ATTACHMENT B
ANALYTICAL RESULTS

ATTACHMENT B1

July 10, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12F0919

Re: Baycote

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 12 sample(s) on 6/22/2012 5:05:00PM for the analyses presented in the following report as Work Order 12F0919.

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.

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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. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Project: Baycote
Lab Order: 12F0919

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12F0919-01	B-AL-01		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-02	B-ALOX-02		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-03	B-BL-03		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-04	B-BL- 03		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-05	B-BS-04		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-06	B-BS- 04		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-07	B-CAL-05		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-08	B-CAL- 05		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-09	B-CNL-06		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-10	B-CNL- 06		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-11	B-CNS-07		06/21/2012 10:00	6/22/2012 5:05:00PM
12F0919-12	B-CNS- 07		06/21/2012 10:00	6/22/2012 5:05:00PM

CASE NARRATIVE

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Project: Baycote
Lab Order: 12F0919

pH was added to this work order. Limited quantity prevented the pH from being reported on each sample.

The Laboratory Control Duplicate associated with B-BL-03, B-BS-04, B-CAL-05, B-CNL-06, and B-CNS-07 samples failed the precision criteria for Reactive Cyanide. The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

The Matrix Spike and Matrix Spike Duplicate performed on the B-BS-04 sample failed the accuracy criteria for pyridine with a <LOW> bias. The precision criteria were met. This data is indicative of a bias related to sample matrix <OR> preparation.

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-AL-01
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-01
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Metals by ICP		Method: **SW-846 6010B** Prep Method: **SW846 3050B**				Analyst: **SA** Prep Date/Time: **06/25/2012 07:42**	
Arsenic	A	***ND***	5.0		mg/Kg	10	06/29/2012 15:47
Barium	A	***0.94***	0.20		mg/Kg	1	06/28/2012 21:11
Cadmium	A	***80***	0.20		mg/Kg	1	06/28/2012 21:11
Chromium	A	***7100***	2.0		mg/Kg	10	06/29/2012 15:47
Lead	A	***1.4***	0.38		mg/Kg	1	06/28/2012 21:11
Selenium	A	***ND***	1.5		mg/Kg	1	06/28/2012 21:11
Silver	A	***150***	5.0		mg/Kg	10	06/29/2012 15:47
Total Mercury by CVAA		Method: **SW-846 7471A** Prep Method: **SW-846 7471**				Analyst: **SA** Prep Date/Time: **06/26/2012 12:11**	
Mercury	A	***ND***	0.038		mg/Kg	1	06/26/2012 14:47
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **07/03/2012 14:55**	
pH	A	***< 2.00***	2.00		pH Units	1	07/03/2012 15:45

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-ALOX-02
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-02
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Metals by ICP		Method: **SW-846 6010B** Prep Method: **SW846 3050B**				Analyst: **SA** Prep Date/Time: **06/25/2012 07:42**	
Arsenic	A	***9.2***	0.48		mg/Kg	1	06/28/2012 21:17
Barium	A	***3.1***	0.19		mg/Kg	1	06/28/2012 21:17
Cadmium	A	***3300***	19		mg/Kg	100	06/29/2012 15:52
Chromium	A	***20000***	19		mg/Kg	100	06/29/2012 15:52
Lead	A	***35***	0.36		mg/Kg	1	06/28/2012 21:17
Selenium	A	***ND***	1.4		mg/Kg	1	06/28/2012 21:17
Silver	A	***6.3***	0.48		mg/Kg	1	06/28/2012 21:17
Total Mercury by CVAA		Method: **SW-846 7471A** Prep Method: **SW-846 7471**				Analyst: **SA** Prep Date/Time: **06/26/2012 12:11**	
Mercury	A	***1.1***	0.41		mg/Kg	10	06/26/2012 14:58
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **07/03/2012 14:55**	
pH	A	***< 2.00***	2.00		pH Units	1	07/03/2012 15:45

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-BL-03
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-03
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **07/02/2012 06:22**	
1,4-Dichlorobenzene	A	***ND***	14		mg/L	100	07/03/2012 17:38
2,4,5-Trichlorophenol	A	***ND***	14		mg/L	100	07/03/2012 17:38
2,4,6-Trichlorophenol	A	***ND***	14		mg/L	100	07/03/2012 17:38
2,4-Dinitrotoluene	A	***ND***	14		mg/L	100	07/03/2012 17:38
2-Methylphenol	A	***ND***	14		mg/L	100	07/03/2012 17:38
3/4-Methylphenol	A	***ND***	14		mg/L	100	07/03/2012 17:38
Hexachlorobenzene	A	***ND***	14		mg/L	100	07/03/2012 17:38
Hexachlorobutadiene	A	***ND***	14		mg/L	100	07/03/2012 17:38
Hexachloroethane	A	***ND***	14		mg/L	100	07/03/2012 17:38
Nitrobenzene	A	***ND***	14		mg/L	100	07/03/2012 17:38
Pentachlorophenol	A	***ND***	68		mg/L	100	07/03/2012 17:38
Pyridine	A	***ND***	14		mg/L	100	07/03/2012 17:38
Total Cresol	M	***ND***	14		mg/L	100	07/03/2012 17:38
Surr: 2,4,6-Tribromophenol	S	0.00	47.8-138	D	%REC	100	07/03/2012 17:38
Surr: 2-Fluorobiphenyl	S	18.90	10-110	D	%REC	100	07/03/2012 17:38
Surr: 2-Fluorophenol	S	10.80	10-110	D	%REC	100	07/03/2012 17:38
Surr: Nitrobenzene-d5	S	0.00	10-110	D	%REC	100	07/03/2012 17:38
Surr: Phenol-d5	S	0.00	10-60.8	D	%REC	100	07/03/2012 17:38
Surr: Terphenyl-d14	S	184.00	16.8-110	DS	%REC	100	07/03/2012 17:38
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **07/03/2012 08:44**	
1,1-Dichloroethene	A	***ND***	4.9		mg/L	1000	07/03/2012 17:19
1,2-Dichloroethane	A	***ND***	4.9		mg/L	1000	07/03/2012 17:19
2-Butanone	A	***ND***	9.8		mg/L	1000	07/03/2012 17:19
Benzene	A	***ND***	4.9		mg/L	1000	07/03/2012 17:19
Carbon tetrachloride	A	***ND***	4.9		mg/L	1000	07/03/2012 17:19
Chlorobenzene	A	***ND***	4.9		mg/L	1000	07/03/2012 17:19
Chloroform	A	***ND***	4.9		mg/L	1000	07/03/2012 17:19
Tetrachloroethene	A	***ND***	4.9		mg/L	1000	07/03/2012 17:19
Trichloroethene	A	***ND***	4.9		mg/L	1000	07/03/2012 17:19
Vinyl chloride	A	***ND***	2.0		mg/L	1000	07/03/2012 17:19
1,4-Dichlorobenzene	B	***ND***	9.8		mg/L	1000	07/03/2012 17:19
Surr: 1,2-Dichloroethane-d4	S	100.00	74.5-132		%REC	1000	07/03/2012 17:19
Surr: 4-Bromofluorobenzene	S	93.10	80-120		%REC	1000	07/03/2012 17:19
Surr: Dibromofluoromethane	S	98.20	80-120		%REC	1000	07/03/2012 17:19
Surr: Toluene-d8	S	95.70	80-120		%REC	1000	07/03/2012 17:19
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:18

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-BL-03
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-03
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***0.114***	0.0500		mg/L	1	06/27/2012 16:28
Barium	A	***ND***	2.50		mg/L	1	06/27/2012 16:28
Cadmium	A	***ND***	0.0500	B	mg/L	1	06/27/2012 16:28
Chromium	A	***1.58***	0.0500	B	mg/L	1	06/27/2012 16:28
Lead	A	***ND***	0.0375		mg/L	1	06/27/2012 16:28
Selenium	A	***0.926***	0.150		mg/L	1	06/27/2012 16:28
Silver	A	***ND***	0.0500		mg/L	1	06/28/2012 19:41
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Oil CN Distillation**				Analyst: **demo** Prep Date/Time: **06/28/2012 11:30**	
Cyanide, Total	A	***8.5***	4.9		mg/L	10	06/29/2012 16:14
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **07/02/2012 16:13**	
Ignitability	A	***> 170***	30		°F	1	07/02/2012 16:13

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-BL- 03
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-04
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **demo**	
Reactive Cyanide		Prep Method: **Oil Reactive CN Distillation**				Prep Date/Time: **06/29/2012 09:40**	
Reactive Cyanide	A	***2.3***	2.0		mg/L	1	07/02/2012 16:28

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-BS-04
Sample Description:
Matrix: Solid

Work Order/ID: 12F0919-05
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **07/02/2012 06:22**	
1,4-Dichlorobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
2,4,5-Trichlorophenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
2,4,6-Trichlorophenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
2,4-Dinitrotoluene	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
2-Methylphenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
3/4-Methylphenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
Hexachlorobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
Hexachlorobutadiene	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
Hexachloroethane	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
Nitrobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
Pentachlorophenol	A	***ND***	2.5		mg/L	10	07/03/2012 19:17
Pyridine	A	***ND***	0.50		mg/L	10	07/03/2012 19:17
Total Cresol	M	***ND***	0.50		mg/L	10	07/03/2012 19:17
Surr: 2,4,6-Tribromophenol	S	62.80	47.8-138		%REC	10	07/03/2012 19:17
Surr: 2-Fluorobiphenyl	S	45.20	10-110		%REC	10	07/03/2012 19:17
Surr: 2-Fluorophenol	S	33.30	10-110		%REC	10	07/03/2012 19:17
Surr: Nitrobenzene-d5	S	40.00	10-110		%REC	10	07/03/2012 19:17
Surr: Phenol-d5	S	36.90	10-60.8		%REC	10	07/03/2012 19:17
Surr: Terphenyl-d14	S	42.50	16.8-110		%REC	10	07/03/2012 19:17
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **06/26/2012 08:29**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 13:37
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	06/26/2012 13:37
2-Butanone	A	***ND***	0.10		mg/L	10	06/26/2012 13:37
Benzene	A	***ND***	0.050		mg/L	10	06/26/2012 13:37
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	06/26/2012 13:37
Chlorobenzene	A	***ND***	0.050		mg/L	10	06/26/2012 13:37
Chloroform	A	***ND***	0.050		mg/L	10	06/26/2012 13:37
Tetrachloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 13:37
Trichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 13:37
Vinyl chloride	A	***ND***	0.020		mg/L	10	06/26/2012 13:37
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	06/26/2012 13:37
Surr: 1,2-Dichloroethane-d4	S	103.00	74.5-132		%REC	10	06/26/2012 13:37
Surr: 4-Bromofluorobenzene	S	95.50	80-120		%REC	10	06/26/2012 13:37
Surr: Dibromofluoromethane	S	102.00	80-120		%REC	10	06/26/2012 13:37
Surr: Toluene-d8	S	101.00	80-120		%REC	10	06/26/2012 13:37
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:02

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-BS-04
Sample Description:
Matrix: Solid

Work Order/ID: 12F0919-05
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***ND***	0.0100		mg/L	1	06/27/2012 15:12
Barium	A	***ND***	0.500		mg/L	1	06/27/2012 15:12
Cadmium	A	***0.437***	0.00500	B	mg/L	1	06/27/2012 15:12
Chromium	A	***2.17***	0.0100	B	mg/L	1	06/27/2012 15:12
Lead	A	***0.0104***	0.00750		mg/L	1	06/27/2012 15:12
Selenium	A	***ND***	0.0300		mg/L	1	06/27/2012 15:12
Silver	A	***0.168***	0.0100		mg/L	1	06/27/2012 15:12
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **demo** Prep Date/Time: **06/27/2012 12:45**	
Cyanide, Total	A	***1600***	48		mg/Kg	200	06/29/2012 17:07
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **07/02/2012 16:39**	
Ignitability	A	***> 170***	30		°F	1	07/02/2012 16:39
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **07/10/2012 11:05**	
pH	A	***9.95***	2.00		pH Units	1	07/10/2012 11:39

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-BS- 04
Sample Description:
Matrix: Solid

Work Order/ID: 12F0919-06
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **demo**	
Reactive Cyanide		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **06/29/2012 09:40**	
Reactive Cyanide	A	***ND***	2.0		mg/Kg	1	07/02/2012 16:30

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CAL-05
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-07
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **07/02/2012 06:22**	
1,4-Dichlorobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
2,4,5-Trichlorophenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
2,4,6-Trichlorophenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
2,4-Dinitrotoluene	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
2-Methylphenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
3/4-Methylphenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
Hexachlorobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
Hexachlorobutadiene	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
Hexachloroethane	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
Nitrobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
Pentachlorophenol	A	***ND***	2.5		mg/L	10	07/03/2012 19:37
Pyridine	A	***ND***	0.50		mg/L	10	07/03/2012 19:37
Total Cresol	M	***ND***	0.50		mg/L	10	07/03/2012 19:37
Surr: 2,4,6-Tribromophenol	S	2.93	47.8-138	DS	%REC	10	07/03/2012 19:37
Surr: 2-Fluorobiphenyl	S	28.10	10-110	D	%REC	10	07/03/2012 19:37
Surr: 2-Fluorophenol	S	0.00	10-110	D	%REC	10	07/03/2012 19:37
Surr: Nitrobenzene-d5	S	33.60	10-110	D	%REC	10	07/03/2012 19:37
Surr: Phenol-d5	S	2.20	10-60.8	DS	%REC	10	07/03/2012 19:37
Surr: Terphenyl-d14	S	36.80	16.8-110	D	%REC	10	07/03/2012 19:37
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **07/03/2012 08:44**	
1,1-Dichloroethene	A	***ND***	0.48		mg/L	100	07/03/2012 16:47
1,2-Dichloroethane	A	***ND***	0.48		mg/L	100	07/03/2012 16:47
2-Butanone	A	***ND***	0.96		mg/L	100	07/03/2012 16:47
Benzene	A	***ND***	0.48		mg/L	100	07/03/2012 16:47
Carbon tetrachloride	A	***ND***	0.48		mg/L	100	07/03/2012 16:47
Chlorobenzene	A	***ND***	0.48		mg/L	100	07/03/2012 16:47
Chloroform	A	***ND***	0.48		mg/L	100	07/03/2012 16:47
Tetrachloroethene	A	***ND***	0.48		mg/L	100	07/03/2012 16:47
Trichloroethene	A	***ND***	0.48		mg/L	100	07/03/2012 16:47
Vinyl chloride	A	***ND***	0.19		mg/L	100	07/03/2012 16:47
1,4-Dichlorobenzene	B	***ND***	0.96		mg/L	100	07/03/2012 16:47
Surr: 1,2-Dichloroethane-d4	S	104.00	74.5-132		%REC	100	07/03/2012 16:47
Surr: 4-Bromofluorobenzene	S	90.80	80-120		%REC	100	07/03/2012 16:47
Surr: Dibromofluoromethane	S	104.00	80-120		%REC	100	07/03/2012 16:47
Surr: Toluene-d8	S	95.00	80-120		%REC	100	07/03/2012 16:47
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:19

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CAL-05
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-07
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***16.7***	5.00		mg/L	100	06/27/2012 16:34
Barium	A	***ND***	250		mg/L	100	06/27/2012 16:34
Cadmium	A	***556***	5.00	B	mg/L	100	06/27/2012 16:34
Chromium	A	***46900***	5.00	B	mg/L	100	06/27/2012 16:34
Lead	A	***14.3***	3.75		mg/L	100	06/27/2012 16:34
Selenium	A	***ND***	15.0		mg/L	100	06/27/2012 16:34
Silver	A	***5.00***	5.00		mg/L	100	06/28/2012 19:46
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Oil CN Distillation**				Analyst: **ABG** Prep Date/Time: **06/28/2012 11:30**	
Cyanide, Total	A	***0.49***	0.49		mg/L	1	06/29/2012 16:46
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **07/02/2012 16:58**	
Ignitability	A	***> 170***	30		°F	1	07/02/2012 16:58

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CAL- 05
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-08
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**					Analyst: **demo**
Reactive Cyanide		Prep Method: **Oil Reactive CN Distillation**					Prep Date/Time: **06/29/2012 09:40**
Reactive Cyanide	A	***ND***	2.0		mg/L	1	07/02/2012 16:31

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CNL-06
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-09
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **07/02/2012 06:22**	
1,4-Dichlorobenzene	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
2,4,5-Trichlorophenol	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
2,4,6-Trichlorophenol	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
2,4-Dinitrotoluene	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
2-Methylphenol	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
3/4-Methylphenol	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
Hexachlorobenzene	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
Hexachlorobutadiene	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
Hexachloroethane	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
Nitrobenzene	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
Pentachlorophenol	A	***ND***	25		mg/L	100	07/03/2012 18:37
Pyridine	A	***ND***	5.0		mg/L	100	07/03/2012 18:37
Total Cresol	M	***ND***	5.0		mg/L	100	07/03/2012 18:37
Surr: 2,4,6-Tribromophenol	S	34.70	47.8-138	DS	%REC	100	07/03/2012 18:37
Surr: 2-Fluorobiphenyl	S	14.00	10-110	D	%REC	100	07/03/2012 18:37
Surr: 2-Fluorophenol	S	13.30	10-110	D	%REC	100	07/03/2012 18:37
Surr: Nitrobenzene-d5	S	15.00	10-110	D	%REC	100	07/03/2012 18:37
Surr: Phenol-d5	S	35.30	10-60.8	D	%REC	100	07/03/2012 18:37
Surr: Terphenyl-d14	S	36.00	16.8-110	D	%REC	100	07/03/2012 18:37
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **07/03/2012 08:44**	
1,1-Dichloroethene	A	***ND***	5.0		mg/L	1000	07/03/2012 17:52
1,2-Dichloroethane	A	***ND***	5.0		mg/L	1000	07/03/2012 17:52
2-Butanone	A	***ND***	9.9		mg/L	1000	07/03/2012 17:52
Benzene	A	***ND***	5.0		mg/L	1000	07/03/2012 17:52
Carbon tetrachloride	A	***ND***	5.0		mg/L	1000	07/03/2012 17:52
Chlorobenzene	A	***ND***	5.0		mg/L	1000	07/03/2012 17:52
Chloroform	A	***ND***	5.0		mg/L	1000	07/03/2012 17:52
Tetrachloroethene	A	***ND***	5.0		mg/L	1000	07/03/2012 17:52
Trichloroethene	A	***ND***	5.0		mg/L	1000	07/03/2012 17:52
Vinyl chloride	A	***ND***	2.0		mg/L	1000	07/03/2012 17:52
1,4-Dichlorobenzene	B	***ND***	9.9		mg/L	1000	07/03/2012 17:52
Surr: 1,2-Dichloroethane-d4	S	101.00	74.5-132		%REC	1000	07/03/2012 17:52
Surr: 4-Bromofluorobenzene	S	91.60	80-120		%REC	1000	07/03/2012 17:52
Surr: Dibromofluoromethane	S	101.00	80-120		%REC	1000	07/03/2012 17:52
Surr: Toluene-d8	S	95.20	80-120		%REC	1000	07/03/2012 17:52
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:20

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CNL-06
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-09
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***0.485***	0.0500		mg/L	1	06/27/2012 16:40
Barium	A	***ND***	2.50		mg/L	1	06/27/2012 16:40
Cadmium	A	***6740***	1.00	B	mg/L	100	06/28/2012 19:52
Chromium	A	***8.88***	0.0500	B	mg/L	1	06/27/2012 16:40
Lead	A	***1.36***	0.0375		mg/L	1	06/27/2012 16:40
Selenium	A	***2.56***	0.150		mg/L	1	06/27/2012 16:40
Silver	A	***16.4***	5.00		mg/L	100	06/28/2012 19:52
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Oil CN Distillation**				Analyst: **ABG** Prep Date/Time: **06/28/2012 11:30**	
Cyanide, Total	A	***31000***	480		mg/L	1000	06/29/2012 16:46
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **07/03/2012 08:43**	
Ignitability	A	***> 170***	30		°F	1	07/03/2012 8:43

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CNL- 06
Sample Description:
Matrix: Oil

Work Order/ID: 12F0919-10
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **demo**	
Reactive Cyanide		Prep Method: **Oil Reactive CN Distillation**				Prep Date/Time: **06/29/2012 09:40**	
Reactive Cyanide	A	***ND***	200		mg/L	100	07/02/2012 16:43

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CNS-07
Sample Description:
Matrix: Solid

Work Order/ID: 12F0919-11
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **07/02/2012 06:22**	
1,4-Dichlorobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
2,4,5-Trichlorophenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
2,4,6-Trichlorophenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
2,4-Dinitrotoluene	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
2-Methylphenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
3/4-Methylphenol	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
Hexachlorobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
Hexachlorobutadiene	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
Hexachloroethane	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
Nitrobenzene	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
Pentachlorophenol	A	***ND***	2.5		mg/L	10	07/03/2012 19:58
Pyridine	A	***ND***	0.50		mg/L	10	07/03/2012 19:58
Total Cresol	M	***ND***	0.50		mg/L	10	07/03/2012 19:58
Surr: 2,4,6-Tribromophenol	S	71.50	47.8-138		%REC	10	07/03/2012 19:58
Surr: 2-Fluorobiphenyl	S	51.60	10-110		%REC	10	07/03/2012 19:58
Surr: 2-Fluorophenol	S	66.30	10-110		%REC	10	07/03/2012 19:58
Surr: Nitrobenzene-d5	S	57.20	10-110		%REC	10	07/03/2012 19:58
Surr: Phenol-d5	S	79.10	10-60.8	S	%REC	10	07/03/2012 19:58
Surr: Terphenyl-d14	S	47.00	16.8-110		%REC	10	07/03/2012 19:58
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **06/26/2012 08:29**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 14:09
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	06/26/2012 14:09
2-Butanone	A	***ND***	0.10		mg/L	10	06/26/2012 14:09
Benzene	A	***ND***	0.050		mg/L	10	06/26/2012 14:09
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	06/26/2012 14:09
Chlorobenzene	A	***ND***	0.050		mg/L	10	06/26/2012 14:09
Chloroform	A	***ND***	0.050		mg/L	10	06/26/2012 14:09
Tetrachloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 14:09
Trichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 14:09
Vinyl chloride	A	***ND***	0.020		mg/L	10	06/26/2012 14:09
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	06/26/2012 14:09
Surr: 1,2-Dichloroethane-d4	S	101.00	74.5-132		%REC	10	06/26/2012 14:09
Surr: 4-Bromofluorobenzene	S	95.30	80-120		%REC	10	06/26/2012 14:09
Surr: Dibromofluoromethane	S	99.80	80-120		%REC	10	06/26/2012 14:09
Surr: Toluene-d8	S	101.00	80-120		%REC	10	06/26/2012 14:09
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:03

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CNS-07
Sample Description:
Matrix: Solid

Work Order/ID: 12F0919-11
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***ND***	0.0100		mg/L	1	06/27/2012 15:18
Barium	A	***ND***	0.500		mg/L	1	06/27/2012 15:18
Cadmium	A	***348***	0.200	B	mg/L	100	06/28/2012 20:32
Chromium	A	***0.475***	0.0100	B	mg/L	1	06/27/2012 15:18
Lead	A	***0.111***	0.00750		mg/L	1	06/27/2012 15:18
Selenium	A	***0.655***	0.0300		mg/L	1	06/27/2012 15:18
Silver	A	***1.26***	0.0100		mg/L	1	06/27/2012 15:18
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **ABG** Prep Date/Time: **06/28/2012 11:30**	
Cyanide, Total	A	***44000***	500		mg/Kg	1000	06/29/2012 16:46
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **07/03/2012 09:27**	
Ignitability	A	***> 170***	30		°F	1	07/03/2012 9:27
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **07/10/2012 11:05**	
pH	A	***10.2***	2.00		pH Units	1	07/10/2012 11:39

Analytical Results

Date: *Tuesday, July 10, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-CNS- 07
Sample Description:
Matrix: Solid

Work Order/ID: 12F0919-12
Sampled: 06/21/2012 10:00
Received: 06/22/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **demo**	
Reactive Cyanide		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **06/29/2012 09:40**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	07/02/2012 16:44

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

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.

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)

Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)

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

Microbac®

COOLER INSPECTION

Date: Tuesday, July 10, 2012

Client Name: Environmental Restoration

Date/Time Received: 06/22/2012 17:05

Work Order Number: 12F0919

Received by: Dave Bryant

Checklist completed by: 6/22/2012 10:44:00AM | Dave Bryant

Reviewed by: 6/22/2012 | KGF

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 6.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Sample ID	Client Sample ID	Comments
12F0919-01	B-AL-01	Likely High In Cyanide/Metals
12F0919-02	B-ALOX-02	Likely High In Cyanide/Metals
12F0919-03	B-BL-03	Likely High In Cyanide/Metals
12F0919-04	B-BL- 03	Likely High In Cyanide/Metals
12F0919-05	B-BS-04	Likely High In Cyanide/Metals
12F0919-06	B-BS- 04	Likely High In Cyanide/Metals
12F0919-07	B-CAL-05	Likely High In Cyanide/Metals
12F0919-08	B-CAL- 05	Likely High In Cyanide/Metals
12F0919-09	B-CNL-06	Likely High In Cyanide/Metals
12F0919-10	B-CNL- 06	Likely High In Cyanide/Metals
12F0919-11	B-CNS-07	Likely High In Cyanide/Metals
12F0919-12	B-CNS- 07	Likely High In Cyanide/Metals

Environmental Restoration L.L.C.
16294 Westwoods Business Park Drive
St. Louis, MO 63021
(636) 227-7477
Fax (636) 227-6447

Alternate billing information: South Holland
Environmental Restoration
16660 CANAL ST.
South Holland, IL 60473

Report to: T Viehweg
Email to: tviehweg@erllc.com

Chain of Custody
Page 1 of 1

Prepared by: Viehweg

12F0919

CoCode (lab use only)
Template/Prelogin
Shipped Via:

on: Bay cote
City/State Collected: Mishawaka IN
352 446 6325
236 630 2476
Client Project #: B B5-101
ESC Key:
d by: T Viehweg
Site/Facility ID#:
P.O. #:
by (signature):
Rush (Lab MUST Be Notified)
Same Day
Next Day
Two Day
Date Results Needed:
Email? No Yes
Fax? No Yes
on Ice N Y

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Containers	Total RCRA Metals	pH	TCLP (Metals, volatile, semi-vols)	Total Cyanide	Reactive Cyanide	~~Ignitability~~	Flash point	Remarks/Containment	Sample # (lab only)
B-AL-01				6-21-12	10:00	1	X	X							01
B-ALOX-02						1	X	X							02
B-BL-03						1			X	X	X	X	X		03/04
B-BS-04						1			X	X	X	X	X		05/06
B-CAL-05						1			X	X	X	X	X		07/08
B-CNL-06						1			X	X	X	X	X		09/10
B-CNS-07						1			X	X	X	X	X		11/12

*Matrix SS - Soil/Solid GW - GroundWater WW - WasteWater DW - Drinking Water OT - Other ____ pH ____ Temp ____

Remarks: CNL + CNS samples likely high in cyanide; samples ~~high~~ likely high in metals Flow ____ Other ____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via:	Condition: (lab use only)
	6-21-12	1630		UPS / Fed Ex / Courier	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 6° C Bottles Received:	
	6-21-12	1705			
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/21/12 Time: 1705	pH Checked: NCF:

06/22/2012
12F0919
Kevin Falvey
ER - South Holland
Bayvote Metal Mishawaka

ATTACHMENT B2

July 5, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12F0923

Re: Baycote

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 6 sample(s) on 6/21/2012 5:05:00PM for the analyses presented in the following report as Work Order 12F0923.

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. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,

Kevin Falvey
Account Manager

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

WORK ORDER SAMPLE SUMMARY

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Project: Baycote
Lab Order: 12F0923

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12F0923-01	B-NL1-08		06/21/2012 10:30	6/21/2012 5:05:00PM
12F0923-02	B-NL2-09		06/21/2012 10:30	6/21/2012 5:05:00PM
12F0923-03	B-NS1-10		06/21/2012 10:30	6/21/2012 5:05:00PM
12F0923-04	B-NS2-11		06/21/2012 10:30	6/21/2012 5:05:00PM
12F0923-05	B-NL3-12		06/21/2012 10:30	6/21/2012 5:05:00PM
12F0923-06	B-NL4-13		06/21/2012 10:30	6/21/2012 5:05:00PM

CASE NARRATIVE

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Project: Baycote
Lab Order: 12F0923

The Matrix Spike and Matrix Spike Duplicate performed on the B-NS2-11 sample failed the accuracy criteria for Cadmium and Chromium. This bias is due to the high indigenous analyte concentration (relative to the spike amount).

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NL1-08
Sample Description:
Matrix: Aqueous

Work Order/ID: 12F0923-01
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **06/26/2012 09:30**	
1,4-Dichlorobenzene	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
2,4,5-Trichlorophenol	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
2,4,6-Trichlorophenol	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
2,4-Dinitrotoluene	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
2-Methylphenol	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
3/4-Methylphenol	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
Hexachlorobenzene	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
Hexachlorobutadiene	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
Hexachloroethane	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
Nitrobenzene	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
Pentachlorophenol	A	***ND***	1.5		mg/L	4	06/27/2012 5:29
Pyridine	A	***ND***	0.30		mg/L	4	06/27/2012 5:29
Total Cresol	M	***ND***	0.30		mg/L	4	06/27/2012 5:29
Surr: 2,4,6-Tribromophenol	S	101.00	47.8-138		%REC	4	06/27/2012 5:29
Surr: 2-Fluorobiphenyl	S	59.00	10-110		%REC	4	06/27/2012 5:29
Surr: 2-Fluorophenol	S	92.80	10-110		%REC	4	06/27/2012 5:29
Surr: Nitrobenzene-d5	S	64.80	10-110		%REC	4	06/27/2012 5:29
Surr: Phenol-d5	S	124.00	10-60.8	S	%REC	4	06/27/2012 5:29
Surr: Terphenyl-d14	S	86.30	16.8-110		%REC	4	06/27/2012 5:29
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **07/03/2012 08:44**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	07/03/2012 15:41
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	07/03/2012 15:41
2-Butanone	A	***ND***	0.50		mg/L	50	07/03/2012 15:41
Benzene	A	***ND***	0.25		mg/L	50	07/03/2012 15:41
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	07/03/2012 15:41
Chlorobenzene	A	***ND***	0.25		mg/L	50	07/03/2012 15:41
Chloroform	A	***ND***	0.25		mg/L	50	07/03/2012 15:41
Tetrachloroethene	A	***ND***	0.25		mg/L	50	07/03/2012 15:41
Trichloroethene	A	***ND***	0.25		mg/L	50	07/03/2012 15:41
Vinyl chloride	A	***ND***	0.10		mg/L	50	07/03/2012 15:41
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	07/03/2012 15:41
Surr: 1,2-Dichloroethane-d4	S	102.00	74.5-132		%REC	50	07/03/2012 15:41
Surr: 4-Bromofluorobenzene	S	93.00	80-120		%REC	50	07/03/2012 15:41
Surr: Dibromofluoromethane	S	99.90	80-120		%REC	50	07/03/2012 15:41
Surr: Toluene-d8	S	96.00	80-120		%REC	50	07/03/2012 15:41
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:21

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NL1-08
Sample Description:
Matrix: Aqueous

Work Order/ID: 12F0923-01
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***ND***	0.0100		mg/L	1	06/27/2012 16:46
Barium	A	***ND***	0.500		mg/L	1	06/27/2012 16:46
Cadmium	A	***0.812***	0.0100	B	mg/L	1	06/27/2012 16:46
Chromium	A	***0.864***	0.0100	B	mg/L	1	06/27/2012 16:46
Lead	A	***ND***	0.00750		mg/L	1	06/27/2012 16:46
Selenium	A	***ND***	0.0300		mg/L	1	06/27/2012 16:46
Silver	A	***0.764***	0.0100		mg/L	1	06/28/2012 19:58
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **ABG** Prep Date/Time: **06/28/2012 11:30**	
Cyanide, Total	A	***0.020***	0.0050		mg/L	1	06/29/2012 16:46
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **06/28/2012 14:28**	
Ignitability	A	***> 170***	30		°F	1	06/28/2012 14:28
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **06/29/2012 13:55**	
pH	A	***5.78***	2.00		pH Units	1	06/29/2012 14:38

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NL2-09
Sample Description:
Matrix: Oil

Work Order/ID: 12F0923-02
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **06/26/2012 09:30**	
1,4-Dichlorobenzene	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
2,4,5-Trichlorophenol	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
2,4,6-Trichlorophenol	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
2,4-Dinitrotoluene	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
2-Methylphenol	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
3/4-Methylphenol	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
Hexachlorobenzene	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
Hexachlorobutadiene	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
Hexachloroethane	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
Nitrobenzene	A	***ND***	2.0		mg/L	20	06/27/2012 5:49
Pentachlorophenol	A	***ND***	10		mg/L	20	06/27/2012 5:49
Pyridine	A	***92***	10		mg/L	100	06/27/2012 13:44
Total Cresol	M	***ND***	2.0		mg/L	20	06/27/2012 5:49
Surr: 2,4,6-Tribromophenol	S	0.00	47.8-138	D	%REC	20	06/27/2012 5:49
Surr: 2-Fluorobiphenyl	S	48.80	10-110	D	%REC	20	06/27/2012 5:49
Surr: 2-Fluorophenol	S	0.00	10-110	D	%REC	20	06/27/2012 5:49
Surr: Nitrobenzene-d5	S	125.00	10-110	DS	%REC	20	06/27/2012 5:49
Surr: Phenol-d5	S	5.87	10-60.8	DS	%REC	20	06/27/2012 5:49
Surr: Terphenyl-d14	S	130.00	16.8-110	DS	%REC	20	06/27/2012 5:49
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **07/03/2012 08:44**	
1,1-Dichloroethene	A	***ND***	0.48		mg/L	100	07/03/2012 16:14
1,2-Dichloroethane	A	***ND***	0.48		mg/L	100	07/03/2012 16:14
2-Butanone	A	***ND***	0.97		mg/L	100	07/03/2012 16:14
Benzene	A	***ND***	0.48		mg/L	100	07/03/2012 16:14
Carbon tetrachloride	A	***ND***	0.48		mg/L	100	07/03/2012 16:14
Chlorobenzene	A	***ND***	0.48		mg/L	100	07/03/2012 16:14
Chloroform	A	***ND***	0.48		mg/L	100	07/03/2012 16:14
Tetrachloroethene	A	***ND***	0.48		mg/L	100	07/03/2012 16:14
Trichloroethene	A	***ND***	0.48		mg/L	100	07/03/2012 16:14
Vinyl chloride	A	***ND***	0.19		mg/L	100	07/03/2012 16:14
1,4-Dichlorobenzene	B	***ND***	0.97		mg/L	100	07/03/2012 16:14
Surr: 1,2-Dichloroethane-d4	S	101.00	74.5-132		%REC	100	07/03/2012 16:14
Surr: 4-Bromofluorobenzene	S	94.50	80-120		%REC	100	07/03/2012 16:14
Surr: Dibromofluoromethane	S	99.80	80-120		%REC	100	07/03/2012 16:14
Surr: Toluene-d8	S	94.20	80-120		%REC	100	07/03/2012 16:14
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:22

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NL2-09
Sample Description:
Matrix: Oil

Work Order/ID: 12F0923-02
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***ND***	0.0500		mg/L	1	06/27/2012 16:52
Barium	A	***ND***	2.50		mg/L	1	06/27/2012 16:52
Cadmium	A	***8540***	1.00	B	mg/L	100	06/28/2012 20:03
Chromium	A	***11.4***	0.0500	B	mg/L	1	06/27/2012 16:52
Lead	A	***0.116***	0.0375		mg/L	1	06/27/2012 16:52
Selenium	A	***ND***	0.150		mg/L	1	06/27/2012 16:52
Silver	A	***ND***	5.00		mg/L	100	06/28/2012 20:03
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Oil CN Distillation**				Analyst: **ABG** Prep Date/Time: **06/28/2012 11:30**	
Cyanide, Total	A	***3.3***	0.50		mg/L	1	06/29/2012 16:46
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **06/28/2012 15:08**	
Ignitability	A	***> 170***	30		°F	1	06/28/2012 15:08
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **06/29/2012 13:55**	
pH	A	***6.24***	2.00		pH Units	1	06/29/2012 14:38

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NS1-10
Sample Description:
Matrix: Solid

Work Order/ID: 12F0923-03
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **06/27/2012 10:43**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
2-Methylphenol	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
Hexachloroethane	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
Nitrobenzene	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
Pentachlorophenol	A	***ND***	0.25		mg/L	1	06/28/2012 19:31
Pyridine	A	***ND***	0.050		mg/L	1	06/28/2012 19:31
Total Cresol	M	***ND***	0.050		mg/L	1	06/28/2012 19:31
Surr: 2,4,6-Tribromophenol	S	120.00	47.8-138		%REC	1	06/28/2012 19:31
Surr: 2-Fluorobiphenyl	S	68.50	10-110		%REC	1	06/28/2012 19:31
Surr: 2-Fluorophenol	S	87.40	10-110		%REC	1	06/28/2012 19:31
Surr: Nitrobenzene-d5	S	72.10	10-110		%REC	1	06/28/2012 19:31
Surr: Phenol-d5	S	87.80	10-60.8	S	%REC	1	06/28/2012 19:31
Surr: Terphenyl-d14	S	78.80	16.8-110		%REC	1	06/28/2012 19:31
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **06/26/2012 08:29**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 14:40
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	06/26/2012 14:40
2-Butanone	A	***ND***	0.10		mg/L	10	06/26/2012 14:40
Benzene	A	***ND***	0.050		mg/L	10	06/26/2012 14:40
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	06/26/2012 14:40
Chlorobenzene	A	***ND***	0.050		mg/L	10	06/26/2012 14:40
Chloroform	A	***ND***	0.050		mg/L	10	06/26/2012 14:40
Tetrachloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 14:40
Trichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 14:40
Vinyl chloride	A	***ND***	0.020		mg/L	10	06/26/2012 14:40
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	06/26/2012 14:40
Surr: 1,2-Dichloroethane-d4	S	97.60	74.5-132		%REC	10	06/26/2012 14:40
Surr: 4-Bromofluorobenzene	S	96.30	80-120		%REC	10	06/26/2012 14:40
Surr: Dibromofluoromethane	S	98.80	80-120		%REC	10	06/26/2012 14:40
Surr: Toluene-d8	S	101.00	80-120		%REC	10	06/26/2012 14:40
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***0.119***	0.0500		mg/L	50	06/26/2012 14:50

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NS1-10
Sample Description:
Matrix: Solid

Work Order/ID: 12F0923-03
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***0.0213***	0.0100		mg/L	1	06/27/2012 15:24
Barium	A	***0.510***	0.500		mg/L	1	06/27/2012 15:24
Cadmium	A	***29.0***	0.00500	B	mg/L	1	06/27/2012 15:24
Chromium	A	***2.84***	0.0100	B	mg/L	1	06/27/2012 15:24
Lead	A	***0.615***	0.00750		mg/L	1	06/27/2012 15:24
Selenium	A	***0.0494***	0.0300		mg/L	1	06/27/2012 15:24
Silver	A	***0.526***	0.0100		mg/L	1	06/27/2012 15:24
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **demo** Prep Date/Time: **06/27/2012 12:45**	
Cyanide, Total	A	***49000***	500		mg/Kg	2000	06/29/2012 17:18
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **JML** Prep Date/Time: **06/29/2012 11:13**	
Ignitability	A	***> 170***	30		°F	1	06/29/2012 11:13
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **06/25/2012 14:30**	
pH	A	***6.43***	2.00		pH Units	1	06/25/2012 15:10

