

Spectrum Analytical

$\mathbf{\Delta}$	Final Report					
	Re-Issued Report					
	Revised Report					
Re	port Date:					
24-May-16 11:13						

Laboratory Report

South Hadley School Department 116 Main Street South Hadley, MA 01075

Attn: Bruce Mailhott

Project: Plains School - S. Hadley, MA

Project #: [none]

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SC21403-01	Plains School by Gym	Drinking Water	16-May-16 21:00	17-May-16 09:45
SC21403-02	Plains School by Top of Stairs	Drinking Water	16-May-16 21:00	17-May-16 09:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011 New York # 11393 Pennsylvania # 68-04426/68-02924 Rhode Island # LAO00098 USDA # S-51435



Authorized by:

June O'Connor Laboratory Director

Eurofins Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our Quality web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received 21.5 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

There is no relevant protocol-specific QC and/or performance standards non-conformances to report.

Sample Acceptance Check Form

Client:

South Hadley School Department

Project:

Plains School - S. Hadley, MA / [none]

Work Order:

SC21403

Sample(s) received on:

5/17/2016

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	<u>N/A</u>
Were custody seals present?		\checkmark	
Were custody seals intact?			V
Were samples received at a temperature of ≤ 6 °C?		\checkmark	
Were samples cooled on ice upon transfer to laboratory representative?		abla	
Were samples refrigerated upon transfer to laboratory representative?		\checkmark	
Were sample containers received intact?	\checkmark		
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	✓		
Were samples accompanied by a Chain of Custody document?	✓		
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?		<u> </u>	
Did sample container labels agree with Chain of Custody document?			
Were samples received within method-specific holding times?	$\overline{\mathbf{V}}$		

Summary of Hits

Lab ID:

SC21403-01

Client ID:

Plains School by Gym

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Copper	0.0129		0.00050	mg/l	EPA 200.8
Lab ID: SC21403-02			Client ID: Plains So	chool by Top o	of Stairs
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Copper	0,0145		0.00050	mg/l	EPA 200.8

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

	lentification hool by Gym -01				Project # one]	Γ	<u>Matrix</u> Drinking W		ection Date, -May-16 21			ceived May-16	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Meta	als by EPA 200/6000 Series	Methods											
	Preservation	Lab Preserved		N/A			1	EPA 200/6000 methods	17-May-1 6		LNB	1608282	
Total Meta	als by EPA 200 Series Met	hods											
7440-50-8	Copper	0.0129		mg/l	0.00050	0.00010	1	EPA 200.8	20-May-1 6	23-May-1 6	edt	1608565	Х
7439-92-1	Lead	< 0.00050		mg/l	0.00050	0.00004	1	a	TI			H Salata Salata Salata Salata	X
	dentification			Client l	Project#		Matrix		ection Date			ceived	
Plains Sc SC21403	hool by Top of Stairs -02				one]	Γ	Orinking W	/ater 16	-May-16 21	1:00	17-1	May-16	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Meta	als by EPA 200/6000 Series	s Methods											
	Preservation	Lab Preserved		N/A			1	EPA 200/6000 methods	17-May-1 6		LNB	1608282	
Total Meta	als by EPA 200 Series Met	hods											
7440-50-8	Copper	0.0145		mg/l	0.00050	0.00010	1	EPA 200.8	20-May-1 6	23-May-1 6	edt	1608565	Х

0.00050 0.00004

7439-92-1

Lead

< 0.00050

mg/l

Х

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1608565 - EPA 200 Series										
Blank (1608565-BLK1)					Pre	epared: 20-	May-16 A	nalyzed: 23-N	May-16	
Lead	< 0.00050		mg/l	0.00050						
Copper	< 0.00050		mg/i	0.00050						
LCS (1608565-BS1)					Pre	epared: 20-	May-16 A	nalyzed: 23-N	<u>//aγ-16</u>	
Lead	0.0260		mg/l	0.00050	0.0250		104	85-115		
Copper	0.0247		mg/l	0.00050	0.0250		99	85-115		
Duplicate (1608565-DUP1)			Source: S	C21403-01	Pro	epared: 20-	May-16 A	nalyzed: 23-N	//ay-16	
Lead	< 0.00050		mg/l	0.00050		0.00005				20
Copper	0.0114		mg/l	0.00050		0.0129			12	20
Matrix Spike (1608565-MS1)			Source: S	C21403-01	Pro	epared: 20-	May-16 A	nalyzed: 23-N	/lay-16	
Lead	0.0739	D	mg/l	0.00500	0.100	0.00005	74	70-130		
Copper	0.0844	D	mg/l	0.00500	0.100	0.0129	71	70-130		
Matrix Spike (1608565-MS2)			Source: S	C21403-02	Pro	epared: 20-	May-16 A	nalyzed: 23-N	/ay-16	
Lead	0.0973	D	mg/l	0.00500	0.100	0.00011	97	70-130		
Copper	0,109	D	mg/l	0.00500	0.100	0.0145	95	70-130		

