

November 22, 2016

Jeremy Miller
Maintenance Manager
Department of Administrative Services
Enterprise Asset Management Division
1225 Ferry Street SE
Salem, Oregon 97301

Via email: Jeremy.W.MILLER@oregon.gov

Regarding: Drinking Water Sampling for Lead

Justice Building 1162 Court Street NE Salem, Oregon 97301

PBS Project # 25103.003 Phase 0015

Dear Mr. Miller:

On October 12 and 13, 2016, PBS Engineering and Environmental Inc. (PBS) performed drinking water sampling at the Justice building located at1162 Court Street NE in Salem, Oregon. The testing was requested by State of Oregon Department of Administrative Services in an effort to ensure that concentrations of lead in drinking water remain below the EPA action level.

Sampling methodology and the interpretation of laboratory results were based on the EPA Lead and Copper Rule (LCR). Following LCR sampling guidelines, PBS collected the first 1000 milliliters (mL) of water from each test location (first draw) early in the morning following an overnight stagnation period. The LCR's stagnation period, and sampling protocol specifying the first 1000 mL samples, is designed to maximize the likelihood that the highest concentrations of lead are identified in water used for consumption. At each sample location, immediately following first draw sampling, a flush sample was collected after the water had been allowed to run for 30 seconds.

The water sampling process was supervised by a certified industrial hygienist (CIH) who is also an Oregon Health Authority certified lead risk assessor.

The action level set by the EPA for lead is 15 parts per billion (ppb). If the action level is exceeded in more than 10 percent of taps sampled, then action must be taken to control plumbing-material corrosion.

Forty-four first draw and flush drinking water samples were collected and delivered under chain of custody to BSK Laboratories in Vancouver, Washington for lead analysis. Initially, only first draw samples were analyzed. Any first draw sample that exceeded the EPA action level for lead had its associated flush sample analyzed.

Lead concentrations in all of the first draw samples were undetectable according to laboratory analysis, indicating that all of these drinking water samples contained lead well below the EPA action level of 15 ppb.

The following table presents all first draw sample locations and lead concentrations in ppb.

First Draw Drinking Water Sample Locations and Lead Concentrations

Sample Number	Sample Location	Lead Concentration (ppb)			
SK-JUB-001-FD	Executive services break room kitchen sink fifth floor	ND			
SK-JUB-003-FD	Room 503 conference room 505 break room kitchen sink fifth floor	ND			
WF-JUB-005-FD	Upper water fountain next to custodial/electrical room fifth floor	ND			
WF-JUB-007-FD	Lower water fountain next to custodial/electrical room fifth floor	ND			
S-JUB-009-FD	Supply room sink fourth floor	ND			
SK-JUB-011-FD	Coffee / break room kitchen sink fourth floor	ND			
WF-JUB-013-FD	Upper water fountain next to custodial/electrical room fourth floor	ND			
WF-JUB-015-FD	Lower water fountain next to custodial/electrical room fourth floor	ND			
SK-JUB-017-FD	-FD Room 303 conference room 305 break room kitchen sink third floor				
WF-JUB-019-FD	Upper water fountain next to custodial/electrical room third floor	ND			
WF-JUB-021-FD	Lower water fountain next to custodial/electrical room third floor	ND			
SK-JUB-023-FD	Kitchenette kitchen sink second floor	ND			
WF-JUB-025-FD	Upper water fountain next to custodial/electrical room second floor	ND			
WF-JUB-027-FD	Lower water fountain next to custodial/electrical room second floor	ND			
SK-JUB-029-FD	Kitchenette sink first floor	ND			
WF-JUB-031-FD	Upper water fountain between men's room and kitchenette first floor	ND			
WF-JUB-033-FD	Lower water fountain between men's room and kitchenette first floor	ND			
WF-JUB-035-FD	Water fountain near main entry first floor	ND			
WF-JUB-037-FD	Basement lower water fountain between men's and women's bathroom	ND			
WF-JUB-039-FD	Basement upper water fountain between men's and women's bathroom	ND			
SK-JUB-041-FD	Basement coffee station kitchen sink	ND			
SK-JUB-043-FD	Coffee room district attorney's office, third floor kitchen sink	ND			

ND: None Detected

Please refer to the attached Chain of Custody form and laboratory data for greater details. It should be noted that quality control (QC) sample results are included at the end of laboratory information. The QC samples are both laboratory blanks and spiked samples used internally by the laboratory to assess accuracy.

