



REPORT FOR LEAD TESTING IN DRINKING WATER

for

WHITMAN COLLEGE CAMPUS AND INTEREST HOUSES

Walla Walla, WA 99362

Project #E2016/0706

August 2, 2016

prepared for:

Whitman College
Attn: Fred Miller
345 Boyer Ave.
Walla Walla, WA 99362

prepared by:

Blue Mountain Environmental & Consulting Co., Inc.
PO Box 545/125 Main Street
Waitsburg, WA 99361
(509) 520-6519

PROJECT SUMMARY

Client: Whitman College
345 Boyer Ave.
Walla Walla, WA 99362

Point of Contact: Mr. Fred Miller

Property: Whitman College
Walla Walla, Washington

Major Commercial Activity: University

Environmental Professional: Yancy Meyer, BMEC, Inc.

Project Number: E2016/0706

Report Date: August J, 2016

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1.0 INTRODUCTION

Whitman College retained Blue Mountain Environmental & Consulting Company, Inc. (BMEC) to perform an investigation for the presence of lead in drinking water in all of the campus buildings, interest houses, and the Mill Creek cabins, located in Walla Walla, Washington, and Milton-Freewater, Oregon (Mill Creek cabins). Yancy Meyer, Environmental Professional with BMEC, assisted by Caris Lynch of BMEC, performed the water sampling on July 19th and 20th, and August 1st, 2016.

At the request of Whitman College, 1-4 water samples were taken from each building from sinks and water fountains. Samples were taken according to EPA protocols, allowing the sink/fountain to run for at least 30 seconds prior to sampling mid-stream with sterile containers using nitrile gloves.

Sampling results indicate two of the sinks and one drinking fountain sampled had total lead levels above the EPA action level of 15 parts per billion (ppb). All of the other samples were either non-detect or below the 15 ppb action level. The treatment technique regulation for lead (referred to as the Lead and Copper Rule) requires water systems to control the corrosivity of the water; however, as most of the samples were low or non-detect, it is the opinion of BMEC that corrosivity is not the issue, and that a filter system to remove the lead at the sinks would be appropriate treatment.

1.1 BACKGROUND

In 1974, Congress passed the Safe Drinking Water Act. This law requires EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur with an adequate margin of safety. These non-enforceable health goals, based solely on possible health risks are called maximum contaminant level goals (MCLGs). The MCLG for lead is zero. EPA has set this level based on the best available science which shows there is no safe level of exposure to lead.

For most contaminants, EPA sets an enforceable regulation called a maximum contaminant level, (MCL) the highest level of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. EPA sets MCLs at levels that are economically and technologically feasible. However, because lead contamination of drinking water often results from corrosion of the plumbing materials belonging to water system customers, EPA established a treatment technique rather than an MCL for lead. A treatment technique is an enforceable procedure or level of technological performance which water systems must follow to ensure control of a contaminant.

The treatment technique regulation for lead (referred to as the Lead and Copper Rule) requires water systems to control the corrosivity of the water. The regulation also requires systems to collect tap samples from sites served by the system that are more likely to have plumbing materials containing lead. If more than 10 percent of tap water samples exceed the lead action level of 15 parts per billion, then water systems are required to take additional actions including:

- Taking further steps optimize their corrosion control treatment (for water systems serving 50,000 people that have not fully optimized their corrosion control).
- Educating the public about lead in drinking water and actions consumers can take to reduce their exposure to lead.
- Replacing the portions of lead service lines (lines that connect distribution mains to customers) under the water system's control.

EPA issued the Lead and Copper Rule in 1991 and revised the regulation in 2000 and 2007. States may set more stringent drinking water regulations than EPA; however, Washington State protocols are the same as the national protocols.

2.0 SCOPE OF SERVICES

LEAD IN DRINKING WATER: Title XIV of The Public Health Service Act: Safety of Public Water Systems (Safe Drinking Water Act) regulates the maximum level of lead considered to be safe for drinking water at 15 ppb. The scope of service included sampling of drinking water in the campus buildings, interest houses, and the Mill Creek cabins, and analysis of the samples by an accredited laboratory. Analysis of the results to recommend corrective action if needed.

