

## ANALYTICAL REPORT

Eurofins TestAmerica, Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-162984-1  
Client Project/Site: Field Sampling Channel Lake

For:  
Microbial Discovery Group, LLC  
5200 W. Ashland Way  
Franklin, Wisconsin 53132

Attn: Dan Barker



Authorized for release by:  
5/14/2019 9:51:55 AM

Sandie Fredrick, Project Manager II  
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### LINKS

Review your project  
results through  
**TotalAccess**

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[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 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.*



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# Case Narrative

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

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**Job ID: 500-162984-1**

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**Laboratory: Eurofins TestAmerica, Chicago**

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**Narrative**

**Job Narrative  
500-162984-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 5/8/2019 10:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

**Metals**

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

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# Detection Summary

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

## Client Sample ID: #5

Lab Sample ID: 500-162984-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Volatile Solids	26		0.10	0.10	%	1		SM 2540G	Total/NA

## Client Sample ID: #6

Lab Sample ID: 500-162984-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Volatile Solids	27		0.10	0.10	%	1		SM 2540G	Total/NA

## Client Sample ID: #9

Lab Sample ID: 500-162984-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Volatile Solids	34		0.10	0.10	%	1		SM 2540G	Total/NA

## Client Sample ID: #13

Lab Sample ID: 500-162984-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Volatile Solids	29		0.10	0.10	%	1		SM 2540G	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

# Method Summary

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

Method	Method Description	Protocol	Laboratory
Moisture	Percent Moisture	EPA	TAL CHI
SM 2540G	Total, Fixed, and Volatile Solids	SM	TAL CHI

**Protocol References:**

- EPA = US Environmental Protection Agency
- SM = "Standard Methods For The Examination Of Water And Wastewater"

**Laboratory References:**

- TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-162984-1	#5	Sludge	05/07/19 00:00	05/08/19 10:35
500-162984-2	#6	Sludge	05/07/19 00:00	05/08/19 10:35
500-162984-3	#9	Sludge	05/07/19 00:00	05/08/19 10:35
500-162984-4	#13	Sludge	05/07/19 00:00	05/08/19 10:35

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# Client Sample Results

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

**Client Sample ID: #5**

**Lab Sample ID: 500-162984-1**

**Date Collected: 05/07/19 00:00**

**Matrix: Sludge**

**Date Received: 05/08/19 10:35**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	95.9		0.1	0.1	%			05/10/19 08:55	1
Percent Solids	4.1		0.1	0.1	%			05/10/19 08:55	1
Total Volatile Solids	26		0.10	0.10	%			05/14/19 07:52	1

# Client Sample Results

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

**Client Sample ID: #6**

**Lab Sample ID: 500-162984-2**

**Date Collected: 05/07/19 00:00**

**Matrix: Sludge**

**Date Received: 05/08/19 10:35**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	98.3		0.1	0.1	%			05/10/19 08:55	1
Percent Solids	1.7		0.1	0.1	%			05/10/19 08:55	1
Total Volatile Solids	27		0.10	0.10	%			05/14/19 07:52	1



# Client Sample Results

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

**Client Sample ID: #9**

**Lab Sample ID: 500-162984-3**

**Date Collected: 05/07/19 00:00**

**Matrix: Sludge**

**Date Received: 05/08/19 10:35**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	96.0		0.1	0.1	%			05/10/19 08:55	1
Percent Solids	4.0		0.1	0.1	%			05/10/19 08:55	1
Total Volatile Solids	34		0.10	0.10	%			05/14/19 07:52	1

# Client Sample Results

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

**Client Sample ID: #13**

**Date Collected: 05/07/19 00:00**

**Date Received: 05/08/19 10:35**

**Lab Sample ID: 500-162984-4**

**Matrix: Sludge**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	92.7		0.1	0.1	%			05/10/19 08:55	1
Percent Solids	7.3		0.1	0.1	%			05/10/19 08:55	1
Total Volatile Solids	29		0.10	0.10	%			05/14/19 07:52	1

## Definitions/Glossary

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

### 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
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)

# QC Association Summary

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

## General Chemistry

### Analysis Batch: 484675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-162984-1	#5	Total/NA	Sludge	Moisture	
500-162984-2	#6	Total/NA	Sludge	Moisture	
500-162984-3	#9	Total/NA	Sludge	Moisture	
500-162984-4	#13	Total/NA	Sludge	Moisture	

