



Analytica Alaska Southeast
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6/26/2008

Admiralty Environmental, LLC
431 N. Franklin St.
Suite 101
Juneau, AK 99801
Attn: David Wetzel

Work Order #: J0806179
Date: 6/26/2008
Work ID: Star Princess
Date Received: 6/20/2008

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
J0806179-01	Ketchikan Bunker Water Conn		

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

Claire Toon
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Alaska Southeast

Work Order: J0806179

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Methods for the Determination of Metals in Environmental Samples, EPA/600/R-94/111, May 1994.

SAMPLE RECEIPT:

One (1) sample was received on 6/20/2008 at 4:50:00 PM, at a temperature of 5.9°C, in cooler 1 at Analytica-Juneau. The cooler was opened on 6/20/08. The sample was received in good condition and in order per chain of custody.

The sample was transferred for analysis to Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241, where it was received at a temperature of 2.3°C, in good condition and in order per chain of custody on 6/24/08.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN

A summary of our review is shown below, organized by test:

Test Method: 200.8 - Metals by ICP/MS - Dissolved - Aqueous

HOLDING TIMES:

Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:

There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:

Instrument checks were within method criteria.

INITIAL CALIBRATIONS:

Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:

Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:

Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:

There are no method blank outliers.

LCS OUTLIERS:

There are no LCS outliers.

MS/MSD and DUP OUTLIERS:

There are no MS/MSD or DUP outliers.

Test Method: In-lab filtration for dissolved metals - Aqueous

HOLDING TIMES:

Per the 40CFR Part 136, filtration for dissolved targets should be performed in the field, within 15 minutes of sampling. Per client request, filtration was performed as soon as possible upon sample receipt.

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): J0806179
Project: Star Princess
Client: Admiralty Environmental, LLC
Client Project Number: AE 2049

Client Sample Name: **Ketchikan Bunker Water Connection**

Matrix: Aqueous

Collection Date: 6/17/2008 7:09:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	3.62	0.10	ug/L	6/25/08 17:48		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	0.212	0.15	ug/L	6/25/08 17:48		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	4.14	0.25	ug/L	6/25/08 17:48		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/20/08 17:00		al	In-lab filtration for dissolved metals

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806179

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Ketchikan Bunker Water Connection**

Matrix: Aqueous

Collection Date: 6/17/2008 7:09:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806179-01A

Prep Date: 6/20/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080624003

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/20/2008 5:00:00PM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806179-01A

Prep Date: 6/25/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080625011

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/25/2008 5:48:19PM

Instrument: Elan

File Name: 062508asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	3.62		ug/L	0.10	0.034	1
Nickel	7440-02-0	0.212		ug/L	0.15	0.050	
Zinc	7440-66-6	4.14		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806179

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Method Blank Report

Client Sample Name: MB

Matrix: Aqueous

Collection Date: 6/25/2008 12:00:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T080625011-MB

Analysis Date: 6/25/2008 2:09:14PM

Prep Date: 6/25/2008

Instrument: Elan

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

File Name: 062508asam.re

Prep Method ID: 200.8

Dilution Factor: 1

Prep Batch Number: T080625011

Report Basis: Dry Weight Basis

Analyst Initials: GY

Sample prep wt./vol: 50.00 ml

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	ND		ug/L	0.10	0.034	1
Nickel	7440-02-0	ND		ug/L	0.15	0.050	
Zinc	7440-66-6	ND		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806179

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG): J0806179

Project: Star Princess

Project Number:

Prep Batch: T080625011

QUALITY CONTROL REPORT

SAMPLE DUPLICATE REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Base Sample: F0806238-02D

Prep Date: 6/25/2008

Samp. Anal. Date: 6/25/2008 4:51:15PM

Units: ug/L

DUP Anal. Date: 6/25/2008 4:55:41PM

Matrix: Aqueous

Analyte Name	SampResult	DUPRes.	RPD	RPDLim	Flag
Arsenic	5.16	5.11	1.0	20	

LCS/LCSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

MB: T080625011-MB

Prep Date: 6/25/2008

MB Anal. Date: 6/25/2008 2:09:14PM

Units: ug/L

LCS Anal. Date: 6/25/2008 2:13:40PM LCSD Anal. Date: 6/25/2008 2:18:05PM

Matrix: Aqueous

Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLv	Recov.	SD Recov	RPD	Recov Lim	RPDLim	Flag
Nickel	ND	50.4	50.1	50.0	50.0	100.8	100.2	0.6	85 - 115	20	
Copper	ND	51.7	51.2	50.0	50.0	103.4	102.4	1.0	85 - 115	20	
Zinc	ND	51.4	50.0	50.0	50.0	102.8	100.0	2.8	85 - 115	20	

MS/MSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Parent: F0806238-02D

Prep Date: 6/25/2008

Samp. Anal. Date: 6/25/2008 4:51:15PM

Units: ug/L

MS Anal. Date: 6/25/2008 5:00:08PM MSD Anal. Date: 6/25/2008 5:04:34PM

Matrix: Aqueous

Analyte Name	SampResult	MSRes.	MSDRes	SPLv	SPDLv	Recov.	MSD Rec.	RPD	Recov Lim	RPDLim	Flag
Arsenic	5.16	58.0	59.0	50.0	50.0	105.7	107.7	1.7	70 - 130	20	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806179

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806179

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: 88,812 Lab Project Number: J0806179

Prep Date: 6/25/2008

Lab Method Blank Id: T080625011-MB

Prep Batch ID: T080625011

Method: 200.8 - Metals by ICP/MS - Dissolved

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
F0806238-02D	Batch QC	062508asam.rep	6/25/2008 4:51:15PM
J0806179-01A	Ketchikan Bunker Water Connection	062508asam.rep	6/25/2008 5:48:19PM
T080625011-LCS	LCS	062508asam.rep	6/25/2008 2:13:40PM
T080625011-LCSD	LCSD	062508asam.rep	6/25/2008 2:18:05PM
F0806238-02D-DUP	DUP	062508asam.rep	6/25/2008 4:55:41PM
F0806238-02D-MS	MS	062508asam.rep	6/25/2008 5:00:08PM
F0806238-02D-MSD	MSD	062508asam.rep	6/25/2008 5:04:34PM

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806179

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Other Flags may be applied. See Case Narrative for Description

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806179
Project: Star Princess
Client: Admiralty Environmental, LLC
Client Project Number: AE 2049

REPORTING CONVENTIONS FOR THIS REPORT

J0806179

<u>Test Name</u>	<u>Basis</u>	<u># Sig Figs</u>	<u>Reporting Limit</u>
200.8/200.8 (Aqueous) - Dissolved	As Received		Report to PQL
Filtration (Aqueous)	As Received		Report to PQL



Analytica Alaska Southeast
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Fax (907) 780-6670

7/11/2008

Admiralty Environmental, LLC
431 N. Franklin St.
Suite 101
Juneau, AK 99801
Attn: David Wetzel

Work Order #: J0806209
Date: 7/11/2008
Work ID: Star Princess
Date Received: 6/25/2008

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
J0806209-01	Evaporator 1	J0806209-02	Evaporator 3
J0806209-03	Evaporator 2	J0806209-04	Bunkering Victoria - On Pier
J0806209-05	Bunkering Seattle - Fwd Port		

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

Keelin Kistner
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Alaska Southeast

Work Order: J0806209

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Methods for the Determination of Metals in Environmental Samples, EPA/600/R-94/111, May 1994.

SAMPLE RECEIPT:

Five (5) samples were received on 6/25/2008 at 4:25:00 PM, at a temperature of 2.3°C, in cooler 1 at Analytica-Juneau. The cooler was opened on 6/25/2008. The samples were received in good condition and in order per chain of custody.

The sample was transferred for analysis to Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241, where it was received at a temperature of 2.1°C, in good condition and in order per chain of custody on 6/27/08.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN

A summary of our review is shown below, organized by test:

Test Method: 200.8 - Metals by ICP/MS - Dissolved - Aqueous

HOLDING TIMES:

Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:

There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:

Instrument checks were within method criteria.

INITIAL CALIBRATIONS:

Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:

Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:

Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:

There are no method blank outliers.

LCS OUTLIERS:

There are no LCS outliers.

MS/MSD and DUP OUTLIERS:

There are no MS/MSD or DUP outliers.

Test Method: In-lab filtration for dissolved metals - Aqueous

HOLDING TIMES:

Per the 40CFR Part 136, filtration for dissolved targets should be performed in the field, within 15 minutes of sampling. Per client request, filtration was performed as soon as possible upon sample receipt.

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): J0806209
Project: Star Princess
Client: Admiralty Environmental, LLC
Client Project Number: AE 2049

Client Sample Name: **Bunkering Seattle - Fwd Port**

Matrix: Aqueous

Collection Date: 6/22/2008 10:29:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	0.749	0.10	ug/L	7/7/08 22:51		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	0.390	0.15	ug/L	7/7/08 22:51		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	5.85	0.25	ug/L	7/7/08 22:51		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	mg/L	6/25/08 16:45		AL	In-lab filtration for dissolved metals

Client Sample Name: **Bunkering Victoria - On Pier**

Matrix: Aqueous

Collection Date: 6/21/2008 5:50:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	2.47	0.10	ug/L	7/7/08 22:25		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	0.431	0.15	ug/L	7/7/08 22:25		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	8.92	0.25	ug/L	7/7/08 22:25		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	mg/L	6/25/08 16:45		AL	In-lab filtration for dissolved metals

Client Sample Name: **Evaporator 1**

Matrix: Aqueous

Collection Date: 6/20/2008 3:20:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	49.7	0.10	ug/L	7/7/08 22:12		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	3.13	0.15	ug/L	7/7/08 22:12		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	15.4	0.25	ug/L	7/7/08 22:12		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	mg/L	6/25/08 16:45		AL	In-lab filtration for dissolved metals

Client Sample Name: **Evaporator 2**

Matrix: Aqueous

Collection Date: 6/23/2008 3:45:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	50.3	0.10	ug/L	7/7/08 22:21		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	1.00	0.15	ug/L	7/7/08 22:21		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	28.1	0.25	ug/L	7/7/08 22:21		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	mg/L	6/25/08 16:45		AL	In-lab filtration for dissolved metals

Client Sample Name: **Evaporator 3**

Matrix: Aqueous

Collection Date: 6/20/2008 3:25:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	42.5	0.10	ug/L	7/7/08 22:16		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	1.04	0.15	ug/L	7/7/08 22:16		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	51.8	0.25	ug/L	7/7/08 22:16		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	mg/L	6/25/08 16:45		AL	In-lab filtration for dissolved metals

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Evaporator 1

Matrix: Aqueous

Collection Date: 6/20/2008 3:20:00PM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806209-01A

Prep Date: 6/25/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080710015

Report Basis: As Received

Sample prep wt./vol: 250.00 ml

Analysis Date: 6/25/2008 4:45:00PM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: AL

Prep Extract Vol: 250.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		mg/L	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806209-01A

Prep Date: 7/7/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080707007

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 7/7/2008 10:12:12PM

Instrument: Elan

File Name: 070708bsam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	49.7		ug/L	0.10	0.034	1
Nickel	7440-02-0	3.13		ug/L	0.15	0.050	
Zinc	7440-66-6	15.4		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Evaporator 3

Matrix: Aqueous

Collection Date: 6/20/2008 3:25:00PM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806209-02A

Prep Date: 6/25/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080710015

Report Basis: As Received

Sample prep wt./vol: 250.00 ml

Analysis Date: 6/25/2008 4:45:00PM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: AL

Prep Extract Vol: 250.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		mg/L	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806209-02A

Prep Date: 7/7/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080707007

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 7/7/2008 10:16:43PM

Instrument: Elan

File Name: 070708bsam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	42.5		ug/L	0.10	0.034	1
Nickel	7440-02-0	1.04		ug/L	0.15	0.050	
Zinc	7440-66-6	51.8		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Evaporator 2

