

Trace Analytical Laboratories, Inc.  
2241 Black Creek Road  
Muskegon, MI 49444-2673



231-773-5998 Phone  
888-979-4469 Fax  
www.trace-labs.com

July 16, 2021

Mr. Dale Clark  
Clare, City of  
202 W. Fifth St.  
Clare, Mi 48617

Phone: (989) 386-2321  
Fax:

RE: Trace ID: 21G0309

Dear Mr. Clark:

Enclosed are your analytical results associated with your project for City of Clare. The results of this report relate only to the samples listed in the body of this report.

The results were obtained from Prein and Newhof

Thank you for working with Trace. If you have questions concerning this report, please contact me at 231.773.5998 or by email at [tbrewer@trace-labs.com](mailto:tbrewer@trace-labs.com).

Sincerely,

A handwritten signature in black ink that reads "Timothy W. Brewer". The signature is fluid and cursive.

Tim Brewer  
Project Manager

Enclosures



NJDEP Accreditation No. MI008

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

July 14, 2021

Trace Analytical Laboratories, Inc.  
2241 Black Creek Road  
Muskegon, MI 49444-2673

RE: 21G0309

Order No.: 2107514

Dear Mr. Tim Brewer:

[Guide to reading Lab Result](#)

Prein&Newhof Laboratory received 2 sample(s) on 7/12/2021 on your behalf. Your test results are provided in your Prein&Newhof Laboratory analytical report. Please carefully review your analytical report, noting the following.

- You can be assured that the sample results meet the Safe Drinking Water Criteria as no analyte tested exceeds the EPA Maximum Contaminant Level unless indicated by an " \* " in the "Qual" column.
- You can be assured that all samples were received and analyzed within required holding times unless noted by a "H" in the "Qual" column.
- You can be assured that all quality control data is within laboratory-defined or method-specified acceptance limits unless defined by the addition of an attached Case Narrative document.
- When testing for PFHxS, PFOA, PFOS, MeFOSAA, and EtFOSAA results include both branched and linear isotopes. We extract a Method Blank and analyze it with the preparation batch. Method Blank analytes are within the Reporting Limit (RL).

To learn more about interpreting your Drinking Water Test Results and reading your Lab Report, follow the link above to view our "Guide to Reading Lab Results". If you have any concerns about your test results or need additional help, please call: 616-364-7600 or email me: [sbylsma@preinnewhof.com](mailto:sbylsma@preinnewhof.com).

Thank you for trusting Prein&Newhof with your testing needs.

We use EPA Approved Methods for all regulated parameters. EPA Lab #: MI000014

We are certified by the State of Michigan for Drinking Water Analysis for: Coliform Bacteria, Metals, Cyanide, Minerals, Anions, Volatile Organics, THM's, Haloacetic Acids, and PFAS.  
Michigan Lab ID#: 0020

Sincerely,



Steve Bylsma  
Laboratory Manager

CC:  
Ms. Gina Roe

<b>CLIENT:</b>	Trace Analytical Laboratories, Inc.	<b>Collection Date</b>	7/7/2021 11:00:00 AM
<b>Project:</b>	21G0309	<b>Received Date:</b>	7/12/2021 1:40:00 PM
<b>Lab ID:</b>	2107514-01	<b>Matrix:</b>	DRINKING WATER
<b>Client Sample ID:</b>	21G0309-01	<b>Sampled By:</b>	JM
<b>Location:</b>	Plant Tap		

Analyses	Result	RL	Qual	Units	MCL	Date Analyzed
----------	--------	----	------	-------	-----	---------------

**PFAS, DRINKING WATER**

**EPA 537.1**

Analyst: **JS**

PFBS	2.5	2.0		ng/L	420	7/14/2021 7:03:00 AM
PFHxA	< 2.0	2.0		ng/L	400000	7/14/2021 7:03:00 AM
HFPO-DA	< 2.0	2.0		ng/L	370	7/14/2021 7:03:00 AM
PFHxS	5.9	2.0		ng/L	51	7/14/2021 7:03:00 AM
PFHpA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
ADONA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
PFOA	< 2.0	2.0		ng/L	8.0	7/14/2021 7:03:00 AM
PFOS	3.1	2.0		ng/L	16	7/14/2021 7:03:00 AM
PFNA	< 2.0	2.0		ng/L	6.0	7/14/2021 7:03:00 AM
9CI-PF3ONS	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
PFDA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
NMeFOSAA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
NEtFOSAA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
PFUnA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
11CI-PF3OUdS	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
PFDaA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
PFTrDA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
PFTA	< 2.0	2.0		ng/L		7/14/2021 7:03:00 AM
Surr: d5-N-EtFOSSA	87.7	70 - 130		%Rec		7/14/2021 7:03:00 AM
Surr: M3HFPO-DA	89.9	70 - 130		%Rec		7/14/2021 7:03:00 AM
Surr: MPFDA	91.5	70 - 130		%Rec		7/14/2021 7:03:00 AM
Surr: MPFHxA	88.8	70 - 130		%Rec		7/14/2021 7:03:00 AM

