EXHIBIT 6

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

Mr. Paul Barrett
Princess Cruises
24200 Magic Mountain Parkway
Santa Clarita, CA 91355

August 12, 2008

Princess Metals Investigation

Summary

Samples of water from bunker connections utilized by Princess ships were taken in the ports of Juneau, Ketchikan, San Francisco, Seattle, Skagway, Vancouver, Victoria, and Whittier for the analysis of dissolved copper, dissolved nickel, and dissolved zinc. A synopsis of the analytical results is listed below. Results that are above the 2010 ADEC general permit regulatory limits are in bold.

Sampling Location – Bunkered Water	Sample Date	Dissolved Copper (µg/L)	Dissolved Nickel (µg/L)	Dissolved Zinc (µg/L)
Skagway Bunkered Water – St. Forward Port	06/12/08	0.688	1.48	6.53
Ketchikan Bunkering Connection	06/17/08	**3.62**	0.212	4.14
Ketchikan Bunkered Water – St. Forward Port	06/17/08	0.43	0.2	6.49
Juneau Bunkering Connection (AJ Dock)	06/18/08	**28.1**	1.24	13.7
Victoria Bunkering Connection – On Pier	06/21/08	2.47	0.431	8.92
Seattle Bunkering Connection – Forward Port	06/22/08	0.749	0.39	5.85
Juneau Bunkering Conn. (S. Franklin Dock)	06/25/08	**41.7**	2.35	16
Seattle Princess Dock – North Berth	06/30/08	**34**	1.3	**2600**
San Francisco Bunkering Connection	7/16/08	0.83	<0.5	<5
Whittier Bunkering Connection	7/24/08	1.3	0.345	17.5
Vancouver Bunkering Connection North	7/24/08	1.5	<0.2	9.0
Vancouver Bunkering Connection Central	7/24/08	**15**	<0.2	**280**
Vancouver Bunkering Connection South	7/24/08	**7.8**	<0.2	6.0

Based on this set of samples, water from Juneau and Seattle bunker connections utilized by Princess ships appears to contain elevated levels of dissolved copper relative to the other ports sampled, while Seattle Princess dock bunker water contains elevated zinc. The very high amount of dissolved zinc found in water taken from the North Berth of the Seattle dock may have been a result of sampling of stagnant water or contamination. However, dissolved zinc content in water from that bunker connection has been confirmed during a subsequent sampling event to be relatively high (700 µg/L).

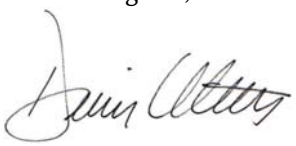
In addition to the samples taken from bunker connections, water samples were taken from a variety of points onboard the Star Princess. These samples were analyzed in the same manner as the bunker water connection samples, for the dissolved metals copper, nickel, and zinc. A synopsis of the analytical results is listed below. Results that are above the 2010 ADEC general permit regulatory limits are in bold.

Sampling Location – Star Princess	Sample Date	Dissolved Copper (µg/L)	Dissolved Nickel (µg/L)	Dissolved Zinc (µg/L)
Potable Water Tank (8&9) after Retention	06/17/08	**15.3**	1.74	17.8
Tap Water – Bridge Pantry Deck 14	06/17/08	**19.5**	1.87	26.9
Crew Cabin Deck 10 Fwd. Port (Hot Water)	06/17/08	**52.3**	**8.27**	33.5
Pax. Cabin Deck 8 Fwd. Stbd. (Hot Water)	06/17/08	**56.3**	**8.2**	34.9
Pax. Cabin Deck 11 Port Midship	06/17/08	**44.7**	2.21	33.7
Crew Cabin Deck 4 Port	06/17/08	**41.6**	1.85	40
Tap Water – Crew Galley Deck 5 Aft (Hot)	06/17/08	**26.3**	**10.4**	25.2
Designated Overboard Discharge Sample Port	06/18/08	**59.2**	**13.6**	**123**
Alternate Overboard Discharge Sample Point	06/18/08	**116**	**258**	**183**
Influent MBR – Blackwater - Evac. 4	06/18/08	**17**	**8.58**	**115**
Influent MBR – Graywater – Buffer Tank	06/18/08	**22.5**	7.64	**94.6**
Potable Water Tank (11-12) after Retention	06/18/08	**17.6**	1.48	18
Evaporator 1	06/20/08	**49.7**	3.13	15.4
Evaporator 3	06/20/08	**42.5**	1.04	51.8
Evaporator 2	06/23/08	**50.3**	1	28.1
Designated Overboard Discharge Sample Port	06/25/08	**55.5**	**15.7**	**119**

In general, levels of dissolved copper, nickel, and zinc observed in the final overboard permeate of the Star Princess are not solely a result of high levels of dissolved metals taken on board from bunker water connections and appear to be partially generated by sources within the ship. Several ports do show levels of metals in their bunkered potable water that are in excess of the 2010 ADEC general permit regulatory limits, which should be considered in the source water evaluation and reduction plan for all ships. Additional testing would also confirm whether these trace metals levels are constant in the potable water sources, as this report generally only includes single points of data.

