EMAIL:		Bonle Type	500ML PU
ATORIES	SUB CONTRATOR PACE ANALYTICAL COMPANY:	575 Broad Hollow Road	le, NY 11747	0 FAX (631) 420-8436		Client Sample ID	1 1707056-0021 SW Pit Eff 7/12/17
AMERICAN ANALVIIC	CONTRATOR: PACE		CITY. STATE, ZIP. Melville, NY 11747	PHONE: (631) 694-3040	ACCOUNT ⊭:	SAMPLE ID	1707056-002I
	SUB (ADDRESS	CITY.	NOH4	ACCO	ITEM	-

Relarquished By, A. Land	Date: 7-0-1-1	1 11. da	Recorded	Ster. 1	. 7-13-17 Time 11:40	CH: //	REPORT TRANSMITTAL DESIRED:	
Reinnfaßhed Bki	Date:	Time:	Received By:		Date:	Time	C HARDCOPY (extra cost) C FAX C EMAIL	ONLINE
Relınquished By:	Date:	Time:	Received By:	H	Date:	Time;	FOR LAB USE ONLY	
TAT:	Standard	RUSH	H Next BD	2nd BD	3rd BD		Temp af samples $\bigcirc \sigma$ Attempt to Cool?	1
			Note: RUSH requests will incur surcharges!	its will incur surch	3çsşî		CONTINUE.	

Page 7 of 8

07	S	ample	Condit	ion Upon Receipt	
Pace Analytical*				WO#:7023973	
Concertational Collections y	Client	Name:			
		Amai	1.E(PM: JDS Due Date: 07/24/17	
Courier: [] Fed Ex[] UPS []USPS4	Client []Com	mercial [] [Pace Dt	CLIENT: AMAN-ECO	
·					
Tracking #: Custody Seal on Cooler/Box Present: [Yes XNo			Seals Intact: Yes No	
Packing Material: Bubble Wrap Bub			ie []Dthe	r Type of Ico: Wet Blue None	
Thermometer Used: TH092		tion Facto		Samples on ice, cooling process has be	egun
Cooler Temperature (*C): 521		Temperatu			
Temp should be above freezing to 6.0°C					
USDA Regulated Soll (TN/A, water san	npie)			Date and Initials of person examining contents: OK	INC
Did samples originate in a quarantine zone within	the United State	s: AL, AR, CA	۱, Fl., GA, IC	D, LA, MS, NC, Did samples orignate from a foreign source (in including Hawaii and Puerto Rico)? [] Yes	
IN NY OK (NO SC TNI TY or VA (check man	2 YES	SI I NO		ist (F-LI-C-010) and include with SCUR/COC paperwork.	Q 110
If Yes to either questio	n, nii out a Ro	guiatoù at	I OTICOM	COMMENTS:	
Chain of Custody Present:	Tiyes			1.	
Chain of Custody Filled Out:	DYes			2.	
Chain of Custody Relinquished:	DYes	DNo		3,	
Sampler Name & Signature on COC:	UlYes	∏No	DN/A	4.	
Samples Arrived within Hold Time:	TYes	□No		5.	
Short Hold Time Analysis (<72hr):	IYes	[]No		6.	
ush Turn Around Time Requested:	ElYes	INO	_	Z	
sufficient Volume: (Triple volume provided for MS	MSD THes	UNo		0.	
correct Containers Used:	CYes	DNo		9.	
-Pace Containers Used:	TYes	□No	-	*	
containers Intact:	Dyes	[]Nø		10.	
iltered volume received for Dissolved tests	DYes	⊡No	EIN/A	11. Note if sediment is visible in the dissolved container.	
ample Labels match COC:	(Pares	□No		12.	
-Includes date/lime/ID/Analysis Matrix: S					
Il containers needing preservation have been cho	CKed DYes	ElNo	ETHUA		
H paper Lot #			1	Sample #	
Il containers needing preservation are found to be ompliance with EPA recommendation?	e in	.4	1	Compron	
INO1, H2SO4, HCI, NaOH>9 Sullide,	□Yes	□No	TINA		
AOH>12 Cyanide) xceptions: VOA, Coliform, TOC/DOC, Oil and Gr	easo,		4	Initial when completed: Lot # of added preservative: Date/Time preservative:	vative added
RO/8015 (water). er Method, VOA pH is checked alter analysis				Timat with composition, Corr of stocks production, Corr of stocks production,	
		[]blo	AMA	14.	
amples checked for dechlorination:	□Yes	ENo	- Start	Positive for Res, Chlorine? Y N	
esidual chlorine strips Lot #		۵No		15.	
eadspace in VOA Vials (>6mm):	□Yes □Yes		DINA	16.	
ip Blank Present	∐Yes		EIN/A		
rip Blank Custody Seals Present ace Trip Blank Lot # (if applicable):					
lient Notification/ Resolution:				Field Data Required? Y / N	
				Date/Time:	
erson Contacted:					

* PM (Project Manager) review is documented electronically in LIMS.



Vincent Sapienza, P.E. Acting Commissioner

Pamela Elardo, P.E. Deputy Commissioner

Bureau of Wastewater Treatment 96-05 Horace Harding Expressway – 2nd Floor Corona, NY 11368

Tel. (718) 595-6924 Fax (718) 595-4084 Henningson, Durham & Richardson Architecture and Engineering, P.C. 1 International Boulevard, 10th Floor Suite 1000 Mahwah, NJ 07495-0027 Attn: Michael P. Musso, P.E.

Re: Groundwater Discharge, Lycee Francais de New York File # C-3274

Dear Mr. Musso:

This Letter of Approval is an extension of the Letter of Approval issued on August 25, 2016.

This is in response to the August 9, 2017 submission requesting permission to discharge up to **6,000 gallons per day (gpd)** of groundwater generated at 505 East 75th Street, New York, NY 10021 (under a New York State Department of Environmental Conservation Site Management Plan). The groundwater will be treated through bag filters and granular activated carbon units, per provided schematic and information, before discharging to the on-site combined sewer at the above mentioned property. The sewer leads to the combined sewer located at 75th Street between York Avenue and the FDR Drive in New York, NY.

Based upon the information, schematic and analytical data submitted, you are hereby conditionally authorized, to discharge up to 6,000 gpd of the groundwater, treated through the above system, per provided schematic and information, as specified in your submissions, for a period of one year, to the combined sewer at the above mentioned location. This Letter of Approval shall expire at midnight on August 20, 2018.

This conditional approval, however, is subject to your obtaining a groundwater discharge Approval, specifying allowable flow rates, from the Chief of Permitting and Compliance, Bureau of Water and Sewer Operations, if discharges are to exceed 10,000 gpd. You are also required to follow manufacturer specifications for the operation and maintenance of the selected equipment. This Letter of Approval is contingent upon the permittee's compliance with any other Federal, State or Local laws applicable to the permitted activity.

<u>Under no circumstances shall muddy groundwater be discharged into the public sewer.</u>

August 21, 2017

Payment shall be made to and permit obtained from the Bureau of Customer Service for groundwater discharge into the New York City Wastewater System in accordance with the Water and Wastewater Rate Schedule established by the New York City Water Board.

You are required to hold the groundwater to the maximum extent practicable during heavy wet weather events. Refer to File # C-3274 in any correspondence to this office.

This Letter of Approval is an Order of the Commissioner of the Department of Environmental Protection. Please be advised that failure to comply with this Letter of Approval may result in the issuance of Notices of Violation (returnable to the New York City Environmental Control Board) and/or revocation of the Letter of Approval. Notices of Violation carry penalties of up to \$10,000 a day, per violation.

If you have any questions concerning this matter, please contact Sean Hulbert, Assistant Chemical Engineer, at (718) 595-4715.

Sincerely,

Frances Leung, P.E., Chief Industrial Inspections and Permitting Section

Appendix D

Completed Monitoring Forms (Form G)

This form is to be completed by LFNY staff on a weekly basis.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	eb. 7th 2015	-
Name:	any Alvarado	-
Company:	Lyce Trancais de New York	_
Position/Title:	Chief Engineer	-

Location	Inspec	ted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			normal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: YAN Est. Flow (gpm)*: 89pm
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: YN
Flow meter readings [Periodic]	Yes	No	normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:

hanged - out 100 and 50 micron Dags for the S. U. pit room area Days aren

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion.

Underdrain System Cleanout Monitoring

74 2015 Name: Jany 7th Date:

Kamus ENTIQUE Alvarado

Cleanout No.	Location	Observation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	βQ	11.75	No
3a	SW pit room	_	" " " "	ON
3b	SW pit room		Flowing	445
7	Storage area off of music room		0,00	No
8	Gym storage room		<i>L</i> (-
9a	Large gym		17 "	
96	Large gym		,, (1	
10a	Large gym		15.15	
10b	Large gym		,5	
11a	NE stairwell		Dra	
11b	NW gym storage	7	d d	1

T.O.C. - top of cleanout pipe

This form is to be completed by LFNY staff on a weekly basis.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	March -	7 th	2015				
Name:	Danny	Alvar	ado	_			
Company:	Lycee	Fra	ancals	de	New	lovk	
Position/Title:	ch;	ef é	inginee	r.			-

Location	Inspec	ted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly			
Outside Contractors: At Time of Work]			normal
Underdrain System Cleanouts	(Yes)	No	Complete and attach the
[Bi-monthly minimum]			cleanout log form.
Southwest Foundation Pit	(Yes)	No	Flow: (Y) N
[Weekly, minimum]			Est. Flow (gpm)*: 8 3 pm
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow Y N
Flow meter readings	Yes	No	
[Periodic]			normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:

Changed 100 and 50 micron ~ 01 west er. TR roum.

