

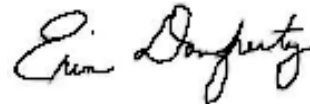
ANALYTICAL REPORT

Eurofins Environment Testing Philadelphia, LLC
213 Witmer Road
Horsham, PA 19044-0962
Tel: (215)355-3900

Laboratory Job ID: 630-30730-1
Client Project/Site: Quarterly Leachate
Sampling Event: Quarterly Leachate Comp/Grab

For:
Cape May County Municipal Utilities Auth
1523 U.S. Route 9 North
PO BOX 610
Cape May Court House, New Jersey 08210

Attn: Michael M Frisko



Authorized for release by:
4/22/2022 9:02:34 AM

Erin Dougherty, Project Administrator
(215)355-3900
Erin.Dougherty@et.eurofinsus.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.





Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs

· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically “SAFE” if no coliform bacteria are detected. To be considered “SAFE” your report should indicate “<1 cfu/100mL” or “NEG” for the coliform test. If you report indicates a positive result “POS” or a value greater than or equal to one, then your supply is “UNSAFE FOR DRINKING” contact your local health department.

Warranties, Terms, and Conditions

· Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as “grab” samples unless otherwise identified.

· Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins’ online data portal “TotalAccess” will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).

Erin Dougherty

Project Administrator

4/22/2022 9:02:34 AM

Case Narrative

Client: Cape May County Municipal Utilities Auth
Project/Site: Quarterly Leachate

Job ID: 630-30730-1

Job ID: 630-30730-1

Laboratory: Eurofins Environment Testing Philadelphia, LLC

Narrative

Job Narrative 630-30730-1

Receipt

The samples were received on 4/7/2022 3:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

A trip blank was not submitted for analysis with this sample shipment; and was not listed on the Chain of Custody (COC).

GC/MS VOA

Method 624.1_PREC: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: LEACHATE GRAB (630-30730-2). Elevated reporting limits (RLs) are provided.

Method 624.1_PREC: The continuing calibration verification (CCV) associated with batch 410-242477 recovered above the upper control limit for Bromoform. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 335.4: The reference method requires samples to be preserved to a pH of >12. The following sample(s) were received with insufficient preservation at a pH of 9: LEACHATE GRAB (630-30730-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



Sample Summary

Client: Cape May County Municipal Utilities Auth
Project/Site: Quarterly Leachate

Job ID: 630-30730-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
630-30730-1	SSLF22-04 LEACHATE COMPOSITE	Leachate	04/07/22 08:45	04/07/22 15:45
630-30730-2	LEACHATE GRAB	Leachate	04/07/22 08:45	04/07/22 15:45

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Client Sample Results

Client: Cape May County Municipal Utilities Auth
Project/Site: Quarterly Leachate

Job ID: 630-30730-1

Client Sample ID: SSLF22-04 LEACHATE COMPOSITE

Lab Sample ID: 630-30730-1

Date Collected: 04/07/22 08:45

Matrix: Leachate

Date Received: 04/07/22 15:45

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Cadmium	ND		5.0	1.0	ug/L		04/19/22 13:32	1	WJM9

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	ND		1.0	0.40	ug/L		04/18/22 14:07	1	UEFS

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Biochemical Oxygen Demand	110		20	20	mg/L		04/08/22 16:34	1	F8TI

Client Sample ID: LEACHATE GRAB

Lab Sample ID: 630-30730-2

Date Collected: 04/07/22 08:45

Matrix: Leachate

Date Received: 04/07/22 15:45

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
1,1,1-Trichloroethane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
1,1,1,2-Tetrachloroethane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
1,1,1,2-Trichloroethane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
1,1-Dichloroethane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
1,1-Dichloroethene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
1,2-Dichloroethane	ND		50	15	ug/L		04/08/22 14:40	50	UJML
1,2-Dichloropropane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Benzene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Bromodichloromethane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Bromoform	ND	*+	50	10	ug/L		04/08/22 14:40	50	UJML
Bromomethane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Carbon tetrachloride	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Chlorobenzene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Chloroethane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Chloroform	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Chloromethane	ND		50	15	ug/L		04/08/22 14:40	50	UJML
cis-1,2-Dichloroethene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
cis-1,3-Dichloropropene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Dibromochloromethane	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Ethylbenzene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Methylene Chloride	ND		50	15	ug/L		04/08/22 14:40	50	UJML
Toluene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Tetrachloroethene	ND		50	15	ug/L		04/08/22 14:40	50	UJML
trans-1,2-Dichloroethene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
trans-1,3-Dichloropropene	ND		50	5.0	ug/L		04/08/22 14:40	50	UJML
Trichloroethene	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Trichlorofluoromethane	ND		50	15	ug/L		04/08/22 14:40	50	UJML
Vinyl chloride	ND		50	15	ug/L		04/08/22 14:40	50	UJML
Xylenes, Total	ND		50	10	ug/L		04/08/22 14:40	50	UJML
Acrolein	ND		500	150	ug/L		04/08/22 14:40	50	UJML
Acrylonitrile	ND		50	15	ug/L		04/08/22 14:40	50	UJML
2-Chloroethyl vinyl ether	ND		50	25	ug/L		04/08/22 14:40	50	UJML

