

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Phoenix

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Phoenix, AZ 85040

Tel: (602)437-3340

TestAmerica Job ID: 550-80133-1

TestAmerica SDG: Arizona Desert Elementary School

Client Project/Site: Pb in DW / Gadsden 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:

4/10/2017 3:11:30 PM

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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.

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Sample Summary	5
Detection Summary	6
Client Sample Results	7
QC Sample Results	8
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	15

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Definitions/Glossary

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

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

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)

Case Narrative

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

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

Job ID: 550-80133-1

Laboratory: TestAmerica Phoenix

Narrative

Job Narrative
550-80133-1

Comments

No additional comments.

Receipt

The sample was received on 3/31/2017 10:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 22.4° C.

Receipt Exceptions

The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: A-110111 (550-80133-1). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

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

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-80133-1	A-110111	Drinking Water	03/29/17 07:00	03/31/17 10:30

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Detection Summary

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

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

Client Sample ID: A-110111

Lab Sample ID: 550-80133-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.7		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 / Gadsden Elementary District

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

Client Sample ID: A-110111

Date Collected: 03/29/17 07:00

Date Received: 03/31/17 10:30

Lab Sample ID: 550-80133-1

Matrix: Drinking Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.7		0.50	ppb		04/04/17 10:15	04/08/17 17:10	1

QC Sample Results

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

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 550-113957/1-A

Matrix: Water

Analysis Batch: 114409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 113957

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	ppb		04/04/17 10:15	04/08/17 16:49	1

Lab Sample ID: LCS 550-113957/3-A

Matrix: Water

Analysis Batch: 114409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 113957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	99.4		ppb		99	85 - 115

Lab Sample ID: LCSD 550-113957/4-A

Matrix: Water

Analysis Batch: 114409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 113957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Lead	100	98.0		ppb		98	85 - 115	1	20

Lab Sample ID: 550-80132-A-11-B MS

Matrix: Water

Analysis Batch: 114409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 113957

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.7		100	93.3		ppb		92	70 - 130

Lab Sample ID: 550-80132-A-11-C MSD

Matrix: Water

Analysis Batch: 114409

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 113957

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Lead	1.7		100	94.3		ppb		93	70 - 130	1	20

QC Association Summary

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

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

Metals

Prep Batch: 113957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-80133-1	A-110111	Total/NA	Drinking Water	200.8	
MB 550-113957/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-113957/3-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-113957/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-80132-A-11-B MS	Matrix Spike	Total/NA	Water	200.8	
550-80132-A-11-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 114409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-80133-1	A-110111	Total/NA	Drinking Water	200.8	113957
MB 550-113957/1-A	Method Blank	Total/NA	Water	200.8	113957
LCS 550-113957/3-A	Lab Control Sample	Total/NA	Water	200.8	113957
LCSD 550-113957/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	113957
550-80132-A-11-B MS	Matrix Spike	Total/NA	Water	200.8	113957
550-80132-A-11-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	113957

Lab Chronicle

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

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

Client Sample ID: A-110111

Date Collected: 03/29/17 07:00

Date Received: 03/31/17 10:30

Lab Sample ID: 550-80133-1

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			113957	04/04/17 10:15	SGO	TAL PHX
Total/NA	Analysis	200.8		1	114409	04/08/17 17:10	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 / Gadsden Elementary District

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

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
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Method Summary

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

TestAmerica Job ID: 550-80133-1
SDG: Arizona Desert Elementary School

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

80133

Collection Log

for experienced sample collectors

Complete copy of this form for each sample collected. Your drinking water sample cannot be tested unless a copy of this form is shipped to the lab with each sample. In addition, the sample cannot be tested unless the Sample Identification Number matches the number on the sample container label.

- ☒ Check this box to confirm that **water had not been used at this tap or other taps in the area for 6 hours** and **no** flushing was done prior to sampling

Name of School District	Goedden elementary school district 32
School Name	Arizona Desert
Building (name/number)	hallway A
Type of Fixture (tap, drinking fountain etc.)	tap
Location of Fixture (example, room number)	Room 110/111
Sample Identification Number (Write this number on the sample container and on this sheet)	A-110111
Date of Collection	03-29-2017
Time of Collection	7:00 AM
Printed Name of Sample Collector	Jorge Mena Sotelo
Signature Sample Collector	Jorge Mena S.

550-80133 Chain of Custody



Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	
Signature	
Notes: 22.4°C Fed EX GR 3/31/17 10:30 no ice Uley	

For relinquishing samples upon delivery to labs only

Relinquished date and signature _____



These samples were collected for lead screening purposes only and cannot be used for compliance.

Arizona Department of Environmental Quality
Public School Lead Drinking Water Screening Program
Sampling Plan & Collection Log
for
Experienced Sample Collectors

Use these procedures to collect samples of water for lead screening at school. This protocol is part of a proactive program to screen the drinking water at Arizona schools for lead. Schools will be provided a sampling kit that will include this form, a list of school buildings to sample, sampling containers and return shipping if needed.

Sample Locations

When possible select two sampling locations from each building built before January 1, 1988 and one sample location for buildings built after this date. Prioritize sampling locations based on how frequently someone could drink from them. The chart below should be used to select sampling locations.

Recommended	Do Not Sample
Drinking fountains	Bathroom sinks
Preschool classrooms	Janitor closets
Cafeteria and kitchen sinks	Hose bibs
Nurse's/health office sinks	Taps attached to water softeners
Home economics room sinks	Taps attached Point of Use devices
Any sink known to be or visibly used for consumption	Fixtures where human consumption of the water is not likely to occur

Sample Collection

1. Collect all water samples before the facility opens for the day and any water usage occurs.
2. The water must have sat in the pipes for at least six (6) hours before a sample is taken.
3. Collect samples in the container(s) provided by completing the following steps:
 - 1) Open sample container
 - 2) Hold sample container under fixture (**cold water tap only**).
 - 3) Turn on fixture
 - 4) Fill sample container
 - 5) Close sample container tightly
 - 6) Complete label on sample container, ensure information on container matches information recorded on the "Collection Log" provided immediately following the collection of each sample.
 - 7) Provide a map with sample locations
4. Assign a **unique** sample identification number to each sample. (For example, bldg100-01 to indicate it is collected in building 100 and is the first sample). Record that number on the Sample Collection Record form and sample container.
5. Accurately complete the "Collection Log". **Accurate information about the sample is essential.**
6. Ship the samples as instructed within three (3) days. Place all Sample Collection Logs in a water tight container such as a zip lock bag. Keep the Sample Collection Log with the samples. The lab must receive the sample within ten (10) calendar days in order for them to be analyzed.

When possible submit all samples for a school at one time.

Login Sample Receipt Checklist

Client: Arizona Dept of Environmental Quality

Job Number: 550-80133-1

SDG Number: Arizona Desert Elementary School

Login Number: 80133

List Number: 1

Creator: Vilaboy, Monica

List Source: TestAmerica Phoenix

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.