

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (626) 386-1101  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Arizona Department of Environmental Quality  
1110 West Washington Street  
Phoenix, AZ 85007  
Attention: David Burchard

Date of Issue  
04/25/2017



Eurofins Eaton  
Analytical

TDF: Thomas.D.French  
Project Manager



Report: 654855  
Project: PS-ED  
ADHS License #: AZ0778  
Group: Pine Strawberry ES LDS  
PO#: Museum Conf.  
PO#: ADEQ16-116686:3

\* Accredited in accordance with TNI 2009 and ISO/IEC 17025:2005.

\* Laboratory certifies that the test results meet all **TNI 2009 and ISO/IEC 17025:2005** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Mississippi	Certified
Arizona	AZ0778	Montana	Cert 0035
Arkansas	Certified	Nebraska	Certified
California-Monrovia-ELAP	2813	Nevada	CA00006-2016
California-Colton- ELAP	2812	New Hampshire *	2959
California-Folsom- ELAP	2820	New Jersey *	CA 008
California-Fresno- ELAP	2966	New Mexico	Certified
Colorado	Certified	New York *	11320
Connecticut	PH-0107	North Carolina	06701
Delaware	CA 006	North Dakota	R-009
Florida *	E871024	Oregon (Primary AB) *	ORELAP 4034
Georgia	947	Pennsylvania *	68-565
Guam	16-003r	Puerto Rico	Certified
Hawaii	Certified	Rhode Island	LAO00326
Idaho	Certified	South Carolina	87016
Illinois *	200033	South Dakota	Certified
Indiana	C-CA-01	Tennessee	TN02839
Kansas *	E-10268	Texas *	T104704230-15-9
Kentucky	90107	Utah *	CA000062016-10
Louisiana *	LA16003	Vermont	VT0114
Maine	CA0006	Virginia *	460260
Maryland	224	Washington	C838
Commonwealth of Northern Marianas Is.	MP0004	Wyoming	Certified
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264

\* NELAP/TNI Recognized Accreditation Bodies

**ISO 17025 Accredited Method List**

**The tests listed below are accredited and meet the requirements of ISO 17025 as verified by the ANSI-ASQ National Accreditation Board/ANAB.**

**Refer to Certificate and scope of accreditation (AT 1807) found at: <http://www.eatonanalytical.com>**

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
Bicarbonate Alkalinity as HCO3	SM 2320B	x	x	x
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cryptosporidium	EPA 1623	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DCBP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Giardia	EPA 1623	x		x
Glyphosate	EPA 547	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	CDC Legionella	x		x
Mercury	EPA 245.1	x	x	x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
NDMA	EPA 521	x		x
NDMA	TQ In house method based on EPA 521 (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphate	SM 4500P E			x
Ortho Phosphorous	SM 4500P E	x		
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Semi-VOC	EPA 625		x	x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2/EPA 524.3	x		x
VOC	EPA 624		x	x
VOC	EPA SW 846 8260	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x

## Acknowledgement of Samples Received

Addr: **Arizona Department of Environmental Quality**  
1110 West Washington Street  
Phoenix, AZ 85007

Attn: David Burchard  
Phone: (602) 771-4298

Client ID: ADEQ-LEAD  
Folder #: 654855  
Project: PS-ED  
Sample Group: Pine Strawberry ES LDS Museum  
Conf.  
Project Manager: Thomas.D.French  
Phone: (480) 778-1558  
PO #: ADEQ16-116686:3  
Sampler: Roberth Keith Howell

The following samples were received from you on **April 20, 2017 at 1214**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical.

Sample #	Sample ID	Sample Date
<u>201704200256</u>	1-Confirmation First Draw Sample Type: Kitchen Sink Facility ID: LDS/Museum Sample Point ID: Kitchen Area @ICPMS Freight - Return Freight - Outbound	04/17/2017 0800
<u>201704200257</u>	2-Confirmation Flush Sample Type: Kitchen Sink Facility ID: LDS/Museum Sample Point ID: Kitchen Area @ICPMS	04/17/2017 0801
<u>201704200258</u>	3- Confirmation Day 2 Sample Type: Kitchen Sink Facility ID: LDS/Museum Sample Point ID: Kitchen Area @ICPMS	04/18/2017 0800

### Test Description

@ICPMS -- ICPMS Metals  
@ICPMS -- ICPMS Metals

# Lead In Schools Confirmation Sampling Log

School District: Pine Strawberry Elementary District

School Name: Pine Strawberry Elementary School

Building Name/Number/Year Built: LDS/Museum

Sample Collector Name and Phone Number: Keith Howell; (928) 978-6601

654855

Sample ID # (must appear on bottle)		Fixture Type/Make and model #	Fixture location	Collection Time	Collection Date
C – First Draw	1	kitchen sink / no name	Kitchen Area	8:00 AM	4-17-2017
C- Flush	2	kitchen sink / no name	Kitchen Area	8:01 AM	4-17-2017
C – First Draw Day Two	3	kitchen sink / no name	Kitchen Area	8:00 AM	4-18-2017
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
	36				
	37				
	38				
	39				
	40				