3.0 SUMMARY OF REGULATIONS

3.1. TITLE XIV OF THE PUBLIC HEALTH SERVICE ACT SAFETY OF PUBLIC WATER SYSTEMS (SAFE DRINKING WATER ACT)

The NATIONAL DRINKING WATER REGULATIONS SEC. 1412 regulates contaminants in drinking water, and has set a 15 ppb maximum level for lead. Any lead contamination above that level must be addressed by treatment.

4.0 SAMPLING METHODOLOGY

Blue Mountain Environmental & Consulting sampled drinking water according to EPA protocols, allowing the sink/fountain to run for at least 30 seconds prior to sampling mid-stream with sterile containers using nitrile gloves. The samples were then submitted with chain of custody documentation to On-Site Laboratory for analysis of total lead content.

5.0 LABORATORY INFORMATION

Samples were analyzed by On-Site Laboratory in Redmond, Washington by EPA Method 200.8. OnSite Environmental, Inc. performs a wide variety of analytical methods under various regulatory programs using published and internally developed validated test methods. The laboratory participates in semi-annual single-blind performance evaluations studies as part of on-going certification/accreditation with the Washington Department of Ecology (WDOE) and Alaska Department of Environmental Conservation (ADEC).

6.0 RESULTS

The following sample results were over the EPA action level of 15 ppb:

Sample Number	Location	Result
7-18-15	Music Hall Green Room 119	16 ppb
7-18-40	Welty Wellness Center sink next to Room 111	24 ppb
8-1-81	Music Hall Fountain across from Room 118	18 ppb

The following sample results were at or above the detection limit of 1.0 ppb and under the EPA action level of 15 ppb:

Sample Number	Location	Result
7-18-05	Harper Joy Theatre basement dressing room	4.3 ppb
7-18-06	Harper Joy Theatre lobby middle fountain	6.0 ppb
7-18-08	Sherwood Center next to Room 201	4.7 ppb
7-18-09	Cordiner Hall lobby fountain near Men's room	8.0 ppb
7-18-14	Hunter Conservatory 2 nd floor fountain by elevator	1.1 ppb
7-18-16	Music Hall fountain next to Room 101	5.2 ppb
7-18-18	Boyer House fountain by front entrance	2.7 ppb
7-18-19	Glover Alston house kitchen sink	1.5 ppb
7-18-22	Marcus House kitchen sink	1.1 ppb
7-18-23	Visual Arts lounge sink	1.9 ppb
7-18-24	Visual Arts fountain next to Room 116	1.6 ppb
7-18-25	Anderson Hall kitchen Room 108	2.2 ppb
7-18-26	Anderson Hall fountain next to stairs	6.7 ppb
7-18-37	Maxey Hall faculty lounge Room 148	1.7 ppb
7-18-38	Maxey Hall fountain next to elevators west entrance	1.9 ppb
7-18-39	Maxey Hall 1 st floor between Room W28 and Auditorium	1.3 ppb
7-18-41	Welty Wellness house north kitchen sink	1.5 ppb
7-18-44	Lyman Hall fountain next to main common room	1.1 ppb
7-18-45	Jewett Hall common kitchen Room 110	2.6 ppb
7-18-46	Jewett Hall drinking fountain south entrance	10 ppb
7-18-49	Jewett Hall café kitchen	1.0 ppb
7-18-50	Olin Hall East Room 110	3.6 ppb
7-18-51	Penrose Library faculty lounge Room 318	1.9 ppb
7-18-54	North Hall sink 2 nd floor across from Room 231	1.5 ppb
7-18-55	North Hall fountain 2 nd floor across from Room 231	7.7 ppb
7-18-56	Boyer House Apt 201 ½	2.0 ppb
7-18-57	Boyer House Apt 202 ½	2.0 ppb
7-19-58	Fine Arts House kitchen sink	2.4 ppb
7-19-63	Community Co-op Service house kitchen sink	3.9 ppb
7-19-66	Writing House kitchen sink	1.2 ppb
7-19-69	Tamarac House common sink Room 1	1.2 ppb
7-19-72	President's House kitchen sink	1.3 ppb
7-19-73	Sigma House kitchen sink	5.3 ppb
7-19-75	JWC main cabin kitchen sink	1.2 ppb
7-19-76	JWC Ansel Adams cabin kitchen sink	1.8 ppb

