October 11, 2016

Mr. Michael McLean, P.E.
Project Manager
New York State Department of Environmental Conservation
1115 State Route 86
P.O. Box 296
Ray Brook, New York 12977-0296

Re: Periodic Review Report
36 Elm Street
Glens Falls, NY 12801
NYSDEC Site Number E557019

File: 1032.008.001

Dear Mr. McLean:

The 36 Elm Street site (herein referred to as the "site") is located in the City of Glens Falls, Warren County, New York, and is identified as 309.28-1-13 on the City of Glens Falls Tax Map. The 0.14-acre parcel contains a 17,550 square foot, three-story masonry building with a basement. The building footprint encompasses the entire limits of the property. On December 29, 2006, the Greater Glens Falls Local Development Corporation (GGFLDC) entered into State Assistance Contract (SAC) #C303163 with the New York State Department of Environmental Conservation (NYSDEC) to conduct a remedial site investigation and perform interim remedial measures (IRMs) at the subject property.

Based on the results of the remedial site investigation, the primary environmental concerns associated with the Site included:

1. Potential residual contaminants associated with the four aboveground storage tanks (ASTs) and boiler tank that remained in the basement area;
2. Potential subsurface petroleum contamination associated with an outdoor underground storage tank (UST);
3. The former use of the Site as an automobile repair facility in the 1930s; the presence of asbestos-containing material (ACM) and lead-based paint throughout the entire structure;
4. The presence of potential polychlorinated biphenyl (PCB)-containing light ballasts in the building; and
5. Potential off-site impacts associated with the prior operation of automobile repair and gasoline station facilities in the immediate surrounding area.

10 Airline Drive • Suite 200 • Albany, New York 12205
Telephone: 518-218-1801 • Facsimile: 518-218-1805 • www.BartonandLoguidice.com

The site was remediated in accordance with the NYSDEC-approved IRM Contract Bid Documents and Specifications prepared by Barton & Loguidice, D.P.C. (B&L) dated November 2006. The following is a summary of the IRMs performed at the site:

1. Waste materials including asbestos, lead-based paint, underground and above ground tank liquids and sludge, fuel oil contaminated sand, containers of jars of commercial dishwashing liquids and chlorinated cleaning agents, PCB light ballasts, and refrigerant gas cylinders, were removed from the site.
2. Closure in place of one 1,000 gallon UST located at the northeast corner of the site.
3. Removal of residual wastes and affected structures, including the four ASTs in the basement, the block tank vault enclosure, sand back-fill material (approximately 5 tons), the former boiler tank and associated piping, and 6.95 tons of soil excavated during the UST test pit and sampling activities.

After completion of the aforementioned IRMs, the NYSDEC recommended to the GGFLDC that the open pit in the basement area be remediated (i.e., backfilled and covered with a layer of concrete) in order to eliminate the potential exposure pathway that existed with regards to dermal contact with the standing water. Therefore, B&L sent a letter to the GGFLDC dated January 22, 2009 which recommended the general procedures to be followed by a qualified contractor in the backfilling of the open pit and installation of a concrete slab. The GGFLDC subsequently retained the services of A.J. Catalfamo Construction Inc. of Hudson Falls, NY to provide the requested services and the work was performed in February of 2009. Based on an inspection of the basement area by Mr. Stephen Le Fevre of B&L on January 8, 2013, the open pit in the basement had been backfilled and covered with a layer of concrete, and the area of standing water no longer existed.

The NYSDEC issued the Record of Decision (ROD) for the site on January 8, 2009. Based on the information presented in the Site Investigation/ Remedial Alternatives Report (SI/RAR) for the 36 Elm Street site prepared by B&L dated May 2008, the Department selected No Further Action as the remedy for the site. The components of the No Further Action remedy included the successful completion of the previously referenced IRMs and the imposition of an institutional control in the form of an environmental easement in order to achieve restricted residential use for the site. However, the building at 36 Elm Street may also be used for commercial purposes, with the stipulation that restricted residential uses will only be permitted above the first floor area as provided for in the City's Zoning law. Specifically, residential use is not allowed in the first floor or basement areas of the building, with the exception of allowing residents temporary access to the first floor and/or basement areas for the purpose of gaining access to utility connections.

In addition to restricting the future use and development of the property to restricted residential use (including commercial and industrial use), the environmental easement also mandates that the entry (i.e., seepage) of groundwater into the basement area be properly controlled or eliminated, and the use of groundwater as a source of potable or process water be prohibited unless a NYSDOH-approved water quality treatment system has been installed at the site. And lastly, the environmental

easement requires the property owner to submit to the Department a periodic certification of the institutional controls in the form of a periodic review report (PRR).

Remaining Contamination

Currently, there are no complete exposure pathways at the site. However, there are potential exposure pathways associated with groundwater at the site, and contaminated sub-surface soil near the existing site. Specifically, groundwater at the site contains elevated inorganic compounds, including lead, iron, and manganese. Some inorganics, such as iron, may be naturally occurring and are not considered associated with former activities at the site. It is unclear if elevated lead levels in the groundwater are a result of former operations at the site or if they represent local background and impacts from off-site properties. Regardless, groundwater could present a potential for exposure if a well was installed at the property for potable water use. However, this exposure pathway is unlikely since the site and surrounding properties are serviced with public water. Public drinking water is routinely tested and must comply with federal and state drinking water standards.

The potential for contaminated vapors in soil to enter the building at the site (via soil vapor intrusion) was evaluated. Based on the results of the investigation, soil vapor intrusion does not present an exposure pathway of concern for future users of the site.

Sub-surface soil and groundwater immediately south of the Site are contaminated with semi-volatile organic compounds (SVOCs) and are not considered site-related. A spill number has been assigned by the NYSDEC to the adjoining property.

Annual Site Inspection

As stipulated in the ROD, the current owner of the property must prepare and submit a PRR to the NYSDEC on an annual basis. Therefore, at the request of the GGFLDC, Mr. Stephen Le Fevre of B&L conducted a site inspection of the 36 Elm Street site on September 1, 2016, and subsequently prepared this PRR. In addition, B&L completed the enclosed Institutional and Engineering Controls Certification Form provided by the NYSDEC.

The site inspection included a visual inspection of the property exterior, surrounding property exteriors, and the basement of the property building. In particular, Mr. Le Fevre inspected the condition of the concrete slab that had been previously installed in the basement area to prevent the occurrence of standing water. Mr. Le Fevre determined that the concrete slab was serving its intended purpose, as the concrete slab was observed to be dry. In addition, no standing water was found to exist in any other areas of the basement at the 36 Elm Street site.

Upon further inspection of the basement area, Mr. Le Fevre observed two piles of sediment located adjacent to the west wall of the building which had not been present during the prior site inspection conducted on January 8, 2013. Apparently the sediment originated outside of the 36 Elm Street building structure and migrated into the basement area via two small cracks/fissures that were observed to exist in the basement wall immediately adjacent to the sediment piles. According to

information provided by the City of Glens Falls, the water line supplying the sprinkler system in the adjacent building at some point froze, ruptured, and flooded the basement of the adjacent building. The flooding apparently rose to a level that caused the water to leak from the basement of the adjacent building and enter the basement of the 36 Elm Street building structure under a pressurized condition. B&L theorizes that the water entering the building was sediment laden, thereby resulting in the creation of the two observed piles.

For the purpose of charactering the recently deposited sediments in the basement area, a B&L hydrogeologist collected two representative grab samples from the sediment piles on September 15, 2016. The sediment samples were submitted to Pace Analytical Laboratories for the analysis of semi-volatile organic compounds (SVOCs) using EPA Method 8270D, target analyte list (TAL) metals using EPA Method 6010C, and mercury using EPA Method 7471. B&L compared the enclosed analytical laboratory test results to the applicable 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives (SCOs) and determined that there were no exceedances of the analyzed SVOC and metals parameters.

