

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: 550-82455-1

TestAmerica Sample Delivery Group: Fairbanks Middle School

Client Project/Site: Pb in DW/Morenci Unified School District

For:

Arizona Dept of Environmental Quality

1110 W. Washington St., MC5415B-1

Phoenix, Arizona 85007

Attn: David A Burchard



Authorized for release by:

5/16/2017 4:52:23 PM

Sarah Murphy, Project Manager I

(602)437-3340

sarah.murphy@testamericainc.com

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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.

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Definitions/Glossary

Client: Arizona Dept of Environmental Quality
Project/Site: Pb in DW/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
SDG: Fairbanks Middle 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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
SDG: Fairbanks Middle School

Job ID: 550-82455-1

Laboratory: TestAmerica Phoenix

Narrative

Job Narrative 550-82455-1

Comments

No additional comments.

Receipt

The samples were received on 5/9/2017 11:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 24.7° C.

Receipt Exceptions

The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: 1001 (550-82455-1), 1004 (550-82455-2), 1000 (550-82455-3), 1002 (550-82455-4) and 1003 (550-82455-5). 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.

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Sample Summary

Client: Arizona Dept of Environmental Quality
Project/Site: Pb in DW/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
SDG: Fairbanks Middle School

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-82455-1	1001	Drinking Water	05/07/17 10:24	05/09/17 11:00
550-82455-2	1004	Drinking Water	05/07/17 10:22	05/09/17 11:00
550-82455-3	1000	Drinking Water	05/07/17 10:10	05/09/17 11:00
550-82455-4	1002	Drinking Water	05/07/17 10:00	05/09/17 11:00
550-82455-5	1003	Drinking Water	05/07/17 10:20	05/09/17 11:00

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Detection Summary

Client: Arizona Dept of Environmental Quality
Project/Site: Pb in DW/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
SDG: Fairbanks Middle School

Client Sample ID: 1001

Lab Sample ID: 550-82455-1

No Detections.

Client Sample ID: 1004

Lab Sample ID: 550-82455-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.86		0.50	ppb	1		200.8	Total/NA

Client Sample ID: 1000

Lab Sample ID: 550-82455-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	1.0		0.50	ppb	1		200.8	Total/NA

Client Sample ID: 1002

Lab Sample ID: 550-82455-4

No Detections.

Client Sample ID: 1003

Lab Sample ID: 550-82455-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.51		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/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
 SDG: Fairbanks Middle School

Client Sample ID: 1001
 Date Collected: 05/07/17 10:24
 Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-1
 Matrix: Drinking Water

Method: 200.8 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Lead	ND		0.50	ppb		05/11/17 11:37	05/15/17 16:08	1	

Client Sample ID: 1004
 Date Collected: 05/07/17 10:22
 Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-2
 Matrix: Drinking Water

Method: 200.8 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Lead	0.86		0.50	ppb		05/11/17 11:37	05/15/17 16:10	1	

Client Sample ID: 1000
 Date Collected: 05/07/17 10:10
 Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-3
 Matrix: Drinking Water

Method: 200.8 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Lead	1.0		0.50	ppb		05/11/17 11:37	05/15/17 16:12	1	

Client Sample ID: 1002
 Date Collected: 05/07/17 10:00
 Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-4
 Matrix: Drinking Water

Method: 200.8 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Lead	ND		0.50	ppb		05/11/17 11:37	05/15/17 16:14	1	

Client Sample ID: 1003
 Date Collected: 05/07/17 10:20
 Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-5
 Matrix: Drinking Water

Method: 200.8 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Lead	0.51		0.50	ppb		05/11/17 11:37	05/15/17 16:16	1	

QC Sample Results

Client: Arizona Dept of Environmental Quality
 Project/Site: Pb in DW/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
 SDG: Fairbanks Middle School

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 550-117105/1-A
Matrix: Water
Analysis Batch: 117436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 117105

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	ppb		05/11/17 11:37	05/15/17 15:49	1

Lab Sample ID: LCS 550-117105/3-A
Matrix: Water
Analysis Batch: 117436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 117105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	100	93.4		ppb		93	85 - 115

Lab Sample ID: LCSD 550-117105/4-A
Matrix: Water
Analysis Batch: 117436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 117105

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Lead	100	92.5		ppb		93	85 - 115	1	20

Lab Sample ID: 550-82457-A-1-B MS
Matrix: Water
Analysis Batch: 117436

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 117105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lead	ND		100	88.5		ppb		88	70 - 130

Lab Sample ID: 550-82457-A-1-C MSD
Matrix: Water
Analysis Batch: 117436

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 117105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Lead	ND		100	87.5		ppb		88	70 - 130	1	20

QC Association Summary

Client: Arizona Dept of Environmental Quality
 Project/Site: Pb in DW/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
 SDG: Fairbanks Middle School

Metals

Prep Batch: 117105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-82455-1	1001	Total/NA	Drinking Water	200.8	
550-82455-2	1004	Total/NA	Drinking Water	200.8	
550-82455-3	1000	Total/NA	Drinking Water	200.8	
550-82455-4	1002	Total/NA	Drinking Water	200.8	
550-82455-5	1003	Total/NA	Drinking Water	200.8	
MB 550-117105/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-117105/3-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-117105/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-82457-A-1-B MS	Matrix Spike	Total/NA	Water	200.8	
550-82457-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 117436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-82455-1	1001	Total/NA	Drinking Water	200.8	117105
550-82455-2	1004	Total/NA	Drinking Water	200.8	117105
550-82455-3	1000	Total/NA	Drinking Water	200.8	117105
550-82455-4	1002	Total/NA	Drinking Water	200.8	117105
550-82455-5	1003	Total/NA	Drinking Water	200.8	117105
MB 550-117105/1-A	Method Blank	Total/NA	Water	200.8	117105
LCS 550-117105/3-A	Lab Control Sample	Total/NA	Water	200.8	117105
LCSD 550-117105/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	117105
550-82457-A-1-B MS	Matrix Spike	Total/NA	Water	200.8	117105
550-82457-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	117105

