

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Phoenix

4625 East Cotton Ctr Blvd

Suite 189

Phoenix, AZ 85040

Tel: (602)437-3340

TestAmerica Job ID: 550-80052-1

TestAmerica SDG: Loma Linda Elementary School Confirmation Sampling

Client Project/Site: Pb in DW / Creighton Elementary District

For:

Arizona Dept of Environmental Quality

1110 W. Washington St., MC5415B-1

Phoenix, Arizona 85007

Attn: David A Burchard



Authorized for release by:

4/3/2017 10:12:07 PM

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### LINKS

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TotalAccess

Have a Question?



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[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-80052-1	Screening 1	Drinking Water	03/30/17 06:46	03/30/17 14:46
550-80052-2	Screening 2	Drinking Water	03/30/17 06:49	03/30/17 14:46
550-80052-3	C-First Draw 3	Drinking Water	03/29/17 08:44	03/30/17 14:46
550-80052-4	C-Flush 4	Drinking Water	03/29/17 08:46	03/30/17 14:46
550-80052-5	C-First Draw Day Two 5	Drinking Water	03/30/17 07:00	03/30/17 14:46

## Detection Summary

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

### Client Sample ID: Screening 1

Lab Sample ID: 550-80052-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	1.3		0.50	ppb	1		200.8	Total/NA

### Client Sample ID: Screening 2

Lab Sample ID: 550-80052-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	3.4		0.50	ppb	1		200.8	Total/NA

### Client Sample ID: C-First Draw 3

Lab Sample ID: 550-80052-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	86		0.50	ppb	1		200.8	Total/NA

### Client Sample ID: C-Flush 4

Lab Sample ID: 550-80052-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	1.3		0.50	ppb	1		200.8	Total/NA

### Client Sample ID: C-First Draw Day Two 5

Lab Sample ID: 550-80052-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	30		0.50	ppb	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Phoenix

## Client Sample Results

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

### Client Sample ID: Screening 1

Date Collected: 03/30/17 06:46

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-1

Matrix: Drinking Water

#### Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.3		0.50	ppb		04/03/17 09:08	04/03/17 14:37	1

### Client Sample ID: Screening 2

Date Collected: 03/30/17 06:49

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-2

Matrix: Drinking Water

#### Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.4		0.50	ppb		04/03/17 09:08	04/03/17 14:38	1

### Client Sample ID: C-First Draw 3

Date Collected: 03/29/17 08:44

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-3

Matrix: Drinking Water

#### Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	86		0.50	ppb		04/03/17 09:16	04/03/17 11:52	1

### Client Sample ID: C-Flush 4

Date Collected: 03/29/17 08:46

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-4

Matrix: Drinking Water

#### Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.3		0.50	ppb		04/03/17 09:16	04/03/17 11:57	1

### Client Sample ID: C-First Draw Day Two 5

Date Collected: 03/30/17 07:00

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-5

Matrix: Drinking Water

#### Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	30		0.50	ppb		04/03/17 09:08	04/03/17 14:40	1

# QC Sample Results

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 550-113830/1-A  
Matrix: Water  
Analysis Batch: 113896

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 113830

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	ppb		04/03/17 09:08	04/03/17 14:14	1

Lab Sample ID: LCS 550-113830/4-A  
Matrix: Water  
Analysis Batch: 113896

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 113830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	89.2		ppb		89	85 - 115

Lab Sample ID: LCSD 550-113830/5-A  
Matrix: Water  
Analysis Batch: 113896

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 113830

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Lead	100	89.6		ppb		90	85 - 115	0	20

Lab Sample ID: 550-79837-C-1-B MS  
Matrix: Water  
Analysis Batch: 113896

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 113830

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.7		100	88.7		ppb		87	70 - 130

Lab Sample ID: 550-79837-C-1-C MSD  
Matrix: Water  
Analysis Batch: 113896

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 113830

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Lead	1.7		100	89.0		ppb		87	70 - 130	0	20

Lab Sample ID: MB 550-113831/1-A  
Matrix: Water  
Analysis Batch: 113871

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 113831

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	ppb		04/03/17 09:16	04/03/17 11:44	1

Lab Sample ID: LCS 550-113831/3-A  
Matrix: Water  
Analysis Batch: 113871

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 113831

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	91.6		ppb		92	85 - 115

Lab Sample ID: LCSD 550-113831/4-A  
Matrix: Water  
Analysis Batch: 113871

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 113831

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Lead	100	91.0		ppb		91	85 - 115	1	20

TestAmerica Phoenix

## QC Sample Results

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

Lab Sample ID: 550-80052-3 MS  
Matrix: Drinking Water  
Analysis Batch: 113871

Client Sample ID: C-First Draw 3  
Prep Type: Total/NA  
Prep Batch: 113831

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	86		100	175		ppb		89	70 - 130

Lab Sample ID: 550-80052-3 MSD  
Matrix: Drinking Water  
Analysis Batch: 113871

Client Sample ID: C-First Draw 3  
Prep Type: Total/NA  
Prep Batch: 113831

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	86		100	175		ppb		89	70 - 130	0	20



