

# 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: 550-80274-1

TestAmerica SDG: San Fernando Elementary School

Client Project/Site: Pb in DW/San Fernando Elementary Dist

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 3:14:55 PM

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### LINKS

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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/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando 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/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando Elementary School

**Job ID: 550-80274-1**

**Laboratory: TestAmerica Phoenix**

### Narrative

#### Job Narrative 550-80274-1

### Comments

No additional comments.

### Receipt

The samples were received on 4/4/2017 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 20.4° C.

### Receipt Exceptions

The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: KT 001 (550-80274-1) and MP 002 (550-80274-2). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

The Chain-of-Custody (COC) was incomplete as received. The sampling times are missing on the COC and therefore have been taken from the containers.

### 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/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando Elementary School

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-80274-1	KT 001	Drinking Water	04/03/17 06:45	04/04/17 10:15
550-80274-2	MP 002	Drinking Water	04/03/17 06:45	04/04/17 10:15

## Detection Summary

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando Elementary School

**Client Sample ID: KT 001**

**Lab Sample ID: 550-80274-1**

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: MP 002**

**Lab Sample ID: 550-80274-2**

No Detections.

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/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando Elementary School

**Client Sample ID: KT 001**

**Date Collected: 04/03/17 06:45**

**Date Received: 04/04/17 10:15**

**Lab Sample ID: 550-80274-1**

**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		04/06/17 17:16	04/07/17 16:38	1

**Client Sample ID: MP 002**

**Date Collected: 04/03/17 06:45**

**Date Received: 04/04/17 10:15**

**Lab Sample ID: 550-80274-2**

**Matrix: Drinking Water**

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	ppb		04/06/17 17:16	04/07/17 16:44	1

# QC Sample Results

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando Elementary School

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

Lab Sample ID: MB 550-114284/1-A  
Matrix: Water  
Analysis Batch: 114403

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 114284

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	ppb		04/06/17 17:16	04/07/17 16:10	1

Lab Sample ID: LCS 550-114284/3-A  
Matrix: Water  
Analysis Batch: 114403

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 114284

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	91.2		ppb		91	85 - 115

Lab Sample ID: LCSD 550-114284/4-A  
Matrix: Water  
Analysis Batch: 114403

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 114284

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Lead	100	88.9		ppb		89	85 - 115	3	20

Lab Sample ID: 550-80424-A-3-B MS  
Matrix: Water  
Analysis Batch: 114403

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 114284

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	ND		100	84.0		ppb		84	70 - 130

Lab Sample ID: 550-80424-A-3-C MSD  
Matrix: Water  
Analysis Batch: 114403

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 114284

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Lead	ND		100	83.5		ppb		84	70 - 130	1	20



## QC Association Summary

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando Elementary School

### Metals

#### Prep Batch: 114284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-80274-1	KT 001	Total/NA	Drinking Water	200.8	
550-80274-2	MP 002	Total/NA	Drinking Water	200.8	
MB 550-114284/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-114284/3-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-114284/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-80424-A-3-B MS	Matrix Spike	Total/NA	Water	200.8	
550-80424-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

#### Analysis Batch: 114403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-80274-1	KT 001	Total/NA	Drinking Water	200.8	114284
550-80274-2	MP 002	Total/NA	Drinking Water	200.8	114284
MB 550-114284/1-A	Method Blank	Total/NA	Water	200.8	114284
LCS 550-114284/3-A	Lab Control Sample	Total/NA	Water	200.8	114284
LCSD 550-114284/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	114284
550-80424-A-3-B MS	Matrix Spike	Total/NA	Water	200.8	114284
550-80424-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	114284

## Lab Chronicle

Client: Arizona Dept of Environmental Quality  
Project/Site: Pb in DW/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando Elementary School

**Client Sample ID: KT 001**

**Date Collected: 04/03/17 06:45**

**Date Received: 04/04/17 10:15**

**Lab Sample ID: 550-80274-1**

**Matrix: Drinking Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			114284	04/06/17 17:16	SLS	TAL PHX
Total/NA	Analysis	200.8		1	114403	04/07/17 16:38	TEK	TAL PHX

**Client Sample ID: MP 002**

**Date Collected: 04/03/17 06:45**

**Date Received: 04/04/17 10:15**

**Lab Sample ID: 550-80274-2**

**Matrix: Drinking Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			114284	04/06/17 17:16	SLS	TAL PHX
Total/NA	Analysis	200.8		1	114403	04/07/17 16:44	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/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando 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/San Fernando Elementary Dist

TestAmerica Job ID: 550-80274-1  
SDG: San Fernando 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

80274

## 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	San Fernando Elem S.D. #35
School Name	San Fernando Elem School
Building (name/number)	Main
Type of Fixture (tap, drinking fountain etc.)	TAP
Location of Fixture (example, room number)	Kitchen
Sample Identification Number ( <u>Write this number on the sample container and on this sheet</u> )	KT001
Date of Collection	4-3-17
Time of Collection	
Printed Name of Sample Collector	Christina Hughes
Signature Sample Collector	<i>Christina Hughes</i>

550-80274 Chain of Custody



Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	4-4-17 10:18
Signature	<i>[Signature]</i>
Notes: 20.4°C      MZLE      RDB	

