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www.TRCSolutions.com

July 28, 2016

Mr. Alexander Lempert
Sr. Director, IEH Division
New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, NY 11101

**Re: J.H.S. 126K – PCB Bulk and Wipe Sampling Report for Composter
424 Leonard Street, Brooklyn, New York 11222
WA# 802626, Service ID #62054, SCA Project IDS #100178**

Dear Mr. Lempert,

At the request of the New York City School Construction Authority (NYCSCA), TRC Engineers, Inc. (TRC) has prepared this Summary Report for the detailed sampling of the interior and exterior surfaces of the composter for Polychlorinated Biphenyl compounds (PCBs). Sampling of the composter was performed on July 18 and July 21, 2016. The concrete sidewalk area surrounding the composter will also be sampled following completion of the PCB soil remediation project currently underway at the School which is tentatively scheduled for completion during mid-August 2016. The composter is located adjacent to the exterior of the school building along Manhattan Avenue.

TRC collected representative PCB bulk samples of wood from both the interior and exterior surfaces of the composter; and conducted PCB wipe sampling on the top surfaces of PVC piping located both inside and outside of the composter.

PCB BULK SAMPLES OF WOOD

On July 18, 2016, TRC collected a total of two (2) composite samples of the wood material from the interior bottom and sides and one (1) composite sample from the exterior topside of the composter. On July 21, 2016, one (1) additional composite sample of the wood material was collected from the exterior side of the composter, approximately one (1) inch above the bottom. Quality Assurance/Quality Control (QA/QC) pre-sampling field wipe samples of the drill bits used were also collected to verify the cleanliness of the dedicated drill bits prior to sampling.

Bulk samples of the porous wood materials were collected according to United States Environmental Protection Agency (USEPA) Standard Operating Procedures for Sampling Porous Surfaces for PCBs, dated May 2011. In accordance with this method, a dedicated steel drill bit (approximately 1-inch diameter) was advanced to a depth of approximately ½ inch with the collection of drill cuttings for PCB analysis. Each drill bit was pre-cleaned with wipe sampling media, and the wipe samples submitted for PCB analysis to verify that each drill bit was clean prior to sampling. A dedicated scoopula was used at each sample location to aide in the collection of the sample material. For each sample, a minimum of 10-grams of wood drill cuttings were placed in separate, pre-cleaned PCB-free certified amber glassware with Teflon-lined caps for submission to Pace Analytical Services, Inc. (Pace) under standard chain-of-custody procedures. Pace is an independent laboratory certified to perform PCB analysis by the New York State Department of Health Environmental Laboratory Approval Program (NYSDOH ELAP No. 11078).

Bulk samples were analyzed by Pace using gas chromatography (GC) in accordance with USEPA SW846 Method 8082 following Soxhlet Extraction (SW846 Method 3540C).

The laboratory results of the bulk samples of the wood from the interior and exterior of the composter indicate that PCBs were not detected in the samples collected. A summary of the composter wood bulk sample descriptions, locations and analytical results are provided in Table 1. Copies of the laboratory reports and chain-of-custody forms for the bulk samples are included in Attachment 1 to this report.

Table 1 PCB Bulk Wood Samples Collected from the Composter at J.H.S. 126K			
Sample No.	Material	Location	Total PCBs Concentration (µg/g)
126K-Wood-1	Composter Wood Interior Bottom & Sides Near Bottom	North Side	ND (<0.486)
126K-Wood-2	Composter Wood Interior Bottom & Sides Near Bottom	South Side	ND (<0.439)
126K-Wood-3	Composter Wood Exterior Top Side	Center	ND (<0.430)
126K-Wood-4	Composter Wood Near Bottom Exterior Side	East Side	ND (<0.469)

ND = Not Detected

PCB WIPE SAMPLES OF PVC PIPING

On July 18, 2016, a total of three (3) wipe samples were collected from the top surfaces of non-porous PVC piping inside and outside of the composter located in the courtyard of J.H.S. 126K. Two (2) wipe samples were collected from the surface of the composter interior PVC piping, and one (1) wipe sample was collected from the surface of the composter exterior PVC piping. PCB-free certified wipe media was used to collect the surface samples and one (1) field blank was submitted for QA/QC protocols.

Wipe Samples of the PVC piping were collected utilizing PCB-free gauze wipes wetted with hexane. At each sample location, an approximately 100 square centimeter (cm²) size area was wiped, in accordance with American Society for Testing and Materials (ASTM) D6661-10, *Standard Practice for Field Collection of Organic Compounds from Surfaces Using Wipe Sampling*. Samples were collected from the surface of the PVC piping material, using customized sampling templates provided by the laboratory to mask surfaces outside the prescribed sampling area. Each wipe sample collected was placed in a separate, pre-cleaned glass jar with a Teflon-lined cap for submission to the laboratory under standard chain-of-custody procedures.

Samples were analyzed for PCBs by Pace using gas chromatography (GC) in accordance with USEPA SW846 Method 8082 following Soxhlet Extraction (SW846 Method 3540C).

The laboratory results of the wipe samples indicate that the sample concentrations ranged from not detected to 0.376 µg/100 cm² of PCBs in the samples collected. A summary of the composter PVC piping wipe sample descriptions, locations and analytical results are provided in Laboratory Reports and chain-of-custody forms are in Attachment 2 to this report.

Table 2 PCB Wipe Samples Collected from Composter PVC Piping at J.H.S. 126K				
Sample No.	Material	Location	High Occupancy Non-Porous Material Cleanup Criteria	PCBs Surface Wipe Concentration (µg/100 cm²)
126K-Wipe-1	Composter PVC Piping (Interior)	North Side	10 µg/100 cm ²	ND (<0.100)
126K-Wipe-2	Composter PVC Piping (Interior)	South Side		0.376
126K-Wipe-3	Composter PVC Piping (Exterior)	North Side		ND (<0.100)

ND = Not Detected

CONCLUSIONS AND RECOMMENDATIONS

No PCBs were detected in the representative bulk samples of the wood from the composter. PCBs were also not detected in two of the three surface wipe samples collected from the composter PVC piping. In the one interior PVC piping wipe sample where PCBs were detected, the concentration of 0.376 µg/100 cm² was found to be well below the high occupancy clean up level for non-porous surfaces of 10 ug/100 cm².

Based on the sampling and analysis conducted as part of this study, all sample results were found to be in compliance with USEPA PCB (40 CFR §761) requirements, and no remedial actions are required to continue to utilize the composter.

CONDITIONS AND LIMITATIONS

TRC has performed the tasks set forth above in a thorough and professional manner consistent with industry standards. TRC cannot guarantee and does not warrant that this limited assessment has revealed all adverse environmental conditions affecting the site. The results and opinions set forth by TRC are based on the information in our possession as of the date of this report.

If you have any questions, please do not hesitate to contact us at (212) 221-7822.

Sincerely,

TRC Engineers, Inc.



Anthony J. Sigona, P.E, CSP, LEED AP BD+C
Senior Project Manager



Edward A. Gerdts, CIH, CSP, LEED AP
Senior Vice President

ATTACHMENT 1

**PCB BULK SAMPLE
LABORATORY RESULTS AND CHAIN OF CUSTODY**

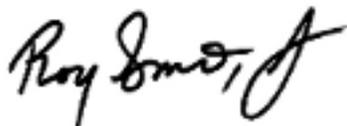
Pace Analytical e-Report

Report prepared for:
TRC ENVIRONMENTAL
1430 BROADWAY
10TH FLOOR
NY, NY 10018
CONTACT:

Project ID: K126-JHS 126 Brooklyn - 261463.0000.0002
Sampling Date(s): July 18, 2016
Lab Report ID: 16070315
Client Service Contact: Nick Nicholas (518) 346-4592

Analysis Included:
PCB Analysis
Percent Total Solid

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is responsible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.



Roy Smith
Technical Director



Certifications: New York (EPA: NY00906, ELAP: 11078), New Jersey (NY026), Connecticut (PH-0337),
Massachusetts (M-NY906), Virginia (460241)

Pace Analytical Services, Inc. | 2190 Technology Drive | Schenectady, NY 12308
Phone: 518.346.4592 | internet: www.pacelabs.com

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CASE NARRATIVE

July 26, 2016

REVISED CASE NARRATIVE

This report was revised to include corrected sample collection dates.

This data package (SDG ID: 16070315) consists of 3 solid samples and 1 wipe sample received on 07/19/2016. The samples are from Project Name: K126-JHS 126 Brooklyn - 261463.0000.0002.

This sample delivery group consists of the following samples:

<u>Lab Sample ID</u>	<u>Client ID</u>	<u>Collection Date</u>
AT17797	126K-WOOD-1	07/18/2016 15:30
AT17798	126K-WOOD-2	07/18/2016 15:30
AT17799	126K-WOOD-3	07/18/2016 15:30
AT17800	126K-DECON	07/18/2016 15:30

Sample Delivery and Receipt Conditions

- (1.) All samples were delivered to the laboratory via FEDEX delivery service on 07/19/2016.
- (2.) All samples were received at the laboratory intact and within holding times.
- (3.) All samples were received at the laboratory properly preserved, if applicable.

PCB Aroclor Analysis (Solid)

Analysis for PCB Aroclors was performed by method SW-846 8082A. Samples were extracted by Soxhlet Extraction Method (EPA - Method 3540C). The following technical and administrative items were noted for the analysis:

- (1.) The surrogates DCBP and TCMX were diluted out for several quality control samples (LAB ID: AT17799M and AT17799K) due to the high concentration of PCB in the samples.

PCB Aroclor Analysis (Wipe)

Analysis for PCB Aroclors was performed by EPA Method 8082A. Samples were extracted by Soxhlet Extraction Method (EPA - Method 3540C). The following technical and administrative items were noted for the analysis:

- (1.) All quality assurance parameters were met for the analysis, unless otherwise noted.

Respectfully submitted,



Nick Nicholas
Project Manager

QUALIFIERS

Definitions

B - Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.

D - Surrogate was diluted. The analysis of the sample required a dilution such that the surrogate concentration was diluted outside the laboratory acceptance criteria.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be reanalyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

MDL – Adjusted Method Detection Limit.

P - Indicates relative percent difference (RPD) between primary and secondary gas chromatograph (GC) column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary gas chromatograph (GC) column analysis exceeds 25 %.

