



*City of Tempe*  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: [www.tempe.gov](http://www.tempe.gov)

March 21, 2017

Justin Bern  
City of Tempe Lead & Copper  
P.O. Box 5002  
Tempe, AZ 85280  
TEL: (480) 350-2860  
FAX (480) 350-2677

RE: ADEQ School Lead Initiative

Order No.: 1702049

Dear Justin Bern:

City of Tempe received 8 sample(s) on 02/06/2017 for the analyses presented in the following report.

Justin Bern  
Quality Officer  
6600 S Price Rd  
Tempe, AZ 85283

Lab license #AZ0055



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## Case Narrative

WO#: 1702049  
Date: 03/21/2017

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**CLIENT:** City of Tempe Lead & Copper  
**Project:** ADEQ School Lead Initiative

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This report in its entirety consists of the documents listed below. All documents contain the City of Tempe Work Order Number assigned to this report.

1. Paginated Report including: Case Narrative, Analytical Results and Applicable Quality Control Summary Reports.
2. A Cover Letter that immediately precedes the Paginated Report.
3. Copies of the Chain of Custody Documents supplied with this sample set.

Any comments or problems with the analytical events associated with this report are noted below.



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## Analytical Report

(base report)

WO#: 1702049

Date Reported: 03/21/2017

**CLIENT:** City of Tempe Lead & Copper  
**Matrix:** AQUEOUS  
**Lab ID:** 1702049-001A  
**Project:** ADEQ School Lead Initiative  
**Client Sample ID** Kyrene Elementary District\_Kyrene del los Ninos School\_1001-1

**Tag Number:**

**Collection Date:** 02/04/2017 1:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS					E200.8	E200.8 Analyst: MK
Lead	1.8	1.0		µg/L	1	02/08/2017 1:43:52 PM

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
	ND	Not Detected at the Reporting Limit	PL	Permit Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



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## Analytical Report

(base report)

WO#: 1702049

Date Reported: 03/21/2017

**CLIENT:** City of Tempe Lead & Copper  
**Matrix:** AQUEOUS  
**Lab ID:** 1702049-002A  
**Project:** ADEQ School Lead Initiative  
**Client Sample ID** Kyrene Elementary District\_Kyrene del los Ninos School\_1001-2

**Tag Number:**

**Collection Date:** 02/04/2017 1:53:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS					E200.8	E200.8 Analyst: MK
Lead	1.5	1.0		µg/L	1	02/08/2017 1:47:22 PM

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
	ND	Not Detected at the Reporting Limit	PL	Permit Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



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## Analytical Report

(base report)

WO#: 1702049

Date Reported: 03/21/2017

**CLIENT:** City of Tempe Lead & Copper  
**Matrix:** AQUEOUS  
**Lab ID:** 1702049-003A  
**Project:** ADEQ School Lead Initiative  
**Client Sample ID** Kyrene Elementary District\_Kyrene del los Ninos School\_1002-01

**Tag Number:**

**Collection Date:** 02/04/2017 1:56:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS					E200.8	E200.8 Analyst: MK
Lead	ND	1.0		µg/L	1	02/09/2017 9:50:31 AM

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
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## Analytical Report

(base report)

WO#: 1702049

Date Reported: 03/21/2017

**CLIENT:** City of Tempe Lead & Copper  
**Matrix:** AQUEOUS  
**Lab ID:** 1702049-004A  
**Project:** ADEQ School Lead Initiative  
**Client Sample ID** Kyrene Elementary District\_Kyrene del los Ninos School\_1006-01

**Tag Number:**

**Collection Date:** 02/04/2017 1:57:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS					E200.8	E200.8 Analyst: MK
Lead	ND	1.0		µg/L	1	02/09/2017 10:03:12 AM

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
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	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



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## Analytical Report

(base report)

WO#: 1702049

Date Reported: 03/21/2017

**CLIENT:** City of Tempe Lead & Copper  
**Matrix:** AQUEOUS  
**Lab ID:** 1702049-005A  
**Project:** ADEQ School Lead Initiative  
**Client Sample ID** Kyrene Elementary District\_Kyrene del los Ninos School\_1007-01

**Tag Number:**

**Collection Date:** 02/04/2017 2:02:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS					E200.8	E200.8
						Analyst: MK
Lead	3.2	1.0		µg/L	1	02/09/2017 10:07:27 AM

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
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## Analytical Report

(base report)

WO#: **1702049**

Date Reported: **03/21/2017**

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<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	AQUEOUS	<b>Collection Date:</b>	02/04/2017 2:21:00 PM
<b>Lab ID:</b>	1702049-006A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	Kyrene Elementary District_Kyrene del los Ninos School_1008-01		

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Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>METALS BY ICP/MS</b>				<b>E200.8</b>	<b>E200.8</b>	Analyst: <b>MK</b>
Lead	4.2	1.0		µg/L	1	02/09/2017 10:19:28 AM

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<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
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	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