**Qualifiers:** < Not Detected at the Reporting Limit  
MCL Maximum Contaminant Level  
RL Reporting Limit

H Holding times for preparation or analysis exceeded  
PL Permit Limit

**CLIENT:** Trace Analytical Laboratories, Inc.

**Collection Date:** 7/7/2021 11:00:00 AM

**Project:** 21G0309

**Received Date:** 7/12/2021 1:40:00 PM

**Lab ID:** 2107514-02

**Matrix:** BLANK

**Client Sample ID:** Field Blank

**Sampled By:** JM

**Location:**

Analyses	Result	RL	Qual	Units	MCL	Date Analyzed
----------	--------	----	------	-------	-----	---------------

**PFAS, DRINKING WATER**

**EPA 537.1**

Analyst: **JS**

PFBS	< 2.0	2.0		ng/L	420	7/14/2021 3:15:00 AM
PFHxA	< 2.0	2.0		ng/L	400000	7/14/2021 3:15:00 AM
HFPO-DA	< 2.0	2.0		ng/L	370	7/14/2021 3:15:00 AM
PFHxS	< 2.0	2.0		ng/L	51	7/14/2021 3:15:00 AM
PFHpA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
ADONA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
PFOA	< 2.0	2.0		ng/L	8.0	7/14/2021 3:15:00 AM
PFOS	< 2.0	2.0		ng/L	16	7/14/2021 3:15:00 AM
PFNA	< 2.0	2.0		ng/L	6.0	7/14/2021 3:15:00 AM
9CI-PF3ONS	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
PFDA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
NMeFOSAA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
NEtFOSAA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
PFUnA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
11CI-PF3OUdS	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
PFDoA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
PFTTrDA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
PFTA	< 2.0	2.0		ng/L		7/14/2021 3:15:00 AM
Surr: d5-N-EtFOSSA	92.2	70 - 130		%Rec		7/14/2021 3:15:00 AM
Surr: M3HFPO-DA	93.3	70 - 130		%Rec		7/14/2021 3:15:00 AM
Surr: MPFDA	89.5	70 - 130		%Rec		7/14/2021 3:15:00 AM
Surr: MPFHxA	87.7	70 - 130		%Rec		7/14/2021 3:15:00 AM

**Qualifiers:** < Not Detected at the Reporting Limit  
MCL Maximum Contaminant Level  
RL Reporting Limit

H Holding times for preparation or analysis exceeded  
PL Permit Limit

WO#: 2107514

7/14/2021

**Client:** Trace Analytical Laboratories, Inc.

**Project:** 21G0309

**TestCode:** PFAS-DW

Sample ID: <b>MB-L8-3439</b>	SampType: <b>MBLK</b>	TestCode: <b>PFAS-DW</b>	Units: <b>ng/L</b>	Prep Date: <b>7/13/2021</b>	RunNo: <b>22118</b>						
Client ID: <b>PBW</b>	Batch ID: <b>3439</b>	TestNo: <b>EPA 537.1</b>		Analysis Date: <b>7/14/2021</b>	SeqNo: <b>387855</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFBS	< 1.8	1.8									
PFHxA	< 1.8	1.8									
HFPO-DA	< 1.8	1.8									
PFHxS	< 1.8	1.8									
PFHpA	< 1.8	1.8									
ADONA	< 1.8	1.8									
PFOA	< 1.8	1.8									
PFOS	< 1.8	1.8									
PFNA	< 1.8	1.8									
9CI-PF3ONS	< 1.8	1.8									
PFDA	< 1.8	1.8									
NMeFOSAA	< 1.8	1.8									
NEtFOSAA	< 1.8	1.8									
PFUnA	< 1.8	1.8									
11CI-PF3OUdS	< 1.8	1.8									
PFDoA	< 1.8	1.8									
PFTTrDA	< 1.8	1.8									
PFTA	< 1.8	1.8									
Surr: d5-N-EtFOSSA	72		80.00		89.4	70	130				
Surr: M3HFPO-DA	190		200.0		92.7	70	130				
Surr: MPFDA	72		80.00		89.8	70	130				
Surr: MPFHxA	70		80.00		87.0	70	130				