PQL – Practical Quantitation Limit. PQLs are adjusted for sample weight/volume and dilution factors.

RL - Reporting Limit Denotes lowest analyte concentration reportable for the sample based on regulatory or project specific limits.

U - Denotes analyte not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.

Z - Chromatographic interference due to polychlorinated biphenyl (PCB) co-elution.

* - Value not within control limits.

SAMPLE CHAIN OF CUSTODY



PCB BULK SAMPLE DATA AND CHAIN OF CUSTODY FORM

<16070315P1>



160703151

Client Name: NYCSCA

Project Name and Address: K126 - J.H.S. 126 Brooklyn

Page: 1 of 1

424 Leonard Street, Brooklyn, N.Y. 11222

Date: 7-18-2016

Requested Turnaround Time: 48 Hours

Project Manager: A Sigona

Project Number:

261463.0000.0002

Purchase Order 98046

PCB BULK SAMPLE INFORMATION

Bulk Sample ID No.	Room	Material Name/Use	Location	Floor	Quantity (L & W)	Condition G/D/SD	Date	Time	Photo ID No.
126K-WOOD-1	Exterior	COMPOSITE WOOD - BOTTOM	North Side	1	N/A	G	7/18/16	15:30	102-64
126K-WOOD-2	Exterior	COMPOSITE WOOD - BOTTOM	South Side	1	N/A	G			102-75
126K-WOOD-3	Exterior	COMPOSITE WOOD - TOP	Center	1	N/A	G			102-80
126K-DECON	Exterior	PRE-CLEAN NEW BIT FOR EACH SAMPLE w/ Hammer Wipe	N/A	1	N/A	G		15:30	102-59

Condition:

G- Good, D - Damaged, SD- Significantly Damaged

Special Instruction to Laboratory:

Composite A, B, C samples

Create one (1) composite sample of each homogeneous material from equal mass portions (± 5%) of the three (3) subsamples for extraction and analysis via EPA Method 8082 for the following Arochlors: 1016, 1221, 1232, 1242, 1248, 1254, 1260, 1262, 1268

CHAIN OF CUSTODY INFORMATION AND LABORATORY INFORMATION

Relinquished By:	Date	Time	Received By:	Date	Time	Method Of Submittal	
I. (Print): Anthony Sigona (Sign): [Signature]	7/18/16	18:05	FEDEX			Field	
II. (Print): [Signature] (Sign): [Signature]	7/19/16	955	A. Roway A. Roway	7/19/16	955	Fed-Ex	
ASigona@trcsolutions.com JOestreicher@trcsolutions.com AJaval@trcsolutions.com	Analytical Method: EPA Method 8082 * See special instructions box		Lab Comments: TEMP: 0.5			Analyzed By:	Date & Time:
						Print Name:	
						Sign:	

<16070315P2>



Sample Condition Upon Receipt

CLIENT NAME: NYSCA

PROJECT :

COURIER: FedEx UPS Client Pace Other

TRACKING # 7836 0763 6400

CUSTODY SEAL PRESENT: Yes No INTACT: Yes No N/A

PACKING MATERIAL: Bubble Wrap Bubble Bags None Other

ICE USED: Wet Blue None

THERMOMETER USED: #164 IR Gun 03 #160239773 #160239773-PRB

COOLER TEMPERATURE (°C): 0.5

BIOLOGICAL TISSUE IS FROZEN: Yes No N/A

COMMENTS:

Temperature is Acceptable? Yes No

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name / Signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. <u>2-day</u>
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
- Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC: - Includes date/time/ID/Analysis	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	12. <u>ID on container lid for all samples. Time/date/analysis not listed on any containers.</u>
All containers needing preservation have been checked:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are in compliance with EPA recommendation: - Exceptions that are not checked: TOC, VOA, Subcontract Analyses	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed: <u>N/A</u> Lot # of added preservative: <u>N/A</u>
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot #: <u>N/A</u>		

Sample Receipt form filled in: _____

Line-Out (Includes Copying Shipping Documents and verifying sample pH):

CJV 7/19/16

Log In (Includes notifying PM of any discrepancies and documenting in LIMS):

CJV 7/19/16

Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook):

CJV 7/19/16

3

SAMPLE RECEIPT



SAMPLE RECEIPT REPORT

16070315

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

CLIENT: TRC ENVIRONMENTAL
PROJECT: K126-JHS 126 BROOKLYN - 261463.0000.0002
LRF: 16070315
REPORT: ANALYTICAL REPORT
EDD: NO
LRF TAT: *48 HOUR*

RECEIVED DATE: 07/19/2016 09:55
SHIPPED VIA: FEDEX
SHIPPING ID: 7836 0763 6460
NUMBER OF COOLERS: 1
CUSTODY SEAL INTACT: YES
COOLER STATUS: CHILLED
TEMPERATURE(S): 5.5 °C

SAMPLE SEALS INTACT: NA
¹**SAMPLES PRESERVED PER METHOD GUIDANCE:** YES
³**SAMPLES REC'D IN HOLDTIME:** YES
DISPOSAL: BY LAB (45 DAYS)
COC DISCREPANCY: NO

COMMENTS:

CLIENT ID (LAB ID)	TAT-DUE Date ⁴	DATE-TIME SAMPLED	MATRIX	METHOD	TEST DESCRIPTION	QC REQUEST
126K-WOOD-1 (AT17797)	*48 HOUR* 07-21-16	07/13/2016 15:30	Solid	EPA 8082A	PCB Analysis	
126K-WOOD-2 (AT17798)	*48 HOUR* 07-21-16	07/13/2016 15:30	Solid	EPA 8082A	PCB Analysis	
126K-WOOD-3 (AT17799)	*48 HOUR* 07-21-16	07/13/2016 15:30	Solid	EPA 8082A	PCB Analysis	
126K-DECON (AT17800)	*48 HOUR* 07-21-16	07/13/2016 15:30	Wipe	EPA 8082A	PCB Analysis	

¹The pH preservation check of Oil and Grease (Method 1664) and Total Organic Carbon (Method 5310B) are performed as soon as possible after sample receipt and may not be included in this report.
²The pH preservation check of aqueous volatile samples is not performed until after the analysis of the sample to maintain zero headspace and is not included in this report.
³Samples received for pH analysis are not marked as a hold time exceedance here. SW-846 methods suggests analysis to be done within 15 minutes of sample collection. Because of transportation time it is not possible for the laboratory to perform the test in that time. Sample Certificates of Analysis reports are noted as such.
⁴Samples arriving at the laboratory after 4:00 pm are assigned a due date as if they arrived the following business day unless other arrangements have been made.
 The due date represents the date the lab report is expected to be completed on or before 5:00 pm (EST) for the date specified.
⁵All samples which require thermal preservation shall be considered acceptable when received greater than 6 degrees Celsius if they are collected on the same day as received and there is evidence that the chilling process has begun, such as arrival on ice. Control limits are between 0-6 Degrees Celsius. Control limits do not apply for metals analysis.
⁶Samples requesting analysis for Orthophosphate (SM 4500-P E-99,-11) require the samples to be filtered in the field within 15 minutes of the sampling event. Samples that are received unfiltered will be noted as not method compliant on the Certificates of Analysis.

Reporting Parameters and Lists

- EPA 8082A - PCB Analysis - (ug/g)
- Aroclor 1016
 - Aroclor 1221
 - Aroclor 1232
 - Aroclor 1242
 - Aroclor 1248
 - Aroclor 1254
 - Aroclor 1260
 - Aroclor 1262
 - Aroclor 1268
 - Total PCB Amount > RL

- EPA 8082A - PCB Analysis - (ug/Wipe)
- Aroclor 1016
 - Aroclor 1221
 - Aroclor 1232
 - Aroclor 1242
 - Aroclor 1248
 - Aroclor 1254
 - Aroclor 1260
 - Total PCB's

GC - PCB



Analytical Sample Results

Job Number: 16070315

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL	Collection Date: 07/18/2016 15:30
Project: K126-JHS 126 Brooklyn - 261463.0000.0002	Sample Matrix: SOLID
Client Sample ID: 126K-WOOD-1	Received Date: 07/19/2016 09:55
Lab Sample ID: 16070315-01 (AT17797)	Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-17	SW-846 8082A (PCB)	07/20/2016 14:05	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34297	EPA 3540C	07/19/2016 13:33	KTC	1.03 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.486	1.00	U	GC21F-2863-17
Aroclor 1221	11104-28-2	ND	0.486	1.00	U	GC21F-2863-17
Aroclor 1232	11141-16-5	ND	0.486	1.00	U	GC21F-2863-17
Aroclor 1242	53469-21-9	ND	0.486	1.00	U	GC21F-2863-17
Aroclor 1248	12672-29-6	ND	0.486	1.00	U	GC21F-2863-17
Aroclor 1254	11097-69-1	ND	0.486	1.00	U	GC21F-2863-17
Aroclor 1260	11096-82-5	ND	0.486	1.00	U	GC21F-2863-17
Aroclor 1262	37324-23-5	ND	0.486	1.00	U	GC21F-2863-17
Aroclor 1268	11100-14-4	ND	0.486	1.00	U	GC21F-2863-17
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2863-17

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	98.8	38.9-143		GC21F-2863-17
Decachlorobiphenyl	2051-24-3	90.2	30.0-155		GC21F-2863-17

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Analytical Sample Results

Job Number: 16070315

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: 126K-WOOD-2
Lab Sample ID: 16070315-02 (AT17798)

Collection Date: 07/18/2016 15:30
Sample Matrix: SOLID
Received Date: 07/19/2016 09:55
Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-18	SW-846 8082A (PCB)	07/20/2016 14:18	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34297	EPA 3540C	07/19/2016 13:35	KTC	1.14 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.439	1.00	U	GC21F-2863-18
Aroclor 1221	11104-28-2	ND	0.439	1.00	U	GC21F-2863-18
Aroclor 1232	11141-16-5	ND	0.439	1.00	U	GC21F-2863-18
Aroclor 1242	53469-21-9	ND	0.439	1.00	U	GC21F-2863-18
Aroclor 1248	12672-29-6	ND	0.439	1.00	U	GC21F-2863-18
Aroclor 1254	11097-69-1	ND	0.439	1.00	U	GC21F-2863-18
Aroclor 1260	11096-82-5	ND	0.439	1.00	U	GC21F-2863-18
Aroclor 1262	37324-23-5	ND	0.439	1.00	U	GC21F-2863-18
Aroclor 1268	11100-14-4	ND	0.439	1.00	U	GC21F-2863-18
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2863-18