7-19-77	Phi Theta Kappa kitchen sink	2.8 ppb
7-20-79	DSHS building basement sink	2.2 ppb
8-1-82	Music Hall fountain next to Room 213	12 ppb

The following samples were below the detection limit of 1.0 ppb:

Sample Number	Location
7-18-01	Science Building Room 221
7-18-02	Science Building drinking fountain next to Room 115
7-18-03	Physical Plant Conference room sink
7-18-04	Physical Plant fountain next to conference room
7-18-07	Sherwood Center faculty lounge sink next to Room 209
7-18-10	Baker Ferguson Fitness Center pool fountain
7-18-11	Reid Hall commercial kitchen sink
7-18-12	Reid Hall lobby fountain
7-18-13	Hunter Conservatory faculty lounge sink
7-18-17	Boyer House sink by Room 211
7-18-20	Bratten Hall fountain next to stairs
7-18-21	Dance Hall fountain next to restrooms
7-18-27	Prentiss Hall kitchen sink
7-18-28	Prentiss Hall Room 222
7-18-29	Prentiss Hall fountain by great hall
7-18-30	Douglas Hall kitchen Room 112
7-18-31	Douglas Hall Room 216 Apt B2
7-18-32	Douglas Hall fountain next to Room 112
7-18-33	Baker Center commercial kitchen sink
7-18-34	Memorial Hall break room 121
7-18-35	Memorial Hall fountain 2 nd floor north entrance
7-18-36	Southeast tennis court fountain
7-18-42	Penrose House butler pantry sink
7-18-43	Lyman Hall Mable Dillard lounge Room B111
7-18-47	Jewett Hall café kitchen sink
7-18-48	Olin Hall fountain next to Room 243
7-18-52	Penrose Library fountain next to Room 213
7-18-53	Martin Field fountain next to entrance
7-19-59	Spanish House kitchen sink
7-19-60	French House kitchen sink
7-19-61	Environmental House kitchen sink
7-19-62	Global Awareness house kitchen sink
7-19-64	German House
7-19-65	Mecca House kitchen sink
7-19-67	Tekisujuku House kitchen sink
7-19-68	Tamarac House kitchen sink Room 105
7-19-70	College House common sink
7-19-71	College House Apt. A110 sink
7-19-74	College Cabin kitchen sink
7-20-78	Prentiss Hall Room 106 kitchen sink
7-20-80	DSHS Building fountain building entry
8-1-83	Reid Center Bookstore Room 112

8.0 DISCUSSION & RECOMMENDATIONS

Sampling results indicate two of the sinks and one drinking fountain sampled had total lead levels above the EPA action level of 15 parts per billion (ppb). All of the other samples were either non-detect or below the 15 ppb action level. The treatment technique regulation for lead (referred to as the Lead and Copper Rule) requires water systems to control the corrosivity of the water; however, as most of the samples were low or non-detect, it is the opinion of BMEC that corrosivity is not the issue, and that a filter system to remove the lead at the sinks/fountains would be appropriate treatment.

9.0 AUTHENTICATION

Having followed sampling protocol and stringent QA/QC controls, the conclusions in this report are well-founded, professional opinions.

Report Written By:



Yancy Meyer
Environmental Professional
BMEC

Report Reviewed By:



Steve Wing
Environmental Professional
BMEC

10.0 REPORT LIMITATIONS

The enclosed site assessment has been performed for the exclusive use by Whitman College, or agents specified by them, for the transaction at issue concerning the subject properties in Walla Walla, Washington, and Milton-Freewater, Oregon.

The purpose of an environmental investigation is to evaluate potential or actual effects of past or current practices on a given site. In performing an environmental investigation, a balance must be struck between reasonable inquiry into environmental issues and an exhaustive analysis of every conceivable issue of possible concern. This environmental assessment contains BMEC opinion regarding environmental issues of concern and/or additional issues that may need to be addressed. In rendering our professional opinion, BMEC warrants that the services provided within the scope of this assessment were performed, within the limits described, in accordance with generally accepted environmental consulting principles and practices. No other warranty, expressed or implied, is made. The following paragraphs describe the assumptions and standard parameters under which such opinion is rendered.

