



CH2M HILL
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June 9, 2008

NW Pipe - Stormwater

358932.PH.0E

RE: Laboratory Report for NW Pipe - Stormwater
Applied Sciences Laboratory Reference No. H2094

Pat Heins/PDX:

On June 06, 2008, CH2M HILL Applied Sciences Laboratory received four samples with a request for analysis of selected parameters. All analyses were performed by CH2M HILL unless otherwise indicated below.

The analytical results and associated quality control data are enclosed. Any unusual difficulties encountered during the analysis of your samples are discussed in the case narrative. The results included in this report only relate to the samples listed on the following Sample Cross-Reference page. This report shall not be reproduced except in full, without the written approval of the laboratory.

CH2M HILL Applied Sciences Laboratory appreciates your business and looks forward to serving your analytical needs again. If you should have any questions concerning the data, or if you need additional information, please call Kathy McKinley at (541) 758-0235, extension 3144.

Sincerely,

Kathy McKinley
Analytical Manager

Enclosures

cc:
Tina Rice/PDX



OR100022

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CLIENT SAMPLE CROSS-REFERENCE

CH2M HILL Applied Sciences Laboratory Reference No. H2094

Sample ID	Client Sample ID	Date Collected	Time Collected
H209401	D5-16-060508	06/05/2008	11:05
H209402	D5-17-060508	06/05/2008	11:06
H209403	D5-18-060508	06/05/2008	11:07
H209404	D5-19-060508	06/05/2008	11:08

**CASE NARRATIVE
METALS**

Lab Reference No.: H2094

Client/Project: NW Pipe - Stormwater

- I. Holding Time:
All acceptance criteria were met.

- II. Digestion Exceptions:
Client sample was not a drinking water sample; therefore, the sample was digested without preconcentration.

- III. Analysis:
 - A. Calibration:
All acceptance criteria were met.

 - B. Method Blank(s):
All acceptance criteria were met.

 - C. Duplicate Sample(s):
All acceptance criteria were met.

 - D. Spike Sample(s):
All acceptance criteria were met.

 - E. Laboratory Control Sample(s):
All acceptance criteria were met.

 - F. ICP Interference Check Sample(s):
All acceptance criteria were met.

 - G. ICP Serial Dilution(s):
Not Required.

 - H. Other:
All analyses were performed in accordance with 40 CFR Part 136.

- IV. Documentation Exceptions:
None.

- V. I certify that this data package is in compliance with the terms and conditions agreed to by the client and CH2M HILL, both technically and for completeness, except for the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Prepared by: *Joe, G* Date: 6-9-08

Reviewed by: *Kangsh* Date: 6/9/08

CH2M HILL Applied Sciences Laboratory (ASL)

Client Information

Client Sample ID: D5-16-060508

Project Name: NW Pipe

Sample Date: 06/05/08

Sample Time: 11:05

Type: Grab

Matrix: Water

Lab Information

Lab Sample ID: H209401

Date Received: 06/06/08

Report Revision No.: 0

Reported By: JG

Reviewed By: *KML*

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	20.0	404		ug/L	E200.7	06/09/08

U=Not detected at specified reporting limit
J=Estimated value below reporting limit
E=Estimated value above calibration range
*=See case narrative

CH2M HILL Applied Sciences Laboratory (ASL)

<u>Client Information</u>	<u>Lab Information</u>
Client Sample ID: D5-17-060508	Lab Sample ID: H209402
Project Name: NW Pipe	Date Received: 06/06/08
Sample Date: 06/05/08	Report Revision No.: 0
Sample Time: 11:06	Reported By: JG
Type: Grab	Reviewed By: <i>KME</i>
Matrix: Water	

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	20.0	248		ug/L	E200.7	06/09/08

U=Not detected at specified reporting limit
 J=Estimated value below reporting limit
 E=Estimated value above calibration range
 *=See case narrative

CH2M HILL Applied Sciences Laboratory (ASL)

<u>Client Information</u>				<u>Lab Information</u>			
Client Sample ID: D5-18-060508				Lab Sample ID: H209403			
Project Name: NW Pipe				Date Received: 06/06/08			
Sample Date: 06/05/08				Report Revision No.: 0			
Sample Time: 11:07				Reported By: JG			
Type: Grab				Reviewed By: <i>KML</i>			
Matrix: Water							

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	20.0	315		ug/L	E200.7	06/09/08

U=Not detected at specified reporting limit
 J=Estimated value below reporting limit
 E=Estimated value above calibration range
 *=See case narrative

CH2M HILL Applied Sciences Laboratory (ASL)

<u>Client Information</u>				<u>Lab Information</u>			
Client Sample ID: D5-19-060508				Lab Sample ID: H209404			
Project Name: NW Pipe				Date Received: 06/06/08			
Sample Date: 06/05/08				Report Revision No.: 0			
Sample Time: 11:08				Reported By: JG			
Type: Grab				Reviewed By: <i>Knc</i>			
Matrix: Water							

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	20.0	292		ug/L	E200.7	06/09/08

U=Not detected at specified reporting limit
 J=Estimated value below reporting limit
 E=Estimated value above calibration range
 *=See case narrative

CH2M HILL Applied Sciences Laboratory (ASL)

<u>Client Information</u>	<u>Lab Information</u>
Client Sample ID: WB1-0608	Lab Sample ID: WB1-0608
Project Name: NW Pipe	Date Received: N/A
Sample Date: N/A	Report Revision No.: 0
Sample Time: N/A	Reported By: JG
Type: QC	Reviewed By: <i>JMC</i>
Matrix: Water	

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	20.0	20.0	U	ug/L	E200.7	06/09/08

U=Not detected at specified reporting limit
 J=Estimated value below reporting limit
 E=Estimated value above calibration range
 *=See case narrative



Sample Receipt Record

Batch Number: SDG: H2094 Date received: 6/6/08
 NW Pipe
 Client/Project 06/06/2008

VERIFICATION OF SAMPLE CONDITIONS (verify all items) * HD = Client Hand delivered Samples

Observation	YES	NO
Radiological Screening for AFCEE		NA
Were custody seals intact and on the outside of the cooler?	X	
If yes, Where? Front <input checked="" type="checkbox"/> Rear <input checked="" type="checkbox"/> Lt Side <input type="checkbox"/> Rt Side <input type="checkbox"/>		
Type of packing material: <u>Ice</u> Blue Ice Bubble wrap		
Was the Chain of Custody inside the cooler?	X	
Was the Chain of Custody properly filled out?	X	
Were the sample containers in good condition?	X	
Containers supplied by ASL?		X
Any sample with < 1/2 holding time remaining? If so contact LPM		X
Was there ice in the cooler? Enter temp. 2.2° C	X	
All VOCs free of air bubbles ?		NA

VERIFICATION OF SAMPLE PRESERVATION

Sample No	Nutrients pH <2	Metals pH <2	Volatiles pH <2	Cyanides pH >12	TOC pH <2	TOX pH <2	Other (specify)	N/A (soils/unpres)
1		<2						
2		I						
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

LOGIN AND pH VERIFICATIONS PERFORMED BY

Al Habae 6/6/08 10:55
 Date/Time

 Date/Time