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	93.3	38.9-143		GC21F-2863-18
Decachlorobiphenyl	2051-24-3	90.0	30.0-155		GC21F-2863-18

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Analytical Sample Results

Job Number: 16070315

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: 126K-WOOD-3
Lab Sample ID: 16070315-03 (AT17799)

Collection Date: 07/18/2016 15:30
Sample Matrix: SOLID
Received Date: 07/19/2016 09:55
Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-19	SW-846 8082A (PCB)	07/20/2016 14:30	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34297	EPA 3540C	07/19/2016 13:36	KTC	1.16 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.430	1.00	U	GC21F-2863-19
Aroclor 1221	11104-28-2	ND	0.430	1.00	U	GC21F-2863-19
Aroclor 1232	11141-16-5	ND	0.430	1.00	U	GC21F-2863-19
Aroclor 1242	53469-21-9	ND	0.430	1.00	U	GC21F-2863-19
Aroclor 1248	12672-29-6	ND	0.430	1.00	U	GC21F-2863-19
Aroclor 1254	11097-69-1	ND	0.430	1.00	U	GC21F-2863-19
Aroclor 1260	11096-82-5	ND	0.430	1.00	U	GC21F-2863-19
Aroclor 1262	37324-23-5	ND	0.430	1.00	U	GC21F-2863-19
Aroclor 1268	11100-14-4	ND	0.430	1.00	U	GC21F-2863-19
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2863-19

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	98.2	38.9-143		GC21F-2863-19
Decachlorobiphenyl	2051-24-3	90.4	30.0-155		GC21F-2863-19

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Analytical Sample Results

Job Number: 16070315

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: 126K-DECON
Lab Sample ID: 16070315-04 (AT17800)

Collection Date: 07/18/2016 15:30
Sample Matrix: WIPE
Received Date: 07/19/2016 09:55
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-27	SW-846 8082A (PCB)	07/20/2016 16:12	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34296	EPA 3540C	07/19/2016 13:30	KTC	1 Wipe(s)	25.0 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.500	1.00	U	GC21F-2863-27
Aroclor 1221	11104-28-2	ND	0.500	1.00	U	GC21F-2863-27
Aroclor 1232	11141-16-5	ND	0.500	1.00	U	GC21F-2863-27
Aroclor 1242	53469-21-9	ND	0.500	1.00	U	GC21F-2863-27
Aroclor 1248	12672-29-6	ND	0.500	1.00	U	GC21F-2863-27
Aroclor 1254	11097-69-1	ND	0.500	1.00	U	GC21F-2863-27
Aroclor 1260	11096-82-5	ND	0.500	1.00	U	GC21F-2863-27
Total PCB's	1336-36-3	ND		1.00	U	GC21F-2863-27

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	103	59.3-136		GC21F-2863-27
Decachlorobiphenyl	2051-24-3	96.2	70.2-139		GC21F-2863-27

¹Qualifier column where * denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Quality Control Samples (Field)



Quality Control Results
Matrix Spike Sample (MS)
Job Number: 16070315

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL	Collection Date: N/A
Project: K126-JHS 126 Brooklyn - 261463.0000.0002	Sample Matrix: SOLID
Client Sample ID: 126K-WOOD-3 MS	Received Date: N/A
Lab Sample ID: 16070315-03M (AT17799M)	Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC21F-2863-20	SW-846 8082A (PCB)	07/20/2016 14:43	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1: 34297	EPA 3540C	07/19/2016 13:37	KTC	1.06 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	110	4.70	10.0		GC21F-2863-20
Aroclor 1221	11104-28-2	ND	4.70	10.0	U	GC21F-2863-20
Aroclor 1232	11141-16-5	ND	4.70	10.0	U	GC21F-2863-20
Aroclor 1242	53469-21-9	ND	4.70	10.0	U	GC21F-2863-20
Aroclor 1248	12672-29-6	ND	4.70	10.0	U	GC21F-2863-20
Aroclor 1254	11097-69-1	ND	4.70	10.0	U	GC21F-2863-20
Aroclor 1260	11096-82-5	114	4.70	10.0		GC21F-2863-20
Aroclor 1262	37324-23-5	ND	4.70	10.0	U	GC21F-2863-20
Aroclor 1268	11100-14-4	ND	4.70	10.0	U	GC21F-2863-20
Total PCB Amount > RL	1336-36-3	224		10.0		GC21F-2863-20

Analyte Spiked	CAS No.	Sample (ug/g)	Added (ug/g)	MS (ug/g)	MS % Rec.	Q ¹	Limits (%)
Aroclor 1016	12674-11-2	94.0	94.0	110	117		70.0-130
Aroclor 1260	11096-82-5	94.0	94.0	114	122		70.0-130

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	124	38.9-143	D	GC21F-2863-20
Decachlorobiphenyl	2051-24-3	104	30.0-155	D	GC21F-2863-20

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results
Matrix Spike Duplicate (MSD)
Job Number: 16070315

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL	Collection Date: N/A
Project: K126-JHS 126 Brooklyn - 261463.0000.0002	Sample Matrix: SOLID
Client Sample ID: 126K-WOOD-3 MSD	Received Date: N/A
Lab Sample ID: 16070315-03K (AT17799K)	Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-21	SW-846 8082A (PCB)	07/20/2016 14:56	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34297	EPA 3540C	07/19/2016 13:37	KTC	1.09 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	109	4.57	10.0		GC21F-2863-21
Aroclor 1221	11104-28-2	ND	4.57	10.0	U	GC21F-2863-21
Aroclor 1232	11141-16-5	ND	4.57	10.0	U	GC21F-2863-21
Aroclor 1242	53469-21-9	ND	4.57	10.0	U	GC21F-2863-21
Aroclor 1248	12672-29-6	ND	4.57	10.0	U	GC21F-2863-21
Aroclor 1254	11097-69-1	ND	4.57	10.0	U	GC21F-2863-21
Aroclor 1260	11096-82-5	113	4.57	10.0		GC21F-2863-21
Aroclor 1262	37324-23-5	ND	4.57	10.0	U	GC21F-2863-21
Aroclor 1268	11100-14-4	ND	4.57	10.0	U	GC21F-2863-21
Total PCB Amount > RL	1336-36-3	222		10.0		GC21F-2863-21

Analyte Spiked	CAS No.	Sample (ug/g)	Added (ug/g)	MSD (ug/g)	MSD % Rec.	Q ¹	Limits (%)	Precision		
								MS % Rec.	RPD	Q ¹
Aroclor 1016	12674-11-2	91.5	109	109	119		70.0-130	117	1.69	20
Aroclor 1260	11096-82-5	91.5	113	113	124		70.0-130	122	1.63	20

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	112	38.9-143	D	GC21F-2863-21
Decachlorobiphenyl	2051-24-3	102	30.0-155	D	GC21F-2863-21

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Quality Control Samples (Lab)



**Quality Control Results
Method Blank**

Job Number: 16070315

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Method Blank (AT17797B)
Lab Sample ID: PBLK-59

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-15	SW-846 8082A (PCB)	07/20/2016 13:39	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34297	EPA 3540C	07/19/2016 13:32	KTC	10.0 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC21F-2863-15
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC21F-2863-15
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC21F-2863-15
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC21F-2863-15
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC21F-2863-15
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC21F-2863-15
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC21F-2863-15
Aroclor 1262	37324-23-5	ND	0.0500	1.00	U	GC21F-2863-15
Aroclor 1268	11100-14-4	ND	0.0500	1.00	U	GC21F-2863-15
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2863-15

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	101	38.9-143		GC21F-2863-15
Decachlorobiphenyl	2051-24-3	89.2	30.0-155		GC21F-2863-15

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Lab Control Sample (LCS)**

Job Number: 16070315

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample (AT17797L)
Lab Sample ID: LCS-59

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-16	SW-846 8082A (PCB)	07/20/2016 13:52	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34297	EPA 3540C	07/19/2016 13:33	KTC	10.1 g	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/g)	LCS (ug/g)	LCS % Rec.	Q ¹	Limits (%)
Aroclor 1016	12674-11-2	1.24	1.23	99.5		70.0-130
Aroclor 1260	11096-82-5	1.24	1.21	97.8		70.0-130

¹Qualifier column where "*" denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	99.8	38.9-143		GC21F-2863-16
Decachlorobiphenyl	2051-24-3	87.5	30.0-155		GC21F-2863-16

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Method Blank**

Job Number: 16070315

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Method Blank (AT17800B)
Lab Sample ID: PBLK-58

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-24	SW-846 8082A (PCB)	07/20/2016 15:34	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34296	EPA 3540C	07/19/2016 13:30	KTC	1 Wipe(s)	25.0 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.500	1.00	U	GC21F-2863-24
Aroclor 1221	11104-28-2	ND	0.500	1.00	U	GC21F-2863-24
Aroclor 1232	11141-16-5	ND	0.500	1.00	U	GC21F-2863-24
Aroclor 1242	53469-21-9	ND	0.500	1.00	U	GC21F-2863-24
Aroclor 1248	12672-29-6	ND	0.500	1.00	U	GC21F-2863-24
Aroclor 1254	11097-69-1	ND	0.500	1.00	U	GC21F-2863-24
Aroclor 1260	11096-82-5	ND	0.500	1.00	U	GC21F-2863-24
Total PCB's	1336-36-3	ND		1.00	U	GC21F-2863-24

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	105	59.3-136		GC21F-2863-24
Decachlorobiphenyl	2051-24-3	94.7	70.2-139		GC21F-2863-24

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Lab Control Sample (LCS)**

Job Number: 16070315

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample (AT17800L)
Lab Sample ID: LCS-58

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-25	SW-846 8082A (PCB)	07/20/2016 15:47	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34296	EPA 3540C	07/19/2016 13:30	KTC	1 Wipe(s)	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCS (ug/Wipe)	LCS % Rec.	Q ¹	Limits (%)
Aroclor 1016	12674-11-2	12.5	13.5	108		70.0-130
Aroclor 1260	11096-82-5	12.5	13.6	109		70.0-130