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion.

Underdrain System Cleanout Monitoring

5100 74 March Date:

Name: Warry Bluarach / Enrique Ranos

	LOCATION	Ubservation of water / moisture on floor / floor slab?	Deptn to water (inches below T.O.C.)	Piping?
2	Small gym	00 N	11 1/4	No
3a	SW pit room		25 3/4"	ON
3b	SW pit room		flowing.	Cap
7	Storage area off of music room) o (o	No
∞	Gym storage room		"", "	
9a	Large gym		17 «	
96	Large gym		11/4	
10a	Large gym		, S.	
10b	Large gym		15"	
11a	NE stairwell		* Duce Pig	
11b	NW gym storage	>	, ind	->

T.O.C. - top of cleanout pipe

This form is to be completed by LFNY staff on a weekly basis.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	Apr: 13h, 2015
Name:	Danny Awarado
Company:	hycee trancais de N.Y.
Position/Title:	Chief Engineer.

Location	Inspect	ted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			normal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: Ø N Est. Flow (gpm)*: 8
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y N
Flow meter readings [Periodic]	Yes	No	noo mal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:

50 mizron bays for 100 and alleri west pit room area. Se.

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion.

Underdrain System Cleanout Monitoring

134 2015 Apr. 1 Date:

Danny Alvarado, Enrique Ramos

Name:

	LUCAHOII	Observation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	ηo	", ", II	No No
3a	SW pit room		"Y, SC	N0
3b	SW pit room		Flowing	465
7	Storage area off of music room		р ,,0С	NP
8	Gym storage room		" "/. L I	
9a	Large gym		., 11	
96	Large gym			
10a	Large gym		. 4.51	
10b	Large gym		<i>ر</i> ، , , , , , , , , , , , , , , , , , ,	
11a	NE stairwell		Ary C	->
11b	NW gym storage	~	Ч ^с ч,	

T.O.C. - top of cleanout pipe

This form is to be completed by LFNY staff on a weekly basis.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	May 2nd.	2015	· · · · · · · · · · · · · · · · · · ·	
Name:	Dany	gluarado		
Company:	ky cee	Francels	de New	forte
Position/Title:	ch	sef Build	ing Engineer	Į

Location	Inspec	ted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly			
Outside Contractors: At Time			1
of Work]	$\langle \rangle$		normal
Underdrain System Cleanouts	Yes	No	Complete and attach the
[Bi-monthly minimum]	~		cleanout log form.
Southwest Foundation Pit	(Yes)	No	Flow: Y / N
[Weekly, minimum]			Est. Flow (gpm)*: 8
Northeast Foundation Pit	(Yes)	No	Flow: X N
[Weekly, minimum]			
Flow meter readings	Yes	No	
[Periodic]			
			normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:

.2 cut 100 and 50 micron Charged for the South west ejocker alea. oom

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion, **Underdrain System Cleanout Monitoring**

Date: a Miny 2nd. 2015

Name: Janny Alvarade / Enrique Ramos

Cleanout No.	Location	Observation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
5	Small gym	No	" 9, 11	No
3a	SW pit room		" h/s SC	ŃO
3b	SW pit room		Flourac	(an
7	Storage area off of music room		0 C	NO
8	Gym storage room		"e/, L 1	_
9a	Large gym		" "/c 9/	
96	Large gym			
10a	Large gym		" 1/ 5/	
10b	Large gym		. 51	
11a	NE stairwell		E	
11b	NW gym storage		e e e e e e e e e e e e e e e e e e e	>

T.O.C. - top of cleanout pipe

This form is to be completed by LFNY staff on a weekly basis.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	Ju	ie 12	1- 5	2015		
Name:	Dan	14 Alu	ara	lo	_	
Company:	h.	1 cee	Fr	ancals	de	New York
Position/Title		Chio	f e	engineer		

Location	Inspe	cted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly			
Outside Contractors: At Time of Work]			nor mal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y/ N Est. Flow (gpm)*: 8 gpm
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: W N
Flow meter readings [Periodic]	Yes	No	hormal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:

micron bass anger 100 50 and South _____ the pit room wes-

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion.

Underdrain System Cleanout Monitoring

(-2015 5 5 JUME 6 Date:

Kaluas	
Eurique	
Alvarado 1	
Wanay	
Name: _	

Cleanout Ivo.	LOCATION	water / moisture on floor / floor slab?	(inches below T.O.C.)	Piping?
2	Small gym	No	11 3/4 "	202
3a	SW pit room		25.	02
3b	SW pit room		Flow	4=>
7	Storage area off of music room		20 1/4	20
8	Gym storage room		12 1/1	
9a	Large gym		n/. C1	
96	Large gym		Dry	
10a	Large gym		1512	
10b	Large gym		5	
11a	NE stairwell	>	In	>
11b	NW gym storage		r A	

This form is to be completed by LFNY staff on a weekly basis.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	Joly 29, 2015	
Name:	Danny Alvavado	
Company:	hycee Francais de New York	_
Position/Title:	chief Engineer	

Location	Inspec	ted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly			
Outside Contractors: At Time of Work]			normal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: Ø / N & Est. Flow (gpm)*:
Northeast Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: DN
Flow meter readings [Periodic]	Yes	No	normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:

changed and 100 and 50 micron filters. South west pitroom area.

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion. Underdrain System Cleanout Monitoring

2015 4 bC 1. Date:

0 1 . -

Cleanout No.	Location	Observation of water / moisture on floor / floor slah?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	No.	× 1/, 11	
3а	SW pit room	-	infe SC	
3b	SW pit room		Flow W 3	Sall
7	Storage area off of music room		, oc	4
œ	Gym storage room		17 1/2	
9a	Large gym		. 21	
96	Large gym		2 2 2 2 2 2 2 2	
I0a	Large gym		1516	
10b	Large gym			
lla	NE stairwell		e e	
11b	NW gym storage	>	Art.	

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	iept.	19th	2015			
Name:	Janny	Alu	arado			
Company:	hyce	e F	TANCAIS	de	New	fork
Position/Title:		Ch.ef	Buildin	IS E	15 Meet	

Location	Inspec	cted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly			
Outside Contractors: At Time of Work]	1.0		NUTMA
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: ()/N Est. Flow (gpm)*: 8gpm
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y N
Flow meter readings [Periodic]	Yes	No	
			Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

changed out 100 and 50 micron filter bags for the South west pid room aven ejector.

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion...

Underdrain System Cleanout Monitoring

2000 19 M Stat. Date:

Kames ENFLOVE Alvaredo Danny Name:

	-ocation	Ubservation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	N6	11 3/4	NO
3a	SW pit room		""/c SC	No
3b	SW pit room		F) 04. 24 8	Ser
7	Storage area off of music room		30 1/4	NO NO
∞	Gym storage room		17 14 "	
9a	Large gym		" //	
9b	Large gym		1/ 1/1	
10a	Large gym		15 1/21	
10b	Large gym		, 5/	
11a	NE stairwell		3	
11b	NW gym storage	>	A.	>

top of cleanout pipe 1.0.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:(Och qu	2015	4				
Name:	sanny	Alvas	rado	-			
Company:	hycre	244	4	de	New	York	
Position/Title:	Cl	ivef	Buildi	J	Gasine	oet	

Location	Inspec	ted	Findings
Carbon Treatment System	Yes	No	8
[LFNY Staff: Weekly			
Outside Contractors: At Time			(
of Work]	10		pormal
Underdrain System Cleanouts	Yes	No	Complete and attach the
[Bi-monthly minimum]			cleanout log form.
Southwest Foundation Pit	Yes	No	Flow: Y / N
[Weekly, minimum]			Est. Flow (gpm)*: 8
Northeast Foundation Pit	Yes	No	Flow: (P/N
[Weekly, minimum]			
Flow meter readings	Yes	No	
[Periodic]			1
			normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

charged out 100 and 50 micron South west pit ream area. Under treatment

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion.