**Qualifiers:** < Not Detected at the Reporting Limit  
PL Permit Limit

H Holding times for preparation or analysis exceeded  
RL Reporting Limit

MCL Maximum Contaminant Level

WO#: 2107514

7/14/2021

**Client:** Trace Analytical Laboratories, Inc.

**Project:** 21G0309

**TestCode:** PFAS-DW

Sample ID: <b>LCS-low-3439 A</b>	SampType: <b>LCS-LOW</b>	TestCode: <b>PFAS-DW</b>	Units: <b>ng/L</b>	Prep Date: <b>7/13/2021</b>	RunNo: <b>22118</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>3439</b>	TestNo: <b>EPA 537.1</b>		Analysis Date: <b>7/14/2021</b>	SeqNo: <b>387856</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFBS	1.9	1.8	2.000	0	97.4	50	150				
PFHxA	2.0	1.8	2.000	0	102	50	150				
HFPO-DA	1.9	1.8	2.000	0	95.2	50	150				
PFHxS	2.0	1.8	2.000	0	98.0	50	150				
PFHpA	2.4	1.8	2.000	0	118	50	150				
ADONA	1.8	1.8	2.000	0	88.0	50	150				
PFOA	1.9	1.8	2.000	0	93.8	50	150				
PFOS	2.1	1.8	2.000	0	104	50	150				
PFNA	1.9	1.8	2.000	0	95.6	50	150				
9CI-PF3ONS	1.8	1.8	2.000	0	91.4	50	150				
PFDA	2.0	1.8	2.000	0	101	50	150				
NMeFOSAA	2.0	1.8	2.000	0	101	50	150				
NEtFOSAA	1.9	1.8	2.000	0	97.4	50	150				
PFUnA	1.9	1.8	2.000	0	94.4	50	150				
11CI-PF3OUdS	1.9	1.8	2.000	0	93.6	50	150				
PFDoA	1.9	1.8	2.000	0	92.8	50	150				
PFTTrDA	2.0	1.8	2.000	0	98.0	50	150				
PFTA	1.8	1.8	2.000	0	92.2	50	150				
Surr: d5-N-EtFOSSA	77		80.00		96.0	70	130				
Surr: M3HFPO-DA	190		200.0		97.0	70	130				
Surr: MPFDA	80		80.00		100	70	130				
Surr: MPFHxA	75		80.00		94.3	70	130				

**Qualifiers:** < Not Detected at the Reporting Limit  
PL Permit Limit

H Holding times for preparation or analysis exceeded  
RL Reporting Limit

MCL Maximum Contaminant Level

WO#: **2107514**

7/14/2021

**Client:** Trace Analytical Laboratories, Inc.

**Project:** 21G0309

**TestCode:** PFAS-DW

Sample ID: <b>LCS-low-3439 B</b>	SampType: <b>LCS-LOW</b>	TestCode: <b>PFAS-DW</b>	Units: <b>%Rec</b>	Prep Date: <b>7/14/2021</b>	RunNo: <b>22118</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>R22118</b>	TestNo: <b>EPA 537.1</b>		Analysis Date: <b>7/14/2021</b>	SeqNo: <b>387858</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: d5-N-EtFOSSA	82		80.00		103	70	130				
Surr: M3HFPO-DA	200		200.0		97.9	70	130				
Surr: MPFDA	80		80.00		99.9	70	130				
Surr: MPFHxA	76		80.00		94.7	70	130				

Sample ID: <b>2107513-01ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>PFAS-DW</b>	Units: <b>ng/L</b>	Prep Date: <b>7/13/2021</b>	RunNo: <b>22118</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>3439</b>	TestNo: <b>EPA 537.1</b>		Analysis Date: <b>7/14/2021</b>	SeqNo: <b>387868</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFBS	< 1.6	1.6						0	0	30	
PFHxA	< 1.6	1.6						0	0	30	
HFPO-DA	< 1.6	1.6						0	0	30	
PFHxS	< 1.6	1.6						0	0	30	
PFHpA	< 1.6	1.6						0	0	30	
ADONA	< 1.6	1.6						0	0	30	
PFOA	< 1.6	1.6						0	0	30	
PFOS	< 1.6	1.6						0	0	30	
PFNA	< 1.6	1.6						0	0	30	
9CI-PF3ONS	< 1.6	1.6						0	0	30	
PFDA	< 1.6	1.6						0	0	30	
NMeFOSAA	< 1.6	1.6						0	0	30	
NEtFOSAA	< 1.6	1.6						0	0	30	
PFUnA	< 1.6	1.6						0	0	30	
11CI-PF3OUdS	< 1.6	1.6						0	0	30	