Notes and Definitions

D Data reported from a dilution

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: Jackie Clement Special Handling:

Standard TAT - 7 to 10 business days	☐ Rush TAT - Date Needed: S Gac(S	All TATs subject to laboratory approval	Mun 24-ar notification needed for tustiles Samples disposed after 60 days unless otherwise instructed.
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		OF COVICE RECCE		Rush TAT - Date Needed:
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Spectrum Analytical

V	Final Report
	Re-Issued Report
	Revised Report
Re	port Date:
24-	May-16 11:13

Laboratory Report

South Hadley School Department 116 Main Street South Hadley, MA 01075

Attn: Bruce Mailhott

Project: Mosier School - S. Hadley, MA

Project #: [none]

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SC21405-01	Mosier School Sink (Kitchen)	Drinking Water	16-May-16 21:00	17-May-16 09:45
SC21405-02	Mosier Bubbler (Cafe)	Drinking Water	16-May-16 21:00	17-May-16 09:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011 New York # 11393 Pennsylvania # 68-04426/68-02924 Rhode Island # LAO00098 USDA # S-51435



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The samples were received 21.5 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of ± 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 200.8

Samples:

SC21405-01

Mosier School Sink (Kitchen)

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Copper

SC21405-02

Mosier Bubbler (Cafe)

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Copper

Sample Acceptance Check Form

Client:	South Hadley School Department
Project:	Mosier School - S. Hadley, MA / [none]
Work Order:	SC21405

5/17/2016

Sample(s) received on:

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	res	110	N/A
Were custody seals present?		\checkmark	
Were custody seals intact?			√
Were samples received at a temperature of ≤ 6°C?		✓	
Were samples cooled on ice upon transfer to laboratory representative?		\checkmark	
Were samples refrigerated upon transfer to laboratory representative?		\checkmark	
Were sample containers received intact?	$\overline{\mathbf{C}}$		
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	\checkmark		
Were samples accompanied by a Chain of Custody document?	$ \overline{\checkmark} $		
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?			
Did sample container labels agree with Chain of Custody document?	\checkmark		
Were samples received within method-specific holding times?			

Summary of Hits

Lab ID:

SC21405-01

Client ID:

Mosier School Sink (Kitchen)

Parameter	Result	Flag Reporting Limit	Units	Analytical Method
Copper	0.439	GS1, D0.00500	mg/l	EPA 200.8
Lead	0.0114	0.00050	mg/l	EPA 200.8
Lab ID: SC21405-02		Client ID: Mosier F	Bubbler (Cafe)	
Parameter	Result	Flag Reporting Limit	Units	Analytical Method
Copper	0.195	GS1, D0.00250	mg/l	EPA 200.8

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

_	dentification chool Sink (Kitchen) -01				Project# one]	E	<u>Matrix</u> Orinking W		ection Date -May-16 21			ceived May-16	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Met	als by EPA 200/6000 Series	Methods											
	Preservation	Lab Preserved		N/A			1	EPA 200/6000 methods	17-May-1 6		LNB	1608282	
Total Met	als by EPA 200 Series Meth	nods											
7440-50-8	Copper	0,439	GS1, D	mg/l	0.00500	0.00096	10	EPA 200.8	20-May-1 6	23-May-1 6	edt	1608565	Х
7439-92-1	Lead	0.0114		mg/l	0.00050	0,00004	1	н	n	23-May-1 6	n	ıτ	Х
	<u>lentification</u> ubbler (Cafe) -02				Project# one]	Γ	<u>Matrix</u> Orinking W		ection Date -May-16 21			<u>ceived</u> May-16	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Met	als by EPA 200/6000 Series	Methods											
	Preservation	Lab Preserved		N/A			1	EPA 200/6000 methods	17-May-1 6		LNB	1608282	
Total Met	als by EPA 200 Series Meti	hods											
7440-50-8	Copper	0.195	GS1, D	mg/l	0.00250	0.00048	5	EPA 200.8	20-May-1 6	23-May-1 6	edt	1608565	Х
7439-92-1	Lead	< 0.00050		mg/l	0.00050	0.00004	1	И	п	23-May-1 6	•	n	Χ