¹Qualifier column where "*" denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	101	59.3-136		GC21F-2863-25
Decachlorobiphenyl	2051-24-3	98.4	70.2-139		GC21F-2863-25

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results
Lab Control Sample - Duplicate (LCSD)
Job Number: 16070315

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample - Duplicate (AT17800S)
Lab Sample ID: LCSD-58

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2863-26	SW-846 8082A (PCB)	07/20/2016 15:59	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34296	EPA 3540C	07/19/2016 13:30	KTC	1 Wipe(s)	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCSD (ug/Wipe)	LCSD % Rec.	Q ¹	Limits (%)	Precision			Limits (%)
							LCS % Rec.	RPD	Q ¹	
Aroclor 1016	12674-11-2	12.5	12.7	102		70.0-130	108	5.71	*	0
Aroclor 1260	11096-82-5	12.5	12.6	101		70.0-130	109	7.62	*	0

¹Qualifier column where "*" denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	102	59.3-136		GC21F-2863-26
Decachlorobiphenyl	2051-24-3	94.4	70.2-139		GC21F-2863-26

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Pace Analytical e-Report

Report prepared for:
TRC ENVIRONMENTAL
1430 BROADWAY
10TH FLOOR
NY, NY 10018
CONTACT:

Project ID: K126-JHS 126 Brooklyn - 261463.0000.0002
Sampling Date(s): July 21, 2016
Lab Report ID: 16070418
Client Service Contact: Nick Nicholas (518) 346-4592

Analysis Included:
PCB Analysis
Percent Total Solid

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is responsible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.



Roy Smith
Technical Director



Certifications: New York (EPA: NY00906, ELAP: 11078), New Jersey (NY026), Connecticut (PH-0337), Massachusetts (M-NY906), Virginia (460241)

Pace Analytical Services, Inc. | 2190 Technology Drive | Schenectady, NY 12308
Phone: 518.346.4592 | internet: www.pacelabs.com

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CASE NARRATIVE

July 26, 2016

CASE NARRATIVE

This data package (SDG ID: 16070418) consists of 1 solid sample and 1 wipe sample received on 07/22/2016. The samples are from Project Name: K126-JHS 126 Brooklyn - 261463.0000.0002.

This sample delivery group consists of the following samples:

<u>Lab Sample ID</u>	<u>Client ID</u>	<u>Collection Date</u>
AT18214	126K-WOOD-4	07/21/2016 16:30
AT18215	126K-DECON-2	07/21/2016 16:25

Sample Delivery and Receipt Conditions

- (1.) All samples were delivered to the laboratory via FEDEX delivery service on 07/22/2016.
- (2.) All samples were received at the laboratory intact and within holding times.
- (3.) All samples were received at the laboratory properly preserved, if applicable.

PCB Aroclor Analysis (Solid)

Analysis for PCB Aroclors was performed by method SW-846 8082A using a dual column GC system. Samples were extracted by Soxhlet Extraction Method (EPA - Method 3540C). The following technical and administrative items were noted for the analysis:

- (1.) The surrogates DCBP and TCMX were diluted out for several quality control samples (LAB ID: AT18214M and AT18214K) due to the high concentration of PCB in the samples.

PCB Aroclor Analysis (Wipe)

Analysis for PCB Aroclors was performed by EPA Method 8082A dual column GC analysis. Samples were extracted by Soxhlet Extraction Method (EPA - Method 3540C). The following technical and administrative items were noted for the analysis:

- (1.) All quality assurance parameters were met for the analysis, unless otherwise noted.

Respectfully submitted,



Nick Nicholas
Project Manager

QUALIFIERS

Definitions

B - Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.

D - Surrogate was diluted. The analysis of the sample required a dilution such that the surrogate concentration was diluted outside the laboratory acceptance criteria.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be reanalyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

MDL – Adjusted Method Detection Limit.

P - Indicates relative percent difference (RPD) between primary and secondary gas chromatograph (GC) column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary gas chromatograph (GC) column analysis exceeds 25 %.

PQL – Practical Quantitation Limit. PQLs are adjusted for sample weight/volume and dilution factors.

RL - Reporting Limit Denotes lowest analyte concentration reportable for the sample based on regulatory or project specific limits.

U - Denotes analyte not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.

Z - Chromatographic interference due to polychlorinated biphenyl (PCB) co-elution.

* - Value not within control limits.

SAMPLE CHAIN OF CUSTODY



PCB BULK SAMPLE DATA AND CHAIN OF CUSTODY FORM

<16070418P1>

Client Name: NYCSCA

Project Name and Address: K126 - J.H.S. 126 Brooklyn
424 Leonard Street, Brooklyn, N.Y. 11222

Prepared By

Page: 1 of 1

Date: 7-21-2016

Requested Turnaround Time: 48 Hours



160704181

: A Sigona

Project Number:
261463.0000.0002
Purchase Order 98046

PCB BULK SAMPLE INFORMATION

Bulk Sample ID No.	Room	Material Name/Use	Location	Floor	Quantity (L & W)	Condition G/D/SD	Date	Time	Photo ID No.
--------------------	------	-------------------	----------	-------	------------------	------------------	------	------	--------------

126K-WOOD-4	EXT.	COMPOSTER / EXTERIOR WOOD (bottom/sides)	EAST SIDE		COURTYARD 1109AM @		7/21/16	16:30	
126K-DECON-2		DECON of 1" SPADE BIT					7/21/16	16:25	

Condition:

G- Good, D - Damaged, SD- Significantly Damaged

Special Instruction to Laboratory: N/A

CHAIN OF CUSTODY INFORMATION AND LABORATORY INFORMATION

Relinquished By:	Date	Time	Received By:	Date	Time	Method Of Submittal	
I. (Print): Anthony Sigona	7/21/16		Fedex			Field	
(Sign): <i>[Signature]</i>						Walk In	
II. (Print): <i>[Signature]</i>	7/22/16	9:25	A. Javal	7/22/16	9:25	Fed-Ex	
(Sign): <i>[Signature]</i>			<i>[Signature]</i>			Others	
ASigona@trcsolutions.com	Analytical Method:		Lab Comments:			Analyzed By:	Date & Time:
JOestreicher@trcsolutions.com	EPA Method 8082		Temp: 2.4			Print Name:	
AJaval@trcsolutions.com	* See special instructions box					Sign:	

<16070418P2>



Sample Condition Upon Receipt

CLIENT NAME: TRC - SM

PROJECT: K126

COURIER: FedEx UPS Client Pace Other

TRACKING # 8993 8024 6261

CUSTODY SEAL PRESENT: Yes No INTACT: Yes No N/A

PACKING MATERIAL: Bubble Wrap Bubble Bags None Other

ICE USED: Wet Blue None

THERMOMETER USED: #164 IR Gun 03 #160239773 #160239773-PRB

COOLER TEMPERATURE (°C): 2.4

BIOLOGICAL TISSUE IS FROZEN: Yes No N/A

Temperature is Acceptable? Yes No

COMMENTS:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		3.
Sampler Name / Signature on COC:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		7. <u>2-days</u>
Sufficient Volume:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		9.
- Pace Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		12.
- Includes date/time/ID/Analysis				
All containers needing preservation have been checked:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are in compliance with EPA recommendation:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
- Exceptions that are not checked: TOC, VOA, Subcontract Analyses				
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot #: <u>N/A</u>				

Sample Receipt form filled in: DB 7/22/16

Line-Out (Includes Copying Shipping Documents and verifying sample pH): DB 7/22/16

Log In (Includes notifying PM of any discrepancies and documenting in LIMS): DB 7/22/16

Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): DB 7/22/16

SAMPLE RECEIPT



SAMPLE RECEIPT REPORT

16070418

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

CLIENT: TRC ENVIRONMENTAL
PROJECT: K126-JHS 126 BROOKLYN - 261463.0000.0002
LRF: 16070418
REPORT: ANALYTICAL REPORT
EDD: NO
LRF TAT: *48 HOUR*

RECEIVED DATE: 07/22/2016 09:25
SHIPPED VIA: FEDEX
SHIPPING ID: 8993 8024 6261
NUMBER OF COOLERS: 1
CUSTODY SEAL INTACT: YES
COOLER STATUS: CHILLED
TEMPERATURE(S): 5.4 °C

SAMPLE SEALS INTACT: NA
¹**SAMPLES PRESERVED PER METHOD GUIDANCE:** YES
³**SAMPLES REC'D IN HOLDTIME:** YES
DISPOSAL: BY LAB (45 DAYS)
COC DISCREPANCY: NO

COMMENTS:

CLIENT ID (LAB ID)	TAT-DUE Date ⁴	DATE-TIME SAMPLED	MATRIX	METHOD	TEST DESCRIPTION	QC REQUEST
126K-WOOD-4 (AT18214)	*48 HOUR* 07-26-16	07/21/2016 16:30	Solid	EPA 8082A	PCB Analysis	
126K-DECON-2 (AT18215)	*48 HOUR* 07-26-16	07/21/2016 16:25	Wipe	EPA 8082A	PCB Analysis	

¹The pH preservation check of Oil and Grease (Method 1664) and Total Organic Carbon (Method 5310B) are performed as soon as possible after sample receipt and may not be included in this report.
²The pH preservation check of aqueous volatile samples is not performed until after the analysis of the sample to maintain zero headspace and is not included in this report.
³Samples received for pH analysis are not marked as a hold time exceedance here. SW-846 methods suggests analysis to be done within 15 minutes of sample collection. Because of transportation time it is not possible for the laboratory to perform the test in that time. Sample Certificates of Analysis reports are noted as such.
⁴Samples arriving at the laboratory after 4:00 pm are assigned a due date as if they arrived the following business day unless other arrangements have been made. The due date represents the date the lab report is expected to be completed on or before 5:00 pm (EST) for the date specified.
⁵All samples which require thermal preservation shall be considered acceptable when received greater than 6 degrees Celsius if they are collected on the same day as received and there is evidence that the chilling process has begun, such as arrival on ice. Control limits are between 0-6 Degrees Celsius. Control limits do not apply for metals analysis.
⁶Samples requesting analysis for Orthophosphate (SM 4500-P E-99,-11) require the samples to be filtered in the field within 15 minutes of the sampling event. Samples that are received unfiltered will be noted as not method compliant on the Certificates of Analysis.

