

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
05/22/2017



Eurofins Eaton
Analytical

TDF: Thomas.D.French
Project Manager

Report:661049
Project:TUBACITY-UD
ADHS License #:AZ0778
Group:Dzil Libei Elementary School
PO#: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 HCO ₃	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 CO ₃	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-CLO ₂ 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-SiO ₂ C	x	x	
Sulfide	SM 4500-S ⁻ D		x	
Sulfite	SM 4500-SO ₃ 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 #: 661049
Project: TUBACITY-UD
Sample Group: Dzil Libei Elementary School

Project Manager: Thomas.D.French
Phone: (480) 778-1558
PO #: ADEQ16-116686:3
Sampler: Raymond P. Begay

The following samples were received from you on **May 18, 2017** at **1203**. 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>201705180333</u>	1001-100	05/14/2017 0854
	Sample Type: Sink Facility ID: Dzil Libei Sample Point ID: Teacher Work Lounge	
	@ICPMS	Freight - Outbound
		Freight - Return
<u>201705180334</u>	1002-101	05/14/2017 0904
	Sample Type: Sink Facility ID: Dzil Libei Sample Point ID: Classroom Sink #305	
	@ICPMS	
<u>201705180335</u>	1003-102	05/14/2017 0909
	Sample Type: Sink Facility ID: Dzil Libei Sample Point ID: Kitchen Sink	
	@ICPMS	

Test Description

@ICPMS -- ICPMS Metals

661049

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	Tuba City Unified District
School Name	Dzil Libei Elementary School
Building (name/number)	Dzil Libei
Type of Fixture (tap, drinking fountain etc.)	Sink
Location of Fixture (example, room number)	Teacher Work lounge
Sample Identification Number (<u>Write this number on the sample container and on this sheet</u>)	Dzil Libei Elementary School 1001-100
Date of Collection	May 14, 2017
Time of Collection	8:54 Am D.S.T.
Printed Name of Sample Collector	Raymond P. Begay
Signature Sample Collector	Raymond P. Begay

Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	5/18/17 1203
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.

Collection Log

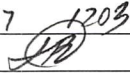
for experienced sample collectors

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	Tuba City Unified District
School Name	Dzil Libei Elementary School
Building (name/number)	Dzil Libei
Type of Fixture (tap, drinking fountain etc.)	classroom sink
Location of Fixture (example, room number)	classroom sink # 305
Sample Identification Number (<u>Write this number on the sample container and on this sheet</u>)	Dzil Libei Elementary School 1002-101
Date of Collection	May 14, 2017
Time of Collection	9:04 am D.S.T.
Printed Name of Sample Collector	Raymond P. Begay
Signature Sample Collector	Raymond P. Begay

Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	5/18/17 1203
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.

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	Tuba City Unified District
School Name	Dzil Libei Elementary School
Building (name/number)	Dzil Libei
Type of Fixture (tap, drinking fountain etc.)	Sink
Location of Fixture (example, room number)	Kitchen Sink
Sample Identification Number (<u>Write this number on the sample container and on this sheet</u>)	Dzil Libei Elementary School 1003-102
Date of Collection	May 14, 2017
Time of Collection	9:09 AM D.S.T.
Printed Name of Sample Collector	Raymond P. Begay
Signature Sample Collector	Raymond P. Begay

Notes Sample collector:

For Lab use only	
Analyze this drinking water sample for lead	
Date and Time Lab received	5/18/17 1203
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.



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

661049

SAMPLE TEMP RECEIVED:

IR Gun ID = 570A (Observation = 20.0 °C) (Corr.Factor 0.4 °C) (Final = 21.0 °C)

TYPE OF ICE: Real ☒ Synthetic ☐ No Ice ☒

CONDITION OF ICE: Frozen ☐ Partially Frozen ☐ Thawed ☒

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

SAMPLES REC'D DAY OF COLLECTION? ☐

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:

SIGNATURE

[Signature]

