

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

936 Ridgebrook Road • Sparks, MD 21152 • Phone 410-316-7800 • Fax 410-316-7885

May 20, 2009

Ms. Katie A. Giordano  
Baltimore Development Corporation  
36 South Charles St., Suite 1600  
Baltimore, MD 21201

RE: **Addendum to Phase II Environmental Site Assessment**  
Gateway South Redevelopment Properties  
Former Warner Street Inc. Properties  
Baltimore, Maryland  
KCI Project No. 01-05437013

Dear Ms. Giordano:

KCI Technologies, Inc. (KCI) appreciates the opportunity to provide our services on this project. KCI recently completed a Phase II Environmental Site Assessment (ESA) report for the above referenced properties dated April 29, 2009. Many of the soil samples were found to contain detectable concentrations of mercury.

In accordance with Maryland VCP protocols, KCI has requested speciation of the mercury results in the four (4) soil samples having the highest mercury concentrations identified during the Phase II ESA. The analysis was performed by the contract laboratory, Microbac Laboratories, Inc. of Baltimore, Maryland. Results are reported in Table 1 below. The laboratory Certificates of Analysis and Chain-of Custody Record are included in Attachment A.

**Table 1 – Summary of Elemental Mercury Supplemental Analysis**

Sample (Depth)	Total Mercury	Mercury, Elemental
SB-42 (4-6')	2.5 mg/kg	0.162 mg/kg
SB-D-50 (9-11')	4.8 mg/kg	0.945 mg/kg
SB-48 (4-6')	4.1 mg/kg	0.128 mg/kg
SB-D-47 (8-12')	14 mg/kg	0.688 mg/kg

The elemental mercury results ranged from 0.162 to 0.688 mg/kg. There is no MDE Clean Up Standard (CUS) for elemental mercury in soil; instead, an applicant is advised that the vapor intrusion and inhalation of volatiles and dust pathways should be evaluated when mercury results exceed the regional mercury Anticipated Typical Concentration (ATC) (MDE, 2008). The ATC for mercury in the eastern Maryland region is 0.51 mg/kg. Two (2) of the elemental mercury results exceeded the ATC for mercury.

However, the elemental mercury concentrations were below the screening levels presented for residential (4.3 mg/kg) and non-residential (24 mg/kg) soils on the EPA Region III Regional Screening Level Table (April 2009).

KCI recommends that the applicant provide the above information to MDE to assist with decisions regarding remedial actions at the properties.

Sincerely,

**KCI Technologies, Inc.**

A handwritten signature in black ink, appearing to read "James M. Moulds". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

James M. Moulds  
Environmental Scientist  
Geo-Environmental Division

**Attachment A**

**Laboratory Certificates of Analysis and Chain-of-Custody Record**



**Microbac Laboratories, Inc.**  
Baltimore Division  
2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800  
Fax: 410-633-6553  
www.microbac.com

## COVER LETTER

Will Lyman  
KCI Technologies  
936 Ridgebrook Road  
Sparks, MD 21152  
RE: Gateway South

May 19, 2009  
Report No.: 09E0210

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 05/07/2009 09:50.

The enclosed results were obtained from and 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 has been reviewed and meet the applicable project and certification specific requirements, unless otherwise noted.

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

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

This Data Package contains the following:

- This Cover Page
- Sample Summary
- Test Results
- Notes and Definitions
- Cooler Receipt Log
- Chain of Custody

A handwritten signature in black ink that reads "Lisa Grant". The signature is fluid and cursive, with the first name "Lisa" and last name "Grant" clearly distinguishable.

5/19/2009

Final report reviewed by:

Lisa M. Grant/Project Manager

Report issue date

*All samples received in proper condition and results conform to ISO 17025 standards unless otherwise noted.*

*If we have not met or exceeded your expectations, please contact the Director or Trevor Boyce, President at tboyce@microbac.com or Robert Morgan, Chief Operation Officer, at rmorgan@microbac.com.*



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### CERTIFICATE OF ANALYSIS

KCI Technologies  
936 Ridgebrook Road  
Sparks, MD 21152

Project: Gateway South  
Project Number: Gateway South  
Project Manager: Will Lyman

Report: 09E0210  
Reported: 05/19/2009 10:08

### SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
SB-42	09E0210-04	Solid	Not Specified	3/30/09 15:10	5/7/09 9:50
SB-D-50	09E0210-03	Solid	Not Specified	3/31/09 12:00	5/7/09 9:50
SB-48	09E0210-02	Solid	Not Specified	3/30/09 9:30	5/7/09 9:50
SB-D-47	09E0210-01	Solid	Not Specified	3/31/09 9:15	5/7/09 9:50

Microbac Laboratories, Inc., Baltimore Division

Lisa M. Grant, Project Manager

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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Report: 09E0210  
Reported: 05/19/2009 10:08

#### SB-D-47

09E0210-01 (Solid) Sampled: 03/31/2009 09:15; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
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#### Enviro Chem Laboratories Inc

##### Subcontracted Analyses

Mercury, Elemental	0.688	0.393	mg/kg		051309 1308	CHK	EPA 3200	
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Microbac Laboratories, Inc., Baltimore Division

Lisa M. Grant, Project Manager

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Report: 09E0210  
Reported: 05/19/2009 10:08

### SB-48

09E0210-02 (Solid) Sampled: 03/30/2009 09:30; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
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### Enviro Chem Laboratories Inc

#### Subcontracted Analyses

Mercury, Elemental	0.128	0.08	mg/kg		051309 1309	CHK	EPA 3200	
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Microbac Laboratories, Inc., Baltimore Division

Lisa M. Grant, Project Manager

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Project Number: Gateway South  
Project Manager: Will Lyman

Report: 09E0210  
Reported: 05/19/2009 10:08

#### SB-D-50

09E0210-03 (Solid) Sampled: 03/31/2009 12:00; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
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#### Enviro Chem Laboratories Inc

##### Subcontracted Analyses

Mercury, Elemental	0.945	0.327	mg/kg		051309 1310	CHK	EPA 3200	
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Microbac Laboratories, Inc., Baltimore Division

Lisa M. Grant, Project Manager

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Project Number: Gateway South  
Project Manager: Will Lyman

Report: 09E0210  
Reported: 05/19/2009 10:08

#### SB-42

09E0210-04 (Solid) Sampled: 03/30/2009 15:10; Type: Not Specified

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
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#### Enviro Chem Laboratories Inc

##### Subcontracted Analyses

Mercury, Elemental	0.162	0.089	mg/kg	051309 1312	CHK	EPA 3200
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Microbac Laboratories, Inc., Baltimore Division

Lisa M. Grant, Project Manager

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### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

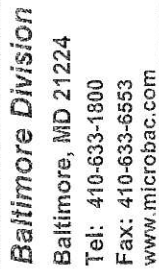
### Cooler Receipt Log

Cooler ID: Default Cooler

Cooler Temp: °C

Custody Seals Intact:	No	COC/Containers Agree:	No
Containers Intact:	No	Correct Preservation:	No
Received On Ice:	No	Correct Number of Containers Received:	No
Radiation Scan Acceptable:	No	Sufficient Sample Volume for Testing:	No
COC Present:	No	Samples Received in Proper Condition:	No

Comments:



**Sample Submittal  
Chain of Custody Record**

Work Order Number:

09E0210

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