Reporting Parameters and Lists

- EPA 8082A - PCB Analysis - (ug/100cm2)
- Aroclor 1016
 - Aroclor 1221
 - Aroclor 1232
 - Aroclor 1242
 - Aroclor 1248
 - Aroclor 1254
 - Aroclor 1260
 - Aroclor 1262
 - Aroclor 1268
 - Total PCB's

- EPA 8082A - PCB Analysis - (ug/g)
- Aroclor 1016
 - Aroclor 1221
 - Aroclor 1232
 - Aroclor 1242
 - Aroclor 1248
 - Aroclor 1254
 - Aroclor 1260
 - Aroclor 1262
 - Aroclor 1268
 - Total PCB Amount > RL

GC - PCB



Analytical Sample Results

Job Number: 16070418

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL	Collection Date: 07/21/2016 16:30
Project: K126-JHS 126 Brooklyn - 261463.0000.0002	Sample Matrix: SOLID
Client Sample ID: 126K-WOOD-4	Received Date: 07/22/2016 09:25
Lab Sample ID: 16070418-01 (AT18214)	Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-6	SW-846 8082A (PCB)	07/26/2016 10:22	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:18	SW	1.07 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.469	1.00	U	GC20F-2547-6
Aroclor 1221	11104-28-2	ND	0.469	1.00	U	GC20F-2547-6
Aroclor 1232	11141-16-5	ND	0.469	1.00	U	GC20F-2547-6
Aroclor 1242	53469-21-9	ND	0.469	1.00	U	GC20F-2547-6
Aroclor 1248	12672-29-6	ND	0.469	1.00	U	GC20F-2547-6
Aroclor 1254	11097-69-1	ND	0.469	1.00	U	GC20F-2547-6
Aroclor 1260	11096-82-5	ND	0.469	1.00	U	GC20F-2547-6
Aroclor 1262	37324-23-5	ND	0.469	1.00	U	GC20F-2547-6
Aroclor 1268	11100-14-4	ND	0.469	1.00	U	GC20F-2547-6
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC20F-2547-6

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	104	38.9-143		GC20F-2547-6
Decachlorobiphenyl	2051-24-3	107	30.0-155		GC20F-2547-6
Tetrachloro-meta-xylene	877-09-8	97.1	38.9-143		GC20B-2546-6
Decachlorobiphenyl	2051-24-3	95.9	30.0-155		GC20B-2546-6

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Analytical Sample Results

Job Number: 16070418

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: 126K-DECON-2
Lab Sample ID: 16070418-02 (AT18215)

Collection Date: 07/21/2016 16:25
Sample Matrix: WIPE
Received Date: 07/22/2016 09:25
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-14	SW-846 8082A (PCB)	07/26/2016 12:19	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34328	EPA 3540C	07/25/2016 08:15	SW	1 Wipe(s)	25.0 mL	NA

Analyte	CAS No.	Result (ug/100cm ²)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.500	1.00	U	GC20F-2547-14
Aroclor 1221	11104-28-2	ND	0.500	1.00	U	GC20F-2547-14
Aroclor 1232	11141-16-5	ND	0.500	1.00	U	GC20F-2547-14
Aroclor 1242	53469-21-9	ND	0.500	1.00	U	GC20F-2547-14
Aroclor 1248	12672-29-6	ND	0.500	1.00	U	GC20F-2547-14
Aroclor 1254	11097-69-1	ND	0.500	1.00	U	GC20F-2547-14
Aroclor 1260	11096-82-5	ND	0.500	1.00	U	GC20F-2547-14
Aroclor 1262	37324-23-5	ND	0.500	1.00	U	GC20F-2547-14
Aroclor 1268	11100-14-4	ND	0.500	1.00	U	GC20F-2547-14
Total PCB's	1336-36-3	ND		1.00	U	GC20F-2547-14

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	93.8	59.3-136		GC20F-2547-14
Decachlorobiphenyl	2051-24-3	99.8	70.2-139		GC20F-2547-14
Tetrachloro-meta-xylene	877-09-8	89.5	59.3-136		GC20B-2546-14
Decachlorobiphenyl	2051-24-3	90.9	70.2-139		GC20B-2546-14

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Note: Concentration results based upon client supplied area.

Quality Control Samples (Field)



**Quality Control Results
Matrix Spike Sample (MS)**

Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL	Collection Date: N/A
Project: K126-JHS 126 Brooklyn - 261463.0000.0002	Sample Matrix: SOLID
Client Sample ID: 126K-WOOD-4 MS	Received Date: N/A
Lab Sample ID: 16070418-01M (AT18214M)-Confirm	Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20B-2546-7	SW-846 8082A (PCB)	07/26/2016 10:35	MCA	NA	NA	Phenomenex, Zebtron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:21	SW	1.06 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	4.71	10.0	U	GC20B-2546-7
Aroclor 1221	11104-28-2	ND	4.71	10.0	U	GC20B-2546-7
Aroclor 1232	11141-16-5	ND	4.71	10.0	U	GC20B-2546-7
Aroclor 1242	53469-21-9	ND	4.71	10.0	U	GC20B-2546-7
Aroclor 1248	12672-29-6	ND	4.71	10.0	U	GC20B-2546-7
Aroclor 1254	11097-69-1	119	4.71	10.0		GC20B-2546-7
Aroclor 1260	11096-82-5	ND	4.71	10.0	U	GC20B-2546-7
Aroclor 1262	37324-23-5	ND	4.71	10.0	U	GC20B-2546-7
Aroclor 1268	11100-14-4	ND	4.71	10.0	U	GC20B-2546-7
Total PCB Amount > RL	1336-36-3	119		10.0		GC20B-2546-7

Analyte Spiked	CAS No.	Sample (ug/g)	Added (ug/g)	MS (ug/g)	MS % Rec.	Q ¹	Limits (%)
Aroclor 1254	11097-69-1		94.3	119	126		70.0-130

¹Qualifier column where "*" denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	88.8	38.9-143	D	GC20B-2546-7
Decachlorobiphenyl	2051-24-3	57.1	30.0-155	D	GC20B-2546-7

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Matrix Spike Sample (MS)
Job Number: 16070418**

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL	Collection Date: N/A
Project: K126-JHS 126 Brooklyn - 261463.0000.0002	Sample Matrix: SOLID
Client Sample ID: 126K-WOOD-4 MS	Received Date: N/A
Lab Sample ID: 16070418-01M (AT18214M)-Primary	Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-7	SW-846 8082A (PCB)	07/26/2016 10:35	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:21	SW	1.06 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	4.71	10.0	U	GC20F-2547-7
Aroclor 1221	11104-28-2	ND	4.71	10.0	U	GC20F-2547-7
Aroclor 1232	11141-16-5	ND	4.71	10.0	U	GC20F-2547-7
Aroclor 1242	53469-21-9	ND	4.71	10.0	U	GC20F-2547-7
Aroclor 1248	12672-29-6	ND	4.71	10.0	U	GC20F-2547-7
Aroclor 1254	11097-69-1	128	4.71	10.0		GC20F-2547-7
Aroclor 1260	11096-82-5	ND	4.71	10.0	U	GC20F-2547-7
Aroclor 1262	37324-23-5	ND	4.71	10.0	U	GC20F-2547-7
Aroclor 1268	11100-14-4	ND	4.71	10.0	U	GC20F-2547-7
Total PCB Amount > RL	1336-36-3	128		10.0		GC20F-2547-7

Analyte Spiked	CAS No.	Sample (ug/g)	Added (ug/g)	MS (ug/g)	MS % Rec.	Q ¹	Limits (%)
Aroclor 1254	11097-69-1		94.3	128	135	*	70.0-130

¹Qualifier column where "*" denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	99.3	38.9-143	D	GC20F-2547-7
Decachlorobiphenyl	2051-24-3	105	30.0-155	D	GC20F-2547-7

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Matrix Spike Duplicate (MSD)**
Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL	Collection Date: N/A
Project: K126-JHS 126 Brooklyn - 261463.0000.0002	Sample Matrix: SOLID
Client Sample ID: 126K-WOOD-4 MSD	Received Date: N/A
Lab Sample ID: 16070418-01K (AT18214K)-Primary	Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-8	SW-846 8082A (PCB)	07/26/2016 10:47	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:22	SW	1.01 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	4.95	10.0	U	GC20F-2547-8
Aroclor 1221	11104-28-2	ND	4.95	10.0	U	GC20F-2547-8
Aroclor 1232	11141-16-5	ND	4.95	10.0	U	GC20F-2547-8
Aroclor 1242	53469-21-9	ND	4.95	10.0	U	GC20F-2547-8
Aroclor 1248	12672-29-6	ND	4.95	10.0	U	GC20F-2547-8
Aroclor 1254	11097-69-1	150	4.95	10.0		GC20F-2547-8
Aroclor 1260	11096-82-5	ND	4.95	10.0	U	GC20F-2547-8
Aroclor 1262	37324-23-5	ND	4.95	10.0	U	GC20F-2547-8
Aroclor 1268	11100-14-4	ND	4.95	10.0	U	GC20F-2547-8
Total PCB Amount > RL	1336-36-3	150		10.0		GC20F-2547-8

Analyte Spiked	CAS No.	Sample (ug/g)	Added (ug/g)	MSD (ug/g)	MSD % Rec.	Q ¹	Limits (%)	Precision			
								MS % Rec.	RPD	Q ¹	Limits (%)
Aroclor 1254	11097-69-1	99.0	150	151	*	70.0-130	135	11.2	20		

¹Qualifier column where "*" denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	130	38.9-143	D	GC20F-2547-8
Decachlorobiphenyl	2051-24-3	111	30.0-155	D	GC20F-2547-8

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Matrix Spike Duplicate (MSD)
Job Number: 16070418**