Site Management Periodic Review Report Notice

The Institutional and Engineering Controls Certification Form for the 36 Elm Street site has been completed by B&L and is included as an attachment herein.

Conclusions

The site inspection of the 36 Elm Street site institutional controls is complete. There were no deficiencies in regard to the institutional controls identified during the inspection. In addition, no activities occurred during the past year requiring the implementation of additional institutional or engineering controls.

Very truly yours,

BARTON & LOGUIDICE, D.P.C.

Stephen B. Le Fevre, P.G. C.P.G.
Senior Managing Hydrogeologist

SBL/NCM/akg
Attachments

Periodic Review Report
Institutional and Engineering Controls Certification Form

Enclosure 2

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

Site Details **Box 1**

Site No. E557019

Site Name 36 Elm Street

Site Address: 36 Elm Street Zip Code: 12801
City/Town: Glens Falls
County: Warren
Site Acreage: 0.1

Reporting Period: July 08, 2015 to July 02, 2016

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. E557019 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
309.28-1-13	City of Glens Falls	Ground Water Use Restriction Landuse Restriction Building Use Restriction Site Management Plan IC/EC Plan

Box 4

Description of Engineering Controls

None Required

Not Applicable/No EC's

Box 5

Periodic Review Report (PRR) Certification Statements

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

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

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

YES	NO
☒	☐

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

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

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

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

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

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

YES	NO
☒	☐

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

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

_____ _____

Signature of Owner, Remedial Party or Designated Representative — Date

IC CERTIFICATIONS
SITE NO. E557019

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

I EDWARD Bartholomew at 333 Glen Street Glens Falls
print name — print business address

am certifying as CEO Greater Glens Falls Local Development Corp (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Edward Bart [signature] — 11-17-14

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

IC/EC CERTIFICATIONS

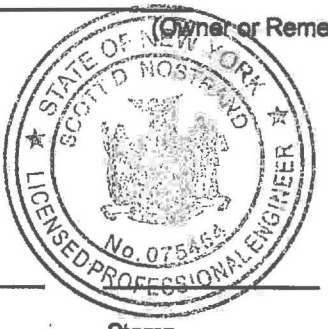
Box 7

Signature

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

I Scott Nostrand (print name) at Barton & Loguidice, D.P.C., Syracuse, NY (print business address),

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



Scott D

10.10.16

Signature of , for the Owner or Remedial Party, Rendering Certification | Stamp (Required for PE) | Date

Laboratory Analysis Results

Pace Analytical e-Report

***Issuance of this report is prior to full data package.**

Report prepared for:
BARTON AND LOGUIDICE
10 AIRLINE DRIVE
ALBANY, NY 12205
CONTACT: STEVE LEFEVRE

Project ID: 36 ELM ST - 1032.008.001
Sampling Date(s): September 15, 2016
Lab Report ID: 16090353
Client Service Contact: Nick Nicholas (518) 346-4592

Analysis Included:
SVOCs E8270D - Sub Pace LI
Metals E6010C - Sub Pace LI
Mercury E7471B - Sub Pace LI

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within the 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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Table of Contents

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

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

<16090353P1>

160903531

Page: 1 of 1

1921573

Section A Required Client Information:

Company:	B+L
Address:	10 AIRLINE DRIVE SUITE 200 ALBANY NY 12205
Email To:	slefevre@bartonandloguidice.com
Phone:	(518) 218-1801
Fax:	(518) 218-1805
Requested Due Date/TAT:	STANDARD

Section B Required Project Information:

Report To:	Steve Lefevre
Copy To:	Rosemary McCormick
Purchase Order No.:	
Project Name:	36 ELM ST
Project Number:	1032.008.001

Section C Invoice Information:

Attention:	ACCOUNTS PAYABLE
Company Name:	B+L
Address:	443 ELECTRONIC PKWY LIVERPOOL NY
Pace Quote Reference:	
Pace Project Manager:	NICHOLAS NICHOLAS
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER NYSDEC

Site Location STATE: NY

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	SVOCs by 8270	TAL Metals	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SAND-01	SL	G			9/15/16	7:45		2	X									X	X		AT25233
2	SAND-02	SL	G			9/15/16	7:47		2	X									X	X		AT25234
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / B+L	9/15/16	9:05	A. Rowray	9/15/16	905	2.0	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: ROSEMARY MCCORMICK

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 9/15/16

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

2

Sample Condition Upon Receipt

160903532

CLIENT NAME: B+L A16.

PROJECT : 1032.009.001

COURIER: FedEx ☐ UPS ☐ Client ☑ Pace ☐ Other ☐

TRACKING # N/A

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): 2.0

BIOLOGICAL TISSUE IS FROZEN: Yes ☐ No ☐ N/A ☑

COMMENTS:

Temperature is Acceptable? ☑ Yes ☐ No

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

Sample Receipt form filled in: AA 9/16/16

Line-Out (Includes Copying Shipping Documents and verifying sample pH): AA 9/16/16

Log In (Includes notifying PM of any discrepacies and documenting in LIMS): AJB 9/16/16

Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): AA 9/16/16

Document Control# F-NY-C-034-rev.01 (24May2016)

SAMPLE RECEIPT

SAMPLE RECEIPT REPORT
16090353

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

CLIENT: BARTON AND LOGUIDICE
PROJECT: 36 ELM ST - 1032.008.001
LRF: 16090353
REPORT: DATA PACKAGE
EDD: NO
LRF TAT: 7 DAYS

RECEIVED DATE: 09/15/2016 09:05
SHIPPED VIA: DROP OFF [1,2]
SHIPPING ID: R. MCCORMICK/BAR-AL [3]
NUMBER OF COOLERS: 1
CUSTODY SEAL INTACT: NA
COOLER STATUS: CHILLED
TEMPERATURE(S): [5] 2.0 (IR) °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:

3

CLIENT ID (LAB ID)	TAT-DUE Date [4]	DATE-TIME SAMPLED	MATRIX	METHOD	TEST DESCRIPTION	QC REQUEST
SAND-01 (AT25233)	7 DAYS 09-26-16	09/15/2016 07:45	Soil	Mercury E7471B	Mercury E7471B - Sub Pace LI	
	7 DAYS 09-26-16	09/15/2016 07:45	Soil	Metals E6010C	Metals E6010C - Sub Pace LI	
	7 DAYS 09-26-16	09/15/2016 07:45	Soil	SVOCs E8270D	SVOCs E8270D - Sub Pace LI	
SAND-02 (AT25234)	7 DAYS 09-26-16	09/15/2016 07:47	Soil	Mercury E7471B	Mercury E7471B - Sub Pace LI	
	7 DAYS 09-26-16	09/15/2016 07:47	Soil	Metals E6010C	Metals E6010C - Sub Pace LI	
	7 DAYS 09-26-16	09/15/2016 07:47	Soil	SVOCs E8270D	SVOCs E8270D - Sub Pace LI	

[1]The 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.
[2]The 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.
[3]Samples 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.
[4]Samples 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.
[5]All 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.
[6]Samples 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

Subcontract Analysis

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results are only for the samples and analytes requested.