Any opinions and/or recommendations presented in this report apply to site conditions existing at the time of performance of services. BMEC is unable to report on or accurately predict events that may affect the site after performance of services, whether occurring naturally or caused by human forces. BMEC assumes no responsibility for conditions BMEC did not investigate, or conditions not generally recognized as environmentally unacceptable at the time services were performed.

Except where there is expressed concern of our client, or where specific environmental contaminants have previously been reported by others, naturally occurring toxic substances, or contaminant concentrations not of current environmental concern, may not be addressed in this document.

No assessment is thorough enough to exclude the presence of hazardous materials at a given site. Therefore, if specific hazardous materials have not been identified during this assessment, the lack of such identifications should not be construed as a guarantee of the absence of hazardous materials, but merely as the result of services performed within the scope, limitations, and cost of work done.

BMEC is not responsible for the effects of changes in applicable environmental standards, practices, or regulations after the performance of services. Services provided for this assessment were performed in accordance with BMEC's agreement and understanding with our client, which may not be fully disclosed in this report. Opinions and/or recommendations are intended for the client, purpose, site, location, time frame, and project parameters indicated.

This report was prepared solely for the use of our client, and should be reviewed in its entirety; BMEC is not responsible for subsequent separation, detachment, or partial use of this document. Any reliance on this report by a third party shall be at such party's sole risk.

Appendix A

Laboratory Reports



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

July 28, 2016

Yancy Meyer
Blue Mountain Environmental, Inc.
90 Baldwin Road
Walla Walla, WA 99362

Re: Analytical Data for Project E2016/0706; Whitman College
Laboratory Reference No. 1607-179

Dear Yancy:

Enclosed are the analytical results and associated quality control data for samples submitted on July 21, 2016.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

Case Narrative

Samples were collected on July 18, 19, and 20, 2016 and received by the laboratory on July 21, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: July 28, 2016
 Samples Submitted: July 21, 2016
 Laboratory Reference: 1607-179
 Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-01					
Client ID:	7-18-01					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-02					
Client ID:	7-18-02					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-03					
Client ID:	7-18-03					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-04					
Client ID:	7-18-04					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-05					
Client ID:	7-18-05					
Lead	4.3	1.0	200.8		7-27-16	
Lab ID:	07-179-06					
Client ID:	7-18-06					
Lead	6.0	1.0	200.8		7-27-16	
Lab ID:	07-179-07					
Client ID:	7-18-07					
Lead	ND	1.0	200.8		7-27-16	



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 Samples Submitted: July 21, 2016
 Laboratory Reference: 1607-179
 Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-08					
Client ID:	7-18-08					
Lead	4.7	1.0	200.8		7-27-16	
Lab ID:	07-179-09					
Client ID:	7-18-09					
Lead	8.0	1.0	200.8		7-27-16	
Lab ID:	07-179-10					
Client ID:	7-18-10					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-11					
Client ID:	7-18-11					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-12					
Client ID:	7-18-12					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-13					
Client ID:	7-18-13					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-14					
Client ID:	7-18-14					
Lead	1.1	1.0	200.8		7-27-16	



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 Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-15					
Client ID:	7-18-15					
Lead	16	1.0	200.8		7-27-16	
Lab ID:	07-179-16					
Client ID:	7-18-16					
Lead	5.2	1.0	200.8		7-27-16	
Lab ID:	07-179-17					
Client ID:	7-18-17					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-18					
Client ID:	7-18-18					
Lead	2.7	1.0	200.8		7-27-16	
Lab ID:	07-179-19					
Client ID:	7-18-19					
Lead	1.5	1.0	200.8		7-27-16	
Lab ID:	07-179-20					
Client ID:	7-18-20					
Lead	ND	1.0	200.8		7-27-16	



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 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-21					
Client ID:	7-18-21					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-22					
Client ID:	7-18-22					
Lead	1.1	1.0	200.8		7-27-16	
Lab ID:	07-179-23					
Client ID:	7-18-23					
Lead	1.9	1.0	200.8		7-27-16	
Lab ID:	07-179-24					
Client ID:	7-18-24					
Lead	1.6	1.0	200.8		7-27-16	
Lab ID:	07-179-25					
Client ID:	7-18-25					
Lead	2.2	1.0	200.8		7-27-16	
Lab ID:	07-179-26					
Client ID:	7-18-26					
Lead	6.7	1.0	200.8		7-27-16	
Lab ID:	07-179-27					
Client ID:	7-18-27					
Lead	ND	1.0	200.8		7-27-16	



