



John Kaeding  
56 Kaeding Rd. 100725  
Worcester, VT 05682

PROJECT: Doty School  
WORK ORDER: 2403-06164  
DATE RECEIVED: March 06, 2024  
DATE REPORTED: March 29, 2024  
SAMPLER: John

### Laboratory Report

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields. The Williston, VT facility is also ISO/IEC 17025:2017 accredited for Total Coliform and E coli by SM9223B.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory.

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.  
Laboratory Director

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



160 James Brown Dr., Williston, VT 05495  
Ph 802-879-4333 Fax 802-879-7103

56 Etna Road, Lebanon, NH 03766  
Ph 603-678-4891 Fax 603-678-4893



**Laboratory Report**

DATE REPORTED: 03/29/2024

CLIENT: John Kaeding

WORK ORDER: 2403-06164

PROJECT: Doty School

DATE RECEIVED: 03/06/2024

001

Site: Kitchen Sink

Date Sampled: 3/5/24

Time: 19:00

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Analysis Date/Time</u>	<u>Lab/Tech</u>	<u>NELAC</u>	<u>Qual.</u>
Perchlorate	0.091	ug/L	EPA 6850	3/12/24	SWSUB	U	SBEU, J

Report Summary of Qualifiers and Notes

SBEU: This sample analysis was subcontracted to Eurofins Laboratory. Please note the J qualifier on the subcontracted report. The complete report is attached.

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Eileen Toomey  
Endyne, Inc.

160 James Brown Drive  
Williston, Vermont 05495

Generated 3/15/2024 10:43:26 AM

## JOB DESCRIPTION

Perchlorate

## JOB NUMBER

200-72490-1

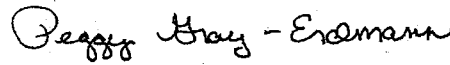
# Eurofins Burlington

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

## Authorization



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3/15/2024 10:43:26 AM

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Authorized for release by  
Peggy Gray-Erdmann, Client Relations Manager  
[Peggy.Gray-Erdmann@et.eurofinsus.com](mailto:Peggy.Gray-Erdmann@et.eurofinsus.com)  
(716)504-9829

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# Definitions/Glossary

Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

## 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
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)
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

# Case Narrative

Client: Endyne, Inc.  
Project: Perchlorate

Job ID: 200-72490-1

**Job ID: 200-72490-1**

**Eurofins Burlington**

## CASE NARRATIVE

**Client: Endyne, Inc.**

**Project: Perchlorate**

**Report Number: 200-72490-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **RECEIPT**

The samples were received on 03/07/2024; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 8.9 C.

### **PERCHLORATE**

Sample 2403-06164-001 KITCHEN SINK (200-72490-1) was analyzed for perchlorate in accordance with EPA Method 331.0. The samples were analyzed on 03/12/2024.

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

Eurofins Burlington

# Detection Summary

Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

**Client Sample ID: 2403-06164-001 KITCHEN SINK**

**Lab Sample ID: 200-72490-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	0.091	J	0.20	0.039	ug/L	1		331.0	Total/NA

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

**Client Sample ID: 2403-06164-001 KITCHEN SINK**

**Lab Sample ID: 200-72490-1**

**Date Collected: 03/05/24 19:00**

**Matrix: Water**

**Date Received: 03/07/24 15:00**

**Method: EPA 331.0 - Perchlorate (LC/MS/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.091	J	0.20	0.039	ug/L			03/12/24 23:29	1

# QC Sample Results

Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

## Method: 331.0 - Perchlorate (LC/MS/MS)

Lab Sample ID: MB 200-201851/3  
Matrix: Water  
Analysis Batch: 201851

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.20	U	0.20	0.039	ug/L			03/12/24 22:59	1

Lab Sample ID: LCS 200-201851/4  
Matrix: Water  
Analysis Batch: 201851

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	10.0	9.626		ug/L		96	80 - 120

Lab Sample ID: 200-72490-1 MS  
Matrix: Water  
Analysis Batch: 201851

Client Sample ID: 2403-06164-001 KITCHEN SINK  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	0.091	J	10.0	10.43	E	ug/L		103	80 - 120