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

Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas
Collected : 9/15/2016 7:45:00 AM
Received : 9/17/2016 10:10:00 AM AT25233
Collected By CLIENT

Lab No. : 1609E84-001
Client Sample ID: SAND-01

Sample Information:
Type : Solid

Origin:

Analytical Method: SW6010C : Prep Method: SW3050B Prep Date: 9/23/2016 1:00:00 PM Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Aluminum	3,840		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Antimony	< 3.0		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Arsenic	1.4		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Barium	12.8		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Beryllium	< 0.3		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Cadmium	< 0.1		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Calcium	1,110		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Chromium	1.5		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Cobalt	< 2.5		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Copper	5.2		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Iron	6,510		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Lead	8.4		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Magnesium	1,490		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Manganese	67.3		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Nickel	2.4		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Potassium	309		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Selenium	< 0.5		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Silver	< 0.5		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Sodium	< 250		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Thallium	< 0.5		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Vanadium	6.0		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01
Zinc	22.7		1	mg/kg	09/23/2016 8:15 PM	Container-01 of 01

4

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported : 9/26/2016

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas
Collected : 9/15/2016 7:45:00 AM
Received : 9/17/2016 10:10:00 AM AT25233
Collected By CLIENT

Lab No. : 1609E84-001
Client Sample ID: SAND-01

Sample Information:
Type : Solid

Origin:

Analytical Method: SW8270D : Prep Method: SW3545A Prep Date: 9/19/2016 6:07:37 PM Analyst: SH

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
2,4,5-Trichlorophenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2,4,6-Trichlorophenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2,4-Dichlorophenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2,4-Dimethylphenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2,4-Dinitrophenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2,4-Dinitrotoluene	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2,6-Dinitrotoluene	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2-Chloronaphthalene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2-Chlorophenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2-Methylnaphthalene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2-Methylphenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2-Nitroaniline	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
2-Nitrophenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
3,3´-Dichlorobenzidine	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
3-Nitroaniline	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
4,6-Dinitro-2-methylphenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
4-Bromophenyl-phenylether	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
4-Chloro-3-methylphenol	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
4-Chloroaniline	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
4-Chlorophenyl-phenylether	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
4-Nitroaniline	< 330		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
4-Nitrophenol	< 330	c	1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
Acenaphthene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
Acenaphthylene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
Anthracene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
Benzo(a)anthracene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
Benzo(a)pyrene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
Benzo(b)fluoranthene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
Benzo(g,h,i)perylene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01
Benzo(k)fluoranthene	< 170		1	µg/Kg-dry	09/21/2016 3:36 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
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+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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Date Reported : 9/26/2016

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas
Collected : 9/15/2016 7:45:00 AM
Received : 9/17/2016 10:10:00 AM AT25233
Collected By CLIENT

Lab No. : 1609E84-001
Client Sample ID: SAND-01

Sample Information:
Type : Solid

Origin:

Analytical Method: SW8270D : Prep Method: SW3545A Prep Date: 9/19/2016 6:07:37 PM Analyst: SH

Parameter(s)	Results	Qualifier	D.F.	Units			Analyzed:	Container:
Bis(2-chloroethoxy)methane	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Bis(2-chloroethyl)ether	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Bis(2-ethylhexyl)phthalate	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Butyl benzyl phthalate	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Carbazole	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Chrysene	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Dibenzo(a,h)anthracene	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Dibenzofuran	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Diethylphthalate	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Dimethylphthalate	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Di-n-butyl phthalate	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Di-n-octyl phthalate	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Fluoranthene	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Fluorene	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Hexachlorobenzene	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Hexachlorobutadiene	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Hexachlorocyclopentadiene	< 330	c	1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Hexachloroethane	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Indeno(1,2,3-cd)pyrene	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Isophorone	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Naphthalene	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Nitrobenzene	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
N-Nitroso-di-n-propylamine	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
N-Nitrosodiphenylamine	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Pentachlorophenol	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Phenanthrene	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Phenol	< 330		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Pyrene	< 170		1	µg/Kg-dry			09/21/2016 3:36 AM	Container-01 of 01
Surr: 1,2-Dichlorobenzene-d4	68.0		1	%Rec	Limit	20-130	09/21/2016 3:36 AM	Container-01 of 01
Surr: 2,4,6-Tribromophenol	28.7		1	%Rec	Limit	19-122	09/21/2016 3:36 AM	Container-01 of 01

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Caitlin Panzarella
Project Manager : Caitlin Panzarella

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Date Reported : 9/26/2016

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NYSDOH ID#10478 www.pacelabs.com

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas
Collected : 9/15/2016 7:45:00 AM
Received : 9/17/2016 10:10:00 AM AT25233
Collected By CLIENT

Lab No. : 1609E84-001
Client Sample ID: SAND-01

Sample Information:
Type : Solid
Origin:

Analytical Method: SW8270D : Prep Method: SW3545A Prep Date: 9/19/2016 6:07:37 PM Analyst: SH

Parameter(s)	Results	Qualifier	D.F.	Units			Analyzed:	Container:
Surr: 2-Chlorophenol-d4	72.6		1	%Rec	Limit	20-130	09/21/2016 3:36 AM	Container-01 of 01
Surr: 2-Fluorobiphenyl	69.5		1	%Rec	Limit	30-115	09/21/2016 3:36 AM	Container-01 of 01
Surr: 2-Fluorophenol	69.4		1	%Rec	Limit	25-121	09/21/2016 3:36 AM	Container-01 of 01
Surr: 4-Terphenyl-d14	78.7		1	%Rec	Limit	18-137	09/21/2016 3:36 AM	Container-01 of 01
Surr: Nitrobenzene-d5	73.7		1	%Rec	Limit	23-120	09/21/2016 3:36 AM	Container-01 of 01
Surr: Phenol-d5	76.7		1	%Rec	Limit	24-113	09/21/2016 3:36 AM	Container-01 of 01

Analytical Method: SW7471B : Prep Method: SW7471 Prep Date: 9/19/2016 6:30:49 PM Analyst: AG

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Mercury	< 0.03		1	mg/Kg-dry	09/20/2016 12:02 PM	Container-01 of 01

Analytical Method: D2216 : Analyst: KiM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Percent Moisture	< 1.0		1	wt%	09/20/2016 10:49 AM	Container-01 of 01

4

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H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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Date Reported : 9/26/2016

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NYSDOH ID#10478 www.pacelabs.com

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas
Collected : 9/15/2016 7:47:00 AM
Received : 9/17/2016 10:10:00 AM AT25234
Collected By CLIENT

Lab No. : 1609E84-002
Client Sample ID: SAND-02

Sample Information:
Type : Solid

Origin:

Analytical Method: SW6010C : Prep Method: SW3050B Prep Date: 9/23/2016 1:00:00 PM Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Aluminum	3,610		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Antimony	< 3.1		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Arsenic	1.1		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Barium	10.8		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Beryllium	< 0.3		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Cadmium	< 0.1		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Calcium	2,150		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Chromium	2.2		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Cobalt	< 2.5		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Copper	5.9		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Iron	7,040		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Lead	16.6		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Magnesium	1,540		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Manganese	73.1		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Nickel	2.6		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Potassium	338		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Selenium	< 0.5		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Silver	< 0.5		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Sodium	< 254		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Thallium	< 0.5		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Vanadium	6.8		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01
Zinc	46.4		1	mg/kg-dry	09/23/2016 8:20 PM	Container-01 of 01

4

Qualifiers: E = Value above quantitation range, Value estimated.
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D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
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M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
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Caitlin Panzarella
Project Manager : Caitlin Panzarella

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2190 Technology Drive
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Attn To : William A. Kotas
Collected : 9/15/2016 7:47:00 AM
Received : 9/17/2016 10:10:00 AM AT25234
Collected By CLIENT

Lab No. : 1609E84-002
Client Sample ID: SAND-02

Sample Information:
Type : Solid

Origin:

Analytical Method: SW8270D : Prep Method: SW3545A Prep Date: 9/19/2016 6:07:37 PM Analyst: SH