Underdrain System Cleanout Monitoring

Sice 20 50 Date:

Janny Alvarado / Enrique Ramos

Name:

Cleanout No.	Location	Observation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	N 6	1, 11	NC
3a	SW pit room		", ", SC	0 رم
3b	SW pit room		Flouind	221
7	Storage area off of music room		η/ς, DC	N/O
8	Gym storage room		12"	
9a	Large gym)7 //".	
9b	Large gym		, 16 31	
10a	Large gym		ر ۲5 "	
10b	Large gym		14 3/4 "	\rightarrow
11a	NE stairwell		er s	J.S.
11b	NW gym storage	>	Dra	25

T.O.C. - top of cleanout pipe

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	November.	Doth	2015	
Name:	Danny	Alvary	rdo	
Company:	hypee	Franc	als de	New York
Position/Tit	tle: Ch	iel Engi	n-e-er	1

Location	Inspec	ted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly			
Outside Contractors: At Time of Work]			normal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y/N Est. Flow (gpm)*: ¥ 3 pm
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: OP N
Flow meter readings [Periodic]	Yes	No	normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Chang 50 Mizron bags S.W. Cr p recom ere

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion. **Underdrain System Cleanout Monitoring**

Date: Nousmber JOH. Dei S

Name: Danny Alvarade, Enrique Ramos

		water / moisture on floor / floor slab?	(inches below T.O.C.)	Piping?
2	Small gym	On	11.75	en
3a	SW pit room			07
3b	SW pit room		Fleme to 6	Sel
7	Storage area off of music room		0,90	C N
8	Gym storage room		17 '6"	-
9a	Large gym		17 16	
9b	Large gym		17 1/4 "	
10a	Large gym		"4.51	
10b	Large gym		,2,	
11a	NE stairwell		2	>
116	NW gym storage			

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G	Inspection Checklist -	Groundwater	Management	System
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This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	2c. 74	2015	-1		
Name:	anny_	Alvava	do	-	1 1
Company:	hy cree	Trancais	de	Nen	YOK
Position/Title:	Chief	Buildin	1g E	ng neer	r

Location	Inspe	cted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			Normal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y/N Est. Flow (gpm)*: 89, N
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow Y N
Flow meter readings [Periodic]	Yes	No	normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

50 100 ano Area.

This form is to be completed by LFNY staff once every two weeks. It should by faxed to HDR (845-735-7466) upon completion,

Underdrain System Cleanout Monitoring

Dec. Anny Name: Date:

SIDE

5

	Observed flow in Piping?	٩M	U M	yes) NU	-	
S	Depth to Water (inches below T.O.C.)	111/2"	26"	Flowing	" " " "	, 9, 11	
are do and Enrique Ramos	Observation of water / moisture on floor / floor slab?	NC					
Aburedo and	Location	Small gym	SW pit room	SW pit room	Storage area off of music room	Gym storage room	
Name: Danny	Cleanout No.	2	3a	3b	L	8	

" hT.Z.

Large gym

9a

Large gym

6

Large gym

10a

15.6

:51

M/. LI

and

A

T.O.C. - top of cleanout pipe

NW gym storage

11b

NE stairwell

lla

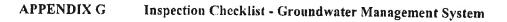
Large gym

10b

Stepher	Stephen Belloni			
Cleanoul No.	Location	Observation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	No	11	No
3a	SW pit room		25 1/2 "	No
3b	SW pit room		Ringing Hour	200
7	Storage area off of music room		North Change	No No
8	Gym storage room		1.6	
9a	Large gym			
96	Large gym		-	
10a	Large gym		15 1/2	
10b	Large gym	\	5	
11a	NE stairwell		Dry	- -
11b	NW gym storage	P	Dur	

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN



This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	- 97-1	~			
Name: <u>Step</u>		Belloni	1	Enrique	Ramas
Company:	-yake	Francais	1		
Position/Title:	Enginee	r Super	Vis	05	
)	1			1.1111111111111111111111111111111111111

Location	Inspe	ected	Findings
Carbon Treatment System	(Yes)	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			Normal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes)	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(res)	No	Flow: (Y) N Est. Flow (gpm)*: 8.4
Northeast Foundation Pit [Weekly, minimum]	(Yes)	No	Flow:(Y/ N
Flow meter readings [Periodic]	(Yes)	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Underdrain System Cleanout Monitoring

Date: 2-23-46 Name: Stephen Bellon: / Enrique Rames

	Location	Observation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	Na		14
3a	SW pit room		1511.	VIV
3b	SW pit room		d L . Q	000
7	Storage area off of music room		WONING FLOW	VE S Alo
∞	Gym storage room			n //
9a	Large gym		11. 1/4	
9b	Large gym		ſ	
10a	Large gym			
10b	Large gym		* 0	1
lla	NE stairwell	/		>
11b	NW gym storage	~	10	

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date: 3-19-16
Name: <u>Stophen Bellen</u>
Company: Trancists
Position/Title: <u>E.h.g. new Superviser</u>

Location	Inspe	cted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			Normal
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(Yes)	No	Flow:(Y)/N Est. Flow (gpm)*: Q
Northeast Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: Y/N
Flow meter readings [Periodic]	Yes	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Underdrain System Cleanout Monitoring

3-13-16 Date:

, NT	and the second s
Cleanout No. Location	Observation of

Cleanout No.	Location	Observation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	//e	e/, 11	No
3a	SW pit room		e1.55	N.a.
3b	SW pit room		Burning The	No c
7	Storage area off of music room		De lour	Ma
ø	Gym storage room		6	
9a	Large gym		<u>[</u>	
96	Large gym			
10a	Large gym		1	
10b	Large gym		15	
11a	NE stairwell		Nr.	1
11b	NW gym storage	>	14	>

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	-16	
Name:	Stephen	Belleni
Company:	Lycee	Francais
Position/Title:	Enginee	: Supernoor

Location	Inspe	cted	Findings
Carbon Treatment System	(Yes)	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			Normal
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: (Y) N Est. Flow (gpm)*: 8 5
Northeast Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: (Y) N
Flow meter readings [Periodic]	(Yes)	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Observed flow in Piping? (inches below T.O.C.) Depth to Water Ĉ, \mathcal{I}^{1} 1 2.1 water / moisture on floor / floor slab? Observation of 111 Storage area off of Gym storage room Underdrain System Cleanout Monitoring Location NW gym storage ALS . LAS SW pit room SW pit room music room NE stairwell Small gym Large gym Large gym Large gym Large gym T.O.C. - top of cleanout pipe 1 1 Cleanout No. 10b lla 11b 10a 3a 3b 9b 9a \sim 5 ∞ Name: Date:

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	5-16
Name:	stephen Belleni
Company:	Lycee Francais
Position/Title:	Engineer Supervisor

Location	Inspe	ected	Findings
Carbon Treatment System [LFNY Staff: Weekly Outside Contractors: At Time of Work]	T	No	Normal
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: (y) / N Est. Flow (gpm)*: 8 3
Northeast Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: (Y)/ N
Flow meter readings [Periodic]	(Yes)	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:6	-16	
Name:	Stephen Beiloni	
Company:	Lycee Francais	4
Position/Title:	Engineer Supervisor	

Location	Inspe	ected	Findings
Carbon Treatment System	(Yes)	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			Normal
Underdrain System Cleanouts [Bi-monthly minimum]	(Te)	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(res)	No	Flow: ()/N Est. Flow (gpm)*: 8.5
Northeast Foundation Pit [Weekly, minimum]	Cres	No	Flow: () / N
Flow meter readings [Periodic]	(Yes)	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Underdrain System Cleanout Monitoring

Date: 0/11/6

Name: Stephen Bellon.

creation No.	Location	Observation of water / moisture on floor / floor slab?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	0.1	11.75	24
3a	SW pít room		21/2	00
3b	SW pit room			Vac
7	Storage area off of music room		DO IT STOR	C. 2
×	Gym storage room		511 61	3 7
9a	Large gym		. [1
96	Large gym		1	
10a	Large gym		15 14	
401	Large gym			
lla	NE stairwell	1		11
11b	NW gym storage	>	A North	>

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:
Name: Stephen Belloni
Company: Lycee Francais
Position/Title: Engineer Supervisor

Location	Inspe	ected	Findings
Carbon Treatment System	(Yes)	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]		ŧί	Normal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(Yem)	No	Flow: Ø/N Est. Flow (gpm)*: 8
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: ()/N
Flow meter readings [Periodic]	(Yes)	No	Normal .

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Observed flow in Piping? No 110 es es 10 (inches below T.O.C.) Runing Flow Depth to Water 17.25 200 15.25 1.5 Dry してい E 1 5 water / moisture on floor / floor slab? Observation of 0 Storage area off of Gym storage room Underdrain System Cleanout Monitoring Location NW gym storage Belloni SW pit room SW pit room NE stairwell music room Small gym Large gym Large gym Large gym Large gym 2-6-1 Stephen T.O.C. - top of cleanout pipe Cleanout No. lla 116 10a 10b 3b 3a <u>9a</u> 96 2 ~ 00 Name: Date:

b. .

