



December 15, 2010

Weston Solutions, Inc.  
20 North Wacker Drive  
Chicago, IL 60606-2901

Work Order No.: 10L0400

Re: ESI Environmental

Dear Shauna Ross:

Microbac Laboratories, Inc. - Chicagoland Division received 1 sample(s) on 12/13/2010 1:22:00PM for the analyses presented in the following report as Work Order 10L0400.

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 feel free to contact us.

Sincerely,  
Microbac Laboratories, Inc.

A handwritten signature in black ink, appearing to read "Deborah Griffiths", is written over a light gray rectangular background.

Deborah Griffiths  
Senior Project Manager



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**WORK ORDER SAMPLE SUMMARY**

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**Date:** *Wednesday, December 15, 2010***Client:** Weston Solutions, Inc.**Project:** ESI Environmental**Lab Order:** 10L0400

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Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
10L0400-01	51 3rd Rinse Split		12/11/2010 15:15	12/13/2010 1:22:00PM



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**CASE NARRATIVE**

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**Date:** *Wednesday, December 15, 2010*

**Client:** Weston Solutions, Inc.

**Project:** ESI Environmental

**Lab Order:** 10L0400

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This sample was analyzed at a dilution due to sample matrix interference.



## Analytical Results

Date: Wednesday, December 15, 2010

Client: Weston Solutions, Inc.

Client Project: ESI Environmental

Client Sample ID: 51 3rd Rinse Split

Sample Description:

Matrix: Oil

Work Order/ID: 10L0400-01

Sampled: 12/11/2010 15:15

Received: 12/13/2010 13:22

Analyses	AT		Result	RL	Qual	Units	DF	Analyzed
Polychlorinated Biphenyls	Method: SW-846 8082						Analyst: tm	
	Prep Method: SW846 3580A						Prep Date/Time: 12/13/2010 15:13	
	Aroclor 1016	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Aroclor 1221	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Aroclor 1232	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Aroclor 1242	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Aroclor 1248	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Aroclor 1254	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Aroclor 1260	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Aroclor 1262	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Aroclor 1268	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Total PCB's	A	ND	10000		µg/Kg	10	12/14/2010 15:19
	Surr: Decachlorobiphenyl	S	0.00	52.6-143	D	%REC	10	12/14/2010 15:19
Surr: Tetrachloro-m-xylene	S	0.00	51.3-135	D	%REC	10	12/14/2010 15:19	

#### **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

#### **ANALYTE TYPES: (AT)**

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

#### **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			

#### **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.*

Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)

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)

Kentucky DEP for the chemical analysis of drinking water (lab #90147)

Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)

\*New York SDH for the chemical analysis of air and emissions (lab #11909)

North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)

Tennessee DEC for the chemical analysis of drinking water (lab #04017)

Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

## COOLER INSPECTION

Client Name: Weston Solutions, Inc.

Date: Wednesday, December 15, 2010

Date/Time Received: 12/13/2010 13:22

Work Order Number: 10L0400

Received by: Dave Bryant

Checklist completed by: 12/13/2010 1:58:00PM Dave Bryant

Reviewed by: 12/13/2010 DDG

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 6.00°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 checked="" 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"/>	
COC included the requested analyses?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	

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

COC signed when relinquished and received?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Samples received on ice?	Yes	<input checked="" type="checkbox"/>	No	<input 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
10L0400-01	51 3rd Rinse Split	



## Analytical QC Summary

**Client:** Weston Solutions, Inc.

**GC Semivolatiles - Quality Control**

**Work Order:** 10L0400

**Project:** ESI Environmental

**Batch:** B009286 **Prep:** SW846 3580A

### Polychlorinated Biphenyls

**Sample ID:** Blank (B009286-BLK1)

**Method:** SW-846 8082

**Prepped:** 12/13/2010 15:13

**Source:**

**Analyzed:** 12/14/2010 13:41

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Aroclor 1016	ND	1000	µg/Kg							
Aroclor 1221	ND	1000	µg/Kg							
Aroclor 1232	ND	1000	µg/Kg							
Aroclor 1242	ND	1000	µg/Kg							
Aroclor 1248	ND	1000	µg/Kg							
Aroclor 1254	ND	1000	µg/Kg							
Aroclor 1260	ND	1000	µg/Kg							
Aroclor 1262	ND	1000	µg/Kg							
Aroclor 1268	ND	1000	µg/Kg							
Total PCB's	ND	1000	µg/Kg							
Surrogate: Decachlorobiphenyl	200		µg/Kg	200.0		100	52.6-143			
Surrogate: Tetrachloro-m-xylene	200		µg/Kg	200.0		100	51.3-135			

**Sample ID:** LCS (B009286-BS1)

**Method:** SW-846 8082

**Prepped:** 12/13/2010 15:13

**Source:**

**Analyzed:** 12/14/2010 14:05

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Aroclor 1016	5600	1000	µg/Kg	5000		112	72.7-123			
Aroclor 1260	5100	1000	µg/Kg	5000		102	80.3-123			
Surrogate: Decachlorobiphenyl	210		µg/Kg	200.0		105	52.6-143			
Surrogate: Tetrachloro-m-xylene	200		µg/Kg	200.0		100	51.3-135			

**Sample ID:** LCS Dup (B009286-BSD1)

**Method:** SW-846 8082

**Prepped:** 12/13/2010 15:13

**Source:**

**Analyzed:** 12/14/2010 14:29

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Aroclor 1016	4890	1000	µg/Kg	5000		97.8	72.7-123	13.5	30	
Aroclor 1260	5890	1000	µg/Kg	5000		118	80.3-123	14.4	30	
Surrogate: Decachlorobiphenyl	210		µg/Kg	200.0		105	52.6-143			
Surrogate: Tetrachloro-m-xylene	200		µg/Kg	200.0		100	51.3-135			



Chain of Custody Record  
Number 100175

Instructions on back

\* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

\*\* **Preservative Types:** (1) HNO<sub>3</sub>, (2) H<sub>2</sub>SO<sub>4</sub>, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Possible Hazard Identification	<input type="checkbox"/> Hazardous <input type="checkbox"/> Non-Hazardous	<input type="checkbox"/> Radioactive	Sample Disposition		<input type="checkbox"/> Dispose as appropriate <input type="checkbox"/> Return <input type="checkbox"/> Archive	
			Date/Time	Received By (signature)		
Comments  sample temperature upon receipt in degrees C = 66.0 F			Relinquished By (signature) <i>Jim L. Pass</i>	Date/Time 12/13/10	Received By (signature) <i>M. McCony</i>	Date/Time 12/13/10
			Relinquished By (signature) <i>M. McCony</i>	Date/Time 12/13/10	Received By (signature)	Date/Time
			Relinquished By (signature)	Date/Time	Received for Lab By (signature) <i>OSI</i>	Date/Time 12/13/10

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