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DRINKING WATER LEAD
EPA 200.8

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-28					
Client ID:	7-18-28					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-29					
Client ID:	7-18-29					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-30					
Client ID:	7-18-30					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-31					
Client ID:	7-18-31					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-32					
Client ID:	7-18-32					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-33					
Client ID:	7-18-33					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-34					
Client ID:	7-18-34					
Lead	ND	1.0	200.8		7-27-16	



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**DRINKING WATER LEAD
 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-35					
Client ID:	7-18-35					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-36					
Client ID:	7-18-36					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-37					
Client ID:	7-18-37					
Lead	1.7	1.0	200.8		7-27-16	
Lab ID:	07-179-38					
Client ID:	7-18-38					
Lead	1.9	1.0	200.8		7-27-16	
Lab ID:	07-179-39					
Client ID:	7-18-39					
Lead	1.3	1.0	200.8		7-27-16	
Lab ID:	07-179-40					
Client ID:	7-18-40					
Lead	24	1.0	200.8		7-27-16	



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**DRINKING WATER LEAD
 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-41					
Client ID:	7-18-41					
Lead	1.5	1.0	200.8		7-27-16	
Lab ID:	07-179-42					
Client ID:	7-18-42					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-43					
Client ID:	7-18-43					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-44					
Client ID:	7-18-44					
Lead	1.1	1.0	200.8		7-27-16	
Lab ID:	07-179-45					
Client ID:	7-18-45					
Lead	2.6	1.0	200.8		7-27-16	
Lab ID:	07-179-46					
Client ID:	7-18-46					
Lead	10	1.0	200.8		7-27-16	
Lab ID:	07-179-47					
Client ID:	7-18-47					
Lead	ND	1.0	200.8		7-27-16	



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**DRINKING WATER LEAD
 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-48					
Client ID:	7-18-48					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-49					
Client ID:	7-18-49					
Lead	1.0	1.0	200.8		7-27-16	
Lab ID:	07-179-50					
Client ID:	7-18-50					
Lead	3.6	1.0	200.8		7-27-16	
Lab ID:	07-179-51					
Client ID:	7-18-51					
Lead	1.9	1.0	200.8		7-27-16	
Lab ID:	07-179-52					
Client ID:	7-18-52					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-53					
Client ID:	7-18-53					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-54					
Client ID:	7-18-54					
Lead	1.5	1.0	200.8		7-27-16	



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**DRINKING WATER LEAD
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Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-55					
Client ID:	7-18-55					
Lead	7.7	1.0	200.8		7-27-16	
Lab ID:	07-179-56					
Client ID:	7-18-56					
Lead	2.0	1.0	200.8		7-27-16	
Lab ID:	07-179-57					
Client ID:	7-18-57					
Lead	1.8	1.0	200.8		7-27-16	
Lab ID:	07-179-58					
Client ID:	7-19-58					
Lead	2.4	1.0	200.8		7-27-16	
Lab ID:	07-179-59					
Client ID:	7-19-59					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-60					
Client ID:	7-19-60					
Lead	ND	1.0	200.8		7-27-16	



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**DRINKING WATER LEAD
 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-61					
Client ID:	7-19-61					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-62					
Client ID:	7-19-62					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-63					
Client ID:	7-19-63					
Lead	3.9	1.0	200.8		7-27-16	
Lab ID:	07-179-64					
Client ID:	7-19-64					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-65					
Client ID:	7-19-65					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-66					
Client ID:	7-19-66					
Lead	1.2	1.0	200.8		7-27-16	
Lab ID:	07-179-67					
Client ID:	7-19-67					
Lead	ND	1.0	200.8		7-27-16	



Date of Report: July 28, 2016
 Samples Submitted: July 21, 2016
 Laboratory Reference: 1607-179
 Project: E2016/0706; Whitman College

DRINKING WATER LEAD
EPA 200.8

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-68					
Client ID:	7-19-68					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-69					
Client ID:	7-19-69					
Lead	1.2	1.0	200.8		7-27-16	
Lab ID:	07-179-70					
Client ID:	7-19-70					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-71					
Client ID:	7-19-71					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-72					
Client ID:	7-19-72					
Lead	1.3	1.0	200.8		7-27-16	
Lab ID:	07-179-73					
Client ID:	7-19-73					
Lead	5.3	1.0	200.8		7-27-16	
Lab ID:	07-179-74					
Client ID:	7-19-74					
Lead	ND	1.0	200.8		7-27-16	