Drinking Water Sampling for Lead, Department of Administrative Services Justice Building November 22, 2016 Page 3 of 3

Please feel free to contact me at 503.417.7602 or derek.may@pbsenv.com with any questions or comments.

Sincerely,

PBS Engineering and Environmental Inc.

Derek May, Principal

S. Dul sky

Attachments: Laboratory Results
Chain of Custody Form

DM::bmp

The information contained in this document is proprietary and shall not be duplicated, used, or disclosed in whole or in part to other parties without the permission of PBS.



Derek May PBS Environmental 4412 SW Corbett Ave Portland, OR 97239

RE: Report for A6J1886 Oregon DAS - Lead

Dear Derek May,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 10/13/2016. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Debra Karlsson, at 559-497-2888.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Debra Karlsson, Project Coordinator



Accredited in Accordance with NELAP ORELAP #4021





Case Narrative

Project and Report Details Invoice Details

Client: PBS Environmental Invoice To: PBS Environmental Report To: Derek May Invoice Attn: Accounts Payable

Project #: Justice Building #25103.003 PH 15 Project PO#: -

Received: 10/13/2016 - 09:00

Report Due: 10/27/2016

Sample Receipt Conditions

Cooler:Default CoolerContainers IntactTemperature on Receipt °C: 20.2COC/Labels Agree

Received with no thermal preservation. Sample(s) split after receipt at the laboratory.

Initial receipt at BSK-VAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s) Report Format CC:

Derek May FINAL.RPT





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-01 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Description: SK-JUB-001-FD // Executive services breakroom kitchen sink

Sample Type: First Draw

5th Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-03 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Description: SK-JUB-003-FD // Room 503 Conference room 505 breakroom

Sample Type: First Draw

kitchen sink 5th Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-05
Sampled By: Client
Sampled By: Drinking Water

Matrix: Drinking Water Sample Type: First Draw

Sample Description: WF-JUB-005-FD // Upper water fountain next to

custodial/electrical room 5th Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch Prepare	d Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373 10/19/16	6 10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-07 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Type: First Draw Sample Description: WF-JUB-007-FD // Lower water fountain next to custodial/electrical room 5th Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-09 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Type: First Draw Sample Description: S-JUB-009-FD // Supply room sink 4th Floor

	Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
ī	Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-11 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Description: SK-JUB-011-FD // Coffee/Breakroom kitchen sink 4th Floor

Sample Type: First Draw

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-13 Sampled By: Client Sample Date - Time: 10/12/16 - 00:00

Matrix: Drinking Water

Sample Description: WF-JUB-013-FD // Upper water fountain next to

Sample Type: First Draw

custodial/electrical room 4th Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-15

Sample Date - Time: 10/12/16 - 00:00

Sampled By: Client

Matrix: Drinking Water

Matrix: Drinking Water
Sample Type: First Draw

Sample Description: WF-JUB-015-FD // Lower water fountain next to

custodial/electrical room 4th Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

 Sample ID: A6J1886-17
 Sample Date - Time: 10/12/16 - 00:00

 Sampled By: Client
 Matrix: Drinking Water

Matrix: Drinking Water Sample Type: First Draw

Sample Description: SK-JUB-017-FD // Room 303 conference room 305 breakroom

kitchen sink 3rd Floor

	Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
ī	Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-19
Sampled By: Client

Sample Date - Time: 10/12/16 - 00:00

Matrix: Drinking Water

Sample Type: First Draw

Sample Description: WF-JUB-019-FD // Upper water fountain next to custodial/electrical room 3rd Floor

BSK Associates Fresno

Metals

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-21 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Type: First Draw Sample Description: WF-JUB-021-FD // Lower water fountain next to

custodial/electrical room 3rd Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-23Sample Date - Time: 10/12/16 - 00:00Sampled By: ClientMatrix: Drinking Water

Matrix: Drinking Water Sample Type: First Draw

Sample Description: SK-JUB-023-FD // Kitchenette kitchen sink 2nd Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-25 Sampled By: Client Sample Date - Time: 10/12/16 - 00:00