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
2,4,5-Trichlorophenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2,4,6-Trichlorophenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2,4-Dichlorophenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2,4-Dimethylphenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2,4-Dinitrophenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2,4-Dinitrotoluene	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2,6-Dinitrotoluene	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2-Chloronaphthalene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2-Chlorophenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2-Methylnaphthalene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2-Methylphenol	< 330		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2-Nitroaniline	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
2-Nitrophenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
3,3´-Dichlorobenzidine	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
3-Nitroaniline	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
4,6-Dinitro-2-methylphenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
4-Bromophenyl-phenylether	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
4-Chloro-3-methylphenol	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
4-Chloroaniline	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
4-Chlorophenyl-phenylether	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
4-Nitroaniline	< 340		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
4-Nitrophenol	< 340	c	1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
Acenaphthene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
Acenaphthylene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
Anthracene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
Benzo(a)anthracene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
Benzo(a)pyrene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
Benzo(b)fluoranthene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
Benzo(g,h,i)perylene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01
Benzo(k)fluoranthene	< 170		1	µg/Kg-dry	09/21/2016 4:05 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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Caitlin Panzarella
Project Manager : Caitlin Panzarella

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2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas
Collected : 9/15/2016 7:47:00 AM
Received : 9/17/2016 10:10:00 AM AT25234
Collected By CLIENT

Lab No. : 1609E84-002
Client Sample ID: SAND-02

Sample Information:
Type : Solid

Origin:

Analytical Method: SW8270D : Prep Method: SW3545A Prep Date: 9/19/2016 6:07:37 PM Analyst: SH

Parameter(s)	Results	Qualifier	D.F.	Units			Analyzed:	Container:
Bis(2-chloroethoxy)methane	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Bis(2-chloroethyl)ether	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Bis(2-ethylhexyl)phthalate	< 340	c	1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Butyl benzyl phthalate	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Carbazole	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Chrysene	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Dibenzo(a,h)anthracene	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Dibenzofuran	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Diethylphthalate	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Dimethylphthalate	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Di-n-butyl phthalate	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Di-n-octyl phthalate	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Fluoranthene	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Fluorene	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Hexachlorobenzene	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Hexachlorobutadiene	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Hexachlorocyclopentadiene	< 340	c	1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Hexachloroethane	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Indeno(1,2,3-cd)pyrene	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Isophorone	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Naphthalene	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Nitrobenzene	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
N-Nitroso-di-n-propylamine	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
N-Nitrosodiphenylamine	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Pentachlorophenol	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Phenanthrene	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Phenol	< 340		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Pyrene	< 170		1	µg/Kg-dry			09/21/2016 4:05 AM	Container-01 of 01
Surr: 1,2-Dichlorobenzene-d4	68.2		1	%Rec	Limit	20-130	09/21/2016 4:05 AM	Container-01 of 01
Surr: 2,4,6-Tribromophenol	33.6		1	%Rec	Limit	19-122	09/21/2016 4:05 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported : 9/26/2016

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
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NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results are only for the samples and analytes requested.

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

Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas
Collected : 9/15/2016 7:47:00 AM
Received : 9/17/2016 10:10:00 AM AT25234
Collected By CLIENT

Lab No. : 1609E84-002
Client Sample ID: SAND-02

Sample Information:
Type : Solid

Origin:

Analytical Method: SW8270D : Prep Method: SW3545A Prep Date: 9/19/2016 6:07:37 PM Analyst: SH

Parameter(s)	Results	Qualifier	D.F.	Units			Analyzed:	Container:
Surr: 2-Chlorophenol-d4	73.0		1	%Rec	Limit	20-130	09/21/2016 4:05 AM	Container-01 of 01
Surr: 2-Fluorobiphenyl	72.8		1	%Rec	Limit	30-115	09/21/2016 4:05 AM	Container-01 of 01
Surr: 2-Fluorophenol	70.7		1	%Rec	Limit	25-121	09/21/2016 4:05 AM	Container-01 of 01
Surr: 4-Terphenyl-d14	78.3		1	%Rec	Limit	18-137	09/21/2016 4:05 AM	Container-01 of 01
Surr: Nitrobenzene-d5	76.0		1	%Rec	Limit	23-120	09/21/2016 4:05 AM	Container-01 of 01
Surr: Phenol-d5	77.9		1	%Rec	Limit	24-113	09/21/2016 4:05 AM	Container-01 of 01

Analytical Method: SW7471B : Prep Method: SW7471 Prep Date: 9/19/2016 6:30:49 PM Analyst: AG

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Mercury	0.06		1	mg/Kg-dry	09/20/2016 12:04 PM	Container-01 of 01

Analytical Method: D2216 : Analyst: KiM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Percent Moisture	1.2		1	wt%	09/20/2016 10:50 AM	Container-01 of 01

4

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported : 9/26/2016

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Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **MB-58242**	SampType: **MBLK**	TestCode: **8270_SSTAR**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106033**
Client ID: **PBS**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2349927**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthylene	< 330	330									
Naphthalene	< 330	330									
Acenaphthene	< 330	330									
Fluorene	< 330	330									
Phenanthrene	< 330	330									
Anthracene	< 330	330									
Fluoranthene	< 330	330									
Pyrene	< 330	330									
Benzo(a)anthracene	< 330	330									
Chrysene	< 330	330									
Benzo(b)fluoranthene	< 330	330									
Benzo(k)fluoranthene	< 330	330									
Benzo(a)pyrene	< 330	330									
Indeno(1,2,3-cd)pyrene	< 330	330									
Dibenzo(a,h)anthracene	< 330	330									
Benzo(g,h,i)perylene	< 330	330									
Surr: Nitrobenzene-d5	1,300		1,667		80.1	23	120				
Surr: 2-Fluorobiphenyl	1,300		1,667		75.0	30	115				
Surr: 4-Terphenyl-d14	1,300		1,667		79.6	18	137				
Surr: 1,2-Dichlorobenzene-d4	1,300		1,667		75.7	20	130				

