Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

January 17, 2019

Cletus Ketter
Veolia North America
6001 W. Pershing Rd
Cicero, IL 60804

RE: Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

Dear Cletus Ketter:
Enclosed are the analytical results for sample(s) received by the laboratory on January 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Cindy K Varga

Cindy Varga
cindy.varga@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jackie Lawless, Veolia North America

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CERTIFICATIONS

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

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SAMPLE SUMMARY

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40181790001	**PCD 010819 FECAL**	Solid	01/08/19 08:00	01/09/19 11:55
40181790002	**PCD 010819**	Solid	01/08/19 08:00	01/09/19 11:55

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SAMPLE ANALYTE COUNT

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40181790002	**PCD 010819**	EPA 6010	TXW	8
		EPA 7471	AJT	1
		ASTM D2974-87	PCG	1
		EPA 160.4	KTS	1
		SM 2540G	KTS	1

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ANALYTICAL RESULTS

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

Sample: PCD 010819 **Lab ID: 40181790002** Collected: 01/08/19 08:00 Received: 01/09/19 11:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**12.4**	mg/kg	4.8	1	01/14/19 08:05	01/14/19 18:22	7440-38-2	
Cadmium	**2.2**	mg/kg	0.48	1	01/14/19 08:05	01/14/19 18:22	7440-43-9	
Copper	**416**	mg/kg	1.4	1	01/14/19 08:05	01/14/19 18:22	7440-50-8	
Lead	**76.2**	mg/kg	1.9	1	01/14/19 08:05	01/14/19 18:22	7439-92-1	
Molybdenum	**11.9**	mg/kg	0.96	1	01/14/19 08:05	01/14/19 18:22	7439-98-7	
Nickel	**38.4**	mg/kg	0.96	1	01/14/19 08:05	01/14/19 18:22	7440-02-0	
Selenium	**6.2**	mg/kg	4.2	1	01/14/19 08:05	01/14/19 18:22	7782-49-2	
Zinc	**708**	mg/kg	3.8	1	01/14/19 08:05	01/14/19 18:22	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.51**	mg/kg	0.066	1	01/15/19 11:26	01/16/19 08:54	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**3.6**	%	0.10	1		01/10/19 14:10		
160.4 Total Volatile Solids	Analytical Method: EPA 160.4							
Total Volatile Solids	**53.6**	% (w/w)	0.10	1		01/11/19 19:37		
2540G Total Percent Solids	Analytical Method: SM 2540G							
Total Solids	**98.4**	%	0.10	1		01/09/19 18:12		

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QUALITY CONTROL DATA

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

QC Batch: 311451 | Analysis Method: EPA 7471
QC Batch Method: EPA 7471 | Analysis Description: 7471 Mercury
Associated Lab Samples: 40181790002

METHOD BLANK: 1816509 | Matrix: Solid
Associated Lab Samples: 40181790002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.010	0.035	01/16/19 08:15	

LABORATORY CONTROL SAMPLE: 1816510

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.92	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1816511 1816512

Parameter	Units	40181829001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	<0.013	1	1	1.2	1.2	110	114	85-115	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

QC Batch: 311330 | Analysis Method: EPA 6010
QC Batch Method: EPA 3050 | Analysis Description: 6010 MET
Associated Lab Samples: 40181790002

METHOD BLANK: 1816207 | Matrix: Solid
Associated Lab Samples: 40181790002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.0	5.0	01/14/19 17:42	
Cadmium	mg/kg	<0.13	0.50	01/14/19 17:42	
Copper	mg/kg	<0.44	1.5	01/14/19 17:42	
Lead	mg/kg	<0.60	2.0	01/14/19 17:42	
Molybdenum	mg/kg	<0.14	1.0	01/14/19 17:42	
Nickel	mg/kg	<0.23	1.0	01/14/19 17:42	
Selenium	mg/kg	<1.3	4.4	01/14/19 17:42	
Zinc	mg/kg	<1.0	4.0	01/14/19 17:42	

LABORATORY CONTROL SAMPLE: 1816208

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	45.3	91	80-120	
Cadmium	mg/kg	50	46.5	93	80-120	
Copper	mg/kg	50	47.6	95	80-120	
Lead	mg/kg	50	46.5	93	80-120	
Molybdenum	mg/kg	50	45.6	91	80-120	
Nickel	mg/kg	50	46.9	94	80-120	
Selenium	mg/kg	50	48.3	97	80-120	
Zinc	mg/kg	50	49.0	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1816209 1816210