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	8-16
Name:	Stephen Bellen
Company:	Lycee Francis
Position/Title:	Engineer Supervisor

Inspe	ected	Findings
(Yes)	No	Normal
Yes	No	Complete and attach the cleanout log form.
(Yes)	No	Flow: () / N Est. Flow (gpm)*: 8
Tes	No	Flow: (Y) N
(Yes)	No	Normal
	(Yes) (Yes) (Yes) (Yes)	Yes No Yes No

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Observed flow in Piping? No No Ko Running Flow 20 3/4 (inches below T.O.C.) 2/ 26 17.25 Depth to Water 15.5 5 Urv こう water / moisture on floor / floor slab? Observation of NO Gym storage room Storage area off of NW gym storage Location **Underdrain System Cleanout Monitoring** 8-27-16 Staphen Belloni SW pit room SW pit room NE stairwell music.room Large gym Large gym Small gym Large gym Large gym LO.C. - top of eleanout pipe Cleanout No. l la qH 10b 10a <u>9a</u> 96 3b За 8 2 ~ Name: Date:

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date: 9-16	
Name:	
Company: Lycec Francas	
Position/Title: Engineer Superviser	

Location	Inspe	ected	Findings
Carbon Treatment System	(Yes)	No	A. 1
[LFNY Staff: Weekly	i		Normal
Outside Contractors: At Time of Work]			
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form,
Southwest Foundation Pit [Weekly, minimum]	(res)	No	Flow: ()/ N Est. Flow (gpm)*: 8, 1
Northeast Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: W/N
Flow meter readings [Periodic]	(°es)	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Observed flow in Piping? Vo les No Nc 25.75 Running Flow 20.5 17.25 17.25 17.35 17.35 (inches below T.O.C.) Depth to Water 11.5 15 PTU F water / moisture on floor / floor slab? Observation of C 9-17-16 Stephen Bellani Storage area off of music room Gym storage room Underdrain System Cleanout Monitoring Location NW gym storage SW pit room SW pit room Small gym NE stairwell Large gym Large gym Large gym Large gym T.O.C. - top of cleanout pipe Cleanout No. 10a 2 **3a** 3b lla 10b 11b~ 96 ∞ <u>9a</u> Name: Date:

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	0/11/16	
Name:	Stephen Bellon	
Company:	Lycee Francais	
Position/Title:	Engineer	

Location	lusp	ected	Findings
Carbon Treatment System	Yes	No	6
[LFNY Staff: Weekly Outside Contractors: At Time of Work]		\sim	
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	(No)	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y/N Est. Flow (gpm)*: 8
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y/N
Flow meter readings [Periodic]	Yes	No	0483380

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Observed flow in Piping? 100 les (inches below T.O.C.) Depth to Water Running 4/1 (1) 15 17.25 5 20,06 90 んこう L 5 water / moisture on floor / floor slab? Observation of 100 Gym storage room Storage area off of Location NW gym storage **Underdrain System Cleanout Monitoring** SW pit room SW pit room NE stairwell music room Relloni Large gym Small gym Large gym Large gym Large gym T.O.C. - top of cleanout pipe Stephen 1011 Cleanout No. 11b 10b Ila 10a 3a 3b 9a 96 0 ~ 00 Name: Date:

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	1-16				
Name:	Stephen	Belle	<u>Ωι</u>		
Company:	Lycee	França	15		
Position/Title:	- Ene	fincer	Supervixe	с.	

Location	Inspe	ected	Findings
Carbon Treatment System	Yes	No	Λ.
[LFNY Staff: Weekly	1	19	Normal
Outside Contractors: At Time of Work]			
Underdrain System Cleanouts [Bi-monthly minimum]	Yes)	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Te	No	Flow: (y)/ N Est. Flow (gpm)*: 8.2
Northeast Foundation Pit [Weekly. minimum]	80	No	Flow: (Y) N
Flow meter readings [Periodic]	(Yes)	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	
Name:Bellooi	
Company: Lycre Francis	
Position/Title: Engineer Supervisor	

Location	Inspe	eted	Findings
Carbon Treatment System	Yes	No	1
[LFNY Staff: Weekly Outside Contractors: At Time	*		Wormal
of Work] Underdrain System Cleanouts [Bi-monthly minimum]	(Yeg	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(Ten)	No	Flow: (Y) / N Est. Flow (gpm)*: 83
Northeast Foundation Pit [Weekly, minimum]	(Yen)	No	Flow: Y N
Flow meter readings [Periodic]	Yes	No	- Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Observed flow in Piping? ON 110 485 0/0 (inches below T.O.C.) Running Flow 35 1/2:0 Depth to Water 14/1 4 14/1 91 e1, 91 C 12,11, 11 1 1000 Ē うい $\underline{\Gamma}$ water / moisture on floor / floor slab? Observation of 5 Storage area off of Gym storage room Underdrain System Cleanout Monitoring Location NW gym storage SW pit room SW pit room Small gym music room NE stairwell Large gym Large gym Large gym Large gym Changer 13/3/16 T.O.C. - top of cleanout pipe Cleanout No. 10a 10b 11a 116 3b 3a 2 9a 96 5 00 Name: Date:

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	- 17	
Name:	Stephen Bellon	
Company:	Lyce Frances	
Position/Title:	Engineer Supervisor	

Inspected		Findings
Yes	No	
		Normal
Yes	No	Complete and attach the cleanout log form.
(re)	No	Flow: () / N Est. Flow (gpm)*: () /
(Yes)	No	Flow: (Y)/N
(Yes)	No	Normal
	Yes Yes Yes Yes	YesNoYesNoYesNoYesNo

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	2-17	
Name:	Stechen Belleni	
Company:	Lycee Francos	
Position/Title:	Engineer Supervisor	

Location	Inspe	cted	Findings	
Carbon Treatment System	Yes	No	A 1	
[LFNY Staff: Weekly	f.		Normal	
Outside Contractors: At Time of Work]				
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form.	
Southwest Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: (Y) N Est. Flow $(gpm)^*$: \Re_{i}	
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: (Y) N	
Flow meter readings [Periodic]	(Yes)	No	Normal	

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Observed flow in Piping? NO NO 110 fes (inches below T.O.C.) 5/1 51 25.12 Depth to Water 20 ح/، 11 1-51 5 Run 20 [] 9 C water / moisture on floor / floor slab? Observation of 01 2/17/17 Stephen Bellon/Enrigue Ramos Underdrain System Cleanout Monitoring Storage area off of music room Gym storage room Location NW gym storage. SW pit roum S.W pit room Small gym Large gym NE stairwell Large gym Large gym Large gym T.O.C. - top of cleanout pipe Cleanout No. 2 3a 9E 1 00 92 96 10a 100 11a Date: Name: 116

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

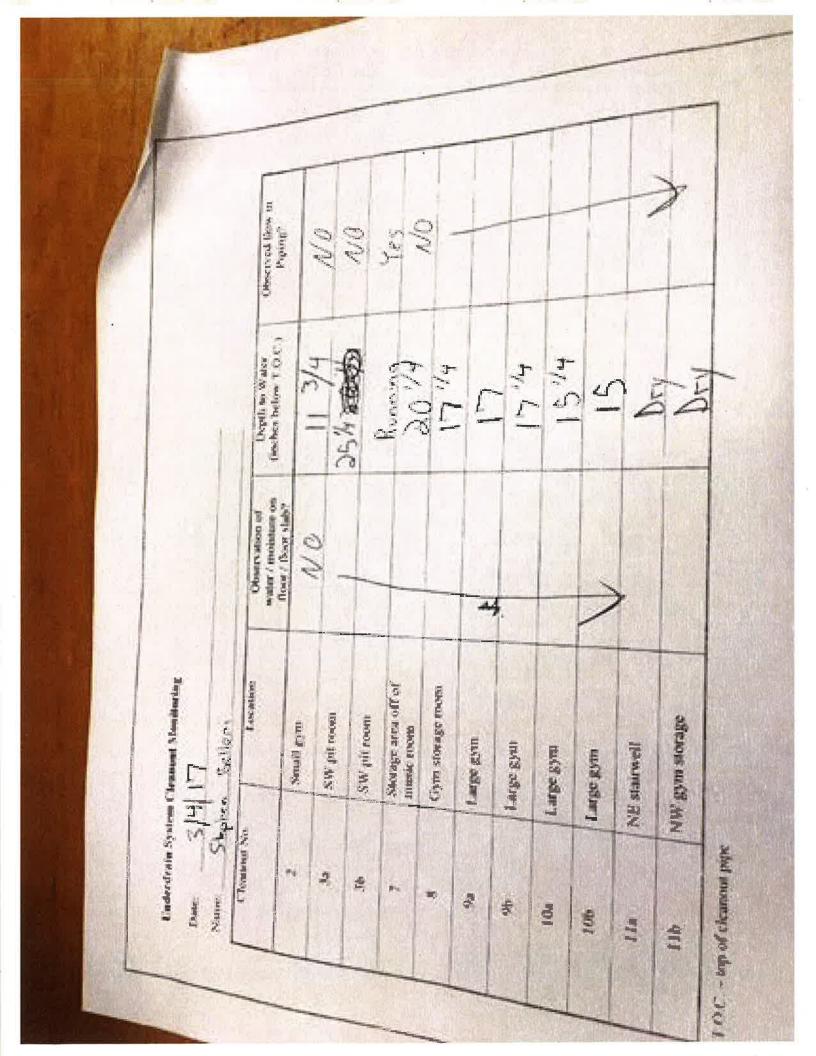
This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	3-17	
Name:	Stephen Bellant	ŵ
Company:	Lycee Francais	
Position/Title:	Engineer Supervisor	

Location	Inspe	cted	Findings
Carbon Treatment System	(Yes)	No	
[LFNY Staff: Weekly			Normal
Outside Contractors: At Time of Work]	-		
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: Y/N Est. Flow (gpm)*: 8
Northeast Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: (Y) N
Flow meter readings [Periodic]	(Yes)	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:



LYCEE FRANCAIS DE NEW YORK SI

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	1-17	
Name:	Stephen Bellon;	
Company:	Lycee Francais	
Position/Title: _	Engineer Supervisor	

Location	Inspected		Findings
Carbon Treatment System	(Yes)	No	Normal
[LFNY Staff: Weekly Outside Contractors: At Time of Work]	\sim		/ l'Ormal
Underdrain System Cleanouts [Bi-monthly minimum]	પિછ	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: W N Est. Flow (gpm)*: 8
Northeast Foundation Pit [Weekly. minimum]	(Yes)	No	Flow: (Y) N
Flow meter readings [Periodic]	Yes	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