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_SSTAR**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106033**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2349928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_SSTAR**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106033**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270** **SW3545**		Analysis Date: **9/21/2016**	SeqNo: **2349928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthylene	1,600	330	1,667	0	93.2	43	107				
Naphthalene	1,500	330	1,667	0	87.5	18	142				
Acenaphthene	1,600	330	1,667	0	95.4	45	109				
Fluorene	1,500	330	1,667	0	90.4	47	108				
Phenanthrene	1,700	330	1,667	0	103	47	124				
Anthracene	1,800	330	1,667	0	107	50	117				
Fluoranthene	1,600	330	1,667	0	93.7	45	126				
Pyrene	1,800	330	1,667	0	110	49	132				
Benzo(a)anthracene	1,600	330	1,667	0	96.6	52	116				
Chrysene	1,700	330	1,667	0	102	48	121				
Benzo(b)fluoranthene	1,400	330	1,667	0	83.3	45	122				
Benzo(k)fluoranthene	1,700	330	1,667	0	99.0	54	124				
Benzo(a)pyrene	1,600	330	1,667	0	96.1	56	119				
Indeno(1,2,3-cd)pyrene	2,000	330	1,667	0	121	50	108				S
Dibenzo(a,h)anthracene	1,800	330	1,667	0	110	52	109				S
Benzo(g,h,i)perylene	2,200	330	1,667	0	134	30	107				S
Surr: Nitrobenzene-d5	1,400		1,667		81.7	23	120				
Surr: 2-Fluorobiphenyl	1,300		1,667		78.8	30	115				
Surr: 4-Terphenyl-d14	1,400		1,667		85.6	18	137				
Surr: 1,2-Dichlorobenzene-d4	1,200		1,667		73.1	20	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **MB-58242**	SampType: **MBLK**	TestCode: **8270_S_TCL**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106039**
Client ID: **PBS**	Batch ID: **58242**	TestNo: **SW8270** **SW3545**		Analysis Date: **9/21/2016**	SeqNo: **2350298**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
3-Methylphenol/4-Methylphenol	< 330	330									
Phenol	< 330	330									
Bis(2-chloroethyl)ether	< 330	330									
2-Chlorophenol	< 330	330									
2-Methylphenol	< 330	330									
N-Nitroso-di-n-propylamine	< 330	330									
Hexachloroethane	< 330	330									
Nitrobenzene	< 330	330									
Isophorone	< 330	330									
2-Nitrophenol	< 330	330									
2,4-Dimethylphenol	< 330	330									
Bis(2-chloroethoxy)methane	< 330	330									
2,4-Dichlorophenol	< 330	330									
Naphthalene	< 330	330									
4-Chloroaniline	< 330	330									
Hexachlorobutadiene	< 330	330									
4-Chloro-3-methylphenol	< 330	330									
2-Methylnaphthalene	< 330	330									
Hexachlorocyclopentadiene	< 330	330									
2,4,6-Trichlorophenol	< 330	330									
2,4,5-Trichlorophenol	< 830	830									
2-Chloronaphthalene	< 330	330									
2-Nitroaniline	< 830	830									
Dimethylphthalate	< 330	330									
Acenaphthylene	< 330	330									
2,6-Dinitrotoluene	< 330	330									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID	**MB-58242**	SampType:	**MBLK**	TestCode:	**8270_S_TCL**	Units:	**µg/Kg**	Prep Date:	**9/19/2016**	RunNo:	**106039**
Client ID:	**PBS**	Batch ID:	**58242**	TestNo:	**SW8270**	**SW3545**		Analysis Date:	**9/21/2016**	SeqNo:	**2350298**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
3-Nitroaniline	< 830	830									
Acenaphthene	< 330	330									
2,4-Dinitrophenol	< 830	830									
4-Nitrophenol	< 830	830									
Dibenzofuran	< 330	330									
2,4-Dinitrotoluene	< 330	330									
Diethylphthalate	< 330	330									
4-Chlorophenyl-phenylether	< 330	330									
Fluorene	< 330	330									
4-Nitroaniline	< 830	830									
4,6-Dinitro-2-methylphenol	< 830	830									
N-Nitrosodiphenylamine	< 330	330									
4-Bromophenyl-phenylether	< 330	330									
Hexachlorobenzene	< 330	330									
Pentachlorophenol	< 830	830									
Phenanthrene	< 330	330									
Anthracene	< 330	330									
Carbazole	< 330	330									
Di-n-butyl phthalate	< 330	330									
Fluoranthene	< 330	330									
Pyrene	< 330	330									
Butyl benzyl phthalate	< 330	330									
3,3´-Dichlorobenzidine	< 330	330									
Benzo(a)anthracene	< 330	330									
Chrysene	< 330	330									
Bis(2-ethylhexyl)phthalate	< 330	330									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **MB-58242**	SampType: **MBLK**	TestCode: **8270_S_TCL**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106039**
Client ID: **PBS**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2350298**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Di-n-octyl phthalate	< 330	330									
Benzo(b)fluoranthene	< 330	330									
Benzo(k)fluoranthene	< 330	330									
Benzo(a)pyrene	< 330	330									
Indeno(1,2,3-cd)pyrene	< 330	330									
Dibenzo(a,h)anthracene	< 330	330									
Benzo(g,h,i)perylene	< 330	330									
Surr: 2-Fluorophenol	2,100		2,500		83.3	25	121				
Surr: Nitrobenzene-d5	1,300		1,667		80.1	23	120				
Surr: Phenol-d5	2,200		2,500		86.6	24	113				
Surr: 2,4,6-Tribromophenol	1,900		2,500		76.3	19	122				
Surr: 2-Fluorobiphenyl	1,300		1,667		75.0	30	115				
Surr: 4-Terphenyl-d14	1,300		1,667		79.6	18	137				
Surr: 2-Chlorophenol-d4	2,100		2,500		85.7	20	130				
Surr: 1,2-Dichlorobenzene-d4	1,300		1,667		75.7	20	130				

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_S_TCL**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106039**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2350299**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
3-Methylphenol/4-Methylphenol	1,500	330	1,667	0	92.9	26	119				
Phenol	1,700	330	1,667	0	103	38	104				
Bis(2-chloroethyl)ether	1,300	330	1,667	0	80.2	32	116				
2-Chlorophenol	1,600	330	1,667	0	93.3	36	109				
2-Methylphenol	1,600	330	1,667	0	93.1	36	104				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_S_TCL**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106039**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270** **SW3545**		Analysis Date: **9/21/2016**	SeqNo: **2350299**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitroso-di-n-propylamine	1,400	330	1,667	0	83.6	33	109				
Hexachloroethane	1,400	330	1,667	0	84.3	34	105				
Nitrobenzene	1,500	330	1,667	0	87.9	36	119				
Isophorone	1,400	330	1,667	0	83.6	14	129				
2-Nitrophenol	1,700	330	1,667	0	99.8	36	117				
2,4-Dimethylphenol	1,400	330	1,667	0	84.7	24	96				
Bis(2-chloroethoxy)methane	1,300	330	1,667	0	80.1	29	112				
2,4-Dichlorophenol	1,600	330	1,667	0	96.1	41	117				
Naphthalene	1,500	330	1,667	0	87.5	18	142				
4-Chloroaniline	1,200	330	1,667	0	73.5	29	88				
Hexachlorobutadiene	1,200	330	1,667	0	70.0	36	118				
4-Chloro-3-methylphenol	1,700	330	1,667	0	103	45	118				
2-Methylnaphthalene	1,500	330	1,667	0	90.4	31	135				
Hexachlorocyclopentadiene	1,200	330	1,667	0	69.1	10	97				
2,4,6-Trichlorophenol	1,700	330	1,667	0	101	45	110				
2,4,5-Trichlorophenol	1,700	830	1,667	0	103	45	111				
2-Chloronaphthalene	1,300	330	1,667	0	79.8	35	107				
2-Nitroaniline	1,400	830	1,667	0	84.3	42	118				
Dimethylphthalate	1,600	330	1,667	0	93.8	49	112				
Acenaphthylene	1,600	330	1,667	0	93.2	43	107				
2,6-Dinitrotoluene	1,700	330	1,667	0	101	50	109				
3-Nitroaniline	1,600	830	1,667	0	94.2	40	95				
Acenaphthene	1,600	330	1,667	0	95.4	45	109				
2,4-Dinitrophenol	< 830	830	1,667	0	33.2	10	80				
4-Nitrophenol	1,600	830	1,667	0	93.7	26	118				
Dibenzofuran	1,700	330	1,667	0	99.0	48	112				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_S_TCL**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106039**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270** **SW3545**		Analysis Date: **9/21/2016**	SeqNo: **2350299**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	1,700	330	1,667	0	101	49	112				
Diethylphthalate	1,600	330	1,667	0	96.6	51	114				
4-Chlorophenyl-phenylether	1,300	330	1,667	0	79.3	48	111				
Fluorene	1,500	330	1,667	0	90.4	47	108				
4-Nitroaniline	1,900	830	1,667	0	116	46	110				S
4,6-Dinitro-2-methylphenol	1,100	830	1,667	0	65.9	16	104				
N-Nitrosodiphenylamine	1,400	330	1,667	0	85.4	39	90				
4-Bromophenyl-phenylether	1,500	330	1,667	0	89.7	50	116				
Hexachlorobenzene	1,600	330	1,667	0	94.5	51	110				
Pentachlorophenol	1,200	830	1,667	0	73.4	22	115				
Phenanthrene	1,700	330	1,667	0	103	47	124				
Anthracene	1,800	330	1,667	0	107	50	117				
Carbazole	1,900	330	1,667	0	113	51	114				
Di-n-butyl phthalate	1,900	330	1,667	0	116	53	124				
Fluoranthene	1,600	330	1,667	0	93.7	45	126				
Pyrene	1,800	330	1,667	0	110	49	132				
Butyl benzyl phthalate	1,900	330	1,667	0	117	54	130				
3,3´-Dichlorobenzidine	1,600	330	1,667	0	95.3	41	116				
Benzo(a)anthracene	1,600	330	1,667	0	96.6	52	116				
Chrysene	1,700	330	1,667	0	102	48	121				
Bis(2-ethylhexyl)phthalate	2,000	330	1,667	0	121	60	127				
Di-n-octyl phthalate	1,900	330	1,667	0	113	46	141				
Benzo(b)fluoranthene	1,400	330	1,667	0	83.3	45	122				
Benzo(k)fluoranthene	1,700	330	1,667	0	99.0	54	124				
Benzo(a)pyrene	1,600	330	1,667	0	96.1	56	119				
Indeno(1,2,3-cd)pyrene	2,000	330	1,667	0	121	50	108				S

