

Pace Analytical Services, LLC 110 South Bayview Blvd. Oldsmar , FL 34677 (813)881-9401

May 03, 2019

Timothy Caughey Pinellas County Schools 11111 S. Belcher Road Largo, FL 33773

RE: Project: Northshore Metals Pace Project No.: 35465329

Dear Timothy Caughey:

Enclosed are the analytical results for sample(s) received by the laboratory on May 02, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Amg Atkins

Amy Weinberg amy.weinberg@pacelabs.com (813) 881-9401 Project Manager

Enclosures

cc: Dominic Mormando, Pinellas County Schools





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#### CERTIFICATIONS

Project: Northshore Metals Pace Project No.: 35465329

Ormond Beach Certification IDs	
8 East Tower Circle, Ormond Beach, FL 32174	Missouri Certification #: 236
Alaska DEC- CS/UST/LUST	Montana Certification #: Cert 0074
Alabama Certification #: 41320	Nebraska Certification: NE-OS-28-14
Arizona Certification# AZ0819	New Hampshire Certification #: 2958
Colorado Certification: FL NELAC Reciprocity	New Jersey Certification #: FL022
Connecticut Certification #: PH-0216	New York Certification #: 11608
Delaware Certification: FL NELAC Reciprocity	North Carolina Environmental Certificate #: 667
Florida Certification #: E83079	North Carolina Certification #: 12710
Georgia Certification #: 955	North Dakota Certification #: R-216
Guam Certification: FL NELAC Reciprocity	Oklahoma Certification #: D9947
Hawaii Certification: FL NELAC Reciprocity	Pennsylvania Certification #: 68-00547
Illinois Certification #: 200068	Puerto Rico Certification #: FL01264
Indiana Certification: FL NELAC Reciprocity	South Carolina Certification: #96042001
Kansas Certification #: E-10383	Tennessee Certification #: TN02974
Kentucky Certification #: 90050	Texas Certification: FL NELAC Reciprocity
Louisiana Certification #: FL NELAC Reciprocity	US Virgin Islands Certification: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007	Virginia Environmental Certification #: 460165
Maryland Certification: #346	West Virginia Certification #: 9962C
Michigan Certification #: 9911	Wisconsin Certification #: 399079670
Mississippi Certification: FL NELAC Reciprocity	Wyoming (EPA Region 8): FL NELAC Reciprocity



## SAMPLE SUMMARY

Project: Northshore Metals

Pace Project No.: 35465329

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35465329001	Northshore-Kitchen	Drinking Water	04/30/19 06:40	05/02/19 12:35
35465329002	NorthshoreB1-Water fountain	Drinking Water	04/30/19 06:35	05/02/19 12:35



## SAMPLE ANALYTE COUNT

Project: Northshore Metals Pace Project No.: 35465329

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35465329001	Northshore-Kitchen	EPA 200.8	KPP	2	PASI-O
35465329002	NorthshoreB1-Water fountain	EPA 200.8	KPP	2	PASI-O



### ANALYTICAL RESULTS

Project: Northshore Metals

Pace Project No.: 35465329

Sample: Northshore-Kitchen	Lab ID:	35465329001	Collected	I: 04/30/19	06:40	Received: 05/	02/19 12:35 Ma	atrix: Drinking	Water
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical	Method: EPA 20	00.8						
Copper Lead	612 0.87 I	ug/L ug/L	1.0 1.0	0.93 0.64	1 1		05/03/19 13:19 05/03/19 13:19	7440-50-8 7439-92-1	J(M1)



### ANALYTICAL RESULTS

Project: Northshore Metals

Pace Project No.: 35465329

Sample: NorthshoreB1-Water fountain	Lab ID:	35465329002	Collected	l: 04/30/19	06:35	Received: 05/	/02/19 12:35 N	latrix: Drinking V	Vater
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical	Method: EPA 2	00.8						
Copper Lead	244 0.64 U	ug/L ug/L	1.0 1.0	0.93 0.64	1 1		05/03/19 13:27 05/03/19 13:27	7 7440-50-8 7 7439-92-1	



#### **QUALITY CONTROL DATA**

Project:	Norths	shore Metals											
Pace Project No.:	35465	329											
QC Batch:	5359	900		Analys	is Method	: E	PA 200.8						
QC Batch Method:	EPA	200.8		Analys	is Descrip	tion: 2	00.8 MET N	o Prep D	rinking Water				
Associated Lab Sa	mples:	3546532900	1, 35465329002										
METHOD BLANK:	29032	:06		N	Aatrix: Wa	ter							
Associated Lab Sa	mples:	3546532900	1, 35465329002										
				Blank	K R	eporting							
Para	meter		Units	Resul	t	Limit	MDL		Analyzed	Qua	alifiers		
Copper			ug/L	0.9	93 U	1.0	)	0.93 0	5/03/19 14:17	7			
Lead			ug/L	0.0	64 U	1.0		0.64 0	5/03/19 14:17	7			
LABORATORY CO	NTROL	SAMPLE: 2	903207										
				Spike	LCS	6	LCS	% R	lec				
Para	meter		Units	Conc.	Resu	ılt	% Rec	Lim	its Qu	ualifiers	_		
Copper			ug/L	50		45.4	91		85-115				
Lead			ug/L	50		48.0	96		85-115				
MATRIX SPIKE & I	MATRIX	SPIKE DUPLI	CATE: 29032	02		2903203							
				MS	MSD								
			35465329001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Paramet	er	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Copper		ug/L	612	50	50	652	642	7	9 59	70-130	2	20	J(M1)
Lead		ug/L	0.87 l	50	50	55.0	45.6	10	8 89	70-130	19	20	
MATRIX SPIKE & M	MATRIX	SPIKE DUPLI	CATE: 29032	04		2903205							
				MS	MSD								
_			35465338002	Spike	Spike	MS	MSD	MS	MSD	% Rec	<b>-</b>	Max	<u> </u>
Paramet	er	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Copper		ug/L	483	50	50	518	517	7	0 67	70-130	0	20	J(M1)
Lead		ug/L	0.64 U	50	50	47.3	49.3	9	4 98	70-130	4	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