A complete report of the final lab results is enclosed, and includes the analytical results, case narratives, and chains of custody.

Kindest Regards,



David Wetzel
Admiralty Environmental

ANALYTICA
Environmental Laboratories

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

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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

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: Dry Weight Basis

Sample prep wt./vol: 50.00 ml

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

Instrument: Elan

File Name: 062508asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	

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:

QUALITY CONTROL REPORT

Prep Batch: **T080625011**

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
DUP Anal. Date: 6/25/2008 4:55:41PM
Units: ug/L
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
LCS Anal. Date: 6/25/2008 2:13:40PM LCSD Anal. Date: 6/25/2008 2:18:05PM
Units: ug/L
Matrix: Aqueous

Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLev	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
MS Anal. Date: 6/25/2008 5:00:08PM MSD Anal. Date: 6/25/2008 5:04:34PM
Units: ug/L
Matrix: Aqueous

Analyte Name	SampResult	MSRes.	MSDRes	SPLev	SPDLev	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	

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 signifcance. Otherwise it indicates that a matrix bias may exist at the analytical step.

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:

SampleNum	ClientSampleName	DataFile	AnalysisDate
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

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

Workorder (SDG): J0806179

Project: **Star Princess**

Client: **Admiralty Environmental, LLC**

Client Project Number: **AE 2049**

REPORTING CONVENTIONS FOR THIS REPORT

J0806179

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

ANALYTICA
Environmental Laboratories

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 #: 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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

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: Dry Weight Basis

Sample prep wt./vol: 50.00 ml

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

Instrument: Elan

File Name: 070708bsam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	

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:

QUALITY CONTROL REPORT

Prep Batch: **T080707007**

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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	DUPRes.	RPD	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	RPD	Recov Lim	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	MSRes.	MSDRes	SPLev	SPDLev	Recov.	MSD Rec.	RPD	Recov Lim	RPDLim	Flag
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	

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 signifcance. Otherwise it indicates that a matrix bias may exist at the analytical step.

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:

SampleNum	ClientSampleName	DataFile	AnalysisDate
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

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

Workorder (SDG): J0806209

Project: **Star Princess**

Client: **Admiralty Environmental, LLC**

Client Project Number: **AE 2049**

REPORTING CONVENTIONS FOR THIS REPORT

J0806209

Test Name	Basis	# Sig Figs	Reporting Limit
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

ANALYTICA
Environmental Laboratories

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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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 Retentior**

Matrix: Aqueous

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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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 Por**

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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
Filtration		**1.0**		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	J0806164-04A	Analysis Date:	6/26/2008 5:15:49PM
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
Filtration		**1.0**		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	J0806164-05A	Analysis Date:	6/26/2008 5:19:38PM
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
Filtration		**1.0**		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	J0806164-07A	Analysis Date:	6/26/2008 5:31:06PM
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
Filtration		**1.0**		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	J0806164-11A	Analysis Date:	6/26/2008 6:01:34PM
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
Filtration		**1.0**		Date	1.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	J0806164-12A	Analysis Date:	6/26/2008 6:05:23PM
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	

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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	

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:

QUALITY CONTROL REPORT

Prep Batch: **T080625012**

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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	DUPRes.	RPD	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	RPD	Recov Lim	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	MSRes.	MSDRes	SPLev	SPDLev	Recov.	MSD Rec.	RPD	Recov Lim	RPDLim	Flag
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

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:

QUALITY CONTROL REPORT

Prep Batch: **T080626010**

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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	DUPRes.	RPD	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	RPD	Recov Lim	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	MSRes.	MSDRes	SPLev	SPDLev	Recov.	MSD Rec.	RPD	Recov Lim	RPDLim	Flag
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	

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 signifcance. Otherwise it indicates that a matrix bias may exist at the analytical step.