Matrix: Aqueous

Collection Date: 6/23/2008 3:45:00PM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806209-03A

Prep Date: 6/25/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080710015

Report Basis: As Received

Sample prep wt./vol: 250.00 ml

Analysis Date: 6/25/2008 4:45:00PM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: AL

Prep Extract Vol: 250.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		mg/L	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806209-03A

Prep Date: 7/7/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080707007

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 7/7/2008 10:21:13PM

Instrument: Elan

File Name: 070708bsam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	50.3		ug/L	0.10	0.034	1
Nickel	7440-02-0	1.00		ug/L	0.15	0.050	
Zinc	7440-66-6	28.1		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Bunkering Victoria - On Pier**

Matrix: Aqueous

Collection Date: 6/21/2008 5:50:00PM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806209-04A

Prep Date: 6/25/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080710015

Report Basis: As Received

Sample prep wt./vol: 250.00 ml

Analysis Date: 6/25/2008 4:45:00PM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: AL

Prep Extract Vol: 250.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		mg/L	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806209-04A

Prep Date: 7/7/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080707007

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 7/7/2008 10:25:43PM

Instrument: Elan

File Name: 070708bsam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	2.47		ug/L	0.10	0.034	1
Nickel	7440-02-0	0.431		ug/L	0.15	0.050	
Zinc	7440-66-6	8.92		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Bunkering Seattle - Fwd Port**

Matrix: Aqueous

Collection Date: 6/22/2008 10:29:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806209-05A

Prep Date: 6/25/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080710015

Report Basis: As Received

Sample prep wt./vol: 250.00 ml

Analysis Date: 6/25/2008 4:45:00PM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: AL

Prep Extract Vol: 250.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		mg/L	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806209-05A

Prep Date: 7/7/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080707007

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 7/7/2008 10:51:53PM

Instrument: Elan

File Name: 070708bsam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	0.749		ug/L	0.10	0.034	1
Nickel	7440-02-0	0.390		ug/L	0.15	0.050	
Zinc	7440-66-6	5.85		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Method Blank Report

Client Sample Name: MB

Matrix: Aqueous

Collection Date: 7/7/2008 12:00:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T080707007-MB

Analysis Date: 7/7/2008 3:35:36PM

Prep Date: 7/7/2008

Instrument: Elan

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

File Name: 070708bsam.re

Prep Method ID: 200.8

Dilution Factor: 1

Prep Batch Number: T080707007

Report Basis: Dry Weight Basis

Analyst Initials: GY

Sample prep wt./vol: 50.00 ml

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	ND		ug/L	0.10	0.034	1
Nickel	7440-02-0	ND		ug/L	0.15	0.050	
Zinc	7440-66-6	ND		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG): J0806209

Project: Star Princess

Project Number:

Prep Batch: T080707007

QUALITY CONTROL REPORT

SAMPLE DUPLICATE REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Base Sample: F0806396-02A

Prep Date: 7/7/2008

Samp. Anal. Date: 7/7/2008 9:05:03PM

Units: ug/L

DUP Anal. Date: 7/7/2008 9:09:33PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>DUPRes.</u>	<u>RPD</u>	<u>RPDLim</u>	<u>Flag</u>
Copper	648	648	0.0	20	
Lead	7.31	7.29	0.3	20	

LCS/LCSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

MB: T080707007-MB

Prep Date: 7/7/2008

MB Anal. Date: 7/7/2008 3:35:36PM

Units: ug/L

LCS Anal. Date: 7/7/2008 3:40:05PM LCSD Anal. Date: 7/7/2008 3:45:04PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SDRes.</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>SD Recov</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	ND	52.1	52.3	50.0	50.0	104.2	104.6	0.4	85 - 115	20	
Copper	ND	53.2	53.6	50.0	50.0	106.4	107.2	0.7	85 - 115	20	
Zinc	ND	51.4	51.9	50.0	50.0	102.8	103.8	1.0	85 - 115	20	

MS/MSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Parent: F0806396-02A

Prep Date: 7/7/2008

Samp. Anal. Date: 7/7/2008 9:05:03PM

Units: ug/L

MS Anal. Date: 7/7/2008 9:14:03PM MSD Anal. Date: 7/7/2008 9:19:03PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>MSRes.</u>	<u>MSDRes</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>MSD Rec.</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Copper	648	688	686	50.0	50.0	80.0	76.0	0.3	70 - 130	20	NOTE 2 NOTE 2
Lead	7.31	59.3	60.5	50.0	50.0	104.0	106.4	2.0	70 - 130	20	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: 88,987 Lab Project Number: J0806209

Prep Date: 7/7/2008

Lab Method Blank Id: T080707007-MB

Prep Batch ID: T080707007

Method: 200.8 - Metals by ICP/MS - Dissolved

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
F0806396-02A	Batch QC	070708bsam.rep	7/7/2008 9:05:03PM
J0806209-01A	Evaporator 1	070708bsam.rep	7/7/2008 10:12:12PM
J0806209-02A	Evaporator 3	070708bsam.rep	7/7/2008 10:16:43PM
J0806209-03A	Evaporator 2	070708bsam.rep	7/7/2008 10:21:13PM
J0806209-04A	Bunkering Victoria - On Pier	070708bsam.rep	7/7/2008 10:25:43PM
J0806209-05A	Bunkering Seattle - Fwd Port	070708bsam.rep	7/7/2008 10:51:53PM
T080707007-LCS	LCS	070708bsam.rep	7/7/2008 3:40:05PM
T080707007-LCSD	LCSD	070708bsam.rep	7/7/2008 3:45:04PM
F0806396-02A-DUP	DUP	070708bsam.rep	7/7/2008 9:09:33PM
F0806396-02A-MS	MS	070708bsam.rep	7/7/2008 9:14:03PM
F0806396-02A-MSD	MSD	070708bsam.rep	7/7/2008 9:19:03PM

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806209

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Other Flags may be applied. See Case Narrative for Description

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806209
Project: Star Princess
Client: Admiralty Environmental, LLC
Client Project Number: AE 2049

REPORTING CONVENTIONS FOR THIS REPORT

J0806209

<u>Test Name</u>	<u>Basis</u>	<u># Sig Figs</u>	<u>Reporting Limit</u>
200.8/200.8 (Aqueous) - Dissolved	As Received		Report to PQL
Filtration (Aqueous)	As Received		Report to PQL



Analytica Alaska Southeast
5438 Shaune Drive
Juneau, AK 99801
(907) 780-6668
Fax (907) 780-6670

7/3/2008

Admiralty Environmental, LLC
431 N. Franklin St.
Suite 101
Juneau, AK 99801
Attn: David Wetzel

Work Order #: J0806164
Date: 7/3/2008
Work ID: Star Princess
Date Received: 6/19/2008

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
J0806164-01	Bunkered Water Skagway St. F	J0806164-02	Potable Water Tk (8+9) after R
J0806164-03	Bunkered Water - Ketchikan - S	J0806164-04	Tap Water - Bridge Pantry Dec
J0806164-05	Crew Cabin Deck 10 Fwd Port (J0806164-06	Pax Cabin Deck 8 Fwd Stbd (h
J0806164-07	Pax Cabin Deck 11 Port Midshi	J0806164-08	Crew Cabin Deck 4 Port
J0806164-09	Tap Water - Crew Galley Deck 5	J0806164-10	Influent MBR Black Water - Ev
J0806164-11	Influent MBR Gray Water - Buff	J0806164-12	Potable Water Tk (11-12) after R
J0806164-13	Bunkered Water - Juneau -AJ D	J0806164-14	Alternate OB Sample Point

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

Keelin Kistner
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Alaska Southeast

Work Order: J0806164

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Methods for the Determination of Metals in Environmental Samples, EPA/600/R-94/111, May 1994.

SAMPLE RECEIPT:

Fourteen (14) samples were received on 6/19/2008 at 7:00:00 AM, at a temperature of 5.6°C, in cooler 1 at Analytica-Juneau. The cooler was opened on 6/19/2008. The samples were received in good condition and in order per chain of custody.

The samples were transferred for analysis to Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241, where they were received at a temperature of 5.1°C, in good condition and in order per chain of custody on 6/24/08.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN

A summary of our review is shown below, organized by test:

Test Method: 200.8 - Metals by ICP/MS - Dissolved - Aqueous

HOLDING TIMES:

Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:

There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:

Instrument checks were within method criteria.

INITIAL CALIBRATIONS:

Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:

Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:

Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:

There are no method blank outliers.

LCS OUTLIERS:

There are no LCS outliers.

MS/MSD and DUP OUTLIERS:

There are no MS/MSD or DUP outliers.

Test Method: In-lab filtration for dissolved metals - Aqueous

HOLDING TIMES:

Per the 40CFR Part 136, filtration for dissolved targets should be performed in the field, within 15 minutes of sampling. Per client request, filtration was performed as soon as possible upon sample receipt.

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): J0806164
Project: Star Princess
Client: Admiralty Environmental, LLC
Client Project Number: AE 2049

Client Sample Name: **Alternate OB Sample Point**

Matrix: Aqueous

Collection Date: 6/18/2008 5:20:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	116	1.0	ug/L	6/27/08 0:53		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	258	1.5	ug/L	6/27/08 0:53		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	183	2.5	ug/L	6/27/08 0:53		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: **Bunkered Water - Juneau -AJ Dock**

Matrix: Aqueous

Collection Date: 6/18/2008 5:30:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	28.1	0.10	ug/L	6/26/08 18:09		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	1.24	0.15	ug/L	6/26/08 18:09		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	13.7	0.25	ug/L	6/26/08 18:09		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: **Bunkered Water - Ketchikan - St. Fwd Port**

Matrix: Aqueous

Collection Date: 6/17/2008 11:30:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	0.430	0.10	ug/L	6/26/08 17:12		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	0.200	0.15	ug/L	6/26/08 17:12		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	6.49	0.25	ug/L	6/26/08 17:12		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: **Bunkered Water Skagway St. Fwd Port**

Matrix: Aqueous

Collection Date: 6/12/2008 8:35:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	0.688	0.10	ug/L	6/26/08 16:29		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	1.48	0.15	ug/L	6/26/08 16:29		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	6.53	0.25	ug/L	6/26/08 16:29		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: **Crew Cabin Deck 10 Fwd Port (hot water)**

Matrix: Aqueous

Collection Date: 6/17/2008 11:45:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	52.3	0.10	ug/L	6/26/08 17:19		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	8.27	0.15	ug/L	6/26/08 17:19		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	33.5	0.25	ug/L	6/26/08 17:19		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): J0806164
Project: Star Princess
Client: Admiralty Environmental, LLC
Client Project Number: AE 2049

Client Sample Name: **Crew Cabin Deck 4 Port**

Matrix: Aqueous

Collection Date: 6/17/2008 12:00:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	41.6	0.10	ug/L	6/26/08 17:34		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	1.85	0.15	ug/L	6/26/08 17:34		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	40.0	0.25	ug/L	6/26/08 17:34		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: **Influent MBR Black Water - Evac 4**

Matrix: Aqueous

Collection Date: 6/18/2008 11:35:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	17.0	1.4	ug/L	6/27/08 0:49		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	8.58	2.1	ug/L	6/27/08 0:49		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	115	3.6	ug/L	6/27/08 0:49		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: **Influent MBR Gray Water - Buffer Tk**

Matrix: Aqueous

Collection Date: 6/18/2008 11:45:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	22.5	0.10	ug/L	6/26/08 18:01		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	7.64	0.15	ug/L	6/26/08 18:01		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	94.6	0.25	ug/L	6/26/08 18:01		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: **Pax Cabin Deck 11 Port Midship**

Matrix: Aqueous

Collection Date: 6/17/2008 11:55:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	44.7	0.10	ug/L	6/26/08 17:31		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	2.21	0.15	ug/L	6/26/08 17:31		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	33.7	0.25	ug/L	6/26/08 17:31		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: **Pax Cabin Deck 8 Fwd Stbd (hot water)**