Lab Sample ID: 200-72490-1 MSD  
Matrix: Water  
Analysis Batch: 201851

Client Sample ID: 2403-06164-001 KITCHEN SINK  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	0.091	J	10.0	9.746		ug/L		97	80 - 120	7	20

# QC Association Summary

Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

## LCMS

### Analysis Batch: 201851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-72490-1	2403-06164-001 KITCHEN SINK	Total/NA	Water	331.0	
MB 200-201851/3	Method Blank	Total/NA	Water	331.0	
LCS 200-201851/4	Lab Control Sample	Total/NA	Water	331.0	
200-72490-1 MS	2403-06164-001 KITCHEN SINK	Total/NA	Water	331.0	
200-72490-1 MSD	2403-06164-001 KITCHEN SINK	Total/NA	Water	331.0	

# Lab Chronicle

Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

**Client Sample ID: 2403-06164-001 KITCHEN SINK**

**Lab Sample ID: 200-72490-1**

**Date Collected: 03/05/24 19:00**

**Matrix: Water**

**Date Received: 03/07/24 15:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	331.0		1	201851	JS	EET BUR	03/12/24 23:29

**Laboratory References:**

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

# Accreditation/Certification Summary

Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

## Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-18-24
Florida	NELAP	E87467	06-30-24
Minnesota	NELAP	050-999-436	12-31-24
New Hampshire	NELAP	2006	12-18-24
New Jersey	NELAP	VT972	06-30-24
New York	NELAP	10391	03-31-24
Pennsylvania	NELAP	68-00489	04-30-24
Rhode Island	State	LAO00298	12-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00272	12-19-26
Vermont	State	VT4000	02-10-25
Virginia	NELAP	460209	12-14-24
Wisconsin	State	399140830	08-31-24

# Method Summary

Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

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Method	Method Description	Protocol	Laboratory
331.0	Perchlorate (LC/MS/MS)	EPA	EET BUR

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**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

# Sample Summary

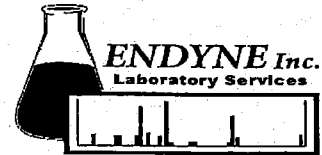
Client: Endyne, Inc.  
Project/Site: Perchlorate

Job ID: 200-72490-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-72490-1	2403-06164-001 KITCHEN SINK	Water	03/05/24 19:00	03/07/24 15:00

# Chain of Custody



Test America  
 30 Community Drive  
 South Burlington VT  
 05403

Customer: Eileen Toomey  
 Endyne, Inc.  
 160 James Brown Drive  
 Williston VT 05495  
 Etoomey@endynelabs.com  
 802-879-4333

State of Sample origin: VERMONT

The analysis requested requires the Testing Lab have and maintain TNI/NELAC accreditation. If you do not currently maintain TNI/NELAC accreditation for the parameter/matrix requested in the above referenced State, please Contact Endyne immediately at (802) 879-4333.

Thank you.

Turn Around Time: \_\_\_\_\_

Special Instructions:

SN-PCLA-W	POTABLE	Perchlorate by HPLC/MS			2403-06164-W		
Sample		Btl #	Btl Typ	Btl Desc	Pres.	Matrix	Sampled
2403-06164-001	Kitchen Sink	001	PHC	1 - 4 oz Plastic pH	< 6C		3/5/24 19:00



200-72490 Chain of Custody

Relinquished by: (Sign, Date, Time) Eileen Toomey

Relinquished by: (Sign, Date, Time) \_\_\_\_\_

Relinquished by: (Sign, Date, Time) \_\_\_\_\_

Received by: (Sign, Date, Time) Luca Ming 3-7-24 1500

Received by: (Sign, Date, Time) \_\_\_\_\_

Received by: (Sign, Date, Time) \_\_\_\_\_



## Login Sample Receipt Checklist

Client: Endyne, Inc.

