

April 21, 2011

Martin

Fredericksburg, VA 22401

Work Order No.: 11D0684

Re: Fredericksburg, VA / Hg Analysis

Dear Martin :

Microbac Laboratories, Inc. - Chicagoland Division received 1 sample(s) on 4/18/2011 1:00:00PM for the analyses presented in the following report as Work Order 11D0684.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Jeff Loewe, Division Manager at [jeff.loewe@microbac.com](mailto:jeff.loewe@microbac.com). You may also contact Sean Hyde, Chief Operating Officer at [sean.hyde@microbac.com](mailto:sean.hyde@microbac.com) or James Nokes, President at [james.nokes@microbac.com](mailto:james.nokes@microbac.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Paluch".

Dan Paluch  
Project Manager



**WORK ORDER SAMPLE SUMMARY**

**Date:** *Thursday, April 21, 2011*

**Client:** WALK-IN CLIENT  
**Project:** Fredericksburg, VA / Hg Analysis  
**Lab Order:** 11D0684

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<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Collection Date</b>	<b>Date Received</b>
11D0684-01	Ling Zhi Whitening Cream		04/16/2011 12:15	4/18/2011 1:00:00PM



**CASE NARRATIVE**

**Date:** *Thursday, April 21, 2011*

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**Client:** WALK-IN CLIENT  
**Project:** Fredericksburg, VA / Hg Analysis  
**Lab Order:** 11D0684

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The Matrix Spike and Matrix Spike Duplicate performed on the Ling Zhi Whitening Cream sample failed the accuracy criteria for Mercury. This bias is due to the high indigenous analyte concentration (relative to the spike amount).



## Analytical Results

Date: *Thursday, April 21, 2011*

**Client:** WALK-IN CLIENT  
**Client Project:** Fredericksburg, VA / Hg Analysis  
**Client Sample ID:** Ling Zhi Whitening Cream  
**Sample Description:**  
**Matrix:** Solid

**Work Order/ID:** 11D0684-01  
**Sampled:** 04/16/2011 12:15  
**Received:** 04/18/2011 13:00

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: SW-846 7471A		Analyst: SA			
<b>Total Mercury by CVAA</b>		Prep Method: SW-846 7471		Prep Date/Time: 04/20/2011 08:20			
Mercury	A	15000	3100		mg/Kg	80000	04/20/2011 15:02



**FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)**

NA	=	Not Analyzed
mg/L	=	Milligrams per Liter (ppm)
mg/Kg	=	Milligrams per Kilogram (ppm)
U	=	Undetected
J	=	Analyte concentration detected between RL and MDL (Metals / Organics)
B	=	Detected in the associated method Blank at a concentration above the routine PQL/RL
D	=	Dilution performed on sample
ND	=	Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
E	=	Value above quantitation range
H	=	Analyte was prepared and/or analyzed outside of the analytical method holding time
I	=	Matrix Interference
R	=	RPD outside accepted recovery limits
S	=	Spike recovery outside recovery limits
Surr	=	Surrogate
DF	=	Dilution Factor
RL	=	Reporting Limit
MDL	=	Method Detection Limit
NR	=	Not Recovered

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**ANALYTE TYPES: (AT)**

A,B	=	Target Analyte
I	=	Internal Standard
M	=	Summation Analyte
S	=	Surrogate
T	=	Tentatively Identified Compound (TIC, concentration estimated)

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**QC SAMPLE IDENTIFICATIONS**

MBLK	=	Method Blank	ICSA	=	Interference Check Standard "A"
DUP	=	Method Duplicate	ICSAB	=	Interference Check Standard "AB"
LCS	=	Laboratory Control Sample	LCSD	=	Laboratory Control Sample Duplicate
BS	=	Method Blank Spike	BSD	=	Method Blank Spike Duplicate
MS	=	Matrix Spike	MSD	=	Matrix Spike Duplicate
ICB	=	Initial Calibration Blank	CCB	=	Continuing Calibration Blank
ICV	=	Initial Calibration Verification	CCV	=	Continuing Calibration Verification
PDS	=	Post Digestion Spike	SD	=	Serial Dilution
OPR	=	Ongoing Precision and Recovery Standard			

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**CERTIFICATIONS**

*Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.*

- The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
- The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
- Kansas Department of Health and Environment for the analysis of drinking water, wastewater, and solid hazardous waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (Certificate No. E-10397)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)



**COOLER INSPECTION**

Client Name: WALK-IN CLIENT

Work Order Number: 11D0684

Checklist completed by: 4/18/2011 6:55:00PM | Dave Bryant

Date: Thursday, April 21, 2011

Date/Time Received: 04/18/2011 13:00

Received by: Dave Bryant

Reviewed by: 4/19/2011 | DPP

Carrier Name: Std US Mail

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 16.00°C

After-Hour Arrival?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	
Shipping container/cooler in good condition?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample containers?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
COC present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included sufficient client identification?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included sufficient sample collector information?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included a sample description?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC agrees with sample labels?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC identified the appropriate matrix?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included date of collection?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included time of collection?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC identified the appropriate number of containers?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Samples in proper container/bottle?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Sample containers intact?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
All samples received within holding time?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
If the samples are preserved, are the preservatives identified?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	

If No, adjusted by? \_\_\_\_\_

COC included the requested analyses?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC signed when relinquished and received?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Samples received on ice?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	
Samples properly preserved?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Voa vials for aqueous samples have zero headspace?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>

Cooler Comments: \_\_\_\_\_

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

Sample ID	Client Sample ID	Comments
11D0684-01	Ling Zhi Whitening Cream	



## Analytical QC Summary

**Client:** WALK-IN CLIENT **Metals - Quality Control**  
**Work Order:** 11D0684  
**Project:** Fredericksburg, VA / Hg Analysis  
**Batch:** B013729 **Prep:** SW-846 7471

### Total Mercury by CVAA

Sample ID:					Method:			Prepped:			
Source:							Analyzed:				
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	
Mercury	ND	0.0010	mg/Kg								
<b>Sample ID:</b>	Blank (B013729-BLK1)				<b>Method:</b>	SW-846 7471A		<b>Prepped:</b>	04/20/2011 08:20		
<b>Source:</b>							<b>Analyzed:</b>	04/20/2011 14:14			
Mercury	ND	0.0010	mg/Kg								
<b>Sample ID:</b>	LCS (B013729-BS1)				<b>Method:</b>	SW-846 7471A		<b>Prepped:</b>	04/20/2011 08:20		
<b>Source:</b>							<b>Analyzed:</b>	04/20/2011 14:16			
Mercury	5.98	2.0	mg/Kg	7.070		84.6	41.9-122				
<b>Sample ID:</b>	Matrix Spike (B013729-MS1)				<b>Method:</b>	SW-846 7471A		<b>Prepped:</b>	04/20/2011 08:20		
<b>Source:</b>	11D0684-01						<b>Analyzed:</b>	04/20/2011 14:42			
Mercury	15200	1600	mg/Kg	0.07812	14900	NR	70-130		20	S	
<b>Sample ID:</b>	Matrix Spike Dup (B013729-MSD1)				<b>Method:</b>	SW-846 7471A		<b>Prepped:</b>	04/20/2011 08:20		
<b>Source:</b>	11D0684-01						<b>Analyzed:</b>	04/20/2011 14:48			
Mercury	16900	1600	mg/Kg	0.08065	14900	NR	70-130	11.0	20	ES	