



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
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www.alsglobal.com

March 27, 2017

Analytical Report for Service Request No: K1702754

Richard Hamilton
Lower Columbia College
1600 Maple St.
Longview, WA 98632

RE: Water Samples Memorial Park

Dear Richard,

Enclosed are the results of the sample(s) submitted to our laboratory March 22, 2017
For your reference, these analyses have been assigned our service request number **K1702754**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager



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ALS Group USA, Corp
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www.alsglobal.com

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.



Chain of Custody

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PROJECT NAME WATER SAMPLES MEMORIAL PARK						NUMBER OF CONTAINERS	Semi-volatile Organics by GC/MS 625 <input type="checkbox"/> 8270 <input type="checkbox"/> 8270LL <input type="checkbox"/> SIM PAH <input type="checkbox"/>	Volatile Organics 624 <input type="checkbox"/> 8260 <input type="checkbox"/>	Hydrocarbons (*see below) Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Oil <input type="checkbox"/>	Oil & Grease/TFPH 1664 HEM <input type="checkbox"/> 1664 SGT <input type="checkbox"/>	PCBs Aroclors <input type="checkbox"/>	Pesticides/Herbicides 608 <input type="checkbox"/> 8081 <input type="checkbox"/>	Congeners <input type="checkbox"/>	Chlorophenolics Tri <input type="checkbox"/> 8141 <input type="checkbox"/> 8151 <input type="checkbox"/>	Tetra <input type="checkbox"/> 8151M <input type="checkbox"/>	Metals, Total or Dissolved (See List below) PCP <input type="checkbox"/>	Cyanide <input type="checkbox"/>	Hex-Chrom <input type="checkbox"/>	(circle) pH, Cond., Cl, SO ₄ , PO ₄ , F, NO ₂ , NO ₃ , BOD, TSS, TDS, Turb.	(circle) NH ₃ -N, COD, TKN, TOC, DOC, NO ₂ +NO ₃ , T-Phos	TOX 9020 <input type="checkbox"/> AOX 1650 <input type="checkbox"/> 506 <input type="checkbox"/>	Alkalinity <input type="checkbox"/> CO ₃ <input type="checkbox"/> HCO ₃ <input type="checkbox"/>	Dioxins/Furans 1613 <input type="checkbox"/> 8290 <input type="checkbox"/>	Dissolved Gases RSK 175 <input type="checkbox"/> Methane <input type="checkbox"/> CO ₂ <input type="checkbox"/>	Ethane <input type="checkbox"/> Ethene <input type="checkbox"/>	REMARKS
PROJECT NUMBER																										
PROJECT MANAGER RICHARD HAMILTON																										
COMPANY NAME LOWER COLUMBIA COLLEGE																										
ADDRESS 1600 MAPLE ST.																										
CITY/STATE/ZIP LONGVIEW WA 98632																										
E-MAIL ADDRESS RHamilton@LCC.CTC.EDU																										
PHONE # 360-462-2261 FAX # _____																										
SAMPLERS SIGNATURE <i>Suzanne M. Munch</i>																										
SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX																						
MEMORIAL PARK CLASSROOM 101	3-21-17	7:02			1																					
MEMORIAL PARK RESTROOM 101B		7:03			1																					
MEMORIAL PARK CLASSROOM 102		7:04			1																					
MEMORIAL PARK RESTROOM 102B		7:06			1																					
MEMORIAL PARK CLASSROOM 103		7:08			1																					
MEMORIAL PARK RESTROOM 103B		7:09			1																					
MEMORIAL PARK RESTROOM AG WEST		7:00			1																					
MEMORIAL PARK RESTROOM AG EAST		7:01			1																					
MEMORIAL PARK ROOM 104 SINK		7:10			1																					
MEMORIAL PARK ROOM 109 HAND SINK		7:12			1																					

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.

___ 5 day

___ Standard (15 working days)

___ Provide FAX Results

Requested Report Date _____

Circle which metals are to be analyzed:


Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe **(Pb)** Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe **(Pb)** Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

***INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)**

SPECIAL INSTRUCTIONS/COMMENTS:

Container Supply Number



77946

Sample Shipment contains USDA regulated soil samples (check box if ap,

RELINQUISHED BY:

Suzanne M. Munch
Signature
Suzanne Munch
Printed Name

9:07 3/22/17
Date/Time
LCC
Firm

RECEIVED BY:

R Hamilton
Signature
R Hamilton
Printed Name

3/22/17 0907
Date/Time
ALS
Firm

RELINQUISHED BY:

Signature

Printed Name

Date/Time

Firm

RECEIVED BY:

Signature

Printed Name

Date/Time

Firm



PC HH

Cooler Receipt and Preservation Form

Client Lower Columbia College Service Request K17 02754

Received: 3/22/17 Opened: 3/22/17 By: KO Unloaded: 3/22/17 By: KO

- 1. Samples were received via? **USPS** **Fed Ex** **UPS** **DHL** **PDX** **Courier** **Hand Delivered**
- 2. Samples were received in: (circle) **Cooler** **Box** **Envelope** **Other** NA
- 3. Were custody seals on coolers? **NA** **Y** **N** If yes, how many and where? _____
If present, were custody seals intact? **Y** **N** If present, were they signed and dated? **Y** **N**

