



CH2M HILL
Applied Sciences Laboratory
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Tel 541.752.4271
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March 31, 2008

NW Pipe

358932.PH.0E

RE: Laboratory Report for NW Pipe
Applied Sciences Laboratory Reference No. H1513

Pat Heins/PDX:

On March 15, 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.

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,

A handwritten signature in cursive script that reads "Kathy McKinley".

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. H1513

Sample ID	Client Sample ID	Date Collected	Time Collected
H151301	SW16-31308	03/13/2008	23:20
H151302	SW17-31308	03/13/2008	23:24
H151303	SW18-31308	03/13/2008	23:26
H151304	SW19-31308	03/13/2008	23:28

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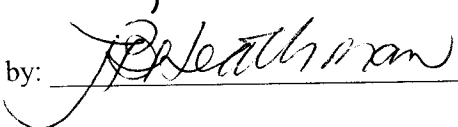
**CASE NARRATIVE
METALS**

Lab Reference No.: H1513

Client/Project: NW Pipe

- 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):
Analysis performed in accordance with standard operating procedure.
 - D. Spike Sample(s):
Analysis performed in accordance with standard operating procedure.
 - 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:  Date: 3/20/08

Reviewed by:  Date: 3/31/08

CH2M HILL Applied Sciences Laboratory (ASL)

Client Information				Lab Information			
Client Sample ID: SW16-31308				Lab Sample ID: H151301			
Project Name: NW Pipe				Date Received: 03/15/08			
Sample Date: 03/13/08				Report Revision No.: 0			
Sample Time: 23:20				Reported By: JG			
Type: Grab				Reviewed By: JBA			
Matrix: Water							

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	5.0	4390		ug/L	SW6010B	03/18/08

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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: SW17-31308	Lab Sample ID: H151302
Project Name: NW Pipe	Date Received: 03/15/08
Sample Date: 03/13/08	Report Revision No.: 0
Sample Time: 23:24	Reported By: JG
Type: Grab	Reviewed By: <i>[Signature]</i>
Matrix: Water	

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	5.0	4710		ug/L	SW6010B	03/18/08

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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: SW18-31308	Lab Sample ID: H151303
Project Name: NW Pipe	Date Received: 03/15/08
Sample Date: 03/13/08	Report Revision No.: 0
Sample Time: 23:26	Reported By: JG
Type: Grab	Reviewed By: <i>JG</i>
Matrix: Water	

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	5.0	4550		ug/L	SW6010B	03/18/08

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

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CH2M HILL Applied Sciences Laboratory (ASL)

<u>Client Information</u>	<u>Lab Information</u>
Client Sample ID: SW19-31308	Lab Sample ID: H151304
Project Name: NW Pipe	Date Received: 03/15/08
Sample Date: 03/13/08	Report Revision No.: 0
Sample Time: 23:28	Reported By: JG
Type: Grab	Reviewed By: <i>JGA</i>
Matrix: Water	

Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	5.0	4500		ug/L	SW6010B	03/18/08

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

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CH2M HILL Applied Sciences Laboratory (ASL)

<u>Client Information</u>	<u>Lab Information</u>
Client Sample ID: WB1-0318	Lab Sample ID: WB1-0318
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>JGA</i>
Matrix: Water	

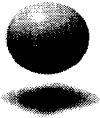
Analyte	CAS#	Dilution Factor	MRL	Sample Result	Qualifier	Units	Analysis Method	Date Analyzed
Metals								
Zinc	7440-66-6	1	5.0	5.0	U	ug/L	SW6010B	03/18/08

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

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CH2M HILL Applied Sciences Laboratory
 CHAIN OF CUSTODY RECORD

Project/Contact Information				Requested Analysis				THIS AREA FOR LAB USE ONLY					
Project #		358932.PH.OE		SDG: H1513				Pg 1		of 1			
Project Name		Northwest Pipe Co		NW Pipe				Custody Review					
Report Copy to		Pat Heins & EData to Tina Rice		03/17/2008				Log In		LIMS Verification			
Company Name/Contact		CH2M HILL Pat Heins/PDX						pH		Cust Seals Y N Ice Y N			
Total Number of Containers				Preservative				Cooler Temperature					
Type		Matrix		Client Sample ID		LAB QC		Alternate Description				Lab ID	
Comp		Grab		SW16-31308		1						1	
Water		Soil		SW17-31308		1						2	
Sediment				SW18-31308		1						3	
Date		Time		SW19-31308		1						4	
3/13/08		23:20											
3/13/08		23:24											
3/13/08		23:26											
3/13/08		23:28											
Relinquished By				Date/Time				Received By					
Pat Heins				3/14/08 10:00									
Relinquished By				Date/Time				Received By					
Valerie Wing				3/17/08 9:45				Logan					
Relinquished By				Date/Time				Received By					
Pat Heins				3/15/08 Rec									
Special Instructions													
* Metals: total Zinc only Standard 21 DAY TAT													



Batch Number: | **SDG: H1513**
NW Pipe
Client/Project | **03/17/2008**

Date received: **3-17-08 Login**
3-15-08 REC

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?	✓	
If yes, Where? <u>Front</u> Rear Lt Side Rt Side		
Type of packing material: <u>(ice) Blue Ice</u> Bubble wrap		
Was the Chain of Custody inside the cooler?	✓	
Was the Chain of Custody properly filled out?	✓	
Were the sample containers in good condition?	✓	
Containers supplied by ASL?	✓	
Any sample with < 1/2 holding time remaining? If so contact LPM		✓
Was there ice in the cooler? Enter temp. <u>3.0 C</u>	✓	
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		✓						
3		✓						
4		✓						
5								
6								
7								
8								
9								
10								
11								
12								
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14								
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16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

LOGIN AND pH VERIFICATIONS PERFORMED BY

Valerie Wang 3/17/08 945
Date/Time

Date/Time

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