



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

April 06, 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.: 1704025

Dear Justin Bern:

City of Tempe received 16 sample(s) on 04/04/2017 for the analyses presented in the following report.

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

Lab license #AZ0055



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Case Narrative

WO#: 1704025  
Date: 04/06/2017

---

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

---

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.

1704025-06 & 07 voided, suspect sampling error, resample.



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: **1704025**

Date Reported: **04/06/2017**

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:03:00 AM
<b>Lab ID:</b>	1704025-001A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1012-02A		

---

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	32	1.0		µg/L	1	04/05/2017 4:33:45 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: 1704025

Date Reported: 04/06/2017

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:04:00 AM
<b>Lab ID:</b>	1704025-002A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1012-02A		

---

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS				E200.8	E200.8	Analyst: MK
Lead	2.0	1.0		µg/L	1	04/05/2017 4:46:08 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: **1704025**

Date Reported: **04/06/2017**

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:10:00 AM
<b>Lab ID:</b>	1704025-003A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1012-02A		

---

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	44	1.0		µg/L	1	04/05/2017 4:50:10 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: **1704025**

Date Reported: **04/06/2017**

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:15:00 AM
<b>Lab ID:</b>	1704025-004A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1011-01A		

---

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	73	1.0		µg/L	1	04/05/2017 5:02:38 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: **1704025**

Date Reported: **04/06/2017**

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:16:00 AM
<b>Lab ID:</b>	1704025-005A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1011-01A		

---

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	13	1.0		µg/L	1	04/05/2017 5:06:33 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: **1704025**

Date Reported: **04/06/2017**

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:31:00 AM
<b>Lab ID:</b>	1704025-008A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1018-02A		

---

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	6.1	1.0		µg/L	1	04/05/2017 5:18:13 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





City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: 1704025

Date Reported: 04/06/2017

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:32:00 AM
<b>Lab ID:</b>	1704025-009A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1018-02A		

---

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	4.6	1.0		µg/L	1	04/05/2017 5:22:01 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: 1704025

Date Reported: 04/06/2017

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:37:00 AM
<b>Lab ID:</b>	1704025-010A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1018-02A		

---

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	4.1	1.0		µg/L	1	04/05/2017 5:26:06 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: 1704025

Date Reported: 04/06/2017

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 6:45:00 AM
<b>Lab ID:</b>	1704025-011A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1018-02A		

---

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS				E200.8	E200.8	Analyst: MK
Lead	9.7	1.0		µg/L	1	04/05/2017 5:30:02 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: **1704025**

Date Reported: **04/06/2017**

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 7:04:00 AM
<b>Lab ID:</b>	1704025-013A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1018-02A		

---

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	5.4	1.0		µg/L	1	04/05/2017 5:50:50 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: 1704025

Date Reported: 04/06/2017

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 7:09:00 AM
<b>Lab ID:</b>	1704025-014A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1018-02A		

---

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS				E200.8	E200.8	Analyst: MK
Lead	6.9	1.0		µg/L	1	04/05/2017 5:54:47 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: **1704025**

Date Reported: **04/06/2017**

---

<b>CLIENT:</b>	City of Tempe Lead & Copper	<b>Tag Number:</b>	
<b>Matrix:</b>	DRINKING WATER	<b>Collection Date:</b>	04/04/2017 7:14:00 AM
<b>Lab ID:</b>	1704025-015A		
<b>Project:</b>	ADEQ School Lead Initiative		
<b>Client Sample ID</b>	TUHSD_Marcos_de_Niza_High_School_1018-02A		

---

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	10	1.0		µg/L	1	04/05/2017 5:58:39 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## Analytical Report

(base report)

WO#: 1704025

Date Reported: 04/06/2017

**CLIENT:** City of Tempe Lead & Copper  
**Matrix:** DRINKING WATER  
**Lab ID:** 1704025-016A  
**Project:** ADEQ School Lead Initiative  
**Client Sample ID** TUHSD\_Marcos\_de\_Niza\_High\_School\_1018-02A

**Tag Number:**

**Collection Date:** 04/04/2017 7:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS BY ICP/MS					E200.8	E200.8 Analyst: MK
Lead	16	1.0		µg/L	1	04/05/2017 6:02:27 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



City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## QC SUMMARY REPORT

WO#: 1704025

07-Apr-17

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

**BatchID:** 957

Sample ID	MB-957	SampType:	MBLK	TestCode:	200.8	Units:	µg/L	Prep Date:	04/05/2017	RunNo:	12171			
Client ID:	PBW	Batch ID:	957	TestNo:	E200.8	E200.8		Analysis Date:	04/05/2017	SeqNo:	141913			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead		ND		1.0										
------	--	----	--	-----	--	--	--	--	--	--	--	--	--	--

Sample ID	LCS-957	SampType:	LCS	TestCode:	200.8	Units:	µg/L	Prep Date:	04/05/2017	RunNo:	12171			
Client ID:	LCSW	Batch ID:	957	TestNo:	E200.8	E200.8		Analysis Date:	04/05/2017	SeqNo:	141916			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead		100		1.0	100.0	0		102	85	115				
------	--	-----	--	-----	-------	---	--	-----	----	-----	--	--	--	--

Sample ID	1704025-001AMS	SampType:	MS	TestCode:	200.8	Units:	µg/L	Prep Date:	04/05/2017	RunNo:	12171			
Client ID:	TUHSD_Marcos_de	Batch ID:	957	TestNo:	E200.8	E200.8		Analysis Date:	04/05/2017	SeqNo:	141918			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead		140		1.0	100.0	31.64		105	70	130				
------	--	-----	--	-----	-------	-------	--	-----	----	-----	--	--	--	--

Sample ID	1704025-001AMSD	SampType:	MSD	TestCode:	200.8	Units:	µg/L	Prep Date:	04/05/2017	RunNo:	12171			
Client ID:	TUHSD_Marcos_de	Batch ID:	957	TestNo:	E200.8	E200.8		Analysis Date:	04/05/2017	SeqNo:	141919			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead		140		1.0	100.0	31.64		105	70	130	136.4	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





City of Tempe  
6600 S Price Rd  
Tempe, AZ 85283  
TEL: 4803502855 FAX: 4803502677  
Website: www.tempe.gov

## QC SUMMARY REPORT

WO#: 1704025

07-Apr-17

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

**BatchID:** 957

Sample ID	1704025-011AMS	SampType:	MS	TestCode:	200.8	Units:	µg/L	Prep Date:	04/05/2017	RunNo:	12171		
Client ID:	TUHSD_Marcos_de	Batch ID:	957	TestNo:	E200.8	E200.8		Analysis Date:	04/05/2017	SeqNo:	141930		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		120		1.0	100.0	9.671	108	70	130				

Sample ID	1704025-011AMSD	SampType: MSD	TestCode: 200.8	Units: µg/L	Prep Date: 04/05/2017	RunNo: 12171					
Client ID: TUHSD_Marcos_de	Batch ID: 957	TestNo: E200.8	E200.8	Analysis Date: 04/05/2017	SeqNo: 141931						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	120	1.0	100.0	9.671	107	70	130	117.5	0.512	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