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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

QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_S_TCL**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106039**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270** **SW3545**		Analysis Date: **9/21/2016**	SeqNo: **2350299**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenzo(a,h)anthracene	1,800	330	1,667	0	110	52	109				S
Benzo(g,h,i)perylene	2,200	330	1,667	0	134	30	107				S
Surr: 2-Fluorophenol	2,100		2,500		82.8	25	121				
Surr: Nitrobenzene-d5	1,400		1,667		81.7	23	120				
Surr: Phenol-d5	2,200		2,500		89.0	24	113				
Surr: 2,4,6-Tribromophenol	2,200		2,500		88.0	19	122				
Surr: 2-Fluorobiphenyl	1,300		1,667		78.8	30	115				
Surr: 4-Terphenyl-d14	1,400		1,667		85.6	18	137				
Surr: 2-Chlorophenol-d4	2,200		2,500		87.3	20	130				
Surr: 1,2-Dichlorobenzene-d4	1,200		1,667		73.1	20	130				

4

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID	**MB-58242**	SampType:	**MBLK**	TestCode:	**8270_S_4-2**	Units:	**µg/Kg**	Prep Date:	**9/19/2016**	RunNo:	**106047**
Client ID:	**PBS**	Batch ID:	**58242**	TestNo:	**SW8270**	**SW3545**		Analysis Date:	**9/21/2016**	SeqNo:	**2350339**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	< 330	330									
Bis(2-chloroethyl)ether	< 330	330									
2-Chlorophenol	< 330	330									
2-Methylphenol	< 330	330									
N-Nitroso-di-n-propylamine	< 330	330									
Hexachloroethane	< 330	330									
Nitrobenzene	< 330	330									
Isophorone	< 330	330									
2-Nitrophenol	< 330	330									
2,4-Dimethylphenol	< 330	330									
Bis(2-chloroethoxy)methane	< 330	330									
2,4-Dichlorophenol	< 330	330									
Naphthalene	< 330	330									
4-Chloroaniline	< 330	330									
Hexachlorobutadiene	< 330	330									
4-Chloro-3-methylphenol	< 330	330									
2-Methylnaphthalene	< 330	330									
Hexachlorocyclopentadiene	< 330	330									
2,4,6-Trichlorophenol	< 330	330									
2,4,5-Trichlorophenol	< 830	830									
2-Chloronaphthalene	< 330	330									
2-Nitroaniline	< 830	830									
Dimethylphthalate	< 330	330									
2,6-Dinitrotoluene	< 330	330									
Acenaphthylene	< 330	330									
3-Nitroaniline	< 830	830									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **MB-58242**	SampType: **MBLK**	TestCode: **8270_S_4-2**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106047**
Client ID: **PBS**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2350339**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	< 330	330									
2,4-Dinitrophenol	< 830	830									
4-Nitrophenol	< 830	830									
Dibenzofuran	< 330	330									
2,4-Dinitrotoluene	< 330	330									
Diethylphthalate	< 330	330									
Fluorene	< 330	330									
4-Chlorophenyl-phenylether	< 330	330									
4-Nitroaniline	< 830	830									
4,6-Dinitro-2-methylphenol	< 830	830									
N-Nitrosodiphenylamine	< 330	330									
4-Bromophenyl-phenylether	< 330	330									
Hexachlorobenzene	< 330	330									
Pentachlorophenol	< 830	830									
Phenanthrene	< 330	330									
Anthracene	< 330	330									
Carbazole	< 330	330									
Di-n-butyl phthalate	< 330	330									
Fluoranthene	< 330	330									
Pyrene	< 330	330									
Butyl benzyl phthalate	< 330	330									
3,3´-Dichlorobenzidine	< 330	330									
Benzo(a)anthracene	< 330	330									
Chrysene	< 330	330									
Bis(2-ethylhexyl)phthalate	< 330	330									
Di-n-octyl phthalate	< 330	330									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **MB-58242**	SampType: **MBLK**	TestCode: **8270_S_4-2**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106047**
Client ID: **PBS**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2350339**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(b)fluoranthene	< 330	330									
Benzo(k)fluoranthene	< 330	330									
Benzo(a)pyrene	< 330	330									
Indeno(1,2,3-cd)pyrene	< 330	330									
Dibenzo(a,h)anthracene	< 330	330									
Benzo(g,h,i)perylene	< 330	330									
Surr: 2-Fluorophenol	2,100		2,500		83.3	25	121				
Surr: Nitrobenzene-d5	1,300		1,667		80.1	23	120				
Surr: Phenol-d5	2,200		2,500		86.6	24	113				
Surr: 2,4,6-Tribromophenol	1,900		2,500		76.3	19	122				
Surr: 2-Fluorobiphenyl	1,300		1,667		75.0	30	115				
Surr: 4-Terphenyl-d14	1,300		1,667		79.6	18	137				
Surr: 2-Chlorophenol-d4	2,100		2,500		85.7	20	130				
Surr: 1,2-Dichlorobenzene-d4	1,300		1,667		75.7	20	130				