Job Number: 200-72490-1

Login Number: 72490

List Source: Eurofins Burlington

List Number: 1

Creator: Muniz, Luca

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
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.	True	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	8.9°C
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.	N/A	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



2403-06164

John Kaeding  
Doty School

**Residential Testing Chain of Custody**

Customer Name: John Kaeding  
 Address: 50 Kaeding Rd  
 City: Worcester State: VT Zip: 05082

Email: johnkaeding@gmail.com  
 Phone Number: 802 229 0176 802 279 0853  
 Name of Sample Collector: \_\_\_\_\_

911 Designated Sample Address: Doty School  
Worcester VT 05082  
**Write this address on the bottles** City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Was the water chlorinated within the past two weeks? Y / N  
**Source:** New Well \_\_\_\_\_ Tag Number (if known) \_\_\_\_\_  
 Existing Well  Spring \_\_\_\_\_ Surface Water \_\_\_\_\_ Public \_\_\_\_\_ Other \_\_\_\_\_

**Sample Location**

Use this Line if Testing Bacteria Only: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ am/pm  
 (Kitchen, bathroom, etc.)  
 First Draw Lead Sample: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ am/pm  
 (Kitchen, bathroom, etc.)  
 All other Samples (Flush) Kitchen Sink Date: 3/5/24 Time: 7 am/pm  
 (Kitchen, bathroom, etc.)

**All Total Coliform/E.coli samples (individually or in a kit) will have an additional \$50 fee if delivered to the lab on a Friday. Some analysis may not be accepted on holiday weeks. Please call the lab for holiday sample instructions.**

<b>Bacteria</b> Total Coliform/E. coli \$25	<b>Radiological</b> Gross Alpha* \$60 Uranium \$50 Radium 226/228* \$225 Radon (Air or Water) \$100	<b>FHA/VA Kit \$85</b> Total Coliform / E. coli, Nitrate, Nitrite, First Draw Lead	<b>Kit C \$200</b> Arsenic, Chloride, Copper, Iron, Lead, Manganese, Sodium, Nitrate, Nitrite, Hardness, Uranium, Fluoride
<b>VT Homeowner Package \$245</b> Total Coliform/E. coli, Kit C, Gross Alpha*	<b>Organics</b> VOC (EPA 524) \$130 Diesel Range Organics \$90 PCBs \$125 Pesticides \$250 Herbicides \$175	<b>Table A11-5 &amp; A11-7 \$185</b> Total Coliform / E. coli, Nitrate, Nitrite, Arsenic, Chloride, Iron, Manganese, Sodium, Odor, pH, Uranium	<b>Water Conditioning Package \$150</b> Alkalinity, pH, Chloride, Sulfate, Calcium, Barium, Magnesium, Sodium, Potassium, Hardness, Uranium
<b>Comprehensive Package \$300</b> Total Coliform / E. coli, pH, Total Hardness, Chloride, Fluoride, Nitrate, Nitrite, Sulfate, Arsenic, Iron, Manganese, Cadmium, Chromium, Barium, Lead (First Draw), Copper, Sodium, Uranium, Gross Alpha*	<b>Common Health Risk \$185</b> Total Coliform / E.coli Nitrate, Nitrite, Fluoride, Arsenic, First Draw Lead, Uranium, Gross Alpha*	<b>Common Aesthetics \$85</b> pH, Chloride, Hardness, Calcium, Magnesium, Sodium, Iron, Manganese	
<b>Table 11-5 &amp; 11-6 New Well and Hardness \$235</b> Total Coliform / E. coli, Fluoride, Nitrate, Nitrite, Arsenic, Chloride, Iron, Manganese, Sodium, Lead(First Draw) Odor, pH, Uranium, Gross Alpha*, Total Hardness			
Other: <u>Per-Chlorate</u>			

\*Indicates parameter will be sub-contracted to an outside certified laboratory

Relinquished By: [Signature] Date/Time: 3/6/24 10:35  
 Received By: [Signature] Date/Time: 3/6/24 10:35  
 Temp Check °C: 0.0 Delivered on Ice  Delivered by: [Signature]  
 Amt. Paid: 300.00 Cash \_\_\_\_\_ Check # \_\_\_\_\_ Credit Card 1744