Matrix: Drinking Water

Sample Description: WF-JUB-025-FD // Upper water fountain next to

Sample Type: First Draw

custodial/electrical room 2nd Floor

BSK Associates Fresno

Metals

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-27 Sampled By: Client Sample Date - Time: 10/12/16 - 00:00

Matrix: Drinking Water

Sample Type: First Draw

Sample Description: WF-JUB-027-FD // Lower water fountain next to custodial/electrical room 2nd Floor

BSK Associates Fresno

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-29 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Type: First Draw Sample Description: SK-JUB-029-FD // Kitchenette sink 1st Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-31 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Type: First Draw Sample Description: WF-JUB-031-FD // Upper water fountain between men's room

and kitchenette 1st Floor

BSK Associates Fresno

Metals

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-33Sample Date - Time: 10/12/16 - 00:00Sampled By: ClientMatrix: Drinking Water

Matrix: Drinking Water Sample Type: First Draw

 $\textbf{Sample Description:} \ \text{WF-JUB-033-FD} \ \textit{//} \ \text{Lower water fountain between men's room}$

and kitchenette 1st Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16	





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-35 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Type: First Draw Sample Description: WF-JUB-035-FD // Water fountain near main entry 1st Floor

Analyte	Method	Result	RL	Units	RL Mult	Batch Prepared	Analyzed Qual
Lead	EPA 200 8	ND	0.0010	ma/l	1	Δ61/1373 10/10/16	10/19/16





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-37 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Description: WF-JUB-037-FD // Basement lower water fountain between

Sample Type: First Draw

men's and women's bathroom

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614373	10/19/16	10/19/16





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-39 **Sample Date - Time:** 10/12/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Type: First Draw Sample Description: WF-JUB-039-FD // Basement upper water fountain between

men's and women's bathroom

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614384	10/19/16	10/19/16





Sampled By: Client

Oregon DAS - Lead

Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-41 **Sample Date - Time:** 10/12/16 - 00:00

Matrix: Drinking Water

Sample Description: SK-JUB-041-FD // Basement coffee station kitchen sink

Sample Type: First Draw

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614384	10/19/16	10/19/16





Justice Building #25103.003 PH 15

Certificate of Analysis

Sample ID: A6J1886-43 **Sample Date - Time:** 10/13/16 - 00:00 Sampled By: Client

Matrix: Drinking Water

Sample Description: SK-JUB-043-FD // Coffee room District Attorney Office, 3rd Floor

Sample Type: First Draw

kitchen sink

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed Q	Qual
Lead	EPA 200.8	ND	0.0010	mg/L	1	A614535	10/21/16	10/21/16	