Matrix: Aqueous

Collection Date: 6/17/2008 11:50:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	56.3	0.10	ug/L	6/26/08 17:27		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	8.20	0.15	ug/L	6/26/08 17:27		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	34.9	0.25	ug/L	6/26/08 17:27		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): J0806164
Project: Star Princess
Client: Admiralty Environmental, LLC
Client Project Number: AE 2049

Client Sample Name: Potable Water Tk (11-12) after Retention

Matrix: Aqueous

Collection Date: 6/18/2008 11:55:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	17.6	0.10	ug/L	6/26/08 18:05		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	1.48	0.15	ug/L	6/26/08 18:05		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	18.0	0.25	ug/L	6/26/08 18:05		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: Potable Water Tk (8+9) after Retention

Matrix: Aqueous

Collection Date: 6/17/2008 11:20:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	15.3	0.10	ug/L	6/26/08 17:08		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	1.74	0.15	ug/L	6/26/08 17:08		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	17.8	0.25	ug/L	6/26/08 17:08		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: Tap Water - Bridge Pantry Deck 14

Matrix: Aqueous

Collection Date: 6/17/2008 11:35:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	19.5	0.10	ug/L	6/26/08 17:15		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	1.87	0.15	ug/L	6/26/08 17:15		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	26.9	0.25	ug/L	6/26/08 17:15		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Client Sample Name: Tap Water - Crew Galley Deck 5 Aft (Hot)

Matrix: Aqueous

Collection Date: 6/17/2008 12:05:00PM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	26.3	0.10	ug/L	6/26/08 17:38		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	10.4	0.15	ug/L	6/26/08 17:38		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	25.2	0.25	ug/L	6/26/08 17:38		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	6/19/08 9:00		al	In-lab filtration for dissolved metals

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Bunkered Water Skagway St. Fwd Port**

Matrix: Aqueous

Collection Date: 6/12/2008 8:35:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-01A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-01A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 4:29:22PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	0.688		ug/L	0.10	0.034	1
Nickel	7440-02-0	1.48		ug/L	0.15	0.050	
Zinc	7440-66-6	6.53		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Potable Water Tk (8+9) after Retention**

Matrix: Aqueous

Collection Date: 6/17/2008 11:20:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-02A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-02A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 5:08:11PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	15.3		ug/L	0.10	0.034	1
Nickel	7440-02-0	1.74		ug/L	0.15	0.050	
Zinc	7440-66-6	17.8		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Bunkered Water - Ketchikan - St. Fwd Port

Matrix: Aqueous Collection Date: 6/17/2008 11:30:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-03A Analysis Date: 6/19/2008 9:00:00AM
Prep Date: 6/19/2008 Instrument: Filter
Analytical Method ID: In-lab filtration for dissolved metals File Name:
Prep Method ID: Filtration Dilution Factor: 1
Prep Batch Number: J080620006
Report Basis: As Received Analyst Initials: al
Sample prep wt./vol: 1.00 ml Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-03A Analysis Date: 6/26/2008 5:12:00PM
Prep Date: 6/26/2008 Instrument: Elan
Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved File Name: 062608asam.re
Prep Method ID: 200.8 Dilution Factor: 1
Prep Batch Number: T080626010
Report Basis: As Received Analyst Initials: GY
Sample prep wt./vol: 50.00 ml Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	0.430		ug/L	0.10	0.034	1
Nickel	7440-02-0	0.200		ug/L	0.15	0.050	
Zinc	7440-66-6	6.49		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Tap Water - Bridge Pantry Deck 14**

Matrix: Aqueous

Collection Date: 6/17/2008 11:35:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-04A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-04A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 5:15:49PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	19.5		ug/L	0.10	0.034	1
Nickel	7440-02-0	1.87		ug/L	0.15	0.050	
Zinc	7440-66-6	26.9		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Crew Cabin Deck 10 Fwd Port (hot water)

Matrix: Aqueous

Collection Date: 6/17/2008 11:45:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-05A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-05A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 5:19:38PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	52.3		ug/L	0.10	0.034	1
Nickel	7440-02-0	8.27		ug/L	0.15	0.050	
Zinc	7440-66-6	33.5		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Pax Cabin Deck 8 Fwd Stbd (hot water)

Matrix: Aqueous

Collection Date: 6/17/2008 11:50:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-06A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-06A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 5:27:17PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	56.3		ug/L	0.10	0.034	1
Nickel	7440-02-0	8.20		ug/L	0.15	0.050	
Zinc	7440-66-6	34.9		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Pax Cabin Deck 11 Port Midship

Matrix: Aqueous

Collection Date: 6/17/2008 11:55:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-07A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-07A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 5:31:06PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	44.7		ug/L	0.10	0.034	1
Nickel	7440-02-0	2.21		ug/L	0.15	0.050	
Zinc	7440-66-6	33.7		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Crew Cabin Deck 4 Port**

Matrix: Aqueous

Collection Date: 6/17/2008 12:00:00PM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-08A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-08A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 5:34:55PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	41.6		ug/L	0.10	0.034	1
Nickel	7440-02-0	1.85		ug/L	0.15	0.050	
Zinc	7440-66-6	40.0		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Tap Water - Crew Galley Deck 5 Aft (Hot)

Matrix: Aqueous Collection Date: 6/17/2008 12:05:00PM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-09A Analysis Date: 6/19/2008 9:00:00AM
Prep Date: 6/19/2008 Instrument: Filter
Analytical Method ID: In-lab filtration for dissolved metals File Name:
Prep Method ID: Filtration Dilution Factor: 1
Prep Batch Number: J080620006
Report Basis: As Received Analyst Initials: al
Sample prep wt./vol: 1.00 ml Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-09A Analysis Date: 6/26/2008 5:38:44PM
Prep Date: 6/26/2008 Instrument: Elan
Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved File Name: 062608asam.re
Prep Method ID: 200.8 Dilution Factor: 1
Prep Batch Number: T080626010
Report Basis: As Received Analyst Initials: GY
Sample prep wt./vol: 50.00 ml Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	26.3		ug/L	0.10	0.034	1
Nickel	7440-02-0	10.4		ug/L	0.15	0.050	
Zinc	7440-66-6	25.2		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Influent MBR Black Water - Evac 4**

Matrix: Aqueous

Collection Date: 6/18/2008 11:35:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-10A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-10A

Prep Date: 6/25/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.2_ICPMS

Prep Batch Number: T080625012

Report Basis: As Received

Sample prep wt./vol: 35.00 ml

Analysis Date: 6/27/2008 12:49:47AM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 10

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	17.0		ug/L	1.4	0.49	1
Nickel	7440-02-0	8.58		ug/L	2.1	0.71	
Zinc	7440-66-6	115		ug/L	3.6	1.2	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Influent MBR Gray Water - Buffer Tk**

Matrix: Aqueous

Collection Date: 6/18/2008 11:45:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-11A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-11A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 6:01:34PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	22.5		ug/L	0.10	0.034	1
Nickel	7440-02-0	7.64		ug/L	0.15	0.050	
Zinc	7440-66-6	94.6		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: Potable Water Tk (11-12) after Retention

Matrix: Aqueous

Collection Date: 6/18/2008 11:55:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-12A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-12A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 6:05:23PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	17.6		ug/L	0.10	0.034	1
Nickel	7440-02-0	1.48		ug/L	0.15	0.050	
Zinc	7440-66-6	18.0		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Bunkered Water - Juneau -AJ Dock**

Matrix: Aqueous

Collection Date: 6/18/2008 5:30:00PM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-13A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-13A

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 6:09:14PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	28.1		ug/L	0.10	0.034	1
Nickel	7440-02-0	1.24		ug/L	0.15	0.050	
Zinc	7440-66-6	13.7		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Client Sample Report

Client Sample Name: **Alternate OB Sample Point**

Matrix: Aqueous

Collection Date: 6/18/2008 5:20:00PM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806164-14A

Prep Date: 6/19/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080620006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 6/19/2008 9:00:00AM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806164-14A

Prep Date: 6/25/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.2_ICPMS

Prep Batch Number: T080625012

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/27/2008 12:53:38AM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 10

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	116		ug/L	1.0	0.34	1
Nickel	7440-02-0	258		ug/L	1.5	0.50	
Zinc	7440-66-6	183		ug/L	2.5	0.84	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Report Section: Method Blank Report

Client Sample Name: MB

Matrix: Aqueous

Collection Date: 6/25/2008 12:00:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T080625012-MB

Prep Date: 6/25/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.2_ICPMS

Prep Batch Number: T080625012

Report Basis: Dry Weight Basis

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 4:09:30PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	ND		ug/L	0.10	0.034	1
Nickel	7440-02-0	ND		ug/L	0.15	0.050	
Zinc	7440-66-6	ND		ug/L	0.25	0.084	

Lab Sample Number: T080626010-MB

Prep Date: 6/26/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080626010

Report Basis: Dry Weight Basis

Sample prep wt./vol: 50.00 ml

Analysis Date: 6/26/2008 3:49:43PM

Instrument: Elan

File Name: 062608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	ND		ug/L	0.10	0.034	1
Nickel	7440-02-0	ND		ug/L	0.15	0.050	
Zinc	7440-66-6	ND		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG): J0806164

Project: Star Princess

Project Number:

Prep Batch: T080625012

QUALITY CONTROL REPORT

SAMPLE DUPLICATE REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Base Sample: J0806157-01A

Prep Date: 6/25/2008

Samp. Anal. Date: 6/27/2008 12:26:06AM

Units: ug/L

DUP Anal. Date: 6/27/2008 12:29:56AM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>DUPRes.</u>	<u>RPD</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	13.6	13.9	2.2	20	
Copper	59.2	58.4	1.4	20	
Zinc	123	122	0.8	20	

LCS/LCSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

MB: T080625012-MB

Prep Date: 6/25/2008

MB Anal. Date: 6/26/2008 4:09:30PM

Units: ug/L

LCS Anal. Date: 6/26/2008 4:13:21PM LCSD Anal. Date: 6/26/2008 4:17:12PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SDRes.</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>SD Recov</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	ND	54.3	54.8	50.0	50.0	108.6	109.6	0.9	85 - 115	20	
Copper	ND	54.9	55.2	50.0	50.0	109.8	110.4	0.5	85 - 115	20	
Zinc	ND	54.9	55.6	50.0	50.0	109.8	111.2	1.3	85 - 115	20	

MS/MSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Parent: J0806157-01A

Prep Date: 6/25/2008

Samp. Anal. Date: 6/27/2008 12:26:06AM

Units: ug/L

MS Anal. Date: 6/27/2008 12:33:47AM MSD Anal. Date: 6/27/2008 12:37:38AM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>MSRes.</u>	<u>MSDRes</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>MSD Rec.</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	13.6	69.2	68.8	50.0	50.0	111.2	110.4	0.6	70 - 130	20	
Copper	59.2	116	115	50.0	50.0	113.6	111.6	0.9	70 - 130	20	
Zinc	123	178	176	50.0	50.0	110.0	106.0	1.1	70 - 130	20	

Prep Batch: T080626010

SAMPLE DUPLICATE REPORT

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG): J0806164

Project: Star Princess

Project Number:

Prep Batch: T080626010

QUALITY CONTROL REPORT

SAMPLE DUPLICATE REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Base Sample: J0806164-01A

Prep Date: 6/26/2008

Samp. Anal. Date: 6/26/2008 4:29:22PM

Units: ug/L

DUP Anal. Date: 6/26/2008 4:33:12PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>DUPRes.</u>	<u>RPD</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	1.48	1.37	7.7	20	
Copper	0.688	0.612	11.7	20	
Zinc	6.53	6.39	2.2	20	