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:

SampleNum	ClientSampleName	DataFile	AnalysisDate
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

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:

SampleNum	ClientSampleName	DataFile	AnalysisDate
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

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

Workorder (SDG): J0806164

Project: **Star Princess**

Client: **Admiralty Environmental, LLC**

Client Project Number: **AE 2049**

REPORTING CONVENTIONS FOR THIS REPORT

J0806164

Test Name	Basis	# Sig Figs	Reporting Limit
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

ANALYTICA
Environmental Laboratories

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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

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: Dry Weight Basis

Sample prep wt./vol: 50.00 ml

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

Instrument: Elan

File Name: 070708bsam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	

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:

QUALITY CONTROL REPORT

Prep Batch: **T080707007**

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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	DUPRes.	RPD	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	RPD	Recov Lim	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	MSRes.	MSDRes	SPLev	SPDLev	Recov.	MSD Rec.	RPD	Recov Lim	RPDLim	Flag
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	

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 signifcance. Otherwise it indicates that a matrix bias may exist at the analytical step.

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:

SampleNum	ClientSampleName	DataFile	AnalysisDate
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

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

Workorder (SDG): J0806214

Project: **Princess Metals Investigation**

Client: **Admiralty Environmental, LLC**

Client Project Number: **AE 2091**

REPORTING CONVENTIONS FOR THIS REPORT

J0806214

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
940 South Harney St.
Seattle, WA 98108
Phone: 206.767.5060
Fax: 206.767.5063

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

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
940 Harney St.
Seattle, WA 98108
Phone: 206.767.5060
Fax: 206.767.5063

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

REPORT OF LABORATORY ANALYSIS Date Printed: 7/7/2008 14:46

REVISED
JG 7/7/08

Pace Analytical®
www.pacelabs.com

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Fax: 206.767.5063

Appendix

Quality Control Report

Pace Analytical Services, Inc.

Blank Report

Test:	200.8 - Diss. Cu, Ni, Zn Drinking Water by ICP/MS	SDG ID:	ADENV080607
		Preparation Date:	7/2/2008
Lab Sample ID:	B070208ICPMSW10	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	
Lab Sample ID	**Client Sample ID**
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

Date Printed: 7/7/2008 14:46

REVISED
dlo 7/7/08

California State Certified Laboratory No.2153

C E R C O
analytical, inc.

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

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

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

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Cerco Analytical, Inc	Client Project ID: #0807123	Date Sampled: 07/16/08
		Date Received: 07/16/08
3942 Valley Avenue suite A	Client Contact: Darlene Langford	Date Extracted: 07/16/08
Pleasanton, CA 94566	Client P.O.:	Date Analyzed: 07/16/08

Metals*

Extraction method E200.8 Analytical methods E200.8 Work Order: 0807389

Lab ID	Client ID	Matrix	Extraction Type	Copper	Nickel	Zinc	DF	% SS
001A	Fresh Water Bunker	W	DISS.	0.83	ND	ND	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	DISS.	0.5	0.5	5.0	µg/L
	S	TOTAL	NA	NA	NA	NA

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.
WET = Waste Extraction Test (STLC).
DI WET = Waste Extraction Test using de-ionized water.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

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.

DHS ELAP Certification 1644

QA/QC Officer

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:	**San Francisco Bunker Connection**	**Bunker Water Investigation**	LGN #
		Dissolved Metals	**AE**
REPORT TO:	Admiralty Environmental	PHONE#: (907) 463-4415	
ADDRESS:	431 N. Franklin St., Suite 101 Juneau, AK 99801	SAMPLED BY: T. Davidson	Initial Temp. (°C) Small Temp. Blank: Large Temp. Blank:
Samples taken in the presence of:			CA0807123

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn													
7/16/08	1134	Fresh Water Bunker Connection - Pier #	H_2O	1	1													

DATE: 7/16/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE	Section to be completed by Receiving Laboratory
TIME: 1134	RELINQUISHED BY: (print) Kevin Wong	RECEIVED BY: (print) Tessina Davidson	TIME	Temp/Loc:
DATE: 7/16/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE: 7/16/08	Thermo ID#: Condition of Costody Seals
TIME	RELINQUISHED BY: (print) Tessina Davidson	RECEIVED BY: (print)	TIME	Initialed By: Shipped Via:

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 Spectroscop (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			0.0002	0.0002	0.001
UNITS			mg/L	mg/L	mg/L

mg/L = milligrams per liter
< = Less than detection limit

CANTEST LTD.

Anna Becalska, PhD
Coordinator, Trace Metals

ANALYTICA
Environmental Laboratories

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

Analyte	Result	PQL	Units	Analysis Date	Flags	Analyst	Method
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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

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: Dry Weight Basis

Sample prep wt./vol: 50.00 ml

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

Instrument: Elan

File Name: 080608asam.re

Dilution Factor: 1

Analyst Initials: GY

Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	Rerun #:
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	

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:

QUALITY CONTROL REPORT

Prep Batch: **T080805014**

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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	DUPRes.	RPD	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	LCSRes.	SDRes.	SPLev	SPDLev	Recov.	SD Recov	RPD	Recov Lim	RPDLim	Flag
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

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

Units: ug/L

Matrix: Aqueous

Analyte Name	SampResult	MSRes.	MSDRes	SPLev	SPDLev	Recov.	MSD Rec.	RPD	Recov Lim	RPDLim	Flag
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	

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 signifcance. Otherwise it indicates that a matrix bias may exist at the analytical step.