BSK Associates Fresno Metals Quality Control Report

	M	etals Qı	uality (ontrol	Report					
Analyto	Pocult	DI	Units	Spike Level	Source Result	% REC	%REC	PDD.	RPD	Date Analyzed Qual
Analyte	Result					%REC	Limits	TRPD	Limit	Anaryzeu Quai
Batch: A614373		EPA 2	00.6 - Q	uality Co	ntroi					Prepared: 10/19/2016
Prep Method: EPA 200.2										Analyst: GNG
Blank (A614373-BLK1)										
Lead	ND	0.0010	mg/L							10/19/16
Blank Spike (A614373-BS1)										
Lead	0.11	0.0010	mg/L	0.10		107	85-115			10/19/16
Blank Spike Dup (A614373-BSD1)										
Lead	0.11	0.0010	mg/L	0.10		107	85-115	1	20	10/19/16
Matrix Spike (A614373-MS1), Source: A	\6J1885-01									
Lead	0.20	0.0020	mg/L	0.20	0.0020	101	70-130			10/19/16
Matrix Spike (A614373-MS2), Source: A	\6J1886-19									
Lead	0.21	0.0020	mg/L	0.20	ND	104	70-130			10/19/16
Matrix Spike Dup (A614373-MSD1), So	urce: A6J1885-01									
Lead	0.21	0.0020	mg/L	0.20	0.0020	102	70-130	1	20	10/19/16
Matrix Spike Dup (A614373-MSD2), So	urce: A6J1886-19									
Lead	0.21	0.0020	mg/L	0.20	ND	103	70-130	1	20	10/19/16
		EPA 2	00.8 - Q	uality Co	ntrol					
Batch: A614384										Prepared: 10/19/2016
Prep Method: EPA 200.2										Analyst: GNG
Blank (A614384-BLK1) Lead	ND	0.0010	ma/l							10/19/16
Leau	ND	0.0010	mg/L							10/19/10
Blank Spike (A614384-BS1) Lead	0.098	0.0010	mg/L	0.10		98	85-115			10/19/16
	0.030	0.0010	mg/L	0.10		30	03-113			10/13/10
Blank Spike Dup (A614384-BSD1) Lead	0.098	0.0010	mg/L	0.10		98	85-115	0	20	10/19/16
		0.0010	mg/L	0.10		ÜÜ.	00 110	Ü	20	16/16/16
Matrix Spike (A614384-MS1), Source: <i>A</i> Lead	A6J1785-21 0.20	0.0020	mg/L	0.20	0.0029	101	70-130			10/19/16
			J							
Matrix Spike (A614384-MS2), Source: <i>I</i> ∟ead	A6J1750-01 0.20	0.0020	mg/L	0.20	ND	100	70-130			10/19/16
			J							
Matrix Spike Dup (A614384-MSD1), Soi Lead	0.20	0.0020	mg/L	0.20	0.0029	99	70-130	1	20	10/19/16
			ž							
Matrix Spike Dup (A614384-MSD2), Soo ∟ead	0.20	0.0020	mg/L	0.20	ND	102	70-130	2	20	10/19/16
	•		5	-		-			-	

A6J1886 FINAL 10252016 1750

Printed: 10/25/2016

QA-RP-0001-10 Final.rpt



BSK Associates Fresno Metals Quality Control Report

			<u> </u>							
Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed Qual
		EPA 20	00.8 - Q	uality Co	ntrol					
Batch: A614535 Prep Method: EPA 200.2 - Pb/Cu Rule										Prepared: 10/21/2016 Analyst: GNG
Blank (A614535-BLK1)										
Lead	ND	0.0010	mg/L							10/21/16
Blank Spike (A614535-BS1)										
Lead	0.11	0.0010	mg/L	0.10		110	85-115			10/21/16
Blank Spike Dup (A614535-BSD1)										
Lead	0.11	0.0010	mg/L	0.10		110	85-115	1	20	10/21/16
Matrix Spike (A614535-MS1), Source: A	A6J1886-43									
Lead	0.21	0.0020	mg/L	0.20	ND	105	70-130			10/21/16
Matrix Spike (A614535-MS2), Source: A	A6J2165-01									
Lead	0.22	0.0020	mg/L	0.20	ND	108	70-130			10/21/16
Matrix Spike Dup (A614535-MSD1), So	urce: A6J1886-43									
Lead	0.21	0.0020	mg/L	0.20	ND	105	70-130	0	20	10/21/16
Matrix Spike Dup (A614535-MSD2), So	urce: A6J2165-01									
Lead	0.22	0.0020	mg/L	0.20	ND	108	70-130	0	20	10/21/16



Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- · Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
μg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
μg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

WA100008-008

BSK is not accredited under the NELAP program for the following parameters: **NA**

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

Fresno			
State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792016-1	State of Oregon - NELAP	4021
EPA - UCMR3	CA00079	State of Washington	C997-16
Sacramento			
State of California - ELAP	2435		
San Bernardino			
State of California - ELAP	2993	State of Oregon - NELAP	4119-001