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## QC SUMMARY REPORT

WO#: 1702049

21-Mar-17

**Client:** City of Tempe Lead & Copper  
**Project:** ADEQ School Lead Initiative

**BatchID:** 923

Sample ID	MB-923	SampType:	MBLK	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11942		
Client ID:	PBW	Batch ID:	923	TestNo:	E200.8	E200.8		Analysis Date:	02/08/2017	SeqNo:	139167		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	ND	1.0												
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Sample ID	LCS-923	SampType:	LCS	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11942		
Client ID:	LCSW	Batch ID:	923	TestNo:	E200.8	E200.8		Analysis Date:	02/08/2017	SeqNo:	139170		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	100	1.0	100.0	0	101	85	115							
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Sample ID	1702020-001EMS	SampType:	MS	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11942		
Client ID:	ZZZZZZ	Batch ID:	923	TestNo:	E200.8	E200.8		Analysis Date:	02/08/2017	SeqNo:	139174		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	100	1.0	100.0	0	105	70	130							
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Sample ID	1702020-001EMSD	SampType: MSD	TestCode: 200.8	Units: µg/L	Prep Date: 02/07/2017	RunNo: 11942					
Client ID: ZZZZZZ	Batch ID: 923	TestNo: E200.8	E200.8	Analysis Date: 02/08/2017	SeqNo: 139175						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	110	1.0	100.0	0	105	70	130	104.9	0.286	20				
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**Qualifiers:**

H Holding times for preparation or analysis exceeded  
RL Reporting Detection Limit

M Manual Integration used to determine area response  
W Sample container temperature is out of limit as specified at testcode

ND Not Detected at the Reporting Limit



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## QC SUMMARY REPORT

WO#: 1702049

21-Mar-17

**Client:** City of Tempe Lead & Copper

**Project:** ADEQ School Lead Initiative

**BatchID:** 923

Sample ID	1702048-004A MS	SampType:	MS	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11942		
Client ID:	ZZZZZZ	Batch ID:	923	TestNo:	E200.8	E200.8		Analysis Date:	02/08/2017	SeqNo:	139180		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		110		1.0	100.0	2.185	105	70	130				

Sample ID	1702048-004A MSD	SampType: MSD	TestCode: 200.8		Units: µg/L	Prep Date: 02/07/2017			RunNo: 11942			
Client ID:	ZZZZZZ	Batch ID: 923	TestNo: E200.8		E200.8	Analysis Date: 02/08/2017			SeqNo: 139181			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		110	1.0	100.0	2.185	105	70	130	106.7	0	20	

**Qualifiers:**

H Holding times for preparation or analysis exceeded  
RL Reporting Detection Limit

M Manual Integration used to determine area response  
W Sample container temperature is out of limit as specified at testcode

ND Not Detected at the Reporting Limit



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## QC SUMMARY REPORT

WO#: 1702049

21-Mar-17

**Client:** City of Tempe Lead & Copper  
**Project:** ADEQ School Lead Initiative

**BatchID:** 924

Sample ID	MB-924	SampType:	MBLK	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11949		
Client ID:	PBW	Batch ID:	924	TestNo:	E200.8	E200.8		Analysis Date:	02/09/2017	SeqNo:	139261		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	ND	1.0									
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Sample ID	LCS-924	SampType:	LCS	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11949			
Client ID:	LCSW	Batch ID:	924	TestNo:	E200.8	E200.8		Analysis Date:	02/09/2017	SeqNo:	139264			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	97	1.0	100.0	0	97.2	85	115				
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Sample ID	1702049-003AMS	SampType:	MS	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11949		
Client ID:	Kyrene Elementary	Batch ID:	924	TestNo:	E200.8	E200.8		Analysis Date:	02/09/2017	SeqNo:	139266		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	110	1.0	100.0	0	106	70	130				
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Sample ID	1702049-003AMSD	SampType:	MSD	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11949			
Client ID:	Kyrene Elementary	Batch ID:	924	TestNo:	E200.8	E200.8		Analysis Date:	02/09/2017	SeqNo:	139267			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	110	1.0	100.0	0	106	70	130	106.0	0	20	
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**Qualifiers:**

H Holding times for preparation or analysis exceeded  
RL Reporting Detection Limit

M Manual Integration used to determine area response  
W Sample container temperature is out of limit as specified at testcode

ND Not Detected at the Reporting Limit



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## QC SUMMARY REPORT

WO#: 1702049

21-Mar-17

**Client:** City of Tempe Lead & Copper

**Project:** ADEQ School Lead Initiative

**BatchID:** 924

Sample ID	1702050-001AMS	SampType:	MS	TestCode:	200.8	Units:	µg/L	Prep Date:	02/07/2017	RunNo:	11949		
Client ID:	ZZZZZZ	Batch ID:	924	TestNo:	E200.8	E200.8		Analysis Date:	02/09/2017	SeqNo:	139272		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		110		1.0	100.0	1.329	106	70	130				

Sample ID	1702050-001AMSD	SampType: MSD	TestCode: 200.8	Units: µg/L	Prep Date: 02/07/2017	RunNo: 11949					
Client ID: ZZZZZZ	Batch ID: 924	TestNo: E200.8	E200.8	Analysis Date: 02/09/2017	SeqNo: 139273						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	110	1.0	100.0	1.329	106	70	130	107.4	0.279	20	

**Qualifiers:**

H Holding times for preparation or analysis exceeded  
RL Reporting Detection Limit

M Manual Integration used to determine area response  
W Sample container temperature is out of limit as specified at testcode

ND Not Detected at the Reporting Limit