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_S_4-2**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106047**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2350340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1,700	330	1,667	0	103	38	104				
Bis(2-chloroethyl)ether	1,300	330	1,667	0	80.2	32	116				
2-Chlorophenol	1,600	330	1,667	0	93.3	36	109				
2-Methylphenol	1,600	330	1,667	0	93.1	36	104				
N-Nitroso-di-n-propylamine	1,400	330	1,667	0	83.6	33	109				
Hexachloroethane	1,400	330	1,667	0	84.3	34	105				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_S_4-2**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106047**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2350340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrobenzene	1,500	330	1,667	0	87.9	36	119				
Isophorone	1,400	330	1,667	0	83.6	14	129				
2-Nitrophenol	1,700	330	1,667	0	99.8	36	117				
2,4-Dimethylphenol	1,400	330	1,667	0	84.7	24	96				
Bis(2-chloroethoxy)methane	1,300	330	1,667	0	80.1	29	112				
2,4-Dichlorophenol	1,600	330	1,667	0	96.1	41	117				
Naphthalene	1,500	330	1,667	0	87.5	18	142				
4-Chloroaniline	1,200	330	1,667	0	73.5	29	88				
Hexachlorobutadiene	1,200	330	1,667	0	70.0	36	118				
4-Chloro-3-methylphenol	1,700	330	1,667	0	103	45	118				
2-Methylnaphthalene	1,500	330	1,667	0	90.4	31	135				
Hexachlorocyclopentadiene	1,200	330	1,667	0	69.1	10	97				
2,4,6-Trichlorophenol	1,700	330	1,667	0	101	45	110				
2,4,5-Trichlorophenol	1,700	830	1,667	0	103	45	111				
2-Chloronaphthalene	1,300	330	1,667	0	79.8	35	107				
2-Nitroaniline	1,400	830	1,667	0	84.3	42	118				
Dimethylphthalate	1,600	330	1,667	0	93.8	49	112				
2,6-Dinitrotoluene	1,700	330	1,667	0	101	50	109				
Acenaphthylene	1,600	330	1,667	0	93.2	43	107				
3-Nitroaniline	1,600	830	1,667	0	94.2	40	95				
Acenaphthene	1,600	330	1,667	0	95.4	45	109				
2,4-Dinitrophenol	< 830	830	1,667	0	33.2	10	80				
4-Nitrophenol	1,600	830	1,667	0	93.7	26	118				
Dibenzofuran	1,700	330	1,667	0	99.0	48	112				
2,4-Dinitrotoluene	1,700	330	1,667	0	101	49	112				
Diethylphthalate	1,600	330	1,667	0	96.6	51	114				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_S_4-2**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106047**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270** **SW3545**		Analysis Date: **9/21/2016**	SeqNo: **2350340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluorene	1,500	330	1,667	0	90.4	47	108				
4-Chlorophenyl-phenylether	1,300	330	1,667	0	79.3	48	111				
4-Nitroaniline	1,900	830	1,667	0	116	46	110				S
4,6-Dinitro-2-methylphenol	1,100	830	1,667	0	65.9	16	104				
N-Nitrosodiphenylamine	1,400	330	1,667	0	85.4	39	90				
4-Bromophenyl-phenylether	1,500	330	1,667	0	89.7	50	116				
Hexachlorobenzene	1,600	330	1,667	0	94.5	51	110				
Pentachlorophenol	1,200	830	1,667	0	73.4	22	115				
Phenanthrene	1,700	330	1,667	0	103	47	124				
Anthracene	1,800	330	1,667	0	107	50	117				
Carbazole	1,900	330	1,667	0	113	51	114				
Di-n-butyl phthalate	1,900	330	1,667	0	116	53	124				
Fluoranthene	1,600	330	1,667	0	93.7	45	126				
Pyrene	1,800	330	1,667	0	110	49	132				
Butyl benzyl phthalate	1,900	330	1,667	0	117	54	130				
3,3´-Dichlorobenzidine	1,600	330	1,667	0	95.3	41	116				
Benzo(a)anthracene	1,600	330	1,667	0	96.6	52	116				
Chrysene	1,700	330	1,667	0	102	48	121				
Bis(2-ethylhexyl)phthalate	2,000	330	1,667	0	121	60	127				
Di-n-octyl phthalate	1,900	330	1,667	0	113	46	141				
Benzo(b)fluoranthene	1,400	330	1,667	0	83.3	45	122				
Benzo(k)fluoranthene	1,700	330	1,667	0	99.0	54	124				
Benzo(a)pyrene	1,600	330	1,667	0	96.1	56	119				
Indeno(1,2,3-cd)pyrene	2,000	330	1,667	0	121	50	108				S
Dibenzo(a,h)anthracene	1,800	330	1,667	0	110	52	109				S
Benzo(g,h,i)perylene	2,200	330	1,667	0	134	30	107				S

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58242**

Sample ID **LFB-58242**	SampType: **LFB**	TestCode: **8270_S_4-2**	Units: **µg/Kg**	Prep Date: **9/19/2016**	RunNo: **106047**
Client ID: **ZZZZZZ**	Batch ID: **58242**	TestNo: **SW8270**	**SW3545**	Analysis Date: **9/21/2016**	SeqNo: **2350340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	2,100		2,500		82.8	25	121				
Surr: Nitrobenzene-d5	1,400		1,667		81.7	23	120				
Surr: Phenol-d5	2,200		2,500		89.0	24	113				
Surr: 2,4,6-Tribromophenol	2,200		2,500		88.0	19	122				
Surr: 2-Fluorobiphenyl	1,300		1,667		78.8	30	115				
Surr: 4-Terphenyl-d14	1,400		1,667		85.6	18	137				
Surr: 2-Chlorophenol-d4	2,200		2,500		87.3	20	130				
Surr: 1,2-Dichlorobenzene-d4	1,200		1,667		73.1	20	130				

4

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58244**

Sample ID	**MB-58244**	SampType:	**MBLK**	TestCode:	**HG_7471A_S**	Units:	**mg/Kg**	Prep Date:	**9/19/2016**	RunNo:	**105944**
Client ID:	**PBS**	Batch ID:	**58244**	TestNo:	**SW7471**	**SW7471**		Analysis Date:	**9/20/2016**	SeqNo:	**2346705**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	< 0.03	0.03									

Sample ID	**LCS-58244**	SampType:	**LCS**	TestCode:	**HG_7471A_S**	Units:	**mg/Kg**	Prep Date:	**9/19/2016**	RunNo:	**105944**
Client ID:	**LCSS**	Batch ID:	**58244**	TestNo:	**SW7471**	**SW7471**		Analysis Date:	**9/20/2016**	SeqNo:	**2346706**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.18	0.03	0.17	0	108	72.9	127				

4

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58332**

Sample ID	**MB-58332**	SampType:	**MBLK**	TestCode:	**6010_S_PKG**	Units:	**mg/kg**	Prep Date:	**9/23/2016**	RunNo:	**106319**
Client ID:	**PBS**	Batch ID:	**58332**	TestNo:	**SW6010**	**SW3050A**		Analysis Date:	**9/23/2016**	SeqNo:	**2356388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	< 10	10									
Antimony	< 3.0	3.0									
Arsenic	< 0.5	0.5									
Barium	< 10	10									
Beryllium	< 0.3	0.3									
Cadmium	< 0.1	0.1									
Calcium	< 50.0	50.0									
Chromium	< 0.5	0.5									
Cobalt	< 2.5	2.5									
Copper	< 1.3	1.3									
Iron	< 5.0	5.0									
Lead	< 0.3	0.3									
Magnesium	< 50.0	50.0									
Manganese	< 0.8	0.8									
Nickel	< 2.0	2.0									
Potassium	< 250	250									
Selenium	< 0.5	0.5									
Silver	< 0.5	0.5									
Sodium	< 250	250									
Thallium	< 0.5	0.5									
Vanadium	< 2.5	2.5									
Zinc	< 1.0	1.0									

4

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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

QC SUMMARY REPORT

WO#: **1609E84**

26-Sep-16

Client: Pace Analytical Services Inc.