LCS/LCSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

MB: T080626010-MB

Prep Date: 6/26/2008

MB Anal. Date: 6/26/2008 3:49:43PM

Units: ug/L

LCS Anal. Date: 6/26/2008 3:53:31PM LCSD Anal. Date: 6/26/2008 3:57:20PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SDRes.</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>SD Recov</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	ND	55.2	53.8	50.0	50.0	110.4	107.6	2.6	85 - 115	20	
Copper	ND	55.8	55.0	50.0	50.0	111.6	110.0	1.4	85 - 115	20	
Zinc	ND	56.1	55.5	50.0	50.0	112.2	111.0	1.1	85 - 115	20	

MS/MSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Parent: J0806164-01A

Prep Date: 6/26/2008

Samp. Anal. Date: 6/26/2008 4:29:22PM

Units: ug/L

MS Anal. Date: 6/26/2008 4:37:02PM MSD Anal. Date: 6/26/2008 4:40:52PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>MSRes.</u>	<u>MSDRes</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>MSD Rec.</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	1.48	54.6	55.4	50.0	50.0	106.2	107.8	1.5	70 - 130	20	
Copper	0.688	54.6	55.7	50.0	50.0	107.8	110.0	2.0	70 - 130	20	
Zinc	6.53	66.1	66.7	50.0	50.0	119.1	120.3	0.9	70 - 130	20	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: 88,730 Lab Project Number: J0806164

Prep Date: 6/25/2008

Lab Method Blank Id: T080625012-MB

Prep Batch ID: T080625012

Method: 200.8 - Metals by ICP/MS - Dissolved

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
J0806157-01A	Batch QC	062608asam.rep	6/27/2008 12:26:06AM
J0806164-10A	Influent MBR Black Water - Evac 4	062608asam.rep	6/27/2008 12:49:47AM
J0806164-14A	Alternate OB Sample Point	062608asam.rep	6/27/2008 12:53:38AM
T080625012-LCS	LCS	062608asam.rep	6/26/2008 4:13:21PM
T080625012-LCSD	LCSD	062608asam.rep	6/26/2008 4:17:12PM
J0806157-01A-DUP	DUP	062608asam.rep	6/27/2008 12:29:56AM
J0806157-01A-MS	MS	062608asam.rep	6/27/2008 12:33:47AM
J0806157-01A-MSD	MSD	062608asam.rep	6/27/2008 12:37:38AM

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: 88,730 Lab Project Number: J0806164

Prep Date: 6/26/2008

Lab Method Blank Id: T080626010-MB

Prep Batch ID: T080626010

Method: 200.8 - Metals by ICP/MS - Dissolved

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
J0806164-01A	Bunkered Water Skagway St. Fwd Port	062608asam.rep	6/26/2008 4:29:22PM
J0806164-02A	Potable Water Tk (8+9) after Retention	062608asam.rep	6/26/2008 5:08:11PM
J0806164-03A	Bunkered Water - Ketchikan - St. Fwd Port	062608asam.rep	6/26/2008 5:12:00PM
J0806164-04A	Tap Water - Bridge Pantry Deck 14	062608asam.rep	6/26/2008 5:15:49PM
J0806164-05A	Crew Cabin Deck 10 Fwd Port (hot water)	062608asam.rep	6/26/2008 5:19:38PM
J0806164-06A	Pax Cabin Deck 8 Fwd Stbd (hot water)	062608asam.rep	6/26/2008 5:27:17PM
J0806164-07A	Pax Cabin Deck 11 Port Midship	062608asam.rep	6/26/2008 5:31:06PM
J0806164-08A	Crew Cabin Deck 4 Port	062608asam.rep	6/26/2008 5:34:55PM
J0806164-09A	Tap Water - Crew Galley Deck 5 Aft (Hot)	062608asam.rep	6/26/2008 5:38:44PM
J0806164-11A	Influent MBR Gray Water - Buffer Tk	062608asam.rep	6/26/2008 6:01:34PM
J0806164-12A	Potable Water Tk (11-12) after Retention	062608asam.rep	6/26/2008 6:05:23PM
J0806164-13A	Bunkered Water - Juneau -AJ Dock	062608asam.rep	6/26/2008 6:09:14PM
T080626010-LCS	LCS	062608asam.rep	6/26/2008 3:53:31PM
T080626010-LCSD	LCSD	062608asam.rep	6/26/2008 3:57:20PM
J0806164-01A-DUP	DUP	062608asam.rep	6/26/2008 4:33:12PM
J0806164-01A-MS	MS	062608asam.rep	6/26/2008 4:37:02PM
J0806164-01A-MSD	MSD	062608asam.rep	6/26/2008 4:40:52PM
T080626010-LCS	LCS	062708asam.rep	6/27/2008 12:02:14PM
T080626010-LCSD	LCSD	062708asam.rep	6/27/2008 12:05:35PM

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806164

Project: Star Princess

Client: Admiralty Environmental, LLC

Client Project Number: AE 2049

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Other Flags may be applied. See Case Narrative for Description

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806164
Project: Star Princess
Client: Admiralty Environmental, LLC
Client Project Number: AE 2049

REPORTING CONVENTIONS FOR THIS REPORT

J0806164

<u>Test Name</u>	<u>Basis</u>	<u># Sig Figs</u>	<u>Reporting Limit</u>
200.8/200.8 (Aqueous) - Dissolved	As Received		Report to PQL
Filtration (Aqueous)	As Received		Report to PQL



Analytica Alaska Southeast
5438 Shaune Drive
Juneau, AK 99801
(907) 780-6668
Fax (907) 780-6670

7/11/2008

Admiralty Environmental, LLC
431 N. Franklin St.
Suite 101
Juneau, AK 99801
Attn: David Wetzel

Work Order #: J0806214
Date: 7/11/2008
Work ID: Princess Metals Investigation
Date Received: 6/25/2008

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
J0806214-01	Bunker Water connection (JN		

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

Keelin Kistner
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Alaska Southeast

Work Order: J0806214

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

SAMPLE RECEIPT:

One (1) sample was received on 6/25/2008 12:45:00 PM, at a temperature of 1.5°C, in cooler 1 at Analytica-Juneau. The cooler was opened on 6/25/2008. The sample was received in good condition and in order per chain of custody.

The sample was transferred for analysis to Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241, where it was received at a temperature of 2.1°C, in good condition and in order per chain of custody on 6/27/08.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN

A summary of our review is shown below, organized by test:

Test Method: 200.8 - Metals by ICP/MS - Dissolved - Aqueous

HOLDING TIMES:

Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:

There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:

Instrument checks were within method criteria.

INITIAL CALIBRATIONS:

Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:

Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:

Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:

There are no method blank outliers.

LCS OUTLIERS:

There are no LCS outliers.

MS/MSD and DUP OUTLIERS:

There are no MS/MSD or DUP outliers.

Test Method: In-lab filtration for dissolved metals - Aqueous

HOLDING TIMES:

Per the 40CFR Part 136, filtration for dissolved targets should be performed in the field, within 15 minutes of sampling. Per client request, filtration was performed as soon as possible upon sample receipt.

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): J0806214
Project: Princess Metals Investigation
Client: Admiralty Environmental, LLC
Client Project Number: AE 2091

Client Sample Name: **Bunker Water connection (JNU Dock)**

Matrix: Aqueous

Collection Date: 6/25/2008 10:15:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	41.7	0.10	ug/L	7/7/08 23:00		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	2.35	0.15	ug/L	7/7/08 23:00		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	16.0	0.25	ug/L	7/7/08 23:00		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	mg/L	6/25/08 14:00		AL	In-lab filtration for dissolved metals

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0806214

Project: Princess Metals Investigation

Client: Admiralty Environmental, LLC

Client Project Number: AE 2091

Report Section: Client Sample Report

Client Sample Name: **Bunker Water connection (JNU Dock)**

Matrix: Aqueous

Collection Date: 6/25/2008 10:15:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0806214-01A

Prep Date: 6/25/2008

Analytical Method ID: In-lab filtration for dissolved metals

Prep Method ID: Filtration

Prep Batch Number: J080711003

Report Basis: As Received

Sample prep wt./vol: 250.00 ml

Analysis Date: 6/25/2008 2:00:00PM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: AL

Prep Extract Vol: 250.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		mg/L	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0806214-01A

Prep Date: 7/7/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080707007

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 7/7/2008 11:00:54PM

Instrument: Elan

File Name: 070708bsam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	41.7		ug/L	0.10	0.034	1
Nickel	7440-02-0	2.35		ug/L	0.15	0.050	
Zinc	7440-66-6	16.0		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806214

Project: Princess Metals Investigation

Client: Admiralty Environmental, LLC

Client Project Number: AE 2091

Report Section: Method Blank Report

Client Sample Name: MB

Matrix: Aqueous

Collection Date: 7/7/2008 12:00:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T080707007-MB

Analysis Date: 7/7/2008 3:35:36PM

Prep Date: 7/7/2008

Instrument: Elan

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

File Name: 070708bsam.re

Prep Method ID: 200.8

Dilution Factor: 1

Prep Batch Number: T080707007

Report Basis: Dry Weight Basis

Analyst Initials: GY

Sample prep wt./vol: 50.00 ml

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	ND		ug/L	0.10	0.034	1
Nickel	7440-02-0	ND		ug/L	0.15	0.050	
Zinc	7440-66-6	ND		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806214

Project: Princess Metals Investigation

Client: Admiralty Environmental, LLC

Client Project Number: AE 2091

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG): J0806214

Project: Princess Metals Investigation

Project Number:

Prep Batch: T080707007

QUALITY CONTROL REPORT

SAMPLE DUPLICATE REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Base Sample: F0806396-02A

Prep Date: 7/7/2008

Samp. Anal. Date: 7/7/2008 9:05:03PM

Units: ug/L

DUP Anal. Date: 7/7/2008 9:09:33PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>DUPRes.</u>	<u>RPD</u>	<u>RPDLim</u>	<u>Flag</u>
Copper	648	648	0.0	20	
Lead	7.31	7.29	0.3	20	

LCS/LCSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

MB: T080707007-MB

Prep Date: 7/7/2008

MB Anal. Date: 7/7/2008 3:35:36PM

Units: ug/L

LCS Anal. Date: 7/7/2008 3:40:05PM LCSD Anal. Date: 7/7/2008 3:45:04PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SDRes.</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>SD Recov</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	ND	52.1	52.3	50.0	50.0	104.2	104.6	0.4	85 - 115	20	
Copper	ND	53.2	53.6	50.0	50.0	106.4	107.2	0.7	85 - 115	20	
Zinc	ND	51.4	51.9	50.0	50.0	102.8	103.8	1.0	85 - 115	20	

MS/MSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Parent: F0806396-02A

Prep Date: 7/7/2008

Samp. Anal. Date: 7/7/2008 9:05:03PM

Units: ug/L

MS Anal. Date: 7/7/2008 9:14:03PM MSD Anal. Date: 7/7/2008 9:19:03PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>MSRes.</u>	<u>MSDRes</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>MSD Rec.</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Copper	648	688	686	50.0	50.0	80.0	76.0	0.3	70 - 130	20	NOTE 2 NOTE 2
Lead	7.31	59.3	60.5	50.0	50.0	104.0	106.4	2.0	70 - 130	20	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806214

Project: Princess Metals Investigation

Client: Admiralty Environmental, LLC

Client Project Number: AE 2091

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806214

Project: Princess Metals Investigation

Client: Admiralty Environmental, LLC

Client Project Number: AE 2091

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: 88,993 **Lab Project Number:** J0806214

Prep Date: 7/7/2008

Lab Method Blank Id: T080707007-MB

Prep Batch ID: T080707007

Method: 200.8 - Metals by ICP/MS - Dissolved

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
F0806396-02A	Batch QC	070708bsam.rep	7/7/2008 9:05:03PM
J0806214-01A	Bunker Water connection (JNU Dock)	070708bsam.rep	7/7/2008 11:00:54PM
T080707007-LCS	LCS	070708bsam.rep	7/7/2008 3:40:05PM
T080707007-LCSD	LCSD	070708bsam.rep	7/7/2008 3:45:04PM
F0806396-02A-DUP	DUP	070708bsam.rep	7/7/2008 9:09:33PM
F0806396-02A-MS	MS	070708bsam.rep	7/7/2008 9:14:03PM
F0806396-02A-MSD	MSD	070708bsam.rep	7/7/2008 9:19:03PM

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806214

Project: Princess Metals Investigation

Client: Admiralty Environmental, LLC

Client Project Number: AE 2091

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Other Flags may be applied. See Case Narrative for Description

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0806214

Project: Princess Metals Investigation

Client: Admiralty Environmental, LLC

Client Project Number: AE 2091

REPORTING CONVENTIONS FOR THIS REPORT

J0806214

<u>Test Name</u>	<u>Basis</u>	<u># Sig Figs</u>	<u>Reporting Limit</u>
200.8/200.8 (Aqueous) - Dissolved	As Received		Report to PQL
Filtration (Aqueous)	As Received		Report to PQL

Certificate of Analysis

Client: Admiralty Environmental
431 N Franklin Street Suite 101
Juneau, AK 99801

ATTN: David Wetzel

Work ID: Princess Dock AE 2100

SDG Number: ADENV080607

Taken By: ERIN EVANS

Date Received: 06/30/2008

Transported By: ERIN EVANS

Date Reported: 07/03/2008

Sample Identification:

Lab Sample ID	Sample Description	Collection Date /Time	Type
ADENV080607-001	North Bunker Water-Prince	06/30/2008 12:45	Water

Comments:

There were no discrepancies noted upon receipt of the samples. The temperature blank was measured at < 6.0 C.