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.*

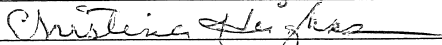
①

## 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	San Fernando School Dist #35
School Name	San Fernando Elem. School
Building (name/number)	Main
Type of Fixture (tap, drinking fountain etc.)	Drinking Fountain
Location of Fixture (example, room number)	Multi-Purpose Room
Sample Identification Number ( <u>Write this number on the sample container and on this sheet</u> )	MP002
Date of Collection	4-3-17
Time of Collection	
Printed Name of Sample Collector	Christina Hughes
Signature Sample Collector	

Notes Sample collector:

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

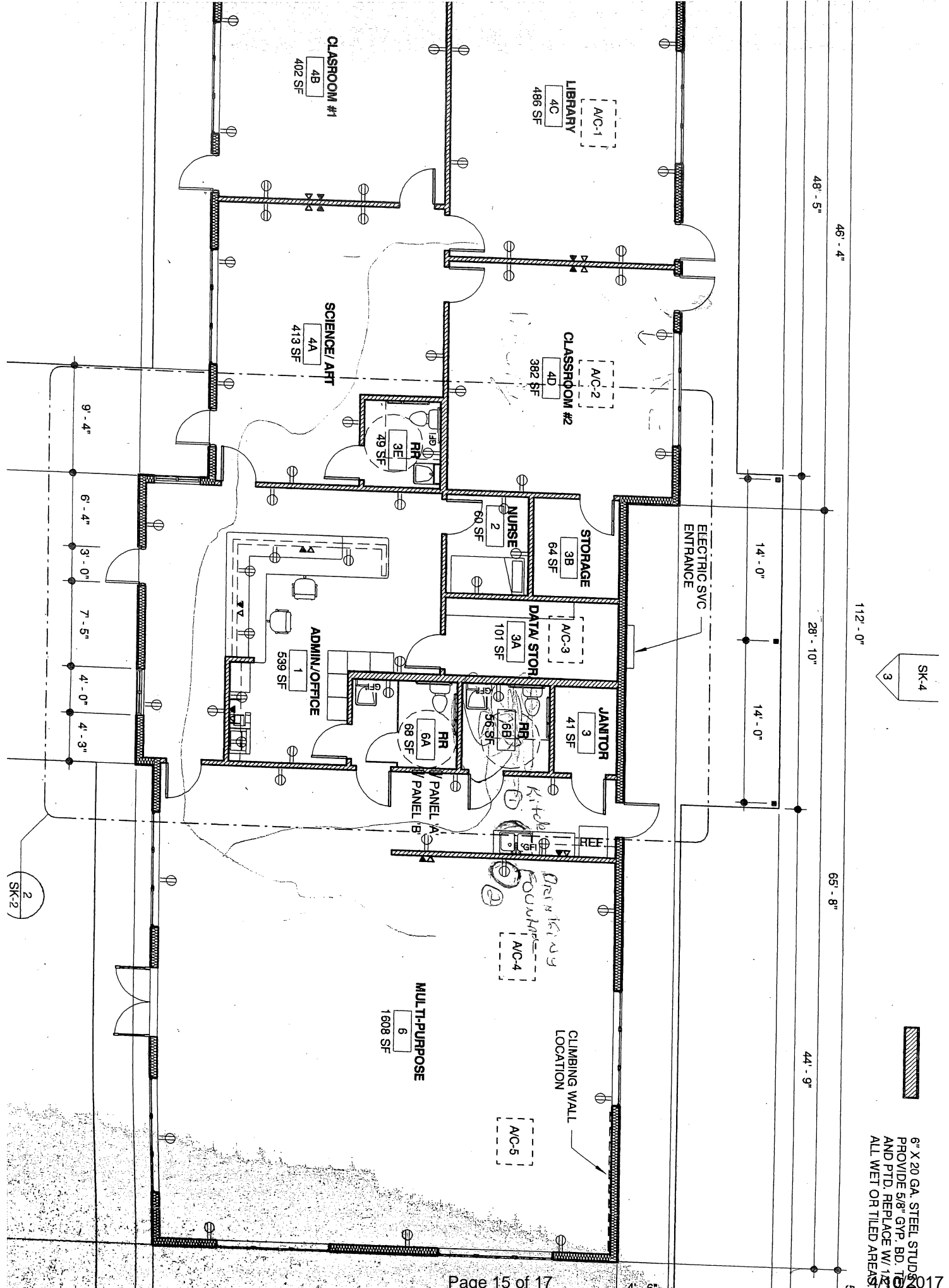
For relinquishing samples upon delivery to labs only

Relinquished date and signature \_\_\_\_\_

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

②

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



6" X 20 GA. STEEL STUDS  
PROVIDE 5/8" GYP. BD. T  
AND PTD. REPLACE W/ 1/2"  
ALL WET OR TILED AREAS

District	School	Building No	Building Desc	Building Use	Year Built	Number of Bottles Per Building
San Fernando Elementary District	San Fernando Elementary School	1001	Original Building	Classrooms	1927	not in use 2
San Fernando Elementary District	San Fernando Elementary School	1002	Modular	Classrooms	1983	no longer there 2
San Fernando Elementary District	San Fernando Elementary School	1003	SFB-funded school	Classrooms	2008	1
Address:					Number of Bottles Per Kit:	5

San Fernando Elementary School District  
ATTN: Christina Hughes  
One School House Rd.  
Sasabe, AZ 85633



## Login Sample Receipt Checklist

Client: Arizona Dept of Environmental Quality

Job Number: 550-80274-1

SDG Number: San Fernando Elementary School

**Login Number: 80274**

**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.	False	Refer to Job Narrative for details.
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.	False	No date or time on COC, logged in per container labels.
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.