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NS2-11
Sample Description:
Matrix: Solid

Work Order/ID: 12F0923-04
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **06/27/2012 10:43**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
2-Methylphenol	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
Hexachloroethane	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
Nitrobenzene	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
Pentachlorophenol	A	***ND***	0.25		mg/L	1	06/28/2012 19:50
Pyridine	A	***ND***	0.050		mg/L	1	06/28/2012 19:50
Total Cresol	M	***ND***	0.050		mg/L	1	06/28/2012 19:50
Surr: 2,4,6-Tribromophenol	S	98.20	47.8-138		%REC	1	06/28/2012 19:50
Surr: 2-Fluorobiphenyl	S	53.40	10-110		%REC	1	06/28/2012 19:50
Surr: 2-Fluorophenol	S	71.60	10-110		%REC	1	06/28/2012 19:50
Surr: Nitrobenzene-d5	S	55.30	10-110		%REC	1	06/28/2012 19:50
Surr: Phenol-d5	S	78.50	10-60.8	S	%REC	1	06/28/2012 19:50
Surr: Terphenyl-d14	S	62.10	16.8-110		%REC	1	06/28/2012 19:50
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **06/26/2012 08:29**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 15:11
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	06/26/2012 15:11
2-Butanone	A	***ND***	0.10		mg/L	10	06/26/2012 15:11
Benzene	A	***ND***	0.050		mg/L	10	06/26/2012 15:11
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	06/26/2012 15:11
Chlorobenzene	A	***ND***	0.050		mg/L	10	06/26/2012 15:11
Chloroform	A	***ND***	0.050		mg/L	10	06/26/2012 15:11
Tetrachloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 15:11
Trichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 15:11
Vinyl chloride	A	***ND***	0.020		mg/L	10	06/26/2012 15:11
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	06/26/2012 15:11
Surr: 1,2-Dichloroethane-d4	S	99.20	74.5-132		%REC	10	06/26/2012 15:11
Surr: 4-Bromofluorobenzene	S	95.60	80-120		%REC	10	06/26/2012 15:11
Surr: Dibromofluoromethane	S	98.80	80-120		%REC	10	06/26/2012 15:11
Surr: Toluene-d8	S	101.00	80-120		%REC	10	06/26/2012 15:11
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***0.177***	0.0500		mg/L	50	06/26/2012 14:51

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NS2-11
Sample Description:
Matrix: Solid

Work Order/ID: 12F0923-04
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***0.128***	0.0100		mg/L	1	06/27/2012 15:30
Barium	A	***ND***	0.500		mg/L	1	06/27/2012 15:30
Cadmium	A	***146***	0.200	B	mg/L	100	06/28/2012 20:37
Chromium	A	***253***	0.300	B	mg/L	100	06/28/2012 20:37
Lead	A	***1.22***	0.00750		mg/L	1	06/27/2012 15:30
Selenium	A	***3.29***	0.0300		mg/L	1	06/27/2012 15:30
Silver	A	***0.0271***	0.0100		mg/L	1	06/27/2012 15:30
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **demo** Prep Date/Time: **06/27/2012 12:45**	
Cyanide, Total	A	***200***	25		mg/Kg	100	06/29/2012 17:17
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **JML** Prep Date/Time: **06/29/2012 11:42**	
Ignitability	A	***> 170***	30		°F	1	06/29/2012 11:42
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **06/25/2012 14:30**	
pH	A	***6.63***	2.00		pH Units	1	06/25/2012 15:10

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NL3-12
Sample Description:
Matrix: Aqueous

Work Order/ID: 12F0923-05
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **06/26/2012 09:30**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
2-Methylphenol	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
Hexachloroethane	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
Nitrobenzene	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
Pentachlorophenol	A	***ND***	0.25		mg/L	1	06/27/2012 6:09
Pyridine	A	***ND***	0.050		mg/L	1	06/27/2012 6:09
Total Cresol	M	***ND***	0.050		mg/L	1	06/27/2012 6:09
Surr: 2,4,6-Tribromophenol	S	91.80	47.8-138		%REC	1	06/27/2012 6:09
Surr: 2-Fluorobiphenyl	S	53.40	10-110		%REC	1	06/27/2012 6:09
Surr: 2-Fluorophenol	S	69.90	10-110		%REC	1	06/27/2012 6:09
Surr: Nitrobenzene-d5	S	56.10	10-110		%REC	1	06/27/2012 6:09
Surr: Phenol-d5	S	69.60	10-60.8	S	%REC	1	06/27/2012 6:09
Surr: Terphenyl-d14	S	47.50	16.8-110		%REC	1	06/27/2012 6:09
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **07/03/2012 08:44**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	07/03/2012 15:08
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	07/03/2012 15:08
2-Butanone	A	***ND***	0.10		mg/L	10	07/03/2012 15:08
Benzene	A	***ND***	0.050		mg/L	10	07/03/2012 15:08
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	07/03/2012 15:08
Chlorobenzene	A	***ND***	0.050		mg/L	10	07/03/2012 15:08
Chloroform	A	***ND***	0.050		mg/L	10	07/03/2012 15:08
Tetrachloroethene	A	***ND***	0.050		mg/L	10	07/03/2012 15:08
Trichloroethene	A	***ND***	0.050		mg/L	10	07/03/2012 15:08
Vinyl chloride	A	***ND***	0.020		mg/L	10	07/03/2012 15:08
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	07/03/2012 15:08
Surr: 1,2-Dichloroethane-d4	S	101.00	74.5-132		%REC	10	07/03/2012 15:08
Surr: 4-Bromofluorobenzene	S	89.80	80-120		%REC	10	07/03/2012 15:08
Surr: Dibromofluoromethane	S	99.50	80-120		%REC	10	07/03/2012 15:08
Surr: Toluene-d8	S	95.60	80-120		%REC	10	07/03/2012 15:08
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:26

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NL3-12
Sample Description:
Matrix: Aqueous

Work Order/ID: 12F0923-05
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***ND***	0.0100		mg/L	1	06/27/2012 16:58
Barium	A	***ND***	0.500		mg/L	1	06/27/2012 16:58
Cadmium	A	***0.0856***	0.0100	B	mg/L	1	06/27/2012 16:58
Chromium	A	***ND***	0.0100	B	mg/L	1	06/27/2012 16:58
Lead	A	***ND***	0.00750		mg/L	1	06/27/2012 16:58
Selenium	A	***ND***	0.0300		mg/L	1	06/27/2012 16:58
Silver	A	***ND***	0.0100		mg/L	1	06/28/2012 20:09
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **ABG** Prep Date/Time: **06/28/2012 11:30**	
Cyanide, Total	A	***1.5***	0.50		mg/L	100	06/29/2012 16:46
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **06/28/2012 16:00**	
Ignitability	A	***> 170***	30		°F	1	06/28/2012 16:00
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **06/29/2012 13:55**	
pH	A	***8.11***	2.00		pH Units	1	06/29/2012 14:38

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NL4-13
Sample Description:
Matrix: Aqueous

Work Order/ID: 12F0923-06
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **CR** Prep Date/Time: **06/27/2012 10:43**	
1,4-Dichlorobenzene	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
2,4,5-Trichlorophenol	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
2,4,6-Trichlorophenol	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
2,4-Dinitrotoluene	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
2-Methylphenol	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
3/4-Methylphenol	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
Hexachlorobenzene	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
Hexachlorobutadiene	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
Hexachloroethane	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
Nitrobenzene	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
Pentachlorophenol	A	***ND***	1.0		mg/L	4	06/28/2012 20:10
Pyridine	A	***ND***	0.20		mg/L	4	06/28/2012 20:10
Total Cresol	M	***ND***	0.20		mg/L	4	06/28/2012 20:10
Surr: 2,4,6-Tribromophenol	S	70.90	47.8-138		%REC	4	06/28/2012 20:10
Surr: 2-Fluorobiphenyl	S	43.80	10-110		%REC	4	06/28/2012 20:10
Surr: 2-Fluorophenol	S	68.50	10-110		%REC	4	06/28/2012 20:10
Surr: Nitrobenzene-d5	S	60.60	10-110		%REC	4	06/28/2012 20:10
Surr: Phenol-d5	S	93.40	10-60.8	S	%REC	4	06/28/2012 20:10
Surr: Terphenyl-d14	S	51.80	16.8-110		%REC	4	06/28/2012 20:10
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **06/26/2012 08:29**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 15:43
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	06/26/2012 15:43
2-Butanone	A	***ND***	0.10		mg/L	10	06/26/2012 15:43
Benzene	A	***ND***	0.050		mg/L	10	06/26/2012 15:43
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	06/26/2012 15:43
Chlorobenzene	A	***ND***	0.050		mg/L	10	06/26/2012 15:43
Chloroform	A	***ND***	0.050		mg/L	10	06/26/2012 15:43
Tetrachloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 15:43
Trichloroethene	A	***ND***	0.050		mg/L	10	06/26/2012 15:43
Vinyl chloride	A	***ND***	0.020		mg/L	10	06/26/2012 15:43
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	06/26/2012 15:43
Surr: 1,2-Dichloroethane-d4	S	95.90	74.5-132		%REC	10	06/26/2012 15:43
Surr: 4-Bromofluorobenzene	S	92.70	80-120		%REC	10	06/26/2012 15:43
Surr: Dibromofluoromethane	S	96.80	80-120		%REC	10	06/26/2012 15:43
Surr: Toluene-d8	S	102.00	80-120		%REC	10	06/26/2012 15:43
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:47**	
Mercury	A	***ND***	0.00100		mg/L	1	06/26/2012 14:27

Analytical Results

Date: *Thursday, July 5, 2012*

Client: Environmental Restoration
Client Project: Baycote
Client Sample ID: B-NL4-13
Sample Description:
Matrix: Aqueous

Work Order/ID: 12F0923-06
Sampled: 06/21/2012 10:30
Received: 06/21/2012 17:05

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **06/26/2012 10:03**	
Arsenic	A	***ND***	0.0500		mg/L	1	06/27/2012 17:03
Barium	A	***ND***	2.50		mg/L	1	06/27/2012 17:03
Cadmium	A	***0.134***	0.0500	B	mg/L	1	06/27/2012 17:03
Chromium	A	***8.40***	0.0500	B	mg/L	1	06/27/2012 17:03
Lead	A	***0.136***	0.0375		mg/L	1	06/27/2012 17:03
Selenium	A	***ND***	0.150		mg/L	1	06/27/2012 17:03
Silver	A	***ND***	0.0500		mg/L	1	06/28/2012 20:26
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **ABG** Prep Date/Time: **06/28/2012 11:30**	
Cyanide, Total	A	***1.7***	0.50		mg/L	100	06/29/2012 16:46
Ignitability (Closed Cup)		Method: **SW-846 1010**				Analyst: **JML** Prep Date/Time: **06/28/2012 16:44**	
Ignitability	A	***> 170***	30		°F	1	06/28/2012 16:44
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **06/29/2012 13:55**	
pH	A	***6.37***	2.00		pH Units	1	06/29/2012 14:38

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

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.

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)

Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)

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

Microbac®

COOLER INSPECTION

Date: Thursday, July 5, 2012

Client Name: Environmental Restoration

Date/Time Received: 06/21/2012 17:05

Work Order Number: 12F0923

Received by: Dave Bryant

Checklist completed by: 6/22/2012 11:29:00AM | Dave Bryant

Reviewed by: 6/22/2012 | KGF

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 6.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12F0923-01	B-NL1-08	Likely High In Metals
12F0923-02	B-NL2-09	Likely High In Metals
12F0923-03	B-NS1-10	Likely High In Metals
12F0923-04	B-NS2-11	Likely High In Metals
12F0923-05	B-NL3-12	Likely High In Metals
12F0923-06	B-NL4-13	Likely High In Metals

Environmental Restoration L.L.C.
6294 Westwoods Business Park Drive
St. Louis, MO 63021
(636) 227-7477
Fax (636) 227-6447

12F0923 Kevin Falvey
ER - South Holland
Bavcote Metal Mishawaka
06/21/2012

Alternate billing information: Environmental Restoration
16660 CANAL STREET
South Holland, IL 60473

Report to: T Viehweg
Email to: T.Viehweg@erllc.com

Chain of Custody
Page 1 of 1

Prepared by: T Viehweg

12F0923

CoCode (lab use only)
Template/Prelogin
Shipped Via:

Analysis/Container/Preservative

Project:	Bay Cote
Phone:	362 446 6325 / 636 680 2476
Client Project #:	B5-101
ESC Key:	
Site/Facility ID#:	
P.O. #:	
Collected by:	T Viehweg
City/State Collected:	Mishawaka IN
Relinquished by (signature):	
Rush	(Lab MUST Be Notified) Same Day / Next Day / Two Day
Date Results Needed:	
Email?	No ✓ Yes
Fax?	No Yes
Cooler on Ice	N Y

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Containers	TCLP (metals, volatiles, semi vols)	pH	Flash Point	Total Cyanide					Remarks/Containment	Sample # (lab only)
B-NL1-08				6/21/12	1030	1	X	X	X	X						01
B-NL2-09						1	X	X	X	X						02
B-NS1-10						1	X	X	X	X						03
B-NS2-11						1	X	X	X	X						04
B-NL3-12						1	X	X	X	X						05
B-NL4-13						1	X	X	X	X						06

*Matrix SS - Soil/Solid GW - GroundWater WW - WasteWater DW - Drinking Water OT - Other _____ pH _____ Temp _____

Remarks: Samples likely high in metals

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
[signature]	6-21-12	1630	[signature]
[signature]	6-21-12	1705	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ Fed Ex ☐ Courier ☐
Temp: 6°C
Bottles Received:
Date: 6/21/12 Time: 1705
Condition: (lab use only)
pH Checked: NCF:

ATTACHMENT B3

July 27, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12G0642

Re: Mishawaka- Baycote

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 7 sample(s) on 7/16/2012 2:40:00PM for the analyses presented in the following report as Work Order 12G0642.

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. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Friday, July 27, 2012*

Client: Environmental Restoration
Project: Mishawaka- Baycote
Lab Order: 12G0642

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12G0642-01	7-12-Solid 2-TCLP		07/13/2012 00:00	7/16/2012 2:40:00PM
12G0642-02	7-12-Solid 2		07/13/2012 00:00	7/16/2012 2:40:00PM
12G0642-03	Decon-TCLP		07/13/2012 00:00	7/16/2012 2:40:00PM
12G0642-04	A77-TCLP		07/13/2012 00:00	7/16/2012 2:40:00PM
12G0642-05	A77		07/13/2012 00:00	7/16/2012 2:40:00PM
12G0642-06	U51-TCLP		07/13/2012 00:00	7/16/2012 2:40:00PM
12G0642-07	U51		07/13/2012 00:00	7/16/2012 2:40:00PM

CASE NARRATIVE

Date: *Friday, July 27, 2012*

Client: Environmental Restoration
Project: Mishawaka- Baycote
Lab Order: 12G0642

Microbac Chicagoland laboratory sub-contracted TCLP Metals (As, Ba, Cd, Cr, Pb, Se, AS) for samples A77 and U51 to Microbac of Louisville, Kentucky.

The Laboratory Control Duplicate associated with 7-12-Solid 2, A77, U51 samples failed the precision criteria for Reactive Cyanide. The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

The Laboratory Control Sample associated with the Delon-TCLP, A77-TCLP, and U51-TCLP samples failed the acceptance criteria for Mercury. This is considered insignificant, as the bias was high yet the sample concentrations were below the reporting limit.

The Matrix Spike and Matrix Spike Duplicate performed on the 7-12-Solid-2-TCLP sample failed the accuracy and precision criteria for Total Cyanide. This bias is due to the high indigenous analyte concentration (relative to the spike amount).

B - the Method Blank associated with the 7-12-Solid 2-TCLP and Delon-TCLP samples contained Silver at a level above the reporting limit. This is considered insignificant, as the concentration in the sample was below the reporting limit.

In the 6010 analysis, the Cadmium and Chromium CCVs failed with a high bias, affecting the 7-12-Solid 2-TCLP and Delon-TCLP samples.

The Matrix Spike and Matrix Spike Duplicate performed on the 7-12-Solid-2-TCLP 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: *Friday, July 27, 2012*

Client: Environmental Restoration
Client Project: Mishawaka- Baycote
Client Sample ID: 7-12-Solid 2-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12G0642-01
Sampled: 07/13/2012 0:00
Received: 07/16/2012 14:40

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **07/23/2012 09:52**	
Mercury	A	***0.190***	0.100		mg/L	100	07/25/2012 12:00
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **ZZZ** Prep Date/Time: **07/20/2012 11:48**	
Arsenic	A	***0.123***	0.0100		mg/L	1	07/23/2012 22:44
Barium	A	***ND***	0.500		mg/L	1	07/23/2012 22:44
Cadmium	A	***145***	0.00200	E	mg/L	1	07/23/2012 22:44
Chromium	A	***124***	0.00300	E	mg/L	1	07/23/2012 22:44
Lead	A	***0.0918***	0.00750		mg/L	1	07/23/2012 22:44
Selenium	A	***ND***	0.700		mg/L	1	07/23/2012 22:44
Silver	A	***ND***	0.500	B	mg/L	1	07/23/2012 22:44
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **GRIEF** Prep Date/Time: **07/23/2012 12:50**	
Cyanide, Total	A	***800***	24		mg/Kg	100	07/23/2012 16:33
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **07/20/2012 14:27**	
pH	A	***9.39***	2.00		pH Units	1	07/20/2012 14:31

Analytical Results

Date: *Friday, July 27, 2012*

Client: Environmental Restoration
Client Project: Mishawaka- Baycote
Client Sample ID: 7-12-Solid 2
Sample Description:
Matrix: Solid

Work Order/ID: 12G0642-02
Sampled: 07/13/2012 0:00
Received: 07/16/2012 14:40

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **GRIEF**	
Reactive Cyanide		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **07/23/2012 10:00**	
Reactive Cyanide	A	***ND***	20		mg/Kg	10	07/23/2012 16:38

Analytical Results

Date: *Friday, July 27, 2012*

Client: Environmental Restoration
Client Project: Mishawaka- Baycote
Client Sample ID: Decon-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12G0642-03
Sampled: 07/13/2012 0:00
Received: 07/16/2012 14:40

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **07/23/2012 09:52**	
Mercury	A	***ND***	0.00100		mg/L	1	07/23/2012 15:43
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **ZZZ** Prep Date/Time: **07/20/2012 11:48**	
Arsenic	A	***ND***	0.0100		mg/L	1	07/23/2012 22:50
Barium	A	***ND***	0.500		mg/L	1	07/23/2012 22:50
Cadmium	A	***ND***	0.500		mg/L	1	07/23/2012 22:50
Chromium	A	***17.6***	0.00300		mg/L	1	07/23/2012 22:50
Lead	A	***ND***	0.00750		mg/L	1	07/23/2012 22:50
Selenium	A	***ND***	0.700		mg/L	1	07/23/2012 22:50
Silver	A	***ND***	0.500	B	mg/L	1	07/23/2012 22:50
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **GRIEF** Prep Date/Time: **07/23/2012 12:50**	
Cyanide, Total	A	***6.6***	0.10		mg/L	10	07/23/2012 16:31
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **07/20/2012 14:27**	
pH	A	***8.01***	2.00		pH Units	1	07/20/2012 14:31

Analytical Results

Date: *Friday, July 27, 2012*

Client: Environmental Restoration
Client Project: Mishawaka- Baycote
Client Sample ID: A77-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12G0642-04
Sampled: 07/13/2012 0:00
Received: 07/16/2012 14:40

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **07/23/2012 09:52**	
Mercury	A	***ND***	0.00100		mg/L	1	07/23/2012 15:45
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SUB** Prep Date/Time: **07/20/2012 11:48**	
Arsenic	A	***ND***	0.100		mg/L	1	07/26/2012 2:58
Barium	A	***0.570***	0.0100		mg/L	1	07/26/2012 2:58
Cadmium	A	***ND***	0.0100		mg/L	1	07/26/2012 2:58
Chromium	A	***ND***	0.0100		mg/L	1	07/26/2012 2:58
Lead	A	***0.0340***	0.0100		mg/L	1	07/26/2012 2:58
Selenium	A	***ND***	0.0500		mg/L	1	07/26/2012 2:58
Silver	A	***ND***	0.0100		mg/L	1	07/26/2012 2:58
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **GRIEF** Prep Date/Time: **07/23/2012 12:50**	
Cyanide, Total	A	***620***	25		mg/Kg	100	07/23/2012 16:45
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **07/20/2012 14:27**	
pH	A	***5.96***	2.00		pH Units	1	07/20/2012 14:31

Analytical Results

Date: *Friday, July 27, 2012*

Client: Environmental Restoration
Client Project: Mishawaka- Baycote
Client Sample ID: A77
Sample Description:
Matrix: Solid

Work Order/ID: 12G0642-05
Sampled: 07/13/2012 0:00
Received: 07/16/2012 14:40

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **GRIEF**	
Reactive Cyanide		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **07/23/2012 10:00**	
Reactive Cyanide	A	***ND***	2.0		mg/Kg	1	07/23/2012 16:04

Analytical Results

Date: *Friday, July 27, 2012*

Client: Environmental Restoration
Client Project: Mishawaka- Baycote
Client Sample ID: U51-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12G0642-06
Sampled: 07/13/2012 0:00
Received: 07/16/2012 14:40

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **07/23/2012 09:52**	
Mercury	A	***ND***	0.00200		mg/L	1	07/23/2012 15:46
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SUB** Prep Date/Time: **07/20/2012 11:48**	
Arsenic	A	***ND***	0.100		mg/L	1	07/26/2012 2:58
Barium	A	***0.700***	0.0100		mg/L	1	07/26/2012 2:58
Cadmium	A	***ND***	0.0100		mg/L	1	07/26/2012 2:58
Chromium	A	***0.0120***	0.0100		mg/L	1	07/26/2012 2:58
Lead	A	***0.0110***	0.0100		mg/L	1	07/26/2012 2:58
Selenium	A	***ND***	0.0500		mg/L	1	07/26/2012 2:58
Silver	A	***ND***	0.0100		mg/L	1	07/26/2012 2:58
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **GRIEF** Prep Date/Time: **07/23/2012 12:50**	
Cyanide, Total	A	***11***	0.25		mg/Kg	1	07/23/2012 15:55
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **07/20/2012 14:27**	
pH	A	***7.30***	2.00		pH Units	1	07/20/2012 14:31

Analytical Results

Date: *Friday, July 27, 2012*

Client: Environmental Restoration
Client Project: Mishawaka- Baycote
Client Sample ID: U51
Sample Description:
Matrix: Solid

Work Order/ID: 12G0642-07
Sampled: 07/13/2012 0:00
Received: 07/16/2012 14:40

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **GRIEF**	
Reactive Cyanide		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **07/23/2012 10:00**	
Reactive Cyanide	A	***ND***	2.0		mg/Kg	1	07/23/2012 16:28

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

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.

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)

Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)

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

Microbac®

COOLER INSPECTION

Date: Friday, July 27, 2012

Client Name: Environmental Restoration

Date/Time Received: 07/16/2012 14:40

Work Order Number: 12G0642

Received by: Dave Bryant

Checklist completed by: 7/17/2012 2:24:00PM | Dave Bryant

Reviewed by: 7/17/2012 | KGF

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 4.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12G0642-01	7-12-Solid 2-TCLP	
12G0642-02	7-12-Solid 2	
12G0642-03	Decon-TCLP	
12G0642-04	A77-TCLP	
12G0642-05	A77	
12G0642-06	U51-TCLP	
12G0642-07	U51	

12G0642 Kevin Falvey
ER - South Holland
Fort Wayne

07/16/2012

Microbac

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number

Instructions on back

Client Name: Environmental Restoration LLC
Address: 16660 CANAL ST.
City, State, Zip: South Holland, IL
Contact: John Behrens
Telephone #: 708 333-9915

Project: Mishawaka, IN.
Location: Baycore Metal Finishing
PO #:
Compliance Monitoring? [ ] Yes(1) [X] No
(1)Agency/Program

Turnaround Time: [X] Routine (7 working days) [ ] RUSH* (notify lab) _____ (needed by)

Report Type: [ ] Results Only [ ] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

Sampled by (PRINT): John Behrens
Sampler Signature: [signature]
Sampler Phone #: 708 333-9915
Send Report via [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address): J.Behrens@ERLLC.com

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types ** ↓	PH	TCLP Metals	Total CN	ReacTive CN					For Lab Use Only 12G0642
7-12-Solid2	S		X		7/13		1	NONE	X	X	X	X					01/02
Decon	L	X			7/13		1	NONE	X	X	X						03
A77	Sludge		X		7/13		1	NONE	X	X	X	X					04/05
U51	Sludge		X		7/13		3	NONE	X	X	X	X					06/07

Possible Hazard Identification: [X] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition: [X] Dispose as appropriate [ ] Return [ ] Archive

Comments:
7-12-Solid2 likely high in metals
A77 likely high in metals
U51 likely high in metals
Analysis for waste code determination

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	7/16/12	[signature]	7.16.12 1215 ~~1440~~
[signature]	7.16.12 1440		
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
		[signature]	7/16/12 1440

Sample temperature upon receipt in degrees C = ON ICE 4°C

rev. 11/04/04

Page ____ of ____

ATTACHMENT B4

August 2, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12G0781

Re: Baycote Metals

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 2 sample(s) on 7/19/2012 2:13:00PM for the analyses presented in the following report as Work Order 12G0781.

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 Robert Crookston, Interim Managing Director at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Thursday, August 2, 2012*

Client: Environmental Restoration
Project: Baycote Metals
Lab Order: 12G0781

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12G0781-01	A-81		07/18/2012 16:00	7/19/2012 2:13:00PM
12G0781-02	A-81		07/18/2012 16:00	7/19/2012 2:13:00PM

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

CASE NARRATIVE

Date: *Thursday, August 2, 2012*

Client: Environmental Restoration
Project: Baycote Metals
Lab Order: 12G0781

The Laboratory Control Sample associated with this sample failed the acceptance criteria for TCLP Selenium. This is considered insignificant, as the bias was high yet the sample concentration was below the reporting limit.

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

The Laboratory Control Duplicate associated with A-81 failed the precision criteria for Reactive Cyanide The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

Analytical Results

Date: *Thursday, August 2, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals
Client Sample ID: A-81
Sample Description:
Matrix: Solid

Work Order/ID: 12G0781-01
Sampled: 07/18/2012 16:00
Received: 07/19/2012 14:13

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA	Method: **1311/7470A** Prep Method: **/SW-846 7470**					Analyst: **RPL** Prep Date/Time: **07/30/2012 08:42**	
Mercury	A	***ND***	0.00100		mg/L	1	07/30/2012 14:18
TCLP Metals by ICP	Method: **1311/6010B** Prep Method: **/SW846 3005A**					Analyst: **RPL** Prep Date/Time: **07/27/2012 10:38**	
Arsenic	A	***ND***	0.0100		mg/L	1	07/27/2012 17:12
Barium	A	***1.04***	0.500		mg/L	1	07/27/2012 17:12
Cadmium	A	***0.804***	0.00200		mg/L	1	07/27/2012 17:12
Chromium	A	***0.270***	0.00300		mg/L	1	07/27/2012 17:12
Lead	A	***ND***	0.00750		mg/L	1	07/27/2012 17:12
Selenium	A	***ND***	0.100		mg/L	1	07/27/2012 17:12
Silver	A	***ND***	0.0100		mg/L	1	07/27/2012 17:12
Total Cyanide	Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**					Analyst: **GRIEF** Prep Date/Time: **07/27/2012 10:15**	
Cyanide, Total	A	***530***	25		mg/Kg	100	07/30/2012 14:13
pH	Method: **SW-846 9045C**					Analyst: **EP** Prep Date/Time: **07/27/2012 14:53**	
pH	A	***8.51***	2.00		pH Units	1	07/27/2012 15:24
Reactive Sulfide	Method: **Chapter 7/9034** Prep Method: **Solid Reactive Sulfide Distillation**					Analyst: **JH** Prep Date/Time: **07/25/2012 11:00**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	07/25/2012 15:49

Analytical Results

Date: *Thursday, August 2, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals
Client Sample ID: A-81
Sample Description:
Matrix: Solid

Work Order/ID: 12G0781-02
Sampled: 07/18/2012 16:00
Received: 07/19/2012 14:13

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014** Prep Method: **Solid Reactive CN Distillation**				Analyst: **GRIEF** Prep Date/Time: **08/01/2012 09:50**	
Reactive Cyanide	A	***ND***	2.0		mg/Kg	1	08/01/2012 15:40

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

1. The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
2. The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
3. Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
4. Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
5. Indiana DEM approved support laboratory for solid waste and wastewater analyses
6. Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
7. Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
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)
9. Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
10. North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
11. Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
12. Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

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COOLER INSPECTION

Date: Thursday, August 2, 2012

Client Name: Environmental Restoration

Date/Time Received: 07/19/2012 14:13

Work Order Number: 12G0781

Received by: Dave Bryant

Checklist completed by: 7/19/2012 6:23:00PM | Dave Bryant

Reviewed by: 7/20/2012 | KGF

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 4.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12G0781-01	A-81	Possible high CN
12G0781-02	A-81	Possible high CN

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

12G0781
ER - South Holland
Kevin Falvey
Bavcote Metal Mishawaka
07/19/2012

Microbac®

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 103937

Instructions on back

Client Name: Environmental Restoration LLC
Address: 16660 Canal Street
City, State, Zip: South Holland, IL
Contact: John Bethards
Telephone #: 708-333-8915
Sampled by (PRINT): John Bethards
Sampler Signature: [signature]
Sampler Phone #:
Send Report via [ ] Mail [ ] Telephone [ ] Fax (fax #) [ ] e-mail (address) J.Bethards@ERLLC.com

Project: Mishawaka ITX
Location: Bavcote Metal Processing
PO #:
Compliance Monitoring? [ ] Yes(1) [ ] No
(1)Agency/Program

Turnaround Time: [ ] Routine (7 working days) [ ] RUSH* (notify lab) (needed by)

Report Type: [ ] Results Only [ ] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses / Preservative Types **	TCLP metals	pH	TOTAL CN	Reactive CN				For Lab Use Only
* A-81	L	X			7/18	1600	1	NONE	X	X	X	X				12G0781
																01
* Possible High CN level																02

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments: ON Ice

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	7/19 1413	[signature]	7/19 1413
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
		[signature]	7/19/12 1413

Sample temperature upon receipt in degrees C = 4°C

rev. 11/04/04

Page ___ of ___

Page 8 of 8

ATTACHMENT B5

August 13, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12H0205

Re: Baycote Metal Mishawaka

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 2 sample(s) on 8/6/2012 1:45:00PM for the analyses presented in the following report as Work Order 12H0205.

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 Robert Crookston, Interim Managing Director at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Monday, August 13, 2012*

Client: Environmental Restoration
Project: Baycote Metal Mishawaka
Lab Order: 12H0205

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12H0205-01	8-3 Solid 3		08/03/2012 13:00	8/6/2012 1:45:00PM
12H0205-02	8-3 Solid 3		08/03/2012 13:00	8/6/2012 1:45:00PM

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

CASE NARRATIVE

Date: *Monday, August 13, 2012*

Client: Environmental Restoration
Project: Baycote Metal Mishawaka
Lab Order: 12H0205

The Matrix Spike and Matrix Spike Duplicate performed on the 8-3 Solid 3 sample failed the accuracy criteria for Total Cyanide. This bias is due to the high indigenous analyte concentration (relative to the spike amount).

Analytical Results

Date: *Monday, August 13, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Mishawaka
Client Sample ID: 8-3 Solid 3
Sample Description:
Matrix: Solid

Work Order/ID: 12H0205-01
Sampled: 08/03/2012 13:00
Received: 08/06/2012 13:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/09/2012 09:54**	
Mercury	A	***ND***	0.00100		mg/L	1	08/09/2012 14:12
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **08/09/2012 09:24**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/09/2012 16:16
Barium	A	***ND***	0.500		mg/L	1	08/09/2012 16:16
Cadmium	A	***29.2***	0.00200		mg/L	1	08/09/2012 16:16
Chromium	A	***0.290***	0.00300		mg/L	1	08/09/2012 16:16
Lead	A	***ND***	0.00750		mg/L	1	08/09/2012 16:16
Selenium	A	***ND***	0.0300		mg/L	1	08/09/2012 16:16
Silver	A	***ND***	0.0100		mg/L	1	08/09/2012 16:16
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/13/2012 13:05**	
Cyanide, Total	A	***480***	25		mg/Kg	100	08/13/2012 16:05
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **08/10/2012 14:50**	
pH	A	***7.05***	2.00		pH Units	1	08/10/2012 16:02

Analytical Results

Date: *Monday, August 13, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Mishawaka
Client Sample ID: 8-3 Solid 3
Sample Description:
Matrix: Solid

Work Order/ID: 12H0205-02
Sampled: 08/03/2012 13:00
Received: 08/06/2012 13:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
Reactive Cyanide		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **08/07/2012 07:30**	
Reactive Cyanide	A	***ND***	20		mg/Kg	10	08/07/2012 13:50

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

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2. The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
3. Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
4. Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
5. Indiana DEM approved support laboratory for solid waste and wastewater analyses
6. Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
7. Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
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)
9. Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
10. North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
11. Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
12. Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

Microbac®

COOLER INSPECTION

Date: Monday, August 13, 2012

Client Name: Environmental Restoration

Date/Time Received: 08/06/2012 13:45

Work Order Number: 12H0205

Received by: Dave Bryant

Checklist completed by: 8/6/2012 5:56:00PM | Dave Bryant

Reviewed by: 8/7/2012 | KGF

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 4.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12H0205-01	8-3 Solid 3	
12H0205-02	8-3 Solid 3	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

12H0205 Kevin Falvey
ER - South Holland
Baycote Metal Mishawaka
08/06/2012

Microbac®

Samples Submitted to:
[ ] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 103936

Instructions on back

Client Name: Environmental Restoration, LLC
Address: 16660 Canal Street
City, State, Zip: South Holland, IL
Contact: John Behrens
Telephone #: 708-333-9915

Project: Baycote Metal Finishing
Location: Mishawaka, IN
PO #:
Compliance Monitoring? [ ] Yes(1) [ ] No
(1)Agency/Program

Turnaround Time: [X] Routine (5 working days) [ ] RUSH* (notify lab) _____ (needed by)

Report Type: [X] Results Only [ ] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

Sampled by (PRINT): Leland J. Meadows
Sampler Signature: [signature]
Sampler Phone #:
Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address) J.Behrens@erllc.com

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types ** ↓	pH	TCLP metals	CN- reactive	CN- total					For Lab Use Only
																	12H0205
8-3 solid 3	S		✓		8/3/12	1300	2		X	X	X	X					01/02

Possible Hazard Identification: [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments: ON ICE

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	8.6.12 1251	[signature]	8.6.12 1251
[signature]	8.6.12 1345		

Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
		[signature]	8/6/12 1345

Sample temperature upon receipt in degrees C = 4°C

rev. 11/04/04

Page 1 of 1

ATTACHMENT B6

August 20, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12H0577

Re: Baycote Mishawaka

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 12 sample(s) on 8/14/2012 3:45:00PM for the analyses presented in the following report as Work Order 12H0577.

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 Robert Crookston, Interim Managing Director at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

WORK ORDER SAMPLE SUMMARY

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12H0577

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12H0577-01	A-83-Total		08/14/2012 09:00	8/14/2012 3:45:00PM
12H0577-02	A-83		08/14/2012 09:00	8/14/2012 3:45:00PM
12H0577-03	A-89-Total		08/14/2012 13:30	8/14/2012 3:45:00PM
12H0577-04	A-89-TCLP		08/14/2012 13:30	8/14/2012 3:45:00PM
12H0577-05	A-85-Total		08/14/2012 13:40	8/14/2012 3:45:00PM
12H0577-06	A-85-TCLP		08/14/2012 13:40	8/14/2012 3:45:00PM
12H0577-08	A-87		08/14/2012 13:50	8/14/2012 3:45:00PM
12H0577-09	Z-27-Total		08/14/2012 14:00	8/14/2012 3:45:00PM
12H0577-10	Z-27		08/14/2012 14:00	8/14/2012 3:45:00PM
12H0577-11	C-00-Total		08/14/2012 14:10	8/14/2012 3:45:00PM
12H0577-12	C-00-Total		08/14/2012 14:10	8/14/2012 3:45:00PM

CASE NARRATIVE

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12H0577

B - the Method Blank associated with the A-89-TCLP, A-85-TCLP, A-87, and C-00-Total samples contained Lead at a level above the reporting limit. This is considered insignificant, as the concentrations in the samples were below the reporting limit.