LYCEE FRANÇAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date: 4/10/17 Name: marin Mendoza /Brenton Seer Company: ILB Mechanical Services Position Tille: Plumbers Meahanin

Location	Inspected		Findings	
Carbon Treatment System [LFNY Staff: Weekly Outside Contractors: At Time of Work]	(B)	No	bock flush carlien tanks, everything checked good	
Underdrain System Cleanouts [Bi-monthly minimum]	(MB)	No	Complete and attach the cleanout log form.	
Southwest Foundation Pit [Weekly, minimum]	Yes	No?	Flow: Y / N Est. Flow (gpm)*:	
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y / N	
Flow meter readings [Periodic]	Tes	No		

"Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings: A fecture flost on HI fund was repaired with new one. Back washed carlien tonkt. and relocated meter way from epictor pit

Observed flow in Piping? N/0 Yes NO NO Depth to Water (inches below T.O.C.) 25 3/4 Ph H Running 1/1 (1) 1/1 41,08 11 91 5 E 5 Stephen Belloni/Enrique Ramos/Clmcolc Motate water / moisture on floor / floor slab? Observation of Storage area off of Gym storage room Underdrain System Cleanout Monitoring Location NW gym storage SW pit room SW pit room music room Small gym NE stairwell Large gym Large gym Large gym Large gym 4-29-17 T.O.C. - top of cleanout pipe Cleanout No. 3a 2 3b ~ <u>9a</u> 10a 8 96 10b I la 911 Name: Date: -

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	5-17	
Name:	Stephen Bellen	
Company:	Lycce Francais	F
Position/Title:	Engineer Supervisor	
)	

Luspe	cted	Findings
Yes	No	i indingo
(Yes)	No	Complete and attach the cleanout log form.
(Yes)	No	Flow: Y N Est. Flow (gpm)*: 8
Yes	No	Flow; Ø/ N
Yes	No	
	Yes Yes Yes Yes	Yes No Yes No Yes No

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:

Observed flow in Piping? V/O 0 ves (inches below T.O.C.) 30,06 35.5 Depth to Water 8111 50.01 Runing 5 S.F. 20 Dri 10 5 water / moisture on floor / floor slab? Observation of Storage area off of Gym storage room Underdrain System Cleanout Monitoring Location NW gym storage Stephen Belleni SW pit room SW pit room music room Small gym NE stairwell Large gym Large gym Large gym Large gym 5/13/17 T.O.C. - top of cleanout pipe Cleanout No. 3a 2 3b 5 <u>9</u>a 10a 00 96 10b 11a 116 Name: Date:

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date:	6-17
Name:	Stephen Belleni
Company:	Lycee Francais
Position/Title:	Engineer Supervisit

Location	Inspe	cted	Findings
Carbon Treatment System [LFNY Staff: Weekly Outside Contractors: At Time of Work]	Yes	No	Normel
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y /N Est. Flow (gpm)*: 8 Flow: Y //N
Northeast Foundation Pit [Weekly, minimum]	Yes	No	Flow: Y //N
Flow meter readings [Periodic]	Yes	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work / follow-up required based upon the inspection findings:

T Observed flow in Piping? No No No Del 1514 1/1/3 Z アレ (inches below T.O.C.) H/1 55 RUnning 17 1/4 - 41 OR Depth to Water 1 E 5 water / moisture on floor / floor slab? Observation of No Storage area off of Gym storage room Underdrain System Cleanout Monitoring Location NW gym storage SW pit room SW pit room music room Small gym Large gym NE stairwell Large gym Large gym Large gym F1101 Stephen Cleanout No. T.O.C. - top of cleanout pipe 0 2 3a 3b 7 00 <u>9</u>a 96 10a Name: Date: 10b 11a 116

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date: 7-17 Name: Stephen Belleni Company: Lycee Francius Position Title: Engineer Superviser

Location	Inspe	ected	Findings		
Carbon Treatment System	Yes	No			
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			Normal		
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form.		
Southwest Foundation Pit [Weekly, minimum]	(i'es)	No	Flow: V/N Est. Flow (gpm)*: 8, 2		
Northeast Foundation Pit [Weekly, minimum]	(Yes)	No	Flow: (Y) N		
Flow meter readings [Periodic]	(Yes)	No	Normal		

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work follow-up required based upon the inspection findings:

	Observed B	Piping?	NO	No	4es 1	/ No /						7	,
	Depth to Water	(inches below T.O.C.)	11.75	33.5	Kunna	1/1 1/4		H-1-1-1	11.14	SL'H	P-11	Bu	
	Observation of water / moisture on	floor / floor slab?	0/								1	>	
eanout M	Location	Small gym	SW pit room	SW pit room	Storage area off of music room	Gym storage room	Large gym	Large gym	Large gym	Large gym	NE stairwell	NW gym storage	
Underdrain System Cl	OUTIN	2	За	3b	7	8	9a	96	10a	10b I	IIa N	11b N	T.O.C top of cleanout pipe

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SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date: <u>8-17</u> Name: <u>Stephen</u> Belleni Company: <u>Lycee Francuis</u> Position Title: <u>Epogeneer</u> Superviser

Location	Insp	ected	Findings
Carbon Treatment System	(Yes)	No	, indings
[LFNY Staff: Weekly Outside Contractors: At Time of Work]			Normal
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form.
Southwest Foundation Pit [Weekly, minimum]	tics	No	Flow: (Y) N Est. Flow (gpm)*: 8
Northeast Foundation Pit Weekly, minimum]	(Tes)	No	Flow: () N
Flow meter readings Periodic]	(Yes)	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work follow-up required based upon the inspection findings:

Date:	17			
Cleanout No.	repres 1			
	Location	Observation of water / moisture on	Depth to Water	Obtomerad C
2	Small gym	floor / floor slab?	(mones below T.O.C.)	Piping?
3a	SW pit room	0//	11.75	An
3b	SW pit room		11,50	No
7	Storage area off of music room		Running	C es
8	Gym storage room		100	all
9a	Large gym		h/. []	-
96	Large gym			
10a	Large gym		51	+
10b	Large gym		C.7	+
11a	NE stairwell		120	
11b	NW gym storage	>	10	\rightarrow $+$

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors

Date: 9-17 Name: Stephen Belloni Company: Lycee Frances Position/Title: Engineer Supressor

Location	Inspe	cted	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]) 1		Normal
Underdrain System Cleanouts [Bi-monthly minimum]	Yes	No	Complete and attach the
Southwest Foundation Pit [Weekly, minimum]	Ves	No	Est. Flow (gpm)*:
Northeast Foundation Pit [Weekly, minimum]	(Fes)	No	Flow: WN
Flow meter readings [Periodic]	Yes	No	/Vərma
	t.		T

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90%) or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work follow-up required based upon the inspection findings:

Underdrain System Cleanout Monitoring Date: 9 - 1/6 - 17

· 11-21 1-15 Date:

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Cleanout No. Location Observation of water / moisture on floor / floor slab?		3a SW pit room	3b SW pit room	7 Storage area off of music room	8 Gym storage room	9a Large gym	9b Large gym	10a Large gym	10b Large gym	11a NE stairwell	
Depth to Water (inches below T.O.C.)	11.50	25.75	Punning	20.25	17.5	[]	Drv	15,50	15.25	Dr.	
Observed flow in Piping?	Na	Na	lles	MO				Les alter			11/1

SITE MANAGEMENT PLAN

APPENDIX G Inspection Checklist - Groundwater Management System

This form must be completed during each inspection performed by in-house staff and outside contractors.

Date: _____ 0-17

Name: Stephen Belloni Company: Lycee Franciais Position Title: Engineer Supervisor

Location	Insp	ected	Findings
Carbon Treatment System	Yes	No	
[LFNY Staff: Weekly Outside Contractors: At Time of Work]	1		Normal
Underdrain System Cleanouts [Bi-monthly minimum]	(Yes)	No	Complete and attach the cleanout log form
Southwest Foundation Pit [Weekly, minimum]	(Yes)	No	Cleanout log form. Flow: Y N Est. Flow (gpm)*: X • 1
Northeast Foundation Pit [Weekly, minimum]	(ves) -	No	Flow (F) N
Flow meter readings [Periodic]	Yes	No	Normal

*Estimated flow in southwest foundation pit to be performed routinely and recorded. Since the majority (estimate of 90% or greater) of the entire foundation flow drains to the southwest foundation pit. Estimates of flow quantity in the northeast pit are not required.