A6J1886 FINAL 10252016 1750

Printed: 10/25/2016

Vancouver

State of Oregon - NELAP

State of Washington

C824-16



Add to AbJ1886

Engineering + KCOPY w/ addrtion

Environmental

OREGON DAS LEAD IN DRINKING WATER

A6J1886 PBSEN1939

10/13/2016 10

TESTING PROGRAM

1	PBSEN1939 10	25103.003
FACILITY NAME:		PH 15
ANALYSIS REQUESTED:		

	BY/SIGNATURE: Stene al	env.com		TURN AROUND TIME: 7-10 days
		SAMPLE	DATA FC	DRM
LAB	SAMPLE#	BUILDING	ROOM	LOCATION IN ROOM
	WF-JVB-027-FD			Water Fourteem (lower) and floor
	WF-JUB-028-FL			next to custodial [Electrical Room
	SK-JUB- 029-FO			Kitchentho, 18th Floor, Kitchen
	514-JUB- 030-FL			Sigk
	WF-JUB- 031- FD	<u> </u>		Water Foundain (upper) 15 Floor
	W+-JJB-032-FL			between meas room and Kirchenette
	WF-JUB-033-FD			Water Fourtain (lower) 184 Floor
	WF-JUB-034-FL			between Men's room and Kitcherook
	WF - JUB - 035-FD			Wades Fountain, 1st Floor
	WF - JUB - 036 - FL			Hear Main Briting
	WF- JUB - 037-F0	-	<u> </u>	water Fountain Basement (
	WF-JUB-038-FL		ļ	between mens and workings both po
···	WE-508-039-F0			Woder Fountain, basement (low
	WF-JUB- O40-FU			letueon mens and womans be
	SK-208-041-40			Coffee Station Kitchenette
112	51-218-010-FL			Busenert Kricken Sink
- <u>モン</u>	5K-JUB-043-FO 5K-JUB-044-FL			Coffee Room District Attorney
	71- 700- 0 14-12			office, 31 & Floor Kitchen

A6J1886 BSK Associates SR-FL-0002-16 10/13/2016 PBSEN1939 Sample Integrity BSK Bottles: (Yes No of Page Was temperature within range? Were correct containers and preservatives Yes No (NA Chemistry ≤ 6°C Micro < 10°C Yes I No NA received for the tests requested? <u>I</u> If samples were taken today, is there evidence Were there bubbles in the VOA vials? Yes No that chilling has begun? Yes No (NA (Volatiles Only) Did all bottles arrive unbroken and intact? Yes Was a sufficient amount of sample received? No Ýes Ŋο Did all bottle labels agree with COC? Do samples have a hold time <72 hours? Yes (No Was sodium thiosulfate added to CN sample(s) Was PM notified of discrepancies? Yes No(until chlorine was no longer present? Yes By/Time: 250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V) Checks Passed? Bacti Na₂S₂O₃ None (P)White Cap Cr6 (P) Lt. Green Label/Blue Cap NH40H(NH4)2S04 DW Cl, pH > 8 N Cr6 (P) Pink Label/Blue Cap NH4OH(NH4)2SO4 WW pH 9.3-9.7 Υ Cr6 (P) Black Label/Blue Cap NH40H(NH4)2S04 7199 pH 9.0-9.5 YN ***24 HOUR HOLD TIME*** HNO₃ (P) Bed Cap or HCI (P) Purple Cap/Lt. Blue Label H₂SO₄ (P) or (AG) Yellow Cap/Label pH < 2 N NaOH (P) Green Cap CI, pH >10 Y Ν NaOH + ZnAc (P) 9 < Hq Y N Dissolved Oxygen 300ml (g) ò None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270 **Bottles Received** HCI (AG)Lt. Blue Label O&G, Diesel Ascorbic, EDTA, KH2Ct (AG)Pink Label 525 Na₂O₃S 250mL (AG)^{NeoniGreen Label} 515 Na₂S₂O₃ 1 Liter (Brown P) 549 Na₂S₂O₃ (AG)^{Blue Label} 548, THM, 524 Na₂S₂O₃ (CG) Blue Label 504, 505, 547 Na₂S₂O₃ + MCAA (CG)^{Orange Label} 531 2 > Ha Y N NH₄Cl (AG)^{Purple Label} 552 EDA (AG)Brown Label DBPs HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624 Buffer pH 4 (CG) H₃PO₄ (CG)^{Salmon Label} Other: Asbestos 1Liter Plastic w/ Foil Low Level Hg / Metals Double Baggie Bottled Water Clear Glass 250mL / 500mL / 1 Liter Soil Tube Brass / Steel / Plastic Tedlar Bag / Plastic Bag Container Preservative Date/Time/Initials Container Preservative Date/Time/Initials 250* Spli s)P SP SP * Odd numbers only. Rik Comments