Lead In Schools Confirmation Sampling Log (page 2)					
Sample ID # (must appear on bottle)		Fixture Type/Make and model #	Fixture location	Collection Time	Collection Date
	41				
	42				
	43				
	44				
	45				
	46				
	47				
	48				
	49				
	50				

These samples were collected for screening purposes only and are not to be used for compliance determinations

For relinquishing samples upon delivery to labs only

DATE RELINQUISHED:	4-18-2017
RELINQUISHING AGENT SIGNATURE:	Robert Keith Howell
SIGNATORY NAME PRINTED:	Robert Keith Howell

For Lab Use Only

ANALYZE THIS DRINKING WATER SAMPLE FOR LEAD

DATE LAB RECEIVED:	4-20-17
TIME LAB RECEIVED:	12:14
LAB SIGNATURE:	MAV
LAB SIGNATORY NAME PRINTED:	MAV DEB. MOON
NOTES:	18.0 °C

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (626) 386-1101

Kit #: 164676



Created By: Thomas.D.French - [TDF]  
Deliver By: 04/12/2017  
STG: Bottle Orders  
Ice Type: W

**Kit Order for Arizona Department of Environmental Quality**  
Thomas.D.French is your Eurofins Eaton Analytical Service Manager

**Note: Sampler Please return this paper with your samples**

Client ID: ADEQ-LEAD  
Project Code: PS-ED Bottle Orders  
Group Name: Pine Strawberry ES LDS Museum Conf.  
PO#/JOB#: ADEQ16-116686:3

**Ship Sample Kits to**  
Pine Strawberry Elementary District  
3868 N. Pine Creek Drive  
Pine, AZ 85544  
  
Attn: Keith Howell  
Phone: (928) 476-3283

**Send Report to**  
Arizona Department of Environmental  
Quality  
1110 West Washington Street  
Phoenix, AZ 85007  
  
Attn: David Burchard  
Phone: (602) 771-4298

**Billing Address**  
Arizona Department of Environmental  
Quality  
1110 West Washington Street  
Phoenix, AZ 85007  
  
Attn: ADEQ  
Phone: (602) 771-1936

# of Sample	Tests	Bottle Qty - Type [ preservative information ]	UN DOT #
1	@ICPMS	1 - 1 L Wide Mouth Plastic [ no preservative ]	
2	@ICPMS	1 - 250 ml widemouth poly [ no preservative ]	

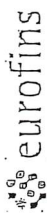
**Comments**

Pine Strawberry Elementary School-LDS Museum / Confirmation Sampling- Include Pine Strawberry Elementary District School-Specific Sample Log & Confirmation Sample Instructions. Packing instructions for return shipment to Eurofins Eaton Analytical, Inc. 750 Royal Oaks Drive, Suite C, Monrovia, CA 91016.

Return Shipment Standard Overnight

Sampler - please refer to Sample Instructions for specific instructions on completing paperwork and what to include with return shipment of the samples. Include a copy of this record also.





Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

SAMPLES REC'D DAY OF COLLECTION? ☐

IR Gun ID = 352A (Observation = 18.2 °C) (Corr.Factor -12 °C) (Final = 18.0 °C)

TYPE OF ICE: Real ☒ Synthetic ☐ No Ice ☒

CONDITION OF ICE: Frozen ☐ Partially Frozen ☐ Thawed ☒ N/A ☒

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: UPS

**UPS NEXT DAY AIR**  
TRACKING #: 1Z R04 336 84 4046 1652

## Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: <10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: <10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)

- 4) UCMR3 : 524.3: (Observation = \_\_\_\_\_ °C) (Corr.Factor = \_\_\_\_\_ °C) (Final = \_\_\_\_\_ °C) (non-GLEC)  
522: (Observation = \_\_\_\_\_ °C) (Corr.Factor = \_\_\_\_\_ °C) (Final = \_\_\_\_\_ °C)

≤ 10°C (if received within 48 hours of sample collection (not the same business day); ≤ 6°C if received after 48 hours of sample collection. Measure temperature for each method above.

- 5) LT2: Giardia /Cryptosporidium: <20 °C, not frozen (received after 8 hours of sample collection)

E. Coli: < 10°C, not frozen (if received after 2 hours of sample collection)

Giardia/Crypto: (Observation = \_\_\_\_\_ °C) (Corr.Factor = \_\_\_\_\_ °C) (Final = \_\_\_\_\_ °C)

E.Coli: (Observation = \_\_\_\_\_ °C) (Corr.Factor = \_\_\_\_\_ °C) (Final = \_\_\_\_\_ °C)

- 6) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

RECEIVED BY: <u>MAN</u>	PRINT NAME: <u>MAN</u>	COMPANY/TITLE: Eurofins Eaton Analytical	DATE: <u>4-20-17</u>	TIME: <u>12:14</u>
-------------------------	------------------------	--	----------------------	--------------------



Tel: (626) 386-1100  
Fax: (626) 386-1101  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments****Report:** 654855**Project:** PS-ED**Group:** Pine Strawberry ES LDS Museum  
Conf.