Parameter	Units	40181934002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	9.7	61	61.3	61.9	60.7	85	83	75-125	2	20	
Cadmium	mg/kg	<0.61	61	61.3	53.1	53.7	87	88	75-125	1	20	
Copper	mg/kg	20.6	61	61.3	76.9	75.4	92	89	75-125	2	20	
Lead	mg/kg	22.5	61	61.3	74.3	74.8	85	85	75-125	1	20	
Molybdenum	mg/kg	<1.2	61	61.3	50.3	50.2	81	80	75-125	0	20	
Nickel	mg/kg	26.9	61	61.3	80.0	78.7	87	84	75-125	2	20	
Selenium	mg/kg	<5.3	61	61.3	54.0	53.3	88	87	75-125	1	20	
Zinc	mg/kg	96.0	61	61.3	150	142	89	76	75-125	5	20	

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QUALITY CONTROL DATA

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

QC Batch: 311174
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40181790002

SAMPLE DUPLICATE: 1815276

Parameter	Units	40181858001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.3	9.9	7	10	

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QUALITY CONTROL DATA

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

QC Batch: 311244
QC Batch Method: EPA 160.4
Analysis Method: EPA 160.4
Analysis Description: 160.4 Total Volatile Solids
Associated Lab Samples: 40181790002

METHOD BLANK: 1815534
Matrix: Solid
Associated Lab Samples: 40181790002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Volatile Solids	% (w/w)	<30.0	30.0	01/11/19 19:36	

LABORATORY CONTROL SAMPLE: 1815535

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Volatile Solids	% (w/w)	321	309	96	80-120	

LABORATORY CONTROL SAMPLE: 1815544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Volatile Solids	% (w/w)	321	311	97	80-120	

LABORATORY CONTROL SAMPLE: 1815545

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Volatile Solids	% (w/w)	321	307	96	80-120	

LABORATORY CONTROL SAMPLE: 1815546

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Volatile Solids	% (w/w)	321	304	95	80-120	

SAMPLE DUPLICATE: 1815536

Parameter	Units	40181790002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Volatile Solids	% (w/w)	53.6	53.5	0	5	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

QC Batch: 311037 | Analysis Method: SM 2540G
QC Batch Method: SM 2540G | Analysis Description: 2540G Total Solids
Associated Lab Samples: 40181790002

METHOD BLANK: 1814653 | Matrix: Solid
Associated Lab Samples: 40181790002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Solids	%	<30.0	30.0	01/09/19 18:09	

LABORATORY CONTROL SAMPLE: 1814654

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	736	714	97	80-120	

SAMPLE DUPLICATE: 1814655

Parameter	Units	40181690001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	98.5	98.6	0	5	

SAMPLE DUPLICATE: 1814975

Parameter	Units	40181790002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	98.4	98.3	0	5	

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QUALIFIERS

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BIOSOLIDS MONTHLY JAN 2019
Pace Project No.: 40181790

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40181790002	**PCD 010819**	EPA 3050	311330	EPA 6010	311401
40181790002	**PCD 010819**	EPA 7471	311451	EPA 7471	311481
40181790002	**PCD 010819**	ASTM D2974-87	311174		
40181790002	**PCD 010819**	EPA 160.4	311244		
40181790002	**PCD 010819**	SM 2540G	311037		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

40181790

Page: 1 of 1

Section A Required Client Information:
Veolia North America
6001 W. Pershing Rd
Cicero, IL 60804
Email To: tommy.anthony@veolia.com
Phone: 312.718.5342 Fax:
Requested Due Date/TAT:

Section B Required Project Information:
Report To: Same
Copy To: cletus.ketter@veolia.com,
MONTHLY SAMPLE
Purchase Order No.: 539167
Project Name: BIOSOLIDS
Project Number:

Section C Invoice Information:
Attention: Veolia Support Services North
Company Name: Veolia Support Services North
Address: 125 S 84th St Suite 175, Milwaukee, WI 53214
Pace Quote Reference:
Pace Project Manager: Cindy Varga
Pace Profile #: 5163

REGULATORY AGENCY
__ NPDES __GROUND WATER __DRINKING WATER
__UST __RCRA OTHER X

SITE LOCATION: __GA X IL __IN __MI __NC __OH __SC __WI OTHER____

Section D Required Client Information
SAMPLE ID
One Character per box.
(A-Z, 0-9 / ,-)
IDs MUST BE UNIQUE
Samples

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Unpreserved	1 L plastic/ whirl	Pak Bag	SM 2540B TS	9222D FECAL COLIFORM *	6010 METALS - As,Cd, Cu,Pb,Mo,Ni,Se,Zn	7471 MERCURY	EPA 160.4 TVS	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	PCD 010819 Fecal	SL		010819	8AM	010819	8AM		1		1			X					001
2	PCD 010819 Metals	SL		010819	8AM	010819	8AM		1	1			X		X		X	X	002
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Filtered (Y/N): N N N N N N
Requested Ana