Labeled by: _____ @ ____

Labels checked by: _____@ ____

RUSH Paged by:

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PBSEN1939

Turnaround: Standard

Due Date: 10/27/2016

PBS Environmental





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BSK Associates SR-FL-0002-16

Sample Integrity

PBSEN1939

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В	BSK Bottles: (Yes) No Page of									
	Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	Yes No(1	VA) V	Vere con	rrect contai	ners and p	reservativ	es (Yes	No NA
- Par	If samples were taken today, is there evidence that chilling has begun?	Yes No (NA		Were there bubbles in the VOA vials?			Yes-	No (NA		
5	Did all bottles arrive unbroken and intact? Did all bottle labels agree with COC?	Yes N	0 W	∕as a su	ifficient am	ount of sar	nple recei	ved?	Yes	T NO
	Was sodium thiosulfate added to CN sample(s)		~) w	o samp /as PM	les have a notified of	hold time ·	<pre></pre> // hours' ies?	?	Yes	(No
ļ	until chlorine was no longer present?		VA / I	M:		By/Time:			Yes	No (NA
	250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V) Bacti Na ₂ S ₂ O ₃	Checks	Passed	?	-42					
	None (P)White Cap	<u> </u>	<u> </u>							
	Cr6 (P) 11 Green Label/Blue Cap NH40H(NH4)2SO4 DW	Cl. pH > 8	Y h		-					
	Cr6 (P) Pink Label/Blue Cap NH40H(NH4)2SO4 WW	pH 9.3-9.7								
		pri 9.5-9.7	YN	1		8 7 4 4.3				17 a
	e24 HOUR HOLD TIME	pH 9.0-9.5	ΥN							
	HNO3 (P) Bed Corr or HCI (P) Purple Cap/Lt. Blue Label	-			10					
	H ₂ SO ₄ (P) or (AG) Yellow Cap/Label	pH<2	YN							
	NaOH (P) Green Cap	CI, pH >10	ΥN							
	NaOH + ZnAc (P)	£< Hq.	Y N						333	
	Dissolved Oxygen 300ml (g)									
7	None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	-							- 1	
<u>.</u> ≤	HCI (AG) ^{Lt. Blue Label} O&G, Diesel					, , , , , , , , , , , , , , , , , , ,		1		<u> </u>
Received	Ascorbic, EDTA, KH ₂ Ct (AG) ^{Pink Label} 525								-	
	Na ₂ O ₃ S 250mL (AG)Neon Green Label 515	-								
Bottles	Na ₂ S ₂ O ₃ 1 Liter (Brown P) 549								1	<u> </u>
Bot	Na ₂ S ₂ O ₃ (AG) ^{Blue Label} 548, THM, 524	-								
	Na ₂ S ₂ O ₃ (CG) ^{Blue Label} 504, 505, 547									
,	Na ₂ S ₂ O ₃ + MCAA (CG)Orange Label 531	pH<3	$\mathbf{Y} = \mathbf{N}$							
<u>.</u>	NH ₄ Cl (AG) ^{Purple Label} 552									28 (1948) 3 (1977)
ç	EDA (AG)Brown Label DBPs		* <u></u> -							
Š	HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624								-	
0	Buffer pH 4 (CG)		-					147,1		
Ĕ.		-	<u> </u>		Miller I					
ا	Other: Asbestos 1Liter Plastic w/ Foil	- 2 - 2 - 3 - 3 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5	3 <u>8 3</u>	-						
	Low Level Hg / Metals Double Baggie	<u>. 1 </u>								
	Bottled Water	-	 .	-	. , , , , ,				-	
	Clear Glass 250mL / 500mL / 1 Liter		_						-	
	Soil Tube Brass / Steel / Plastic		-							7.53.5
	Tedlar Bag / Plastic Bag Container Preservative Date/1			<u> </u>					\top	
Split	Container Preservative Date/1	ime/Initials	SP	Co	ontainer	Prese	rvative	Date/1	ime/	Initials
S,	S P		SP	 		+				
Comments	& Odd num	bens o	l	Rl d	N 10/18 _/	110				

Labeled by: @	Labels checked by:@	RUSH Paged by:@