All sampling and sample handling procedures were conducted in accordance with the NWCA "2007 Operating Season Quality Assurance/Quality Control Plan For Sampling and Analysis of Treated Sewage and Graywater From Commercial Passenger Vessels", January 15, 2007.

Unless otherwise instructed all samples with the exception of samples which are consumed during the analysis, such as microbiological samples, will be disposed of on or after 8/26/08

Respectfully submitted,

Pace Analytical Services, Inc.

JENNI GROSS

Jennifer Gross

Date Printed: 7/3/2008 16:07

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Pace Analytical Services, Inc.

Final Results

Client:	Admiralty Environmental	Project:	Cruise Ship Sampling
SDG Number:	ADENV080607	Work Description:	Princess Dock AE 2100
Sample Number:	North Bunker Water-Princess	Date/Time Collected:	06/30/2008 12:45
Lab Sample ID:	ADENV080607-001	Date/Time Received:	06/30/2008 13:10
Method:	E200.8	Holding Time:	180 Days
		Unit:	mg/L

Lab Tests

Analyte	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Dissolved, Nickel	1	0.0013		0.0010	0.000026	07/02/2008 11:00	07/02/2008 14:33	R029378
Dissolved, Zinc	1	2.6		0.020	0.00021	07/02/2008 11:00	07/02/2008 14:33	R029378
Dissolved, Copper	1	0.034		0.0010	0.000089	07/02/2008 11:00	07/02/2008 14:33	R029378

Appendix
Quality Control Report

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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Pace Analytical Services, Inc.

Blank Report

Test: 200.8 - Diss. Cu, Ni, Zn Drinking Water by ICP/MS
Lab Sample ID: B070208ICPMSW10
SDG ID: ADENV080607
Preparation Date: 7/2/2008
Run Sequence ID: R029378
Analysis Date: 07/02/2008 13:32
Units: mg/L
Matrix: Water

Analyte	Reported	Flag	Limit
Dissolved, Nickel	0.0010	U	0.05
Dissolved, Zinc	0.020	U	0.01

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
ADENV080607-001	North Bunker Water-Princess

U = The analyte of interest was not detected, to the limit of detection indicated

* Measured blank concentration exceeded the established control limit

FORM LTL-RSR-9.0(LTR)

Date Printed: 7/7/2008 14:46

REVISED
du 7/7/08

Mr. David Wetzel
Admiralty Environmental, LLC
431 N. Franklin Street, Suite 101
Juneau, AK 99801

3942-A Valley Avenue
Pleasanton, CA 94566-4715
925.462.2771 • Fax: 925.462.2775
www.cercoanalytical.com

Sample Source:
Project Number: Not indicated
Project Name: Bunker Water Investigation
Date Sampled: 07/16/08
Date Received: 07/16/08
Matrix: Water

23 July 2008
Job No.0807123
Sample No.001
Cust. No.11972

	Analyte	Results*	Reporting Limit	Method	Date Analyzed
Lab No.001					
Sample I.D.:	Fresh Water Bunker Connection – Pier #				
	Copper, Dissolved	0.83	0.5 ug/L	EPA 200.8	07/16/08
	Nickel, Dissolved	N.D.	0.5 ug/L	EPA 200.8	07/16/08
	Zinc, Dissolved	N.D.	5.0 ug/L	EPA 200.8	07/16/08

*Subcontracted to a State Certified Laboratory


Cheryl McMillen
Laboratory Director

Quality Control Summary - All laboratory quality control parameters were found to be within established limits

QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 36962

WorkOrder: 0807389

EPA Method: E200.8	Extraction: E200.8								Spiked Sample ID: 0807372-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Copper	9.8	10	96.3	102	2.69	99.1	93.4	5.88	70 - 130	20	80 - 120	20
Nickel	1.6	10	92	96.1	3.71	96.3	93.1	3.32	70 - 130	20	80 - 120	20
Zinc	53	100	87.5	98.8	7.74	93.9	90.5	3.63	70 - 130	20	80 - 120	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36962 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0807389-001A	07/16/08 11:34 AM	07/16/08	07/16/08 11:55 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = $100 * (MS - Sample) / (Amount Spiked)$; RPD = $100 * (MS - MSD) / ((MS + MSD) / 2)$.

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

[illegible]

Analysis Report



CANTEST LTD.

Professional
Analytical
Services

4606 Canada Way
Burnaby, B.C.
V5G 1K5

FAX: 604 731 2386

TEL: 604 734 7276

1 800 665 8566

REPORT ON: Analysis of Water Samples

REPORTED TO: Admiralty Environmental LLC
431 North Franklin Street
Suite 101
Juneau, AK
99801

Att'n: David Wetzel

CHAIN OF CUSTODY: 2118884

PROJECT NAME: Vancouver Bunker Connection

The following samples were taken by a CANTEST field representative, Mr. Steven Chan, on July 24, 2008.

NUMBER OF SAMPLES: 3

REPORT DATE: August 3, 2008

DATE SUBMITTED: July 24, 2008

GROUP NUMBER: 90724070

SAMPLE TYPE: Water

NOTE: Results contained in this report refer only to the testing of samples as submitted. Other information is available on request.

TEST METHODS:

Dissolved Metals in Water - Samples were filtered in the laboratory and quantitatively determined using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP) and/or Inductively Coupled Plasma-Mass Spectroscopy (ICP/MS).

Metals Analysis in Water

CLIENT SAMPLE IDENTIFICATION:	SAMPLE DATE	CANTEST ID	Dissolved Copper Cu	Dissolved Nickel Ni	Dissolved Zinc Zn
Van. Potable Water North Grab	Jul 24/08	807240237	0.0015	<	0.009
Van. Potable H2O Central Grab	Jul 24/08	807240250	0.015	<	0.28
Van. Potable Water South Grab	Jul 24/08	807240252	0.0078	<	0.006
DETECTION LIMIT UNITS			0.0002 mg/L	0.0002 mg/L	0.001 mg/L

mg/L = milligrams per liter

< = Less than detection limit

CANTEST LTD.

Anna Becalska, PhD
Coordinator, Trace Metals

A Member of the **CANAM** Group
www.testing-labs.com

Page 1



Analytica Alaska Southeast
5438 Shaune Drive
Juneau, AK 99801
(907) 780-6668
Fax (907) 780-6670

8/8/2008

Admiralty Environmental, LLC
431 N. Franklin St.
Suite 101
Juneau, AK 99801
Attn: David Wetzel

Work Order #: J0807222
Date: 8/8/2008
Work ID: Whittier Bunker Connection
Date Received: 7/28/2008

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
J0807222-01	FW Bunker Connection		

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

Claire Toon
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Alaska Southeast

Work Order: J0807222

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Methods for the Determination of Metals in Environmental Samples, EPA/600/R-94/111, May 1994.

SAMPLE RECEIPT:

One (1) sample was received on 7/28/2008 4:30:00 PM, at a temperature of 1.7°C, in cooler 1 at Analytica-Juneau. The cooler was opened on 7/28/2008. The sample was received in good condition and in order per chain of custody.

The sample was transferred for analysis to Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241, where it was received at a temperature of 3.7°C, in good condition and in order per chain of custody on 7/31/2008.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN

A summary of our review is shown below, organized by test:

Test Method: 200.8 - Metals by ICP/MS - Dissolved - Aqueous

HOLDING TIMES:

Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:

There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:

Instrument checks were within method criteria.

INITIAL CALIBRATIONS:

Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:

Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:

Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:

There are no method blank outliers.

LCS OUTLIERS:

There are no LCS outliers.

MS/MSD and DUP OUTLIERS:

There are no MS/MSD or DUP outliers.

Test Method: Filtration for dissolved metals - Lab Filtration - Aqueous

HOLDING TIMES:

Per the 40CFR Part 136, filtration for dissolved targets should be performed in the field, within 15 minutes of sampling. Per client request, filtration was performed as soon as possible upon sample receipt.

Summary of Detected Analytes

Analytica Alaska Southeast

Workorder (SDG): J0807222
Project: Whittier Bunker Connection
Client: Admiralty Environmental, LLC
Client Project Number: AE 2195

Client Sample Name: FW Bunker Connection

Matrix: Aqueous

Collection Date: 7/24/2008 9:02:00AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Flags</u>	<u>Analyst</u>	<u>Method</u>
Copper	1.30	0.10	ug/L	8/6/08 17:10		GY	200.8 - Metals by ICP/MS - Dissolved
Nickel	0.345	0.15	ug/L	8/6/08 17:10		GY	200.8 - Metals by ICP/MS - Dissolved
Zinc	17.5	0.25	ug/L	8/6/08 17:10		GY	200.8 - Metals by ICP/MS - Dissolved
Filtration	1.0	1.0	Date	7/28/08 17:15		al	Filtration for dissolved metals - Lab Filtration

Detailed Analytical Report

Analytica Alaska Southeast

Workorder (SDG): J0807222

Project: Whittier Bunker Connection

Client: Admiralty Environmental, LLC

Client Project Number: AE 2195

Report Section: Client Sample Report

Client Sample Name: FW Bunker Connection

Matrix: Aqueous

Collection Date: 7/24/2008 9:02:00AM

The following test was conducted by: Analytica - Juneau

Lab Sample Number: J0807222-01A

Prep Date: 7/28/2008

Analytical Method ID: Filtration for dissolved metals - Lab Filtration

Prep Method ID: Filtration

Prep Batch Number: J080731006

Report Basis: As Received

Sample prep wt./vol: 1.00 ml

Analysis Date: 7/28/2008 5:15:00PM

Instrument: Filter

File Name:

Dilution Factor: 1

Analyst Initials: al

Prep Extract Vol: 1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Filtration		1.0		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: J0807222-01A

Prep Date: 8/5/2008

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

Prep Method ID: 200.8

Prep Batch Number: T080805014

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 8/6/2008 5:10:24PM

Instrument: Elan

File Name: 080608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	1.30		ug/L	0.10	0.034	1
Nickel	7440-02-0	0.345		ug/L	0.15	0.050	
Zinc	7440-66-6	17.5		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0807222

Project: Whittier Bunker Connection

Client: Admiralty Environmental, LLC

Client Project Number: AE 2195

Report Section: Method Blank Report

Client Sample Name: MB

Matrix: Aqueous

Collection Date: 8/5/2008 12:00:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T080805014-MB