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID	Tracking Number	NA	Filed
20.7	20.8	21.8	21.9	+1	3104	NA		NA	

- 4. Packing material: **Inserts** **Baggies** **Bubble Wrap** **Gel Packs** **Wet Ice** **Dry Ice** **Sleeves** N/A
- 5. Were custody papers properly filled out (ink, signed, etc.)? **NA** **Y** **N**
- 6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* **NA** **Y** **N**
If applicable, tissue samples were received: **Frozen** **Partially Thawed** **Thawed**
- 7. Were all sample labels complete (i.e analysis, preservation, etc.)? **NA** **Y** **N**
- 8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* **NA** **Y** **N**
- 9. Were appropriate bottles/containers and volumes received for the tests indicated? **NA** **Y** **N**
- 10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* **NA** **Y** **N**
- 11. Were VOA vials received without headspace? *Indicate in the table below.* **NA** **Y** **N**
- 12. Was C12/Res negative? **NA** **Y** **N**

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____



Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Classroom 101
Lab Code: K1702754-001

Service Request: K1702754
Date Collected: 03/21/17 07:02
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	0.652	ug/L	0.020	1	03/23/17 16:18	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Restroom 101B
Lab Code: K1702754-002

Service Request: K1702754
Date Collected: 03/21/17 07:03
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	0.893	ug/L	0.020	1	03/23/17 16:27	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Classroom 102
Lab Code: K1702754-003

Service Request: K1702754
Date Collected: 03/21/17 07:04
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	0.748	ug/L	0.020	1	03/23/17 16:29	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Restroom 102B
Lab Code: K1702754-004

Service Request: K1702754
Date Collected: 03/21/17 07:06
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	0.486	ug/L	0.020	1	03/23/17 16:38	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Classroom 103
Lab Code: K1702754-005

Service Request: K1702754
Date Collected: 03/21/17 07:08
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	0.605	ug/L	0.020	1	03/23/17 16:41	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Restroom 103B
Lab Code: K1702754-006

Service Request: K1702754
Date Collected: 03/21/17 07:09
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	0.500	ug/L	0.020	1	03/23/17 16:43	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Restroom AG West
Lab Code: K1702754-007

Service Request: K1702754
Date Collected: 03/21/17 07:00
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	1.06	ug/L	0.020	1	03/23/17 16:46	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Restroom AG East
Lab Code: K1702754-008

Service Request: K1702754
Date Collected: 03/21/17 07:01
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	0.431	ug/L	0.020	1	03/23/17 16:49	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Room 104 Sink
Lab Code: K1702754-009

Service Request: K1702754
Date Collected: 03/21/17 07:10
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	4.12	ug/L	0.020	1	03/23/17 16:52	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Memorial Park Room 109 Hand Sink
Lab Code: K1702754-010

Service Request: K1702754
Date Collected: 03/21/17 07:12
Date Received: 03/22/17 09:07
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	0.431	ug/L	0.020	1	03/23/17 16:54	03/23/17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water
Sample Name: Method Blank
Lab Code: KQ1703219-01

Service Request: K1702754
Date Collected: NA
Date Received: NA
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Lead	200.8	ND U	ug/L	0.020	1	03/23/17 16:07	03/23/17	

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water

Service Request: K1702754
Date Collected: NA
Date Received: NA
Date Analyzed: 03/23/17

Replicate Sample Summary

Total Metals

Sample Name: Batch QC
Lab Code: K1702775-001

Units: ug/L
Basis: NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
				KQ1703219-04 Result			
Lead	200.8	0.020	0.318	0.319	0.319	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water

Service Request: K1702754
Date Collected: 03/21/17
Date Received: 03/22/17
Date Analyzed: 03/23/17

Replicate Sample Summary

Total Metals

Sample Name: Memorial Park Classroom 101
Lab Code: K1702754-001

Units: ug/L
Basis: NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
				KQ1703219-06 Result			
Lead	200.8	0.020	0.652	0.655	0.653	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water

Service Request: K1702754
Date Collected: N/A
Date Received: N/A
Date Analyzed: 03/23/17
Date Extracted: 03/23/17

Matrix Spike Summary
Total Metals

Sample Name: Batch QC
Lab Code: K1702775-001
Analysis Method: 200.8
Prep Method: EPA CLP-METALS ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ1703219-05

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Lead	0.318	52.5	50.0	104	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water

Service Request: K1702754
Date Collected: 03/21/17
Date Received: 03/22/17
Date Analyzed: 03/23/17
Date Extracted: 03/23/17

Matrix Spike Summary
Total Metals

Sample Name: Memorial Park Classroom 101
Lab Code: K1702754-001
Analysis Method: 200.8
Prep Method: EPA CLP-METALS ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ1703219-07

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Lead	0.652	52.9	50.0	104	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water

Service Request: K1702754
Date Analyzed: 03/23/17

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ1703219-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Lead	200.8	50.7	50.0	101	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Lower Columbia College (LCC)
Project: Water Samples Memorial Park
Sample Matrix: Drinking Water

Service Request: K1702754
Date Analyzed: 03/23/17

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ1703219-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Lead	200.8	1.02	1.00	102	85-115