Surrogate	%Recovery	Qualifier	Limits	Analyzed	Dil Fac	Analyst
1,2-Dichloroethane-d4 (Surr)	110		60 - 140	04/08/22 14:40	50	UJML

Eurofins Environment Testing Philadelphia, LLC

Client Sample Results

Client: Cape May County Municipal Utilities Auth
 Project/Site: Quarterly Leachate

Job ID: 630-30730-1

Client Sample ID: LEACHATE GRAB

Lab Sample ID: 630-30730-2

Date Collected: 04/07/22 08:45

Matrix: Leachate

Date Received: 04/07/22 15:45

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Analyzed	Dil Fac	Analyst
4-Bromofluorobenzene (Surr)	89		60 - 140	04/08/22 14:40	50	UJML
Dibromofluoromethane (Surr)	111		60 - 140	04/08/22 14:40	50	UJML
Toluene-d8 (Surr)	95		60 - 140	04/08/22 14:40	50	UJML

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
HEM (Oil & Grease)	2.6	J	5.0	1.4	mg/L		04/18/22 10:32	1	UYB0
Cyanide, Total	ND		0.010	0.0050	mg/L		04/19/22 16:27	1	JCG7

Method: Field Parameter - Field Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Field pH by SM4500-H B	7.94		0.0100	0.0100	S.U.		04/07/22 08:45	1	CS



Accreditation/Certification and Definitions Summary

Client: Cape May County Municipal Utilities Auth
 Project/Site: Quarterly Leachate

Job ID: 630-30730-1

Laboratory: Eurofins Environment Testing Philadelphia, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA093 (Horsham)	06-30-22

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	06-30-22

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Accreditation/Certification and Definitions Summary

Client: Cape May County Municipal Utilities Auth
Project/Site: Quarterly Leachate

Job ID: 630-30730-1

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Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: Cape May County Municipal Utilities Auth
Project/Site: Quarterly Leachate

Job ID: 630-30730-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	ELLE
200.7 Rev 4.4	Metals (ICP)	EPA	ELLE
245.1	Mercury (CVAA)	EPA	ELLE
1664B	HEM and SGT-HEM	1664B	ELLE
335.4	Cyanide, Total	MCAWW	ELLE
SM 5210B	BOD, 5-Day	SM	ELLE
Field Parameter	Field Parameters	EPA	EETP
200.7	Preparation, Total Recoverable Metals	EPA	ELLE
245.1	Preparation, Mercury	EPA	ELLE
Distill/CN	Distillation, Cyanide	None	ELLE

Protocol References:

1664B = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EETP = Eurofins Environment Testing Philadelphia, LLC, 213 Witmer Road, Horsham, PA 19044-0962, TEL (215)355-3900

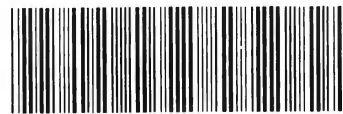
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300



QC

CHAIN OF CUSTODY

Page 1 of 1



630-30730 Chain of Custody

MATRIX CODES

702 Electronic Drive Phone: 215-355-3900
Horsham, PA 19044 Fax: 215-392-0626

Client/Acct. No. CAPE MAY COUNTY MUA
Address

City/State/Zip CM CH NJ 08210
Phone/Fax 609-463-8544
Client Contact: EMILY ZIDANIC

Bill to/Report to (if different)

EMILY ZIDANIC

Sampling Site Address (if different) Include State

Woodbine NJ

P.O. No. WASTE WATER PWSID #: Contract

Quote #

e-mail:

___ Ascorbic/HCL Vials # ___ HCL Vials
___ Na₂S₂O₃
___ Na OH/Zn acetate pH
___ HNO₃ pH
___ H₂SO₄ pH
___ NaOH pH
___ Unpreserved
___ HCL # ___ NH₄CL # ___ MeOH
___ DI Water