**Qualifiers:** < Not Detected at the Reporting Limit  
PL Permit Limit

H Holding times for preparation or analysis exceeded  
RL Reporting Limit

MCL Maximum Contaminant Level

WO#: **2107514**

7/14/2021

**Client:** Trace Analytical Laboratories, Inc.

**Project:** 21G0309

**TestCode:** PFAS-DW

Sample ID: <b>2107513-01ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>PFAS-DW</b>	Units: <b>ng/L</b>	Prep Date: <b>7/13/2021</b>	RunNo: <b>22118</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>3439</b>	TestNo: <b>EPA 537.1</b>		Analysis Date: <b>7/14/2021</b>	SeqNo: <b>387868</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFD <sub>o</sub> A	< 1.6	1.6						0	0	30	
PFT <sub>r</sub> DA	< 1.6	1.6						0	0	30	
PFTA	< 1.6	1.6						0	0	30	
Surr: d5-N-EtFOSSA	61		71.43		85.2	70	130		0	0	
Surr: M3HFPO-DA	160		178.6		90.0	70	130		0	0	
Surr: MPFDA	64		71.43		89.5	70	130		0	0	
Surr: MPFH <sub>x</sub> A	62		71.43		86.5	70	130		0	0	

Sample ID: <b>2107408-02AMS</b>	SampType: <b>MS-HIGH</b>	TestCode: <b>PFAS-DW</b>	Units: <b>ng/L</b>	Prep Date: <b>7/13/2021</b>	RunNo: <b>22118</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>3439</b>	TestNo: <b>EPA 537.1</b>		Analysis Date: <b>7/14/2021</b>	SeqNo: <b>387874</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFBS	310	1.8	320.0	2.120	95.5	70	130				
PFH <sub>x</sub> A	350	1.8	320.0	0	108	70	130				
HFPO-DA	350	1.8	320.0	0	111	70	130				
PFH <sub>x</sub> S	370	1.8	320.0	1.776	115	70	130				
PFHpA	360	1.8	320.0	0	112	70	130				
ADONA	350	1.8	320.0	0	109	70	130				
PFOA	340	1.8	320.0	0	106	70	130				
PFOS	340	1.8	320.0	1.228	105	70	130				
PFNA	350	1.8	320.0	0	109	70	130				
9CI-PF3ONS	330	1.8	320.0	0	105	70	130				
PFDA	360	1.8	320.0	0	114	70	130				
NMeFOSAA	320	1.8	320.0	0	101	70	130				

**Qualifiers:** < Not Detected at the Reporting Limit  
PL Permit Limit

H Holding times for preparation or analysis exceeded  
RL Reporting Limit

MCL Maximum Contaminant Level



WO#: 2107514

7/14/2021

**Client:** Trace Analytical Laboratories, Inc.

**Project:** 21G0309

**TestCode:** PFAS-DW

Sample ID: <b>2107408-02AMS</b>	SampType: <b>MS-HIGH</b>	TestCode: <b>PFAS-DW</b>	Units: <b>ng/L</b>	Prep Date: <b>7/13/2021</b>	RunNo: <b>22118</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>3439</b>	TestNo: <b>EPA 537.1</b>		Analysis Date: <b>7/14/2021</b>	SeqNo: <b>387874</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
NEtFOSAA	320	1.8	320.0	0	99.0	70	130				
PfUnA	330	1.8	320.0	0	104	70	130				
11CI-PF3OUdS	330	1.8	320.0	0	103	70	130				
PFDoA	340	1.8	320.0	0	107	70	130				
PFTTrDA	340	1.8	320.0	0	106	70	130				
PFTA	340	1.8	320.0	0	106	70	130				
Surr: d5-N-EtFOSSA	59		80.00		73.5	70	130				
Surr: M3HFPO-DA	180		200.0		92.4	70	130				
Surr: MPFDA	67		80.00		84.1	70	130				
Surr: MPFHxA	71		80.00		88.5	70	130				