Additional Comments:

* Pace Courier to drop off at sub lab

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
[illegible]	1/8/19	1254	Karen Arnold	1/8/19	1254			Y/N	Y/N	Y/N
Karen Arnold	1/8/19	1700	GS Logistics	1/8/19				Y/N	Y/N	Y/N
GS Logistics	1/9/19	0830	[illegible] Pace	1-9-19	0852	4		Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Harry Maxwell
SIGNATURE of SAMPLER: Harry Maxwell
DATE Signed (MM / DD / YY): 01-08-19

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Veolia

Project # 40181790

All containers needing preservation have been checked and noted below: □Yes □No ☑N/A

Lab Lot# of pH paper:

Lab Std #ID of preservation (if pH adjusted):

Pace Lab #	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)	Initial when completed:	Date/ Time:
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN									
001																					X	1/9/18 AL											2.5 / 5 / 10		
002																																	2.5 / 5 / 10		
003																																	2.5 / 5 / 10		
004																																	2.5 / 5 / 10		
005																																	2.5 / 5 / 10		
006																																	2.5 / 5 / 10		
007																																	2.5 / 5 / 10		
008																																	2.5 / 5 / 10		
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017																																	2.5 / 5 / 10		
018																																	2.5 / 5 / 10		
019																																	2.5 / 5 / 10		
020																																	2.5 / 5 / 10		

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : □Yes □No ☑N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical 1241 Bellevue Street, Green Bay, WI 54302	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: 25Apr2018
	Document No.: **F-GB-C-031-Rev.07**	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: WO#: 40181790

40181790

Client Name: Veolia

Courier: ☑ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☐ Client ☐ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used SR - 9 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3.5 /Corr: 4

Temp Blank Present: ☑ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Person examining contents:
Date: 1-9-19
Initials: SW

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	☑Yes ☐No ☐Yes ☐No	5. Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	8.
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	☑Yes ☐No ☑Yes ☐No ☐N/A ☐Yes ☐No ☑N/A	9.
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 Matrix: S	☐Yes ☑No ☐N/A	12. Time 12 noon. 1-9-19 SW
Trip Blank Present: Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased): _____	☐Yes ☐No ☑N/A ☐Yes ☐No ☑N/A	13.

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CG **Date:** 1/9/19

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave., Suite 150 Geneva, Illinois 60134
Tel. (708) 544-3260 • Toll Free (800) 783-LABS
Fax (708) 544-8587
www.suburbanlabs.com

January 15, 2019

Workorder: 1901420

Cindy Varga
Pace Analytical - WI
1241 Bellevue Street Suite 9
Green Bay, WI 54302

TEL: (920) 469-2436
FAX:
RE: Veolia Biosolids- Cicero IL

Dear Cindy Varga:

Suburban Laboratories, Inc. received 1 sample(s) on 1/8/2019 for the analyses presented in the following report.

All data for the associated quality control (QC) met EPA, method, or internal laboratory specifications except where noted in the case narrative. If you are comparing these results to external QC specifications or compliance limits and have any questions, please contact us.

This final report of laboratory analysis consists of this cover letter, case narrative, analytical report, dates report, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call me at (708) 544-3260.

Sincerely,

Keith Sinon
Project Manager
708-544-3260 ext 212
keith@suburbanlabs.com

Case Narrative

Client: Pace Analytical - WI
Project: Veolia Biosolids- Cicero IL
WorkOrder: 1901420
Temperature of samples upon receipt at SLI: 17.1 C

Date: January 15, 2019
PO #:
QC Level:
Chain of Custody #: EV

General Comments:
- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of 35 IAC Part 186 unless otherwise indicated.
- Waste water analysis follows the rules set forth in 40 CFR part 136 except where otherwise noted.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated.
- For more information about the laboratories' scope of accreditation, please contact us at (708) 544-3260 or the Agency at (217) 782-6455.
- All radiological results are reported to the 95% confidence level.

Abbreviations:
- Reporting Limit: The concentration at which an analyte can be routinely detected on a day to day basis, and which also meets regulatory and client needs.
- Quantitation Limit: The lowest concentration at which results can be accurately quantitated.
- J: The analyte was positively identified above our Method Detection Limit and is considered detectable and usable; however, the associated numerical value is the approximate concentration of the analyte in the sample.
- ATC: Automatic Temperature Correction. - TNTC: Too Numerous To Count
- TIC: Tentatively Identified Compound (GCMS library search identification, concentration estimated to nearest internal standard).
- SS (Surrogate Standard): Quality control compound added to the sample by the lab.