Analysis Date: 8/6/2008 3:31:21PM

Prep Date: 8/5/2008

Instrument: Elan

Analytical Method ID: 200.8 - Metals by ICP/MS - Dissolved

File Name: 080608asam.re

Prep Method ID: 200.8

Dilution Factor: 1

Prep Batch Number: T080805014

Report Basis: Dry Weight Basis

Analyst Initials: GY

Sample prep wt./vol: 50.00 ml

Prep Extract Vol: 50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Rerun #:</u>
Copper	7440-50-8	ND		ug/L	0.10	0.034	1
Nickel	7440-02-0	ND		ug/L	0.15	0.050	
Zinc	7440-66-6	ND		ug/L	0.25	0.084	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0807222

Project: Whittier Bunker Connection

Client: Admiralty Environmental, LLC

Client Project Number: AE 2195

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG): J0807222

Project: Whittier Bunker Connection

Project Number:

Prep Batch: T080805014

QUALITY CONTROL REPORT

SAMPLE DUPLICATE REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Base Sample: J0807220-01A

Prep Date: 8/5/2008

Samp. Anal. Date: 8/6/2008 4:18:35PM

Units: ug/L

DUP Anal. Date: 8/6/2008 4:39:27PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>DUPRes.</u>	<u>RPD</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	0.152	ND	0.0	20	
Copper	0.953	0.935	1.9	20	
Zinc	3.98	4.01	0.8	20	

LCS/LCSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

MB: T080805014-MB

Prep Date: 8/5/2008

MB Anal. Date: 8/6/2008 3:31:21PM

Units: ug/L

LCS Anal. Date: 8/6/2008 3:35:37PM LCSD Anal. Date: 8/6/2008 3:40:22PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SDRes.</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>SD Recov</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	ND	51.4	51.8	50.0	50.0	102.8	103.6	0.8	85 - 115	20	
Copper	ND	53.0	53.5	50.0	50.0	106.0	107.0	0.9	85 - 115	20	
Zinc	ND	53.1	52.8	50.0	50.0	106.2	105.6	0.6	85 - 115	20	

MS/MSD REPORT

Analysis: 200.8 - Metals by ICP/MS - Dissolved

Parent: J0807220-01A

Prep Date: 8/5/2008

Samp. Anal. Date: 8/6/2008 4:18:35PM

Units: ug/L

MS Anal. Date: 8/6/2008 4:43:44PM MSD Anal. Date: 8/6/2008 4:48:30PM

Matrix: Aqueous

<u>Analyte Name</u>	<u>SampResult</u>	<u>MSRes.</u>	<u>MSDRes</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>MSD Rec.</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Nickel	0.152	49.7	49.4	50.0	50.0	99.1	98.5	0.6	70 - 130	20	
Copper	0.953	52.9	52.8	50.0	50.0	103.9	103.7	0.2	70 - 130	20	
Zinc	3.98	58.1	58.3	50.0	50.0	108.2	108.6	0.3	70 - 130	20	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0807222

Project: Whittier Bunker Connection

Client: Admiralty Environmental, LLC

Client Project Number: AE 2195

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0807222

Project: Whittier Bunker Connection
Client: Admiralty Environmental, LLC
Client Project Number: AE 2195

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: 90,324 **Lab Project Number:** J0807222

Prep Date: 8/5/2008

Lab Method Blank Id: T080805014-MB

Prep Batch ID: T080805014

Method: 200.8 - Metals by ICP/MS - Dissolved

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
J0807220-01A	Batch QC	080608asam.rep	8/6/2008 4:18:35PM
J0807222-01A	FW Bunker Connection	080608asam.rep	8/6/2008 5:10:24PM
T080805014-LCS	LCS	080608asam.rep	8/6/2008 3:35:37PM
T080805014-LCSD	LCSD	080608asam.rep	8/6/2008 3:40:22PM
J0807220-01A-DUP	DUP	080608asam.rep	8/6/2008 4:39:27PM
J0807220-01A-MS	MS	080608asam.rep	8/6/2008 4:43:44PM
J0807220-01A-MSD	MSD	080608asam.rep	8/6/2008 4:48:30PM

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0807222

Project: Whittier Bunker Connection

Client: Admiralty Environmental, LLC

Client Project Number: AE 2195

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Other Flags may be applied. See Case Narrative for Description

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): J0807222

Project: Whittier Bunker Connection

Client: Admiralty Environmental, LLC

Client Project Number: AE 2195

REPORTING CONVENTIONS FOR THIS REPORT

J0807222

<u>Test Name</u>	<u>Basis</u>	<u># Sig Figs</u>	<u>Reporting Limit</u>
200.8/200.8 (Aqueous) - Dissolved	As Received		Report to PQL
Filtration (Aqueous) - Lab Filtration	As Received		Report to PQL

Filtered 7/24/08 17:15 AZ



Cooler Receipt Form

Client: Admiralty Environmental, LLC Client Code: 801002
Project: Whittier Bunker Connection

Order #: J0807222

Cooler ID: 1

A. Preliminary Examination Phase:

Date cooler opened: 7/28/2008
Cooler opened by: al

Signature: al

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: Client

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? N/A

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper:

6. Preservative:

Temperature: 1.7 deg. C

Designated person initial here to acknowledge receipt:

al

Date: 7/30/08

COMMENTS:

B. Log-In Phase: Samples Log-in Date: 7/28/2008 Log-in By: al

al

1. Packing Type:

2. Were samples in separate bags? Yes

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 1

Number of samples received: 1

5. Correct containers used? Yes

Correct preservatives added? N/A

6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

9. Was anyone called? No Who was called? _____ By whom? _____ Date: _____

COMMENTS:

Filtered 7/28/08 17:15 A7



Cooler Receipt Form

Client: Admiralty Environmental, LLC Client Code: 801002
Project: Whittier Bunker Connection

Order #: J0807222

Cooler ID: 2

A. Preliminary Examination Phase:

Date cooler opened: 7/31/2008
Cooler opened by: gp

Signature: GP

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: FedEx

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? Yes

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper: Whittier Bunker Connection

6. Preservative:

Temperature: 3.7 deg. C

Designated person initial here to acknowledge receipt:

GP

Date: 7/31/08

COMMENTS:

B. Log-In Phase:

Samples Log-in Date: 8/4/2008

Log-in By: gp

1. Packing Type:

2. Were samples in separate bags? Yes

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 1

Number of samples received: 1

5. Correct containers used? Yes

Correct preservatives added? N/A

6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

9. Was anyone called? No Who was called? _____ By whom? _____ Date: _____

COMMENTS:



Admiralty Environmental
431 N. Franklin Street, Suite 101
Juneau, AK 99801
(907) 463-4415 fax (480) 247-4476

2008 Cruise Ship Sampling Field Notes

Date: Monday, June 30, 2008

AE 2100

Vessel Name: Princess Dock

Sampler(s): Erin Evans

Sample Port ID #1: N. Bunker Water Overboard Discharge ESE 6/30/08 (Grab / Composite) DRINKING WATER
(Blackwater / Graywater / Mixed)

Notes: 835.1 miles - 849.0 miles ≈ 14 miles Princess office # (206) 336-5824
Saw Dan onsite @ Princess office for sample location

Sample Port ID #2: NA (Grab / Composite) (Blackwater / Graywater / Mixed)

Notes: ESE 6/30/08

Sample Port ID #3: (Grab / Composite) (Blackwater / Graywater / Mixed)

Notes:

Sample Port ID #4: (Grab / Composite) (Blackwater / Graywater / Mixed)

Notes:

Field Test Results

	#1	#2	#3	#4
Time, 24-hour	<u>NA</u>	<u>:</u>	<u>:</u>	<u>:</u> <u>ESE 6/30/08</u>
pH, units				
Temp, C				
Free Chlorine, mg/L				
Total Chlorine, mg/L				

As the accompanying shipboard personnel, I hereby acknowledge that I have witnessed this sampling event and can attest that the samples were collected from the correct sampling port(s) as designated in this vessel's Vessel Specific Sampling Plan (VSSP):

[Signature]
Signature

Pelicia Marcel
Printed Name

2008 Cruise Ship Sampling Checklist



Vessel Name: Princess Dock
Sampler Name: Erin Evans
Date: Monday, June 30, 2008
Sampling Event ID #: AE 2100

I. Notification

- ☒ ADEC project manager notified 36 hours prior to the sampling event

II. Type of Sampling

- ☐ Conventional pollutants only
- ☐ Conventional and priority pollutants.
 - ☐ If 2nd unannounced sample, must be > 21 days after the first sampling event.
- ☒ USCG Continuous Compliance/ADEC Permit compliance Parameters
 - ☐ If 2nd continuous compliance sample for month, must be >24 hrs after first sample
- ☐ ADEC Metals and Ammonia testing

III. Sampling Notes (to include:)

- ☒ Vessel name
- ☒ Names of sampling personnel
- ☒ Names of shipboard assistants
- ☒ Signature or initials by the vessel crew indicating that the sample port is correct
- ☒ Sample ID clearly stating where the sample was taken
- ☒ Sample date and times recorded on COC
- ☐ Field measurements: pH, chlorine residual, and temp recorded on COC
- ☒ Records collected on discharge flow rates (always) and holding tank volumes (for underway sampling only)
- ☐ Sample ports within 50 feet of the point of overboard discharge
- ☒ Nature of sample recorded (composite or grab)
- ☒ Waste type recorded (blackwater, graywater, or mixed) DRINKING WATER
- ☐ If deviations from VSSP and/or QA/QCP noted, reported to ADEC/USCG
- ☐ Photographs taken of samples and sampling port
- ☐ If unannounced sampling, sampler verified that vessel is discharging
- ☐ Latitude/longitude and speed at time of discharge being sampled is recorded (for underway sampling only)
- ☐ Copy of the Discharge record for the sampled discharge included
- ☒ Chain of custody properly completed
- ☒ Samples delivered to laboratory within holding times for analyses

Alaska Cruise Ship Data Review Checklist

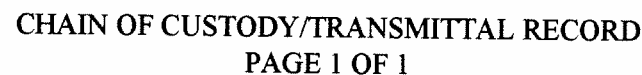
Vessel Name PRINCESS DOCK AE 2100
Date 7/1/08
Location SEATTLE, WA
Sampling Team ERIN EVANS
Laboratory PACE ANALYTICAL

Sample Type:

- ☐ Continued Compliance
- ☐ Random Unannounced

Final Report Package Includes:

- ☒ Sampling event summary sheet
- ☒ Analytical Report
 - ☒ Ship name
 - ☒ Sample ID's
 - ☒ Sample date and time collected
 - ☒ Parameter names and method references
 - ☒ Analytical results
 - ☒ Method Detection Limits (MDL's)
 - ☒ Practical Quantitation Limits (PQL's/reporting limits)
 - ☒ Date and time of sample preparation
 - ☒ Date and time of analysis
 - ☒ Verification that holding times were met
 - ☒ Quality control information: blank results, spiked blank of laboratory control standard recovery, matrix spike/spike duplicate recoveries, relative percent differences between duplicate spike analyses
 - ☒ Case narrative describing deviations from methods, procedural problems with sample analysis, explanation of data abnormalities, and any additional information that is necessary for describing the sample. This narrative should explain when results are outside the precision and accuracy limits and the corrective actions taken to rectify QC problems.
- ☒ Chain of custody form
- ☒ Cooler receipt forms with temperature indicated
- ☐ Discharge logs covering time of sampling. (For recirculated samples, provide discharge logs back to the time of last discharge)
- ☒ Field notes.
- ☐ Latitude and longitude information pertaining to each sample including which overboard port the waste was discharged through and the speed the vessel was traveling (*unannounced samples only*)
- ☒ Completed sampling checklist
- ☒ Completed data review checklist



Filtered 6/20/08 AL 17:00



Cooler Receipt Form

Client: Admiralty Environmental, LLC
Project: Star Princess

Client Code: 801002

Order #: J0806179

Cooler ID: 1

A. Preliminary Examination Phase:

Date cooler opened: 6/20/2008

Cooler opened by: al

Signature: AL

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: Client

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? N/A

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper:

6. Preservative:

Temperature: 5.9 deg. C

Designated person initial here to acknowledge receipt: AL

Date: 6/22/08

COMMENTS: Mailed metals sample from R&M Engineering. A part of the Star Princess Metals Investigation.