The Laboratory Control Duplicate associated with A-89-TCLP, A-85-TCLP, and A-87 samples failed the precision criteria for Cyanide. The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

The Laboratory Control Duplicate associated with Z-27 failed the precision criteria for Reactive Cyanide. The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-83-Total
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-01
Sampled: 08/14/2012 9:00
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **SW-846 9012B**					Analyst: **AGRIE**
Total Cyanide		Prep Method: **Solid CN Distillation**					Prep Date/Time: **08/17/2012 10:50**
Cyanide, Total	A	***810***	44		mg/Kg	100	08/17/2012 14:18

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-83
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-02
Sampled: 08/14/2012 9:00
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide	Method: **Chapter 7/9014**					Analyst: **AGRIE**	
	Prep Method: **Solid Reactive CN Distillation**					Prep Date/Time: **08/17/2012 08:00**	
Reactive Cyanide	A	***4.1***	4.0		mg/Kg	1	08/17/2012 14:49

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-89-Total
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-03
Sampled: 08/14/2012 13:30
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 10:50**	
Cyanide, Total	A	***290***	48		mg/Kg	100	08/17/2012 14:20
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **08/17/2012 12:58**	
pH	A	***9.49***	2.00		pH Units	1	08/17/2012 13:02

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-89-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-04
Sampled: 08/14/2012 13:30
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **clr** Prep Date/Time: **08/17/2012 06:51**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
2-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Hexachloroethane	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Nitrobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Pentachlorophenol	A	***ND***	0.25		mg/L	1	08/17/2012 12:48
Pyridine	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Total Cresol	M	***ND***	0.050		mg/L	1	08/17/2012 12:48
Surr: 2,4,6-Tribromophenol	S	107.00	47.8-138		%REC	1	08/17/2012 12:48
Surr: 2-Fluorobiphenyl	S	61.00	10-110		%REC	1	08/17/2012 12:48
Surr: 2-Fluorophenol	S	88.30	10-110		%REC	1	08/17/2012 12:48
Surr: Nitrobenzene-d5	S	70.70	10-110		%REC	1	08/17/2012 12:48
Surr: Phenol-d5	S	109.00	10-60.8	S	%REC	1	08/17/2012 12:48
Surr: Terphenyl-d14	S	73.20	16.8-110		%REC	1	08/17/2012 12:48
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **08/16/2012 08:35**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
2-Butanone	A	***ND***	0.10		mg/L	10	08/16/2012 19:13
Benzene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Chlorobenzene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Chloroform	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Tetrachloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Trichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Vinyl chloride	A	***ND***	0.020		mg/L	10	08/16/2012 19:13
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	08/16/2012 19:13
Surr: 1,2-Dichloroethane-d4	S	112.00	74.5-132		%REC	10	08/16/2012 19:13
Surr: 4-Bromofluorobenzene	S	85.60	80-120		%REC	10	08/16/2012 19:13
Surr: Dibromofluoromethane	S	115.00	80-120		%REC	10	08/16/2012 19:13
Surr: Toluene-d8	S	99.90	80-120		%REC	10	08/16/2012 19:13
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:42

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-89-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-04
Sampled: 08/14/2012 13:30
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/16/2012 16:52
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 16:52
Cadmium	A	***4.12***	0.00200		mg/L	1	08/16/2012 16:52
Chromium	A	***0.666***	0.00300		mg/L	1	08/16/2012 16:52
Lead	A	***ND***	0.00750	B	mg/L	1	08/16/2012 16:52
Selenium	A	***ND***	0.0300		mg/L	1	08/16/2012 16:52
Silver	A	***0.0129***	0.0100		mg/L	1	08/16/2012 16:52
Reactive Cyanide		Method: **Chapter 7/9014** Prep Method: **Solid Reactive CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 08:00**	
Reactive Cyanide	A	***ND***	4.0		mg/Kg	1	08/17/2012 14:50

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-85-Total
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-05
Sampled: 08/14/2012 13:40
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 10:50**	
Cyanide, Total	A	***690***	45		mg/Kg	100	08/17/2012 14:21
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **08/17/2012 12:58**	
pH	A	***7.77***	2.00		pH Units	1	08/17/2012 13:02

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-85-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-06
Sampled: 08/14/2012 13:40
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **clr** Prep Date/Time: **08/17/2012 06:51**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
2-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Hexachloroethane	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Nitrobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Pentachlorophenol	A	***ND***	0.25		mg/L	1	08/17/2012 13:28
Pyridine	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Total Cresol	M	***ND***	0.050		mg/L	1	08/17/2012 13:28
Surr: 2,4,6-Tribromophenol	S	113.00	47.8-138		%REC	1	08/17/2012 13:28
Surr: 2-Fluorobiphenyl	S	62.60	10-110		%REC	1	08/17/2012 13:28
Surr: 2-Fluorophenol	S	88.00	10-110		%REC	1	08/17/2012 13:28
Surr: Nitrobenzene-d5	S	71.80	10-110		%REC	1	08/17/2012 13:28
Surr: Phenol-d5	S	106.00	10-60.8	S	%REC	1	08/17/2012 13:28
Surr: Terphenyl-d14	S	90.60	16.8-110		%REC	1	08/17/2012 13:28
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **08/16/2012 08:35**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
2-Butanone	A	***ND***	0.10		mg/L	10	08/16/2012 19:44
Benzene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Chlorobenzene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Chloroform	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Tetrachloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Trichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Vinyl chloride	A	***ND***	0.020		mg/L	10	08/16/2012 19:44
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	08/16/2012 19:44
Surr: 1,2-Dichloroethane-d4	S	114.00	74.5-132		%REC	10	08/16/2012 19:44
Surr: 4-Bromofluorobenzene	S	84.90	80-120		%REC	10	08/16/2012 19:44
Surr: Dibromofluoromethane	S	114.00	80-120		%REC	10	08/16/2012 19:44
Surr: Toluene-d8	S	101.00	80-120		%REC	10	08/16/2012 19:44
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:44

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-85-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-06
Sampled: 08/14/2012 13:40
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/16/2012 17:10
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 17:10
Cadmium	A	***3.28***	0.00200		mg/L	1	08/16/2012 17:10
Chromium	A	***0.898***	0.00300		mg/L	1	08/16/2012 17:10
Lead	A	***ND***	0.00750	B	mg/L	1	08/16/2012 17:10
Selenium	A	***0.0573***	0.0300		mg/L	1	08/16/2012 17:10
Silver	A	***ND***	0.0100		mg/L	1	08/16/2012 17:10
Reactive Cyanide		Method: **Chapter 7/9014** Prep Method: **Solid Reactive CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 08:00**	
Reactive Cyanide	A	***ND***	4.0		mg/Kg	1	08/17/2012 14:44

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-87
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-08
Sampled: 08/14/2012 13:50
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA	Method: **1311/7470A** Prep Method: **/SW-846 7470**					Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:47
TCLP Metals by ICP	Method: **1311/6010B** Prep Method: **/SW846 3005A**					Analyst: **SA** Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***0.0356***	0.0100		mg/L	1	08/16/2012 17:33
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 17:33
Cadmium	A	***0.0261***	0.00200		mg/L	1	08/16/2012 17:33
Chromium	A	***2.22***	0.00300		mg/L	1	08/16/2012 17:33
Lead	A	***ND***	0.00750	B	mg/L	1	08/16/2012 17:33
Selenium	A	***ND***	0.0300		mg/L	1	08/16/2012 17:33
Silver	A	***0.0244***	0.0100		mg/L	1	08/16/2012 17:33

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: Z-27-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-09
Sampled: 08/14/2012 14:00
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/20/2012 10:40**	
Cyanide, Total	A	***4.0***	0.50		mg/L	1	08/20/2012 14:29
pH		Method: **SW-846 9045C**				Analyst: **TMG** Prep Date/Time: **08/20/2012 14:40**	
pH	A	***10.2***	2.00		pH Units	1	08/20/2012 14:40

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: Z-27
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-10
Sampled: 08/14/2012 14:00
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:48
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***0.670***	0.0100		mg/L	1	08/16/2012 17:38
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 17:38
Cadmium	A	***0.00260***	0.00200		mg/L	1	08/16/2012 17:38
Chromium	A	***0.246***	0.00300		mg/L	1	08/16/2012 17:38
Lead	A	***ND***	0.0500		mg/L	1	08/16/2012 17:38
Selenium	A	***ND***	0.0300		mg/L	1	08/16/2012 17:38
Silver	A	***0.0526***	0.0100		mg/L	1	08/16/2012 17:38
Reactive Cyanide		Method: **Chapter 7/9014** Prep Method: **Aqueous Reactive CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/20/2012 10:00**	
Reactive Cyanide	A	***ND***	4.0		mg/L	1	08/20/2012 14:35

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: C-00-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-11
Sampled: 08/14/2012 14:10
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 10:50**	
Cyanide, Total	A	***ND***	50		mg/L	100	08/17/2012 14:25
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **08/17/2012 13:41**	
pH	A	***6.49***	2.00		pH Units	1	08/17/2012 13:42

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: C-00-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-12
Sampled: 08/14/2012 14:10
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **clr** Prep Date/Time: **08/17/2012 06:51**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
2-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Hexachloroethane	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Nitrobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Pentachlorophenol	A	***ND***	0.25		mg/L	1	08/17/2012 13:08
Pyridine	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Total Cresol	M	***ND***	0.050		mg/L	1	08/17/2012 13:08
Surr: 2,4,6-Tribromophenol	S	104.00	47.8-138		%REC	1	08/17/2012 13:08
Surr: 2-Fluorobiphenyl	S	56.50	10-110		%REC	1	08/17/2012 13:08
Surr: 2-Fluorophenol	S	74.10	10-110		%REC	1	08/17/2012 13:08
Surr: Nitrobenzene-d5	S	61.30	10-110		%REC	1	08/17/2012 13:08
Surr: Phenol-d5	S	93.10	10-60.8	S	%REC	1	08/17/2012 13:08
Surr: Terphenyl-d14	S	88.30	16.8-110		%REC	1	08/17/2012 13:08
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/SW-846 5030B**				Analyst: **jln** Prep Date/Time: **08/16/2012 08:35**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
2-Butanone	A	***ND***	0.10		mg/L	10	08/16/2012 15:32
Benzene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Chlorobenzene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Chloroform	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Tetrachloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Trichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Vinyl chloride	A	***ND***	0.020		mg/L	10	08/16/2012 15:32
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	08/16/2012 15:32
Surr: 1,2-Dichloroethane-d4	S	114.00	74.5-132		%REC	10	08/16/2012 15:32
Surr: 4-Bromofluorobenzene	S	86.40	80-120		%REC	10	08/16/2012 15:32
Surr: Dibromofluoromethane	S	113.00	80-120		%REC	10	08/16/2012 15:32
Surr: Toluene-d8	S	99.50	80-120		%REC	10	08/16/2012 15:32
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:49

Analytical Results

Date: *Monday, August 20, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: C-00-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-12
Sampled: 08/14/2012 14:10
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **1311/6010B**				Analyst: **SA**	
TCLP Metals by ICP		Prep Method: **/SW846 3005A**				Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/16/2012 17:44
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 17:44
Cadmium	A	***0.00310***	0.00200		mg/L	1	08/16/2012 17:44
Chromium	A	***0.00920***	0.00300		mg/L	1	08/16/2012 17:44
Lead	A	***ND***	0.00750	B	mg/L	1	08/16/2012 17:44
Selenium	A	***ND***	0.0300		mg/L	1	08/16/2012 17:44
Silver	A	***ND***	0.0100		mg/L	1	08/16/2012 17:44

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

[1] The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
[2] The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
[3] Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
[4] Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
[5] Indiana DEM approved support laboratory for solid waste and wastewater analyses
[6] Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
[7] Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
[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)
[9] Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
[10] North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
[11] Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
[12] Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

COOLER INSPECTION

Date: Monday, August 20, 2012

Client Name: Environmental Restoration

Date/Time Received: 08/14/2012 15:45

Work Order Number: 12H0577

Received by: Dave Bryant

Checklist completed by: 8/14/2012 5:49:00PM | Dave Bryant

Reviewed by: 8/15/2012 | KGF

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 6.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12H0577-01	A-83-Total	
12H0577-02	A-83	
12H0577-03	A-89-Total	
12H0577-04	A-89-TCLP	
12H0577-05	A-85-Total	
12H0577-06	A-85-TCLP	
12H0577-07	A-87-Total	
12H0577-08	A-87	
12H0577-09	Z-27-Total	
12H0577-10	Z-27	
12H0577-11	C-00-Total	
12H0577-12	C-00-Total	

Microbac® LABORATORY SERVICES

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 109847

Instructions on back

RUSH

12H0577 Kevin Falvey
ER - South Holland
Baycote Mishawaka

08/14/2012

Client Name: Environmental Restoration
Address: 1666 Fabick Dr.
City, State, Zip: Fenton, MO 63026
Contact: John Behrens
Telephone #: 708-473-7124

Project: Baycote Metals
Location: Mishawaka, IN
PO #: 8391
Compliance Monitoring? [ ] Yes(1) [X] No
(1)Agency/Program

Turnaround Time:
[ ] Routine (7 working days)
[X] RUSH* (notify lab)
8/17/12 (needed by)

Report Type:
[ ] Results Only [ ] Level II
[ ] Level III [ ] Level III CLP-like
[ ] Level IV [ ] Level IV CLP-like
[ ] EDD

Sampled by (PRINT): Leland Meadows
Sampler Signature: [signature]
Sampler Phone #: 404.217.5212

Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address) J.behrens@erllc.com

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses / Preservative Types **	TCLP-VOC	TCLP-SVOC	TCLP-Metals	Total CN	Reactive CN	pH			For Lab Use Only 12H0577
A-83	S	✓			8/14/12	0900	1	N/A			X	X	X				run CN 1st then call (notify) of results 01/02
A-89	S		✓			1330	1		X	X	X	X	X	X			03/04
A-85	S		✓			1340	1		X	X	X	X	X	X			05/06
A-87	L		✓			1350	1				X	X	X				07/08
Z-27	L		✓			1400	1				X	X	X				09/10
C-ØØ	L		✓			1410	2		X	X	X	X	X	X			11/12

* ADDITIONAL SAMPLE TO BE DROPPED OFF ON MONDAY 8.20.12

Possible Hazard Identification: [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	8/14/12 1500	[signature]	8-14/12 1500
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
[signature]	8/14/12 1545	[signature]	8/14/12 1545

Sample temperature upon receipt in degrees C = 6°C

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Samples Submitted to:
[ ] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 103933

Instructions on back

Client Name: ER LLC
Address: 16660 CANAL ST
City, State, Zip: South Holland
Contact: John Behrens
Telephone #: 708 473-7124

Project: Bayrose Metal Finishing
Location: Mishawaka, IN
PO #:
Compliance Monitoring? [ ] Yes(1) [X] No
(1)Agency/Program

Turnaround Time: [ ] Routine (7 working days) [X] RUSH* (notify lab) CN-TOTAL 8/21 AM (needed by)

Report Type: [ ] Results Only [ ] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

Sampled by (PRINT): John Behrens
Sampler Signature:
Sampler Phone #:
Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [ ] e-mail (address)

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types **	pH	CN Total	CN Reactive					For Lab Use Only
227	WW		X		8/17	1540	1	N/NO		X	X					12H0577 09/10

Possible Hazard Identification: [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	8/19/12 1630		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
	8/20/12 0900		08/19/12 0900

Sample temperature upon receipt in degrees C = 0/I 16°

rev. 11/04/04

Page ____ of ____

August 28, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12H0577

Re: Baycote Mishawaka

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 12 sample(s) on 8/14/2012 3:45:00PM for the analyses presented in the following report as Work Order 12H0577.

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 Robert Crookston, Interim Managing Director at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12H0577

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12H0577-01	A-83-Total		08/14/2012 09:00	8/14/2012 3:45:00PM
12H0577-02	A-83		08/14/2012 09:00	8/14/2012 3:45:00PM
12H0577-03	A-89-Total		08/14/2012 13:30	8/14/2012 3:45:00PM
12H0577-04	A-89-TCLP		08/14/2012 13:30	8/14/2012 3:45:00PM
12H0577-05	A-85-Total		08/14/2012 13:40	8/14/2012 3:45:00PM
12H0577-06	A-85-TCLP		08/14/2012 13:40	8/14/2012 3:45:00PM
12H0577-08	A-87		08/14/2012 13:50	8/14/2012 3:45:00PM
12H0577-09	Z-27-Total		08/14/2012 14:00	8/14/2012 3:45:00PM
12H0577-10	Z-27		08/14/2012 14:00	8/14/2012 3:45:00PM
12H0577-11	C-00-Total		08/14/2012 14:10	8/14/2012 3:45:00PM
12H0577-12	C-00-Total		08/14/2012 14:10	8/14/2012 3:45:00PM

CASE NARRATIVE

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12H0577

B - the Method Blank associated with the A-89-TCLP, A-85-TCLP, A-87, and C-00-Total samples contained Lead at a level above the reporting limit. This is considered insignificant, as the concentrations in the samples were below the reporting limit.

The Laboratory Control Duplicate associated with A-89-TCLP, A-85-TCLP, and A-87 samples failed the precision criteria for Cyanide. The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

The Laboratory Control Duplicate associated with Z-27 failed the precision criteria for Reactive Cyanide. The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

The Matrix Spike and Matrix Spike Duplicate performed on the A-83-Total sample failed the accuracy criteria for Cadmium. This bias is due to the high indigenous analyte concentration (relative to the spike amount).

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-83-Total
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-01
Sampled: 08/14/2012 9:00
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/24/2012 09:25**	
Mercury	A	***ND***	0.00100		mg/L	1	08/24/2012 13:38
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **08/23/2012 08:46**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/23/2012 15:17
Barium	A	***0.912***	0.500		mg/L	1	08/23/2012 15:17
Cadmium	A	***4.67***	0.00200		mg/L	1	08/23/2012 15:17
Chromium	A	***0.0188***	0.00300		mg/L	1	08/23/2012 15:17
Lead	A	***ND***	0.00750		mg/L	1	08/23/2012 15:17
Selenium	A	***ND***	0.0300		mg/L	1	08/23/2012 15:17
Silver	A	***ND***	0.0100		mg/L	1	08/23/2012 15:17
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 10:50**	
Cyanide, Total	A	***810***	44		mg/Kg	100	08/17/2012 14:18

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-83
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-02
Sampled: 08/14/2012 9:00
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide	Method: **Chapter 7/9014**					Analyst: **AGRIE**	
	Prep Method: **Solid Reactive CN Distillation**					Prep Date/Time: **08/17/2012 08:00**	
Reactive Cyanide	A	***4.1***	4.0		mg/Kg	1	08/17/2012 14:49

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-89-Total
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-03
Sampled: 08/14/2012 13:30
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 10:50**	
Cyanide, Total	A	***290***	48		mg/Kg	100	08/17/2012 14:20
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **08/17/2012 12:58**	
pH	A	***9.49***	2.00		pH Units	1	08/17/2012 13:02

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-89-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-04
Sampled: 08/14/2012 13:30
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **clr** Prep Date/Time: **08/17/2012 06:51**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
2-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Hexachloroethane	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Nitrobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Pentachlorophenol	A	***ND***	0.25		mg/L	1	08/17/2012 12:48
Pyridine	A	***ND***	0.050		mg/L	1	08/17/2012 12:48
Total Cresol	M	***ND***	0.050		mg/L	1	08/17/2012 12:48
Surr: 2,4,6-Tribromophenol	S	107.00	47.8-138		%REC	1	08/17/2012 12:48
Surr: 2-Fluorobiphenyl	S	61.00	10-110		%REC	1	08/17/2012 12:48
Surr: 2-Fluorophenol	S	88.30	10-110		%REC	1	08/17/2012 12:48
Surr: Nitrobenzene-d5	S	70.70	10-110		%REC	1	08/17/2012 12:48
Surr: Phenol-d5	S	109.00	10-60.8	S	%REC	1	08/17/2012 12:48
Surr: Terphenyl-d14	S	73.20	16.8-110		%REC	1	08/17/2012 12:48
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **08/16/2012 08:35**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
2-Butanone	A	***ND***	0.10		mg/L	10	08/16/2012 19:13
Benzene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Chlorobenzene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Chloroform	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Tetrachloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Trichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:13
Vinyl chloride	A	***ND***	0.020		mg/L	10	08/16/2012 19:13
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	08/16/2012 19:13
Surr: 1,2-Dichloroethane-d4	S	112.00	74.5-132		%REC	10	08/16/2012 19:13
Surr: 4-Bromofluorobenzene	S	85.60	80-120		%REC	10	08/16/2012 19:13
Surr: Dibromofluoromethane	S	115.00	80-120		%REC	10	08/16/2012 19:13
Surr: Toluene-d8	S	99.90	80-120		%REC	10	08/16/2012 19:13
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:42

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-89-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-04
Sampled: 08/14/2012 13:30
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP	Method: **1311/6010B** Prep Method: **/SW846 3005A**					Analyst: **SA** Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/16/2012 16:52
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 16:52
Cadmium	A	***4.12***	0.00200		mg/L	1	08/16/2012 16:52
Chromium	A	***0.666***	0.00300		mg/L	1	08/16/2012 16:52
Lead	A	***ND***	0.00750	B	mg/L	1	08/16/2012 16:52
Selenium	A	***ND***	0.0300		mg/L	1	08/16/2012 16:52
Silver	A	***0.0129***	0.0100		mg/L	1	08/16/2012 16:52
Reactive Cyanide	Method: **Chapter 7/9014** Prep Method: **Solid Reactive CN Distillation**					Analyst: **AGRIE** Prep Date/Time: **08/17/2012 08:00**	
Reactive Cyanide	A	***ND***	4.0		mg/Kg	1	08/17/2012 14:50

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-85-Total
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-05
Sampled: 08/14/2012 13:40
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 10:50**	
Cyanide, Total	A	***690***	45		mg/Kg	100	08/17/2012 14:21
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **08/17/2012 12:58**	
pH	A	***7.77***	2.00		pH Units	1	08/17/2012 13:02

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-85-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-06
Sampled: 08/14/2012 13:40
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **clr** Prep Date/Time: **08/17/2012 06:51**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
2-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Hexachloroethane	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Nitrobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Pentachlorophenol	A	***ND***	0.25		mg/L	1	08/17/2012 13:28
Pyridine	A	***ND***	0.050		mg/L	1	08/17/2012 13:28
Total Cresol	M	***ND***	0.050		mg/L	1	08/17/2012 13:28
Surr: 2,4,6-Tribromophenol	S	113.00	47.8-138		%REC	1	08/17/2012 13:28
Surr: 2-Fluorobiphenyl	S	62.60	10-110		%REC	1	08/17/2012 13:28
Surr: 2-Fluorophenol	S	88.00	10-110		%REC	1	08/17/2012 13:28
Surr: Nitrobenzene-d5	S	71.80	10-110		%REC	1	08/17/2012 13:28
Surr: Phenol-d5	S	106.00	10-60.8	S	%REC	1	08/17/2012 13:28
Surr: Terphenyl-d14	S	90.60	16.8-110		%REC	1	08/17/2012 13:28
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **08/16/2012 08:35**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
2-Butanone	A	***ND***	0.10		mg/L	10	08/16/2012 19:44
Benzene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Chlorobenzene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Chloroform	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Tetrachloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Trichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 19:44
Vinyl chloride	A	***ND***	0.020		mg/L	10	08/16/2012 19:44
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	08/16/2012 19:44
Surr: 1,2-Dichloroethane-d4	S	114.00	74.5-132		%REC	10	08/16/2012 19:44
Surr: 4-Bromofluorobenzene	S	84.90	80-120		%REC	10	08/16/2012 19:44
Surr: Dibromofluoromethane	S	114.00	80-120		%REC	10	08/16/2012 19:44
Surr: Toluene-d8	S	101.00	80-120		%REC	10	08/16/2012 19:44
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:44

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-85-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12H0577-06
Sampled: 08/14/2012 13:40
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP	Method: **1311/6010B** Prep Method: **/SW846 3005A**					Analyst: **SA** Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/16/2012 17:10
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 17:10
Cadmium	A	***3.28***	0.00200		mg/L	1	08/16/2012 17:10
Chromium	A	***0.898***	0.00300		mg/L	1	08/16/2012 17:10
Lead	A	***ND***	0.00750	B	mg/L	1	08/16/2012 17:10
Selenium	A	***0.0573***	0.0300		mg/L	1	08/16/2012 17:10
Silver	A	***ND***	0.0100		mg/L	1	08/16/2012 17:10
Reactive Cyanide	Method: **Chapter 7/9014** Prep Method: **Solid Reactive CN Distillation**					Analyst: **AGRIE** Prep Date/Time: **08/17/2012 08:00**	
Reactive Cyanide	A	***ND***	4.0		mg/Kg	1	08/17/2012 14:44

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-87
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-08
Sampled: 08/14/2012 13:50
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA	Method: **1311/7470A** Prep Method: **/SW-846 7470**					Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:47
TCLP Metals by ICP	Method: **1311/6010B** Prep Method: **/SW846 3005A**					Analyst: **SA** Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***0.0356***	0.0100		mg/L	1	08/16/2012 17:33
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 17:33
Cadmium	A	***0.0261***	0.00200		mg/L	1	08/16/2012 17:33
Chromium	A	***2.22***	0.00300		mg/L	1	08/16/2012 17:33
Lead	A	***ND***	0.00750	B	mg/L	1	08/16/2012 17:33
Selenium	A	***ND***	0.0300		mg/L	1	08/16/2012 17:33
Silver	A	***0.0244***	0.0100		mg/L	1	08/16/2012 17:33

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: Z-27-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-09
Sampled: 08/14/2012 14:00
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Cyanide		Method: **SW-846 9012B**				Analyst: **AGRIE**	
		Prep Method: **Aqueous CN Distillation**				Prep Date/Time: **08/20/2012 10:40**	
Cyanide, Total	A	***4.0***	0.50		mg/L	1	08/20/2012 14:29
pH		Method: **SW-846 9045C**				Analyst: **TMG**	
						Prep Date/Time: **08/20/2012 14:40**	
pH	A	***10.2***	2.00		pH Units	1	08/20/2012 14:40

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: Z-27
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-10
Sampled: 08/14/2012 14:00
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA	Method: **1311/7470A** Prep Method: **/SW-846 7470**					Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:48
TCLP Metals by ICP	Method: **1311/6010B** Prep Method: **/SW846 3005A**					Analyst: **SA** Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***0.670***	0.0100		mg/L	1	08/16/2012 17:38
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 17:38
Cadmium	A	***0.00260***	0.00200		mg/L	1	08/16/2012 17:38
Chromium	A	***0.246***	0.00300		mg/L	1	08/16/2012 17:38
Lead	A	***ND***	0.0500		mg/L	1	08/16/2012 17:38
Selenium	A	***ND***	0.0300		mg/L	1	08/16/2012 17:38
Silver	A	***0.0526***	0.0100		mg/L	1	08/16/2012 17:38
Reactive Cyanide	Method: **Chapter 7/9014** Prep Method: **Aqueous Reactive CN Distillation**					Analyst: **AGRIE** Prep Date/Time: **08/20/2012 10:00**	
Reactive Cyanide	A	***ND***	4.0		mg/L	1	08/20/2012 14:35

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: C-00-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-11
Sampled: 08/14/2012 14:10
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **08/17/2012 10:50**	
Cyanide, Total	A	***ND***	50		mg/L	100	08/17/2012 14:25
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **08/17/2012 13:41**	
pH	A	***6.49***	2.00		pH Units	1	08/17/2012 13:42

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: C-00-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-12
Sampled: 08/14/2012 14:10
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **clr** Prep Date/Time: **08/17/2012 06:51**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
2-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Hexachloroethane	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Nitrobenzene	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Pentachlorophenol	A	***ND***	0.25		mg/L	1	08/17/2012 13:08
Pyridine	A	***ND***	0.050		mg/L	1	08/17/2012 13:08
Total Cresol	M	***ND***	0.050		mg/L	1	08/17/2012 13:08
Surr: 2,4,6-Tribromophenol	S	104.00	47.8-138		%REC	1	08/17/2012 13:08
Surr: 2-Fluorobiphenyl	S	56.50	10-110		%REC	1	08/17/2012 13:08
Surr: 2-Fluorophenol	S	74.10	10-110		%REC	1	08/17/2012 13:08
Surr: Nitrobenzene-d5	S	61.30	10-110		%REC	1	08/17/2012 13:08
Surr: Phenol-d5	S	93.10	10-60.8	S	%REC	1	08/17/2012 13:08
Surr: Terphenyl-d14	S	88.30	16.8-110		%REC	1	08/17/2012 13:08
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **08/16/2012 08:35**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
2-Butanone	A	***ND***	0.10		mg/L	10	08/16/2012 15:32
Benzene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Chlorobenzene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Chloroform	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Tetrachloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Trichloroethene	A	***ND***	0.050		mg/L	10	08/16/2012 15:32
Vinyl chloride	A	***ND***	0.020		mg/L	10	08/16/2012 15:32
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	08/16/2012 15:32
Surr: 1,2-Dichloroethane-d4	S	114.00	74.5-132		%REC	10	08/16/2012 15:32
Surr: 4-Bromofluorobenzene	S	86.40	80-120		%REC	10	08/16/2012 15:32
Surr: Dibromofluoromethane	S	113.00	80-120		%REC	10	08/16/2012 15:32
Surr: Toluene-d8	S	99.50	80-120		%REC	10	08/16/2012 15:32
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/16/2012 08:26**	
Mercury	A	***ND***	0.00100		mg/L	1	08/16/2012 16:49

Analytical Results

Date: *Tuesday, August 28, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: C-00-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H0577-12
Sampled: 08/14/2012 14:10
Received: 08/14/2012 15:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **1311/6010B**				Analyst: **SA**	
TCLP Metals by ICP		Prep Method: **/SW846 3005A**				Prep Date/Time: **08/16/2012 12:37**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/16/2012 17:44
Barium	A	***ND***	0.500		mg/L	1	08/16/2012 17:44
Cadmium	A	***0.00310***	0.00200		mg/L	1	08/16/2012 17:44
Chromium	A	***0.00920***	0.00300		mg/L	1	08/16/2012 17:44
Lead	A	***ND***	0.00750	B	mg/L	1	08/16/2012 17:44
Selenium	A	***ND***	0.0300		mg/L	1	08/16/2012 17:44
Silver	A	***ND***	0.0100		mg/L	1	08/16/2012 17:44

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

[1] The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
[2] The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
[3] Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
[4] Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
[5] Indiana DEM approved support laboratory for solid waste and wastewater analyses
[6] Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
[7] Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
[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)
[9] Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
[10] North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
[11] Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
[12] Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

COOLER INSPECTION

Date: Tuesday, August 28, 2012

Client Name: Environmental Restoration

Date/Time Received: 08/14/2012 15:45

Work Order Number: 12H0577

Received by: Dave Bryant

Checklist completed by: 8/14/2012 5:49:00PM | Dave Bryant

Reviewed by: 8/23/2012 | KGF

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 6.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12H0577-01	A-83-Total	
12H0577-02	A-83	
12H0577-03	A-89-Total	
12H0577-04	A-89-TCLP	
12H0577-05	A-85-Total	
12H0577-06	A-85-TCLP	
12H0577-07	A-87-Total	
12H0577-08	A-87	
12H0577-09	Z-27-Total	
12H0577-10	Z-27	
12H0577-11	C-00-Total	
12H0577-12	C-00-Total	

Microbac® LABORATORY SERVICES

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 109847

Instructions on back

RUSH

12H0577 Kevin Falvey
ER - South Holland
Baycote Mishawaka

08/14/2012

Client Name: Environmental Restoration
Address: 1666 Fabick Dr.
City, State, Zip: Fenton, MO 63026
Contact: John Behrens
Telephone #: 708-473-7124

Project: Baycote Metals
Location: Mishawaka, IN
PO #: 8391
Compliance Monitoring? [ ] Yes(1) [X] No
(1)Agency/Program

Turnaround Time:
[ ] Routine (7 working days)
[X] RUSH* (notify lab)
8/17/12 (needed by)

Report Type:
[ ] Results Only [ ] Level II
[ ] Level III [ ] Level III CLP-like
[ ] Level IV [ ] Level IV CLP-like
[ ] EDD

Sampled by (PRINT): Leland Meadows
Sampler Signature: [signature]
Sampler Phone #: 404.217.5212

Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address) J.behrens@erllc.com

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses / Preservative Types **	TCLP-VOC	TCLP-SVOC	TCLP-Metals	Total CN	Reactive CN	pH			For Lab Use Only 12H0577
A-83	S	✓			8/14/12	0900	1	N/A			X	X	X				run CN 1st then call (notify) of results 01/02
A-89	S		✓			1330	1		X	X	X	X	X	X			03/04
A-85	S		✓			1340	1		X	X	X	X	X	X			05/06
A-87	L		✓			1350	1				X	X	X				07/08
Z-27	L		✓			1400	1				X	X	X				09/10
C-ØØ	L		✓			1410	2		X	X	X	X	X	X			11/12

* ADDITIONAL SAMPLE TO BE DROPPED OFF ON MONDAY 8.20.12

Possible Hazard Identification: [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	8/14/12 1500	[signature]	8-14/12 1500
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
[signature]	8/14/12 1545	[signature]	8/14/12 1545

Sample temperature upon receipt in degrees C = 6°C

rev. 11/04/04

Page 1 of 1

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Samples Submitted to:
[ ] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 103933

Instructions on back

Client Name: ER LLC
Address: 16660 CANAL ST
City, State, Zip: South Holland
Contact: John Behrens
Telephone #: 708 473-7124

Project: Bayrose Metal Finishing
Location: Mishawaka, IN
PO #:
Compliance Monitoring? [ ] Yes(1) [X] No
(1)Agency/Program

Turnaround Time: [ ] Routine (7 working days) [X] RUSH* (notify lab) CN-TOTAL 8/21 AM (needed by)

Report Type: [ ] Results Only [ ] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

Sampled by (PRINT): John Behrens
Sampler Signature:
Sampler Phone #:
Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [ ] e-mail (address)

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types **	pH	CN Total	CN Reactive					For Lab Use Only
227	WW		X		8/17	1540	1	N/NO		X	X					12H0577 09/10

Possible Hazard Identification: [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	8/19/12 1630		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
	8/20/12 0900		08/19/12 0900

Sample temperature upon receipt in degrees C = 0/I 16°

rev. 11/04/04

Page ____ of ____

Bryniarski, Jeff

From: Leland Meadows [l.meadows@erllc.com]
Sent: Tuesday, August 21, 2012 6:46 AM
To: Paul Atkociunas; Bryniarski, Jeff
Cc: John Behrens
Subject: RE: 12H0577 / Baycote Metals - Area A, C, and Z sampling scheme

All,

The following pit, vat, and floor samples were combined as a composite during the sampling and analytical analysis of Microbac 12H0577:

a. A-83 = A-83 only
b. A-89 = A-89 and A-86
c. A-85 = A-82, A-84, and A-85
d. A-87 = A-87 and A-88
e. Z-27 = Z-27 and Z-28
f. C-00 = 5-point composite of standing water in Area C

Thanks,

Leland J. Meadows, CHMM
Environmental Restoration, LLC
6940 Commercial Dr.
Morrow, GA 30260
404.217.5212

From: John Behrens
Sent: Tuesday, August 21, 2012 6:36 AM
To: Leland Meadows; Paul Atkociunas; Bryniarski, Jeff
Subject: FW: 12H0577 / Baycote Metals

From: Kevin Falvey [mailto:kevin.falvey@microbac.com]
Sent: Monday, August 20, 2012 5:27 PM
To: John Behrens
Subject: 12H0577 / Baycote Metals

Dear Mr. Behrens:

This report is for the samples collected on 8/14/2012.

Thank you,

Kevin G. Falvey, CHMM

Microbac Laboratories, Inc.
250 W. 84th Drive
Merrillville, IN 46410

(219) 769-8378 - Office
(219) 746-5618 - Cell
kevin.falvey@microbac.com

ATTACHMENT B7

August 31, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12H1074

Re: Baycote Mishawaka

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 3 sample(s) on 8/27/2012 10:10:00AM for the analyses presented in the following report as Work Order 12H1074.

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 Robert Crookston, Interim Managing Director at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Friday, August 31, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12H1074

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12H1074-01	A-87-Total		08/24/2012 09:00	8/27/2012 10:10:00AM
12H1074-02	A-87		08/24/2012 09:00	8/27/2012 10:10:00AM
12H1074-03	BS-001		08/24/2012 09:45	8/27/2012 10:10:00AM

CASE NARRATIVE

Date: *Friday, August 31, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12H1074

B - the Method Blank associated with the BS-001 sample contained Chromium at a level above the reporting limit. This is considered insignificant, as the concentration in the sample was more than ten-times that measured in the blank.

The Laboratory Control Duplicate associated with A-87 sample failed the precision criteria for Reactive Cyanide. The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

Analytical Results

Date: *Friday, August 31, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-87-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H1074-01
Sampled: 08/24/2012 9:00
Received: 08/27/2012 10:10

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **SW-846 9012B**				Analyst: **GRIEF**	
Total Cyanide		Prep Method: **Aqueous CN Distillation**				Prep Date/Time: **08/29/2012 10:30**	
Cyanide, Total	A	***3100***	50		mg/L	100	08/29/2012 15:03

Analytical Results

Date: *Friday, August 31, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: A-87
Sample Description:
Matrix: Aqueous

Work Order/ID: 12H1074-02
Sampled: 08/24/2012 9:00
Received: 08/27/2012 10:10

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Aqueous Reactive CN Distillation**				Prep Date/Time: **08/31/2012 08:30**	
Reactive Cyanide	A	***20***	2.0		mg/L	1	08/31/2012 16:03

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Friday, August 31, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: BS-001
Sample Description:
Matrix: Solid

Work Order/ID: 12H1074-03
Sampled: 08/24/2012 9:45
Received: 08/27/2012 10:10

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **08/28/2012 09:11**	
Mercury	A	***0.0176***	0.00300		mg/L	3	08/28/2012 13:18
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **08/28/2012 08:49**	
Arsenic	A	***ND***	0.0100		mg/L	1	08/28/2012 11:25
Barium	A	***0.543***	0.500		mg/L	1	08/28/2012 11:25
Cadmium	A	***5.05***	0.00200		mg/L	1	08/28/2012 11:25
Chromium	A	***1.54***	0.00300	B	mg/L	1	08/28/2012 11:25
Lead	A	***ND***	0.00750		mg/L	1	08/28/2012 11:25
Selenium	A	***ND***	0.0300		mg/L	1	08/28/2012 11:25
Silver	A	***10.9***	0.500		mg/L	1	08/29/2012 11:20
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **08/29/2012 14:25**	
pH	A	***10.4***	2.00		pH Units	1	08/29/2012 15:24

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

[1] The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
[2] The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
[3] Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
[4] Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
[5] Indiana DEM approved support laboratory for solid waste and wastewater analyses
[6] Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
[7] Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
[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)
[9] Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
[10] North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
[11] Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
[12] Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

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COOLER INSPECTION

Date: Friday, August 31, 2012

Client Name: Environmental Restoration

Date/Time Received: 08/27/2012 10:10

Work Order Number: 12H1074

Received by: Dave Bryant

Checklist completed by: 8/27/2012 11:15:00AM | Dave Bryant

Reviewed by: 8/27/2012 | KGF

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 6.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12H1074-01	A-87-Total	Possible High Cn
12H1074-02	A-87	Possible High Cn
12H1074-03	BS-001	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

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Samples Submitted to: [X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664

[] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

RUSH

Chain of Custody Record

Number 08142012-01

Instructions on back

12H1074 Kevin Falvey
ER - South Holland
Baycote Mishawaka
08/27/2012

ent Name	Environmental Restoration, LLC	Project	Baycote Metals
dress	1666 Fabick Dr	Location	Mishawaka, IN
y, State, Zip	Fenton, MO 63026	PO #	8391
ntact	John Behrens	Compliance Monitoring?	[] Yes [X] No
lephone #	708-473-7124	(1)Agency/Program	

Turnaround Time: [] Routine (5 working days); [X] RUSH* (notify lab); 8/30/2012 (needed by)

Report Type: [] Results Only; [ ] Level II; [ ] Level III; [ ] Level III CLP-like; [ ] Level IV; [ ] Level IV CLP-like; [ ] EDD

mpled by (PRINT): Leland Meadows — Sampler Signature: [signature] — Sampler Phone #: 708-473-7124

nd Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (addresses) J.behrens@erllc.com & l.meadows@erllc.com

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

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → / Preservative Types ** ↓	TCLP - Volitales	TCLP - Semi Vol	TCLP - Metals	Total CN	Reactive CN	PH			For Lab Use Only
A-87	WW		X		8/24/2012	900	1	N/A				X	X				Possible high CN-
BS-001	DW		X		8/24/2012	945	2				X			X			

Possible Hazard Identification: [] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	8/24/12 1500	[signature]	8-27-2012 9:30am
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
[signature]	8-27-2012 10:10am	[signature]	8/27/12 1010

Sample temperature upon receipt in degrees C: 6°C OT

rev.11/052010

ATTACHMENT B8

September 12, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12I0041

Re: Baycote Mishawaka

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 5 sample(s) on 9/4/2012 12:30:00PM for the analyses presented in the following report as Work Order 12I0041.

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 Robert Crookston, Interim Managing Director at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Karen Ziolkowski
Senior Project Manager

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

WORK ORDER SAMPLE SUMMARY

Date: *Wednesday, September 12, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12I0041

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12I0041-01	Z-NL01		08/31/2012 09:00	9/4/2012 12:30:00PM
12I0041-02	Z-NL01-Total		08/31/2012 09:00	9/4/2012 12:30:00PM
12I0041-03	CNL-08		08/31/2012 09:45	9/4/2012 12:30:00PM
12I0041-04	CNL-08-Total		08/31/2012 09:45	9/4/2012 12:30:00PM
12I0041-05	CNL-08-Amen		08/31/2012 09:45	9/4/2012 12:30:00PM

CASE NARRATIVE

Date: *Wednesday, September 12, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12I0041

The Laboratory Control Duplicate associated with the Z-NL01, Z-NL01-Total and CNL-08 samples failed the precision criteria for Reactive Cyanide. The accuracy criteria was met by the Laboratory Control Sample and Laboratory Control Duplicate.