Describe any work follow-up required based upon the inspection findings:

		Observed flow in Pipine?	•	No	No	Tes N/	0//						11.
		Depth to Water (inches below T.O.C.)		11.75		Running	200000	1	Dev	2	15.75	hrv	2. 4
		Observation of water / moisture on		01								//`	>
Underdrain System Cleanout Monitoring	10-28-17 Stephen Belleni		Small gym	SW pit room	SW pit room	Storage area off of music room	Gym storage room	Large gym	Large gym	Large gym	Large gym	NE stairwell	NW gvm storage
Linderdrain System	Date:	Cleanout No.	2	3a	3b	2	8	9a	96	10a	10b	11a N	11b N

Observed flow in Piping? Yes No No No (inches below T.O.C.) 11.500 Running 20,25 24 25.75 14.75 Depth to Water 17.5 17,25 15.5 Wet Day 1-20 WYC Mur water / moisture on floor / floor slab? Observation of 201 1-11-17 Underdrain System Cleanout Monitoring Location Storage area off of Gym storage room Belleni SW pit room SW pit room Small gym music room NW gym storage Large gym Large gym Large gym NE stairwell Large gym Stephen Cleanout No. T.O.C. - top of cleanout pipe 2 3a 3b C Support Stress Line. Name: Date: ~ 8 <u>9a</u> 96 10a 10b 11a 116

1				
Underdrain System	Underdrain System Cleanout Monitoring			
Date: 12-9-17	۲.7 ا.7			
Name: Stephen	Stephen Belloni			
Cleanout No.	Location	Observation of water / moisture on floor / floor slah?	Depth to Water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	No	511	. Ma
3a	SW pit room		25.5	Na
3b	SW pit room		P.100.00	C. C.
7	Storage area off of music room		201	Mo
8	Gym storage room		55.61	
9a	Large gym		55.61	
9b .	Large gym		tol	
10a	Large gym		15, 5	
10b	Large gym		54'HI	
11a .	NE stairwell	10	Dry	
11b	NW gym storage	3	N21	11

The second of

Underdrain System Cleanout Monitoring Date:

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	1.		Y.	
5	1 0 1 1	1		
	Manage	Sume:		

		water / moisture on floor / floor slah?	Upput to water (inches below T.O.C.)	Observed flow in Piping?
2	Small gym	N a	1/3/4	~
3a	SW pit room	2	12 12	110
3b	SW pit room			0.4/
2	Storage area off of music room		Norain,	10.5
œ	Gym storage room		e/- L	
9a	Large gym		36	
96	Large gym		1111	
10a	Large gym		15.14	
10b	Large gym		1.1 3/4	
lla	NE stairwell	/		
11b	NW gym storage			>

Appendix E

Documentation of Completed O&M and Site Inspection Tasks

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX H Site-wide Inspection Form

This form must be completed on an annual basis and kept on file.

Date: <u>Fe</u>	bruary 10, 2015
Name:	Michael P. Musso, P.E.
Company:	HDR
Position/Title:	Project Manager

- 1. Assessment of compliance with all ICs, including Site usage.
- 2. An evaluation of the condition and continued effectiveness of ECs.
- 3. Assessment of general Site conditions at the time of the inspection.
- 4. Assessment of the Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection.
- 5. Assessment of compliance with permits and schedules included in the Operation and Maintenance Plan.
- 6. Confirmation that Site records are up to date.

SITE MANAGEMENT PLAN

APPENDIX H Site-wide Inspection Form

This form must be completed on an annual basis and kept on file.

Date: 2/9/2016
Name: Michael P. Musso, P.E.
Company: HDR
Position/Title: Project Manager

- 1. Assessment of compliance with all ICs, including Site usage.
- 2. An evaluation of the condition and continued effectiveness of ECs. \checkmark
- 3. Assessment of general Site conditions at the time of the inspection. \checkmark
- 4. Assessment of the Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection.
- 5. Assessment of compliance with permits and schedules included in the Operation and Maintenance Plan.
- 6. Confirmation that Site records are up to date. \checkmark

Site Walk with Harold Chavarro - Meeting with Terrence Kennedy (Manager, Facilities) Min : HOR to set-up new on-site binder, copies of forms, and interactive part e-forms Action Item - Staff SMP + Hazion training to be conducted 2/18/2

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX H Site-wide Inspection Form

This form must be completed on an annual basis and kept on file.

Date: <u>F</u>	ebruary 17, 2017
Name:	Michael P. Musso, P.E.
Company:	HDR
Position/Title:	Project Manager

- 1. Assessment of compliance with all ICs, including Site usage.
- 2. An evaluation of the condition and continued effectiveness of ECs.
- 3. Assessment of general Site conditions at the time of the inspection.
- 4. Assessment of the Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection.
- 5. Assessment of compliance with permits and schedules included in the Operation and Maintenance Plan.
- 6. Confirmation that Site records are up to date.

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX H Site-wide Inspection Form

This form must be completed on an annual basis and kept on file.

Date:	February 13, 2018
Name:	Michael P. Musso, P.E.
Company:	HDR
Position/Title	e: Project Manager

- 1. Assessment of compliance with all ICs, including Site usage.
- 2. An evaluation of the condition and continued effectiveness of ECs.
- 3. Assessment of general Site conditions at the time of the inspection.
- 4. Assessment of the Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection.
- 5. Assessment of compliance with permits and schedules included in the Operation and Maintenance Plan.
- 6. Confirmation that Site records are up to date.

Appendix F

Completed Routine Maintenance Forms (Form L)

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: Teb. 7th 2015
Date: Zeb. 7th 2015 Name: Alvarado
Company: Lycee Francais de New York
Company: <u>hycee Francais de Neu York</u> Position/Title: <u>Chref Engineer</u>
Description of work performed:
Changed at 100 and 50 micron bags for the South west pit room area.
Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No
Are other documents such as receipts and/or copies of invoices attached? Yes No

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by in-

house staff and outside contractors.

Date: March 7th 2015
Date: Dany Alvarado Name: Dany Alvarado Company: Lycee Francois de New York Position/Title: Chief Engineer
Company: Lycee Francois de New York
Position/Title: Chief Engineer
Description of work performed:
Charged -out 100 and 50 mixran bass
- Changed -out 100 and 50 mixron bass for the South west ejector pump
room avea.

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: April 13th 2015
Name: Danny Alvarado
Company: hycee Francais de N.Y. Position/Title: Chief Engineer
Position/Title: Chief Engineer
Description of work performed:
changed at filter Bags 100 and 50 micron
changed at filter Bags 100 and 50 micron for the south west pit room area.
Are color photographs or sketches showing the approximate location of any problems of
incidents attached? Yes No

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: May 2nd. 2015	
Name: Danny Alvarado	
Company: hy cee Francais de New York Position/Title: Chief Building Engineer	
Position/Title: Chief Building Engineer	
Description of work performed:	_
Changed at filter bays 100 and 50)
microns for the South west pit	
gejecter pump room.	
Are color photographs or sketches showing the approximate location of any proble	ms

Are other documents such as receipts and/or copies of invoices attached? (Yes) No

incidents attached?

Yes

No

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: June 1 of 2015
Name: Danny Awarado
Company: Mare trancais de New York
Company: Mare Francais de New York Position/Title: Chief Engineer.
Description of work performed:
changed out 100 and 50 micron
bags for the South west pit room
plea.

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: 7 28 15
Name: Mike Liborizzi
Company: Brookside Environmental
Position/Title: site forenaa
Description of work performed: Pumped out both
carbon ressels and replaced
activated carbon in each.

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: 17-28-15 amid Name: 🤝 Company: Z Position/Title: plumliert on discounce Description of work performed: Cont im

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: Jqth 2015
Name: Danny Alvarado
Company: Lyce Français de New York
Position/Title: chief engineer
Description of work performed:
changed out 100 and 50 micron bags
For the South west pitroom area.

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: Sept. 19th 2015
Name: Danny Alvarado
Company: <u>hycee Français de WewYork</u> Position/Title: <u>Chief Building Engineer</u>
Position/Title: Chief Building Engineer
Description of work performed:
Changed out 100 and 50 micron filter
Changed out 100 and 50 micron filter bags for the South west ejector pit room
avea.

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: Oct. 9th 2015
Name: Danny Alvarado
Company: Lycee Français de New York Position/Title: chaef Brilding Engineer
Position/Title: chaef Brilding Engineer
Description of work performed:
- Changed aut Filter bags 100 and 50
microns for the south mest pit room
avea. Undergrand water treatment.

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

LYCEE FRANCAIS DE NEW YORK SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: November 20th 2015
Name: Alvarado
Company: <u>hypere Francais de Neurfork</u>
Position/Title: Chief Engineer
Description of work performed:
<u>Changed at 100 and 50 micron Silder</u>
Changed out 100 and 50 micron Silder bags for the South west ejector pit
room arca.
Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date:
Name: Stephen Belleni
Company: Lycee Français de New York Position/Title: Engineer
Position/Title: Engineer
Description of work performed: changed sond bag filters,
worked on disconnecting pumps, and carbon tank setup,
changed at carbon / replaced
Brockside/HDR/ILG
All and a second s
Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No
Are other documents such as receipts and/or copies of invoices attached? Yes No

HDR **Crew Chief Report**

Page ____of ____

Crew Chief: Donald Kassell	Project: LFNY
Crew;	Project No.: 10016757
Vehicle(s) Used: Toyota Highlander	Survey: Carbon change out and water quality collection
Boat(s) Used:	Project Manager; Carol Zurlo / Mike Musso

Crew Chief Report (complete after survey):

Survey Start Date; 7/11/16

Survey Start/End

ł	Time:	0530 -	- 1630	
---	-------	--------	--------	--

Describe Details Below:	Yes	No		From	То
Sampling gear working properly	Yes		Boat usage (dates):		
(if no, describe in comments)			Engine Hours:		
Was downtime incurred (no.hrs.)		No	Boat Location:		
(If yes, describe in comments)			Radio Logs:		
Any incidents, accidents or	Yes		Were the following forms completed		
pertinent observations (describe)			and submitted?		No
Field Meters Calibrated	yes		Boat Log:		
Chain-of Custody completed	Yes		Vehicle Log:	Yes	
Samples signed over - Nanuet Lab		No	Equipment Usage Sheet:	yes	
-Outside Lab					

Comments/Observations:

0630 On site- ILG on site. 0635 system is off, 0645 ; ILG leaves.0740; Brookside on site. 0755; Brookside begins setting up.0825; begin removing old carbon. 1020; complete removing old carbon. Used 3 drums for old carbon.they are breaking down some equipment. 1040; begin adding new carbon, 1100; finish adding new carbon, begin clean up. 1115 finish clean up.1130; brookside departs.1135; ILG on site. 1152; system is on.1200; system off small leak.1210; system on. 1230; ILG off site.1315; ; collected NYCDEP samples. 1400; off site. 1500; dropped off samples at fed x in elmsford Brookside used 4 drums 3 for carbon 1 for old filter bags and garbage.