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:

SampleNum	ClientSampleName	DataFile	AnalysisDate
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

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

Workorder (SDG): J0807222

Project: **Whittier Bunker Connection**

Client: **Admiralty Environmental, LLC**

Client Project Number: **AE 2195**

REPORTING CONVENTIONS FOR THIS REPORT

J0807222

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

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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME:	**Whittier Bunker Connection**		**Bunker Water Investigation**
			Dissolved Metals
REPORT TO:	Admiralty Environmental	PHONE#: (907) 463-4415	
ADDRESS:	431 N. Franklin St., Suite 101 Juneau, AK 99801	SAMPLED BY: Ben Eleniz	
Samples taken in the presence of:	CHRISTOPHER C. BENDER		

LGN # J0807222

AE 2195

Initial Temp. (°C)

Small Temp. Blank: ____

Large Temp. Blank: ____

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn
7-24-08	9:02 AM	Fresh Water Bunker Connection	H_2O	1	1

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
7-24-08	Ben Eleniz	[signature]	07/28/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
	[illegible]	Melissa Goldstein	1045
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
07/28/08	[signature]	[signature]	7/28/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
1630	Melissa Goldstein	Amy Lamoreux	1630

Section to Be Completed by Receiving Laboratory

Temp/Loc:	____	____	1.7°C/K	____
Thermo ID#:	____	____	PS1	____
Condition of Costody Seals	____	____	____	____
Initialed By:	____	____	____	____
Shipped Via:			cl/d	

Filed 7/29/08 17:15 AL

Cooler Receipt Form

ANALYTICA

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0807222
Project: Whittier Bunker Connection

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:

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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME: **Whittier Bunker Connection**

Bunker Water Investigation

Dissolved Metals

LGN # J0807222

AE 2195

REPORT TO: Admiralty Environmental

PHONE#: (907) 463-4415

ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801

SAMPLED BY: Ben Elenz

Samples taken in the presence of:
CHRISTOPHER C. BENDER

Initial Temp. (°C)
Small Temp. Blank:
Large Temp. Blank:

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn
7-24-08	9:02 AM	Fresh Water Bunker Connection	H_2O	1	1

DATE 7-24-08	RELINQUISHED BY: (signature) Ben Elenz	RECEIVED BY: (signature)	DATE 07/28/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print) Melissa Goldstein	TIME 1045
DATE 07/28/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE 7/28/8
TIME 1630	RELINQUISHED BY: (print) Melissa Goldstein	RECEIVED BY: (print) Amy Lamonica	TIME 16 30

Temp/Loc:	THO 3.7		L.T/bk
Thermo ID#:			PS1
Condition of Costody Seals	Y		
Initialed By:	BD		
Shipped Via:	F		CSNO

7/3-08 8:00 Amy Lamonica

7/31/08 09:25 Glenn Pezzolo

Filtered 7/29/08 17:15 AL

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0807222
Project: Whittier Bunker Connection

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:

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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

Sam 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	NA	:	:	: ESE 6/30/08
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

Pelican Marcel
Printed Name

2008 Cruise Ship Sampling Checklist

Admiralty ENVIRONMENTAL

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

I. Notification

- [x] 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.
- [x] 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:)

- [x] Vessel name
- [x] Names of sampling personnel
- [x] Names of shipboard assistants
- [x] Signature or initials by the vessel crew indicating that the sample port is correct
- [x] Sample ID clearly stating where the sample was taken
- [x] Sample date and times recorded on COC
- [ ] Field measurements: pH, chlorine residual, and temp recorded on COC
- [x] 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
- [x] Nature of sample recorded (composite or grab)
- [x] 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
- [x] Chain of custody properly completed
- [x] 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

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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME: **Star Princess Metals Investigation**

ADEC Compliance
Dissolved Cu, Ni, Zn

LGN # J08 06179

AE 2049

REPORT TO: Admiralty Environmental | PHONE#: (907) 463-4415

ADDRESS: 431 N. Franklin St., Suite 101, Juneau, AK 99801 | SAMPLED BY: W. Schulz

Samples taken in the presence of:

Initial Temp. (°C)
Small Temp. Blank: ____
Large Temp. Blank: ____

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
06/17/08	0709	Ketchikan Bunker Water Connection	H_2O	2	1		16C	0.3	0.3

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
06-17-08	William Schulz		6/20/08 TF
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
1200	William Schulz	Trevor Fritz	16:50
DATE 6/20/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE 6/20/08
TIME 16:50	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Amy Lawrence	TIME 16.50

Section to Be Completed by Receiving Laboratory

Temp/Loc:			5.9	
Thermo ID#:			FH2	
Condition of Costody Seals			N/A	
Initialed By:				
Shipped Via:			Client	

Filtered 6/20/08 AL 17:00

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0806179
Project: Star Princess

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:

Admiralty ENVIRONMENTAL

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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME: **Star Princess Metals Investigation**

ADEC Compliance
Dissolved Cu, Ni, Zn

LGN # J08 06179

AE 2049

Initial Temp. (°C)
Small Temp. Blank:
Large Temp. Blank:

REPORT TO: **Admiralty Environmental** PHONE#: **(907) 463-4415**

ADDRESS: **431 N. Franklin St., Suite 101 Juneau, AK 99801**

SAMPLED BY: **W. Schulz**

Samples taken in the presence of:

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
06/17/08	0709	Ketchikan Bunker Water Connection	H_2O	2	1		16C	0.3	0.3

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
06-17-08	William Schulz		6/20/08 TF
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
1200	William Schulz	Trevor Fritz	16:50
DATE 6/20/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE 6/20/08
TIME 16:50	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Amy Lamoreaux	TIME 16:50

Section to Be Completed by Receiving Laboratory

		TMO		
Temp/Loc:	2.3		5.9	
Thermo ID#:			FL2	
Condition of Custody Seals	Y		N/A	
Initialed By:	AL			
Shipped Via:	F		Client	

6/23/08 8:15 Amy Lamoreaux

N LeBeau 6/24/08

Filtered 6/20/08 AL 17:00

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0806179
Project: Star Princess

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:

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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME:	**Star Princess**	**Dissolved Cu, Ni, Zn Metals Investigation**	LGN # J0806209
REPORT TO:	Admiralty Environmental	PHONE#: (907) 463-4415	**AE 2049**
ADDRESS:	431 N. Franklin St., Suite 101 Juneau, AK 99801	SAMPLED BY: V. Stirbois	Initial Temp. (°C) Small Temp. Blank: ____ Large Temp. Blank: ____
Samples taken in the presence of:			

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
JUN20,08	1520	EVAPORATOR 1	H_2O	1	1	7.90			
JUN20,08	1525	EVAPORATOR 3	H_2O	1	1	7.79			
JUN21,08	1750	BUNKERING VICTORIA - On Pier	H_2O	1	1	8.14			
JUN22,08	1029	BUNKERING SEATTLE - Fwd Port	H_2O	1	1	8.28			
JUN23,08	1545	EVAPORATOR 2	H_2O	1	1	7.82			
			H_2O	1	1				

DATE: JUN25,08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE: 6/25/08	Section to Be Completed by Receiving Laboratory
TIME: 1545	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Trevor Fritz	TIME: 15:45	Temp/Loc: 2.3°/BK
DATE: 6/25/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE: 6/25/08	Thermo ID#: FH2
TIME: 16:25	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Amy Lamoreaux	TIME: 16:25	Condition of Costody Seals:
				Initialed By:
				Shipped Via: client

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0806209
Project: Star Princess

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:** 6/26/08

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:

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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME: **Star Princess**

Dissolved Cu, Ni, Zn
Metals Investigation

LGN # JD806209

AE 2049

REPORT TO: Admiralty Environmental
PHONE#: (907) 463-4415
ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801
SAMPLED BY: V. Stirbois

Samples taken in the presence of:

Initial Temp. (°C)
Small Temp. Blank:
Large Temp. Blank:

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
JUN20,08	1520	EVAPORATOR 1	H_2O	1	1	7.90			
JUN20,08	1525	EVAPORATOR 3	H_2O	1	1	7.79			
JUN21,08	1750	BUNKERING VICTORIA - On Pier	H_2O	1	1	8.14			
JUN22,08	1009	BUNKERING SEATTLE - Fwd Port	H_2O	1	1	8.28			
JUN23,08	1545	EVAPORATOR 2	H_2O	1	1	7.22			
			H_2O	1	1				