#### **REPORT OF LABORATORY ANALYSIS**

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#### QUALIFIERS

Project: Northshore Metals

Pace Project No.: 35465329

#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

**RPD** - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

#### LABORATORIES

PASI-O Pace Analytical Services - Ormond Beach

#### ANALYTE QUALIFIERS

- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- U Compound was analyzed for but not detected.
- J(M1) Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

			Analytical
Pace Project No.:	35465329		
Project:	Northshore Metals		

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Batch
35465329001	Northshore-Kitchen	EPA 200.8	535900		
35465329002	NorthshoreB1-Water fountain	EPA 200.8	535900		

								12	11	10	9	8	7	6	5	4	ω	2	1	ITEM #			Requeste	Phone	Email:		Company Address	Require	2	
						Empty Co	ADDITIONAL COMMENTS											Northshore B1-Water fountair	Northshore - Kitchen	SAMPLE ID Sample ID's must be unique			od Due Date.	727-547-7199 Fax	caugheyt@pcsb.org	LARGO FL33777	11111 S REI CHER RD	1 Client Information:	Pace Analytical	
						ntainers				2								hallway		Water W Product V Soli/Solid Soli/Soli/ Soli/Solid W Wipe Air Other 11 Tissue 12	MATRIX Drinking D		Projec	Projec	Purch	lutze	Repor	Requi		
					Pa	2	RELING													₩ ⊣ 코 ਚ ⊢ 「 ミ ユ MATRIX CODE (see valid com	es to left)		1#	t Name:	ase Order #	k@ncsh.or	t To: TIMC	red Project I		
	6		SAMP		Jac h		IUISHED BY / AFFILI/											x 4-30-19 6:35	x 4-30-19 6:40	SAMPLE TYPE (G=GRAB C DATE START TIM	C C C C C C C C C C C C C C C C C C C			METALS	and the second se	nandod@pcsb.	DTHY CAUGHEY	nformation:		
	SIGNATURE of	PRINT Name of	PLER NAME A		S.		ATION													IE ENG						019			CHAI The Cha	
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Pace Analytical Fortha Laboratory	Sa	Documer mple Condition L Docume F-FL-C-00	nt Name: Jpon Receip ent No.: 17 rev. 13	ot Form	Document Revised: May 30, 2018 Issuing Authority: Pace Elorida Quality Office
	Sam	ole Conditi	on Ilpo	n Receipt Form (SC	
Project #	WO#	: 354	653	29	Date and Initials of person:
Project Manager: Client:	PM: ADA CLIENT:	37-PINSS	Due Da C	te: 05/09/19	Examining contents: <u>MVC</u> Label: <u>5(2/19</u> Deliver: pH:
Thermometer Used: <u>T-2</u>	03	Date: 5	12/19	Time: 12	40 Initials: MVL
State of Origin: FL Cooler #1 Temp.*C 3. (Visua Cooler #2 Temp.*C (Visua Cooler #3 Temp.*C (Visua Cooler #4 Temp.*C (Visua Cooler #5 Temp.*C (Visua Cooler #6 Temp.*C (V	al) al) al) al) al) JPS USF USF USF USF USF USF USF USF	_(Correction I _(Correction I _(Corr	Factor) Standard Party Seals ne Conte: C	/ projects, all containers verifier (Actual) (Actual) (Actual) (Actual) (Actual) (Actual) (Actual) Commercial Pace rd Overnight Ground Credit Card I intact: Yes No Other Shorted	d to ≤6 °C Samples on ice, cooling process has begun Samples on ice, cooling process has begun Other Other International Priority Unknown Ice: Wet Blue Dry Nore Time: Qty:
Chain of Custody Present				Comments:	
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Samples Arrived within Hold Time					
Sufficient Volume					
Correct Containers Lised					
Containers Intact Sample Labels match COC (sample IDs & collection)	date/time of		No □N/A		
All containers needing acid/base preservat checked. All Containers needing preservation are for compliance with EPA recommendation:	ion have been und to be in	Yes IN	No ⊡N/A No ⊡N/A	Preservative: Lot #/Trace #: Date:	eservation Information:
Exceptions: VOA, Coliforn	n, TOC, O&G, Ca	arbamates		Initials:	
Trin Blank Present:					
Client Notification/ Resolution: Person Contacted:			IO QUIA	Date/Time:	
Comments/ Resolution (use back fo	r additional co	mments):			
Project Manager Review					