	^▲NI	CHA	IN	OF C	USTOD	Y						<u>.</u>					CERT	IFICA	TIONS				
56 Toledo Street, Farmingd					lale NY 11735									NY ELAP - 11418 PA DEP - 68-00573									
(T) 631-454-6100 (F) 631-454-8027								NJ DEP - NY050 CT DOH - PH-0205															
Client Information							Project Information									Δ	nalytic	alInfo	matir				
Company Name				Project Name	· · · · ·	$\Sigma (\Sigma)$,													1	1		
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Project Contact					Project #	10011	175	- - ,						<u>مد ا</u> (الم		•				• •			
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Standard 7-10 Business		3 Day RUSH		2		~~~~~	١.			•					ĒĒ	Fic	1CA	IT.	8-	9	. C _j		
5 Day RUSH			Q = Gr	~	(L = Liqui	~	PC = Pa		קוו				1					je,	чe	-	5.6	e d
		_		mposite		S = Soil		SL = SI								Temp25.2°							
4 Day RUSH	L	_1 Day RUSH	B = Bl	алк	s	O = Oil		SD = S	•		<	Ĺ			an a								
Sample custody must be documented be					alow and first	W = Wipe	3	M = Mis				- مفعله	· 1:					Coole	г Тетр	- <u> </u>			
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SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: 7/11/2016
Name: Michael Librizzi, Oscar Paredo
Company: Brookside Environmental Inc.
Position/Title: Fareman
Description of work performed:
Vacuum-out spent carbon from
2 carbon vessels and replace w)
new activated carbon.
2

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

Are other documents such as receipts and/or copies of invoices attached? Yes No

1

. °,

SITE MANAGEMENT PLAN

(No

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Name: <u>Marvin Mendoza</u> Company: <u>ILG Methanical Services</u> Position/Title: <u>Alembers Mechanic</u> Description of work performed: <u>Alerked on disconnecting</u> <u>Carbon tanks</u>
Company: <u>IIG methanical Services</u> Position/Title: <u>Plankers Mechanic</u> Description of work performed: <u>Worked on disconnecting</u>
Description of work performed: 11orked on disconnecting
Description of work performed: 11orked on disconnecting
Carbon tanks
. ,
R

Are other documents such as receipts and/or copies of invoices attached? Yes

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: Uan Vir Name: G TI Inc Services anina Company: e Position/Title: St Description of work performed: 4 5 how removed and tank replac rg while on site 000 Carbon tanks Backflushed Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No Are other documents such as receipts and/or copies of invoices attached? No Yes

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: 4/10/117 Name: marin / Brenton Company: ILB Mechanical Services Position/Title: plumbers Mechanic Description of work performed: leach quasked Carlion tanks relocated water meter / installed new pigy lack float on sump # 1

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

Are other documents such as receipts and/or copies of invoices attached? Yes No

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: 7/12/17
Name: William Lyan.
Company: Brookside Environmental
Position/Title:Site zupervisor
Description of work performed: Remove and replace
Carbon in 2 carbon Vessels
in besement
· · · · · · · · · · · · · · · · · · ·
3
Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No
Are other documents such as receipts and/or copies of invoices attached? Yes No

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: Serences Name: Company: Position/Title: Jumlient Description of work performed: .

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

Are other documents such as receipts and/or copies of invoices attached? Yes No

SITE MANAGEMENT PLAN

APPENDIX L Routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each routine maintenance event performed by inhouse staff and outside contractors.

Date: 7/12/17 Name: Marvin Hendoza, Juan Toledo Company: ILG Mechanical Services, Inc Position/Title: Mechanic / Mechanic Asst Description of work performed: Drained down Carbon tanks, removed inlet and outlet poses for the caubon tank teplaced filters with new Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No Are other documents such as receipts and/or copies of invoices attached? // No JAVO 100 20171722

ILG MECHANICAL SERVICES, INC. 2323 HAVILAND AVENUE BRONX, NY 10462

Invoice

 Date
 Invoice #

 7/20/2017
 20171722

Bill To

LYCEE FRANCAIS 505 EAST 75TH STREET NEW YORK, NY 10021 ATTN: TERRENCE KENNEDY

Ship	ото	
LYCEI	E FRANCAIS	
NEW Y	AST 75TH STREET YORK , NY 10021	
ATTN:	TERRENCE KENNEDY	
1		

			P.O. No.	Term	S		
		Description			Quantity	Rate	Amou
LABOR: 07/12 - DRAINED DOV CARBON TANK CHAN	VN CARBON TANK NGE. REPLACED F	S, REMOVED INLET AN ILTERS WITH NEW.	D OUTLET HOSES FOF	R THE			Amou
1 MECHANIC 3-1/2 HR 1 MECHANIC ASST, 3-	15 -1/2 HRS				3.5	110.00 80.00	
			S	ubtotal			
					(8.875%)		\$0.00
				otal			665.00
Phone #	Fax #	E-mail					

L	Phone #	Fax #	E-mail
L	917 819-3536	917 819-3538	ILGMECHANICAL@OPTONLINE.NET

The second secon

Appendix G

Completed Non-routine Maintenance Forms (Form M)

This form is to be completed by LFNY staff for all out of the ordinary work performed by TLGAny invoices/receipts for the work performed must be attached.

LYCEE FRANCAIS DE NEW YORK

SITE MANAGEMENT PLAN

No

APPENDIX M Non-routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each non-routine maintenance event performed by in-house staff and outside contractors.

Date: + Brenton Marvin Name: echanica TLG Company: Mechanic Position/Title: Description of work performed (include presence of leaks, date of leak repair and/or other repairs or adjustments made, if applicable): Two defective electiv pumps 16 - Keplaced langement provid

8-Installed Quick disconnect

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

Are other documents such as receipts and/or copies of invoices attached? (Yes)

COVER PAGE

ILG MECHANICAL SERVICES, INC. 555 LONGFELLOW AVENUE BRONX, NY 10474

Date	Invoice #
4/13/2015	20150378

Bill To

LYCEE FRANCAIS 505 EAST 75TH STREET NEW YORK, NY 10021 ATTN: TERRENCE KENNEDY

LYCEE FRANCAIS	
505 EAST 75TH STREET	
NEW YORK, NY 10021	
ATTN: TERRENCE KENNEDY	

	P.O. No.	Terms			
				CONTRAC	СТ
Description			Quantity	Rate	Amoun
LABOR: 04/07 - COMPLETED ALL WORK AS PER ENCLOSED PROPOSAL D SOUTHWEST EJECTOR PUMP ROOM; TWO EJECTOR PUMPS, REV AGREED PRICE: BASED UPON TIME AND MATERIAL NOT TO EX	/ISION #1, 03/25/15			1,027.00 }	1,027.00
	S	Subtotal		5	51,027.00
	5	Sales Tax	(,	\$0.00
	1	Fotal		c	61.027.00

Phone #	Fax #	E-mail
917 819-3536	917 819-3538	ILGMECHANICAL@OPTONLINE.NET

Invoice

ILG MECHANICAL SERVICES, INC. 555 LONGFELLOW AVENUE BRONX, NY 10474

Bill To

LYCEE FRANCAIS 505 EAST 75TH STREET NEW YORK, NY 10021 ATTN: TERRENCE KENNEDY

Date	Invoice #		
4/13/2015	20150378		

1

Ship To

LYCEE FRANCAIS 505 EAST 75TH STREET NEW YORK, NY 10021 ATTN: TERRENCE KENNEDY

	-				
	P.O. No.	Terms			
		1.		CONTRAC	CT
Description			Quantity	Rate	Amoun
LABOR: 04/06 - WORKED TO REPLACE TWO DEFECTIVE EJECTOR PUMI MANAGEMENT)	PS (PROVIDED BY	a.			
1 MECHANIC 6 HRS 1 MECHANIC ASST. 6 HRS			3 6	105.00 70.00	315.00 420.00
04/08 - INSTALLED QUICK DISCONNECT FITTING					1.1
1 MECHANIC 3-1/2 HRS 1 MECHANIC ASST. 3-1/2 HRS			3.5 3.5	105.00 70.00	
SUBTOTAL:					1,347.50
MATERIAL: 1 - 2 X 1 GALV BUSHING 2 - 10 HOSE CLAMP 1/2 1 - 1 X 3 GALV NIPPLE				21.21	21.21
SUBTOTAL:		×			21.21
	S	Subtotal		3	\$1,368.71
	5	Sales Tax			\$0.00
	17	Fotal		9	\$1.368.71

Phone #	Fax #	E-mail
917 819-3536	917 819-3538	ILGMECHANICAL@OPTONLINE.NET

This form is to be completed by LFNY staff for all out of the ordinary work performed by J&R. Any invoices/receipts for the work performed must be attached.