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL	Collection Date: N/A
Project: K126-JHS 126 Brooklyn - 261463.0000.0002	Sample Matrix: SOLID
Client Sample ID: 126K-WOOD-4 MSD	Received Date: N/A
Lab Sample ID: 16070418-01K (AT18214K)-Confirm	Percent Solid: 100 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20B-2546-8	SW-846 8082A (PCB)	07/26/2016 10:47	MCA	NA	NA	Phenomenex, Zebtron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:22	SW	1.01 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	4.95	10.0	U	GC20B-2546-8
Aroclor 1221	11104-28-2	ND	4.95	10.0	U	GC20B-2546-8
Aroclor 1232	11141-16-5	ND	4.95	10.0	U	GC20B-2546-8
Aroclor 1242	53469-21-9	ND	4.95	10.0	U	GC20B-2546-8
Aroclor 1248	12672-29-6	ND	4.95	10.0	U	GC20B-2546-8
Aroclor 1254	11097-69-1	141	4.95	10.0		GC20B-2546-8
Aroclor 1260	11096-82-5	ND	4.95	10.0	U	GC20B-2546-8
Aroclor 1262	37324-23-5	ND	4.95	10.0	U	GC20B-2546-8
Aroclor 1268	11100-14-4	ND	4.95	10.0	U	GC20B-2546-8
Total PCB Amount > RL	1336-36-3	141		10.0		GC20B-2546-8

Analyte Spiked	CAS No.	Sample (ug/g)	Added (ug/g)	MSD (ug/g)	MSD % Rec.	Q ¹	Limits (%)	Precision		
								MS % Rec.	RPD	Q ¹
Aroclor 1254	11097-69-1	99.0	141	142	*	70.0-130	126	11.9	20	

¹Qualifier column where "*" denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	110	38.9-143	D	GC20B-2546-8
Decachlorobiphenyl	2051-24-3	81.5	30.0-155	D	GC20B-2546-8

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Quality Control Samples (Lab)



**Quality Control Results
Method Blank**

Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Method Blank (AT18214B)
Lab Sample ID: PBLK-88

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20B-2546-4	SW-846 8082A (PCB)	07/26/2016 09:57	MCA	NA	NA	Phenomenex, Zebtron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:16	SW	10.5 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC20B-2546-4
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC20B-2546-4
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC20B-2546-4
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC20B-2546-4
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC20B-2546-4
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC20B-2546-4
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC20B-2546-4
Aroclor 1262	37324-23-5	ND	0.0500	1.00	U	GC20B-2546-4
Aroclor 1268	11100-14-4	ND	0.0500	1.00	U	GC20B-2546-4
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC20B-2546-4

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	97.2	38.9-143		GC20B-2546-4
Decachlorobiphenyl	2051-24-3	95.6	30.0-155		GC20B-2546-4

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Method Blank**

Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Method Blank (AT18214B)
Lab Sample ID: PBLK-88

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-4	SW-846 8082A (PCB)	07/26/2016 09:57	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:16	SW	10.5 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC20F-2547-4
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC20F-2547-4
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC20F-2547-4
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC20F-2547-4
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC20F-2547-4
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC20F-2547-4
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC20F-2547-4
Aroclor 1262	37324-23-5	ND	0.0500	1.00	U	GC20F-2547-4
Aroclor 1268	11100-14-4	ND	0.0500	1.00	U	GC20F-2547-4
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC20F-2547-4

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	105	38.9-143		GC20F-2547-4
Decachlorobiphenyl	2051-24-3	109	30.0-155		GC20F-2547-4

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Lab Control Sample (LCS)**

Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample (AT18214L)
Lab Sample ID: LCS-88

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20B-2546-5	SW-846 8082A (PCB)	07/26/2016 10:10	MCA	NA	NA	Phenomenex, Zebron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:17	SW	10.5 g	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/g)	LCS (ug/g)	LCS % Rec.	Q ¹	Limits (%)
Aroclor 1254	11097-69-1	1.20	1.22	102		70.0-130

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	93.8	38.9-143		GC20B-2546-5
Decachlorobiphenyl	2051-24-3	93.9	30.0-155		GC20B-2546-5

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Lab Control Sample (LCS)**
Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample (AT18214L)
Lab Sample ID: LCS-88

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-5	SW-846 8082A (PCB)	07/26/2016 10:10	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34330	EPA 3540C	07/25/2016 08:17	SW	10.5 g	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/g)	LCS (ug/g)	LCS % Rec.	Q ¹	Limits (%)
Aroclor 1254	11097-69-1	1.20	1.30	109		70.0-130

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	102	38.9-143		GC20F-2547-5
Decachlorobiphenyl	2051-24-3	106	30.0-155		GC20F-2547-5

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Method Blank**

Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Method Blank (AT18215B)
Lab Sample ID: PBLK-86

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20B-2546-11	SW-846 8082A (PCB)	07/26/2016 11:42	MCA	NA	NA	Phenomenex, Zebron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34328	EPA 3540C	07/25/2016 08:15	SW	1 Wipe(s)	25.0 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.500	1.00	U	GC20B-2546-11
Aroclor 1221	11104-28-2	ND	0.500	1.00	U	GC20B-2546-11
Aroclor 1232	11141-16-5	ND	0.500	1.00	U	GC20B-2546-11
Aroclor 1242	53469-21-9	ND	0.500	1.00	U	GC20B-2546-11
Aroclor 1248	12672-29-6	ND	0.500	1.00	U	GC20B-2546-11
Aroclor 1254	11097-69-1	ND	0.500	1.00	U	GC20B-2546-11
Aroclor 1260	11096-82-5	ND	0.500	1.00	U	GC20B-2546-11
Aroclor 1262	37324-23-5	ND	0.500	1.00	U	GC20B-2546-11
Aroclor 1268	11100-14-4	ND	0.500	1.00	U	GC20B-2546-11
Total PCB's	1336-36-3	ND		1.00	U	GC20B-2546-11

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	73.0	59.3-136		GC20B-2546-11
Decachlorobiphenyl	2051-24-3	81.3	70.2-139		GC20B-2546-11

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Method Blank**

Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Method Blank (AT18215B)
Lab Sample ID: PBLK-86

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-11	SW-846 8082A (PCB)	07/26/2016 11:42	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34328	EPA 3540C	07/25/2016 08:15	SW	1 Wipe(s)	25.0 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.500	1.00	U	GC20F-2547-11
Aroclor 1221	11104-28-2	ND	0.500	1.00	U	GC20F-2547-11
Aroclor 1232	11141-16-5	ND	0.500	1.00	U	GC20F-2547-11
Aroclor 1242	53469-21-9	ND	0.500	1.00	U	GC20F-2547-11
Aroclor 1248	12672-29-6	ND	0.500	1.00	U	GC20F-2547-11
Aroclor 1254	11097-69-1	ND	0.500	1.00	U	GC20F-2547-11
Aroclor 1260	11096-82-5	ND	0.500	1.00	U	GC20F-2547-11
Aroclor 1262	37324-23-5	ND	0.500	1.00	U	GC20F-2547-11
Aroclor 1268	11100-14-4	ND	0.500	1.00	U	GC20F-2547-11
Total PCB's	1336-36-3	ND		1.00	U	GC20F-2547-11

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	77.4	59.3-136		GC20F-2547-11
Decachlorobiphenyl	2051-24-3	89.8	70.2-139		GC20F-2547-11

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results
Lab Control Sample (LCS)
Job Number: 16070418

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample (AT18215L)
Lab Sample ID: LCS-86

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20B-2546-12	SW-846 8082A (PCB)	07/26/2016 11:54	MCA	NA	NA	Phenomenex, Zebron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34328	EPA 3540C	07/25/2016 08:15	SW	1 Wipe(s)	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCS (ug/Wipe)	LCS % Rec.	Q ¹	Limits (%)
Aroclor 1254	11097-69-1	12.5	10.7	85.4		70.0-130

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	80.8	59.3-136		GC20B-2546-12
Decachlorobiphenyl	2051-24-3	82.1	70.2-139		GC20B-2546-12

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Lab Control Sample (LCS)**
Job Number: 16070418

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample (AT18215L)
Lab Sample ID: LCS-86

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-12	SW-846 8082A (PCB)	07/26/2016 11:54	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34328	EPA 3540C	07/25/2016 08:15	SW	1 Wipe(s)	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCS (ug/Wipe)	LCS % Rec.	Q ¹	Limits (%)
Aroclor 1254	11097-69-1	12.5	11.5	92.0		70.0-130

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	81.1	59.3-136		GC20F-2547-12
Decachlorobiphenyl	2051-24-3	89.3	70.2-139		GC20F-2547-12

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results
Lab Control Sample - Duplicate (LCSD)
Job Number: 16070418

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample - Duplicate (AT18215S)
Lab Sample ID: LCSD-86

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20B-2546-13	SW-846 8082A (PCB)	07/26/2016 12:07	MCA	NA	NA	Phenomenex, Zebron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34328	EPA 3540C	07/25/2016 08:15	SW	1 Wipe(s)	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCSD (ug/Wipe)	LCSD % Rec.	Q ¹	Limits (%)	Precision		
							LCS % Rec.	RPD	Q ¹
Aroclor 1254	11097-69-1	12.5	10.8	86.6		70.0-130	85.4	1.40	20

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	77.9	59.3-136		GC20B-2546-13
Decachlorobiphenyl	2051-24-3	81.3	70.2-139		GC20B-2546-13

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results
Lab Control Sample - Duplicate (LCSD)
Job Number: 16070418

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample - Duplicate (AT18215S)
Lab Sample ID: LCSD-86

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-2547-13	SW-846 8082A (PCB)	07/26/2016 12:07	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34328	EPA 3540C	07/25/2016 08:15	SW	1 Wipe(s)	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCSD (ug/Wipe)	LCSD % Rec.	Q ¹	Limits (%)	Precision		
							LCS % Rec.	RPD	Q ¹
Aroclor 1254	11097-69-1	12.5	11.6	92.4		70.0-130	92.0	0.434	20

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	83.8	59.3-136		GC20F-2547-13
Decachlorobiphenyl	2051-24-3	87.6	70.2-139		GC20F-2547-13

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

ATTACHMENT 2

**PCB WIPE SAMPLE
LABORATORY RESULTS AND CHAIN OF CUSTODY**

Pace Analytical e-Report

Report prepared for:
TRC ENVIRONMENTAL
1430 BROADWAY
10TH FLOOR
NY, NY 10018
CONTACT:

Project ID: K126-JHS 126 Brooklyn - 261463.0000.0002
Sampling Date(s): July 18, 2016
Lab Report ID: 16070311
Client Service Contact: Nick Nicholas (518) 346-4592

Analysis Included:
PCB Analysis

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is responsible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.