Lab Chronicle

Client: Arizona Dept of Environmental Quality
 Project/Site: Pb in DW/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
 SDG: Fairbanks Middle School

Client Sample ID: 1001
Date Collected: 05/07/17 10:24
Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-1
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			117105	05/11/17 11:37	SGO	TAL PHX
Total/NA	Analysis	200.8		1	117436	05/15/17 16:08	TEK	TAL PHX

Client Sample ID: 1004
Date Collected: 05/07/17 10:22
Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-2
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			117105	05/11/17 11:37	SGO	TAL PHX
Total/NA	Analysis	200.8		1	117436	05/15/17 16:10	TEK	TAL PHX

Client Sample ID: 1000
Date Collected: 05/07/17 10:10
Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-3
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			117105	05/11/17 11:37	SGO	TAL PHX
Total/NA	Analysis	200.8		1	117436	05/15/17 16:12	TEK	TAL PHX

Client Sample ID: 1002
Date Collected: 05/07/17 10:00
Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-4
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			117105	05/11/17 11:37	SGO	TAL PHX
Total/NA	Analysis	200.8		1	117436	05/15/17 16:14	TEK	TAL PHX

Client Sample ID: 1003
Date Collected: 05/07/17 10:20
Date Received: 05/09/17 11:00

Lab Sample ID: 550-82455-5
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			117105	05/11/17 11:37	SGO	TAL PHX
Total/NA	Analysis	200.8		1	117436	05/15/17 16:16	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/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
SDG: Fairbanks Middle 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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* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Method Summary

Client: Arizona Dept of Environmental Quality
Project/Site: Pb in DW/Morenci Unified School District

TestAmerica Job ID: 550-82455-1
SDG: Fairbanks Middle School

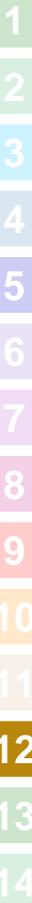
Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL PHX

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



82455

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	Monterey School Dist. #18
School Name	" " "
Building (name/number)	Fairbank Middle Sch.
Type of Fixture (tap, drinking fountain etc.)	drinking fountain c/s room
Location of Fixture (example, room number)	
Sample Identification Number (Write this number on the sample container and on this sheet)	1001
Date of Collection	5/7/17
Time of Collection	10:24am
Printed Name of Sample Collector	M. S. D. #18
Signature Sample Collector	S.R. Chavez

550-82455 Chain of Custody



Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	
Signature	
Notes:	

For relinquishing samples upon delivery to labs only

Relinquished date and signature

FedEx *[Signature]* 11:00 (24.70) no fee

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

①

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	Mesa School Dist #18
School Name	" " "
Building (name/number)	Fairbanks Middle School
Type of Fixture (tap, drinking fountain etc.)	Tap
Location of Fixture (example, room number)	
Sample Identification Number (Write this number on the sample container and on this sheet)	1004
Date of Collection	5/7/17
Time of Collection	10:22 AM
Printed Name of Sample Collector	Mesa #18
Signature Sample Collector	S.R. Chavez

Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	
Signature	
Notes:	

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.

(2)



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	Morazuc School Dist #18
School Name	Fraibault Middle Sch.
Building (name/number)	
Type of Fixture (tap, drinking fountain etc.)	Fountain Hall
Location of Fixture (example, room number)	
Sample Identification Number (Write this number on the sample container and on this sheet)	1002
Date of Collection	5/17/17
Time of Collection	10:10 AM
Printed Name of Sample Collector	Mus #18
Signature Sample Collector	SR. Chavez

Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	
Signature	
Notes:	

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.

3



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	Moroni School Dist. #18
School Name	" "
Building (name/number)	FranBanks middle sch.
Type of Fixture (tap, drinking fountain etc.)	Water Fountain.
Location of Fixture (example, room number)	
Sample Identification Number (Write this number on the sample container and on this sheet)	1002
Date of Collection	5/7/17
Time of Collection	10:00am
Printed Name of Sample Collector	Mason #18
Signature Sample Collector	SR Chavis

Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	
Signature	
Notes:	

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.

4



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	Mesa School Dist. #18
School Name	" " " "
Building (name/number)	Modular
Type of Fixture (tap, drinking fountain etc.)	Fountain
Location of Fixture (example, room number)	
Sample Identification Number (<u>Write this number on the sample container and on this sheet</u>)	1003
Date of Collection	5/17/17
Time of Collection	10:20 am
Printed Name of Sample Collector	MUSD #18
Signature Sample Collector	SR Chavez

Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	
Signature	
Notes:	

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.



Login Sample Receipt Checklist

Client: Arizona Dept of Environmental Quality

Job Number: 550-82455-1
SDG Number: Fairbanks Middle School

Login Number: 82455
List Number: 1
Creator: Vilaboy, Monica

List Source: TestAmerica Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