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1608565 - EPA 200 Series							·			
Blank (1608565-BLK1)					Pre	epared: 20-	May-16 Ar	nalyzed: 23-N	<u>//ay-16</u>	
Lead	< 0.00050		mg/l	0.00050						
Copper	< 0.00050		mg/l	0.00050						
LCS (1608565-BS1)					Pro	epared: 20-	May-16 Ar	nalyzed: 23-N	<u>⁄lay-16</u>	
Lead	0.0260		mg/l	0.00050	0.0250		104	85-115		
Copper	0.0247		mg/l	0.00050	0.0250		99	85-115		

Notes and Definitions

D Data reported from a dilution

GS1 Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

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<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: Jackie Clement SUAPED NEW Special Handling:

Standard TAT -.7 to 10 business days

Rush TAT - Date Needed:

🗱 eurofins

CHAIN

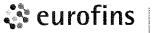
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All TATs subject t Min. 24-hr notific Samples disposed	MUSICK Khoo			ode below:	
	Project No:	Location:	Sampler(s):	List Preservative Code below	Analysis
Page of	Hadles &	So, Hadlex MA	P.O No.: 439776 Quote #.	5=NaOH 6=Ascorbic Acid	WW=Waste Water
Spectrum Analytical	Report To: 56, Hed less Shed Sept.		Telephone #: 4/3 885 2234	F=Field Filtered 1=Na ₂ S2O ₃ 2=HCI 3=H ₂ SO ₄ 4=HNO ₃ 5=NaOH 6=Ascorbic Acid 7=CH3OH 8=NaHSO ₄ 9=Deionized Water 10=H ₃ PO ₄ 11=	DW=Dinking Water GW=Groundwater SW=Surface Water V

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Spectrum Analytical

V	Final Report
	Re-Issued Report
	Revised Report
	port Date:
24	-May-16 11:09

Laboratory Report

South Hadley School Department 116 Main Street South Hadley, MA 01075

Attn: Bruce Mailhott

Project: Middle School - S. Hadley, MA

Project #: [none]

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SC21407-01	Middle School Bubbler by Cafe	Drinking Water	16-May-16 21:00	17-May-16 09:45
SC21407-02	Middle Bubbler by Bottom Ramp	Drinking Water	16-May-16 21:00	17-May-16 09:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011 New York # 11393 Pennsylvania # 68-04426/68-02924 Rhode Island # LAO00098 USDA # S-51435



Authorized by:

June O'Connor Laboratory Director

Eurofins Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our Quality'web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received 21.5 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of ± 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 200.8

Samples:

SC21407-02

Middle Bubbler by Bottom Ramp

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Copper

Sample Acceptance Check Form

~11	
1 111	ent:

South Hadley School Department

Project:

Middle School - S. Hadley, MA / [none]

Work Order:

SC21407

Sample(s) received on:

5/17/2016

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?		✓	
Were custody seals intact?			✓
Were samples received at a temperature of ≤ 6 °C?		\checkmark	
Were samples cooled on ice upon transfer to laboratory representative?		\checkmark	
Were samples refrigerated upon transfer to laboratory representative?		\checkmark	
Were sample containers received intact?	\checkmark		
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	\checkmark		
Were samples accompanied by a Chain of Custody document?	✓		
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?		V	
Did sample container labels agree with Chain of Custody document?	\checkmark		
Were samples received within method-specific holding times?	\checkmark		

Summary of Hits

Lab ID:

SC21407-01

Client ID:

Middle School Bubbler by Cafe

Parameter		Result	Flag	Reporting Limit	Units	Analytical Method
Copper	- "	0.0924		0.00050	mg/l	EPA 200.8
Lab ID:	SC21407-02			Client ID: Middle	Bubbler by Bot	itom Ramp

Parameter	Result	Flag Reporting Limit	Units	Analytical Method
Copper	0.206	GS1, D0.00250	mg/l	EPA 200.8
Lead	0.00290	0.00050	mg/l	EPA 200.8