Roy Smith
Technical Director



Certifications: New York (EPA: NY00906, ELAP: 11078), New Jersey (NY026), Connecticut (PH-0337), Massachusetts (M-NY906), Virginia (460241)

Pace Analytical Services, Inc. | 2190 Technology Drive | Schenectady, NY 12308
Phone: 518.346.4592 | internet: www.pacelabs.com

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CASE NARRATIVE

July 22, 2016

CASE NARRATIVE

This data package (SDG ID: 16070311) consists of 4 wipe samples received on 7/19/2016. The samples are from Project Name: K126-JHS 126 Brooklyn - 261463.0000.0002.

This sample delivery group consists of the following samples:

<u>Lab Sample ID</u>	<u>Client ID</u>	<u>Collection Date</u>
AT17769	126K-WIPE-1	7/18/2016 15:00
AT17770	126K-WIPE-2	7/18/2016 15:00
AT17771	126K-WIPE-3	7/18/2016 15:00
AT17772	FIELD BLANK	7/18/2016 15:00

Sample Delivery and Receipt Conditions

- (1.) All samples were delivered to the laboratory via FEDEX delivery service on 7/19/2016.
- (2.) All samples were received at the laboratory intact and within holding times.
- (3.) All samples were received at the laboratory properly preserved, if applicable.

PCB Aroclor Analysis

Analysis for PCB Aroclors was performed by EPA Method 8082A dual column GC analysis. Samples were extracted by Soxhlet Extraction Method (EPA - Method 3540C). The following technical and administrative items were noted for the analysis:

- (1.) Surrogate compound DCBP was recovered below established quality control limits on the front column of the instrument in sample AT17770. The remaining surrogate compounds were recovered within the acceptable range.
- (2.) Surrogate compound DCBP was recovered below established quality control limits on the back column of the instrument in samples AT17770, AT17771, and AT17772. The remaining surrogate compounds were recovered within the acceptable range.

Respectfully submitted,



Nick Nicholas
Project Manager

QUALIFIERS

Definitions

B - Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.

D - Surrogate was diluted. The analysis of the sample required a dilution such that the surrogate concentration was diluted outside the laboratory acceptance criteria.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be reanalyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

MDL – Adjusted Method Detection Limit.

P - Indicates relative percent difference (RPD) between primary and secondary gas chromatograph (GC) column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary gas chromatograph (GC) column analysis exceeds 25 %.

PQL – Practical Quantitation Limit. PQLs are adjusted for sample weight/volume and dilution factors.

RL - Reporting Limit Denotes lowest analyte concentration reportable for the sample based on regulatory or project specific limits.

U - Denotes analyte not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.

Z - Chromatographic interference due to polychlorinated biphenyl (PCB) co-elution.

* - Value not within control limits.

SAMPLE CHAIN OF CUSTODY

<16070311P1>



PCB AREA WIPE SAMPLE DATA AND CHAIN OF CUSTODY FORM

Client Name: NYCSCA	Project Name and Address: K126 - J.H.S. 126 Brooklyn 424 Leonard Street, Brooklyn, N.Y. 11222	Samples Collected By: <i>A. SIGONA / J. Wright</i>	Page: 1 of 1
Date: 7-18-2016	Requested Turnaround Time: 48 Hours	Project Manager: A Sigona	Project Number: 261463.0000.0002 Purchase Order 98046

PCB AREA WIPE SAMPLE INFORMATION

Wipe Sample ID No.	Sample Location Description	Floor	Room/Area Description	Dimensions of Area Sampled (cm)	Date/Time	Photo ID No
126K-WIPE-1	COMPOSTER Interior (NORTH SIDE - Right)	1	COURT YARD/EXT.	100 cm ²	7/18/16/1500	102-0040
126K-WIPE-2	COMPOSTER Interior (SOUTH SIDE - Left)		↓	↓	↓	102-0044
126K-WIPE-3	COMPOSTER Exterior (NORTH SIDE - Right)		↓	↓	↓	102-0047
FIELD BLANK						

Special Instruction to Laboratory:

CHAIN OF CUSTODY INFORMATION AND LABORATORY INFORMATION

Relinquished By:	Date	Time	Received By:	Date	Time	Method Of Submittal
1. (Print): <i>A. Sigona</i>	7/18/16	18:05	<i>PERA</i>			Field
(Sign): <i>[Signature]</i>			<i>A. Rocha</i>	7/19/16	955	Fed-Ex
TRC Comments: Email Results to: ASigona@trcsolutions.com BRocha@trcsolutions.com JOestreich@trcsolutions.com	Analytical Method:	Lab Comments: TEMP: 0.5	Analyzed By:	Date & Time:	Print Name:	Sign:

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<16070311P2>



Sample Condition Upon Receipt

CLIENT NAME: NYCSCA

PROJECT :

COURIER: FedEx UPS Client Pace Other
 TRACKING # 7836 0763 6460 CUSTODY SEAL PRESENT: Yes No INTACT: Yes No N/A
 PACKING MATERIAL: Bubble Wrap Bubble Bags None Other ICE USED: Wet Blue None
 THERMOMETER USED: #164 IR Gun 03 #160239773 #160239773-PRB COOLER TEMPERATURE (°C): 0.5
 BIOLOGICAL TISSUE IS FROZEN: Yes No N/A

COMMENTS: Temperature is Acceptable? Yes No

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		3.
Sampler Name / Signature on COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		7. <u>2-day</u>
Sufficient Volume:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		9.
- Pace Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		10.
Filtered volume received for Dissolved tests:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		12. <u>ID on container lid. Time/date/analysis is not listed on containers.</u>
- Includes date/time/ID/Analysis				
All containers needing preservation have been checked:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are in compliance with EPA recommendation:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
- Exceptions that are not checked: TOC, VOA, Subcontract Analyses				Initial when completed: <u>N/A</u> Lot # of added preservative: <u>N/A</u>
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot #:			<u>N/A</u>	

Sample Receipt form filled in: DB 7/19/16

Line-Out (Includes Copying Shipping Documents and verifying sample pH): CDW 7/19/16
 Log In (Includes notifying PM of any discrepancies and documenting in LIMS): CDW 7/19/16
 Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): CDW 7/19/16

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SAMPLE RECEIPT



SAMPLE RECEIPT REPORT

16070311

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

CLIENT: TRC ENVIRONMENTAL
PROJECT: K126-JHS 126 BROOKLYN - 261463.0000.0002
LRF: 16070311
REPORT: ANALYTICAL REPORT
EDD: NO
LRF TAT: *3 DAY*

RECEIVED DATE: 07/19/2016 09:55
SHIPPED VIA: FEDEX
SHIPPING ID: 7836 0763 6460
NUMBER OF COOLERS: 1
CUSTODY SEAL INTACT: YES
COOLER STATUS: CHILLED
TEMPERATURE(S): 5.5 °C
SAMPLE SEALS INTACT: NA
SAMPLES PRESERVED PER METHOD GUIDANCE: YES
SAMPLES REC'D IN HOLDTIME: YES
DISPOSAL: BY LAB (45 DAYS)
COC DISCREPANCY: NO

COMMENTS:

CLIENT ID (LAB ID)	TAT-DUE Date ⁴	DATE-TIME SAMPLED	MATRIX	METHOD	TEST DESCRIPTION	QC REQUEST
126K-WIPE-1 (AT17769)	*3 DAY* 07-22-16	07/18/2016 15:00	Wipe	EPA 8082A	PCB Analysis	
126K-WIPE-2 (AT17770)	*3 DAY* 07-22-16	07/18/2016 15:00	Wipe	EPA 8082A	PCB Analysis	
126K-WIPE-3 (AT17771)	*3 DAY* 07-22-16	07/18/2016 15:00	Wipe	EPA 8082A	PCB Analysis	
FIELD BLANK (AT17772)	*3 DAY* 07-22-16	07/18/2016 15:00	Wipe	EPA 8082A	PCB Analysis	

¹The pH preservation check of Oil and Grease (Method 1664) and Total Organic Carbon (Method 5310B) are performed as soon as possible after sample receipt and may not be included in this report.
²The pH preservation check of aqueous volatile samples is not performed until after the analysis of the sample to maintain zero headspace and is not included in this report.
³Samples received for pH analysis are not marked as a hold time exceedance here. SW-846 methods suggests analysis to be done within 15 minutes of sample collection. Because of transportation time it is not possible for the laboratory to perform the test in that time. Sample Certificates of Analysis reports are noted as such.
⁴Samples arriving at the laboratory after 4:00 pm are assigned a due date as if they arrived the following business day unless other arrangements have been made. The due date represents the date the lab report is expected to be completed on or before 5:00 pm (EST) for the date specified.
⁵All samples which require thermal preservation shall be considered acceptable when received greater than 6 degrees Celsius if they are collected on the same day as received and there is evidence that the chilling process has begun, such as arrival on ice. Control limits are between 0-6 Degrees Celsius. Control limits do not apply for metals analysis.
⁶Samples requesting analysis for Orthophosphate (SM 4500-P E-99,-11) require the samples to be filtered in the field within 15 minutes of the sampling event. Samples that are received unfiltered will be noted as not method compliant on the Certificates of Analysis.