DATE: JUN25,08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE: 6/25/08	Section to be Completed by Receiving Laboratory
TIME: 1545	RELINQUISHED BY: (print) Troy Mie Stolberg	RECEIVED BY: (print) TROY FRITZ	TIME: 15:45	Temp/Loc: 2.1 — 2.3°/bk
DATE: 6/25/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE: 6/25/08	Thermo ID#: — FU2
TIME: 16:25	RELINQUISHED BY: (print) TROY FRITZ	RECEIVED BY: (print) Amy Lamoreaux	TIME: 16:25	Condition of Costody Seals: Y
				Initialed By: AL
				Shipped Via: F — client

6/26/08 8:15 — 8:50

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0806209
Project: Star Princess

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:

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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME:	**Star Princess**	**Dissolved Cu, Ni, Zn Metals Investigation**	LGN # J0806164
REPORT TO:	Admiralty Environmental	PHONE#: (907) 463-4415	**AE 2049**
ADDRESS:	431 N. Franklin St., Suite 101 Juneau, AK 99801	SAMPLED BY: V. Stirbois	Initial Temp. (°C) Small Temp. Blank: Large Temp. Blank:

Samples taken in the presence of:

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
June 16, 08	0835	Bunkered water from Skagway St. Fwd Port	H_2O	1	1	7.1			
June 17, 08	1120	Potable Water tk (8+9) after ozonation	H_2O	1	1	7.53			
June 17, 08	1130	Bunkered water - Ketchikan - St. Fwd Port	H_2O	1	1	8.18			
June 16, 08	1135	Tap water - Bridge Pantry - Deck 14	H_2O	1	1	7.45			
June 17, 08	1145	Crew Cabin Deck 10 Fwd Port (Hot water)	H_2O	1	1	7.25			
June 17, 08	1150	Pax Cabin Deck 8 Fwd Stbd (Hot Water)	H_2O	1	1	7.19			

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
6/19/08			6/19/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
0700	TREVOR FITZ	BRIAN BOYLE	700
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME

Section to Be Completed by Receiving Laboratory

Temp/Loc:	5.6°			
Thermo ID#:	FL2			
Condition of Custody Seals	—			
Initialed By:	—			
Shipped Via:	client			

Filtered 6/19/08 9.00 AM
AL

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 # 308061164
		Metals Investigation	**AE 2049**
REPORT TO:	Admiralty Environmental	PHONE#: (907) 463-4415	
ADDRESS:	431 N. Franklin St., Suite 101 Juneau, AK 99801	SAMPLED BY: V. Stirbois	Initial Temp. (°C) Small Temp. Blank: Large Temp. Blank:
Samples taken in the presence of:			

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
JUN 17,08	1155	Pax Cabin Deck 11 Port Midship	H_2O	1	1	7.29			
JUN 17,08	1200	Crew Cabin Deck 4 Port	H_2O	1	1	7.32			
JUN 17,08	1205	Tap Water - Crew Galley - Deck 5 Aft (Hot)	H_2O	1	1	7.31			
JUN 18,08	1135	Influent MBR - Black Water - Evac 4	H_2O	1	1	8.48			
JUN 18,08	1145	Influent MBR - Gray Water - Buffer Tk	H_2O	1	1	6.96			
JUN 18,08	1155	Potable Water Tk (11-tk) after ozonation	H_2O	1	1	7.29			

DATE 6/19/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE 6/19/08	Section to Be Completed by Receiving Laboratory
TIME 0700	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Brian Doyle	TIME 7:00	Temp/Loc: 5.6
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE	Thermo ID#: FUZ
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME	Condition of Costody Seals: —
				Initialed By: —
				Shipped Via: Client

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CHAIN OF CUSTODY/TRANSMITTAL RECORD
PAGE 1 OF 1

PROJECT NAME: Star Princess

Dissolved Cu, Ni, Zn

Metals Investigation

LGN # J0806164

AE 2049

REPORT TO: Admiralty Environmental
PHONE#: (907) 463-4415

ADDRESS: 431 N. Franklin St., Suite 101, Juneau, AK 99801
SAMPLED BY: V. Stirbois

Samples taken in the presence of:

	Initial Temp. (°C)
Small Temp. Blank:	
Large Temp. Blank:	

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn										pH	Temp	Total Cl	Free Cl
JUN18,08	1730	Bunkered Water - Juneau. ~~St. Fwd Pud~~ AJ Dock	H_2O	1	1													
6/18/08	1720	Alternate OB Sample Point	H_2O	1	1													
			H_2O	1	1													
			H_2O	1	1													
			H_2O	1	1													
			H_2O	1	1													

(Field Results: pH, Temp, Total Cl, Free Cl)

DATE / TIME	RELINQUISHED BY	RECEIVED BY	DATE / TIME
DATE 6/19/08	RELINQUISHED BY: (signature) [signature]	RECEIVED BY: (signature) [signature]	DATE 6/19/08
TIME 0700	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Brian Doyle	TIME 700
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME

Section to Be Completed by Receiving Laboratory

Temp/Loc:		5.6		
Thermo ID#:		FUZ		
Condition of Costody Seals		–		
Initialed By:		–		
Shipped Via:		client		

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0806164
Project: Star Princess

Cooler ID: 1

A. Preliminary Examination Phase: **Date cooler opened:** 6/19/2008
Cooler opened by: bd **Signature:** BD

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: BD **Date:** 6/19/08

COMMENTS:

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

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
Metals Investigation

LGN # J0806164

AE 2049

REPORT TO: Admiralty Environmental
PHONE#: (907) 463-4415
ADDRESS: 431 N. Franklin St., Suite 101 Juneau, AK 99801
SAMPLED BY: V. Stirbois

Initial Temp. (°C)
Small Temp. Blank:
Large Temp. Blank:

Samples taken in the presence of:

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
June 12, 08	0835	Bunkered Water from Skagway St. Fwd Port	H_2O	1	1				
June 12, 08	1120	Potable Water 1k (8+9) after ozonation	H_2O	1	1	7.1			
June 12, 08	1130	Bunkered water - Ketchikan - St. Fwd Port	H_2O	1	1	7.53			
June 12, 08	1135	Tap water - Bridge Pantry Deck 14	H_2O	1	1	8.18			
June 12, 08	1145	Crew Cabin Deck 10 Fwd Port (Hot water)	H_2O	1	1	7.45			
June 12, 08	1150	Pax Cabin Deck 8 Fwd Stbd (Hot Water)	H_2O	1	1	7.25			
						7.19			

DATE 6/19/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE 6/19/08
TIME 0700	RELINQUISHED BY: (print) TREVOR FRITZ	RECEIVED BY: (print) BRIAN BOYLE	TIME 700
DATE 6/23/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE 6/24/08
TIME 8:15	RELINQUISHED BY: (print) Amy Lamunyon	RECEIVED BY: (print) N LaBue	TIME 8:45

Section to Be Completed by Receiving Laboratory

Temp/Loc:	5.1	5.6
Thermo ID#:		FL2
Condition of Costody Seals	Y	—
Initialed By:	AL	—
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
Metals Investigation

LGN # D0806164

AE 2049

REPORT TO: Admiralty Environmental | PHONE#: (907) 463-4415

ADDRESS: 431 N. Franklin St., Suite 101, Juneau, AK 99801 | SAMPLED BY: V. Stirbois

Samples taken in the presence of:

Initial Temp. (°C)
Small Temp. Blank:
Large Temp. Blank:

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
JUN17,08	1155	Pax Cabin Deck 11 Port Midship	H_2O	1	1	7.89			
JUN17,08	1200	Crew Cabin Deck 4 Port	H_2O	1	1	7.32			
JUN17,08	1205	Tap Water - Crew Galley - Deck 5 Aft (Hot)	H_2O	1	1	7.31			
JUN18,08	1135	Influent MBR - Black Water - Evac 4	H_2O	1	1	8.48			
JUN18,08	1145	Influent MBR - Gray Water - Buffer Tk	H_2O	1	1	6.96			
JUN18,08	1155	Potable Water Tk (11-L2) after ozonation	H_2O	1	1	7.29			

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
6/19/08			6/19/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
0700	Trevor Fritz	Brian Doyle	7:00
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
		N LaBrie	6/24/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME
		N LaBrie	8:45

Section to be Completed by Receiving Laboratory

Temp/Loc:	5.1	5.6		
Thermo ID#:		FUZ		
Condition of Costody Seals	Y	—		
Initialed By:	AL	—		
Shipped Via:	F	Client		

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CHAIN OF CUSTODY/TRANSMITTAL RECORD

PROJECT NAME: **Star Princess**

Dissolved Cu, Ni, Zn

Metals Investigation

LGN # J0806164

AE 2049

REPORT TO: Admiralty Environmental

PHONE#: (907) 463-4415

ADDRESS: 431 N. Franklin St., Suite 101, Juneau, AK 99801

SAMPLED BY: V. Stirbois

Samples taken in the presence of:

Initial Temp. (°C)
Small Temp. Blank:
Large Temp. Blank:

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn										pH	Temp	Total Cl	Free Cl
JUN18,08	1730	Bunkered Water - Juneau - AJ Dock	H_2O	1	1													
6/18/08	1720	Alternate OB Sample Point	H_2O	1	1													
			H_2O	1	1													
			H_2O	1	1													
			H_2O	1	1													
			H_2O	1	1													