COMPANY/TITLE

Eurofins Eaton Analytical

TIME

DATE

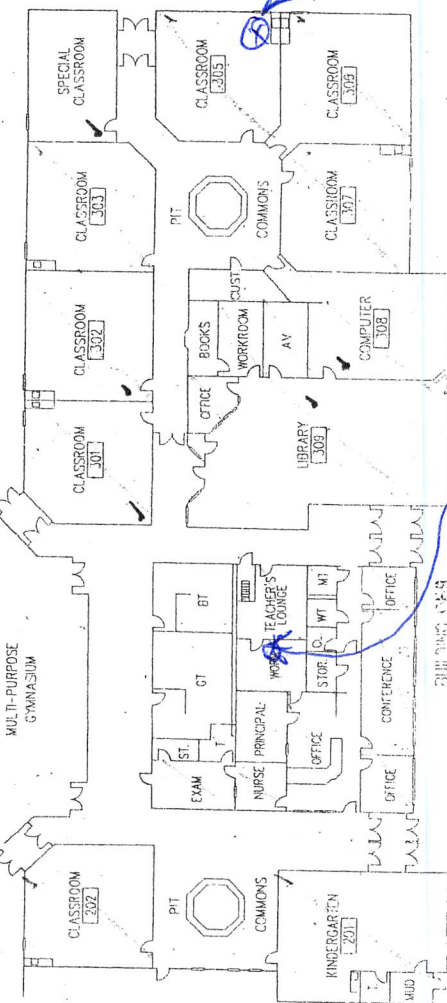
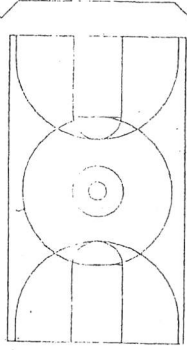
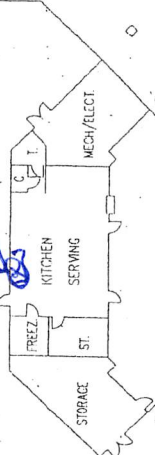
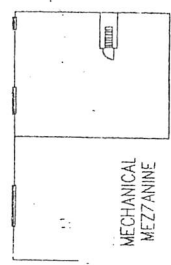
5/18/17

1204

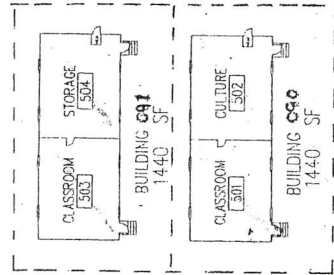
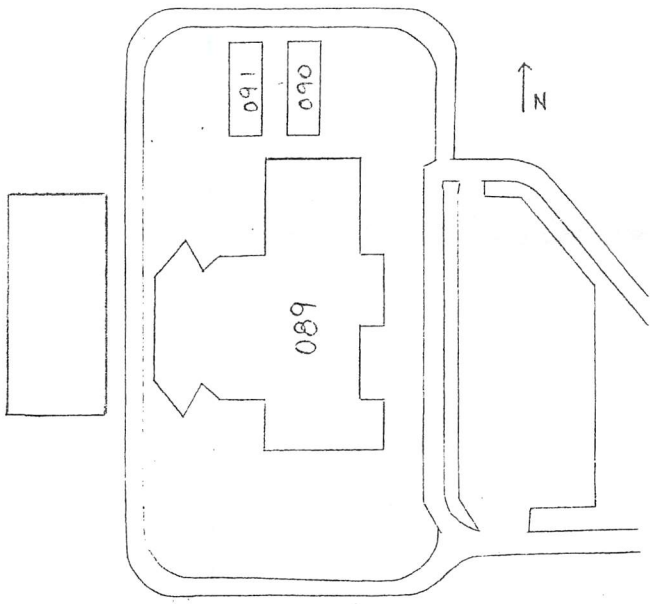
Dziatkiewicz Elementary

SITE	BLDG	Room
111	CAM	089 MULTIPURPOSE
		090 Classroom
		091 Classroom / STRG.

Stink compartment



Teacher lounge



Sample taken in 305

6/12
Tue 1-4-84
11.761

Tuba City Unified District	Dzil Libei Elementary School	1001	100	Elementary	1997	Coconino	1
Tuba City Unified District	Dzil Libei Elementary School	1002	101	Elementary	1998	Coconino	1
Tuba City Unified District	Dzil Libei Elementary School	1003	102	Elementary	1998	Coconino	1
Total Containers							3

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

Laboratory Comments

Report: 661049
Project: TUBACITY-UD
Group: Dzil Libei Elementary School

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: 661049
Project: TUBACITY-UD
Group: Dzil Libei Elementary School