### Analysis Batch: 485126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-162984-1	#5	Total/NA	Sludge	SM 2540G	
500-162984-2	#6	Total/NA	Sludge	SM 2540G	
500-162984-3	#9	Total/NA	Sludge	SM 2540G	
500-162984-4	#13	Total/NA	Sludge	SM 2540G	

# Lab Chronicle

Client: Microbial Discovery Group, LLC  
 Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

## Client Sample ID: #5

Date Collected: 05/07/19 00:00

Date Received: 05/08/19 10:35

## Lab Sample ID: 500-162984-1

Matrix: Sludge

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	484675	05/10/19 08:55	LWN	TAL CHI
Total/NA	Analysis	SM 2540G		1	485126		LWN	TAL CHI
					(Start)	05/14/19 07:52		
					(End)	05/14/19 07:52		

## Client Sample ID: #6

Date Collected: 05/07/19 00:00

Date Received: 05/08/19 10:35

## Lab Sample ID: 500-162984-2

Matrix: Sludge

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	484675	05/10/19 08:55	LWN	TAL CHI
Total/NA	Analysis	SM 2540G		1	485126		LWN	TAL CHI
					(Start)	05/14/19 07:52		
					(End)	05/14/19 07:52		

## Client Sample ID: #9

Date Collected: 05/07/19 00:00

Date Received: 05/08/19 10:35

## Lab Sample ID: 500-162984-3

Matrix: Sludge

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	484675	05/10/19 08:55	LWN	TAL CHI
Total/NA	Analysis	SM 2540G		1	485126		LWN	TAL CHI
					(Start)	05/14/19 07:52		
					(End)	05/14/19 07:52		

## Client Sample ID: #13

Date Collected: 05/07/19 00:00

Date Received: 05/08/19 10:35

## Lab Sample ID: 500-162984-4

Matrix: Sludge

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	484675	05/10/19 08:55	LWN	TAL CHI
Total/NA	Analysis	SM 2540G		1	485126		LWN	TAL CHI
					(Start)	05/14/19 07:52		
					(End)	05/14/19 07:52		

### Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Microbial Discovery Group, LLC  
Project/Site: Field Sampling Channel Lake

Job ID: 500-162984-1

## Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19 *

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\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Regulatory Program:  DW  NPDES  RCRA  Other:

<b>Client Contact</b>		<b>Project Manager: Dan Barker</b>		<b>Site Contact: NA</b>		<b>Date: 5-7-19</b>		<b>COC No:</b>	
MDG Bio		Tel/Fax: 414-303-0683		Lab Contact:		Carrier: None		_____ of _____ COCs	
5200 West Ashland Way		<b>Analysis Turnaround Time</b>		Filtered Sample (Y/N) Perform MS / MSD (Y/N) % Solids (Method 2540G) % Volatile Solids (Method 2540G) COD (Optional) TKN (Optional) Total Phosphorous (Optional)				Sampler:	
Franklin, WI 53132		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS						For Lab Use Only:	
Phone 414-303-0683		TAT if different from Below _____						Walk-in Client:	
Fax		<input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Lab Sampling:	
Project Name: Field sampling								Job / SDG No.:	
Site: Channel Lake				500-162984					
P O # Dbarker									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	% Solids (Method 2540G)	% Volatile Solids (Method 2540G)	COD (Optional)	TKN (Optional)	Total Phosphorous (Optional)	Sample Specific Notes:
1 #5	5/7/2019		Grab	Sludge	1	N	N	x	x				
2 #6	5/7/19		Grab	Sludge	1	N	N	x	x				
3 #9	5/7/19		Grab	Sludge	1	N	N	x	x				
4 #13	5/7/19		Grab	Sludge	1	N	N	x	x				
			Grab	Sludge	1	N	N						

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other \_\_\_\_\_

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months

Special Instructions/QC Requirements & Comments: These are sludge samples from a wastewater treatment facility and may contain fecal coliforms and other related wastewater biological hazards.

Custody Seals Intact:  Yes  No

Custody Seal No.: \_\_\_\_\_ Cooler Temp. (°C): Obs'd: \_\_\_\_\_ Cor'd: \_\_\_\_\_ Therm ID No.: \_\_\_\_\_

Dan Barker	Company: Microbial Discovery	5/7/2019	Received by: <i>[Signature]</i>	Company: <i>TA</i>	Date/Time: 5-8-19 1035
Relinquished by:	Company:-	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:-	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

# Login Sample Receipt Checklist

Client: Microbial Discovery Group, LLC

Job Number: 500-162984-1

**Login Number: 162984**

**List Source: Eurofins TestAmerica, Chicago**

**List Number: 1**

**Creator: James, Jeff A**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	unchilled
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