B. Log-In Phase:

Samples Log-in Date: 6/20/2008

Log-in By: al

AL

1. Packing Type:

2. Were samples in separate bags? Yes

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 2

Number of samples received: 1

5. Correct containers used? Yes

Correct preservatives added? N/A

6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

9. Was anyone called? No

Who was called?

By whom?

Date:

COMMENTS:

[illegible]



Cooler Receipt Form

Client: Admiralty Environmental, LLC Client Code: 801002
Project: Star Princess

Order #: J0806179

Cooler ID: 2

A. Preliminary Examination Phase:

Date cooler opened: 6/24/2008
Cooler opened by: NL

Signature: NL

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: FedEx

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? Yes

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper:

6. Preservative:

Temperature: 2.3 deg. C

Designated person initial here to acknowledge receipt:

NL

Date:

6/24/08

COMMENTS:

B. Log-In Phase: Samples Log-in Date: 6/24/2008 Log-in By: NL

1. Packing Type:

2. Were samples in separate bags? N/A

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 1

Number of samples received: 1

5. Correct containers used? Yes

Correct preservatives added? N/A

6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

9. Was anyone called? No

Who was called?

By whom?

Date:

COMMENTS:



Admiralty Environmental
 431 N. Franklin, Suite 101
 Juneau, AK 99801
 (907) 463-4415 fax (480) 247-4476

CHAIN OF CUSTODY/TRANSMITTAL RECORD
 PAGE 1 OF 1

PROJECT NAME: Star Princess					Dissolved Cu, Ni, Zn										LGN # <u>JD806209</u> AE 2049 <div style="text-align: right;">Initial Temp. (°C)</div> Small Temp. Blank: _____ Large Temp. Blank: _____																																																																																																																		
REPORT TO: Admiralty Environmental					PHONE#: (907) 463-4415					Metals Investigation																																																																																																																							
ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801					SAMPLED BY: V. Stirbois					<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;"># of Bottles</div> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td colspan="10">Dissolved Cu, Ni, Zn</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> </div>										Dissolved Cu, Ni, Zn																																																																																																													
Dissolved Cu, Ni, Zn																																																																																																																																	
Samples taken in the presence of:															Field Results																																																																																																																		
DATE	TIME	SITE DESCRIPTION / IDENTIFIER	MATRIX												pH	Temp	Total Cl	Free Cl																																																																																																															
Jun 20, 08	1520	EVAPORATOR 1	H ₂ O	1 1	7.90																																																																																																																												
Jun 20, 08	1525	EVAPORATOR 2	H ₂ O	1 1	7.79																																																																																																																												
Jun 21, 08	1750	BUNKERING VICTORIA - On Pier	H ₂ O	1 1	8.14																																																																																																																												
Jun 22, 08	1029	BUNKERING SEATTLE - Fire Post	H ₂ O	1 1	8.28																																																																																																																												
Jun 23, 08	1545	EVAPORATOR 2	H ₂ O	1 1	7.27																																																																																																																												
			H ₂ O	1 1																																																																																																																													

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE	Section to Be Completed by Receiving Laboratory Temp/Loc: _____ <u>2.3°/K</u> Thermo ID#: _____ <u>F612</u> Condition of Custody Seals _____ Initialed By: _____ Shipped Via: _____ <u>direct</u>
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME	
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE	
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME	
Jun 25, 08	<i>[Signature]</i>	<i>[Signature]</i>	6/25/08	
1545	Vigilie S. Stein	Trevor Fritz	15:45	
6/25/08	<i>[Signature]</i>	<i>[Signature]</i>	6/25/08	
16:25	Trevor Fritz	Amy Lammonica	16:25	



Cooler Receipt Form

Client: Admiralty Environmental, LLC Client Code: 801002
Project: Star Princess

Order #: J0806209

Cooler ID: 1

A. Preliminary Examination Phase:

Date cooler opened: 6/25/2008
Cooler opened by: al

Signature: AL

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: Client

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? N/A

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper:

6. Preservative:

Temperature: 2.3 deg. C

Designated person initial here to acknowledge receipt:

AL

Date: 6/26/09

COMMENTS:

B. Log-In Phase: Samples Log-in Date: 6/25/2008 Log-in By: al

AL

1. Packing Type:

2. Were samples in separate bags? Yes

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 5

Number of samples received: 5

5. Correct containers used? Yes

Correct preservatives added? N/A

6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

9. Was anyone called? No Who was called? _____ By whom? _____ Date: _____

COMMENTS:





Cooler Receipt Form

Client: Admiralty Environmental, LLC Client Code: 801002
Project: Star Princess

Order #: J0806209

Cooler ID: 2

A. Preliminary Examination Phase:

Date cooler opened: 6/27/2008
Cooler opened by: NL

Signature: NL

- | | | | | | |
|---|-----|---------------------|------------|-------------------------|------------|
| 1. Was airbill Attached? | N/A | Airbill #: | | Carrier Name: | FedEx |
| 2. Custody Seals? | N/A | How many? | 0 | Location: | Seal Name: |
| 3. Seals intact? | Yes | | | | |
| 4. COC Attached? | Yes | Properly Completed? | Yes | Signed by AEL employee? | Yes |
| 5. Project Identification from custody paper: | | | | | |
| 6. Preservative: | | Temperature: | 2.1 deg. C | | |

Designated person initial here to acknowledge receipt:

NL Date: 6/27/08

COMMENTS:

B. Log-In Phase: Samples Log-in Date: 6/27/2008 Log-in By: NL

- | | | | |
|---|-----|------------------------------|----------------|
| 1. Packing Type: | | | |
| 2. Were samples in separate bags? | N/A | | |
| 3. Were containers intact? | Yes | Labels agree with COC? | Yes |
| 4. Number of bottles received: | 5 | Number of samples received: | 5 |
| 5. Correct containers used? | Yes | Correct preservatives added? | N/A |
| 6. Sufficient sample volume? | N/A | | |
| 7. Bubbles in VOA samples? | N/A | | |
| 8. Was Project manager called and status discussed? | No | | |
| 9. Was anyone called? | No | Who was called? | By whom? Date: |

COMMENTS:



Admiralty Environmental
 431 N. Franklin, Suite 101
 Juneau, AK 99801
 (907) 463-4415 fax (480) 247-4476

CHAIN OF CUSTODY/TRANSMITTAL RECORD
 PAGE 1 OF 1

PROJECT NAME: Star Princess				Dissolved Cu, Ni, Zn				LGN # <u>50806169</u>			
REPORT TO: Admiralty Environmental				PHONE#: (907) 463-4415				AE 2049 Initial Temp. (°C) Small Temp. Blank: _____ Large Temp. Blank: _____			
ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801				SAMPLED BY: V. Stirbois							
Samples taken in the presence of:				# of Bottles	Dissolved Cu, Ni, Zn						
DATE	TIME	SITE DESCRIPTION / IDENTIFIER	MATRIX								
June 12, 08	0835	Bulkhead Water from Stairway to Fwd Port	H ₂ O								
June 12, 08	1120	Potable Water 1R (8+9) after collection	H ₂ O								
June 12, 08	1130	Bulkhead Water - Hatched Room - St. Fwd Port	H ₂ O								
June 12, 08	1135	Tap Water - Bridge Purvey - Deck 14	H ₂ O								
June 12, 08	1145	Crew Cabin Deck 10 Fwd Port (Hot Water)	H ₂ O								
June 12, 08	1150	Pax Cabin Deck 8 Fwd Stbd (Hot Water)	H ₂ O								
DATE <u>6/19/08</u> RELINQUISHED BY: (signature) <u>[Signature]</u> RECEIVED BY: (signature) <u>[Signature]</u> DATE <u>6/19/08</u> TIME <u>0700</u> RELINQUISHED BY: (print) <u>TREVOR FRITZ</u> RECEIVED BY: (print) <u>BARBARA ROYLE</u> TIME <u>700</u>				Section to Be Completed by Receiving Laboratory Temp/Loc: <u>5.6</u> Thermo ID#: <u>FLZ</u> Condition of Custody Seals: <u>—</u> Initialed By: <u>—</u> Shipped Via: <u>clmt</u>							

Filed 6/19/08 9:00 AM
 AC



Admiralty Environmental
 431 N. Franklin, Suite 101
 Juneau, AK 99801
 (907) 463-4415 fax (480) 247-4476

CHAIN OF CUSTODY/TRANSMITTAL RECORD
 PAGE 1 OF 1

PROJECT NAME: Star Princess					Dissolved Cu, Ni, Zn										LGN # <u>JD806164</u>																																																																																																																																																																			
REPORT TO: Admiralty Environmental					PHONE#: (907) 463-4415					Metals Investigation										AE 2049 <u>Initial Temp. (°C)</u> Small Temp. Blank: _____ Large Temp. Blank: _____																																																																																																																																																														
ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801					SAMPLED BY: V. Stirbois					<div style="display: flex; flex-direction: column; align-items: center;"> <div># of Bottles</div> <div style="display: flex; flex-direction: row;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Dissolved Cu, Ni, Zn</div> <div style="display: grid; grid-template-columns: repeat(10, 1fr); height: 100px; border: 1px solid black;"></div> </div> </div>																																																																																																																																																																								
Samples taken in the presence of:																																																																																																																																																																																		
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">DATE</th> <th style="width: 10%;">TIME</th> <th style="width: 40%;">SITE DESCRIPTION / IDENTIFIER</th> <th style="width: 10%;">MATRIX</th> <th colspan="2"></th> <th colspan="10"></th> <th colspan="4" style="text-align: center;">Field Results</th> </tr> <tr> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th colspan="10"></th> <th style="width: 5%;">pH</th> <th style="width: 5%;">Temp</th> <th style="width: 10%;">Total Cl</th> <th style="width: 10%;">Free Cl</th> </tr> </thead> <tbody> <tr> <td>5/18/08</td> <td>1730</td> <td>Bunker water - Suncor. <i>AS Rock</i></td> <td>H₂O</td> <td>1</td> <td>1</td> <td colspan="10"></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6/18/08</td> <td>1720</td> <td>Alternate OB Sample point</td> <td>H₂O</td> <td>1</td> <td>1</td> <td colspan="10"></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>H₂O</td> <td>1</td> <td>1</td> <td colspan="10"></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>H₂O</td> <td>1</td> <td>1</td> <td colspan="10"></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>H₂O</td> <td>1</td> <td>1</td> <td colspan="10"></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>H₂O</td> <td>1</td> <td>1</td> <td colspan="10"></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>																			DATE	TIME	SITE DESCRIPTION / IDENTIFIER	MATRIX													Field Results																				pH	Temp	Total Cl	Free Cl	5/18/08	1730	Bunker water - Suncor. <i>AS Rock</i>	H ₂ O	1	1															6/18/08	1720	Alternate OB Sample point	H ₂ O	1	1																		H ₂ O	1	1																		H ₂ O	1	1																		H ₂ O	1	1																		H ₂ O	1	1														
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DATE <u>6/19/08</u>		RELINQUISHED BY: (signature) <i>[Signature]</i>			RECEIVED BY: (signature) <i>[Signature]</i>			DATE <u>6/19/08</u>		Section to Be Completed by Receiving Laboratory Temp/Loc: <u>56</u> Thermo ID#: <u>FVZ</u> Condition of Costody Seals: <u>-</u> Initialed By: <u>-</u> Shipped Via: <u>clant</u>																																																																																																																																																																								
TIME <u>0700</u>		RELINQUISHED BY: (print) <u>Trevor Fritz</u>			RECEIVED BY: (print) <u>Brian Doyle</u>			TIME <u>700</u>																																																																																																																																																																										
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Cooler Receipt Form