LYCEE FRANCAIS DE NEW YORK

413

SITE MANAGEMENT PLAN

APPENDIX M Non-routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each non-routine maintenance event performed by in-house staff and outside contractors.

Date: Name: Company: nanical PCV Services echa Position/Title: NC Upril Description of work performed (include presence of leaks, date of leak repair and/or other repairs or adjustments made, if applicable): Koom anica pve L2 -Belou ea town DUDON VIS olaced De new

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

Are other documents such as receipts and/or copies of invoices attached (Yes) No

SITE MANAGEMENT PLAN

APPENDIX M Non-routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each non-routine maintenance event performed by in-house staff and outside contractors.

Date: Name: Marvin, Brenton, Juan, Ahme Company: JLG Nechanical Services, In Plumber Position/Title: Description of work performed (include presence of leaks, date of leak repair and/or other repairs or adjustments made, if applicable): emored carbon filter tanks, cleaned and Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No Are other documents such as receipts and/or copies of invoices attached? Yes No

R

JOB WORK ORDER

ILG MECHANICAL SERVICES, INC. 555 LONGFELLOW AVENUE BRONX, NY 10474 PHONE (917) 819-3536 FAX (917) 819-3538 EMAIL: ILGMECHANICAL@OPTONLINE.NET

DAY OF WEEK	 -
Tuesday	 -
17-20-15	

BNAME	TIME ARRIVED	
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Invoice

ILG MECHANICAL SERVICES, INC. 555 LONGFELLOW AVENUE BRONX, NY 10474

Bill To

LYCEE FRANCAIS 505 EAST 75TH STREET NEW YORK . NY 10021 ATTN: TERRENCE KENNEDY

Invoice #
20150727

1

Ship To

LYCEE FRANCAIS 505 EAST 75TH STREET NEW YORK, NY 10021 ATTN: TERRENCE KENNEDY

	P.O. No.	Terms			
Description			Quantity	Rate	Amount
LABOR:)7/28 REMOVED CARBON FILTER TANKS, CLEANED AND REFI I MECHANIC 4-1/2 HRS I MECHANIC ASST. 4-1/2 HRS I MECHANIC 3 HRS I MECHANIC ASST. 3 HRS	LED SYSTEM		4.5 4.5 3 3	106.00 70.00 105200 70.00	477.00 315.00 315.00 210.00
	5	Subtotal			1.317.00
	5	Sales Tax	¢	-	\$0.00
	-	Fotal		q	31.317.00

Phone #	Fax #	E-mail
917 819-3536	917 819-3538	ILGMECHANICAL@OPTONLINE.NET

SITE MANAGEMENT PLAN

APPENDIX M Non-routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each non-routine maintenance event performed by in-house staff and outside contractors.

Date: 2015 Name: anny trancals Company: Lyree de New York Position/Title: Building Engineer Chief Description of work performed (include presence of leaks, date of leak repair and/or other repairs or adjustments made, if applicable): 7.24.2015 a 4" GIP conduit was placed in an under ground penetration locate encasement irra drive way entrance SIZ conduit Denedi cn 00 was seale Sealan Mas around and encasemen ~ pre documente

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

Are other documents such as receipts and/or copies of invoices attached? Yes No

SITE MANAGEMENT PLAN

APPENDIX M Non-routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each non-routine maintenance event performed by in-house staff and outside contractors.

Date: Jei J Name: Company: 11-2-2 ∇ FATCALT Su Position/Title: Engineer Description of work performed (include presence of leaks, date of leak repair and/or other repairs or adjustments made, if applicable): Ind be. 2015 Plumbin a (e d roke CCAR46 icð and

Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes No

Are other documents such as receipts and/or copies of invoices attached? Yes No

SITE MANAGEMENT PLAN

APPENDIX M Non-routine Maintenance Form for Components of the Building's Groundwater Management System

This form must be completed during each non-routine maintenance event performed by in-house staff and outside contractors.

Date: Julah ton. Name: Services, Inc. Company: rhance. hance Position/Title: Description of work performed (include presence of leaks, date of leak repair and/or other repairs or adjustments made, if applicable): Checked UMD Jump DUMD have detective +0 Continu Are color photographs or sketches showing the approximate location of any problems or incidents attached? Yes (No Are other documents such as receipts and/or copies of invoices attached? No

Appendix H – Vapor Barrier Repair Associated with New Construction on Adjacent Property

In the Spring of 2015, HDR was notified by LFNY of proposed renovation work on the adjacent 1416 York Avenue property (located immediately west of the school property that is subject to the SMP and PRR). This work included renovations within an existing building for future use by LFNY. HDR worked with LFNY's Facility Staff and its renovation contractor to discuss planned activities where the school building's western wall subsurface vapor barrier may be encountered. The SMP – including the locations and specifications for the approved Grace vapor barrier products - was reviewed with the parties in advance of the renovation work, and the renovation work at the adjacent property was tracked by LFNY and HDR to ensure that the vapor barrier at the subject school property Site – if encountered - was maintained or repaired in conformance with the SMP.

In August 2015, a subsurface conduit penetration (i.e., fiber optic feed), located approximately three feet below sidewalk (ground) elevation, was installed. This conduit (1.5" diameter) penetrated the vapor barrier. HDR reviewed the specifications for the link seal, and recommended that a minimum of two inches of this material be applied around the conduit and the drilled space to provide a reliable seal. Use of caulk was also recommended as a 'good practice'.

Photographs of the completed conduit work were received on August 12, 2015 from Lightower Fiber Networks and are shown below.





Photos of fiber conduit penetration. Existing vapor barrier components visible above and surrounding (in white).

In October 2015, ground floor renovation work at 1416 York Avenue encountered and exposed the vapor barrier system (to a depth of approximately 2-3 ft below sidewalk [top] grade). The subsurface vapor barrier was noted to be partially exposed (see below photo) along the back wall of the renovated space.



October 2015. A portion of the Vapor Barrier along western portion of the subject school building exposed to approximately 2-3 ft below grade.

HDR visited the renovation site (1416 York Avenue) and the subject school property on November 9, 2015, to observe the ground floor renovation work and collect documentation on the renovated space. It was documented that the exposed school property vapor barrier was being handled appropriately and in accordance with the SMP. Excerpts from site visit notes (M. Musso, HDR) are provided below in *italicized* text. [Note that new Grace products as referenced below were utilized for moisture / vapor sealing purposes at the adjacent property as part of the renovation work.]

I conducted a site inspection of the new space today, with focus on (a) environmental items in place for the 505 East 75th Street (existing school) building next door, and (b) general observations for the new space that is under construction.

It was confirmed that Grace Preprufe 300R and 160R – the same products reviewed by NYSDEC for the 505 East 75th Street project several years back - are being / will be installed in the new space as follows:

- Placed beneath all new floor slabs (encompassing the entire footprint of renovated space), including the bottoms of elevator and ejector pits, and on the subsurface sidewalls of the elevator and ejector pits;
- Placed along (outside) of new concrete walls, up to a certain height above the floor grades. The renovation contractor and I walked basement, and it was apparent that the membrane heights on the new walls will differ depending on location but will rise at least 5 – 6 ft above the final floor grades (and thus approach the elevation of the York Ave sidewalk grade)

The basement appears (and has reportedly been) relatively dry, and as noted prior only a very small amount of foundation water has been observed in the deepest parts of the new space excavation (i.e., new elevator pit). The Preprufe in the new space will likely not be under hydrostatic pressure conditions (i.e., will not be "submerged") under normal conditions.

We looked at the back (east) wall of the new space (26-ft width), where the excavation work has encountered the existing 505 East 75th St building wall and minimally exposed the in-place Preprufe (white membrane barely visible in some areas along the back wall). As no further subsurface disturbance other than what I observed today is planned, there does not appear to be a need for any repairs of the Preprufe at the 505 East 75th St building. The black Hydroduct product from the old project was also exposed (this is more visible than the Preprufe, as it rises to a higher elevation on the back wall). I recommended that the black Hydroduct be patched or otherwise maintained in place when the new eastern wall is constructed. Renovation contractor confirmed that with the new eastern wall, there is really no rain or stormwater expected along these walls (old and new) in the future.

Next steps:

- For our Site Management Plan (SMP) files and future NYSDEC reports, I would ask that the renovation contractor continue taking photos of all new Preprufe and Hydroduct installations that occur in the new space.
- I understand that a specialty subcontractor (ACA Contracting, Inc.) is handling the waterproofing and Grace product installations for the project.



November 9, 2015 photo of eastern wall in renovated space. Top 2-3 ft of Vapor Barrier (black Hydroduct) temporarily exposed.

On December 4, 2015, the renovation contractor reported that there were repairs made to two minor tears of the school property's vapor barrier during the renovation work. It was documented that the membrane and Hydroduct protection were folded back up and appropriately fastened to the foundation wall before the renovation work was completed. Preprufe tape was used to secure the Hydroduct.

On February 9, 2016, HDR completed a second site visit to observe the completed adjacent building's basement space.



February 9, 2016 photo of renovated space, looking back towards the western 505 East 75th school building wall.