**Qualifiers:** < Not Detected at the Reporting Limit  
PL Permit Limit

H Holding times for preparation or analysis exceeded  
RL Reporting Limit

MCL Maximum Contaminant Level

Original  
Page 8 of 8

**SUBCONTRACT ORDER**  
**21G0309**

**SENDING LABORATORY:**

Trace Analytical Laboratories, Inc.  
2241 Black Creek Road  
Muskegon, MI 49444  
Phone: 231.773.5998

**RECEIVING LABORATORY:**

Prein and Newhof  
3260 Evergreen Drive NE  
Grand Rapids, MI 49525  
Phone :(616) 364-7600

Project Manager: Tim Brewer

**PO # 21G0309**

7514/1-2

Matrix: Drinking Water      Sampled: 07/07/21 11:00      TAT: Standard

**Sample ID: Plant Tap 21G0309-01**

Sampled By: jm

***Analysis Needed:***

**PFAS Drinking Water- EGLE List with Field Blank**

Released By	<i>[Signature]</i>	Date	7/09/21	Received By	<i>[Signature]</i>	Date	7/12/21	134
Released By		Date		Received By		Date		

Trace Analytical Laboratories, Inc.  
 2241 Black Creek Road  
 Muskegon, MI 49444-2673

Phone 231.773.5998  
 Fax 888.979.4469  
 www.trace-labs.com

Trace ID No. 21G0309

CHAIN-OF-CUSTODY RECORD

Page \_\_\_\_\_ of \_\_\_\_\_

**Report Results To:** City of Clare PO #: \_\_\_\_\_  
**Company Name:** City of Clare Contact Name: SAME  
**Report To:** Dale Clarks Billing Address (if different):  
**Mailing Address:** 202 W. Fifth City, State, Zip Code:  
**City, State, Zip Code:** Clare MI, 48617 Phone Number:  
**Office Phone:** 386.2321 Cell Phone:  
**Email Address:** clarks@cityofclare.org Billing Email Address:

**Trace Use:**  
 Logged By: BW  
 Checked By: BW  
 Soil Volatiles Preserved (circle if applicable):  
MeOH Low Level Lab  
 Sampling Time:

- Turnaround Requirements:**  
 Standard, 5-10 Days  
 3 Day\*  
 1 Day\*  
 \*Results provided end of business day, requires prior approval.
- Matrix Key:**  
 S = Soil / Solid      W = Wipes  
 W = Water            LW = Liquid Waste  
 SL = Sludge          A = Air  
 OI = Oil              D = Drinking Water

Trace No.	Date Collected	Time Collected	Client Sample ID	Metals Field Filtered (Y/N)	Matrix	Number of Containers	Preservation	Analysis Requested	Remarks
1	7-7-21	11:00	Plant Top		WR				PPAS

**Please Sign**

Released By	Received By	Date	Time	Released By	Received By	Date	Time
<u>[Signature]</u>	<u>[Signature]</u>	7/8	10:25	<u>[Signature]</u>	<u>[Signature]</u>	7/10/21	9:23

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

**21G0309**

Clare, City of  
 Project Manager: Tim Brewer

**Sample Log In Checklist**

Date: 7/09/21	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-10 (CF: +0.1°C)	20B12743 (CF: -0.3°C)	Temp Blank	Client Sample
Time: 9:23							
Logged by: <i>HS</i>							
Package Description: Cooler							
Package Temp °C	-1.7	-1.6			✓		
Representative Sample Temp °C	0.6	0.3				✓	✓

**Sample Receipt**

Yes No

Received on ice or other coolant

Ice still present upon receipt

Custody seals present

Yes  No Custody seals intact (if applicable)

Trace Courier

Client Drop-off

UPS

Fex Ex

US Mail

Other

**Sample Condition**

Yes No N/A

All sample containers arrived unbroken and labeled

Sufficient sample to run requested analyses

Correct chemical preservative added to samples

Samples preserved at Trace

Chemical preservation verified, check EMD pH test strip used (if applicable)

pH 0-2.5 (Lot: HC029115)

pH 11.0-13.0 (Lot: HC022540)

Other

Air bubbles absent from VOAs

**Chain of Custody (COC)**

Yes No

All bottle labels agree with COC

COC filled out properly

COC signed by client

**Notes:**

---



---



---



---



---



---



---



---

**CERTIFICATE OF ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.