Date of Report: July 28, 2016
 Samples Submitted: July 21, 2016
 Laboratory Reference: 1607-179
 Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
 EPA 200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-179-75					
Client ID:	7-19-75					
Lead	1.2	1.0	200.8		7-27-16	
Lab ID:	07-179-76					
Client ID:	7-19-76					
Lead	1.8	1.0	200.8		7-27-16	
Lab ID:	07-179-77					
Client ID:	7-19-77					
Lead	2.8	1.0	200.8		7-27-16	
Lab ID:	07-179-78					
Client ID:	7-20-78					
Lead	ND	1.0	200.8		7-27-16	
Lab ID:	07-179-79					
Client ID:	7-20-79					
Lead	2.2	1.0	200.8		7-27-16	
Lab ID:	07-179-80					
Client ID:	7-20-80					
Lead	ND	1.0	200.8		7-27-16	



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Analyzed: 7-27-16
Matrix: Water
Units: ug/L (ppb)
Lab ID: MB0727DW1

Analyte	Method	Result	PQL
Lead	200.8	ND	1.0



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Analyzed: 7-27-16
Matrix: Water
Units: ug/L (ppb)
Lab ID: MB0727DW2

Analyte	Method	Result	PQL
Lead	200.8	ND	1.0



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Analyzed: 7-27-16
Matrix: Water
Units: ug/L (ppb)
Lab ID: MB0727DW3

Analyte	Method	Result	PQL
Lead	200.8	ND	1.0



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Analyzed: 7-27-16
Matrix: Water
Units: ug/L (ppb)
Lab ID: MB0727DW4

Analyte	Method	Result	PQL
Lead	200.8	ND	1.0



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Analyzed: 7-27-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-179-20

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	ND	ND	NA	1.0	



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Analyzed: 7-27-16
Matrix: Water
Units: ug/L (ppb)
Lab ID: 07-179-21

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	ND	ND	NA	1.0	



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Analyzed: 7-27-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-179-41

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	1.45	1.42	2	1.0	



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Analyzed: 7-27-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-179-61

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	ND	ND	NA	1.0	



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
MS/MSD QUALITY CONTROL**

Date Analyzed: 7-27-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-179-20

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	80.0	74.3	93	77.9	97	5	



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
MS/MSD QUALITY CONTROL**

Date Analyzed: 7-27-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-179-21

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	80.0	75.8	95	76.6	96	1	



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
MS/MSD QUALITY CONTROL**

Date Analyzed: 7-27-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-179-41

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	80.0	72.0	88	74.2	91	3	



Date of Report: July 28, 2016
Samples Submitted: July 21, 2016
Laboratory Reference: 1607-179
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
MS/MSD QUALITY CONTROL**

Date Analyzed: 7-27-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-179-61

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	80	76.3	95	73.2	91	4	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
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 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
 (TPH analysis 5 Days)

_____ (other)

Laboratory Number: **07-179**

Number of Containers

NWTPH-HCID
NWTPH-Gx/BTEX
NWTPH-Gx
NWTPH-Dx
Volatiles 8260C
Halogenated Volatiles 8260C
Semivolatiles 8270D/SIM (with low-level PAHs)
PAHs 8270D/SIM (low-level)
PCBs 8082A
Organochlorine Pesticides 8081B
Organophosphorus Pesticides 8270D/SIM
Chlorinated Acid Herbicides 8151A
Total RCRA Metals/ MTCA Metals (circle one)
TCLP Metals
HEM (oil and grease) 1664A

X TOTAL LEAD

% Moisture

Lab ID	Sample Identification	Date		Matrix	Number of Containers	Date	Time	Comments/Special Instructions
		Sampled	Time Sampled					
1	7-18-01	7-18-16	0712	H2O	1			
2	7-18-02		0725					
3	7-18-03		0750					
4	7-18-04		0751					
5	7-18-05		0804					
6	7-18-06		0807					
7	7-18-07		0818					
8	7-18-08		0819					
9	7-18-09		0826					
10	7-18-10		0831					
	Signature	Company						
Relinquished		BMEC				7/19/16	1800	
Received						7/21/16	1030	
Relinquished								
Received								
Relinquished								
Received								
Relinquished								
Reviewed/Date		Reviewed/Date						