Project: 16090353-BAR-ALB:1032.008.001 **BatchID:** **58332**

Sample ID	**LCS-58332**	SampType: **LCS**	TestCode: **6010_S_PKG**	Units: **mg/kg**	Prep Date: **9/23/2016**	RunNo: **106319**
Client ID:	**LCSS**	Batch ID: **58332**	TestNo: **SW6010**	**SW3050A**	Analysis Date: **9/23/2016**	SeqNo: **2356390**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6,200	9.6	7,885	0	78.7	51.8	148				
Antimony	64.3	2.9	101.0	0	63.7	1.6	197				
Arsenic	211	0.5	212.5	0	99.2	79.6	120				
Barium	422	9.6	411.5	0	103	82.7	117				
Beryllium	108	0.2	107.7	0	100	82.4	118				
Cadmium	112	0.1	121.2	0	92.5	81.7	117				
Calcium	5,760	48.1	5,923	0	97.2	80.7	119				
Chromium	70.4	0.5	71.8	0	98.0	78.8	121				
Cobalt	180	2.4	190.4	0	94.7	83.3	117				
Copper	80.9	1.3	80.1	0	101	80.4	120				
Iron	13,100	4.8	14,040	0	93.3	45	155				
Lead	75.4	0.2	73.9	0	102	80.9	119				
Magnesium	2,810	48.1	3,058	0	91.9	76.4	124				
Manganese	395	0.7	434.6	0	91.0	80.8	119				
Nickel	162	1.9	171.2	0	94.8	82	118				
Potassium	2,810	240	2,712	0	104	70.9	129				
Selenium	101	0.5	106.7	0	94.7	77.7	122				
Silver	58.6	0.5	57.3	0	102	74.7	125				
Sodium	889	240	618.3	0	144	54.9	145				
Thallium	142	0.5	145.2	0	97.9	78.8	121				
Vanadium	138	2.4	144.2	0	95.7	76.7	123				
Zinc	306	1.0	325.0	0	94.1	80.5	120				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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Sample Receipt Checklist

Client Name **PACE-NY** Date and Time Received: **9/17/2016 10:10:00 AM**

Work Order Number: **1609E84** RcptNo: **1** Received by **James Ginsberg**

Completed by: Reviewed by: Caitlin Panzarella

Completed Date: 9/19/2016 11:58:02 AM Reviewed Date: 9/26/2016 1:23:08 PM

Carrier name: FedEx

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Are matrices correctly identified on Chain of custody?	Yes	☑	No	☐		
Is it clear what analyses were requested?	Yes	☑	No	☐		
Custody seals intact on sample bottles?	Yes	☐	No	☐	Not Present	☑
Samples in proper container/bottle?	Yes	☑	No	☐		
Were correct preservatives used and noted?	Yes	☑	No	☐	NA	☐
Preservative added to bottles:						
Sample Condition?	Intact	☑	Broken	☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
Were container labels complete (ID, Pres, Date)?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
Was an attempt made to cool the samples?	Yes	☑	No	☐	NA	☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes	☑	No	☐	NA	☐
Response when temperature is outside of range:						
Sample Temp. taken and recorded upon receipt?	Yes	☑	No	☐	To	1.9 °
Water - Were bubbles absent in VOC vials?	Yes	☐	No	☐	No Vials	☑
Water - Was there Chlorine Present?	Yes	☐	No	☐	NA	☑
Water - pH acceptable upon receipt?	Yes	☐	No	☐	No Water	☑
Are Samples considered acceptable?	Yes	☑	No	☐		
Custody Seals present?	Yes	☑	No	☐		
Airbill or Sticker?	Air Bil	☑	Sticker	☐	Not Present	☐
Airbill No:	706298750359					

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

4

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1609E84

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

PACE - L1

CNP 9/26/16

~~Pace-AM 519~~

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

Pace Analytical Services, Inc.
2190 Technology Drive, Schenectady, NY 12308
Telephone (518) 346-4592 Fax (518) 381-6055
www.pacelabs.com

LRF # 16090353
(LAB USE ONLY)

DISPOSAL REQUIREMENTS: (To be filled in by Client)
- ○ RETURN TO CLIENT
- ● DISPOSAL BY RECEIVING LAB
- ○ ARCHIVAL BY RECEIVING LAB

Additional charges incurred for disposal (if hazardous) or archival.
Call for details.

CLIENT (REPORTS TO BE SENT TO): PACE	PROJECT#/PROJECT NAME: 16090353
PROJECT MANAGER: Nick Nicholas	LOCATION (CITY/STATE) ADDRESS: NY
Project: BAR-ALB: 1032.008.001	REQUIRED TURN AROUND TIME: 9/26/2016
Notes:	NAME OF COURIER (IF USED):

ENTER ANALYSIS AND METHOD NUMBER REQUESTED

PRESERVATIVE CODE:	0	0						
BOTTLE TYPE:	MASON	MASON						
BOTTLE SIZE:	4OZ	4OZ						

PRESERVATIVE KEY
0 - ICE
1 - HCL
2 - HNO3
3 - H2SO4
4 - NaOH
5 - Zn. Acetate
6 - MeOH
7 - NaHSO4
8 - Other (Na2SO3)

ELECTRONIC RESULTS: nicholas.nicholas@pacelabs.com; Nicole.Johnson@pacelabs.com

SAMPLE ID	DATE	TIME	MATRIX	GRAB/ COMP	LAB SAMPLE ID (LAB USE ONLY)	NUMBER OF CONTAINERS	SVOC (8270)	TAL METALS (6010)	Mercury (7471)					REMARKS:
SAND-01	9/15/16	7:45	S	GRAB	AT25233	2	X	X	X					1609E84
SAND-02	9/15/16	7:47	S	GRAB	AT25234	2	X	X	X					

AMBIENT OR CHILLED: TEMP: 1.9 | COC TAPE: (Y) N | PROPERLY PRESERVED: Y N | OTHER NOTES: Data Package [LEVEL-4] EDD: EQUIS-DEC-DER

RECEIVED BROKEN OR LEAKING: Y N | COC DISCREPANCIES: Y N | RECVD W/I HOLDING TIMES: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
SIGNATURE [signature]	SIGNATURE VIA FED EX →	SIGNATURE FED EX	SIGNATURE [signature]	SIGNATURE	SIGNATURE
PRINTED NAME A. Bratty 9/16/16	PRINTED NAME	PRINTED NAME	PRINTED NAME [signature] Steven Grinsberg	PRINTED NAME	PRINTED NAME
COMPANY PACE	COMPANY	COMPANY	COMPANY Pace	COMPANY	COMPANY
DATE/TIME 9/16/16 16:00	DATE/TIME	DATE/TIME	DATE/TIME 9/17/16 0010	DATE/TIME	DATE/TIME

S:\LOGIN\MDLCOCS

7062 9875 0359

Sample Condition Upon Receipt

160903532

CLIENT NAME: B+L A16.

PROJECT: 1032.008.001

COURIER: FedEx ☐ UPS ☐ Client ☑ Pace ☐ Other ☐

TRACKING # N/A

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): 2.0

BIOLOGICAL TISSUE IS FROZEN: Yes ☐ No ☐ N/A ☑

COMMENTS:

Temperature is Acceptable? ☑Yes ☐No

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

Sample Receipt form filled in: _____

Line-Out (Includes Copying Shipping Documents and verifying sample pH): AA 9/16/16

Log In (Includes notifying PM of any discrepacies and documenting in LIMS): AJB 9/16/16

Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): AA 9/16/16

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

<16090353P1>

160903531

Page: 1 of 1

1921573

Section A Required Client Information:

Company: B-L
Address: 16 AIRLINE DRIVE SUITE 200
ALBANY NY 12205
Email To: steve.lefevre@bartonandloguidice.com
Phone: (518) 218-1801 Fax: (518) 218-1805
Requested Due Date/TAT: STANDARD

Section B Required Project Information:

Report To: Steve Lefevre
Copy To: Rosemary McCormick
Purchase Order No.:
Project Name: 36 ELM ST
Project Number: 1032.009.001

Section C Invoice Information:

Attention: ACCOUNTS PAYABLE
Company Name: B-L
Address: 443 ELECTRONIC PKWY LIVERPOOL NY
Pace Quote Reference:
Pace Project Manager: NICHOLAS NICHOLAS
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER NYSDEC

Site Location STATE: NY

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: SVOCs by 8270	TAL Metals	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SAND-01	SL	G			9/15/16	7:45		2	X								X	X		AT25233
2	SAND-02	SL	G			9/15/16	7:47		2	X								X	X		AT25234
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	B-L	9/15/16	9:15	A. Rowley	9/19/16	905	2.0@	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: ROSEMARY McCORMICK
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 9/15/16

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007