Analytical Results

Date: *Wednesday, September 12, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: Z-NL01
Sample Description:
Matrix: Aqueous

Work Order/ID: 12I0041-01
Sampled: 08/31/2012 9:00
Received: 09/04/2012 12:30

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **/SW846 3510**				Analyst: **clr** Prep Date/Time: **09/10/2012 06:59**	
1,4-Dichlorobenzene	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
2,4,5-Trichlorophenol	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
2,4,6-Trichlorophenol	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
2,4-Dinitrotoluene	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
2-Methylphenol	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
3/4-Methylphenol	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
Hexachlorobenzene	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
Hexachlorobutadiene	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
Hexachloroethane	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
Nitrobenzene	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
Pentachlorophenol	A	***ND***	1.0		mg/L	4	09/10/2012 15:17
Pyridine	A	***ND***	0.20		mg/L	4	09/10/2012 15:17
Total Cresol	M	***ND***	0.20		mg/L	4	09/10/2012 15:17
Surr: 2,4,6-Tribromophenol	S	30.50	47.8-138	S	%REC	4	09/10/2012 15:17
Surr: 2-Fluorobiphenyl	S	17.80	10-110		%REC	4	09/10/2012 15:17
Surr: 2-Fluorophenol	S	21.30	10-110		%REC	4	09/10/2012 15:17
Surr: Nitrobenzene-d5	S	19.80	10-110		%REC	4	09/10/2012 15:17
Surr: Phenol-d5	S	26.70	10-60.8		%REC	4	09/10/2012 15:17
Surr: Terphenyl-d14	S	28.50	16.8-110		%REC	4	09/10/2012 15:17
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **09/10/2012 08:42**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	09/10/2012 14:32
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	09/10/2012 14:32
2-Butanone	A	***ND***	0.10		mg/L	10	09/10/2012 14:32
Benzene	A	***ND***	0.050		mg/L	10	09/10/2012 14:32
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	09/10/2012 14:32
Chlorobenzene	A	***ND***	0.050		mg/L	10	09/10/2012 14:32
Chloroform	A	***ND***	0.050		mg/L	10	09/10/2012 14:32
Tetrachloroethene	A	***ND***	0.050		mg/L	10	09/10/2012 14:32
Trichloroethene	A	***ND***	0.050		mg/L	10	09/10/2012 14:32
Vinyl chloride	A	***ND***	0.020		mg/L	10	09/10/2012 14:32
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	09/10/2012 14:32
Surr: 1,2-Dichloroethane-d4	S	107.00	74.5-132		%REC	10	09/10/2012 14:32
Surr: 4-Bromofluorobenzene	S	94.60	80-120		%REC	10	09/10/2012 14:32
Surr: Dibromofluoromethane	S	101.00	80-120		%REC	10	09/10/2012 14:32
Surr: Toluene-d8	S	97.50	80-120		%REC	10	09/10/2012 14:32
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **09/07/2012 09:34**	
Mercury	A	***ND***	0.00100		mg/L	1	09/07/2012 14:25

Analytical Results

Date: *Wednesday, September 12, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: Z-NL01
Sample Description:
Matrix: Aqueous

Work Order/ID: 12I0041-01
Sampled: 08/31/2012 9:00
Received: 09/04/2012 12:30

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/07/2012 10:20**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/07/2012 16:10
Barium	A	***ND***	0.500		mg/L	1	09/07/2012 16:10
Cadmium	A	***ND***	0.00200		mg/L	1	09/07/2012 16:10
Chromium	A	***0.0944***	0.00300		mg/L	1	09/07/2012 16:10
Lead	A	***ND***	0.00750		mg/L	1	09/07/2012 16:10
Selenium	A	***ND***	0.0300		mg/L	1	09/07/2012 16:10
Silver	A	***ND***	0.0500		mg/L	1	09/07/2012 16:10
Nitrogen, Ammonia as N		Method: **EPA 350.1 Rev 2.0** Prep Method: **Aqueous Ammonia Distillation**				Analyst: **GRIEF** Prep Date/Time: **09/11/2012 09:05**	
Nitrogen, Ammonia (As N)	A	***7.4***	0.10		mg/L	1	09/11/2012 11:30
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **09/11/2012 12:52**	
pH	A	***7.00***	2.00		pH Units	1	09/11/2012 12:54
Reactive Cyanide		Method: **Chapter 7/9014** Prep Method: **Aqueous Reactive CN Distillation**				Analyst: **GRIEF** Prep Date/Time: **09/10/2012 10:30**	
Reactive Cyanide	A	***ND***	2.0		mg/L	1	09/10/2012 16:09

Analytical Results

Date: *Wednesday, September 12, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: Z-NL01-Total
Sample Description:
Matrix: Aqueous

Work Order/ID: 12I0041-02
Sampled: 08/31/2012 9:00
Received: 09/04/2012 12:30

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **GRIEF**	
Reactive Cyanide		Prep Method: **Aqueous Reactive CN Distillation**				Prep Date/Time: **09/10/2012 10:30**	
Reactive Cyanide	A	***ND***	2.0		mg/L	1	09/10/2012 16:11

Analytical Results

Date: *Wednesday, September 12, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: CNL-08
Sample Description:
Matrix: Aqueous

Work Order/ID: 12I0041-03
Sampled: 08/31/2012 9:45
Received: 09/04/2012 12:30

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **/SW-846 7470**				Analyst: **SA** Prep Date/Time: **09/07/2012 09:34**	
Mercury	A	***4.01***	1.00		mg/L	1000	09/07/2012 15:12
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/07/2012 10:20**	
Arsenic	A	***0.126***	0.0100		mg/L	1	09/07/2012 16:26
Barium	A	***ND***	0.500		mg/L	1	09/07/2012 16:26
Cadmium	A	***7.04***	0.00200		mg/L	1	09/07/2012 16:26
Chromium	A	***107***	0.00300	E	mg/L	1	09/07/2012 16:26
Lead	A	***0.202***	0.00750		mg/L	1	09/07/2012 16:26
Selenium	A	***0.251***	0.0300		mg/L	1	09/07/2012 16:26
Silver	A	***0.267***	0.0100	B	mg/L	1	09/07/2012 16:26
pH		Method: **SW-846 9045C**				Analyst: **EP** Prep Date/Time: **09/11/2012 12:52**	
pH	A	***9.37***	2.00		pH Units	1	09/11/2012 12:54
Reactive Cyanide		Method: **Chapter 7/9014** Prep Method: **Aqueous Reactive CN Distillation**				Analyst: **GRIEF** Prep Date/Time: **09/10/2012 10:30**	
Reactive Cyanide	A	***5.8***	2.0		mg/L	1	09/10/2012 16:05

Analytical Results

Date: *Wednesday, September 12, 2012*

Client:	Environmental Restoration		
Client Project:	Baycote Mishawaka		
Client Sample ID:	CNL-08-Total	**Work Order/ID:**	12I0041-04
Sample Description:		**Sampled:**	08/31/2012 9:45
Matrix:	Aqueous	**Received:**	09/04/2012 12:30

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **SW-846 9012B**					Analyst: **GRIEF**
Total Cyanide		Prep Method: **Aqueous CN Distillation**					Prep Date/Time: **09/10/2012 10:40**
Cyanide, Total	A	***280***	50		mg/L	100	09/10/2012 16:07

Analytical Results

Date: *Wednesday, September 12, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: CNL-08-Amen
Sample Description:
Matrix: Aqueous

Work Order/ID: 12I0041-05
Sampled: 08/31/2012 9:45
Received: 09/04/2012 12:30

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **SM 4500 CN- C, G-1999**				Analyst: **AGRIE**	
Amenable Cyanide		Prep Method: **SW846 9012B / SM-4500CN CG 18th Ed**				Prep Date/Time: **09/11/2012 11:20**	
Cyanide, Amenable to Chlorination	A	***270***	5.0		mg/L	10	09/11/2012 14:58

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

1. The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
2. The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
3. Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
4. Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
5. Indiana DEM approved support laboratory for solid waste and wastewater analyses
6. Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
7. Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
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)
9. Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
10. North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
11. Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
12. Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

COOLER INSPECTION

Date: Wednesday, September 12, 2012

Client Name: Environmental Restoration

Date/Time Received: 09/04/2012 12:30

Work Order Number: 12I0041

Received by: Ken Smith

Checklist completed by: 9/4/2012 1:25:00PM | Dave Bryant

Reviewed by: 9/4/2012 | KGF

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 1.80°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12I0041-01	Z-NL01	POSSIBLE HIGH METALS
12I0041-02	Z-NL01-Total	POSSIBLE HIGH METALS
12I0041-03	CNL-08	POSSIBLE HIGH METALS/Cn
12I0041-04	CNL-08-Total	POSSIBLE HIGH METALS/Cn
12I0041-05	CNL-08-Amen	POSSIBLE HIGH METALS/Cn

Microbac

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 08312012-01

Instructions on back

12I0041 Kevin Falvey
ER - South Holland
Baycote Mishawaka
09/04/2012

Client Name	Environmental Restoration, LLC	Project	Baycote Metals
Address	1666 Fabick Dr	Location	Mishawaka, IN
City, State, Zip	Fenton, MO 63026	PO #	8391
Contact	John Behrens	Compliance Monitoring?	[] Yes [X] No
Telephone #	708-473-7124	(1)Agency/Program	

Turnaround Time
[X] Routine (5 working days)
[] RUSH* (notify lab)
9/7/2012 (needed by)

Report Type
[] Results Only [ ] Level II
[ ] Level III [ ] Level III CLP-like
[ ] Level IV [ ] Level IV CLP-like
[ ] EDD

Sampled by (PRINT): Leland Meadows
Sampler Signature: [signature]
Sampler Phone #: 708-473-7124
Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (addresses) J.behrens@erllc.com & l.meadows@erllc.com

* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** **Preservative Types:** (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types ** ↓	TCLP - Volitales	TCLP - Semi Vol	TCLP - Metals	Total CN	Reactive CN	PH	Ammonia	Amen. Hc CN	For Lab Use Only 12I0041	
Z-NL01	WW		X		8/31/2012	900	5	N/A	X	X	X	X	X	X	X		Possible high metals	01/02
CNL-08	WW		X		8/31/2012	945	2				X	X	X	X		X	Possible high CN Metals	03/04/05

Possible Hazard Identification [] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Sample temperature upon receipt in degrees C = 0/1

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	8/31/12 1230	[signature]	8/31/12 1230
[signature]	9/4/12 0730	[signature]	9/4/12 0800
[signature]	9/4/12 1235	Ben Smith	9/4/12 1235

Rev.11/052010

ATTACHMENT B9

September 18, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12I0277

Re: Baycote Metals, Mishawaka IN

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 7 sample(s) on 9/10/2012 3:35:00PM for the analyses presented in the following report as Work Order 12I0277.

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 Robert Crookston, Interim Managing Director at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

WORK ORDER SAMPLE SUMMARY

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Project: Baycote Metals, Mishawaka IN
Lab Order: 12I0277

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12I0277-01	C - Floor		09/07/2012 13:00	9/10/2012 3:35:00PM
12I0277-02	H - 22		09/07/2012 13:30	9/10/2012 3:35:00PM
12I0277-03	J - 12		09/07/2012 13:45	9/10/2012 3:35:00PM
12I0277-04	E - 6		09/07/2012 14:00	9/10/2012 3:35:00PM
12I0277-05	C - 13		09/07/2012 14:15	9/10/2012 3:35:00PM
12I0277-06	BL - 10		09/07/2012 14:30	9/10/2012 3:35:00PM
12I0277-07	BL - 10		09/07/2012 14:30	9/10/2012 3:35:00PM

CASE NARRATIVE

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Project: Baycote Metals, Mishawaka IN
Lab Order: 12I0277

B - the Method Blank associated with the H-22 sample contained Chromium at a level above the reporting limit. This is considered insignificant, as the concentration in the sample was more than ten-times that measured in the blank.

The Matrix Spike and Matrix Spike Duplicate performed on this sample failed the accuracy and precision criteria for for Silver, Arsenic, Barium, Cadmium, Chromium, Lead, and Selenium due to analyst error. These samples were not spiked for these compounds.

Analytical Results

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals, Mishawaka IN
Client Sample ID: C - Floor
Sample Description:
Matrix: Solid

Work Order/ID: 12I0277-01
Sampled: 09/07/2012 13:00
Received: 09/10/2012 15:35

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/13/2012 10:22**	
Mercury	A	***ND***	0.00100		mg/L	1	09/13/2012 15:06
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/12/2012 10:14**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/12/2012 13:59
Barium	A	***ND***	0.500		mg/L	1	09/12/2012 13:59
Cadmium	A	***3.90***	0.00200		mg/L	1	09/12/2012 13:59
Chromium	A	***2.39***	0.00300		mg/L	1	09/12/2012 13:59
Lead	A	***0.00890***	0.00750		mg/L	1	09/12/2012 13:59
Selenium	A	***ND***	0.0300		mg/L	1	09/12/2012 13:59
Silver	A	***ND***	0.0100		mg/L	1	09/12/2012 13:59

Analytical Results

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals, Mishawaka IN
Client Sample ID: H - 22
Sample Description:
Matrix: Solid

Work Order/ID: 12I0277-02
Sampled: 09/07/2012 13:30
Received: 09/10/2012 15:35

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/13/2012 10:22**	
Mercury	A	***ND***	0.00100		mg/L	1	09/13/2012 15:13
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/12/2012 10:14**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/12/2012 14:57
Barium	A	***ND***	0.500		mg/L	1	09/12/2012 14:57
Cadmium	A	***0.511***	0.00200		mg/L	1	09/12/2012 14:57
Chromium	A	***1.47***	0.00300	B	mg/L	1	09/12/2012 14:57
Lead	A	***ND***	0.00750		mg/L	1	09/12/2012 14:57
Selenium	A	***ND***	0.0300		mg/L	1	09/12/2012 14:57
Silver	A	***ND***	0.0100		mg/L	1	09/12/2012 14:57

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals, Mishawaka IN
Client Sample ID: J - 12
Sample Description:
Matrix: Solid

Work Order/ID: 12I0277-03
Sampled: 09/07/2012 13:45
Received: 09/10/2012 15:35

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/14/2012 12:25**	
Mercury	A	***ND***	0.00100		mg/L	1	09/14/2012 16:33
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/14/2012 11:22**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/14/2012 15:12
Barium	A	***1.08***	0.500		mg/L	1	09/14/2012 15:12
Cadmium	A	***8.03***	0.00200		mg/L	1	09/14/2012 15:12
Chromium	A	***16.2***	0.00300		mg/L	1	09/14/2012 15:12
Lead	A	***0.116***	0.00750		mg/L	1	09/14/2012 15:12
Selenium	A	***ND***	0.0300		mg/L	1	09/14/2012 15:12
Silver	A	***ND***	0.100		mg/L	1	09/14/2012 15:12

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals, Mishawaka IN
Client Sample ID: E - 6
Sample Description:
Matrix: Solid

Work Order/ID: 12I0277-04
Sampled: 09/07/2012 14:00
Received: 09/10/2012 15:35

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/14/2012 12:25**	
Mercury	A	***ND***	0.00100		mg/L	1	09/14/2012 16:20
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/14/2012 11:22**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/14/2012 14:44
Barium	A	***0.627***	0.500		mg/L	1	09/14/2012 14:44
Cadmium	A	***0.104***	0.00200		mg/L	1	09/14/2012 14:44
Chromium	A	***0.237***	0.00300		mg/L	1	09/14/2012 14:44
Lead	A	***ND***	0.00750		mg/L	1	09/14/2012 14:44
Selenium	A	***ND***	0.0300		mg/L	1	09/14/2012 14:44
Silver	A	***ND***	0.0100		mg/L	1	09/14/2012 14:44

Analytical Results

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals, Mishawaka IN
Client Sample ID: C - 13
Sample Description:
Matrix: Solid

Work Order/ID: 12I0277-05
Sampled: 09/07/2012 14:15
Received: 09/10/2012 15:35

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/14/2012 12:25**	
Mercury	A	***ND***	0.00100		mg/L	1	09/14/2012 16:34
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/14/2012 11:22**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/14/2012 15:18
Barium	A	***3.09***	0.500		mg/L	1	09/14/2012 15:18
Cadmium	A	***0.0643***	0.00200		mg/L	1	09/14/2012 15:18
Chromium	A	***0.175***	0.00300		mg/L	1	09/14/2012 15:18
Lead	A	***ND***	0.00750		mg/L	1	09/14/2012 15:18
Selenium	A	***ND***	0.0300		mg/L	1	09/14/2012 15:18
Silver	A	***ND***	0.100		mg/L	1	09/14/2012 15:18

Analytical Results

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals, Mishawaka IN
Client Sample ID: BL - 10
Sample Description:
Matrix: Aqueous

Work Order/ID: 12I0277-06
Sampled: 09/07/2012 14:30
Received: 09/10/2012 15:35

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/14/2012 12:25**	
Mercury	A	***0.0380***	0.0100		mg/L	10	09/14/2012 16:26
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/14/2012 11:22**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/14/2012 14:50
Barium	A	***ND***	0.500		mg/L	1	09/14/2012 14:50
Cadmium	A	***2.82***	0.00200		mg/L	1	09/14/2012 14:50
Chromium	A	***207***	0.00300	E	mg/L	1	09/14/2012 14:50
Lead	A	***0.136***	0.00750		mg/L	1	09/14/2012 14:50
Selenium	A	***ND***	0.0300		mg/L	1	09/14/2012 14:50
Silver	A	***8.11***	0.0100	E	mg/L	1	09/14/2012 14:50
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **09/14/2012 10:35**	
Cyanide, Total	A	***31***	5.0		mg/L	100	09/14/2012 14:51
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **09/17/2012 12:50**	
pH	A	***11.4***	2.00		pH Units	1	09/17/2012 13:26

Analytical Results

Date: *Tuesday, September 18, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals, Mishawaka IN
Client Sample ID: BL - 10
Sample Description:
Matrix: Aqueous

Work Order/ID: 12I0277-07
Sampled: 09/07/2012 14:30
Received: 09/10/2012 15:35

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Aqueous Reactive CN Distillation**				Prep Date/Time: **09/14/2012 10:00**	
Reactive Cyanide	A	***ND***	2.0		mg/L	1	09/14/2012 14:48

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

CERTIFICATIONS

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2. The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
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4. Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
5. Indiana DEM approved support laboratory for solid waste and wastewater analyses
6. Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
7. Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
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9. Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
10. North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
11. Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
12. Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

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COOLER INSPECTION

Date: Tuesday, September 18, 2012

Client Name: Environmental Restoration

Date/Time Received: 09/10/2012 15:35

Work Order Number: 12I0277

Received by: Dave Bryant

Checklist completed by: 9/10/2012 4:41:00PM | James Meyer

Reviewed by: 9/12/2012 | KAZ

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 5.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments: Sample label collection date was 9/7/12.

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

Sample ID	Client Sample ID	Comments
12I0277-01	C - Floor	Likely High In Metals
12I0277-02	H - 22	Likely High In Metals
12I0277-03	J - 12	Likely High In Metals
12I0277-04	E - 6	Likely High In Metals
12I0277-05	C - 13	Likely High In Metals
12I0277-06	BL - 10	Likely High In Metals
12I0277-07	BL - 10	Likely High In Metals

Microbac

Samples Submitted to: [X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664

[] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 09072012-01

Instructions on back

Client Name	Environmental Restoration, LLC	Project	Baycote Metals
Address	1666 Fabick Dr	Location	Mishawaka, IN
City, State, Zip	Fenton, MO 63026	PO #	8391
Contact	John Behrens	Compliance Monitoring?	[] Yes [X] No
Telephone #	708-473-7124	(1)Agency/Program	

Turnaround Time: [X] Routine (5 working days); [] RUSH* (notify lab); 9/14/2012 (needed by)

Report Type: [] Results Only; [ ] Level II; [ ] Level III; [ ] Level III CLP-like; [ ] Level IV; [ ] Level IV CLP-like; [ ] EDD

Sampled by (PRINT): Leland Meadows — Sampler Signature: [signature] — Sampler Phone #: 708-473-7124

Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (addresses) J.behrens@erllc.com & l.meadows@erllc.com

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

** **Preservative Types:** (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types **	TCLP - Volitales	TCLP - Semi Vol	TCLP - Metals	Total CN	Reactive CN	PH	Ammonia		For Lab Use Only 12I0277
C - Floor	S		X		9/14/2012	1300	1	N/A			X						01
H-22	S		X		9/14/2012	1330	1	N/A			X						02
J-12	S	X			9/14/2012	1345	1	N/A			X						03
E-6	S		X		9/14/2012	1400	1	N/A			X						04
C-13	S		X		9/14/2012	1415	1	N/A			X						05
BL-10	WW		X		9/14/2012	1430	3	N/A			X	X	X	X			06/07

Possible Hazard Identification: [] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	9/7/12 1500		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
[signature]	9/10/12 1535	[signature]	9/10/12 1535

Sample temperature upon receipt in degrees C = 5.0

Page 1 of 1

rev.11/052010

12I0277 Kevin Falvey
ER - South Holland
Baycote Metal Mishawaka
09/10/2012

ATTACHMENT B10

September 21, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12I0418

Re: Baycote Mishawaka

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 1 sample(s) on 9/13/2012 9:00:00AM for the analyses presented in the following report as Work Order 12I0418.

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 Robert Crookston, Interim Managing Director at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Friday, September 21, 2012*

Client: Environmental Restoration
Project: Baycote Mishawaka
Lab Order: 12I0418

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12I0418-01	NS5-15		09/12/2012 15:00	9/13/2012 9:00:00AM

Analytical Results

Date: *Friday, September 21, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: NS5-15
Sample Description:
Matrix: Solid

Work Order/ID: 12I0418-01
Sampled: 09/12/2012 15:00
Received: 09/13/2012 9:00

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **clr** Prep Date/Time: **09/19/2012 08:33**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
2-Methylphenol	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
Hexachloroethane	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
Nitrobenzene	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
Pentachlorophenol	A	***ND***	0.25		mg/L	1	09/19/2012 13:42
Pyridine	A	***ND***	0.050		mg/L	1	09/19/2012 13:42
Total Cresol	M	***ND***	0.050		mg/L	1	09/19/2012 13:42
Surr: 2,4,6-Tribromophenol	S	112.00	47.8-138		%REC	1	09/19/2012 13:42
Surr: 2-Fluorobiphenyl	S	64.80	10-110		%REC	1	09/19/2012 13:42
Surr: 2-Fluorophenol	S	70.70	10-110		%REC	1	09/19/2012 13:42
Surr: Nitrobenzene-d5	S	66.80	10-110		%REC	1	09/19/2012 13:42
Surr: Phenol-d5	S	77.90	10-60.8	S	%REC	1	09/19/2012 13:42
Surr: Terphenyl-d14	S	98.10	16.8-110		%REC	1	09/19/2012 13:42
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **09/19/2012 08:22**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	09/19/2012 12:18
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	09/19/2012 12:18
2-Butanone	A	***ND***	0.10		mg/L	10	09/19/2012 12:18
Benzene	A	***ND***	0.050		mg/L	10	09/19/2012 12:18
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	09/19/2012 12:18
Chlorobenzene	A	***ND***	0.050		mg/L	10	09/19/2012 12:18
Chloroform	A	***ND***	0.050		mg/L	10	09/19/2012 12:18
Tetrachloroethene	A	***ND***	0.050		mg/L	10	09/19/2012 12:18
Trichloroethene	A	***ND***	0.050		mg/L	10	09/19/2012 12:18
Vinyl chloride	A	***ND***	0.020		mg/L	10	09/19/2012 12:18
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	09/19/2012 12:18
Surr: 1,2-Dichloroethane-d4	S	98.80	74.5-132		%REC	10	09/19/2012 12:18
Surr: 4-Bromofluorobenzene	S	94.20	80-120		%REC	10	09/19/2012 12:18
Surr: Dibromofluoromethane	S	99.10	80-120		%REC	10	09/19/2012 12:18
Surr: Toluene-d8	S	102.00	80-120		%REC	10	09/19/2012 12:18
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/18/2012 10:04**	
Mercury	A	***ND***	0.00100		mg/L	1	09/18/2012 15:53

Analytical Results

Date: *Friday, September 21, 2012*

Client: Environmental Restoration
Client Project: Baycote Mishawaka
Client Sample ID: NS5-15
Sample Description:
Matrix: Solid

Work Order/ID: 12I0418-01
Sampled: 09/12/2012 15:00
Received: 09/13/2012 9:00

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/17/2012 11:30**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/17/2012 16:31
Barium	A	***0.895***	0.500		mg/L	1	09/17/2012 16:31
Cadmium	A	***0.353***	0.00200		mg/L	1	09/17/2012 16:31
Chromium	A	***0.341***	0.00300		mg/L	1	09/17/2012 16:31
Lead	A	***ND***	0.00750		mg/L	1	09/17/2012 16:31
Selenium	A	***ND***	0.0300		mg/L	1	09/17/2012 16:31
Silver	A	***0.0115***	0.0100		mg/L	1	09/17/2012 16:31
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **09/18/2012 14:25**	
pH	A	***7.82***	2.00		pH Units	1	09/18/2012 15:57
Reactive Cyanide		Method: **Chapter 7/9014** Prep Method: **Solid Reactive CN Distillation**				Analyst: **GRIEF** Prep Date/Time: **09/18/2012 10:30**	
Reactive Cyanide	A	***ND***	2.0		mg/Kg	1	09/19/2012 13:52

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
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D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
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J = Analyte concentration detected between RL and MDL (Metals / Organics)
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mg/L = Milligrams per Liter (ppm)
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U = Undetected
> = Greater than
< = Less than
% = Percent

ANALYTE TYPES: (AT)

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M = Summation Analyte
S = Surrogate
T = Tentatively Identified Compound (TIC, concentration estimated)

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DUP = Method Duplicate
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MS = Matrix Spike
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CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
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CCV = Continuing Calibration Verification
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5. Indiana DEM approved support laboratory for solid waste and wastewater analyses
6. Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
7. Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
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)
9. Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
10. North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
11. Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
12. Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

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COOLER INSPECTION

Date: Friday, September 21, 2012

Client Name: Environmental Restoration

Date/Time Received: 09/13/2012 09:00

Work Order Number: 12I0418

Received by: Dave Bryant

Checklist completed by: 9/13/2012 10:45:00AM | Dave Bryant

Reviewed by: 9/17/2012 | KGF

Carrier Name: FedEx

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 6.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12I0418-01	NS5-15	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

12I0418
ER - South Holland
Kevin Falvey
Baycote Mishawaka
09/13/2012

Microbac

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 09122012-01

Instructions on back

Client Name	Environmental Restoration, LLC	Project	Baycote Metals	Turnaround Time	Report Type
Address	1666 Fabick Dr	Location	Mishawaka, IN	[X] Routine (5 working days)	[] Results Only [ ] Level II
City, State, Zip	Fenton, MO 63026	PO #	8391	[] RUSH* (notify lab)	[ ] Level III [ ] Level III CLP-like
Contact	John Behrens	Compliance Monitoring? [] Yes [X] No		9/18/2012 (needed by)	[ ] Level IV [ ] Level IV CLP-like
Telephone #	708-473-7124	(1)Agency/Program			[ ] EDD

Sampled by (PRINT): Leland Meadows Sampler Signature: Leland Meadows Sampler Phone #: 708-473-7124

Send Report via [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (addresses) J.behrens@erllc.com & l.meadows@erllc.com

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

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → / Preservative Types ** ↓	TCLP - Volitales	TCLP - Semi Vol	TCLP - Metals	Total CN	Reactive CN	PH	Ammonia		For Lab Use Only 12I0418
NS5-15	S		X		9/12/2012	1500	5	~~N/A~~ ICE	X	X	X		X	X			01

Possible Hazard Identification [] Hazardous [ ] Non-Hazardous [ ] Radioactive Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	Leland Meadows	9/12/12 1800		
	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Sample temperature upon receipt in degrees C = 6°C	Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
			[illegible]	9/13/12 0900

rev.11/052010

ATTACHMENT B11

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001;AIHA 101160; NVLAP LabCode 101202-

September 26, 2012

Weston Solutions
20 North Wacker Drive
Suite 1210
Chicago, IL 60606
Telephone: (847) 918-4094
Fax: (312) 424-3330

RE: 20405.012.001.1843.00, ER-Baycote Metal Finishing STAT Project No: 12090610

Dear Tonya Balla:

STAT Analysis received 2 samples for the referenced project on 9/18/2012 6:10:00 PM. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 / NELAC standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Katelin Lewis
Project Manager

STAT Analysis Corporation

Date: September 26, 2012

Client: Weston Solutions
Project: 20405.012.001.1843.00, ER-Baycote Metal Finishing
Lab Order: 12090610

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12090610-001A	BMF-ER-Air-W-20120915 Can #078		9/15/2012 10:51:00 AM	9/18/2012
12090610-002A	BMFER-Air-N-20120915 Can #112		9/15/2012 11:05:00 AM	9/18/2012

CLIENT: Weston Solutions
Project: 20405.012.001.1843.00, ER-Baycote Metal Fin
Lab Order: 12090610

CASE NARRATIVE

Acetone values in the sample BMF-ER-Air-W-20120915 Can #078 (12090610-001A) should be considered to have high bias due to coelution of 2-methylbutane with the same ion used for quantitation of Acetone.

SPECIAL COMMENTS RELATING TO TENATIVELY IDENTIFIED COMPOUNDS (TICS):

Up to 30 Tentatively Identified Compounds (TICs) were identified and reported. TICs were quantitated relative to internal standards, and therefore results are semi-quantitative. Compounds were identified using mass spectral interpretation techniques and a NIST reference library. All identifications were reviewed by an experienced mass spectrometrist.

TICs for each sample are flagged with a "Z" indicating an estimated concentration and a "*" indicating a non-accredited parameter.

Results that are reported in µg/m³ are calculated based on a temperature of 25°C, atmospheric pressure of 760 mm Hg, and the molecular weight of the analyte.

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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: September 26, 2012
Date Printed: September 26, 2012

Client: Weston Solutions
Lab Order: 12090610
Project: 20405.012.001.1843.00, ER-Baycote Metal Finishi
Lab ID: 12090610-001

Client Sample ID: BMF-ER-Air-W-20120915 Can
Collection Date: 9/15/2012 10:51:00 AM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **9/19/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.3		ppbv	1	9/19/2012
1,1,2,2-Tetrachloroethane	ND	0.3		ppbv	1	9/19/2012
1,1,2-Trichloroethane	ND	0.3		ppbv	1	9/19/2012
1,1-Dichloroethane	ND	0.3		ppbv	1	9/19/2012
1,1-Dichloroethene	ND	0.3		ppbv	1	9/19/2012
1,2,4-Trichlorobenzene	ND	0.3		ppbv	1	9/19/2012
1,2,4-Trimethylbenzene	1.2	0.3		ppbv	1	9/19/2012
1,2-Dibromoethane	ND	0.3		ppbv	1	9/19/2012
1,2-Dichlorobenzene	ND	0.3		ppbv	1	9/19/2012
1,2-Dichloroethane	ND	0.3		ppbv	1	9/19/2012
1,2-Dichloropropane	ND	0.3		ppbv	1	9/19/2012
1,3,5-Trimethylbenzene	0.34	0.3		ppbv	1	9/19/2012
1,3-Butadiene	ND	0.3		ppbv	1	9/19/2012
1,3-Dichlorobenzene	ND	0.3		ppbv	1	9/19/2012
1,4-Dichlorobenzene	ND	0.3		ppbv	1	9/19/2012
1,4-Dioxane	ND	0.75		ppbv	1	9/19/2012
2-Butanone	ND	0.75		ppbv	1	9/19/2012
2-Hexanone	ND	1.5		ppbv	1	9/19/2012
4-Ethyltoluene	0.31	0.3		ppbv	1	9/19/2012
4-Methyl-2-pentanone	ND	1.5		ppbv	1	9/19/2012
Acetone	8	3	*	ppbv	1	9/19/2012
Benzene	1	0.3		ppbv	1	9/19/2012
Benzyl chloride	ND	0.75		ppbv	1	9/19/2012
Bromodichloromethane	ND	0.3		ppbv	1	9/19/2012
Bromoform	ND	0.75		ppbv	1	9/19/2012
Bromomethane	ND	0.75		ppbv	1	9/19/2012
Carbon disulfide	ND	0.3		ppbv	1	9/19/2012
Carbon tetrachloride	ND	0.3		ppbv	1	9/19/2012
Chlorobenzene	ND	0.3		ppbv	1	9/19/2012
Chloroethane	ND	0.3		ppbv	1	9/19/2012
Chloroform	ND	0.3		ppbv	1	9/19/2012
Chloromethane	ND	0.75		ppbv	1	9/19/2012
cis-1,2-Dichloroethene	ND	0.3		ppbv	1	9/19/2012
cis-1,3-Dichloropropene	ND	0.3		ppbv	1	9/19/2012
Cyclohexane	0.67	0.3		ppbv	1	9/19/2012
Dibromochloromethane	ND	0.3		ppbv	1	9/19/2012
Dichlorodifluoromethane	0.49	0.3		ppbv	1	9/19/2012
Ethyl acetate	ND	0.3		ppbv	1	9/19/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: September 26, 2012
Date Printed: September 26, 2012

Client: Weston Solutions
Lab Order: 12090610
Project: 20405.012.001.1843.00, ER-Baycote Metal Finishi
Lab ID: 12090610-001

Client Sample ID: BMF-ER-Air-W-20120915 Can
Collection Date: 9/15/2012 10:51:00 AM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **9/19/2012**		Analyst: **VP**
Ethylbenzene	0.75	0.3		ppbv	1	9/19/2012
Freon-113	ND	0.3		ppbv	1	9/19/2012
Freon-114	ND	1.5		ppbv	1	9/19/2012
Heptane	1.3	0.3		ppbv	1	9/19/2012
Hexachlorobutadiene	ND	0.3		ppbv	1	9/19/2012
Hexane	3.8	0.75		ppbv	1	9/19/2012
Isopropyl Alcohol	ND	1.5		ppbv	1	9/19/2012
m,p-Xylene	2.8	0.6		ppbv	1	9/19/2012
Methyl tert-butyl ether	ND	0.3		ppbv	1	9/19/2012
Methylene chloride	ND	3		ppbv	1	9/19/2012
o-Xylene	1	0.3		ppbv	1	9/19/2012
Propene	ND	3		ppbv	1	9/19/2012
Styrene	ND	0.3		ppbv	1	9/19/2012
Tetrachloroethene	ND	0.3		ppbv	1	9/19/2012
Tetrahydrofuran	ND	0.75		ppbv	1	9/19/2012
Toluene	4.4	0.3		ppbv	1	9/19/2012
trans-1,2-Dichloroethene	ND	0.3		ppbv	1	9/19/2012
trans-1,3-Dichloropropene	ND	0.3		ppbv	1	9/19/2012
Trichloroethene	ND	0.3		ppbv	1	9/19/2012
Trichlorofluoromethane	ND	0.3		ppbv	1	9/19/2012
Vinyl acetate	ND	3		ppbv	1	9/19/2012
Vinyl chloride	ND	0.3		ppbv	1	9/19/2012
Xylenes, Total	3.9	0.9		ppbv	1	9/19/2012

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation:
2242 W. Harrison, Suite 200, Chicago, Illinois 60612
Tel: 312.733.0551; Fax: 312.733.2386; e-mail address: STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL 300001; AIHA 101160; NVLAP LabCode 101202-0

Date Reported: September 26, 2012
Date Printed: September 26, 2012

Client: Weston Solutions
Client Sample ID: BMF-ER-Air-W-20120915 Ca
Lab Order: 12090610
Collection Date: 9/15/2012
Project: 20405.012.001.1843.00, ER-Baycote Metal Finishing
Matrix: Air
Lab ID: 12090610-001A

Analyses	µg/m³	ppbv	Qualifier	DF	Date Analyzed
TVOC (S TICS + Target Compounds)	267	78	Z*		
Tentatively Identified Compounds (TICS)					
Isobutane	2.4	1.0	Z*	1	9/19/2012
Butane	14.1	6.0	Z*	1	9/19/2012
Pentane	29.9	10.1	Z*	1	9/19/2012
C5H10 Olefinic hydrocarbon	3.9	1.4	Z*	1	9/19/2012
C5H10 Olefinic hydrocarbon	1.5	0.5	Z*	1	9/19/2012
Cyclopentene	1.0	0.4	Z*	1	9/19/2012
C5H10 Olefinic hydrocarbon	2.6	0.9	Z*	1	9/19/2012
2-Methylpentane	22.7	6.4	Z*	1	9/19/2012
3-Methylpentane	13.7	3.9	Z*	1	9/19/2012
C6H12 Hydrocarbon	1.1	0.3	Z*	1	9/19/2012
Methylcyclopentane	14.5	4.2	Z*	1	9/19/2012
2,4-Dimethylpentane	5.4	1.3	Z*	1	9/19/2012
2-Methylhexane	4.8	1.2	Z*	1	9/19/2012
2,3-Dimethylpentane	3.9	1.0	Z*	1	9/19/2012
3-Methylhexane	5.1	1.2	Z*	1	9/19/2012
Dimethylcyclopentane	1.1	0.3	Z*	1	9/19/2012
Dimethylcyclopentane	1.2	0.3	Z*	1	9/19/2012
C8H18 Aliphatic hydrocarbon	1.0	0.2	Z*	1	9/19/2012
C8H18 Aliphatic hydrocarbon	2.0	0.4	Z*	1	9/19/2012
C8H18 Aliphatic hydrocarbon	1.9	0.4	Z*	1	9/19/2012
C8H18 Aliphatic hydrocarbon	1.6	0.3	Z*	1	9/19/2012
C8H18 Aliphatic hydrocarbon	1.7	0.4	Z*	1	9/19/2012
C8H18 Aliphatic hydrocarbon	1.6	0.3	Z*	1	9/19/2012
C3 Alkylbenzene	1.2	0.2	Z*	1	9/19/2012
C3 Alkylbenzene	1.7	0.3	Z*	1	9/19/2012
C3 Alkylbenzene	1.7	0.4	Z*	1	9/19/2012
C4 Alkylbenzene	1.0	0.2	Z*	1	9/19/2012
C4 Alkylbenzene	2.0	0.4	Z*	1	9/19/2012
C4 Alkylbenzene	1.4	0.3	Z*	1	9/19/2012
Ethenyl ethylbenzene	0.9	0.2	Z*	1	9/19/2012

Qualifiers:
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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: September 26, 2012
Date Printed: September 26, 2012

Client: Weston Solutions
Lab Order: 12090610
Project: 20405.012.001.1843.00, ER-Baycote Metal Finishi
Lab ID: 12090610-002