Chromatograms with final report

Data Package: Level III Level IV

Electronic Data Deliverables (EDDs)



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Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
 (TPH analysis 5 Days)

_____ (other)

Laboratory Number: 07-179

Company: BMEC
 Project Number: 2016/0705 0706
 Project Name: WITTMAN COVERAGE
 Project Manager: Y. MEYER
 Sampled by: Y. MEYER

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
21	7.18.21	7.18.16	0932	H ₂ O
22	7.18.22		1005	
23	7.18.23		1014	
24	7.18.24		1016	
25	7.18.25		1025	
26	7.18.26		1026	
27	7.18.27		1032	
28	7.18.28		1037	
29	7.18.29		1039	
30	7.18.30		1219	

Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals/ MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664A	TOTAL LEAD	% Moisture
1																	

Signature	Company	Date	Time	Comments/Special Instructions
	BMEC	7.19.16	1800	
	BMEC	7/21/16	1030	

Received/Date _____

Relinquished _____

Received _____

Relinquished _____

Received _____

Relinquished _____

Reviewed/Date _____

Reviewed/Date _____

Chromatograms with final report



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Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
 (TPH analysis 5 Days)

(other) _____

Laboratory Number: **07-179**

Number of Containers	
NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx	
Volatiles 8260C	
Halogenated Volatiles 8260C	
Semivolatiles 8270D/SIM (with low-level PAHs)	
PAHs 8270D/SIM (low-level)	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals/ MTCA Metals (circle one)	
TCLP Metals	
HEM (oil and grease) 1664A	

X TOTAL LEAD

% Moisture

Lab ID	Sample Identification	Date		Matrix	Number of Containers	Date	Time	Comments/Special Instructions
		Sampled	Time Sampled					
41	7.18.41	7.18.16	1304	H ₂ O	1			
42	7.18.42		1311					
43	7.18.43		1320					
44	7.18.44		1322					
45	7.18.45		1325					
46	7.18.46		1331					
47	7.18.47		1336					
48	7.18.48		1332					
49	7.18.49		1400					
50	7.18.50		1407					
Relinquished		Signature	Company	Date	Time	Comments/Special Instructions		
Received			BMEC	7.19.16	1800			
Relinquished			BMEC	7/21/16	1630			
Received								
Relinquished								
Received								
Reviewed/Date						Chromatograms with final report <input type="checkbox"/>		



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Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
 (TPH analysis 5 Days)

_____ (other)

Laboratory Number: **07-179**

Company: BMEC
 Project Number: E2016107050706
 Project Name: WYRMAN CAUSEWAY
 Project Manager: Y. MEYER
 Sampled by: Y. MEYER

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
61	7.19.61	7.19.16	0801	Hgt 1
62	7.19.62	0807		
63	7.19.63	0810		
64	7.19.64	0814		
65	7.19.65	0823		
66	7.19.66	0826		
67	7.19.67	0837		
68	7.19.68	0846		
69	7.19.69	0847		
70	7.19.70	0852		

Number of Containers	
NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx	
Volatiles 8260C	
Halogenated Volatiles 8260C	
Semivolatiles 8270D/SIM (with low-level PAHs)	
PAHs 8270D/SIM (low-level)	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals/ MTCA Metals (circle one)	
TCLP Metals	
HEM (oil and grease) 1664A	
TOTAL LEAD	
% Moisture	

Signature	Company	Date	Time	Comments/Special Instructions
	BMEC	7.20.16	1000	
	BMEC	7.21.16	1030	

Relinquished
 Received
 Relinquished
 Relinquished
 Received
 Relinquished
 Received
 Reviewed/Date

Reviewed/Date

Chromatograms with final report



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Chain of Custody

Turnaround Request (in working days)
(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days) (TPH analysis 5 Days)

(other) _____

Laboratory Number: **07-179**

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx	
Volatiles 8260C	
Halogenated Volatiles 8260C	
Semivolatiles 8270D/SIM (with low-level PAHs)	
PAHs 8270D/SIM (low-level)	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals/ MTCA Metals (circle one)	
TCLP Metals	
HEM (oil and grease) 1664A	