Arizona Department of Environmental Quality  
David Burchard  
1110 West Washington Street  
Phoenix, AZ 85007

---

Tel: (626) 386-1100  
Fax: (626) 386-1101  
1 800 566 LABS (1 800 566 5227)

**Report:** 654855  
**Project:** PS-ED  
**Group:** Pine Strawberry ES LDS Museum  
Conf.

**Arizona Department of Environmental Quality**  
David Burchard  
1110 West Washington Street  
Phoenix, AZ 85007

Samples Received on:  
04/20/2017 1214

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b><u>201704200256</u></b>				
		<b><u>1-Confirmation First Draw</u></b>				
04/22/2017 09:52	Lead Total ICAP/MS		18	15	ug/L	0.5
		<b><u>201704200257</u></b>				
		<b><u>2-Confirmation Flush</u></b>				
04/22/2017 09:52	Lead Total ICAP/MS		14	15	ug/L	0.5
		<b><u>201704200258</u></b>				
		<b><u>3- Confirmation Day 2</u></b>				
04/22/2017 09:53	Lead Total ICAP/MS		3.7	15	ug/L	0.5

Tel: (626) 386-1100  
Fax: (626) 386-1101  
1 800 566 LABS (1 800 566 5227)

Laboratory Data

**Report:** 654855  
**Project:** PS-ED  
**Group:** Pine Strawberry ES LDS Museum Conf.

**Arizona Department of Environmental Quality**  
David Burchard  
1110 West Washington Street  
Phoenix, AZ 85007

Samples Received on:  
04/20/2017 1214

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>1-Confirmation First Draw (201704200256)</b>						<b>Sampled on 04/17/2017 0800</b>			
Sample Type: Kitchen Sink									
Facility ID: LDS/Museum									
Sample Point ID: Kitchen Area									
<b>EPA 200.8 - ICPMS Metals</b>									
04/21/17	04/22/17 09:52	988375	988837	(EPA 200.8)	Lead Total ICAP/MS	18	ug/L	0.5	1
<b>2-Confirmation Flush (201704200257)</b>						<b>Sampled on 04/17/2017 0801</b>			
Sample Type: Kitchen Sink									
Facility ID: LDS/Museum									
Sample Point ID: Kitchen Area									
<b>EPA 200.8 - ICPMS Metals</b>									
04/21/17	04/22/17 09:52	988375	988837	(EPA 200.8)	Lead Total ICAP/MS	14	ug/L	0.5	1
<b>3- Confirmation Day 2 (201704200258)</b>						<b>Sampled on 04/18/2017 0800</b>			
Sample Type: Kitchen Sink									
Facility ID: LDS/Museum									
Sample Point ID: Kitchen Area									
<b>EPA 200.8 - ICPMS Metals</b>									
04/21/17	04/22/17 09:53	988375	988837	(EPA 200.8)	Lead Total ICAP/MS	3.7	ug/L	0.5	1

Tel: (626) 386-1100  
Fax: (626) 386-1101  
1 800 566 LABS (1 800 566 5227)

**Laboratory QC Summary**

**Report:** 654855  
**Project:** PS-ED  
**Group:** Pine Strawberry ES LDS Museum  
Conf.

Arizona Department of Environmental Quality

---

**ICPMS Metals**

**Prep Batch: 988375 Analytical Batch: 988837**

201704200256	1-Confirmation First Draw
201704200257	2-Confirmation Flush
201704200258	3- Confirmation Day 2

**Analysis Date: 04/22/2017**

Analyzed by: RPD  
Analyzed by: RPD  
Analyzed by: RPD

Tel: (626) 386-1100  
Fax: (626) 386-1101  
1 800 566 LABS (1 800 566 5227)

**Report:** 654855  
**Project:** PS-ED  
**Group:** Pine Strawberry ES LDS Museum Conf.

Arizona Department of Environmental Quality

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
<b>ICPMS Metals by EPA 200.8</b>									
<b>Analytical Batch: 988837</b>					<b>Analysis Date: 04/22/2017</b>				
LCS1	Lead Total ICAP/MS		20	20.0	ug/L	100	(85-115)		
LCS2	Lead Total ICAP/MS		20	19.8	ug/L	99	(85-115)	20	1.0
MBLK	Lead Total ICAP/MS			<0.25	ug/L				
MRL_CHK	Lead Total ICAP/MS		0.5	0.504	ug/L	101	(50-150)		
MS_201704200157	Lead Total ICAP/MS	ND	20	20.5	ug/L	103	(70-130)		
MS2_201704200266	Lead Total ICAP/MS	48	20	69.8	ug/L	109	(70-130)		
MSD_201704200157	Lead Total ICAP/MS	ND	20	20.7	ug/L	103	(70-130)	20	0.97
MSD2_201704200266	Lead Total ICAP/MS	48	20	69.2	ug/L	106	(70-130)	20	0.86

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.