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

	dentification chool Bubbler by Cafe -01				Project# one]	D	<u>Matrix</u> Prinking W	· · · · · · · · · · · · · · · · · · ·	ection Date -May-16 21			ceived May-16	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Meta	als by EPA 200/6000 Series	Methods											
	Preservation	Lab Preserved		N/A	-		1	EPA 200/6000 methods	17-May-1 6		LNB	1608282	
Total Meta	als by EPA 200 Series Metho	ods											
7440-50-8	Copper	0.0924		mg/l	0.00050	0.00010	1	EPA 200.8	20-May-1 6	23-May-1 6	edt	1608565	Х
7439-92-1	Lead	< 0.00050	Marine Salar S	mg/l	0.00050	0.00004	1		N Jaconstone constant service		A	9	X
	dentification Subbler by Bottom Ramp -02				Project# one]	D	<u>Matrix</u> Prinking W		ection Date			<u>ceived</u> May-16	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Meta	als by EPA 200/6000 Series	Methods Lab Preserved		N/A			1	EPA 200/6000 methods	17-May-1 6		LNB	1608282	
Total Meta	als by EPA 200 Series Metho	ods											
7440-50-8	Copper	0.206	GS1, D	mg/l	0.00250	0.00048	5	EPA 200.8	20-May-1 6	23-May-1 6	edt	1608565	Х
7439-92-1	Lead	0.00290		mg/l	0.00050	0.00004	1	и	PE .	23-May-1 6	н	17	Х

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1608565 - EPA 200 Series										
Blank (1608565-BLK1)					Pre	epared: 20-	May-16 Ar	nalyzed: 23-N	<u>1ay-16</u>	
Lead	< 0.00050		mg/l	0,00050						
Copper	< 0.00050		mg/l	0.00050						
LCS (1608565-BS1)					Pre	epared: 20-l	May-16 A	nalyzed: 23-M	<u>1ay-16</u>	
Lead	0.0260		mg/l	0.00050	0.0250		104	85-115		
Copper	0.0247		mg/l	0.00050	0.0250		99	85-115		

Notes and Definitions

D Data reported from a dilution

GS1 Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

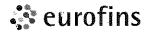
Validated by: Jackie Clement SOZIUON NRV Special Handling:

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Standard TAT - 7 to 10 business days	Rush TAT - Date Needed: Solars	All TATs subject to laboratory approval	Min. 24-hr notification needed for rushes	Samples disposed after 60 days unless otherwise instructed.
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eurorins .	CHAIN	OF CUSTODY RECORD	DV RE		•	☐ Rush TAT - Date Needed:	Date Needed: 30194	67
Spectrum Analytical	Page	se of	. [All TATs sub Min. 24-hr no Samples dispo	All TAI's subject to laboratory approval Min. 24-in notification needed for rushes Samples disposed after 60 days unless otherwise instructed.	moted.
Report To: So, \$40/lex Supt	Invoice To:	Hadley	School	to 20	Project No: Site Name:	middle	School	
Telephone #: 4/3 885-2034	P.O.No.: 424776	776 Quote #:	2 拼之		Location: Sampler(s):		State:	
F=Field Filtered 1=Na ₂ S2O ₃ 2=HCl 3=H ₂ SO ₄ 4=HNO ₃ 7=CH3OH 8=NaHSO ₄ 9=Deionized Water 10=H ₃ PO ₄	\$=NaO]	Acid	r and	List	List Preservative Code below:	e-below:	QA/QC Reporting Notes: * additional charges may apply	otes:
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Spectrum Analytical

V	Final Report
	Re-Issued Report
	Revised Report
Rej	oort Date:

24-May-16 11:10

Laboratory Report

South Hadley School Department 116 Main Street South Hadley, MA 01075 Attn; Bruce Mailhott

Project: High School - S. Hadley, MA

Project #: [none]

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SC21408-01	High School by Art Room	Drinking Water	16-May-16 21:00	17-May-16 09:45
SC21408-02	High School by Gym	Drinking Water	16-May-16 21:00	17-May-16 09:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011 New York # 11393 Pennsylvania # 68-04426/68-02924 Rhode Island # LAO00098 USDA # S-51435

Eurofins Spectrum Analytical, Inc.