Reporting Parameters and Lists

EPA 8082A - PCB Analysis - (ug/Wipe)

- Aroclor 1016
- Aroclor 1221
- Aroclor 1232
- Aroclor 1242
- Aroclor 1248
- Aroclor 1254
- Aroclor 1260
- Total PCB's

GC - PCB



Analytical Sample Results

Job Number: 16070311

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: 126K-WIPE-1
Lab Sample ID: 16070311-01 (AT17769)

Collection Date: 07/18/2016 15:00
Sample Matrix: WIPE
Received Date: 07/19/2016 09:55
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2864-12	SW-846 8082A (PCB)	07/21/2016 11:40	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.100	1.00	U	GC21F-2864-12
Aroclor 1221	11104-28-2	ND	0.100	1.00	U	GC21F-2864-12
Aroclor 1232	11141-16-5	ND	0.100	1.00	U	GC21F-2864-12
Aroclor 1242	53469-21-9	ND	0.100	1.00	U	GC21F-2864-12
Aroclor 1248	12672-29-6	ND	0.100	1.00	U	GC21F-2864-12
Aroclor 1254	11097-69-1	ND	0.100	1.00	U	GC21F-2864-12
Aroclor 1260	11096-82-5	ND	0.100	1.00	U	GC21F-2864-12
Total PCB's	1336-36-3	ND		1.00	U	GC21F-2864-12

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	82.6	59.3-136		GC21F-2864-12
Decachlorobiphenyl	2051-24-3	79.4	70.2-139		GC21F-2864-12
Tetrachloro-meta-xylene	877-09-8	94.3	59.3-136		GC21B-2801-12
Decachlorobiphenyl	2051-24-3	86.3	70.2-139		GC21B-2801-12

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Analytical Sample Results

Job Number: 16070311

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: 126K-WIPE-2
Lab Sample ID: 16070311-02 (AT17770)

Collection Date: 07/18/2016 15:00
Sample Matrix: WIPE
Received Date: 07/19/2016 09:55
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21B-2801-13	SW-846 8082A (PCB)	07/21/2016 11:53	MCA	NA	NA	Phenomenex, Zebron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.100	1.00	U	GC21B-2801-13
Aroclor 1221	11104-28-2	ND	0.100	1.00	U	GC21B-2801-13
Aroclor 1232	11141-16-5	ND	0.100	1.00	U	GC21B-2801-13
Aroclor 1242	53469-21-9	0.376	0.100	1.00		GC21B-2801-13
Aroclor 1248	12672-29-6	ND	0.100	1.00	U	GC21B-2801-13
Aroclor 1254	11097-69-1	ND	0.100	1.00	U	GC21B-2801-13
Aroclor 1260	11096-82-5	ND	0.100	1.00	U	GC21B-2801-13
Total PCB's	1336-36-3	0.376		1.00		GC21B-2801-13

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	92.3	59.3-136		GC21F-2864-13
Decachlorobiphenyl	2051-24-3	51.7	70.2-139	*	GC21F-2864-13
Tetrachloro-meta-xylene	877-09-8	97.0	59.3-136		GC21B-2801-13
Decachlorobiphenyl	2051-24-3	87.2	70.2-139		GC21B-2801-13

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Analytical Sample Results

Job Number: 16070311

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: 126K-WIPE-3
Lab Sample ID: 16070311-03 (AT17771)

Collection Date: 07/18/2016 15:00
Sample Matrix: WIPE
Received Date: 07/19/2016 09:55
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2864-14	SW-846 8082A (PCB)	07/21/2016 12:06	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.100	1.00	U	GC21F-2864-14
Aroclor 1221	11104-28-2	ND	0.100	1.00	U	GC21F-2864-14
Aroclor 1232	11141-16-5	ND	0.100	1.00	U	GC21F-2864-14
Aroclor 1242	53469-21-9	ND	0.100	1.00	U	GC21F-2864-14
Aroclor 1248	12672-29-6	ND	0.100	1.00	U	GC21F-2864-14
Aroclor 1254	11097-69-1	ND	0.100	1.00	U	GC21F-2864-14
Aroclor 1260	11096-82-5	ND	0.100	1.00	U	GC21F-2864-14
Total PCB's	1336-36-3	ND		1.00	U	GC21F-2864-14

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	88.1	59.3-136		GC21F-2864-14
Decachlorobiphenyl	2051-24-3	78.0	70.2-139		GC21F-2864-14
Tetrachloro-meta-xylene	877-09-8	95.7	59.3-136		GC21B-2801-14
Decachlorobiphenyl	2051-24-3	53.9	70.2-139	*	GC21B-2801-14

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Analytical Sample Results

Job Number: 16070311

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: FIELD BLANK
Lab Sample ID: 16070311-04 (AT17772)

Collection Date: 07/18/2016 15:00
Sample Matrix: WIPE
Received Date: 07/19/2016 09:55
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2864-15	SW-846 8082A (PCB)	07/21/2016 12:18	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.100	1.00	U	GC21F-2864-15
Aroclor 1221	11104-28-2	ND	0.100	1.00	U	GC21F-2864-15
Aroclor 1232	11141-16-5	ND	0.100	1.00	U	GC21F-2864-15
Aroclor 1242	53469-21-9	ND	0.100	1.00	U	GC21F-2864-15
Aroclor 1248	12672-29-6	ND	0.100	1.00	U	GC21F-2864-15
Aroclor 1254	11097-69-1	ND	0.100	1.00	U	GC21F-2864-15
Aroclor 1260	11096-82-5	ND	0.100	1.00	U	GC21F-2864-15
Total PCB's	1336-36-3	ND		1.00	U	GC21F-2864-15

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	77.7	59.3-136		GC21F-2864-15
Decachlorobiphenyl	2051-24-3	77.5	70.2-139		GC21F-2864-15
Tetrachloro-meta-xylene	877-09-8	86.0	59.3-136		GC21B-2801-15
Decachlorobiphenyl	2051-24-3	57.6	70.2-139	*	GC21B-2801-15

¹Qualifier column where "*" denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Quality Control Samples (Lab)



**Quality Control Results
Method Blank**

Job Number: 16070311

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Method Blank (AT17769B)
Lab Sample ID: PBLK-62

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21B-2801-9	SW-846 8082A (PCB)	07/21/2016 11:02	MCA	NA	NA	Phenomenex, Zebron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.100	1.00	U	GC21B-2801-9
Aroclor 1221	11104-28-2	ND	0.100	1.00	U	GC21B-2801-9
Aroclor 1232	11141-16-5	ND	0.100	1.00	U	GC21B-2801-9
Aroclor 1242	53469-21-9	ND	0.100	1.00	U	GC21B-2801-9
Aroclor 1248	12672-29-6	ND	0.100	1.00	U	GC21B-2801-9
Aroclor 1254	11097-69-1	ND	0.100	1.00	U	GC21B-2801-9
Aroclor 1260	11096-82-5	ND	0.100	1.00	U	GC21B-2801-9
Total PCB's	1336-36-3	ND		1.00	U	GC21B-2801-9

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	85.9	59.3-136		GC21B-2801-9
Decachlorobiphenyl	2051-24-3	85.2	70.2-139		GC21B-2801-9

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Method Blank**

Job Number: 16070311

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Method Blank (AT17769B)
Lab Sample ID: PBLK-62

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2864-9	SW-846 8082A (PCB)	07/21/2016 11:02	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte	CAS No.	Result (ug/Wipe)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.100	1.00	U	GC21F-2864-9
Aroclor 1221	11104-28-2	ND	0.100	1.00	U	GC21F-2864-9
Aroclor 1232	11141-16-5	ND	0.100	1.00	U	GC21F-2864-9
Aroclor 1242	53469-21-9	ND	0.100	1.00	U	GC21F-2864-9
Aroclor 1248	12672-29-6	ND	0.100	1.00	U	GC21F-2864-9
Aroclor 1254	11097-69-1	ND	0.100	1.00	U	GC21F-2864-9
Aroclor 1260	11096-82-5	ND	0.100	1.00	U	GC21F-2864-9
Total PCB's	1336-36-3	ND		1.00	U	GC21F-2864-9

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	76.8	59.3-136		GC21F-2864-9
Decachlorobiphenyl	2051-24-3	83.2	70.2-139		GC21F-2864-9

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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**Quality Control Results
Lab Control Sample (LCS)**
Job Number: 16070311

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample (AT17769L)
Lab Sample ID: LCS-62

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21B-2801-10	SW-846 8082A (PCB)	07/21/2016 11:15	MCA	NA	NA	Phenomenex, Zebron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCS (ug/Wipe)	LCS % Rec.	Q ¹	Limits (%)
Aroclor 1254	11097-69-1	2.50	2.47	99.0		70.0-130

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	91.0	59.3-136		GC21B-2801-10
Decachlorobiphenyl	2051-24-3	85.9	70.2-139		GC21B-2801-10

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



**Quality Control Results
Lab Control Sample (LCS)**
Job Number: 16070311

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample (AT17769L)
Lab Sample ID: LCS-62

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2864-10	SW-846 8082A (PCB)	07/21/2016 11:15	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCS (ug/Wipe)	LCS % Rec.	Q ¹	Limits (%)
Aroclor 1254	11097-69-1	2.50	2.17	86.9		70.0-130

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	81.9	59.3-136		GC21F-2864-10
Decachlorobiphenyl	2051-24-3	78.0	70.2-139		GC21F-2864-10

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results
Lab Control Sample - Duplicate (LCSD)
Job Number: 16070311

Pace Analytical Services, Inc.
 2190 Technology Drive
 Schenectady, NY 12308
 Phone: 518.346.4592
 Fax: 518.381.6055

Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample - Duplicate (AT17769S)
Lab Sample ID: LCSD-62

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21B-2801-11	SW-846 8082A (PCB)	07/21/2016 11:28	MCA	NA	NA	Phenomenex, Zebron ZB-5, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCSD (ug/Wipe)	LCSD % Rec.	Q ¹	Limits (%)	Precision		
							LCS % Rec.	RPD	Q ¹
Aroclor 1254	11097-69-1	2.50	2.33	93.0		70.0-130	99.0	6.25	20

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	79.5	59.3-136		GC21B-2801-11
Decachlorobiphenyl	2051-24-3	83.1	70.2-139		GC21B-2801-11

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results
Lab Control Sample - Duplicate (LCSD)
Job Number: 16070311

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Client: TRC ENVIRONMENTAL
Project: K126-JHS 126 Brooklyn - 261463.0000.0002
Client Sample ID: Lab Control Sample - Duplicate (AT17769S)
Lab Sample ID: LCSD-62

Collection Date: N/A
Sample Matrix: WIPE
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2864-11	SW-846 8082A (PCB)	07/21/2016 11:27	MCA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	34301	EPA 3540C	07/20/2016 10:30	SW	1 Wipe(s)	5.00 mL	NA

Analyte Spiked	CAS No.	Added (ug/Wipe)	LCSD (ug/Wipe)	LCSD % Rec.	Q ¹	Limits (%)	Precision		
							LCS % Rec.	RPD	Q ¹
Aroclor 1254	11097-69-1	2.50	2.18	87.3		70.0-130	86.9	0.459	20

¹Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹	File ID
Tetrachloro-meta-xylene	877-09-8	76.9	59.3-136		GC21F-2864-11
Decachlorobiphenyl	2051-24-3	76.7	70.2-139		GC21F-2864-11

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.