Field Results: pH, Temp, Total Cl, Free Cl

DATE / TIME	RELINQUISHED BY	RECEIVED BY	DATE / TIME
DATE 6/19/08	RELINQUISHED BY: (signature) [signature]	RECEIVED BY: (signature) [signature]	DATE 6/19/08
TIME 0700	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Brian Doyle	TIME 700
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature) N LaBue	DATE 6/24/08
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print) N LaBue	TIME 8:45

Section to Be completed by Receiving Laboratory

Temp/Loc:	5.1	5.6		
Thermo ID#:		FU2		
Condition of Costody Seals	Y	–		
Initialed By:	AL	–		
Shipped Via:	F	client		

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0806164
Project: Star Princess

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:

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

PROJECT NAME:	**Princess Metals Investigation**		ADEC Compliance / Dissolved Cu, Ni, Zn
REPORT TO:	Admiralty Environmental	PHONE#: (907) 463-4415	
ADDRESS:	431 N. Franklin St., Suite 101 Juneau, AK 99801	SAMPLED BY: T. Fritz, K. Goodwin	
Samples taken in the presence of:			

LGN # J0806214

AE 2091

Initial Temp. (°C)
Small Temp. Blank: ____
Large Temp. Blank: ____

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
06/25/08	10:15	Bunker Water Connection (JNU Princess Dock)	H_2O	12	2				

DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
6/25/08			6/25/08
TIME 12:45	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Brian Doyle	TIME 1245
DATE	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE
TIME	RELINQUISHED BY: (print)	RECEIVED BY: (print)	TIME

Section to Be Completed by Receiving Laboratory

Temp/Loc:	____	1.5/K	____	____
Thermo ID#:	____	FLZ	____	____
Condition of Costody Seals	____	—	____	____
Initialed By:	____	—	____	____
Shipped Via:	____	Client		

Filtered: 6/25/08 14:00 AK

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0806214
Project: Princess Metals Investigation

Cooler ID: 1

A. Preliminary Examination Phase: **Date cooler opened:** 6/25/2008 **Cooler opened by:** bd **Signature:** BD

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: BD **Date:** 6/26/08

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:	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

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

PROJECT NAME: **Princess Metals Investigation**

ADEC Compliance
Dissolved Cu, Ni, Zn

LGN # J0806214

AE 2091

REPORT TO:	Admiralty Environmental
PHONE#:	(907) 463-4415
ADDRESS:	431 N. Franklin St., Suite 101 Juneau, AK 99801
SAMPLED BY:	T. Fritz, K. Goodwin

Samples taken in the presence of:

Initial Temp. (°C)
Small Temp. Blank: ____
Large Temp. Blank: ____

DATE	TIME	SITE DESCRIPTION /IDENTIFIER	MATRIX	# of Bottles	Dissolved Cu, Ni, Zn	Field Results pH	Temp	Total Cl	Free Cl
06/25/08	10:15	Bunker Water Connection (JNU Princess Dock)	H_2O	12	12				

DATE 6/25/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	DATE 6/25/08	Section to Be Completed by Receiving Laboratory
TIME 12:45	RELINQUISHED BY: (print) Trevor Fritz	RECEIVED BY: (print) Brian Doyle	TIME 1245	Temp/Loc: 2.1 1.5 blk
DATE 6/26/08	RELINQUISHED BY: (signature)	RECEIVED BY: (signature) N LeBlanc	DATE 6/27/08	Thermo ID#: FUZ
TIME 8:15	RELINQUISHED BY: (print) Amy Lamoreaux	RECEIVED BY: (print) N LeBlanc	TIME 8:50	Condition of Costody Seals: Y —
				Initialed By: AL —
				Shipped Via: F Client

Filtered: 6/25/08 14:20 AL

ANALYTICA

Cooler Receipt Form

Client: Admiralty Environmental, LLC **Client Code:** 801002 **Order #:** J0806214
Project: Princess Metals Investigation

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:

ADEC/Brad
LSH 7679

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

1199597

Section A Required Client Information	Section B Required Project Information:	Section C Invoice Information:
Company: Admiralty Environmental	Report To:	Attention:
Address: 431 N. Franklin St, Suite 101 Juneau, AK 99801	Copy To:	Company Name:
		Address:
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: 907-463-4415 Fax: (480) 247-4476	Project Name:	Pace Project Manager:
Requested Due Date/TAT:	Project Number: AE 2100	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	Dissolved metals (Al, Co, Zn) (200.8)										Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	North Bonser Water - Princess	DW	G				6/30/08	1245		1	X									X												
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Erin Evans / Pace	6/30/08	1310	[signature]	6/30/08	1310	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Erin Evans

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 06/30/08

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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