DW: DRINKING WATER
GW: GROUND WATER
WW: WASTEWATER
SO: SOIL
SL: SLUDGE
OIL: OIL
SOL: NON SOIL SOLID
MI: MISCELLANEOUS
X: OTHER

PROJECT	Collection		G R A B	C O M P	Matrix Code	Number of Containers										ANALYSIS REQUESTED	Field pH, Temp (°C), DO, Cl ₂ , Cond. etc.
	Date	Military Time				Total	H 2 S O 4	H C l V i a l s	H N O 3	N a O H	Z n A c	U N P R E	B A C T				
SSLF22-04 Leachate	4-7-22	08:45	X		WW	2	X									Oil and Grease	pH = 7.94
			X			1				X						CN	
			X			9	X				X					VOC	
				X		1			X							Cd/Hg	
						1				X						Bod	
						1				X						PH	

SAMPLED BY: (Name/Company)

LA / Land Fill

TAT: STANDARD (10 DAY)

or DUE DATE / /

Report Format: Standard NJ-RDD SRP-RDD

Standard + QC Forms EDD

Field Parameters Analyzed By:

Initials

Date/Time:

Please call for pricing and availability for rush (<10 day) turnaround and for all but standard reporting format.

SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW. USE FULL LEGAL SIGNATURE, DATE AND MILITARY TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, 4 PM IS 1600)

RELINQUISHED BY SAMPLER	DATE	TIME	RECEIVED BY	DATE	TIME	DELIVERY: <input type="checkbox"/> EQC COURIER <input type="checkbox"/> CLIENT <input type="checkbox"/> UPS <input type="checkbox"/> FEDEX <input type="checkbox"/> OTHER	Custody Seal Number
1. <i>[Signature]</i>	4-7-22	12:41	1. <i>[Signature]</i>	4-7-22	12:41		
2. <i>[Signature]</i>	4-7-22	15:05	2. <i>[Signature]</i>	4-7-22	15:05	Rec'd Temp.: <i>[Signature]</i> Initials: <i>[Signature]</i> Location: <i>[Signature]</i>	
3.			3.			COMMENTS:	
4.			4.				
5.			5.				

Hazardous: yes / no

Eurofins Environment Testing Philadelphia-

213 Witmer Road
 Horsham, PA 19044-0962
 Phone: 215-355-3900 Fax: 888-785-8567

Chain of Custody Record



eurofins Environment Testing
 America

Client Information (Sub Contract Lab)		Sampler: Lab PM Dougherty, Erin		Carrier Tracking No(s):		COC No: 630-7457.1											
Client Contact: Shipping/Receiving		Phone:		E-Mail: Erin.Dougherty@et.eurofins.com		State of Origin: New Jersey											
Company: Eurofins Lancaster Laboratories Env, LLC		Accreditations Required (See note): NELAP - New Jersey		Job #: 630-30730-1		Page: Page 1 of 1											
Address: 2425 New Holland Pike, City: Lancaster State, Zip PA, 17601 Phone: 717-656-2300(Tel) Email:		Due Date Requested: 4/20/2022 TAT Requested (days):		Analysis Requested				Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:									
Project Name: Quarterly Leachate Site: Cape May Country MUA Landfill		Project #: 63001619 SSOW#:															
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers		Special Instructions/Note:	
						Preservation Code:											
SSLF22-04 LEACHATE COMPOSITE (630-30730-1)		4/7/22		08:45 Eastern		Water		Water				X X X				2	
LEACHATE GRAB (630-30730-2)		4/7/22		08:45 Eastern		Water		Water				X X X				13	
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Philadelphia, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Philadelphia, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Philadelphia, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Philadelphia, LLC.																	
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
Unconfirmed										<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested: I, II, III, IV, Other (specify)										Primary Deliverable Rank: 1							
Special Instructions/QC Requirements:																	
Empty Kit Relinquished by:						Date:			Time:			Method of Shipment:					
Relinquished by: <i>Sean Janim</i>						Date/Time: 4/7/22 15:			Company: EQC/M			Received by: "Merit Labs"					
Relinquished by:						Date/Time:			Company:			Date/Time: 4/7/22 15:					
Relinquished by:						Date/Time:			Company:			Date/Time: 4/1/22 22:25					
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						Custody Seal No: <i>Merit Labs</i>			Cooler Temperature(s) °C and Other Remarks: <i>NO TBS 0.70c</i>								