Client Sample ID: BMFER-Air-N-20120915 Can #
Collection Date: 9/15/2012 11:05:00 AM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **9/19/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.29		ppbv	1	9/19/2012
1,1,2,2-Tetrachloroethane	ND	0.29		ppbv	1	9/19/2012
1,1,2-Trichloroethane	ND	0.29		ppbv	1	9/19/2012
1,1-Dichloroethane	ND	0.29		ppbv	1	9/19/2012
1,1-Dichloroethene	ND	0.29		ppbv	1	9/19/2012
1,2,4-Trichlorobenzene	ND	0.29		ppbv	1	9/19/2012
1,2,4-Trimethylbenzene	ND	0.29		ppbv	1	9/19/2012
1,2-Dibromoethane	ND	0.29		ppbv	1	9/19/2012
1,2-Dichlorobenzene	ND	0.29		ppbv	1	9/19/2012
1,2-Dichloroethane	ND	0.29		ppbv	1	9/19/2012
1,2-Dichloropropane	ND	0.29		ppbv	1	9/19/2012
1,3,5-Trimethylbenzene	ND	0.29		ppbv	1	9/19/2012
1,3-Butadiene	ND	0.29		ppbv	1	9/19/2012
1,3-Dichlorobenzene	ND	0.29		ppbv	1	9/19/2012
1,4-Dichlorobenzene	ND	0.29		ppbv	1	9/19/2012
1,4-Dioxane	ND	0.73		ppbv	1	9/19/2012
2-Butanone	ND	0.73		ppbv	1	9/19/2012
2-Hexanone	ND	1.5		ppbv	1	9/19/2012
4-Ethyltoluene	ND	0.29		ppbv	1	9/19/2012
4-Methyl-2-pentanone	ND	1.5		ppbv	1	9/19/2012
Acetone	10	2.9	*	ppbv	1	9/19/2012
Benzene	ND	0.29		ppbv	1	9/19/2012
Benzyl chloride	ND	0.73		ppbv	1	9/19/2012
Bromodichloromethane	ND	0.29		ppbv	1	9/19/2012
Bromoform	ND	0.73		ppbv	1	9/19/2012
Bromomethane	ND	0.73		ppbv	1	9/19/2012
Carbon disulfide	ND	0.29		ppbv	1	9/19/2012
Carbon tetrachloride	ND	0.29		ppbv	1	9/19/2012
Chlorobenzene	ND	0.29		ppbv	1	9/19/2012
Chloroethane	ND	0.29		ppbv	1	9/19/2012
Chloroform	ND	0.29		ppbv	1	9/19/2012
Chloromethane	ND	0.73		ppbv	1	9/19/2012
cis-1,2-Dichloroethene	ND	0.29		ppbv	1	9/19/2012
cis-1,3-Dichloropropene	ND	0.29		ppbv	1	9/19/2012
Cyclohexane	ND	0.29		ppbv	1	9/19/2012
Dibromochloromethane	ND	0.29		ppbv	1	9/19/2012
Dichlorodifluoromethane	0.48	0.29		ppbv	1	9/19/2012
Ethyl acetate	ND	0.29		ppbv	1	9/19/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: September 26, 2012
Date Printed: September 26, 2012

Client: Weston Solutions
Lab Order: 12090610
Project: 20405.012.001.1843.00, ER-Baycote Metal Finishi
Lab ID: 12090610-002

Client Sample ID: BMFER-Air-N-20120915 Can #
Collection Date: 9/15/2012 11:05:00 AM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **9/19/2012**		Analyst: **VP**
Ethylbenzene	ND	0.29		ppbv	1	9/19/2012
Freon-113	ND	0.29		ppbv	1	9/19/2012
Freon-114	ND	1.5		ppbv	1	9/19/2012
Heptane	ND	0.29		ppbv	1	9/19/2012
Hexachlorobutadiene	ND	0.29		ppbv	1	9/19/2012
Hexane	ND	0.73		ppbv	1	9/19/2012
Isopropyl Alcohol	ND	1.5		ppbv	1	9/19/2012
m,p-Xylene	0.63	0.58		ppbv	1	9/19/2012
Methyl tert-butyl ether	ND	0.29		ppbv	1	9/19/2012
Methylene chloride	ND	2.9		ppbv	1	9/19/2012
o-Xylene	ND	0.29		ppbv	1	9/19/2012
Propene	ND	2.9		ppbv	1	9/19/2012
Styrene	ND	0.29		ppbv	1	9/19/2012
Tetrachloroethene	ND	0.29		ppbv	1	9/19/2012
Tetrahydrofuran	ND	0.73		ppbv	1	9/19/2012
Toluene	0.61	0.29		ppbv	1	9/19/2012
trans-1,2-Dichloroethene	ND	0.29		ppbv	1	9/19/2012
trans-1,3-Dichloropropene	ND	0.29		ppbv	1	9/19/2012
Trichloroethene	ND	0.29		ppbv	1	9/19/2012
Trichlorofluoromethane	ND	0.29		ppbv	1	9/19/2012
Vinyl acetate	ND	2.9		ppbv	1	9/19/2012
Vinyl chloride	ND	0.29		ppbv	1	9/19/2012
Xylenes, Total	ND	0.88		ppbv	1	9/19/2012

Qualifiers:
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J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
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RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Tel: 312.733.0551; Fax: 312.733.2386; e-mail address: STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL 300001; AIHA 101160; NVLAP LabCode 101202-0

Date Reported: September 26, 2012
Date Printed: September 26, 2012

Client:	Weston Solutions	**Client Sample ID:**	BMFER-Air-N-20120915 Car
Lab Order:	12090610	**Collection Date:**	9/15/2012
Project:	20405.012.001.1843.00, ER-Baycote Metal Finishing	**Matrix:**	Air
Lab ID:	12090610-002A		

Analyses	µg/m^3	ppbv	Qualifier	DF	Date Analyzed
TVOC (S TICS + Target Compounds)	69	26	Z*		
Tentatively Identified Compounds (TICS)					
Propane	10.2	5.7	Z*	1	9/19/2012
Isobutane	1.2	0.5	Z*	1	9/19/2012
Butane	3.2	1.4	Z*	1	9/19/2012
Pentane	4.5	1.5	Z*	1	9/19/2012
3-Methylpentane	1.4	0.4	Z*	1	9/19/2012
Methylcyclopentane	1.2	0.3	Z*	1	9/19/2012

Qualifiers:

ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
J - Analyte detected below quanititation limits	S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
HT - Sample received past holding time	E - Value above quantitation range
* - Non-accredited parameter	H - Holding time exceeded

STAT Analysis Corporation
2242 W. Harrison, Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
e-mail address: STATinfo@STATAnalysis.com AIHA, NVLAP and NELAP accredited

CHAIN OF CUSTODY RECORD

№: 844527 Page: 1 of 1

Company: Weston Solutions
Project Number: 20405.012.001.1843.00 Client Tracking No.:
Project Name: ER-Bayrote Metal finishing
Project Location: Mishawaka, Indiana
Sampler(s): START ROSS / START KOZEL
Report To: TRENNA.SUNDQUIST@WESTONSOLUTIONS.COM
T.BALLA@WESTONSOLUTIONS.COM
Phone:
Fax:
e-mail:
QC Level: 1 ___ 2 X 3 ___ 4 ___

P.O. No.:
Quote No.:

Turn Around:
Results Needed: / / am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	TO-15 w/ TICS	Remarks	Lab No.:
BMF-ER-AIR-W-20120915	9/15/12		AIR	X			1	X		001
Can #078			~~AIR~~	~~X~~			~~1~~ (2R)			
START Time / 03:05	pressure = -30									
END Time / 10:51	final pressure 0									
regulator = 139547										
BMF-ER-AIR-N-20120915	9/15/12		Air	X			1	X		002
Start time / 03:10	pressure = -29									
end time / 11:05	final pressure = 0									
Can # 112										
regulator = 141138										
NO ADDITIONAL										

Relinquished by: (Signature)	Date/Time: 9/15/12 1610	
Received by: (Signature)	Date/Time: 9/17/12 0700	
Relinquished by: (Signature)	Date/Time: 9/18/12 13:10	
Received by: (Signature)	Date/Time: 9/18/12 1810	
Relinquished by: (Signature)	Date/Time:	
Received by: (Signature)	Date/Time:	

Comments:

Preservation Code: A = None B = HNO_3 C = NaOH D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

Laboratory Work Order No.: 12090610

Received on Ice: Yes ☐ No ☒

Temperature: Ambient °C

STAT Analysis Corporation

Sample Receipt Checklist

Client Name WESTON CHICAGO

Date and Time Received: 9/18/2012 6:10:00 PM

Work Order Number 12090610

Received by: CDF

Checklist completed by: Signature 9/18/12 Date

Reviewed by: KL Initials 9-19-12 Date

Matrix: Carrier name: Client Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels/containers?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container or Temp Blank temperature in compliance?	Yes ☑	No ☐	Temperature Ambient °C
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☐	No ☐
Water - Samples pH checked?	Yes ☐	No ☐	Checked by: _____
Water - Samples properly preserved?	Yes ☐	No ☐	pH Adjusted? _____

Any No response must be detailed in the comments section below.

Comments: _____

Client / Person contacted: _____ Date contacted: _____ Contacted by: _____

Response: _____

ATTACHMENT B12

October 3, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12I0923

Re: Baycote Metal Finishing - Mishawaka, IN

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 20 sample(s) on 9/27/2012 10:26:00AM for the analyses presented in the following report as Work Order 12I0923.

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 Robert Crookston, Interim Managing Director, at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer, at sean.hyde@microbac.com or James Nokes, President, at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Project: Baycote Metal Finishing - Mishawaka, IN
Lab Order: 12I0923

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12I0923-01	X 329 - TCLP		09/26/2012 16:05	9/27/2012 10:26:00AM
12I0923-02	X 329		09/26/2012 16:05	9/27/2012 10:26:00AM
12I0923-03	X 330 - TCLP		09/26/2012 16:10	9/27/2012 10:26:00AM
12I0923-04	X 330		09/26/2012 16:10	9/27/2012 10:26:00AM
12I0923-05	X 331 - TCLP		09/26/2012 16:15	9/27/2012 10:26:00AM
12I0923-06	X 331		09/26/2012 16:15	9/27/2012 10:26:00AM
12I0923-07	X 332 - TCLP		09/26/2012 16:20	9/27/2012 10:26:00AM
12I0923-08	X 332		09/26/2012 16:20	9/27/2012 10:26:00AM
12I0923-09	X 333 - TCLP		09/26/2012 16:25	9/27/2012 10:26:00AM
12I0923-10	X 333		09/26/2012 16:25	9/27/2012 10:26:00AM
12I0923-11	X 334 - TCLP		09/26/2012 16:30	9/27/2012 10:26:00AM
12I0923-12	X 334		09/26/2012 16:30	9/27/2012 10:26:00AM
12I0923-13	X 335 - TCLP		09/26/2012 16:35	9/27/2012 10:26:00AM
12I0923-14	X 335		09/26/2012 16:35	9/27/2012 10:26:00AM
12I0923-15	X 336 - TCLP		09/26/2012 16:40	9/27/2012 10:26:00AM
12I0923-16	X 336		09/26/2012 16:40	9/27/2012 10:26:00AM
12I0923-17	G-16 - TCLP		09/27/2012 09:20	9/27/2012 10:26:00AM
12I0923-18	G-16		09/27/2012 09:20	9/27/2012 10:26:00AM
12I0923-19	X 323/G46 - TCLP		09/27/2012 09:30	9/27/2012 10:26:00AM
12I0923-20	X323/G46		09/27/2012 09:30	9/27/2012 10:26:00AM

CASE NARRATIVE

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Project: Baycote Metal Finishing - Mishawaka, IN
Lab Order: 12I0923

The X331-TCLP, X332-TCLP, X333-TCLP, X334-TCLP, X335-TCLP, X336-TCLP and G-16-TCLP samples required dilution prior to VOA analysis due to a strong odor in the TCLP extracts. Reporting limits have been adjusted to reflect the dilution level.

Water Reactivity:
Each sample in this work order was mixed with approximately 25 ml of deonized water.

There was no discernable reaction to any sample : No Visual, No Color Change and No Elevation of Temperature.

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 329 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-01
Sampled: 09/26/2012 16:05
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 17:49
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 17:49
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 17:49
Surr: 2,4,6-Tribromophenol	S	134.00	47.8-138		%REC	1	10/01/2012 17:49
Surr: 2-Fluorobiphenyl	S	66.10	10-110		%REC	1	10/01/2012 17:49
Surr: 2-Fluorophenol	S	67.00	10-110		%REC	1	10/01/2012 17:49
Surr: Nitrobenzene-d5	S	64.10	10-110		%REC	1	10/01/2012 17:49
Surr: Phenol-d5	S	76.10	10-60.8	S	%REC	1	10/01/2012 17:49
Surr: Terphenyl-d14	S	75.40	16.8-110		%REC	1	10/01/2012 17:49
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 18:48
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	10/01/2012 18:48
2-Butanone	A	***ND***	0.10		mg/L	10	10/01/2012 18:48
Benzene	A	***ND***	0.050		mg/L	10	10/01/2012 18:48
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	10/01/2012 18:48
Chlorobenzene	A	***ND***	0.050		mg/L	10	10/01/2012 18:48
Chloroform	A	***ND***	0.050		mg/L	10	10/01/2012 18:48
Tetrachloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 18:48
Trichloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 18:48
Vinyl chloride	A	***ND***	0.020		mg/L	10	10/01/2012 18:48
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	10/01/2012 18:48
Surr: 1,2-Dichloroethane-d4	S	102.00	74.5-132		%REC	10	10/01/2012 18:48
Surr: 4-Bromofluorobenzene	S	94.10	80-120		%REC	10	10/01/2012 18:48
Surr: Dibromofluoromethane	S	104.00	80-120		%REC	10	10/01/2012 18:48
Surr: Toluene-d8	S	96.50	80-120		%REC	10	10/01/2012 18:48
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 14:08

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 329 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-01
Sampled: 09/26/2012 16:05
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0125***	0.0100		mg/L	1	09/28/2012 17:11
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 17:11
Cadmium	A	***0.00520***	0.00200		mg/L	1	09/28/2012 17:11
Chromium	A	***2.40***	0.00300		mg/L	1	09/28/2012 17:11
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 17:11
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 17:11
Silver	A	***0.0120***	0.0100		mg/L	1	09/28/2012 17:11
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***11000***	480		mg/Kg	1000	10/03/2012 9:36
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/01/2012 10:59**	
Ignitability	A	***> 170***	30		°F	1	10/01/2012 10:59
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***9.76***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***ND***	2.5		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 329
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-02
Sampled: 09/26/2012 16:05
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	2.0		mg/Kg	1	10/03/2012 9:17
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 330 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-03
Sampled: 09/26/2012 16:10
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 18:09
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 18:09
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 18:09
Surr: 2,4,6-Tribromophenol	S	128.00	47.8-138		%REC	1	10/01/2012 18:09
Surr: 2-Fluorobiphenyl	S	69.00	10-110		%REC	1	10/01/2012 18:09
Surr: 2-Fluorophenol	S	71.40	10-110		%REC	1	10/01/2012 18:09
Surr: Nitrobenzene-d5	S	68.50	10-110		%REC	1	10/01/2012 18:09
Surr: Phenol-d5	S	80.50	10-60.8	S	%REC	1	10/01/2012 18:09
Surr: Terphenyl-d14	S	76.90	16.8-110		%REC	1	10/01/2012 18:09
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 19:21
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	10/01/2012 19:21
2-Butanone	A	***ND***	0.10		mg/L	10	10/01/2012 19:21
Benzene	A	***ND***	0.050		mg/L	10	10/01/2012 19:21
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	10/01/2012 19:21
Chlorobenzene	A	***ND***	0.050		mg/L	10	10/01/2012 19:21
Chloroform	A	***ND***	0.050		mg/L	10	10/01/2012 19:21
Tetrachloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 19:21
Trichloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 19:21
Vinyl chloride	A	***ND***	0.020		mg/L	10	10/01/2012 19:21
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	10/01/2012 19:21
Surr: 1,2-Dichloroethane-d4	S	99.70	74.5-132		%REC	10	10/01/2012 19:21
Surr: 4-Bromofluorobenzene	S	92.70	80-120		%REC	10	10/01/2012 19:21
Surr: Dibromofluoromethane	S	103.00	80-120		%REC	10	10/01/2012 19:21
Surr: Toluene-d8	S	95.80	80-120		%REC	10	10/01/2012 19:21
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 13:53

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 330 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-03
Sampled: 09/26/2012 16:10
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0150***	0.0100		mg/L	1	09/28/2012 19:15
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 19:15
Cadmium	A	***0.0704***	0.00200		mg/L	1	09/28/2012 19:15
Chromium	A	***1.37***	0.00300		mg/L	1	09/28/2012 19:15
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 19:15
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 19:15
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 19:15
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***3800***	45		mg/Kg	100	10/02/2012 15:41
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/01/2012 10:59**	
Ignitability	A	***> 170***	30		°F	1	10/01/2012 10:59
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***10.5***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***ND***	2.4		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 330
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-04
Sampled: 09/26/2012 16:10
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 8:51
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 331 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-05
Sampled: 09/26/2012 16:15
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 18:29
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 18:29
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 18:29
Surr: 2,4,6-Tribromophenol	S	92.50	47.8-138		%REC	1	10/01/2012 18:29
Surr: 2-Fluorobiphenyl	S	46.70	10-110		%REC	1	10/01/2012 18:29
Surr: 2-Fluorophenol	S	47.30	10-110		%REC	1	10/01/2012 18:29
Surr: Nitrobenzene-d5	S	44.50	10-110		%REC	1	10/01/2012 18:29
Surr: Phenol-d5	S	53.40	10-60.8		%REC	1	10/01/2012 18:29
Surr: Terphenyl-d14	S	63.20	16.8-110		%REC	1	10/01/2012 18:29
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 19:53
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	10/01/2012 19:53
2-Butanone	A	***ND***	0.50		mg/L	50	10/01/2012 19:53
Benzene	A	***ND***	0.25		mg/L	50	10/01/2012 19:53
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	10/01/2012 19:53
Chlorobenzene	A	***ND***	0.25		mg/L	50	10/01/2012 19:53
Chloroform	A	***ND***	0.25		mg/L	50	10/01/2012 19:53
Tetrachloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 19:53
Trichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 19:53
Vinyl chloride	A	***ND***	0.10		mg/L	50	10/01/2012 19:53
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	10/01/2012 19:53
Surr: 1,2-Dichloroethane-d4	S	101.00	74.5-132		%REC	50	10/01/2012 19:53
Surr: 4-Bromofluorobenzene	S	93.00	80-120		%REC	50	10/01/2012 19:53
Surr: Dibromofluoromethane	S	104.00	80-120		%REC	50	10/01/2012 19:53
Surr: Toluene-d8	S	95.60	80-120		%REC	50	10/01/2012 19:53
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 14:09

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 331 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-05
Sampled: 09/26/2012 16:15
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0122***	0.0100		mg/L	1	09/28/2012 17:39
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 17:39
Cadmium	A	***0.0242***	0.00200		mg/L	1	09/28/2012 17:39
Chromium	A	***1.45***	0.00300		mg/L	1	09/28/2012 17:39
Lead	A	***0.0100***	0.00750		mg/L	1	09/28/2012 17:39
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 17:39
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 17:39
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***11000***	490		mg/Kg	1000	10/03/2012 9:37
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 11:21**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 11:21
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***10.0***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***ND***	2.4		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 331
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-06
Sampled: 09/26/2012 16:15
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 8:52
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 332 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-07
Sampled: 09/26/2012 16:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 18:49
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 18:49
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 18:49
Surr: 2,4,6-Tribromophenol	S	111.00	47.8-138		%REC	1	10/01/2012 18:49
Surr: 2-Fluorobiphenyl	S	42.70	10-110		%REC	1	10/01/2012 18:49
Surr: 2-Fluorophenol	S	43.90	10-110		%REC	1	10/01/2012 18:49
Surr: Nitrobenzene-d5	S	43.30	10-110		%REC	1	10/01/2012 18:49
Surr: Phenol-d5	S	52.30	10-60.8		%REC	1	10/01/2012 18:49
Surr: Terphenyl-d14	S	91.00	16.8-110		%REC	1	10/01/2012 18:49
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 20:26
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	10/01/2012 20:26
2-Butanone	A	***ND***	0.50		mg/L	50	10/01/2012 20:26
Benzene	A	***ND***	0.25		mg/L	50	10/01/2012 20:26
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	10/01/2012 20:26
Chlorobenzene	A	***ND***	0.25		mg/L	50	10/01/2012 20:26
Chloroform	A	***ND***	0.25		mg/L	50	10/01/2012 20:26
Tetrachloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 20:26
Trichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 20:26
Vinyl chloride	A	***ND***	0.10		mg/L	50	10/01/2012 20:26
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	10/01/2012 20:26
Surr: 1,2-Dichloroethane-d4	S	102.00	74.5-132		%REC	50	10/01/2012 20:26
Surr: 4-Bromofluorobenzene	S	92.50	80-120		%REC	50	10/01/2012 20:26
Surr: Dibromofluoromethane	S	105.00	80-120		%REC	50	10/01/2012 20:26
Surr: Toluene-d8	S	95.80	80-120		%REC	50	10/01/2012 20:26
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 13:57

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 332 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-07
Sampled: 09/26/2012 16:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0150***	0.0100		mg/L	1	09/28/2012 19:21
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 19:21
Cadmium	A	***0.0579***	0.00200		mg/L	1	09/28/2012 19:21
Chromium	A	***0.775***	0.00300		mg/L	1	09/28/2012 19:21
Lead	A	***0.0115***	0.00750		mg/L	1	09/28/2012 19:21
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 19:21
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 19:21
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***490000***	23000		mg/Kg	50000	10/03/2012 10:04
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 10:04**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 10:04
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***8.57***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***170***	24		mg/Kg	10	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 332
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-08
Sampled: 09/26/2012 16:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:19
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	9.9		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 333 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-09
Sampled: 09/26/2012 16:25
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 19:10
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 19:10
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 19:10
Surr: 2,4,6-Tribromophenol	S	125.00	47.8-138		%REC	1	10/01/2012 19:10
Surr: 2-Fluorobiphenyl	S	56.50	10-110		%REC	1	10/01/2012 19:10
Surr: 2-Fluorophenol	S	56.50	10-110		%REC	1	10/01/2012 19:10
Surr: Nitrobenzene-d5	S	56.90	10-110		%REC	1	10/01/2012 19:10
Surr: Phenol-d5	S	65.60	10-60.8	S	%REC	1	10/01/2012 19:10
Surr: Terphenyl-d14	S	105.00	16.8-110		%REC	1	10/01/2012 19:10
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 20:58
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	10/01/2012 20:58
2-Butanone	A	***ND***	0.50		mg/L	50	10/01/2012 20:58
Benzene	A	***ND***	0.25		mg/L	50	10/01/2012 20:58
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	10/01/2012 20:58
Chlorobenzene	A	***ND***	0.25		mg/L	50	10/01/2012 20:58
Chloroform	A	***ND***	0.25		mg/L	50	10/01/2012 20:58
Tetrachloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 20:58
Trichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 20:58
Vinyl chloride	A	***ND***	0.10		mg/L	50	10/01/2012 20:58
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	10/01/2012 20:58
Surr: 1,2-Dichloroethane-d4	S	100.00	74.5-132		%REC	50	10/01/2012 20:58
Surr: 4-Bromofluorobenzene	S	90.90	80-120		%REC	50	10/01/2012 20:58
Surr: Dibromofluoromethane	S	102.00	80-120		%REC	50	10/01/2012 20:58
Surr: Toluene-d8	S	95.60	80-120		%REC	50	10/01/2012 20:58
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 13:58

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 333 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-09
Sampled: 09/26/2012 16:25
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0142***	0.0100		mg/L	1	09/28/2012 19:26
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 19:26
Cadmium	A	***0.104***	0.00200		mg/L	1	09/28/2012 19:26
Chromium	A	***0.862***	0.00300		mg/L	1	09/28/2012 19:26
Lead	A	***0.0171***	0.00750		mg/L	1	09/28/2012 19:26
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 19:26
Silver	A	***0.0132***	0.0100		mg/L	1	09/28/2012 19:26
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***250000***	21000		mg/Kg	50000	10/03/2012 10:06
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 11:21**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 11:21
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***8.70***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***280***	24		mg/Kg	10	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 333
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-10
Sampled: 09/26/2012 16:25
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:20
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	20		mg/Kg	2	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 334 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-11
Sampled: 09/26/2012 16:30
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 19:29
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 19:29
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 19:29
Surr: 2,4,6-Tribromophenol	S	120.00	47.8-138		%REC	1	10/01/2012 19:29
Surr: 2-Fluorobiphenyl	S	57.40	10-110		%REC	1	10/01/2012 19:29
Surr: 2-Fluorophenol	S	57.00	10-110		%REC	1	10/01/2012 19:29
Surr: Nitrobenzene-d5	S	57.30	10-110		%REC	1	10/01/2012 19:29
Surr: Phenol-d5	S	64.10	10-60.8	S	%REC	1	10/01/2012 19:29
Surr: Terphenyl-d14	S	99.30	16.8-110		%REC	1	10/01/2012 19:29
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 21:31
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	10/01/2012 21:31
2-Butanone	A	***ND***	0.50		mg/L	50	10/01/2012 21:31
Benzene	A	***ND***	0.25		mg/L	50	10/01/2012 21:31
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	10/01/2012 21:31
Chlorobenzene	A	***ND***	0.25		mg/L	50	10/01/2012 21:31
Chloroform	A	***ND***	0.25		mg/L	50	10/01/2012 21:31
Tetrachloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 21:31
Trichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 21:31
Vinyl chloride	A	***ND***	0.10		mg/L	50	10/01/2012 21:31
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	10/01/2012 21:31
Surr: 1,2-Dichloroethane-d4	S	101.00	74.5-132		%REC	50	10/01/2012 21:31
Surr: 4-Bromofluorobenzene	S	91.00	80-120		%REC	50	10/01/2012 21:31
Surr: Dibromofluoromethane	S	104.00	80-120		%REC	50	10/01/2012 21:31
Surr: Toluene-d8	S	96.80	80-120		%REC	50	10/01/2012 21:31
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 13:59

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 334 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-11
Sampled: 09/26/2012 16:30
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0166***	0.0100		mg/L	1	09/28/2012 19:32
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 19:32
Cadmium	A	***0.0825***	0.00200		mg/L	1	09/28/2012 19:32
Chromium	A	***2.25***	0.00300		mg/L	1	09/28/2012 19:32
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 19:32
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 19:32
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 19:32
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***110000***	2400		mg/Kg	5000	10/03/2012 10:01
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 12:18**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 12:18
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***8.84***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***ND***	2.3		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client:	Environmental Restoration		
Client Project:	Baycote Metal Finishing - Mishawaka, IN		
Client Sample ID:	X 334	**Work Order/ID:**	12I0923-12
Sample Description:		**Sampled:**	09/26/2012 16:30
Matrix:	Solid	**Received:**	09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:22
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 335 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-13
Sampled: 09/26/2012 16:35
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 19:49
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 19:49
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 19:49
Surr: 2,4,6-Tribromophenol	S	132.00	47.8-138		%REC	1	10/01/2012 19:49
Surr: 2-Fluorobiphenyl	S	68.50	10-110		%REC	1	10/01/2012 19:49
Surr: 2-Fluorophenol	S	73.90	10-110		%REC	1	10/01/2012 19:49
Surr: Nitrobenzene-d5	S	68.50	10-110		%REC	1	10/01/2012 19:49
Surr: Phenol-d5	S	84.90	10-60.8	S	%REC	1	10/01/2012 19:49
Surr: Terphenyl-d14	S	103.00	16.8-110		%REC	1	10/01/2012 19:49
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 22:03
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	10/01/2012 22:03
2-Butanone	A	***ND***	0.50		mg/L	50	10/01/2012 22:03
Benzene	A	***ND***	0.25		mg/L	50	10/01/2012 22:03
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	10/01/2012 22:03
Chlorobenzene	A	***ND***	0.25		mg/L	50	10/01/2012 22:03
Chloroform	A	***ND***	0.25		mg/L	50	10/01/2012 22:03
Tetrachloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 22:03
Trichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 22:03
Vinyl chloride	A	***ND***	0.10		mg/L	50	10/01/2012 22:03
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	10/01/2012 22:03
Surr: 1,2-Dichloroethane-d4	S	102.00	74.5-132		%REC	50	10/01/2012 22:03
Surr: 4-Bromofluorobenzene	S	91.70	80-120		%REC	50	10/01/2012 22:03
Surr: Dibromofluoromethane	S	106.00	80-120		%REC	50	10/01/2012 22:03
Surr: Toluene-d8	S	96.10	80-120		%REC	50	10/01/2012 22:03
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 14:00

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 335 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-13
Sampled: 09/26/2012 16:35
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0140***	0.0100		mg/L	1	09/28/2012 19:49
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 19:49
Cadmium	A	***0.0372***	0.00200		mg/L	1	09/28/2012 19:49
Chromium	A	***1.35***	0.00300		mg/L	1	09/28/2012 19:49
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 19:49
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 19:49
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 19:49
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***17000***	480		mg/Kg	1000	10/03/2012 9:43
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 12:18**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 12:18
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***9.99***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***ND***	2.4		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 335
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-14
Sampled: 09/26/2012 16:35
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:23
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 336 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-15
Sampled: 09/26/2012 16:40
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 20:09
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 20:09
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 20:09
Surr: 2,4,6-Tribromophenol	S	129.00	47.8-138		%REC	1	10/01/2012 20:09
Surr: 2-Fluorobiphenyl	S	57.40	10-110		%REC	1	10/01/2012 20:09
Surr: 2-Fluorophenol	S	55.30	10-110		%REC	1	10/01/2012 20:09
Surr: Nitrobenzene-d5	S	55.80	10-110		%REC	1	10/01/2012 20:09
Surr: Phenol-d5	S	64.70	10-60.8	S	%REC	1	10/01/2012 20:09
Surr: Terphenyl-d14	S	105.00	16.8-110		%REC	1	10/01/2012 20:09
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 22:36
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	10/01/2012 22:36
2-Butanone	A	***ND***	0.50		mg/L	50	10/01/2012 22:36
Benzene	A	***ND***	0.25		mg/L	50	10/01/2012 22:36
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	10/01/2012 22:36
Chlorobenzene	A	***ND***	0.25		mg/L	50	10/01/2012 22:36
Chloroform	A	***ND***	0.25		mg/L	50	10/01/2012 22:36
Tetrachloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 22:36
Trichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 22:36
Vinyl chloride	A	***ND***	0.10		mg/L	50	10/01/2012 22:36
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	10/01/2012 22:36
Surr: 1,2-Dichloroethane-d4	S	102.00	74.5-132		%REC	50	10/01/2012 22:36
Surr: 4-Bromofluorobenzene	S	90.60	80-120		%REC	50	10/01/2012 22:36
Surr: Dibromofluoromethane	S	105.00	80-120		%REC	50	10/01/2012 22:36
Surr: Toluene-d8	S	96.10	80-120		%REC	50	10/01/2012 22:36
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 14:01

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 336 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-15
Sampled: 09/26/2012 16:40
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0188***	0.0100		mg/L	1	09/28/2012 19:55
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 19:55
Cadmium	A	***0.0421***	0.00200		mg/L	1	09/28/2012 19:55
Chromium	A	***0.909***	0.00300		mg/L	1	09/28/2012 19:55
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 19:55
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 19:55
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 19:55
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***29000***	450		mg/Kg	1000	10/03/2012 9:45
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 13:22**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 13:22
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***8.20***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***ND***	2.5		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 336
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-16
Sampled: 09/26/2012 16:40
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:25
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: G-16 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-17
Sampled: 09/27/2012 9:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 20:29
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 20:29
Surr: 2,4,6-Tribromophenol	S	133.00	47.8-138		%REC	1	10/01/2012 20:29
Surr: 2-Fluorobiphenyl	S	66.20	10-110		%REC	1	10/01/2012 20:29
Surr: 2-Fluorophenol	S	67.70	10-110		%REC	1	10/01/2012 20:29
Surr: Nitrobenzene-d5	S	67.00	10-110		%REC	1	10/01/2012 20:29
Surr: Phenol-d5	S	77.50	10-60.8	S	%REC	1	10/01/2012 20:29
Surr: Terphenyl-d14	S	116.00	16.8-110	S	%REC	1	10/01/2012 20:29
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
2-Butanone	A	***ND***	0.50		mg/L	50	10/01/2012 23:08
Benzene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Chlorobenzene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Chloroform	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Tetrachloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Trichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Vinyl chloride	A	***ND***	0.10		mg/L	50	10/01/2012 23:08
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	10/01/2012 23:08
Surr: 1,2-Dichloroethane-d4	S	103.00	74.5-132		%REC	50	10/01/2012 23:08
Surr: 4-Bromofluorobenzene	S	90.70	80-120		%REC	50	10/01/2012 23:08
Surr: Dibromofluoromethane	S	104.00	80-120		%REC	50	10/01/2012 23:08
Surr: Toluene-d8	S	94.60	80-120		%REC	50	10/01/2012 23:08
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 14:05

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: G-16 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-17
Sampled: 09/27/2012 9:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/28/2012 20:01
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 20:01
Cadmium	A	***ND***	0.00200		mg/L	1	09/28/2012 20:01
Chromium	A	***0.0829***	0.00300		mg/L	1	09/28/2012 20:01
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 20:01
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 20:01
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 20:01
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***2200***	430		mg/Kg	1000	10/03/2012 9:49
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 13:22**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 13:22
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***4.76***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***ND***	2.3		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: G-16
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-18
Sampled: 09/27/2012 9:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:26
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 323/G46 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-19
Sampled: 09/27/2012 9:30
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 21:29
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 21:29
Surr: 2,4,6-Tribromophenol	S	134.00	47.8-138		%REC	1	10/01/2012 21:29
Surr: 2-Fluorobiphenyl	S	75.20	10-110		%REC	1	10/01/2012 21:29
Surr: 2-Fluorophenol	S	75.10	10-110		%REC	1	10/01/2012 21:29
Surr: Nitrobenzene-d5	S	73.40	10-110		%REC	1	10/01/2012 21:29
Surr: Phenol-d5	S	81.50	10-60.8	S	%REC	1	10/01/2012 21:29
Surr: Terphenyl-d14	S	102.00	16.8-110		%REC	1	10/01/2012 21:29
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
2-Butanone	A	***ND***	0.10		mg/L	10	10/01/2012 23:41
Benzene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Chlorobenzene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Chloroform	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Tetrachloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Trichloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Vinyl chloride	A	***ND***	0.020		mg/L	10	10/01/2012 23:41
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	10/01/2012 23:41
Surr: 1,2-Dichloroethane-d4	S	103.00	74.5-132		%REC	10	10/01/2012 23:41
Surr: 4-Bromofluorobenzene	S	91.20	80-120		%REC	10	10/01/2012 23:41
Surr: Dibromofluoromethane	S	105.00	80-120		%REC	10	10/01/2012 23:41
Surr: Toluene-d8	S	96.10	80-120		%REC	10	10/01/2012 23:41
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.00100		mg/L	1	09/28/2012 14:12

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 323/G46 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-19
Sampled: 09/27/2012 9:30
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0102***	0.0100		mg/L	1	09/28/2012 17:45
Barium	A	***1.09***	0.500		mg/L	1	09/28/2012 17:45
Cadmium	A	***0.0551***	0.00200		mg/L	1	09/28/2012 17:45
Chromium	A	***1.65***	0.00300		mg/L	1	09/28/2012 17:45
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 17:45
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 17:45
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 17:45
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***370***	46		mg/Kg	100	10/03/2012 10:03
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 15:05**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 15:05
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***7.60***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***19***	2.3		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 3, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X323/G46
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-20
Sampled: 09/27/2012 9:30
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:28
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

[a] The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
[b] The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
[c] Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
[d] 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
[e] Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
[f] Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
[g] 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)
[h] Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
[i] North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
[-] Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
[j] Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

Microbac®

COOLER INSPECTION

Date: Wednesday, October 3, 2012

Client Name: Environmental Restoration

Date/Time Received: 09/27/2012 10:26

Work Order Number: 12I0923

Received by: Dave Bryant

Checklist completed by: 9/27/2012 11:34:00AM | James Meyer

Reviewed by: 9/27/2012 | KGF

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 18.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	✓	No			
COC signed when relinquished and received?	Yes	✓	No			
Samples received on ice?	Yes		No	✓		
Samples properly preserved?	Yes	✓	No			
Voa vials for aqueous samples have zero headspace?	Yes		No		No VOA vials submitted	✓

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12I0923-01	X 329 - TCLP	Samples suspected to be high cyanide.
12I0923-02	X 329	Samples suspected to be high cyanide.
12I0923-03	X 330 - TCLP	Samples suspected to be high cyanide.
12I0923-04	X 330	Samples suspected to be high cyanide.
12I0923-05	X 331 - TCLP	Samples suspected to be high cyanide.
12I0923-06	X 331	Samples suspected to be high cyanide.
12I0923-07	X 332 - TCLP	Samples suspected to be high cyanide.
12I0923-08	X 332	Samples suspected to be high cyanide.
12I0923-09	X 333 - TCLP	Samples suspected to be high cyanide.
12I0923-10	X 333	Samples suspected to be high cyanide.
12I0923-11	X 334 - TCLP	Samples suspected to be high cyanide.
12I0923-12	X 334	Samples suspected to be high cyanide.
12I0923-13	X 335 - TCLP	Samples suspected to be high cyanide.
12I0923-14	X 335	Samples suspected to be high cyanide.
12I0923-15	X 336 - TCLP	Samples suspected to be high cyanide.
12I0923-16	X 336	Samples suspected to be high cyanide.
12I0923-17	G-16 - TCLP	Samples suspected to be high cyanide.
12I0923-18	G-16	Samples suspected to be high cyanide.
12I0923-19	X 323/G46 - TCLP	Samples suspected to be high cyanide.
12I0923-20	X323/G46	Samples suspected to be high cyanide.