Method References:
For a complete list of method references please contact us.
- E: USEPA Reference methods
- SW: USEPA, Test Methods for Evaluating Solid Waste (SW-846)
- M: Standard Methods for the Examination of Water and Wastewater
- USP: Latest version of United States Pharmacopeia

Workorder Specific Comments:

Suburban Laboratories, Inc.

1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Pace Analytical - WI
Project Name: Veolia Biosolids- Cicero IL

Report Date: January 15, 2019
Workorder: **1901420**

Client Sample ID: **PCD010819**
Lab ID: 1901420-001
Date Received: 01/08/2019 1:00 PM

Matrix: SLUDGE
Collection Date: 01/08/2019 8:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
FECAL COLIFORM (MPN), CLASS A		Method: SM-9221E-Rev 18Ed, 1992				Analyst: MMM	
Fecal Coliform	<2	0		MPN/g-dry	1	01/08/2019 3:32 PM	R104074
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: amo	
Percent Moisture	3.7	1.0	c	wt%	1	01/09/2019 1:53 PM	R104104

Qualifiers:

*/x	Value exceeds Maximum Contaminant Level
B	Analyte detected in the associated Method Blank
C	Value is below Minimum Concentration Limit
c	Analyte not in SLI scope of accreditation
E	Estimated, detected above quantitation range
G	Refer to case narrative page for specific comments
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limit (QL)
N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit
P	Present
Q	Accreditation is not available from Wisconsin
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
T	Analyte detected in sample trip blank
V	EPA requires field analysis/filtration. Lab analysis would be considered past hold time.

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave. Geneva, IL 60134 Tel. 708.544.3260 Fax: 708.544.8587 Toll Free: 800.783.LABS www.suburbanlabs.com

CHAIN OF CUSTODY RECORD

Electronic Version

Company Name: Pace Analytical

Company Address: 1241 Bellevue St

City: Green Bay State: WI Zip: 54302

Phone: 920-321-9455 Fax: ☐ Fax Report

Email Address: cindy.varga@pacelabs.com ☑ Email Report

Project ID / Location: Veoila Biosolids Weekly/Cicero IL

Project Manager (Report to): Cindy Varga

Sample Collector(s): Harry Maxwell

TURNAROUND TIME REQUESTED

☑ Normal ☐ RUSH* *Additional Rush Charges Approved.

*Date & Time Needed:

Normal TAT is 5-7 work days for most work. Rush work must be pre-approved and additional charges apply.

Specify Regulatory Program: (Required) ☐ None/Info only

☐ LUST ☐ SRP ☐ SDWA

☐ 503 Sludge ☐ NPDES ☐ MWRDGC

☐ Disposal ☐ Other *Please specify in comment section below.

ANALYSIS & METHOD REQUESTED

Enter an "X" in box below for request

Page of

PO No.

Shipping Method

QC Reporting Level ☐ 1 ☐ 2 ☐ 3

LAB USE ONLY

SLI Order No. 1901420

Sample containers supplied by customer? ☐ Yes

Temperature of Received Samples 17.1 °C

Samples received within 24 hours of collection? ☐ Yes

	SAMPLE IDENTIFICATION (Please use 1 line per container type)	COLLECTION DATE	COLLECTION TIME	MATRIX	GRAB/ COMP.	CONTAINERS Qty	CONTAINERS SIZE & TYPE	PRESERVATIVE	9222D Fecal Coliform	R	Condition	Split	LAB #
1	PCD010819	1/8/19	0800	SL	GRAB/	1	120 ml sterile	Nathiosulfate	X				14
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water(SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) **CONTAINER:** 2oz, 4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube, Glass (G), Plastic (P) **PRESERVATIVE:** H_2SO_4, HCl, HNO_3, Methanol (MeOH) NaOH, Sodium Bisulfate (NaB), NaThio

COMMENTS & SPECIAL INSTRUCTIONS:

CONDITION CODES

1. Improper/damaged container/cap
2. Improper preservation
3. Insufficient sample volume
4. Headspace/air bubbles for VOCs
5. Received past holding time
6. Received frozen
7. Label conflicts with COC

1. Relinquished By	Date	2. Relinquished By	Date	3. Relinquished By	Date	4. Relinquished By	Date
[signature]	1/8/19						
Received By [signature] ☐ Ice	Time 1:00	Received By ☐ Ice	Time	Received By ☐ Ice	Time	Received By ☐ Ice	Time

Submission of samples subject to Terms and Conditions on back. Rev. 2/01/05 Please fill out this form completely, print, sign & submit with samples. Keep a copy for your records.