TOTAL LEAD

% Moisture

Company: BMEC

Project Number: WHITMAN COLLEGE

Project Name: E2016/0705 0706

Project Manager: Y. Meyer

Sampled by: Y. Meyer

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	Comments/Special Instructions
71	7-19-70	7-19-70	0853	H2O		
72	7-19-71	7-19-71	0957			
73	7-19-72	7-19-72	1003			
74	7-19-73	7-19-73	1058			
75	7-19-74	7-19-74	1113			
76	7-19-75	7-19-75	1120			
77	7-19-76	7-19-76	1553			
78	7-19-77	7-19-77	0816			
79	7-20-78	7-20-78	0816			
80	7-20-79	7-20-79	0816			

Relinquished	Signature	Company	Date	Time	Comments/Special Instructions
Received		BMEC	7/20/16	1000	
Relinquished		BMEC	7/21/16	1030	
Received					
Relinquished					
Received					
Reviewed/Date					Chromatograms with final report <input type="checkbox"/>



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

August 8, 2016

Yancy Meyer
Blue Mountain Environmental, Inc.
90 Baldwin Road
Walla Walla, WA 99362

Re: Analytical Data for Project E2016/0706; Whitman College
Laboratory Reference No. 1608-020

Dear Yancy:

Enclosed are the analytical results and associated quality control data for samples submitted on August 2, 2016.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: August 8, 2016
Samples Submitted: August 2, 2016
Laboratory Reference: 1608-020
Project: E2016/0706; Whitman College

Case Narrative

Samples were collected on August 1, 2016 and received by the laboratory on August 2, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: August 8, 2016
 Samples Submitted: August 2, 2016
 Laboratory Reference: 1608-020
 Project: E2016/0706; Whitman College

DRINKING WATER LEAD
EPA 200.8

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	08-020-01					
Client ID:	8-1-81					
Lead	18	5.0	200.8		8-5-16	
Lab ID:	08-020-02					
Client ID:	8-1-82					
Lead	12	5.0	200.8		8-5-16	
Lab ID:	08-020-03					
Client ID:	8-1-83					
Lead	ND	5.0	200.8		8-5-16	



Date of Report: August 8, 2016
Samples Submitted: August 2, 2016
Laboratory Reference: 1608-020
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Analyzed: 8-5-16
Matrix: Water
Units: ug/L (ppb)
Lab ID: MB0805DW1

Analyte	Method	Result	PQL
Lead	200.8	ND	5.0



Date of Report: August 8, 2016
Samples Submitted: August 2, 2016
Laboratory Reference: 1608-020
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Analyzed: 8-5-16
Matrix: Water
Units: ug/L (ppb)
Lab ID: 08-020-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	17.5	17.5	0	5.0	



Date of Report: August 8, 2016
Samples Submitted: August 2, 2016
Laboratory Reference: 1608-020
Project: E2016/0706; Whitman College

**DRINKING WATER LEAD
EPA 200.8
MS/MSD QUALITY CONTROL**

Date Analyzed: 8-5-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 08-020-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	400	403	96	398	95	1	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
(TPH analysis 5 Days)

_____ (other)

Laboratory Number:

08-020

Company: **BMEC**

Project Number: **E2016/0706**

Project Name: **WHITMAN COVEGE**

Project Manager: **Y. Meyer**

Sampled by: **Y. Meyer**

Lab ID	Sample Identification	Date			Matrix	Number of Containers
		Sampled	Time Sampled	Matrix		
1	8.1.81	8.1.16	0844	H ₂ O	1	
2	8.1.82	↓	0848	↓	↓	
3	8.1.83	↓	0901	↓	↓	

Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals/ MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664A	TOTAL LEAD	% Moisture
1																	

Relinquished	Signature	Company	Date	Time	Comments/Special Instructions
Received	<i>[Signature]</i>	BMEC	8.1.16	1200	
Relinquished	<i>[Signature]</i>	BMEC	8/2/16	1000	
Received					
Relinquished					
Received					
Relinquished					
Received					
Relinquished					
Reviewed/Date					Chromatograms with final report <input type="checkbox"/>