## QC Association Summary

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

### Metals

#### Prep Batch: 113830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-80052-1	Screening 1	Total/NA	Drinking Water	200.8	
550-80052-2	Screening 2	Total/NA	Drinking Water	200.8	
550-80052-5	C-First Draw Day Two 5	Total/NA	Drinking Water	200.8	
MB 550-113830/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-113830/4-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-113830/5-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-79837-C-1-B MS	Matrix Spike	Total/NA	Water	200.8	
550-79837-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

#### Prep Batch: 113831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-80052-3	C-First Draw 3	Total/NA	Drinking Water	200.8	
550-80052-4	C-Flush 4	Total/NA	Drinking Water	200.8	
MB 550-113831/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-113831/3-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-113831/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-80052-3 MS	C-First Draw 3	Total/NA	Drinking Water	200.8	
550-80052-3 MSD	C-First Draw 3	Total/NA	Drinking Water	200.8	

#### Analysis Batch: 113871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-80052-3	C-First Draw 3	Total/NA	Drinking Water	200.8	113831
550-80052-4	C-Flush 4	Total/NA	Drinking Water	200.8	113831
MB 550-113831/1-A	Method Blank	Total/NA	Water	200.8	113831
LCS 550-113831/3-A	Lab Control Sample	Total/NA	Water	200.8	113831
LCSD 550-113831/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	113831
550-80052-3 MS	C-First Draw 3	Total/NA	Drinking Water	200.8	113831
550-80052-3 MSD	C-First Draw 3	Total/NA	Drinking Water	200.8	113831

#### Analysis Batch: 113896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-80052-1	Screening 1	Total/NA	Drinking Water	200.8	113830
550-80052-2	Screening 2	Total/NA	Drinking Water	200.8	113830
550-80052-5	C-First Draw Day Two 5	Total/NA	Drinking Water	200.8	113830
MB 550-113830/1-A	Method Blank	Total/NA	Water	200.8	113830
LCS 550-113830/4-A	Lab Control Sample	Total/NA	Water	200.8	113830
LCSD 550-113830/5-A	Lab Control Sample Dup	Total/NA	Water	200.8	113830
550-79837-C-1-B MS	Matrix Spike	Total/NA	Water	200.8	113830
550-79837-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	113830

## Lab Chronicle

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

### Client Sample ID: Screening 1

Date Collected: 03/30/17 06:46

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-1

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			113830	04/03/17 09:08	SGO	TAL PHX
Total/NA	Analysis	200.8		1	113896	04/03/17 14:37	TEK	TAL PHX

### Client Sample ID: Screening 2

Date Collected: 03/30/17 06:49

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-2

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			113830	04/03/17 09:08	SGO	TAL PHX
Total/NA	Analysis	200.8		1	113896	04/03/17 14:38	TEK	TAL PHX

### Client Sample ID: C-First Draw 3

Date Collected: 03/29/17 08:44

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-3

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			113831	04/03/17 09:16	SGO	TAL PHX
Total/NA	Analysis	200.8		1	113871	04/03/17 11:52	TEK	TAL PHX

### Client Sample ID: C-Flush 4

Date Collected: 03/29/17 08:46

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-4

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			113831	04/03/17 09:16	SGO	TAL PHX
Total/NA	Analysis	200.8		1	113871	04/03/17 11:57	TEK	TAL PHX

### Client Sample ID: C-First Draw Day Two 5

Date Collected: 03/30/17 07:00

Date Received: 03/30/17 14:46

Lab Sample ID: 550-80052-5

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			113830	04/03/17 09:08	SGO	TAL PHX
Total/NA	Analysis	200.8		1	113896	04/03/17 14:40	TEK	TAL PHX

#### Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

## Accreditation/Certification Summary

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

### Laboratory: TestAmerica Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arizona	State Program	9	AZ0728	06-09-17
Analysis Method	Prep Method	Matrix	Analyte	

## Method Summary

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW / Creighton Elementary District

TestAmerica Job ID: 550-80052-1  
SDG: Loma Linda Elementary School Confirmation Sampling

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL PHX

### Protocol References:

EPA = US Environmental Protection Agency

### Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

# Lead In Schools Confirmation Sampling Log

80052

**RUSH!**

School District: Creighton Elementary District

School Name: Loma Linda Elementary School

Building Name/Number/Year Built: Building I

Sample Collector Name and Phone Number:

Sample ID # (must appear on bottle)	Fixture Type/Make and model #	Fixture location	Collection Time	Collection Date
Screening 1	<del>faucet</del> / <del>P. ch...</del>	<del>302</del> 303	6:46	3-30-17
Screening 2	<del>faucet</del> / <del>P. ch...</del>	<del>302</del> 304	6:49	3-30-17
C - First Draw 3	faucet / ?	302	8:44a	3-29-17
C- Flush 4	faucet / ?	302	8:46a	3-29-17
C - First Draw Day Two 5	faucet / ?	302	7:00a	3-30-17
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550-80052 Chain of Custody



David Burchard

3/30/17 1446

*[Signature]*

22.8°C

4/3/2017

## Login Sample Receipt Checklist

Client: Arizona Dept of Environmental Quality

Job Number: 550-80052-1

SDG Number: Loma Linda Elementary School Confirmation Sampling

**Login Number: 80052**

**List Source: TestAmerica Phoenix**

**List Number: 1**

**Creator: Vilaboy, Monica**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.