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

GCMS Semivolatiles - Quality Control

Batch: B033273 **Prep:** SW-846 1311/SW846 3510

TCLP Semivolatile Organic Compounds

Sample ID: Blank (B033273-BLK1) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: **Analyzed:** 10/01/2012 15:49

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,4-Dichlorobenzene	ND	0.050	mg/L							
2,4,5-Trichlorophenol	ND	0.050	mg/L							
2,4,6-Trichlorophenol	ND	0.050	mg/L							
2,4-Dinitrotoluene	ND	0.050	mg/L							
2-Methylphenol	ND	0.050	mg/L							
3/4-Methylphenol	ND	0.050	mg/L							
Hexachlorobenzene	ND	0.050	mg/L							
Hexachlorobutadiene	ND	0.050	mg/L							
Hexachloroethane	ND	0.050	mg/L							
Nitrobenzene	ND	0.050	mg/L							
Pentachlorophenol	ND	0.25	mg/L							
Pyridine	ND	0.050	mg/L							
Total Cresol	ND	0.050	mg/L							
Surrogate: 2,4,6-Tribromophenol	*1.0*		mg/L	*0.7500*		*133*	*47.8-138*			
Surrogate: 2-Fluorobiphenyl	*0.34*		mg/L	*0.5000*		*68.4*	*10-110*			
Surrogate: 2-Fluorophenol	*0.49*		mg/L	*0.7500*		*65.3*	*10-110*			
Surrogate: Nitrobenzene-d5	*0.35*		mg/L	*0.5000*		*70.1*	*10-110*			
Surrogate: Phenol-d5	*0.56*		mg/L	*0.7500*		*74.2*	*10-60.8*			S
Surrogate: Terphenyl-d14	*0.61*		mg/L	*0.5000*		*122*	*16.8-110*			S

Sample ID: Blank (B033273-BLK2) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: **Analyzed:** 10/01/2012 16:08

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,4-Dichlorobenzene	ND	0.050	mg/L							
2,4,5-Trichlorophenol	ND	0.050	mg/L							
2,4,6-Trichlorophenol	ND	0.050	mg/L							
2,4-Dinitrotoluene	ND	0.050	mg/L							
2-Methylphenol	ND	0.050	mg/L							
3/4-Methylphenol	ND	0.050	mg/L							
Hexachlorobenzene	ND	0.050	mg/L							
Hexachlorobutadiene	ND	0.050	mg/L							
Hexachloroethane	ND	0.050	mg/L							
Nitrobenzene	ND	0.050	mg/L							
Pentachlorophenol	ND	0.25	mg/L							
Pyridine	ND	0.050	mg/L							
Total Cresol	ND	0.050	mg/L							
Surrogate: 2,4,6-Tribromophenol	*0.99*		mg/L	*0.7500*		*132*	*47.8-138*			
Surrogate: 2-Fluorobiphenyl	*0.34*		mg/L	*0.5000*		*68.2*	*10-110*			
Surrogate: 2-Fluorophenol	*0.52*		mg/L	*0.7500*		*69.0*	*10-110*			

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

GCMS Semivolatiles - Quality Control

Batch: B033273 **Prep:** SW-846 1311/SW846 3510

Sample ID: Blank (B033273-BLK2) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: **Analyzed:** 10/01/2012 16:08

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Surrogate: Nitrobenzene-d5	*0.35*		mg/L	*0.5000*		*69.6*	*10-110*			
Surrogate: Phenol-d5	*0.57*		mg/L	*0.7500*		*76.1*	*10-60.8*			S
Surrogate: Terphenyl-d14	*0.63*		mg/L	*0.5000*		*127*	*16.8-110*			S

Sample ID: Blank (B033273-BLK3) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: **Analyzed:** 10/01/2012 16:28

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,4-Dichlorobenzene	ND	0.050	mg/L							
2,4,5-Trichlorophenol	ND	0.050	mg/L							
2,4,6-Trichlorophenol	ND	0.050	mg/L							
2,4-Dinitrotoluene	ND	0.050	mg/L							
2-Methylphenol	ND	0.050	mg/L							
3/4-Methylphenol	ND	0.050	mg/L							
Hexachlorobenzene	ND	0.050	mg/L							
Hexachlorobutadiene	ND	0.050	mg/L							
Hexachloroethane	ND	0.050	mg/L							
Nitrobenzene	ND	0.050	mg/L							
Pentachlorophenol	ND	0.25	mg/L							
Pyridine	ND	0.050	mg/L							
Total Cresol	ND	0.050	mg/L							
Surrogate: 2,4,6-Tribromophenol	*0.92*		mg/L	*0.7500*		*123*	*47.8-138*			
Surrogate: 2-Fluorobiphenyl	*0.33*		mg/L	*0.5000*		*66.5*	*10-110*			
Surrogate: 2-Fluorophenol	*0.48*		mg/L	*0.7500*		*64.7*	*10-110*			
Surrogate: Nitrobenzene-d5	*0.33*		mg/L	*0.5000*		*66.5*	*10-110*			
Surrogate: Phenol-d5	*0.55*		mg/L	*0.7500*		*73.5*	*10-60.8*			S
Surrogate: Terphenyl-d14	*0.59*		mg/L	*0.5000*		*119*	*16.8-110*			S

Sample ID: Blank (B033273-BLK4) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: **Analyzed:** 10/01/2012 16:48

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,4-Dichlorobenzene	ND	0.050	mg/L							
2,4,5-Trichlorophenol	ND	0.050	mg/L							
2,4,6-Trichlorophenol	ND	0.050	mg/L							
2,4-Dinitrotoluene	ND	0.050	mg/L							
2-Methylphenol	ND	0.050	mg/L							
3/4-Methylphenol	ND	0.050	mg/L							
Hexachlorobenzene	ND	0.050	mg/L							
Hexachlorobutadiene	ND	0.050	mg/L							
Hexachloroethane	ND	0.050	mg/L							
Nitrobenzene	ND	0.050	mg/L							
Pentachlorophenol	ND	0.25	mg/L							
Pyridine	ND	0.050	mg/L							

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

GCMS Semivolatiles - Quality Control

Batch: B033273 **Prep:** SW-846 1311/SW846 3510

Sample ID: Blank (B033273-BLK4) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: **Analyzed:** 10/01/2012 16:48

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Total Cresol	ND	0.050	mg/L							
Surrogate: 2,4,6-Tribromophenol	*0.96*		mg/L	*0.7500*		*127*	*47.8-138*			
Surrogate: 2-Fluorobiphenyl	*0.33*		mg/L	*0.5000*		*65.1*	*10-110*			
Surrogate: 2-Fluorophenol	*0.48*		mg/L	*0.7500*		*64.4*	*10-110*			
Surrogate: Nitrobenzene-d5	*0.32*		mg/L	*0.5000*		*64.7*	*10-110*			
Surrogate: Phenol-d5	*0.53*		mg/L	*0.7500*		*71.2*	*10-60.8*			S
Surrogate: Terphenyl-d14	*0.62*		mg/L	*0.5000*		*124*	*16.8-110*			S

Sample ID: LCS (B033273-BS1) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: **Analyzed:** 10/01/2012 17:08

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,4-Dichlorobenzene	0.295	0.050	mg/L	0.5000		58.9	21-110			
2,4,5-Trichlorophenol	0.403	0.050	mg/L	0.5000		80.6	38-132			
2,4,6-Trichlorophenol	0.392	0.050	mg/L	0.5000		78.3	32-124			
2,4-Dinitrotoluene	0.358	0.050	mg/L	0.5000		71.7	54.7-110			
2-Methylphenol	0.330	0.050	mg/L	0.5000		66.0	19-123			
3/4-Methylphenol	0.615	0.050	mg/L	1.000		61.5	10-130			
Hexachlorobenzene	0.452	0.050	mg/L	0.5000		90.4	50-150			
Hexachlorobutadiene	0.306	0.050	mg/L	0.5000		61.2	16.6-110			
Hexachloroethane	0.255	0.050	mg/L	0.5000		51.0	10-118			
Nitrobenzene	0.320	0.050	mg/L	0.5000		64.0	31-120			
Pentachlorophenol	0.354	0.25	mg/L	0.5000		70.8	31.1-110			
Pyridine	0.164	0.050	mg/L	0.5000		32.9	10-130			
Total Cresol	0.945	0.050	mg/L	1.500		63.0	10-130			
Surrogate: 2,4,6-Tribromophenol	*1.0*		mg/L	*0.7500*		*134*	*47.8-138*			
Surrogate: 2-Fluorobiphenyl	*0.35*		mg/L	*0.5000*		*69.5*	*10-110*			
Surrogate: 2-Fluorophenol	*0.48*		mg/L	*0.7500*		*63.6*	*10-110*			
Surrogate: Nitrobenzene-d5	*0.33*		mg/L	*0.5000*		*66.9*	*10-110*			
Surrogate: Phenol-d5	*0.54*		mg/L	*0.7500*		*72.4*	*10-60.8*			S
Surrogate: Terphenyl-d14	*0.59*		mg/L	*0.5000*		*117*	*16.8-110*			S

Sample ID: Matrix Spike (B033273-MS1) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: 12I0923-17 **Analyzed:** 10/02/2012 17:36

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,4-Dichlorobenzene	0.289	0.050	mg/L	0.5000	ND	57.8	10-110			
2,4,5-Trichlorophenol	0.350	0.050	mg/L	0.5000	ND	69.9	28-142			
2,4,6-Trichlorophenol	0.342	0.050	mg/L	0.5000	ND	68.4	22-134			
2,4-Dinitrotoluene	0.314	0.050	mg/L	0.5000	ND	62.7	22.6-110			
2-Methylphenol	0.312	0.050	mg/L	0.5000	ND	62.4	10-133			
3/4-Methylphenol	0.588	0.050	mg/L	1.000	ND	58.8	10-140			
Hexachlorobenzene	0.381	0.050	mg/L	0.5000	ND	76.1	40-160			
Hexachlorobutadiene	0.287	0.050	mg/L	0.5000	ND	57.3	10-110			

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

GCMS Semivolatiles - Quality Control

Batch: B033273 **Prep:** SW-846 1311/SW846 3510

Sample ID: Matrix Spike (B033273-MS1) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: 12I0923-17 **Analyzed:** 10/02/2012 17:36

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Hexachloroethane	0.268	0.050	mg/L	0.5000	ND	53.5	10-128			
Nitrobenzene	0.304	0.050	mg/L	0.5000	ND	60.7	20-130			
Pentachlorophenol	0.295	0.25	mg/L	0.5000	ND	58.9	10-110			
Pyridine	0.228	0.050	mg/L	0.5000	ND	45.6	10-150			
Total Cresol	0.901	0.050	mg/L	1.500	ND	60.0	10-140			
Surrogate: 2,4,6-Tribromophenol	*0.83*		mg/L	*0.7500*		*110*	*47.8-138*			
Surrogate: 2-Fluorobiphenyl	*0.32*		mg/L	*0.5000*		*63.2*	*10-110*			
Surrogate: 2-Fluorophenol	*0.50*		mg/L	*0.7500*		*66.4*	*10-110*			
Surrogate: Nitrobenzene-d5	*0.31*		mg/L	*0.5000*		*62.9*	*10-110*			
Surrogate: Phenol-d5	*0.54*		mg/L	*0.7500*		*72.1*	*10-60.8*			S
Surrogate: Terphenyl-d14	*0.44*		mg/L	*0.5000*		*87.0*	*16.8-110*			

Sample ID: Matrix Spike Dup (B033273-MSD1) **Method:** 1311/8270C **Prepped:** 10/01/2012 06:27
Source: 12I0923-17 **Analyzed:** 10/02/2012 17:56

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,4-Dichlorobenzene	0.282	0.050	mg/L	0.5000	ND	56.3	10-110	2.54	30	
2,4,5-Trichlorophenol	0.332	0.050	mg/L	0.5000	ND	66.3	28-142	5.26	30	
2,4,6-Trichlorophenol	0.344	0.050	mg/L	0.5000	ND	68.7	22-134	0.437	30	
2,4-Dinitrotoluene	0.304	0.050	mg/L	0.5000	ND	60.9	22.6-110	2.98	30	
2-Methylphenol	0.312	0.050	mg/L	0.5000	ND	62.4	10-133	0.0320	30	
3/4-Methylphenol	0.586	0.050	mg/L	1.000	ND	58.6	10-140	0.332	30	
Hexachlorobenzene	0.364	0.050	mg/L	0.5000	ND	72.9	40-160	4.34	30	
Hexachlorobutadiene	0.287	0.050	mg/L	0.5000	ND	57.3	10-110	0.0523	30	
Hexachloroethane	0.268	0.050	mg/L	0.5000	ND	53.6	10-128	0.131	30	
Nitrobenzene	0.305	0.050	mg/L	0.5000	ND	61.0	20-130	0.362	30	
Pentachlorophenol	0.272	0.25	mg/L	0.5000	ND	54.3	10-110	8.11	30	
Pyridine	0.244	0.050	mg/L	0.5000	ND	48.9	10-150	6.92	30	
Total Cresol	0.899	0.050	mg/L	1.500	ND	59.9	10-140	0.228	30	
Surrogate: 2,4,6-Tribromophenol	*0.78*		mg/L	*0.7500*		*104*	*47.8-138*			
Surrogate: 2-Fluorobiphenyl	*0.32*		mg/L	*0.5000*		*63.8*	*10-110*			
Surrogate: 2-Fluorophenol	*0.49*		mg/L	*0.7500*		*65.0*	*10-110*			
Surrogate: Nitrobenzene-d5	*0.31*		mg/L	*0.5000*		*62.4*	*10-110*			
Surrogate: Phenol-d5	*0.55*		mg/L	*0.7500*		*72.9*	*10-60.8*			S
Surrogate: Terphenyl-d14	*0.40*		mg/L	*0.5000*		*80.1*	*16.8-110*			

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

GCMS Volatiles - Quality Control

Batch: B033353 **Prep:** SW-846 1311/<noprep>

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

GCMS Volatiles - Quality Control

Batch: B033353 **Prep:** SW-846 1311/<noprep>

TCLP VOA Zero Head Extraction

Sample ID: B033227-blk1 (B033353-BLK1) **Method:** 1311/8260B **Prepped:** 10/01/2012 10:04
Source: **Analyzed:** 10/01/2012 17:44

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,1-Dichloroethene	ND	0.050	mg/L							
1,2-Dichloroethane	ND	0.050	mg/L							
2-Butanone	ND	0.10	mg/L							
Benzene	ND	0.050	mg/L							
Carbon tetrachloride	ND	0.050	mg/L							
Chlorobenzene	ND	0.050	mg/L							
Chloroform	ND	0.050	mg/L							
Tetrachloroethene	ND	0.050	mg/L							
Trichloroethene	ND	0.050	mg/L							
Vinyl chloride	ND	0.020	mg/L							
1,4-Dichlorobenzene	ND	0.10	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*49*		µg/L	*50.00*		*98.3*	*74.5-132*			
Surrogate: 4-Bromofluorobenzene	*46*		µg/L	*50.00*		*92.4*	*80-120*			
Surrogate: Dibromofluoromethane	*51*		µg/L	*50.00*		*102*	*80-120*			
Surrogate: Toluene-d8	*48*		µg/L	*50.00*		*96.3*	*80-120*			

Sample ID: LCS (B033353-BS1) **Method:** 1311/8260B **Prepped:** 10/01/2012 10:04
Source: **Analyzed:** 10/01/2012 12:07

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,1-Dichloroethene	19.4		µg/L	20.00		96.8	47.5-121			
1,2-Dichloroethane	18.8		µg/L	20.00		94.2	67-134			
2-Butanone	17.2		µg/L	20.00		86.0	50.4-113			
Benzene	20.5		µg/L	20.00		103	68.8-120			
Carbon tetrachloride	21.3		µg/L	20.00		107	63.7-142			
Chlorobenzene	20.8		µg/L	20.00		104	76.3-117			
Chloroform	20.7		µg/L	20.00		104	75.9-124			
Tetrachloroethene	22.3		µg/L	20.00		111	72.8-123			
Trichloroethene	21.8		µg/L	20.00		109	72.8-121			
Vinyl chloride	20.3		µg/L	20.00		101	44.7-139			
1,4-Dichlorobenzene	20.9		µg/L	20.00		104	73.6-114			
Surrogate: 1,2-Dichloroethane-d4	*49*		µg/L	*50.00*		*98.6*	*74.5-132*			
Surrogate: 4-Bromofluorobenzene	*48*		µg/L	*50.00*		*97.0*	*80-120*			
Surrogate: Dibromofluoromethane	*52*		µg/L	*50.00*		*104*	*80-120*			
Surrogate: Toluene-d8	*48*		µg/L	*50.00*		*96.4*	*80-120*			

Sample ID: LCS Dup (B033353-BSD1) **Method:** 1311/8260B **Prepped:** 10/01/2012 10:04
Source: **Analyzed:** 10/01/2012 12:40

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
1,1-Dichloroethene	18.2		µg/L	20.00		91.2	47.5-121	5.95	30	
1,2-Dichloroethane	18.3		µg/L	20.00		91.4	67-134	3.02	30	

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

GCMS Volatiles - Quality Control

Batch: B033353 **Prep:** SW-846 1311/<noprep>

Sample ID: LCS Dup (B033353-BSD1) **Method:** 1311/8260B **Prepped:** 10/01/2012 10:04
Source: **Analyzed:** 10/01/2012 12:40

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
2-Butanone	17.8		µg/L	20.00		89.0	50.4-113	3.31	30	
Benzene	20.3		µg/L	20.00		102	68.8-120	1.03	30	
Carbon tetrachloride	20.2		µg/L	20.00		101	63.7-142	5.44	30	
Chlorobenzene	20.8		µg/L	20.00		104	76.3-117	0.00	30	
Chloroform	20.2		µg/L	20.00		101	75.9-124	2.69	30	
Tetrachloroethene	22.4		µg/L	20.00		112	72.8-123	0.493	30	
Trichloroethene	21.1		µg/L	20.00		105	72.8-121	3.50	30	
Vinyl chloride	19.9		µg/L	20.00		99.3	44.7-139	2.09	30	
1,4-Dichlorobenzene	21.0		µg/L	20.00		105	73.6-114	0.621	30	
Surrogate: 1,2-Dichloroethane-d4	*49*		µg/L	*50.00*		*98.4*	*74.5-132*			
Surrogate: 4-Bromofluorobenzene	*49*		µg/L	*50.00*		*97.0*	*80-120*			
Surrogate: Dibromofluoromethane	*51*		µg/L	*50.00*		*101*	*80-120*			
Surrogate: Toluene-d8	*49*		µg/L	*50.00*		*98.2*	*80-120*			

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

Metals - Quality Control

Batch: B033246 **Prep:** SW-846 1311/SW-846 7470

TCLP Mercury by CVAA

Sample ID: Blank (B033246-BLK1) **Method:** 1311/7470A **Prepped:** 09/28/2012 10:50
Source: **Analyzed:** 09/28/2012 13:47

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	ND	0.00100	mg/L							

Sample ID: LCS (B033246-BS1) **Method:** 1311/7470A **Prepped:** 09/28/2012 10:50
Source: **Analyzed:** 09/28/2012 13:51

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00215	0.00100	mg/L	0.002000		108	80-120			

Sample ID: Matrix Spike (B033246-MS1) **Method:** 1311/7470A **Prepped:** 09/28/2012 10:50
Source: 12I0923-03 **Analyzed:** 09/28/2012 13:54

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00239	0.00100	mg/L	0.002000	0.000148	112	50-200			

Sample ID: Matrix Spike Dup (B033246-MSD1) **Method:** 1311/7470A **Prepped:** 09/28/2012 10:50
Source: 12I0923-03 **Analyzed:** 09/28/2012 13:56

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00241	0.00100	mg/L	0.002000	0.000148	113	50-200	0.833	20	

Batch: B033247 **Prep:** SW-846 1311/SW-846 7470

TCLP Mercury by CVAA

Sample ID: Blank (B033247-BLK1) **Method:** 1311/7470A **Prepped:** 09/28/2012 10:50
Source: **Analyzed:** 09/28/2012 14:06

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	ND	0.00100	mg/L							

Sample ID: LCS (B033247-BS1) **Method:** 1311/7470A **Prepped:** 09/28/2012 10:50
Source: **Analyzed:** 09/28/2012 14:07

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00239	0.00100	mg/L	0.002000		120	80-120			

Sample ID: Matrix Spike (B033247-MS1) **Method:** 1311/7470A **Prepped:** 09/28/2012 10:50
Source: 12I0923-05 **Analyzed:** 09/28/2012 14:10

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00249	0.00100	mg/L	0.002000	0.0000470	122	50-200			

Sample ID: Matrix Spike Dup (B033247-MSD1) **Method:** 1311/7470A **Prepped:** 09/28/2012 10:50
Source: 12I0923-05 **Analyzed:** 09/28/2012 14:11

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00255	0.00100	mg/L	0.002000	0.0000470	125	50-200	2.38	20	

Analytical QC Summary

Client: Environmental Restoration **TCLP Metals - Quality Control**
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

Batch: B033240 **Prep:** SW-846 1311/SW846 3005A

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

TCLP Metals - Quality Control

Batch: B033240 **Prep:** SW-846 1311/SW846 3005A

TCLP Metals by ICP

Sample ID: Blank (B033240-BLK1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: **Analyzed:** 09/28/2012 18:41

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	ND	0.0100	mg/L							
Barium	ND	0.500	mg/L							
Cadmium	ND	0.00200	mg/L							
Chromium	ND	0.00300	mg/L							
Lead	ND	0.00750	mg/L							
Selenium	ND	0.0300	mg/L							
Silver	ND	0.0100	mg/L							
Zinc	0.0225	0.0200	mg/L							

Sample ID: LCS (B033240-BS1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: **Analyzed:** 09/28/2012 18:47

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.05	0.0100	mg/L	2.000		102	80-120			
Barium	2.12	0.500	mg/L	2.200		96.4	80-120			
Cadmium	0.197	0.00200	mg/L	0.2000		98.7	80-120			
Chromium	2.06	0.00300	mg/L	2.000		103	80-120			
Lead	1.91	0.00750	mg/L	2.000		95.6	80-120			
Selenium	2.21	0.0300	mg/L	2.000		110	80-120			
Silver	0.193	0.0100	mg/L	0.2000		96.6	80-120			
Zinc	2.02	0.0200	mg/L	2.000		101	80-120			

Sample ID: Matrix Spike (B033240-MS1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: 12I0852-01 **Analyzed:** 09/28/2012 18:58

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.05	0.0100	mg/L	2.000	0.0152	102	50-200			
Barium	2.26	0.500	mg/L	2.200	0.132	96.5	50-200			
Cadmium	0.217	0.00200	mg/L	0.2000	0.0248	96.1	50-200			
Chromium	2.10	0.00300	mg/L	2.000	0.0111	104	50-200			
Lead	3.23	0.00750	mg/L	2.000	1.34	94.4	50-200			
Selenium	2.18	0.0300	mg/L	2.000	ND	109	50-200			
Silver	0.194	0.0100	mg/L	0.2000	ND	96.8	50-200			
Zinc	7.02	0.0200	mg/L	2.000	5.16	93.1	50-200			

Sample ID: Matrix Spike Dup (B033240-MSD1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: 12I0852-01 **Analyzed:** 09/28/2012 19:04

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.06	0.0100	mg/L	2.000	0.0152	102	50-200	0.827	20	
Barium	2.27	0.500	mg/L	2.200	0.132	97.2	50-200	0.663	20	
Cadmium	0.220	0.00200	mg/L	0.2000	0.0248	97.4	50-200	1.15	20	
Chromium	2.09	0.00300	mg/L	2.000	0.0111	104	50-200	0.143	20	

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

TCLP Metals - Quality Control

Batch: B033240 **Prep:** SW-846 1311/SW846 3005A

Sample ID: Matrix Spike Dup (B033240-MSD1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: 12I0852-01 **Analyzed:** 09/28/2012 19:04

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Lead	3.25	0.00750	mg/L	2.000	1.34	95.6	50-200	0.741	20	
Selenium	2.18	0.0300	mg/L	2.000	ND	109	50-200	0.275	20	
Silver	0.196	0.0100	mg/L	0.2000	ND	98.2	50-200	1.54	20	
Zinc	7.06	0.0200	mg/L	2.000	5.16	95.0	50-200	0.540	20	

Batch: B033241 **Prep:** SW-846 1311/SW846 3005A

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

TCLP Metals - Quality Control

Batch: B033241 **Prep:** SW-846 1311/SW846 3005A

TCLP Metals by ICP

Sample ID: Blank (B033241-BLK1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: **Analyzed:** 09/28/2012 17:00

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	ND	0.0100	mg/L							
Barium	ND	0.500	mg/L							
Cadmium	ND	0.00200	mg/L							
Chromium	ND	0.00300	mg/L							
Lead	ND	0.00750	mg/L							
Selenium	ND	0.0300	mg/L							
Silver	ND	0.0100	mg/L							

Sample ID: LCS (B033241-BS1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: **Analyzed:** 09/28/2012 17:05

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.00	0.0100	mg/L	2.000		99.8	80-120			
Barium	2.14	0.500	mg/L	2.200		97.3	80-120			
Cadmium	0.198	0.00200	mg/L	0.2000		98.9	80-120			
Chromium	2.06	0.00300	mg/L	2.000		103	80-120			
Lead	1.91	0.00750	mg/L	2.000		95.4	80-120			
Selenium	2.18	0.0300	mg/L	2.000		109	80-120			
Silver	0.197	0.0100	mg/L	0.2000		98.6	80-120			

Sample ID: Matrix Spike (B033241-MS1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: 12I0923-01 **Analyzed:** 09/28/2012 17:16

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.10	0.0100	mg/L	2.000	0.0125	104	50-200			
Barium	2.30	0.500	mg/L	2.200	0.133	98.5	50-200			
Cadmium	0.200	0.00200	mg/L	0.2000	0.00520	97.6	50-200			
Chromium	4.40	0.00300	mg/L	2.000	2.40	100	50-200			
Lead	1.85	0.00750	mg/L	2.000	ND	92.4	50-200			
Selenium	1.20	0.0300	mg/L	2.000	ND	59.8	50-200			
Silver	0.198	0.0100	mg/L	0.2000	0.0120	93.0	50-200			

Sample ID: Matrix Spike Dup (B033241-MSD1) **Method:** 1311/6010B **Prepped:** 09/28/2012 10:35
Source: 12I0923-01 **Analyzed:** 09/28/2012 17:22

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.08	0.0100	mg/L	2.000	0.0125	104	50-200	0.669	20	
Barium	2.27	0.500	mg/L	2.200	0.133	97.3	50-200	1.14	20	
Cadmium	0.198	0.00200	mg/L	0.2000	0.00520	96.5	50-200	1.15	20	
Chromium	4.39	0.00300	mg/L	2.000	2.40	99.6	50-200	0.182	20	
Lead	1.84	0.00750	mg/L	2.000	ND	92.0	50-200	0.434	20	
Selenium	1.13	0.0300	mg/L	2.000	ND	56.6	50-200	5.41	20	
Silver	0.197	0.0100	mg/L	0.2000	0.0120	92.4	50-200	0.608	20	

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

Wet Chemistry - Quality Control

Batch: B033221

pH

Sample ID: Duplicate (B033221-DUP1) **Method:** SW-846 9045C **Prepped:** 09/27/2012 15:50
Source: 12I0923-11 **Analyzed:** 09/27/2012 15:50

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
pH	8.960	2.00	pH Units		8.840			1.35	20	

Sample ID: Duplicate (B033221-DUP2) **Method:** SW-846 9045C **Prepped:** 09/27/2012 15:50
Source: 12I0923-17 **Analyzed:** 09/27/2012 15:50

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
pH	4.770	2.00	pH Units		4.760			0.210	20	

Sample ID: Duplicate (B033221-DUP3) **Method:** SW-846 9045C **Prepped:** 09/27/2012 15:50
Source: 12I0884-04 **Analyzed:** 09/27/2012 15:50

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
pH	8.420	2.00	pH Units		8.440			0.237	20	

Batch: B033300 **Prep:** Solid CN Distillation

Total Cyanide

Sample ID: Blank (B033300-BLK1) **Method:** SW-846 9012B **Prepped:** 10/01/2012 11:00
Source: **Analyzed:** 10/03/2012 12:56

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Cyanide, Total	ND	0.0050	mg/Kg							

Sample ID: LCS (B033300-BS1) **Method:** SW-846 9012B **Prepped:** 10/01/2012 11:00
Source: **Analyzed:** 10/03/2012 12:56

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Cyanide, Total	0.188	0.0050	mg/Kg	0.2000		94.2	90-110			

Sample ID: LCS Dup (B033300-BSD1) **Method:** SW-846 9012B **Prepped:** 10/01/2012 11:00
Source: **Analyzed:** 10/03/2012 12:56

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Cyanide, Total	0.190	0.0050	mg/Kg	0.2000		95.2	90-110	1.08	20	

Batch: B033308 **Prep:** Solid Reactive CN Distillation

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

Wet Chemistry - Quality Control

Batch: B033308 **Prep:** Solid Reactive CN Distillation

Reactive Cyanide

Sample ID: Blank (B033308-BLK1) **Method:** Chapter 7/9014 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/03/2012 08:15

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Cyanide	ND	2.0	mg/Kg							

Sample ID: LCS (B033308-BS1) **Method:** Chapter 7/9014 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/03/2012 08:17

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Cyanide	16.7	2.0	mg/Kg	250.0		6.67	2.5-51.6			

Sample ID: LCS Dup (B033308-BSD1) **Method:** Chapter 7/9014 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/03/2012 08:18

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Cyanide	17.2	2.0	mg/Kg	250.0		6.89	2.5-51.6	3.15	20	

Batch: B033309 **Prep:** Solid Reactive Sulfide Distillation

Reactive Sulfide

Sample ID: Blank (B033309-BLK1) **Method:** Chapter 7/9034 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/02/2012 15:20

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Sulfide	ND	2.0	mg/Kg							

Sample ID: LCS (B033309-BS1) **Method:** Chapter 7/9034 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/02/2012 15:20

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Sulfide	8.51	2.0	mg/Kg	10.00		85.1	45.9-110			

Sample ID: LCS Dup (B033309-BSD1) **Method:** Chapter 7/9034 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/02/2012 15:20

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Sulfide	8.40	2.0	mg/Kg	10.00		84.0	45.9-110	1.30	200	

Batch: B033338 **Prep:** Solid Sulfide Distillation

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0923
Project: Baycote Metal Finishing - Mishawaka, IN

Wet Chemistry - Quality Control

Batch: B033338 **Prep:** Solid Sulfide Distillation

Total Sulfide

Sample ID: Blank (B033338-BLK1) **Method:** SW-846 9030 Modified **Prepped:** 10/02/2012 10:15
Source: **Analyzed:** 10/02/2012 15:20

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Sulfide	ND	0.050	mg/Kg							

Sample ID: LCS (B033338-BS1) **Method:** SW-846 9030 Modified **Prepped:** 10/02/2012 10:15
Source: **Analyzed:** 10/02/2012 15:20

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Sulfide	1.91	0.50	mg/Kg	5.002		38.2	10-161			

Sample ID: Matrix Spike (B033338-MS1) **Method:** SW-846 9030 Modified **Prepped:** 10/02/2012 10:15
Source: 12I0923-19 **Analyzed:** 10/02/2012 15:20

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Sulfide	219	25	mg/Kg	245.2	18.6	81.8	10-149			

Sample ID: Matrix Spike Dup (B033338-MSD1) **Method:** SW-846 9030 Modified **Prepped:** 10/02/2012 10:15
Source: 12I0923-19 **Analyzed:** 10/02/2012 15:20

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Sulfide	206	23	mg/Kg	229.4	18.6	81.9	10-149	5.97	20	

Batch: B033364

Ignitability (Open Cup)

Sample ID: Duplicate (B033364-DUP1) **Method:** ASTM D92-90 Modified **Prepped:** 10/02/2012 10:04
Source: 12I0923-07 **Analyzed:** 10/02/2012 10:04

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Ignitability	>	30	°F		>			0.00	200	

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LABORATORY SERVICES

Samples Submitted to: [X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664 [ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 109849

Instructions on back

12I0923 Kevin Falvey
ER - South Holland
Baycote Metal Mishawaka
09/27/2012

Client Name: Environmental Restoration LLC
Address: 16660 Canal Street
City, State, Zip: South Holland, IL 60473
Contact: John Behrens
Telephone #: 708 333-9915
Sampled by (PRINT): John Behrens
Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #)

Project: Baycote Metal Finishing
Location: Mishawaka, IN.
PO #:
Compliance Monitoring? [ ] Yes(1) [X] No
(1)Agency/Program

Turnaround Time: [ ] Routine (7 working days) [X] RUSH* (notify lab) 10/2/12 COB (needed by)

Report Type: [ ] Results Only [X] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

Sampler Signature: [signature]
Sampler Phone #: 708 473-7124 cell
[X] e-mail (address): T.Viehweg@ERLLC.com

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses / Preservative Types **	TCLP Metals	TCLP Volatiles	TCL Semi-Vol	PH	Reactive Cyanide & Sulfide	Total Cyanide & Sulfur	Flash Point	Water Reactivity	For Lab Use Only 12I0923
X 329	S	X			9/26/12	1605	1	None	✓	✓	✓	✓	✓	✓	✓	✓	01/02
X 330	S	X				1610	1		✓	✓	✓	✓	✓	✓	✓	✓	03/04
X 331	S	X				1615	1		✓	✓	✓	✓	✓	✓	✓	✓	05/06
X 332	S	X				1620	1		✓	✓	✓	✓	✓	✓	✓	✓	07/08
X 333	S	X				1625	1		✓	✓	✓	✓	✓	✓	✓	✓	09/10
X 334	S	X				1630	1		✓	✓	✓	✓	✓	✓	✓	✓	11/12
X 335	S	X				1635	1		✓	✓	✓	✓	✓	✓	✓	✓	13/14
X 336	S	X				1640	1		✓	✓	✓	✓	✓	✓	✓	✓	15/16

Possible Hazard Identification: [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments
- Samples suspected to be high cyanide
- Material previously involved in a reaction/fire

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	9/27/12 1000	[signature]	9/27/12 1000
[signature]	9/27/12 1025 CST		
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
		[signature]	9/27/12 1020

Sample temperature upon receipt in degrees C = 18°C NI

rev. 11/04/04

Page ____ of ____

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LABORATORY SERVICES

Samples Submitted to: [X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664 [ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 109850

Instructions on back

Client Name: Environmental Restoration LLC	Project: Baycote Metal Finishing	Turnaround Time	Report Type
Address: 16660 Canal St	Location: Mishawaka, IN	[ ] Routine (7 working days)	[ ] Results Only [X] Level II
City, State, Zip: South Holland, IL 60473	PO #	[X] RUSH* (notify lab) 10/2/12 COB (needed by)	[ ] Level III [ ] Level III CLP-like
Contact: John Behrens	Compliance Monitoring? [ ] Yes(1) [X] No		[ ] Level IV [ ] Level IV CLP-like
Telephone #: 708 333-9915	(1)Agency/Program		[ ] EDD

Sampled by (PRINT): John Behrens Sampler Signature: [signature] Sampler Phone #: 708 473-7124

Send Report via [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address) J.Vichweg@ERLLC.com

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

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses / Preservative Types **	TCLP Metals	TCLP Semi-Volatiles	TCLP Volatiles	pH	Total Cyanide and Sulfide	Reactive Cyanide & Sulfide	Flash Point	Water Reactivity	For Lab Use Only 12I0923
G-16	S	✓			9/27	9:20	1	None	x	x	x	x	x	x	x	x	17/18
X323/G46	S	✓			9/27	9:30	1	None	x	x	x	x	x	x	x	x	19/20

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	9/27/12 1000	[signature]	9/27/12 1000
[signature]	9/27/12 1025	[signature]	
		Received for Lab By (signature) [signature]	9/27/12 1025

Sample temperature upon receipt in degrees C = 18.00 NI

rev. 11/04/04

Page ____ of ____

October 24, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12I0923

Re: Baycote Metal Finishing - Mishawaka, IN

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 20 sample(s) on 9/27/2012 10:26:00AM for the analyses presented in the following report as Work Order 12I0923.

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 Robert Crookston, Interim Managing Director, at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer, at sean.hyde@microbac.com or James Nokes, President, at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Wednesday, October 24, 2012*

Client: Environmental Restoration
Project: Baycote Metal Finishing - Mishawaka, IN
Lab Order: 12I0923

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12I0923-17	G-16 - TCLP		09/27/2012 09:20	9/27/2012 10:26:00AM
12I0923-18	G-16		09/27/2012 09:20	9/27/2012 10:26:00AM
12I0923-19	X 323/G46 - TCLP		09/27/2012 09:30	9/27/2012 10:26:00AM
12I0923-20	X323/G46		09/27/2012 09:30	9/27/2012 10:26:00AM

CASE NARRATIVE

Date: *Wednesday, October 24, 2012*

Client: Environmental Restoration
Project: Baycote Metal Finishing - Mishawaka, IN
Lab Order: 12I0923

The X331-TCLP, X332-TCLP, X333-TCLP, X334-TCLP, X335-TCLP, X336-TCLP and G-16-TCLP samples required dilution prior to VOA analysis due to a strong odor in the TCLP extracts. Reporting limits have been adjusted to reflect the dilution level.

Water Reactivity:
Each sample in this work order was mixed with approximately 25 ml of deonized water.

There was no discernable reaction to any sample : No Visual, No Color Change and No Elevation of Temperature.