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

Samples Received on:
05/18/2017 1203

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
05/20/2017 20:22	201705180333 Lead Total ICAP/MS	<u>1001-100</u>	4.7	15	ug/L	0.5
05/20/2017 20:23	201705180334 Lead Total ICAP/MS	<u>1002-101</u>	0.89	15	ug/L	0.5
05/20/2017 20:29	201705180335 Lead Total ICAP/MS	<u>1003-102</u>	49	15	ug/L	0.5

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

Laboratory Data

Report: 661049
Project: TUBACITY-UD
Group: Dzil Libei Elementary School

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

Samples Received on:
05/18/2017 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
1001-100 (201705180333)						Sampled on 05/14/2017 0854			
Sample Type: Sink									
Facility ID: Dzil Libei									
Sample Point ID: Teacher Work Lounge									
EPA 200.8 - ICPMS Metals									
05/19/17	05/20/17 20:22	996519	996696	(EPA 200.8)	Lead Total ICAP/MS	4.7	ug/L	0.5	1
1002-101 (201705180334)						Sampled on 05/14/2017 0904			
Sample Type: Sink									
Facility ID: Dzil Libei									
Sample Point ID: Classroom Sink #305									
EPA 200.8 - ICPMS Metals									
05/19/17	05/20/17 20:23	996519	996696	(EPA 200.8)	Lead Total ICAP/MS	0.89	ug/L	0.5	1
1003-102 (201705180335)						Sampled on 05/14/2017 0909			
Sample Type: Sink									
Facility ID: Dzil Libei									
Sample Point ID: Kitchen Sink									
EPA 200.8 - ICPMS Metals									
05/19/17	05/20/17 20:29	996519	996697	(EPA 200.8)	Lead Total ICAP/MS	49	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: 661049
Project: TUBACITY-UD
Group: Dzil Libei Elementary School

Arizona Department of Environmental Quality

ICPMS Metals

Prep Batch: 996519 Analytical Batch: 996696

201705180333	1001-100
201705180334	1002-101

Analysis Date: 05/20/2017

Analyzed by: RPD
Analyzed by: RPD

ICPMS Metals

Prep Batch: 996519 Analytical Batch: 996697

201705180335	1003-102
--------------	----------

Analysis Date: 05/20/2017

Analyzed by: RPD

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

Report: 661049
Project: TUBACITY-UD
Group: Dzil Libei Elementary School

Arizona Department of Environmental Quality

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
ICPMS Metals by EPA 200.8									
Analytical Batch: 996696					Analysis Date: 05/20/2017				
LCS1	Lead Total ICAP/MS		20	19.6	ug/L	98	(85-115)		
LCS2	Lead Total ICAP/MS		20	19.7	ug/L	98	(85-115)	20	0.51
MBLK	Lead Total ICAP/MS			<0.25	ug/L				
MRL_CHK	Lead Total ICAP/MS		0.5	0.516	ug/L	103	(50-150)		
MS_201705180268	Lead Total ICAP/MS	0.51	20	21.9	ug/L	107	(70-130)		
MS2_201705180314	Lead Total ICAP/MS	ND	20	20.2	ug/L	101	(70-130)		
MSD_201705180268	Lead Total ICAP/MS	0.51	20	21.9	ug/L	107	(70-130)	20	0.0
MSD2_201705180314	Lead Total ICAP/MS	ND	20	21.0	ug/L	105	(70-130)	20	4.4
ICPMS Metals by EPA 200.8									
Analytical Batch: 996697					Analysis Date: 05/20/2017				
LCS1	Lead Total ICAP/MS		20	19.9	ug/L	99	(85-115)		
LCS2	Lead Total ICAP/MS		20	19.8	ug/L	99	(85-115)	20	0.50
MBLK	Lead Total ICAP/MS			<0.25	ug/L				
MRL_CHK	Lead Total ICAP/MS		0.5	0.519	ug/L	104	(50-150)		
MS_201705180335	Lead Total ICAP/MS	49	20	70.5	ug/L	107	(70-130)		
MS2_201705180352	Lead Total ICAP/MS	ND	20	21.8	ug/L	109	(70-130)		
MSD_201705180335	Lead Total ICAP/MS	49	20	70.0	ug/L	105	(70-130)	20	0.71
MSD2_201705180352	Lead Total ICAP/MS	ND	20	21.4	ug/L	107	(70-130)	20	1.9

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.