Client: Admiralty Environmental, LLC Client Code: 801002
Project: Star Princess

Order #: J0806164

Cooler ID: 1

A. Preliminary Examination Phase:

Date cooler opened: 6/19/2008
Cooler opened by: bd

Signature: 

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: Client

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? N/A

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper:

6. Preservative:

Temperature: 5.6 deg. C

Designated person initial here to acknowledge receipt:

 Date: 6/19/08

COMMENTS:

B. Log-In Phase: Samples Log-in Date: 6/19/2008 Log-in By: al



1. Packing Type:

2. Were samples in separate bags? Yes

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 14

Number of samples received: 14

5. Correct containers used? Yes

Correct preservatives added? N/A

6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

9. Was anyone called? No Who was called? _____ By whom? _____ Date: _____

COMMENTS:



Admiralty Environmental
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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME: Star Princess				Dissolved Cu, Ni, Zn		LGN # <u>50806167</u>			
REPORT TO: Admiralty Environmental		PHONE#: (907) 463-4415		Metals Investigation		AE 2049			
ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801		SAMPLED BY: V. Stirbois				Initial Temp. (°C)			
Samples taken in the presence of:				# of Bottles		Small Temp. Blank: _____ Large Temp. Blank: _____			
				Dissolved Cu, Ni, Zn		Field Results			
DATE	TIME	SITE DESCRIPTION / IDENTIFIER	MATRIX			pH	Temp	Total Cl	Free Cl
June 12, 08	0835	Bulkhead Water from Stairway of Fwd Port	H ₂ O	1	1	2.1			
June 12, 08	1120	Potable Water 1R (8+9) after collection	H ₂ O	1	1	7.53			
June 12, 08	1130	Bulkhead Water - Hetchikan - St. Fwd Port	H ₂ O	1	1	8.18			
June 12, 08	1135	Tap Water - Bridge Portway Deck 14	H ₂ O	1	1	7.45			
June 12, 08	1145	Crew Cabin Deck 10 Fwd Port (Hot Water)	H ₂ O	1	1	7.25			
June 12, 08	1150	Pan Cabin Deck 8 Fwd Stbd (Hot Water)	H ₂ O	1	1	7.19			

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
6/19/08	<i>[Signature]</i>	<i>[Signature]</i>	6/19/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
0700	TREVOR FRITZ	BRYAN DOYLE	700
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
6/23/08	<i>[Signature]</i>	<i>[Signature]</i>	6/24/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
8:15	ARMY LAMARCA	N. LaBue	8:45

Section to be completed by receiving laboratory			
Temp/Loc:	5.1	5.6	
Thermo ID#:		FU2	
Condition of Custody Seals	Y	—	
Initialed By:	AL	—	
Shipped Via:	F	direct	



Admiralty Environmental
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Juneau, AK 99801
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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME: Star Princess				Dissolved Cu, Ni, Zn		LGN # <u>05806164</u>			
REPORT TO: Admiralty Environmental		PHONE#: (907) 463-4415		Metals Investigation		AE 2049			
ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801		SAMPLED BY: V. Stirbois				Initial Temp. (°C)			
Samples taken in the presence of:				# of Bottles		Small Temp. Blank: _____			
				Dissolved Cu, Ni, Zn		Large Temp. Blank: _____			
						Field Results			
DATE	TIME	SITE DESCRIPTION / IDENTIFIER	MATRIX			pH	Temp	Total Cl	Free Cl
JUN 17, 08	1155	Pan Cabin Deck 11 Port side ship	H ₂ O	1	1	7.29			
JUN 17, 08	1200	Crew Cabin Deck 4 Port	H ₂ O	1	1	7.32			
JUN 17, 08	1205	Tap Water - Crew Galley Deck 5 Aft (Hot)	H ₂ O	1	1	7.31			
JUN 18, 08	1135	Influent WBR - Black Water - Evac 4	H ₂ O	1	1	8.48			
JUN 18, 08	1145	Influent WBR - Grey Water - Buffer 12	H ₂ O	1	1	6.96			
JUN 18, 08	1155	Potable Water 12 (11-12) After oxidation	H ₂ O	1	1	7.29			

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE	Section to be completed by Receiving Laboratory			
6/19/08			6/19/08	Temp/Loc:	5.1	5.6	
TIME 0700	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Brian Doyle	TIME 7:00	Thermo ID#:		FVZ	
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE	Condition of Custody Seals	✓	—	
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME	Initialed By:	AL	—	
		N LeBue	8:45	Shipped Via:	F	Client	



Admiralty Environmental
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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME: Star Princess				Dissolved Cu, Ni, Zn		LGN # <u>JD806164</u>							
REPORT TO: Admiralty Environmental		PHONE#: (907) 463-4415		Metals Investigation		AE 2049							
ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801		SAMPLED BY: V. Sturbois				Initial Temp. (°C) Small Temp. Blank: _____ Large Temp. Blank: _____							
Samples taken in the presence of:				# of Bottles	Dissolved Cu, Ni, Zn								
DATE	TIME	SITE DESCRIPTION / IDENTIFIER	MATRIX			Field Results							
						pH	Temp	Total Cl	Free Cl				
6/18/08	1730	Bunker water - Juneau. <i>AS back</i>	H ₂ O			1	1						
6/18/08	1720	Alternate OB Sample point	H ₂ O			1	1						
			H ₂ O			1	1						
			H ₂ O			1	1						
			H ₂ O	1	1								
			H ₂ O	1	1								
DATE: 6/19/08		RELINQUISHED BY: (signature) <i>Trevor Fritz</i>		RECEIVED BY: (signature) <i>Brian Doyle</i>		DATE: 6/19/08		Section to be completed by Receiving Laboratory					
TIME: 0700		RELINQUISHED BY: (print) Trevor Fritz		RECEIVED BY: (print) Brian Doyle		TIME: 700		Temp/Loc: 5.1 5.6					
DATE:		RELINQUISHED BY: (signature)		RECEIVED BY: (signature) <i>N. LaBue</i>		DATE: 6/24/08		Thermo ID#: FVZ					
TIME:		RELINQUISHED BY: (print)		RECEIVED BY: (print) N. LaBue		TIME: 8:45		Condition of Custody Seals: Y -					
								Initialed By: AL -					
								Shipped Via: F direct					



Cooler Receipt Form

Client: Admiralty Environmental, LLC Client Code: 801002
Project: Star Princess

Order #: J0806164

Cooler ID: 2

A. Preliminary Examination Phase:

Date cooler opened: 6/24/2008

Cooler opened by: NL

Signature: NL

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: FedEx

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? Yes

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper:

6. Preservative:

Temperature: 5.1 deg. C

Designated person initial here to acknowledge receipt:

NL

Date:

6/24/08

COMMENTS:

B. Log-In Phase:

Samples Log-in Date: 6/24/2008

Log-in By: NL

1. Packing Type:

2. Were samples in separate bags? N/A

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 14

Number of samples received: 14

5. Correct containers used? Yes

Correct preservatives added? N/A

6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

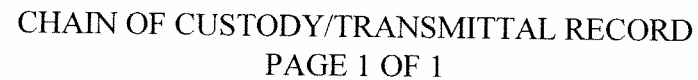
9. Was anyone called? No

Who was called?

By whom?

Date:

COMMENTS:





Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002
Project: Princess Metals Investigation

Order #: J0806214

Cooler ID: 1

A. Preliminary Examination Phase:

Date cooler opened: 6/25/2008
Cooler opened by: bd

Signature: 

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: Client

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? N/A

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper:

6. Preservative:

Temperature: 1.5 deg. C

Designated person initial here to acknowledge receipt:

 **Date:** 6/26/08

COMMENTS:

B. Log-In Phase: **Samples Log-in Date:** 6/25/2008 **Log-in By:** al



1. Packing Type:

2. Were samples in separate bags? Yes

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 1

Number of samples received: 1

5. Correct containers used? Yes

Correct preservatives added? N/A

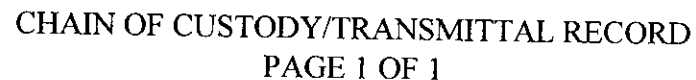
6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

9. Was anyone called? No **Who was called?** _____ **By whom?** _____ **Date:** _____

COMMENTS:



Filtered: 6/25/02 14:00 AZ



Cooler Receipt Form

Client: Admiralty Environmental, LLC Client Code: 801002
Project: Princess Metals Investigation

Order #: J0806214

Cooler ID: 2

A. Preliminary Examination Phase:

Date cooler opened: 6/27/2008

Cooler opened by: NL

Signature: NL

1. Was airbill Attached? N/A

Airbill #:

Carrier Name: FedEx

2. Custody Seals? N/A

How many? 0

Location:

Seal Name:

3. Seals intact? Yes

4. COC Attached? Yes

Properly Completed? Yes

Signed by AEL employee? Yes

5. Project Identification from custody paper:

6. Preservative:

Temperature: 2.1 deg. C

Designated person initial here to acknowledge receipt:

NL

Date: 6/27/08

COMMENTS:

B. Log-In Phase:

Samples Log-in Date: 6/27/2008

Log-in By: NL

1. Packing Type:

2. Were samples in separate bags? N/A

3. Were containers intact? Yes

Labels agree with COC? Yes

4. Number of bottles received: 1

Number of samples received: 1

5. Correct containers used? Yes

Correct preservatives added? N/A

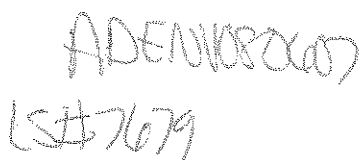
6. Sufficient sample volume? N/A

7. Bubbles in VOA samples? N/A

8. Was Project manager called and status discussed? No

9. Was anyone called? No Who was called? _____ By whom? _____ Date: _____

COMMENTS:



The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1199597

Site Location _____
STATE: _____

[illegible]Samples Intact
(Y/N)

Cooler Receipt Form
Pace Analytical Services, Inc.

SDG: ADENV080607

Taken By: Erin Evans

Cooler: AAD938

Transferred: Erin Evans

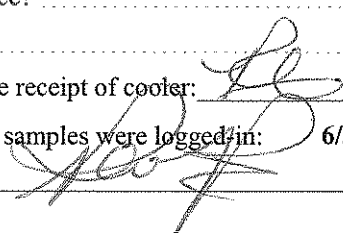
COC #: 1199597

Project: Cruise Ship Sampling (Admiralty Environmental)

Date samples were received at the laboratory: 6/30/2008


Date cooler was opened: 6/30/2008 1:10PM

A. PRELIMINARY EXAMINATION PHASE:

1. Did cooler come with a shipping slip (airbill, etc.)? **NO**
if YES, record carrier name and airbill number:
2. Were custody seals unbroken and intact at the date and time of arrival? **ABSENT**
Date On Custody Seal: Custody Seals Description:
3. Were custody papers sealed in a plastic bag and taped inside to the lid? **YES**
4. Did you screen samples for radioactivity using the Geiger Counter? **NO**
5. Were custody papers filled out properly (ink, signed, etc.)? **YES**
6. Did you sign custody papers in the appropriate place? **YES**
7. If required, was enough cooling material present? **YES**
8. Have designated person initial here to acknowledge receipt of cooler: 

B. LOG-IN PHASE:

Date samples were logged in: 6/30/2008 4:59PM

Logged-in by Rachel Frank (sign) 

9. Describe type of packing in cooler:
10. Were all bottles sealed in separate plastic bags? **NO**
11. Were labels in good condition? **YES**
12. Were all bottle labels complete (ID, date, time signature, preservative, etc.)? **YES**
13. Did all bottle labels agree with custody papers? **YES**
14. Were correct containers used for the tests indicated? **YES**
15. Were the correct pHs observed? **YES**
16. Was a sufficient amount of sample sent for tests indicated? **YES**
17. Were bubbles absent in VOA samples? **YES**
18. Temperatures: 5.2

DISCREPANCIES:

Date Printed: 6/30/2008 16:59