Authorized by:

June O'Connor Laboratory Director

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See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 200.8

Samples:

SC21408-01

High School by Art Room

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Copper

SC21408-02

High School by Gym

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Copper

Sample Acceptance Check Form

Client:	South Hadley School Department
Project:	High School - S. Hadley, MA / [none]
Work Order:	SC21408

5/17/2016

Sample(s) received on:

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
Were custody seals present?		✓	
Were custody seals intact?			
Were samples received at a temperature of $\leq 6^{\circ}$ C?		✓	
Were samples cooled on ice upon transfer to laboratory representative?		√	
Were samples refrigerated upon transfer to laboratory representative?		$\overline{\mathbf{V}}$	
Were sample containers received intact?	\checkmark		
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	\checkmark		
Were samples accompanied by a Chain of Custody document?	\checkmark		
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?			
Did sample container labels agree with Chain of Custody document?			
Were samples received within method-specific holding times?	\checkmark		

Summary of Hits

Lab ID:

SC21408-01

Client ID:

High School by Art Room

Parameter	Result	Flag Reporting Limit	Units	Analytical Method			
Copper	0.184	GS1, D0.00250	mg/l	EPA 200.8			
Lab ID: SC21408-02		Client ID: High Sc					
Parameter	Result	Flag Reporting Limit	Units	Analytical Method			
Copper	0.198	GS1, D0.00250	mg/l	EPA 200.8			

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

	dentification nool by Art Room -01		Project # one]	D	<u>Matrix</u> Prinking W	,	ection Date. -May-16 21	Received 17-May-16					
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Met	als by EPA 200/6000 Ser	ies Methods											
	Preservation	Lab Preserved		N/A			1	EPA 200/6000 methods	17-May-1 6		LNB	1608282	
Total Meta	als by EPA 200 Series M	ethods											
7440-50-8	Copper	0.184	GS1, D	mg/l	0.00250	0.00048	5	EPA 200.8	20-May-1 6	23-May-1 6	edt	1608565	Х
7439-92-1	Lead	< 0.00050		mg/l	0.00050	0,00004	1		ij	23-May-1 6	n	н	Х
_	dentification nool by Gym -02				Project# one]	Ε	<u>Matrix</u> Orinking W		ection Date -May-16 21			ceived May-16	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Met	als by EPA 200/6000 Ser	ies Methods											
	Preservation	Lab Preserved		N/A			1	EPA 200/6000 methods	17-May-1 6		LNB	1608282	•
Total Met	als by EPA 200 Series M	ethods											
7440-50-8	Copper	0.198	GS1, D	mg/l	0.00250	0.00048	5	EPA 200.8	20-May-1 6	23-May-1 6	edt	1608565	X
7439-92-1	Lead	< 0.00050		mg/l	0.00050	0.00004	1	11	Th	23-May-1 6	n	и	Х

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	Spike *RDL Level		Source Result	%REC	%REC Limits	RPD	RPD Limit	
Batch 1608565 - EPA 200 Series	•										
Blank (1608565-BLK1)					Pr	epared; 20-	May-16 Ar	alyzed: 23-N	//ay-16		
Lead	< 0.00050		mg/l	0.00050							
Copper	< 0.00050		mg/l	0.00050							
LCS (1608565-BS1)					<u>Pr</u>	epared: 20-	May-16 Ar	nalyzed: 23-N	/lay-16		
Lead	0.0260		mg/l	0.00050	0.0250		104	85-115			
Copper	0.0247		mg/l	0.00050	0.0250		99	85-115			

Notes and Definitions

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GS1 Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

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<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: Jackie Clement Special Handling:

ss eurofins

Spectrum Analytical

CHAIN OF CUSTODY RECORD

	☐ Standard TAT - 7 to 10 business days
RECORD	□ Rush TAT - Date Needed: SalaceS
	All TATs subject to laboratory approval
	Min. 24-hr notification needed for rushes
	Samples disposed after 60 days unless otherwise instructed.

Samples disposed after 60 days unless otherwise instructed.	(9).	High school	State:	(9):	List Preservative Code-Below: * additional charges may apply * additional charges may apply	Analysis Analysis Tree 12 ye	Cripen Report Cripe CC	In Poper	Ter II*	State-specific reporting standards:	Little Property Control of Contro							vrnat:	10. BMA, (hott @ SH Schools & Cdi		on receipt. Custody Seals: 🗆 Present 🔲 Intact 📋 Broken	Ticod T. Refingershed DIVOA Brozen. Soil Jar Frozen
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	Report To: So Heid / 24 Sipt.		The state of the s	Telephone #: (413) S85 2234 Project Mgr:	F=Field Filtered $1=N_{a_2}S2O_3$ 2=HCl $3=H_2SO_4$ 4=H77=CH3OH 8=NaHSO $_4$ 9=Deionized Water $10=H_3PO_4$	DW=Dinking Water GW=Groundwater SW=Surface Water		X1=X	G= Grab C=	Lab D: Sample D: Ds	Alterol High School by	<u>ا</u>	And High School by	8				Redinguished by:	Ly. Machit	****	The state of the s	The state of the s