Analytical Results

Date: *Wednesday, October 24, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: G-16 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-17
Sampled: 09/27/2012 9:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 20:29
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 20:29
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 20:29
Surr: 2,4,6-Tribromophenol	S	133.00	47.8-138		%REC	1	10/01/2012 20:29
Surr: 2-Fluorobiphenyl	S	66.20	10-110		%REC	1	10/01/2012 20:29
Surr: 2-Fluorophenol	S	67.70	10-110		%REC	1	10/01/2012 20:29
Surr: Nitrobenzene-d5	S	67.00	10-110		%REC	1	10/01/2012 20:29
Surr: Phenol-d5	S	77.50	10-60.8	S	%REC	1	10/01/2012 20:29
Surr: Terphenyl-d14	S	116.00	16.8-110	S	%REC	1	10/01/2012 20:29
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
1,2-Dichloroethane	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
2-Butanone	A	***ND***	0.50		mg/L	50	10/01/2012 23:08
Benzene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Carbon tetrachloride	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Chlorobenzene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Chloroform	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Tetrachloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Trichloroethene	A	***ND***	0.25		mg/L	50	10/01/2012 23:08
Vinyl chloride	A	***ND***	0.10		mg/L	50	10/01/2012 23:08
1,4-Dichlorobenzene	B	***ND***	0.50		mg/L	50	10/01/2012 23:08
Surr: 1,2-Dichloroethane-d4	S	103.00	74.5-132		%REC	50	10/01/2012 23:08
Surr: 4-Bromofluorobenzene	S	90.70	80-120		%REC	50	10/01/2012 23:08
Surr: Dibromofluoromethane	S	104.00	80-120		%REC	50	10/01/2012 23:08
Surr: Toluene-d8	S	94.60	80-120		%REC	50	10/01/2012 23:08
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.0010		mg/L	1	09/28/2012 14:05

Analytical Results

Date: *Wednesday, October 24, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: G-16 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-17
Sampled: 09/27/2012 9:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***ND***	0.0100		mg/L	1	09/28/2012 20:01
Barium	A	***ND***	0.500		mg/L	1	09/28/2012 20:01
Cadmium	A	***ND***	0.00200		mg/L	1	09/28/2012 20:01
Chromium	A	***0.0829***	0.00300		mg/L	1	09/28/2012 20:01
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 20:01
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 20:01
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 20:01
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***2200***	430		mg/Kg	1000	10/03/2012 9:49
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 13:22**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 13:22
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***4.76***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***ND***	2.3		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 24, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: G-16
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-18
Sampled: 09/27/2012 9:20
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:26
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 24, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 323/G46 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-19
Sampled: 09/27/2012 9:30
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Semivolatile Organic Compounds		Method: **1311/8270C** Prep Method: **SW-846 1311/SW846 3510**				Analyst: **ep** Prep Date/Time: **10/01/2012 06:27**	
1,4-Dichlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
2,4,5-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
2,4,6-Trichlorophenol	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
2,4-Dinitrotoluene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
2-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
3/4-Methylphenol	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Hexachlorobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Hexachlorobutadiene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Hexachloroethane	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Nitrobenzene	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Pentachlorophenol	A	***ND***	0.25		mg/L	1	10/01/2012 21:29
Pyridine	A	***ND***	0.050		mg/L	1	10/01/2012 21:29
Total Cresol	M	***ND***	0.050		mg/L	1	10/01/2012 21:29
Surr: 2,4,6-Tribromophenol	S	134.00	47.8-138		%REC	1	10/01/2012 21:29
Surr: 2-Fluorobiphenyl	S	75.20	10-110		%REC	1	10/01/2012 21:29
Surr: 2-Fluorophenol	S	75.10	10-110		%REC	1	10/01/2012 21:29
Surr: Nitrobenzene-d5	S	73.40	10-110		%REC	1	10/01/2012 21:29
Surr: Phenol-d5	S	81.50	10-60.8	S	%REC	1	10/01/2012 21:29
Surr: Terphenyl-d14	S	102.00	16.8-110		%REC	1	10/01/2012 21:29
TCLP VOA Zero Head Extraction		Method: **1311/8260B** Prep Method: **SW-846 1311/<noprep>**				Analyst: **jln** Prep Date/Time: **10/01/2012 10:04**	
1,1-Dichloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
1,2-Dichloroethane	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
2-Butanone	A	***ND***	0.10		mg/L	10	10/01/2012 23:41
Benzene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Carbon tetrachloride	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Chlorobenzene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Chloroform	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Tetrachloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Trichloroethene	A	***ND***	0.050		mg/L	10	10/01/2012 23:41
Vinyl chloride	A	***ND***	0.020		mg/L	10	10/01/2012 23:41
1,4-Dichlorobenzene	B	***ND***	0.10		mg/L	10	10/01/2012 23:41
Surr: 1,2-Dichloroethane-d4	S	103.00	74.5-132		%REC	10	10/01/2012 23:41
Surr: 4-Bromofluorobenzene	S	91.20	80-120		%REC	10	10/01/2012 23:41
Surr: Dibromofluoromethane	S	105.00	80-120		%REC	10	10/01/2012 23:41
Surr: Toluene-d8	S	96.10	80-120		%REC	10	10/01/2012 23:41
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **09/28/2012 10:50**	
Mercury	A	***ND***	0.0010		mg/L	1	09/28/2012 14:12

Analytical Results

Date: *Wednesday, October 24, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X 323/G46 - TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-19
Sampled: 09/27/2012 9:30
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **09/28/2012 10:35**	
Arsenic	A	***0.0102***	0.0100		mg/L	1	09/28/2012 17:45
Barium	A	***1.09***	0.500		mg/L	1	09/28/2012 17:45
Cadmium	A	***0.0551***	0.00200		mg/L	1	09/28/2012 17:45
Chromium	A	***1.65***	0.00300		mg/L	1	09/28/2012 17:45
Lead	A	***ND***	0.00750		mg/L	1	09/28/2012 17:45
Selenium	A	***ND***	0.0300		mg/L	1	09/28/2012 17:45
Silver	A	***ND***	0.0100		mg/L	1	09/28/2012 17:45
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 11:00**	
Cyanide, Total	A	***370***	46		mg/Kg	100	10/03/2012 10:03
Ignitability (Open Cup)		Method: **ASTM D92-90 Modified**				Analyst: **ExB** Prep Date/Time: **10/02/2012 15:05**	
Ignitability	A	***> 170***	30		°F	1	10/02/2012 15:05
pH		Method: **SW-846 9045C**				Analyst: **RJC** Prep Date/Time: **09/27/2012 15:50**	
pH	A	***7.60***	2.00		pH Units	1	09/27/2012 15:50
Total Sulfide		Method: **SW-846 9030 Modified** Prep Method: **Solid Sulfide Distillation**				Analyst: **JH** Prep Date/Time: **10/02/2012 10:15**	
Sulfide	A	***19***	2.3		mg/Kg	1	10/02/2012 15:20

Analytical Results

Date: *Wednesday, October 24, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Finishing - Mishawaka, IN
Client Sample ID: X323/G46
Sample Description:
Matrix: Solid

Work Order/ID: 12I0923-20
Sampled: 09/27/2012 9:30
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	200		mg/Kg	100	10/03/2012 9:28
Reactive Sulfide		Method: **Chapter 7/9034**				Analyst: **JH**	
		Prep Method: **Solid Reactive Sulfide Distillation**				Prep Date/Time: **10/01/2012 10:30**	
Reactive Sulfide	A	***ND***	10		mg/Kg	1	10/02/2012 15:20

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

[a] The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
[b] The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
[c] Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
[d] 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
[e] Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
[f] Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
[g] 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)
[h] Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
[i] North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
[-] Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
[j] Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

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COOLER INSPECTION

Date: Wednesday, October 24, 2012

Client Name: Environmental Restoration

Date/Time Received: 09/27/2012 10:26

Work Order Number: 12I0923

Received by: Dave Bryant

Checklist completed by: 9/27/2012 11:34:00AM | James Meyer

Reviewed by: 9/27/2012 | KGF

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 18.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	✓	No			
COC signed when relinquished and received?	Yes	✓	No			
Samples received on ice?	Yes		No	✓		
Samples properly preserved?	Yes	✓	No			
Voa vials for aqueous samples have zero headspace?	Yes		No		No VOA vials submitted	✓

Cooler Comments:

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

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Sample ID	Client Sample ID	Comments
12I0923-01	X 329 - TCLP	Samples suspected to be high cyanide.
12I0923-02	X 329	Samples suspected to be high cyanide.
12I0923-03	X 330 - TCLP	Samples suspected to be high cyanide.
12I0923-04	X 330	Samples suspected to be high cyanide.
12I0923-05	X 331 - TCLP	Samples suspected to be high cyanide.
12I0923-06	X 331	Samples suspected to be high cyanide.
12I0923-07	X 332 - TCLP	Samples suspected to be high cyanide.
12I0923-08	X 332	Samples suspected to be high cyanide.
12I0923-09	X 333 - TCLP	Samples suspected to be high cyanide.
12I0923-10	X 333	Samples suspected to be high cyanide.
12I0923-11	X 334 - TCLP	Samples suspected to be high cyanide.
12I0923-12	X 334	Samples suspected to be high cyanide.
12I0923-13	X 335 - TCLP	Samples suspected to be high cyanide.
12I0923-14	X 335	Samples suspected to be high cyanide.
12I0923-15	X 336 - TCLP	Samples suspected to be high cyanide.
12I0923-16	X 336	Samples suspected to be high cyanide.
12I0923-17	G-16 - TCLP	Samples suspected to be high cyanide.
12I0923-18	G-16	Samples suspected to be high cyanide.
12I0923-19	X 323/G46 - TCLP	Samples suspected to be high cyanide.
12I0923-20	X323/G46	Samples suspected to be high cyanide.

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

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LABORATORY SERVICES

Samples Submitted to: [X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664 [ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 109849

Instructions on back

12I0923 Kevin Falvey
ER - South Holland
Baycote Metal Mishawaka
09/27/2012

Client Name: Environmental Restoration LLC
Address: 16660 Canal Street
City, State, Zip: South Holland, IL 60473
Contact: John Behrens
Telephone #: 708 333-9915
Sampled by (PRINT): John Behrens
Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #)

Project: Baycote Metal Finishing
Location: Mishawaka, IN.
PO #:
Compliance Monitoring? [ ] Yes(1) [X] No
(1)Agency/Program

Turnaround Time: [ ] Routine (7 working days) [X] RUSH* (notify lab) 10/2/12 COB (needed by)

Report Type: [ ] Results Only [X] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

Sampler Signature: [signature]
Sampler Phone #: 708 473-7124 cell
[X] e-mail (address): T.Viehweg@ERLLC.com

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses / Preservative Types**	TCLP Metals	TCLP Volatiles	TCL Semi-Vol	PH	Reactive Cyanide & Sulfide	Total Cyanide & Sulfur	Flash Point	Water Reactivity	For Lab Use Only 12I0923
X329	S	X			9/26/12	1605	1	None	✓	✓	✓	✓	✓	✓	✓	✓	01/02
X330	S	X				1610	1		✓	✓	✓	✓	✓	✓	✓	✓	03/04
X331	S	X				1615	1		✓	✓	✓	✓	✓	✓	✓	✓	05/06
X332	S	X				1620	1		✓	✓	✓	✓	✓	✓	✓	✓	07/08
X333	S	X				1625	1		✓	✓	✓	✓	✓	✓	✓	✓	09/10
X334	S	X				1630	1		✓	✓	✓	✓	✓	✓	✓	✓	11/12
X335	S	X				1635	1		✓	✓	✓	✓	✓	✓	✓	✓	13/14
X336	S	X				1640	1		✓	✓	✓	✓	✓	✓	✓	✓	15/16

Possible Hazard Identification: [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive
Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments
- Samples suspected to be high cyanide
- Material previously involved in a reaction/fire

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	9/27/12 1000	[signature]	9/27/12 1000
[signature]	9/27/12 1025 CST		
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
		[signature]	9/27/12 1020

Sample temperature upon receipt in degrees C = 18°C NI

rev. 11/04/04

Page ____ of ____

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LABORATORY SERVICES

Samples Submitted to: [X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664 [ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 109850

Instructions on back

Client Name	Environmental Restoration LLC
Address	16660 Canal St
City, State, Zip	South Holland, IL 60473
Contact	John Behrens
Telephone #	708 333-9915
Project	Baycote Metal Finishing
Location	Mishawaka, IN
PO #	
Compliance Monitoring?	[ ] Yes(1) [X] No
(1)Agency/Program	

Turnaround Time: [ ] Routine (7 working days) [X] RUSH* (notify lab) 10/2/12 COB (needed by)

Report Type: [ ] Results Only [X] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

Sampled by (PRINT): John Behrens Sampler Signature: [signature] Sampler Phone #: 708 473-7124

Send Report via [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address) J.Vichweg@ERLLC.com

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

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses / Preservative Types **	TCLP Metals	TCLP Semi-Volatiles	TCLP Volatiles	PH	Total Cyanide and Sulfide	Reactive Cyanide & Sulfide	Flash Point	Water Reactivity	For Lab Use Only 12I0923
G-16	S	✓			9/27	9:20	1	None	x	x	x	x	x	x	x	x	17/18
X323/G46	S	✓			9/27	9:30	1	None	x	x	x	x	x	x	x	x	19/20

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	9/27/12 1000	[signature]	9/27/12 1000
[signature]	9/27/12 1025	[signature]	
		Received for Lab By (signature)	Date/Time
		[signature]	9/27/12 1025

Sample temperature upon receipt in degrees C = 18.00 NI

rev. 11/04/04

Page ____ of ____

ATTACHMENT B13

October 4, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12I0947

Re: Baycote RV Mishawaka, IN

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 2 sample(s) on 9/27/2012 10:26:00AM for the analyses presented in the following report as Work Order 12I0947.

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 Robert Crookston, Interim Managing Director, at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer, at sean.hyde@microbac.com or James Nokes, President, at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

WORK ORDER SAMPLE SUMMARY

Date: *Thursday, October 4, 2012*

Client: Environmental Restoration
Project: Baycote RV Mishawaka, IN
Lab Order: 12I0947

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12I0947-01	BMF-W501-092612		09/26/2012 17:00	9/27/2012 10:26:00AM
12I0947-02	BMF-W501-092612-TCLP		09/26/2012 17:00	9/27/2012 10:26:00AM

CASE NARRATIVE

Date: *Thursday, October 4, 2012*

Client: Environmental Restoration
Project: Baycote RV Mishawaka, IN
Lab Order: 12I0947

B - the Method Blank associated with the sample contained Iron at a level above the reporting limit. This is considered insignificant, as the concentration in the sample was more than ten-times that measured in the blank.

B - the Method Blank associated with the BMF-W501-092612 sample contained Chromium at a level above the reporting limit. This is considered insignificant, as the concentration in the sample was more than ten-times that measured in the blank.

The Matrix Spike and Matrix Spike Duplicate performed on the BMF-W501-092612 sample failed the accuracy and precision criteria for Cadmium, Chromium, Cobalt, and Zinc with a low bias. This bias is due to the high indigenous analyte concentration (relative to the spike amount).

The Matrix Spike and Matrix Spike Duplicate performed on the BMF-W501-092612 sample failed the accuracy criteria for Copper and Nickel with a high bias. The precision criteria were met. A Post Digestion Spike was performed and the acceptance criteria met, indicating accurate measurement at the instrument. This data is indicative of matrix interference at the preparation level. The Matrix Spike and Matrix Spike Duplicate failed the accuracy criteria for Vanadium with a low bias. The precision criteria were met. A Post Digestion Spike was performed and the acceptance criteria were not met, indicating sample matrix interference.

Analytical Results

Date: *Thursday, October 4, 2012*

Client: Environmental Restoration
Client Project: Baycote RV Mishawaka, IN
Client Sample ID: BMF-W501-092612
Sample Description:
Matrix: Solid

Work Order/ID: 12I0947-01
Sampled: 09/26/2012 17:00
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Total Metals by ICP		Method: **SW-846 6010B** Prep Method: **SW846 3050B**				Analyst: **SA** Prep Date/Time: **09/28/2012 08:32**	
Aluminum	A	***55***	40		mg/Kg	4	09/28/2012 21:38
Beryllium	A	***ND***	0.20		mg/Kg	4	09/28/2012 21:38
Calcium	A	***3200***	100		mg/Kg	4	09/28/2012 21:38
Iron	A	***4900***	10	B	mg/Kg	4	09/28/2012 21:38
Magnesium	A	***1200***	100		mg/Kg	4	09/28/2012 21:38
Manganese	A	***58***	0.80		mg/Kg	4	09/28/2012 21:38
Potassium	A	***290***	100		mg/Kg	4	09/28/2012 21:38
Sodium	A	***1400***	100		mg/Kg	4	10/01/2012 11:26
Total Metals by ICP/MS		Method: **SW-846 6020A** Prep Method: **SW846 3050B**				Analyst: **RPL** Prep Date/Time: **09/28/2012 08:32**	
Antimony	A	***0.85***	0.20		mg/Kg	20	09/28/2012 16:06
Arsenic	A	***ND***	0.50		mg/Kg	20	09/28/2012 16:06
Barium	A	***3.7***	0.20		mg/Kg	20	09/28/2012 16:06
Cadmium	A	***72***	0.20		mg/Kg	20	09/28/2012 16:06
Chromium	A	***2000***	10	B	mg/Kg	1000	10/02/2012 17:38
Cobalt	A	***150***	0.20		mg/Kg	20	09/28/2012 16:06
Copper	A	***22***	0.50		mg/Kg	20	09/28/2012 16:06
Lead	A	***9.9***	0.38		mg/Kg	20	09/28/2012 16:06
Nickel	A	***110***	0.50		mg/Kg	20	09/28/2012 16:06
Selenium	A	***0.58***	0.32	B	mg/Kg	20	09/28/2012 16:06
Silver	A	***13***	0.50		mg/Kg	20	09/28/2012 16:06
Thallium	A	***0.24***	0.20		mg/Kg	20	09/28/2012 16:06
Vanadium	A	***ND***	20		mg/Kg	1000	10/02/2012 17:38
Zinc	A	***16000***	50		mg/Kg	1000	10/02/2012 17:38
Total Mercury by CVAA		Method: **SW-846 7471A** Prep Method: **SW-846 7471**				Analyst: **RPL** Prep Date/Time: **09/28/2012 08:20**	
Mercury	A	***0.048***	0.042		mg/Kg	1	09/28/2012 14:23
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Solid CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/03/2012 10:35**	
Cyanide, Total	A	***29***	5.0		mg/Kg	10	10/03/2012 13:24
Hexavalent Chromium		Method: **SW-846 7196A** Prep Method: **SW846 3060A**				Analyst: **AGRIE** Prep Date/Time: **10/03/2012 14:20**	
Chromium, Hexavalent	A	***ND***	20		mg/Kg	50	10/04/2012 15:43

Analytical Results

Date: *Thursday, October 4, 2012*

Client: Environmental Restoration
Client Project: Baycote RV Mishawaka, IN
Client Sample ID: BMF-W501-092612-TCLP
Sample Description:
Matrix: Solid

Work Order/ID: 12I0947-02
Sampled: 09/26/2012 17:00
Received: 09/27/2012 10:26

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **10/01/2012 10:00**	
Mercury	A	***ND***	0.00100		mg/L	1	10/01/2012 14:01
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **10/01/2012 09:50**	
Arsenic	A	***0.0330***	0.0100		mg/L	1	10/01/2012 16:52
Barium	A	***ND***	0.500		mg/L	1	10/01/2012 16:52
Cadmium	A	***6.66***	0.00200		mg/L	1	10/01/2012 16:52
Chromium	A	***31.2***	0.00300		mg/L	1	10/01/2012 16:52
Lead	A	***0.0125***	0.00750		mg/L	1	10/01/2012 16:52
Selenium	A	***ND***	0.0300		mg/L	1	10/01/2012 16:52
Silver	A	***ND***	0.0100		mg/L	1	10/01/2012 16:52
Reactive Cyanide		Method: **Chapter 7/9014** Prep Method: **Solid Reactive CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/01/2012 10:30**	
Reactive Cyanide	A	***ND***	2.0		mg/Kg	1	10/03/2012 8:48

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

[a] The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
[b] The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
[c] Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
[d] 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
[e] Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
[f] Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
[g] 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)
[h] Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
[i] North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
[-] Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
[j] Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

Microbac®

COOLER INSPECTION

Date: Thursday, October 4, 2012

Client Name: Environmental Restoration

Date/Time Received: 09/27/2012 10:26

Work Order Number: 12I0947

Received by: Dave Bryant

Checklist completed by: 9/27/2012 5:51:00PM | Dave Bryant

Reviewed by: 9/28/2012 | KGF

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 10.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	✓	No			
COC signed when relinquished and received?	Yes	✓	No			
Samples received on ice?	Yes		No	✓		
Samples properly preserved?	Yes	✓	No			
Voa vials for aqueous samples have zero headspace?	Yes		No		No VOA vials submitted	✓

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12I0947-01	BMF-W501-092612	
12I0947-02	BMF-W501-092612-TCLP	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0947
Project: Baycote RV Mishawaka, IN

Metals - Quality Control

Batch: B033242 **Prep:** SW846 3050B

Total Metals by ICP

Sample ID: Blank (B033242-BLK1) **Method:** SW-846 6010B **Prepped:** 09/28/2012 08:32
Source: **Analyzed:** 09/28/2012 20:18

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Aluminum	ND	10	mg/Kg							
Beryllium	ND	0.050	mg/Kg							
Calcium	ND	25	mg/Kg							
Iron	2.6	2.5	mg/Kg							
Magnesium	ND	25	mg/Kg							
Manganese	ND	0.20	mg/Kg							
Potassium	ND	25	mg/Kg							

Sample ID: Blank (B033242-BLK2) **Method:** SW-846 6010B **Prepped:** 09/28/2012 08:32
Source: **Analyzed:** 10/01/2012 11:15

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Sodium	ND	25	mg/Kg							

Sample ID: LCS (B033242-BS1) **Method:** SW-846 6010B **Prepped:** 09/28/2012 08:32
Source: **Analyzed:** 09/28/2012 20:23

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Aluminum	9380	20	mg/Kg	6130		153	71.5-250			
Beryllium	249	0.10	mg/Kg	316.0		78.9	61.1-110			
Calcium	12500	50	mg/Kg	11900		105	85.7-139			
Iron	10100	5.0	mg/Kg	9630		105	26.8-193			
Magnesium	4830	50	mg/Kg	5230		92.3	62.5-114			
Manganese	383	0.40	mg/Kg	445.0		86.2	66.7-110			
Potassium	12100	50	mg/Kg	14200		85.2	57.1-110			
Sodium	6990	50	mg/Kg	8160		85.6	55.4-110			

Sample ID: Matrix Spike (B033242-MS1) **Method:** SW-846 6010B **Prepped:** 09/28/2012 08:32
Source: 12I0924-02 **Analyzed:** 09/28/2012 20:35

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Aluminum	3840	10	mg/Kg	100.0	3330	510	75-125			S
Beryllium	13.5	0.050	mg/Kg	10.00	3.12	104	75-125			
Calcium	24700	25	mg/Kg	1000	23400	132	75-125			ES
Iron	33600	2.5	mg/Kg	100.0	33800	NR	75-125			ES
Magnesium	11900	25	mg/Kg	1000	10200	166	75-125			S
Manganese	968	0.20	mg/Kg	10.00	936	320	75-125			ES
Potassium	1300	25	mg/Kg	1000	158	114	75-125			
Sodium	1350	25	mg/Kg	1000	204	114	75-125			

Sample ID: Matrix Spike Dup (B033242-MSD1) **Method:** SW-846 6010B **Prepped:** 09/28/2012 08:32
Source: 12I0924-02 **Analyzed:** 09/28/2012 20:40

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Aluminum	3950	10	mg/Kg	100.0	3330	622	75-125	2.89	20	S

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0947
Project: Baycote RV Mishawaka, IN

Metals - Quality Control

Batch: B033242 **Prep:** SW846 3050B

Sample ID: Matrix Spike Dup (B033242-MSD1) **Method:** SW-846 6010B **Prepped:** 09/28/2012 08:32
Source: 12I0924-02 **Analyzed:** 09/28/2012 20:40

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Beryllium	13.6	0.050	mg/Kg	10.00	3.12	105	75-125	0.958	20	
Calcium	25100	25	mg/Kg	1000	23400	168	75-125	1.47	20	ES
Iron	33400	2.5	mg/Kg	100.0	33800	NR	75-125	0.672	20	ES
Magnesium	12100	25	mg/Kg	1000	10200	194	75-125	2.25	20	S
Manganese	987	0.20	mg/Kg	10.00	936	510	75-125	1.94	20	ES
Potassium	1330	25	mg/Kg	1000	158	117	75-125	2.44	20	
Sodium	1360	25	mg/Kg	1000	204	115	75-125	0.814	20	

Batch: B033243 **Prep:** SW846 3050B

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0947
Project: Baycote RV Mishawaka, IN

Metals - Quality Control

Batch: B033243 **Prep:** SW846 3050B

Total Metals by ICP/MS

Sample ID: Blank (B033243-BLK1) **Method:** SW-846 6020A **Prepped:** 09/28/2012 08:32
Source: **Analyzed:** 09/28/2012 15:54

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Antimony	ND	0.20	mg/Kg							
Arsenic	ND	0.50	mg/Kg							
Barium	ND	0.20	mg/Kg							
Cadmium	ND	0.20	mg/Kg							
Chromium	0.28	0.20	mg/Kg							
Cobalt	ND	0.20	mg/Kg							
Copper	ND	0.50	mg/Kg							
Lead	ND	0.38	mg/Kg							
Nickel	ND	0.50	mg/Kg							
Selenium	0.30	0.20	mg/Kg							
Silver	ND	0.50	mg/Kg							
Thallium	ND	0.20	mg/Kg							
Vanadium	ND	0.40	mg/Kg							
Zinc	ND	1.0	mg/Kg							

Sample ID: LCS (B033243-BS1) **Method:** SW-846 6020A **Prepped:** 09/28/2012 08:32
Source: **Analyzed:** 09/28/2012 16:00

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Antimony	71.3	0.40	mg/Kg	281.0		25.4	10-110			
Arsenic	150	1.0	mg/Kg	192.0		78.1	58.3-110			
Barium	160	0.40	mg/Kg	191.0		83.9	61.3-110			
Cadmium	191	0.40	mg/Kg	245.0		78.1	60.4-110			
Chromium	249	0.40	mg/Kg	303.0		82.2	58.4-110			
Cobalt	195	0.40	mg/Kg	249.0		78.4	61.4-110			
Copper	74.8	1.0	mg/Kg	93.00		80.4	60.5-110			
Lead	180	0.75	mg/Kg	225.0		80.2	60.9-110			
Nickel	207	1.0	mg/Kg	255.0		81.0	61.6-110			
Selenium	76.3	0.40	mg/Kg	112.0		68.1	43.4-111			
Silver	20.9	1.0	mg/Kg	28.80		72.5	50.3-110			
Thallium	187	0.40	mg/Kg	233.0		80.4	55.4-110			
Vanadium	130	0.80	mg/Kg	177.0		73.5	47.1-110			
Zinc	257	2.0	mg/Kg	314.0		81.9	58.6-110			

Sample ID: Matrix Spike (B033243-MS1) **Method:** SW-846 6020A **Prepped:** 09/28/2012 08:32
Source: 12I0947-01 **Analyzed:** 09/28/2012 16:12

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Antimony	94.3	0.20	mg/Kg	100.0	0.851	93.4	70-130			
Arsenic	99.5	0.50	mg/Kg	100.0	ND	99.5	70-130			
Barium	112	0.20	mg/Kg	110.0	3.68	98.5	70-130			
Cadmium	70.8	0.20	mg/Kg	10.00	71.6	NR	70-130			S

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0947
Project: Baycote RV Mishawaka, IN

Metals - Quality Control

Batch: B033243 **Prep:** SW846 3050B

Sample ID: Matrix Spike (B033243-MS1) **Method:** SW-846 6020A **Prepped:** 09/28/2012 08:32
Source: 12I0947-01 **Analyzed:** 09/28/2012 16:12

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Chromium	2540	0.20	mg/Kg	100.0	1880	660	70-130			ES
Cobalt	155	0.20	mg/Kg	10.00	152	31.9	70-130			S
Copper	35.3	0.50	mg/Kg	10.00	21.7	137	70-130			S
Lead	113	0.38	mg/Kg	100.0	9.88	103	70-130			
Nickel	460	0.50	mg/Kg	100.0	115	345	70-130			S
Selenium	97.2	0.20	mg/Kg	100.0	0.582	96.6	70-130			
Silver	22.2	0.50	mg/Kg	10.00	12.8	93.9	70-130			
Thallium	103	0.20	mg/Kg	100.0	0.241	102	70-130			
Vanadium	45.3	0.40	mg/Kg	100.0	ND	45.3	70-130			S
Zinc	15100	1.0	mg/Kg	100.0	14900	260	70-130			ES

Sample ID: Matrix Spike Dup (B033243-MSD1) **Method:** SW-846 6020A **Prepped:** 09/28/2012 08:32
Source: 12I0947-01 **Analyzed:** 09/28/2012 16:18

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Antimony	94.9	0.20	mg/Kg	100.0	0.851	94.0	70-130	0.600	20	
Arsenic	96.1	0.50	mg/Kg	100.0	ND	96.1	70-130	3.45	20	
Barium	107	0.20	mg/Kg	110.0	3.68	94.1	70-130	4.38	20	
Cadmium	54.8	0.20	mg/Kg	10.00	71.6	NR	70-130	25.4	20	RS
Chromium	1890	0.20	mg/Kg	100.0	1880	9.15	70-130	29.4	20	ERS
Cobalt	112	0.20	mg/Kg	10.00	152	NR	70-130	32.8	20	RS
Copper	38.8	0.50	mg/Kg	10.00	21.7	171	70-130	9.19	20	S
Lead	117	0.38	mg/Kg	100.0	9.88	107	70-130	3.67	20	
Nickel	390	0.50	mg/Kg	100.0	115	275	70-130	16.5	20	S
Selenium	93.3	0.20	mg/Kg	100.0	0.582	92.7	70-130	4.05	20	
Silver	18.9	0.50	mg/Kg	10.00	12.8	61.2	70-130	15.9	20	S
Thallium	100	0.20	mg/Kg	100.0	0.241	99.8	70-130	2.42	20	
Vanadium	52.3	0.40	mg/Kg	100.0	ND	52.3	70-130	14.5	20	S
Zinc	12000	1.0	mg/Kg	100.0	14900	NR	70-130	23.3	20	ERS

Sample ID: Post Spike (B033243-PS1) **Method:** SW-846 6020A **Prepped:** 09/28/2012 08:32
Source: 12I0947-01 **Analyzed:** 10/02/2012 17:50

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Copper	637		µg/Kg	200.0	433	102	75-125			
Nickel	4610		µg/Kg	2000	2300	116	75-125			
Vanadium	2040		µg/Kg	2000	-1080	156	75-125			S

Batch: B033244 **Prep:** SW-846 7471

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0947
Project: Baycote RV Mishawaka, IN

Metals - Quality Control

Batch: B033244 **Prep:** SW-846 7471

Total Mercury by CVAA

Sample ID: Blank (B033244-BLK1) **Method:** SW-846 7471A **Prepped:** 09/28/2012 08:50
Source: **Analyzed:** 09/28/2012 14:14

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	ND	0.042	mg/Kg							

Sample ID: LCS (B033244-BS1) **Method:** SW-846 7471A **Prepped:** 09/28/2012 08:50
Source: **Analyzed:** 09/28/2012 14:15

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	10.2	2.0	mg/Kg	13.30		76.7	41.9-122			

Sample ID: Matrix Spike (B033244-MS1) **Method:** SW-846 7471A **Prepped:** 09/28/2012 08:50
Source: 12I0904-01 **Analyzed:** 09/28/2012 14:19

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.475	0.042	mg/Kg	0.08333	0.348	153	70-130			ES

Sample ID: Matrix Spike Dup (B033244-MSD1) **Method:** SW-846 7471A **Prepped:** 09/28/2012 08:50
Source: 12I0904-01 **Analyzed:** 09/28/2012 14:20

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.412	0.042	mg/Kg	0.08333	0.348	77.5	70-130	14.1	20	

Batch: B033284 **Prep:** SW-846 1311/SW-846 7470

TCLP Mercury by CVAA

Sample ID: Blank (B033284-BLK1) **Method:** 1311/7470A **Prepped:** 10/01/2012 10:10
Source: **Analyzed:** 10/01/2012 13:52

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	ND	0.00100	mg/L							

Sample ID: LCS (B033284-BS1) **Method:** 1311/7470A **Prepped:** 10/01/2012 10:10
Source: **Analyzed:** 10/01/2012 13:53

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00198	0.00100	mg/L	0.002000		99.0	80-120			

Sample ID: Matrix Spike (B033284-MS1) **Method:** 1311/7470A **Prepped:** 10/01/2012 10:10
Source: 12I0946-01 **Analyzed:** 10/01/2012 13:59

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00252	0.00100	mg/L	0.002000	0.000353	108	50-200			

Sample ID: Matrix Spike Dup (B033284-MSD1) **Method:** 1311/7470A **Prepped:** 10/01/2012 10:10
Source: 12I0946-01 **Analyzed:** 10/01/2012 14:00

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Mercury	0.00251	0.00100	mg/L	0.002000	0.000353	108	50-200	0.398	20	

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0947
Project: Baycote RV Mishawaka, IN

TCLP Metals - Quality Control

Batch: B033288 **Prep:** SW-846 1311/SW846 3005A

TCLP Metals by ICP

Sample ID: Blank (B033288-BLK1) **Method:** 1311/6010B **Prepped:** 10/01/2012 09:50
Source: **Analyzed:** 10/01/2012 16:19

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	ND	0.0100	mg/L							
Barium	ND	0.500	mg/L							
Cadmium	ND	0.00200	mg/L							
Chromium	ND	0.00300	mg/L							
Lead	ND	0.00750	mg/L							
Selenium	ND	0.0300	mg/L							
Silver	ND	0.0100	mg/L							

Sample ID: LCS (B033288-BS1) **Method:** 1311/6010B **Prepped:** 10/01/2012 09:50
Source: **Analyzed:** 10/01/2012 16:24

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.02	0.0100	mg/L	2.000		101	80-120			
Barium	2.35	0.500	mg/L	2.200		107	80-120			
Cadmium	0.219	0.00200	mg/L	0.2000		109	80-120			
Chromium	2.04	0.00300	mg/L	2.000		102	80-120			
Lead	1.98	0.00750	mg/L	2.000		99.2	80-120			
Selenium	2.16	0.0300	mg/L	2.000		108	80-120			
Silver	0.207	0.0100	mg/L	0.2000		104	80-120			

Sample ID: Matrix Spike (B033288-MS1) **Method:** 1311/6010B **Prepped:** 10/01/2012 09:50
Source: 12I0938-02 **Analyzed:** 10/01/2012 16:35

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.04	0.0100	mg/L	2.000	ND	102	50-200			
Barium	3.07	0.500	mg/L	2.200	0.699	108	50-200			
Cadmium	0.210	0.00200	mg/L	0.2000	0.00110	105	50-200			
Chromium	2.05	0.00300	mg/L	2.000	ND	102	50-200			
Lead	1.90	0.00750	mg/L	2.000	0.00390	94.7	50-200			
Selenium	2.17	0.0300	mg/L	2.000	ND	109	50-200			
Silver	0.210	0.0100	mg/L	0.2000	ND	105	50-200			

Sample ID: Matrix Spike Dup (B033288-MSD1) **Method:** 1311/6010B **Prepped:** 10/01/2012 09:50
Source: 12I0938-02 **Analyzed:** 10/01/2012 16:41

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Arsenic	2.06	0.0100	mg/L	2.000	ND	103	50-200	1.03	20	
Barium	3.02	0.500	mg/L	2.200	0.699	105	50-200	1.61	20	
Cadmium	0.212	0.00200	mg/L	0.2000	0.00110	105	50-200	0.758	20	
Chromium	2.07	0.00300	mg/L	2.000	ND	104	50-200	1.26	20	
Lead	1.91	0.00750	mg/L	2.000	0.00390	95.5	50-200	0.892	20	
Selenium	2.18	0.0300	mg/L	2.000	ND	109	50-200	0.643	20	
Silver	0.210	0.0100	mg/L	0.2000	ND	105	50-200	0.429	20	

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0947
Project: Baycote RV Mishawaka, IN

Wet Chemistry - Quality Control

Batch: B033308 **Prep:** Solid Reactive CN Distillation

Reactive Cyanide

Sample ID: Blank (B033308-BLK1) **Method:** Chapter 7/9014 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/03/2012 08:15

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Cyanide	ND	2.0	mg/Kg							

Sample ID: LCS (B033308-BS1) **Method:** Chapter 7/9014 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/03/2012 08:17

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Cyanide	16.7	2.0	mg/Kg	250.0		6.67	2.5-51.6			

Sample ID: LCS Dup (B033308-BSD1) **Method:** Chapter 7/9014 **Prepped:** 10/01/2012 10:30
Source: **Analyzed:** 10/03/2012 08:18

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Reactive Cyanide	17.2	2.0	mg/Kg	250.0		6.89	2.5-51.6	3.15	20	

Batch: B033386 **Prep:** Solid CN Distillation

Total Cyanide

Sample ID: Blank (B033386-BLK1) **Method:** SW-846 9012B **Prepped:** 10/03/2012 10:35
Source: **Analyzed:** 10/03/2012 13:40

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Cyanide, Total	ND	0.0050	mg/Kg							

Sample ID: LCS (B033386-BS1) **Method:** SW-846 9012B **Prepped:** 10/03/2012 10:35
Source: **Analyzed:** 10/03/2012 13:40

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Cyanide, Total	0.186	0.0050	mg/Kg	0.2000		93.1	90-110			

Sample ID: LCS Dup (B033386-BSD1) **Method:** SW-846 9012B **Prepped:** 10/03/2012 10:35
Source: **Analyzed:** 10/03/2012 13:40

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Cyanide, Total	0.182	0.0050	mg/Kg	0.2000		91.2	90-110	2.09	20	

Batch: B033417 **Prep:** SW846 3060A

Analytical QC Summary

Client: Environmental Restoration
Work Order: 12I0947
Project: Baycote RV Mishawaka, IN

Wet Chemistry - Quality Control

Batch: B033417 **Prep:** SW846 3060A

Hexavalent Chromium

Sample ID: Blank (B033417-BLK1) **Method:** SW-846 7196A **Prepped:** 10/03/2012 14:20
Source: **Analyzed:** 10/04/2012 15:38

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Chromium, Hexavalent	ND	20	mg/Kg							

Sample ID: LCS (B033417-BS1) **Method:** SW-846 7196A **Prepped:** 10/03/2012 14:20
Source: **Analyzed:** 10/04/2012 15:39

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Chromium, Hexavalent	364	20	mg/Kg	400.0		91.0	80-120			

Sample ID: LCS Dup (B033417-BSD1) **Method:** SW-846 7196A **Prepped:** 10/03/2012 14:20
Source: **Analyzed:** 10/04/2012 15:41

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Chromium, Hexavalent	357	20	mg/Kg	400.0		89.3	80-120	1.90	20	

Sample ID: Matrix Spike (B033417-MS1) **Method:** SW-846 7196A **Prepped:** 10/03/2012 14:20
Source: 12I0947-01 **Analyzed:** 10/04/2012 15:44

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Chromium, Hexavalent	337	20	mg/Kg	400.0	15.1	80.4	75-125			

Sample ID: Matrix Spike (B033417-MS2) **Method:** SW-846 7196A **Prepped:** 10/03/2012 14:20
Source: 12I0947-01 **Analyzed:** 10/04/2012 15:47

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Chromium, Hexavalent	26.4	39	mg/Kg	6977	15.1	0.163	75-125			S

Sample ID: Matrix Spike Dup (B033417-MSD1) **Method:** SW-846 7196A **Prepped:** 10/03/2012 14:20
Source: 12I0947-01 **Analyzed:** 10/04/2012 15:46

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Chromium, Hexavalent	323	20	mg/Kg	393.7	15.1	78.3	75-125	4.00	20	

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Samples Submitted to: [✓] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664 [ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 108504

Instructions on back

12I0947 Kevin Falvey
ER - South Holland
Baycote Metal Mishawaka
09/27/2012

Client Name: Environmental Restoration
Address: 166660 Canal Street
City, State, Zip: South Holland, IL 60473
Contact: John Behrens
Telephone #: 708-473-7124

Project: Baycote RV
Location: Mishawaka, IN
PO #:
Compliance Monitoring? [ ] Yes(1) [ ] No
(1)Agency/Program

Turnaround Time: [✓] Routine (7 working days) [ ] RUSH* (notify lab) ____ (needed by)

Report Type: [ ] Results Only [✓] Level II [ ] Level III [ ] Level III CLP-like [ ] Level IV [ ] Level IV CLP-like [ ] EDD

Sampled by (PRINT): David Sena
Sampler Signature: David Sena
Sampler Phone #:
Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [✓] e-mail (address) J.Behrens@ERLLC.com Trenna.Sundquist@WestonSolutions.com

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types ** ↓		TAL metals	Total hex. Chrome	TCLP metals	Total Cyanide	Reactive Cyanide			For Lab Use Only
BMF-WS01-092612	Sludge	X		N	9-26-12	1700	1	U		X	X	X	X	X			12I0947 01/02
* Last Item																	*

Possible Hazard Identification: [✓] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition: [ ] Dispose as appropriate [ ] Return [✓] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
David Sena	9-27-12 / 10:00	[signature]	9/27/12 1000
[signature]	9/27/12 1025 CST	[signature]	
		Received for Lab By (signature): [signature]	9/27/12 1026

Sample temperature upon receipt in degrees C = 10°C OI

rev. 11/04/04

Page ____ of ____

ATTACHMENT B14

October 15, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12J0242

Re: Baycote Metals

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 3 sample(s) on 10/5/2012 5:20:00PM for the analyses presented in the following report as Work Order 12J0242.

