ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: METHOD BLANK**

Lab Sample ID: JB44MB
LIMS ID: 06-2913
Matrix: Water
Data Release Authorized:
Reported: 03/13/06

QC Report No: JB44-Landau Associates
Project: Port of Anacortes
529009
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
200.8	02/21/06	200.8	02/17/06	7440-36-0	Antimony	0.0002	0.0002	U
200.8	02/21/06	200.8	02/17/06	7440-38-2	Arsenic	0.0002	0.0002	U
200.8	02/21/06	200.8	02/17/06	7440-43-9	Cadmium	0.0002	0.0002	U
200.8	02/21/06	200.8	02/17/06	7440-50-8	Copper	0.0005	0.0005	U
200.8	02/21/06	200.8	02/17/06	7439-92-1	Lead	0.001	0.001	U
200.8	02/21/06	200.8	02/17/06	7440-02-0	Nickel	0.0005	0.0005	U
200.8	02/21/06	200.8	02/20/06	7440-28-0	Thallium	0.0002	0.0002	U

U-Analyte undetected at given RL
RL-Reporting Limit

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DISSOLVED METALS
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Sample ID: MW-102
SAMPLE

Lab Sample ID: JB44A
LIMS ID: 06-2913
Matrix: Water
Data Release Authorized:
Reported: 03/13/06

QC Report No: JB44-Landau Associates
Project: Port of Anacortes
529009
Date Sampled: 01/24/06
Date Received: 01/25/06

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
200.8	02/21/06	200.8	02/17/06	7440-36-0	Antimony	0.001	0.001	U
200.8	02/21/06	200.8	02/20/06	**7440-38-2**	**Arsenic**	0.002	**0.036**	
200.8	02/21/06	200.8	02/17/06	7440-43-9	Cadmium	0.001	0.001	U
200.8	02/21/06	200.8	02/17/06	7440-50-8	Copper	0.002	0.002	U
200.8	02/21/06	200.8	02/17/06	7439-92-1	Lead	0.005	0.005	U
200.8	02/21/06	200.8	02/17/06	**7440-02-0**	**Nickel**	0.002	**0.009**	
200.8	02/21/06	200.8	02/20/06	7440-28-0	Thallium	0.001	0.001	U

U-Analyte undetected at given RL
RL-Reporting Limit

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INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
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Sample ID: MW-113
SAMPLE

Lab Sample ID: JB44B
LIMS ID: 06-2914
Matrix: Water
Data Release Authorized:
Reported: 03/13/06

QC Report No: JB44-Landau Associates
Project: Port of Anacortes
529009
Date Sampled: 01/24/06
Date Received: 01/25/06

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
200.8	02/21/06	200.8	02/17/06	7440-36-0	Antimony	0.001	0.001	U
200.8	02/21/06	200.8	02/20/06	**7440-38-2**	**Arsenic**	0.002	**0.036**	
200.8	02/21/06	200.8	02/17/06	7440-43-9	Cadmium	0.001	0.001	U
200.8	02/21/06	200.8	02/17/06	7440-50-8	Copper	0.002	0.002	U
200.8	02/21/06	200.8	02/17/06	7439-92-1	Lead	0.005	0.005	U
200.8	02/21/06	200.8	02/17/06	**7440-02-0**	**Nickel**	0.002	**0.009**	
200.8	02/21/06	200.8	02/20/06	7440-28-0	Thallium	0.001	0.001	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Lab Sample ID: JB44LCS
LIMS ID: 06-2913
Matrix: Water

QC Report No: JB44-Landau Associates
Project: Port of Anacortes
529009

Data Release Authorized:
Reported: 03/13/06

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Spike mg/L	Spike Added	% Recovery	Q
Antimony	0.0241	0.0250	96.4%	
Arsenic	0.0254	0.0250	101.6%	
Cadmium	0.0242	0.0250	96.8%	
Copper	0.0262	0.0250	104.8%	
Lead	0.023	0.025	92.0%	
Nickel	0.0251	0.0250	100.4%	
Thallium	0.0255	0.0250	102.0%	

'Q' codes: N = control limit not met
NA = Not applicable - analyte not spiked

Control Limits: 75-125%

13 February 2006

Stacy Pischer
Landau Associates, Inc.
130 Second Avenue South
Edmonds, WA 98020-9129

RE: Project: Port of Anacortes / 529009
ARI Job No: IZ30

Dear Stacy:

Please find enclosed a copy of chain of custody (COC) record and the analytical results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted thirteen water samples and a trip blank on January 25, 2006 in good condition. There were no discrepancies between the COC and the sample containers' labels.

The samples were analyzed for VOAs, SIM vinyl chloride, SVOAs, LVI SIM-cPAHs, Resin Acids, PCBs, Pests, NWTPH-G, NWTPH-Dx with acid/silica gel cleanups, total and dissolved metals, conventional parameters, and tannins/lignins. The standards for the NWTPH-Dx analyses were acid/silica cleaned as per the method. The analysis for tanning/lignins was sub-contracted to Aquatic Research in Seattle, WA.

The volatiles analyst noted the strong sulfur odor for some of the samples. Samples **MW-108**, MW-101, **MW-105**, and **MW-106** were diluted for the 20-mL purge analyses based on the matrix interference found in the SIM vinyl chloride analyses.

The volatiles analyst noted that the pH's of samples **MW-102**, **MW-113**, **MW-109**, and **MW-101** were approximately 6-8, although the samples were indicated as preserved. The samples were analyzed seven, eight, or nine days past collection for the full-scan 8260 and SIM vinyl chloride analyses.

In the initial undiluted analysis of sample **MW-110** for LVI-SIM cPAHs, the d12-perylene internal standard showed an area above the QC limit. The sample was re-analyzed with a three times dilution with all QC compliant, indicating a matrix effect. Both analyses of this sample have been reported.

In the analyses for PCBs, samples **MW-102**, **MW-113**, and **MW-110** showed somewhat low surrogate recoveries, although within the QC limits. The extractions analyst had noted high levels of emulsions for these samples in the extraction. Surrogates tend to show loss with emulsions.

In some of the samples' metals analyses, the result for an element was slightly higher in the dissolved analysis than in the corresponding total analysis. In general these differences are within the range of analytical variability.

Another potential source of variability is due to the fact that the total samples are not homogenized, but are allowed to settle and an aliquot be withdrawn from the top of the container for the analysis as per the client request.

The analysts noted that many of the samples were diluted due to color for the nitrate/nitrite and ammonia analyses.

No further analytical complications were noted. A copy of this report and all associated raw data will remain on file with ARI. If you have any questions or require additional information, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mary Lou Fox
Project Manager
206/695-6211
marylou@arilabs.com

Enclosures
cc: IZ17
MLF/mlf