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 Robert Crookston, Interim Managing Director, at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer, at sean.hyde@microbac.com or James Nokes, President, at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Monday, October 15, 2012*

Client: Environmental Restoration
Project: Baycote Metals
Lab Order: 12J0242

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12J0242-01	CNL-09		10/03/2012 08:30	10/5/2012 5:20:00PM
12J0242-02	CNL-09-RCN		10/03/2012 08:30	10/5/2012 5:20:00PM
12J0242-03	CAS-01		10/05/2012 12:00	10/5/2012 5:20:00PM

Analytical Results

Date: *Monday, October 15, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals
Client Sample ID: CNL-09
Sample Description:
Matrix: Aqueous

Work Order/ID: 12J0242-01
Sampled: 10/03/2012 8:30
Received: 10/05/2012 17:20

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **10/09/2012 10:46**	
Mercury	A	***ND***	0.0010		mg/L	1	10/09/2012 14:33
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **10/09/2012 10:03**	
Arsenic	A	***ND***	0.0100		mg/L	1	10/09/2012 15:49
Barium	A	***ND***	0.500		mg/L	1	10/09/2012 15:49
Cadmium	A	***407***	0.0400		mg/L	20	10/11/2012 9:06
Chromium	A	***0.410***	0.00300		mg/L	1	10/09/2012 15:49
Lead	A	***ND***	0.00750		mg/L	1	10/09/2012 15:49
Selenium	A	***0.841***	0.0300		mg/L	1	10/09/2012 15:49
Silver	A	***0.0504***	0.0100		mg/L	1	10/09/2012 15:49
Total Cyanide		Method: **SW-846 9012B** Prep Method: **Aqueous CN Distillation**				Analyst: **AGRIE** Prep Date/Time: **10/10/2012 10:30**	
Cyanide, Total	A	***20***	2.5		mg/L	1	10/10/2012 13:41
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **10/10/2012 14:15**	
pH	A	***7.10***	2.00		pH Units	1	10/10/2012 14:41

Analytical Results

Date: *Monday, October 15, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals
Client Sample ID: CNL-09-RCN
Sample Description:
Matrix: Aqueous

Work Order/ID: 12J0242-02
Sampled: 10/03/2012 8:30
Received: 10/05/2012 17:20

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
Reactive Cyanide		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
		Prep Method: **Aqueous Reactive CN Distillation**				Prep Date/Time: **10/11/2012 11:40**	
Reactive Cyanide	A	***ND***	40		mg/L	10	10/12/2012 15:12

Analytical Results

Date: *Monday, October 15, 2012*

Client: Environmental Restoration
Client Project: Baycote Metals
Client Sample ID: CAS-01
Sample Description:
Matrix: Solid

Work Order/ID: 12J0242-03
Sampled: 10/05/2012 12:00
Received: 10/05/2012 17:20

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
TCLP Mercury by CVAA		Method: **1311/7470A** Prep Method: **SW-846 1311/SW-846 7470**				Analyst: **RPL** Prep Date/Time: **10/09/2012 10:46**	
Mercury	A	***ND***	0.0010		mg/L	1	10/09/2012 14:38
TCLP Metals by ICP		Method: **1311/6010B** Prep Method: **SW-846 1311/SW846 3005A**				Analyst: **SA** Prep Date/Time: **10/09/2012 10:03**	
Arsenic	A	***0.618***	0.0100		mg/L	1	10/09/2012 15:55
Barium	A	***ND***	0.500		mg/L	1	10/09/2012 15:55
Cadmium	A	***ND***	0.100		mg/L	1	10/09/2012 15:55
Chromium	A	***290***	0.00300	E	mg/L	1	10/09/2012 15:55
Lead	A	***0.0154***	0.00750		mg/L	1	10/09/2012 15:55
Selenium	A	***ND***	0.0300		mg/L	1	10/09/2012 15:55
Silver	A	***0.0496***	0.0100		mg/L	1	10/09/2012 15:55
pH		Method: **SW-846 9045C**				Analyst: **JH** Prep Date/Time: **10/10/2012 14:15**	
pH	A	***< 2.00***	2.00		pH Units	1	10/10/2012 14:41

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

[a] The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
[b] The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
[c] Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
[d] 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
[e] Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
[f] Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
[g] 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)
[h] Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
[i] North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
[-] Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
[j] Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

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COOLER INSPECTION

Date: Monday, October 15, 2012

Client Name: Environmental Restoration

Date/Time Received: 10/05/2012 17:20

Work Order Number: 12J0242

Received by: Dave Bryant

Checklist completed by: 10/8/2012 7:56:00AM | Dave Bryant

Reviewed by: 10/10/2012 | KGF

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 4.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12J0242-01	CNL-09	POSSIBLE HIGH CN/LIMITED SAMPLE
12J0242-02	CNL-09-RCN	POSSIBLE HIGH CN/LIMITED SAMPLE
12J0242-03	CAS-01	POSSIBLE HIGH METALS, LOW PH

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

ATTACHMENT B15

October 17, 2012

Environmental Restoration
16660 South Canal Street
South Holland, IL 60437-

Work Order No.: 12J0479

Re: Baycote Metal Mishawaka

Dear John Behrens:

Microbac Laboratories, Inc. - Chicagoland Division received 4 sample(s) on 10/12/2012 4:45:00PM for the analyses presented in the following report as Work Order 12J0479.

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 Robert Crookston, Interim Managing Director, at robert.crookston@microbac.com. You may also contact Sean Hyde, Chief Operating Officer, at sean.hyde@microbac.com or James Nokes, President, at james.nokes@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Kevin Falvey
Account Manager

WORK ORDER SAMPLE SUMMARY

Date: *Wednesday, October 17, 2012*

Client: Environmental Restoration
Project: Baycote Metal Mishawaka
Lab Order: 12J0479

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12J0479-01	CNS-10		10/12/2012 09:30	10/12/2012 4:45:00PM
12J0479-02	CNS-10-RCN		10/12/2012 09:30	10/12/2012 4:45:00PM
12J0479-03	CNS-11		10/12/2012 09:45	10/12/2012 4:45:00PM
12J0479-04	CNS-11		10/12/2012 09:45	10/12/2012 4:45:00PM

Analytical Results

Date: *Wednesday, October 17, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Mishawaka
Client Sample ID: CNS-10
Sample Description:
Matrix: Solid

Work Order/ID: 12J0479-01
Sampled: 10/12/2012 9:30
Received: 10/12/2012 16:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **SW-846 9012B**					Analyst: **AGRIE**
Total Cyanide		Prep Method: **Solid CN Distillation**					Prep Date/Time: **10/17/2012 10:45**
Cyanide, Total	A	***780***	48		mg/Kg	100	10/17/2012 13:31

Analytical Results

Date: *Wednesday, October 17, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Mishawaka
Client Sample ID: CNS-10-RCN
Sample Description:
Matrix: Solid

Work Order/ID: 12J0479-02
Sampled: 10/12/2012 9:30
Received: 10/12/2012 16:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
Reactive Cyanide		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/16/2012 08:45**	
Reactive Cyanide	A	***ND***	39		mg/Kg	10	10/17/2012 13:28

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

Analytical Results

Date: *Wednesday, October 17, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Mishawaka
Client Sample ID: CNS-11
Sample Description:
Matrix: Solid

Work Order/ID: 12J0479-03
Sampled: 10/12/2012 9:45
Received: 10/12/2012 16:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **SW-846 9012B**				Analyst: **AGRIE**	
Total Cyanide		Prep Method: **Solid CN Distillation**				Prep Date/Time: **10/17/2012 10:45**	
Cyanide, Total	A	***46***	0.50		mg/Kg	1	10/17/2012 13:36

Analytical Results

Date: *Wednesday, October 17, 2012*

Client: Environmental Restoration
Client Project: Baycote Metal Mishawaka
Client Sample ID: CNS-11
Sample Description:
Matrix: Solid

Work Order/ID: 12J0479-04
Sampled: 10/12/2012 9:45
Received: 10/12/2012 16:45

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: **Chapter 7/9014**				Analyst: **AGRIE**	
Reactive Cyanide		Prep Method: **Solid Reactive CN Distillation**				Prep Date/Time: **10/16/2012 08:45**	
Reactive Cyanide	A	***ND***	40		mg/Kg	10	10/17/2012 13:29

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent

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

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

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.

[a] The American Association for Laboratory Accreditation [A2LA] for Biological Testing, ISO/IEC 17025 (Certificate# 3045.01)
[b] The American Association for Laboratory Accreditation [A2LA] for Environmental Department of Defense Testing, ISO/IEC 17025 (Certificate# 3045.02)
[c] Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #200064)
[d] 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
[e] Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
[f] Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
[g] 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)
[h] Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
[i] North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)
[-] Pennsylvania Department of Environmental Protection (Registration No.: 68-04863)
[j] Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

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COOLER INSPECTION

Date: Wednesday, October 17, 2012

Client Name: Environmental Restoration

Date/Time Received: 10/12/2012 16:45

Work Order Number: 12J0479

Received by: Dave Bryant

Checklist completed by: 10/12/2012 4:40:00PM | Dave Bryant

Reviewed by: 10/15/2012 | KGF

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 6.00°C

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

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

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

Sample ID	Client Sample ID	Comments
12J0479-01	CNS-10	
12J0479-02	CNS-10-RCN	
12J0479-03	CNS-11	
12J0479-04	CNS-11	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

12J0479 Kevin Falvey
ER - South Holland
Baycote Metal Mishawaka
10/12/2012

Microbac

Samples Submitted to: [X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 10122012-01

Instructions on back

RUSH

Client Name	Environmental Restoration, LLC	Project	Baycote Metals
Address	1666 Fabick Dr	Location	Mishawaka, IN
City, State, Zip	Fenton, MO 63026	PO #	8391
Contact	John Behrens	Compliance Monitoring?	[] Yes [X] No
Telephone #	708-473-7124	(1)Agency/Program	

Turnaround Time: [] Routine (5 working days); [X] 3-day RUSH* (notify lab); 10/17/2012 (needed by)

Report Type: [] Results Only; [ ] Level II; [ ] Level III; [ ] Level III CLP-like; [ ] Level IV; [ ] Level IV CLP-like; [ ] EDD

Sampled by (PRINT): Leland Meadows Sampler Signature: Leland Meadows Sampler Phone #: 708-473-7124

Send Report via: [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (addresses) J.behrens@erllc.com & l.meadows@erllc.com

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → / Preservative Types ** ↓	TCLP - Volitales	TCLP - Semi Vol	TCLP - Metals	Total CN	Reactive CN	PH	Ammonia		For Lab Use Only 12J0479
CNS-10	S		X		10/12/2012	930	1	N/A				X	X				possible high CN 01
CNS-11	S		X		10/12/2012	945	1	N/A				X	X				02

Possible Hazard Identification: [] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition: [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Sample temperature upon receipt in degrees C = 6°C

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	10/12/12 1645		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time
			10/12/12 1645

rev.11/052010

ATTACHMENT B16

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

NVLAP Lab Code 101202-0

ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY

Method: EPA-600/M4-82-020

Environmental Restoration L.L.C.
16660 Canal Street
South Holland, IL 60473
Phone: (708) 333-1868
Fax: (708) 333-9915

Reference:	B5-101	Date Received:	10/11/2012
Location:	Mishawaka, Indiana	Date Analyzed:	10/16/2012
Batch No.:	303662	Date Reported:	10/16/2012
Customer No.:	2954	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
303662001	Z-25	ND	Binder 99-100%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

Analyzed by Name : Albio Marquez / Senior Microscopist

Date: 10/16/2012

STAT Analysis Corporation
2242 W. Harrison, Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
e-mail address: STATinfo@STATAnalysis.com AIHA accredited 101160 NVLAP lab code 101202-0

CHAIN OF CUSTODY RECORD

Page : 1 of 1

Client: Environmental Restoration
Street Address: 16660 Canal Street
City, State, Zip: South Holland, IL
Phone: 708 333-9915
Fax: 636-680-2553
e-mail/Alt. Fax: J.Behrens@ERLLC.com
Project Number: B5-101
Project Name: Baycote Metal Finishing
Project Location: Mishawaka, Indiana
Project Manager: Behrens
P.O. Number: B5-101

Turn Around: Immediate: ☐ 4 Hrs: ☐ 8 Hrs: ☐ 24 Hrs: ☐ 1 Day: ☐ 2 Days: ☐ 3 Days: ☐ 5 Days: ☒
Date Due: Time Due: Note: Not all turn around times are available for all analysis.

OFFICE USE ONLY BELOW:
Batch No.: 303662
Samples Acceptable: Yes: ☐ No: ☐
Checked by (Initial/Date):
QC by (Initial/Date):
Reported By (Initial/Date/Time/Method):
Comments:

Relinquished by: Date/Time: 10/9 1536
Received by: Date/Time: 10/11/12 925 FedEx
Relinquished by: Date/Time:
Received by: Date/Time:
Relinquished by: Date/Time:
Received by: Date/Time:

Client Sample Number/Description	Date Taken	Time On	Time Off	Rate (lpm)	Volume (Liters)	Area Wiped (ft^2)	Laboratory Sample No.	PCM Asbestos	PLM Asbestos (Bulk)	PLM Point Count	PLM Gravimetric	TEM Air Asbestos	TEM Bulk Asbestos	TEM Gravimetric Asb.	TEM Microvac Asb.	TEM Water		Other:						
2-25	10-9-12								X															

Comments:

ATTACHMENT B17

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

October 24, 2012

Mr. John Behrens
Environmental Restoration
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote Metal Finishing
Pace Project No.: 5070832

Dear Mr. Behrens:
Enclosed are the analytical results for sample(s) received by the laboratory on October 16, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

CERTIFICATIONS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: CL0065
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 12-019-0
Illinois Certification #: 002885
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-12-3
Utah Certification #: KS000212012-2

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Indianapolis, IN 46268
(317)875-5894

SAMPLE SUMMARY

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5070832001	**NL6-16**	Water	10/15/12 09:00	10/16/12 07:30
5070832002	**NL7-17**	Water	10/15/12 09:30	10/16/12 07:30
5070832003	**NL8-18**	Water	10/15/12 10:00	10/16/12 07:30
5070832004	**NS9-19**	Solid	10/15/12 11:00	10/16/12 07:30
5070832005	**FL-01**	Solid	10/15/12 10:30	10/16/12 07:30
5070832006	**FL-01**	Non Aqueous	10/15/12 10:30	10/16/12 07:30

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
5070832001	**NL6-16**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5070832002	**NL7-17**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5070832003	**NL8-18**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5070832004	**NS9-19**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		ASTM D2974	DWC	1	PASI-K
		EPA 9045	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5070832005	**FL-01**	EPA 6010	FRW	7	PASI-I
		EPA 7471	LLB	1	PASI-I
		EPA 8270	KES	18	PASI-I
		EPA 8260	ALA	13	PASI-I
		EPA 1010	ILP	1	PASI-I
		EPA 9045	TPD	1	PASI-I
5070832006	**FL-01**	EPA 8082	DMT	8	PASI-I

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ANALYTICAL RESULTS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Sample: NL6-16 **Lab ID: 5070832001** Collected: 10/15/12 09:00 Received: 10/16/12 07:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	50.0	1	10/22/12 06:30	10/23/12 09:58	7440-38-2	
Barium	ND	ug/L	500	1	10/22/12 06:30	10/23/12 09:58	7440-39-3	
Cadmium	**5540**	ug/L	25.0	1	10/22/12 06:30	10/23/12 09:58	7440-43-9	
Chromium	**984**	ug/L	50.0	1	10/22/12 06:30	10/23/12 09:58	7440-47-3	
Lead	**171**	ug/L	50.0	1	10/22/12 06:30	10/23/12 09:58	7439-92-1	
Selenium	**116**	ug/L	50.0	1	10/22/12 06:30	10/23/12 09:58	7782-49-2	
Silver	**2010**	ug/L	250	1	10/22/12 06:30	10/23/12 09:58	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	10.0	1	10/22/12 11:10	10/23/12 13:59	7439-97-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**9.3**	Std. Units		1		10/16/12 08:19		H6
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		10/22/12 09:43		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**0.10**	mg/L	0.050	1		10/22/12 14:15	57-12-5	

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7726 Moller Road
Indianapolis, IN 46268
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ANALYTICAL RESULTS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Sample: NL7-17 **Lab ID: 5070832002** Collected: 10/15/12 09:30 Received: 10/16/12 07:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**189**	ug/L	50.0	1	10/22/12 06:30	10/23/12 10:03	7440-38-2	
Barium	**696**	ug/L	500	1	10/22/12 06:30	10/23/12 10:03	7440-39-3	
Cadmium	**4040**	ug/L	25.0	1	10/22/12 06:30	10/23/12 10:03	7440-43-9	
Chromium	**14300**	ug/L	50.0	1	10/22/12 06:30	10/23/12 10:03	7440-47-3	
Lead	**434**	ug/L	50.0	1	10/22/12 06:30	10/23/12 10:03	7439-92-1	
Selenium	ND	ug/L	50.0	1	10/22/12 06:30	10/23/12 10:03	7782-49-2	
Silver	**337**	ug/L	250	1	10/22/12 06:30	10/23/12 10:03	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	10.0	1	10/22/12 11:10	10/23/12 14:02	7439-97-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**6.0**	Std. Units		1		10/16/12 08:20		H6
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	**0.0097**	mg/L	0.0050	1		10/22/12 09:44		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**0.62**	mg/L	0.050	1		10/22/12 14:16	57-12-5	

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Indianapolis, IN 46268
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ANALYTICAL RESULTS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Sample: NL8-18 **Lab ID: 5070832003** Collected: 10/15/12 10:00 Received: 10/16/12 07:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**764**	ug/L	50.0	1	10/22/12 06:30	10/23/12 10:07	7440-38-2	
Barium	**2960**	ug/L	500	1	10/22/12 06:30	10/23/12 10:07	7440-39-3	
Cadmium	**1830**	ug/L	25.0	1	10/22/12 06:30	10/23/12 10:07	7440-43-9	
Chromium	**25900**	ug/L	50.0	1	10/22/12 06:30	10/23/12 10:07	7440-47-3	
Lead	**1550**	ug/L	50.0	1	10/22/12 06:30	10/23/12 10:07	7439-92-1	
Selenium	**68.4**	ug/L	50.0	1	10/22/12 06:30	10/23/12 10:07	7782-49-2	
Silver	**5550**	ug/L	250	1	10/22/12 06:30	10/23/12 10:07	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	20.0	1	10/22/12 11:10	10/23/12 14:04	7439-97-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**7.7**	Std. Units		1		10/16/12 08:20		H6
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		10/22/12 09:44		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**0.073**	mg/L	0.050	1		10/22/12 14:17	57-12-5	

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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Sample: NS9-19 **Lab ID: 5070832004** Collected: 10/15/12 11:00 Received: 10/16/12 07:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/17/12 14:45							
Arsenic	ND	mg/L	0.10	1	10/20/12 02:00	10/22/12 17:14	7440-38-2	
Barium	ND	mg/L	5.0	1	10/20/12 02:00	10/22/12 17:14	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/20/12 02:00	10/22/12 17:14	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/20/12 02:00	10/22/12 17:14	7440-47-3	
Lead	ND	mg/L	0.10	1	10/20/12 02:00	10/22/12 17:14	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/20/12 02:00	10/22/12 17:14	7782-49-2	
Silver	ND	mg/L	0.50	1	10/20/12 02:00	10/22/12 17:14	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/17/12 14:45							
Mercury	ND	mg/L	0.0020	1	10/18/12 10:58	10/19/12 13:25	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**13.7**	%	0.50	1		10/19/12 00:00		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**9.4**	Std. Units		1		10/17/12 13:21		
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		10/22/12 09:34		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**82.9**	mg/kg	2.0	4	10/17/12 13:11	10/18/12 15:07	57-12-5	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Sample: FL-01 **Lab ID: 5070832005** Collected: 10/15/12 10:30 Received: 10/16/12 07:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	ND	mg/kg	2.0	1	10/18/12 09:07	10/19/12 08:00	7440-38-2	
Barium	**426**	mg/kg	2.0	1	10/18/12 09:07	10/19/12 08:00	7440-39-3	
Cadmium	ND	mg/kg	2.0	1	10/18/12 09:07	10/19/12 08:00	7440-43-9	
Chromium	**25.9**	mg/kg	2.0	1	10/18/12 09:07	10/19/12 08:00	7440-47-3	
Lead	ND	mg/kg	2.0	1	10/18/12 09:07	10/19/12 08:00	7439-92-1	
Selenium	ND	mg/kg	2.0	1	10/18/12 09:07	10/19/12 08:00	7782-49-2	
Silver	ND	mg/kg	2.0	1	10/18/12 09:07	10/19/12 08:00	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	1.7	1	10/22/12 08:30	10/22/12 11:59	7439-97-6	4d
8270 MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
1,4-Dichlorobenzene	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	106-46-7	
2,4-Dinitrotoluene	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	87-68-3	
Hexachlorobenzene	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	118-74-1	
Hexachloroethane	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	198000	1	10/18/12 15:46	10/19/12 05:59		
Nitrobenzene	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	98-95-3	
Pentachlorophenol	ND	ug/kg	480000	1	10/18/12 15:46	10/19/12 05:59	87-86-5	
Pyridine	**3080000**	ug/kg	990000	10	10/18/12 15:46	10/19/12 06:20	110-86-1	
2,4,5-Trichlorophenol	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	99000	1	10/18/12 15:46	10/19/12 05:59	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	0	%.	26-98	1	10/18/12 15:46	10/19/12 05:59	4165-60-0	6d
2-Fluorobiphenyl (S)	0	%.	36-94	1	10/18/12 15:46	10/19/12 05:59	321-60-8	6d
p-Terphenyl-d14 (S)	0	%.	32-112	1	10/18/12 15:46	10/19/12 05:59	1718-51-0	6d
Phenol-d5 (S)	0	%.	33-98	1	10/18/12 15:46	10/19/12 05:59	4165-62-2	6d
2-Fluorophenol (S)	0	%.	29-97	1	10/18/12 15:46	10/19/12 05:59	367-12-4	6d
2,4,6-Tribromophenol (S)	0	%.	24-114	1	10/18/12 15:46	10/19/12 05:59	118-79-6	6d
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	125000	25000		10/20/12 03:59	71-43-2	
2-Butanone (MEK)	ND	ug/kg	625000	25000		10/20/12 03:59	78-93-3	
Carbon tetrachloride	ND	ug/kg	125000	25000		10/20/12 03:59	56-23-5	
Chlorobenzene	ND	ug/kg	125000	25000		10/20/12 03:59	108-90-7	
Chloroform	ND	ug/kg	125000	25000		10/20/12 03:59	67-66-3	
1,2-Dichloroethane	ND	ug/kg	125000	25000		10/20/12 03:59	107-06-2	
1,1-Dichloroethene	ND	ug/kg	125000	25000		10/20/12 03:59	75-35-4	
Tetrachloroethene	ND	ug/kg	125000	25000		10/20/12 03:59	127-18-4	
Trichloroethene	ND	ug/kg	125000	25000		10/20/12 03:59	79-01-6	
Vinyl chloride	ND	ug/kg	125000	25000		10/20/12 03:59	75-01-4	
Surrogates								
Dibromofluoromethane (S)	109	%.	71-125	25000		10/20/12 03:59	1868-53-7	1d,3d

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
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ANALYTICAL RESULTS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Sample: FL-01 **Lab ID: 5070832005** Collected: 10/15/12 10:30 Received: 10/16/12 07:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Surrogates								
Toluene-d8 (S)	105	%.	76-124	25000		10/20/12 03:59	2037-26-5	
4-Bromofluorobenzene (S)	110	%.	67-134	25000		10/20/12 03:59	460-00-4	
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	**83.5**	deg F		1		10/18/12 14:54		2d
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**8.6**	Std. Units		1		10/17/12 13:25		

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ANALYTICAL RESULTS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Sample: FL-01 **Lab ID: 5070832006** Collected: 10/15/12 10:30 Received: 10/16/12 07:30 Matrix: Non Aqueous Liquid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3580							
PCB-1016 (Aroclor 1016)	ND	mg/kg	5.0	5	10/16/12 12:15	10/16/12 22:16	12674-11-2	D3
PCB-1221 (Aroclor 1221)	ND	mg/kg	5.0	5	10/16/12 12:15	10/16/12 22:16	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	mg/kg	5.0	5	10/16/12 12:15	10/16/12 22:16	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	mg/kg	5.0	5	10/16/12 12:15	10/16/12 22:16	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	mg/kg	5.0	5	10/16/12 12:15	10/16/12 22:16	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	mg/kg	5.0	5	10/16/12 12:15	10/16/12 22:16	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	mg/kg	5.0	5	10/16/12 12:15	10/16/12 22:16	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	103	%.	55-133	5	10/16/12 12:15	10/16/12 22:16	877-09-8	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: MERP/4199
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5070832004

METHOD BLANK: 817675
Matrix: Water
Associated Lab Samples: 5070832004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	10/19/12 13:05	

LABORATORY CONTROL SAMPLE & LCSD: 817676 817677

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.013	0.013	87	85	80-120	3	20	

MATRIX SPIKE SAMPLE: 817678

Parameter	Units	5070732001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.012	81	75-125	

MATRIX SPIKE SAMPLE: 817679

Parameter	Units	5070864001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.012	80	75-125	

MATRIX SPIKE SAMPLE: 817692

Parameter	Units	5070832004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.013	86	75-125	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: MERP/4203 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 5070832001, 5070832002, 5070832003

METHOD BLANK: 819115 | Matrix: Water
Associated Lab Samples: 5070832001, 5070832002, 5070832003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	10/23/12 13:29	

LABORATORY CONTROL SAMPLE: 819116

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 819117 819118

Parameter	Units	5070752002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.8	4.8	95	95	75-125	.6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 819119 819120

Parameter	Units	5070836001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	2.7	3.0	55	60	75-125	10	20	M3

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: MERP/4205 | Analysis Method: EPA 7471
QC Batch Method: EPA 7471 | Analysis Description: 7471 Mercury
Associated Lab Samples: 5070832005

METHOD BLANK: 819127 | Matrix: Solid
Associated Lab Samples: 5070832005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.20	10/22/12 11:55	

LABORATORY CONTROL SAMPLE: 819128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.5	0.51	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 819129 819130

Parameter	Units	5070977009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.13J	.67	.62	0.80	0.76	99	102	75-125	5	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: MPRP/10036
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 5070832005

METHOD BLANK: 817356
Matrix: Solid
Associated Lab Samples: 5070832005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	2.0	10/19/12 07:48	
Barium	mg/kg	ND	2.0	10/19/12 07:48	
Cadmium	mg/kg	ND	2.0	10/19/12 07:48	
Chromium	mg/kg	ND	2.0	10/19/12 07:48	
Lead	mg/kg	ND	2.0	10/19/12 07:48	
Selenium	mg/kg	ND	2.0	10/19/12 07:48	
Silver	mg/kg	ND	2.0	10/19/12 07:48	

LABORATORY CONTROL SAMPLE: 817357

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	50.9	102	80-120	
Barium	mg/kg	50	50.2	100	80-120	
Cadmium	mg/kg	50	50.4	101	80-120	
Chromium	mg/kg	50	50.0	100	80-120	
Lead	mg/kg	50	50.4	101	80-120	
Selenium	mg/kg	50	51.3	103	80-120	
Silver	mg/kg	25	25.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 817358 817359

Parameter	Units	5070887001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	7.4	59.3	65.5	60.2	66.1	89	90	75-125	9	20	
Barium	mg/kg	149	59.3	65.5	213	221	107	109	75-125	4	20	
Cadmium	mg/kg	ND	59.3	65.5	53.2	59.3	89	89	75-125	11	20	
Chromium	mg/kg	12.6	59.3	65.5	65.2	72.2	89	91	75-125	10	20	
Lead	mg/kg	25.9	59.3	65.5	76.7	88.0	86	95	75-125	14	20	
Selenium	mg/kg	ND	59.3	65.5	52.6	59.0	88	90	75-125	12	20	
Silver	mg/kg	ND	29.7	32.8	25.2	28.3	85	86	75-125	12	20	

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(614)486-5421

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: MPRP/10057
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5070832004

METHOD BLANK: 818833
Matrix: Water
Associated Lab Samples: 5070832004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	10/22/12 17:04	
Barium	mg/L	ND	5.0	10/22/12 17:04	
Cadmium	mg/L	ND	0.050	10/22/12 17:04	
Chromium	mg/L	ND	0.10	10/22/12 17:04	
Lead	mg/L	ND	0.10	10/22/12 17:04	
Selenium	mg/L	ND	0.10	10/22/12 17:04	
Silver	mg/L	ND	0.50	10/22/12 17:04	

LABORATORY CONTROL SAMPLE & LCSD: 818834 818835

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	9.8	9.7	98	97	80-120	.5	20	
Barium	mg/L	10	9.7	9.8	97	98	80-120	.3	20	
Cadmium	mg/L	10	9.6	9.5	96	95	80-120	.4	20	
Chromium	mg/L	10	9.9	9.8	99	98	80-120	.6	20	
Lead	mg/L	10	9.5	9.4	95	94	80-120	.5	20	
Selenium	mg/L	10	9.8	9.7	98	97	80-120	.7	20	
Silver	mg/L	5	4.9	4.8	97	97	80-120	.7	20	

MATRIX SPIKE SAMPLE: 818836

Parameter	Units	5070832004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.8	98	50-150	
Barium	mg/L	ND	10	11.1	98	50-150	
Cadmium	mg/L	ND	10	9.8	98	50-150	
Chromium	mg/L	ND	10	10	99	50-150	
Lead	mg/L	ND	10	9.4	94	50-150	
Selenium	mg/L	ND	10	9.9	99	50-150	
Silver	mg/L	ND	5	4.9	99	50-150	

MATRIX SPIKE SAMPLE: 818837

Parameter	Units	5070732001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.8	98	50-150	
Barium	mg/L	ND	10	10	98	50-150	
Cadmium	mg/L	ND	10	9.7	97	50-150	
Chromium	mg/L	ND	10	9.9	99	50-150	
Lead	mg/L	ND	10	9.4	94	50-150	

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Pace Analytical Services, Inc.
7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

MATRIX SPIKE SAMPLE: 818837

Parameter	Units	5070732001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	9.8	98	50-150	
Silver	mg/L	ND	5	5.0	99	50-150	

MATRIX SPIKE SAMPLE: 818838

Parameter	Units	5070864001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.9	99	50-150	
Barium	mg/L	ND	10	10.0	98	50-150	
Cadmium	mg/L	ND	10	9.7	97	50-150	
Chromium	mg/L	ND	10	9.7	97	50-150	
Lead	mg/L	ND	10	9.3	93	50-150	
Selenium	mg/L	ND	10	9.8	98	50-150	
Silver	mg/L	ND	5	4.9	98	50-150	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: MPRP/10058 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 5070832001, 5070832002, 5070832003

METHOD BLANK: 819135 Matrix: Water
Associated Lab Samples: 5070832001, 5070832002, 5070832003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	10/23/12 12:24	
Barium	ug/L	ND	100	10/23/12 12:24	
Cadmium	ug/L	ND	5.0	10/23/12 12:24	
Chromium	ug/L	ND	10.0	10/23/12 12:24	
Lead	ug/L	ND	10.0	10/23/12 12:24	
Selenium	ug/L	ND	10.0	10/23/12 12:24	
Silver	ug/L	ND	50.0	10/23/12 12:24	

LABORATORY CONTROL SAMPLE: 819136

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	992	99	80-120	
Barium	ug/L	1000	1020	102	80-120	
Cadmium	ug/L	1000	987	99	80-120	
Chromium	ug/L	1000	988	99	80-120	
Lead	ug/L	1000	963	96	80-120	
Selenium	ug/L	1000	1000	100	80-120	
Silver	ug/L	500	473	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 819137 819138

Parameter	Units	5071065007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	979	1000	97	99	75-125	2	20	
Barium	ug/L	ND	1000	1000	1040	1060	97	100	75-125	2	20	
Cadmium	ug/L	ND	1000	1000	959	983	96	98	75-125	2	20	
Chromium	ug/L	ND	1000	1000	933	961	93	96	75-125	3	20	
Lead	ug/L	ND	1000	1000	894	917	89	92	75-125	3	20	
Selenium	ug/L	ND	1000	1000	967	992	97	99	75-125	3	20	
Silver	ug/L	ND	500	500	439	453	88	91	75-125	3	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: MSV/47075
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5030 Low
Associated Lab Samples: 5070832005

METHOD BLANK: 819053
Matrix: Solid
Associated Lab Samples: 5070832005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/kg	ND	5.0	10/20/12 02:17	
1,2-Dichloroethane	ug/kg	ND	5.0	10/20/12 02:17	
2-Butanone (MEK)	ug/kg	ND	25.0	10/20/12 02:17	
Benzene	ug/kg	ND	5.0	10/20/12 02:17	
Carbon tetrachloride	ug/kg	ND	5.0	10/20/12 02:17	
Chlorobenzene	ug/kg	ND	5.0	10/20/12 02:17	
Chloroform	ug/kg	ND	5.0	10/20/12 02:17	
Tetrachloroethene	ug/kg	ND	5.0	10/20/12 02:17	
Trichloroethene	ug/kg	ND	5.0	10/20/12 02:17	
Vinyl chloride	ug/kg	ND	5.0	10/20/12 02:17	
4-Bromofluorobenzene (S)	%.	105	67-134	10/20/12 02:17	
Dibromofluoromethane (S)	%.	106	71-125	10/20/12 02:17	
Toluene-d8 (S)	%.	103	76-124	10/20/12 02:17	

LABORATORY CONTROL SAMPLE: 819054

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	50	48.7	97	71-129	
1,2-Dichloroethane	ug/kg	50	48.0	96	74-120	
2-Butanone (MEK)	ug/kg	250	274	110	38-154	
Benzene	ug/kg	50	50.0	100	73-115	
Carbon tetrachloride	ug/kg	50	49.8	100	57-127	
Chlorobenzene	ug/kg	50	46.4	93	72-121	
Chloroform	ug/kg	50	48.5	97	74-114	
Tetrachloroethene	ug/kg	50	52.1	104	66-126	
Trichloroethene	ug/kg	50	47.9	96	71-117	
Vinyl chloride	ug/kg	50	50.9	102	64-127	
4-Bromofluorobenzene (S)	%.			108	67-134	
Dibromofluoromethane (S)	%.			105	71-125	
Toluene-d8 (S)	%.			97	76-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 819060 819061

Parameter	Units	5070875025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/kg				44.8	45.0				.4	20	
1,2-Dichloroethane	ug/kg	ND	55.9	55.9	36.7	34.9	66	62	19-126	5	20	
2-Butanone (MEK)	ug/kg				325	313				4	20	
Benzene	ug/kg	ND	55.9	55.9	39.0	37.2	70	67	23-138	5	20	
Carbon tetrachloride	ug/kg				37.9	39.4				4	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 819060 819061

Parameter	Units	5070875025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chlorobenzene	ug/kg				18.1	17.3				5	20	
Chloroform	ug/kg				39.6	37.9				5	20	
Tetrachloroethene	ug/kg				23.4	28.0				18	20	
Trichloroethene	ug/kg				33.3	33.3				.01	20	
Vinyl chloride	ug/kg				51.8	52.3				.9	20	
4-Bromofluorobenzene (S)	%.						105	105	67-134		20	
Dibromofluoromethane (S)	%.						109	109	71-125		20	
Toluene-d8 (S)	%.						97	97	76-124		20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: OEXT/31055
QC Batch Method: EPA 3580
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB Oil
Associated Lab Samples: 5070832006

METHOD BLANK: 816601
Matrix: Non Aqueous Liquid
Associated Lab Samples: 5070832006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	mg/kg	ND	5.0	10/16/12 21:51	
PCB-1221 (Aroclor 1221)	mg/kg	ND	5.0	10/16/12 21:51	
PCB-1232 (Aroclor 1232)	mg/kg	ND	5.0	10/16/12 21:51	
PCB-1242 (Aroclor 1242)	mg/kg	ND	5.0	10/16/12 21:51	
PCB-1248 (Aroclor 1248)	mg/kg	ND	5.0	10/16/12 21:51	
PCB-1254 (Aroclor 1254)	mg/kg	ND	5.0	10/16/12 21:51	
PCB-1260 (Aroclor 1260)	mg/kg	ND	5.0	10/16/12 21:51	
Tetrachloro-m-xylene (S)	%.	88	55-133	10/16/12 21:51	

LABORATORY CONTROL SAMPLE: 816602

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	mg/kg	5	6.4	127	50-150	
PCB-1260 (Aroclor 1260)	mg/kg	5	6.0	120	50-150	
Tetrachloro-m-xylene (S)	%.			103	55-133	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: OEXT/31077
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave
Associated Lab Samples: 5070832005

METHOD BLANK: 818176
Matrix: Solid
Associated Lab Samples: 5070832005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/kg	ND	99000	10/19/12 05:39	
2,4,5-Trichlorophenol	ug/kg	ND	99000	10/19/12 05:39	
2,4,6-Trichlorophenol	ug/kg	ND	99000	10/19/12 05:39	
2,4-Dinitrotoluene	ug/kg	ND	99000	10/19/12 05:39	
2-Methylphenol(o-Cresol)	ug/kg	ND	99000	10/19/12 05:39	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	198000	10/19/12 05:39	
Hexachloro-1,3-butadiene	ug/kg	ND	99000	10/19/12 05:39	
Hexachlorobenzene	ug/kg	ND	99000	10/19/12 05:39	
Hexachloroethane	ug/kg	ND	99000	10/19/12 05:39	
Nitrobenzene	ug/kg	ND	99000	10/19/12 05:39	
Pentachlorophenol	ug/kg	ND	480000	10/19/12 05:39	
Pyridine	ug/kg	ND	99000	10/19/12 05:39	
2,4,6-Tribromophenol (S)	%.	0	24-114	10/19/12 05:39	5d
2-Fluorobiphenyl (S)	%.	0	36-94	10/19/12 05:39	5d
2-Fluorophenol (S)	%.	0	29-97	10/19/12 05:39	5d
Nitrobenzene-d5 (S)	%.	0	26-98	10/19/12 05:39	5d
p-Terphenyl-d14 (S)	%.	0	32-112	10/19/12 05:39	5d
Phenol-d5 (S)	%.	0	33-98	10/19/12 05:39	5d

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: PMST/7870
QC Batch Method: ASTM D2974
Associated Lab Samples: 5070832004

Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture

METHOD BLANK: 1082557
Matrix: Solid
Associated Lab Samples: 5070832004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	10/19/12 00:00	

SAMPLE DUPLICATE: 1082558

Parameter	Units	60131373001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.5	23.3	3	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: WET/10286 Analysis Method: SM 4500-H B
QC Batch Method: SM 4500-H B Analysis Description: 4500H+B pH
Associated Lab Samples: 5070832001, 5070832002, 5070832003

SAMPLE DUPLICATE: 816580

Parameter	Units	5070832001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	9.3	9.3	0		H6

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: WET/10291 | Analysis Method: EPA 9045
QC Batch Method: EPA 9045 | Analysis Description: 9045 pH
Associated Lab Samples: 5070832004, 5070832005

SAMPLE DUPLICATE: 816981

Parameter	Units	5070875029 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.9	8.0	1	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: WETA/22095
QC Batch Method: SW-846 7.3.3.2
Analysis Method: SW-846 7.3.3.2
Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5070832004

METHOD BLANK: 1081124
Matrix: Solid
Associated Lab Samples: 5070832004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	0.025	10/22/12 09:19	

LABORATORY CONTROL SAMPLE: 1081125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	.5	0.52	102	71-123	

MATRIX SPIKE SAMPLE: 1081216

Parameter	Units	4068250001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	<0.0052	.5	0.48	95	57-132	

SAMPLE DUPLICATE: 1081127

Parameter	Units	4068250002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/kg	<0.0052	ND		23	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: WETA/22096 | Analysis Method: SW-846 7.3.3.2 Modified
QC Batch Method: SW-846 7.3.3.2 Modified | Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5070832001, 5070832002, 5070832003

METHOD BLANK: 1081147 | Matrix: Water
Associated Lab Samples: 5070832001, 5070832002, 5070832003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/L	ND	0.0050	10/22/12 09:35	

LABORATORY CONTROL SAMPLE: 1081148

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/L	.05	0.053	105	74-121	

MATRIX SPIKE SAMPLE: 1081209

Parameter	Units	60131281001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/L	ND	.05	0.044	87	57-125	

SAMPLE DUPLICATE: 1081150

Parameter	Units	60131281002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/L	ND	ND		26	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: WETA/8729 | Analysis Method: EPA 9012
QC Batch Method: EPA 9012 | Analysis Description: 9012 Cyanide
Associated Lab Samples: 5070832004

METHOD BLANK: 817062 | Matrix: Solid
Associated Lab Samples: 5070832004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	10/18/12 14:15	

LABORATORY CONTROL SAMPLE: 817063

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	10.4	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 817064 817065

Parameter	Units	5070832004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	82.9	10	10	58.0	53.4	-248	-295	90-110	8	20	P6

MATRIX SPIKE SAMPLE: 817066

Parameter	Units	5070875019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	ND	11.2	13.7	122	90-110	M0

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QUALITY CONTROL DATA

Project: Baycote Metal Finishing
Pace Project No.: 5070832

QC Batch: WETA/8741 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5070832001, 5070832002, 5070832003

METHOD BLANK: 818510 Matrix: Water
Associated Lab Samples: 5070832001, 5070832002, 5070832003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	10/22/12 14:13	

LABORATORY CONTROL SAMPLE: 818511

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.21	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 818512 818513

Parameter	Units	5070979005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.2	.2	0.23	0.22	113	111	90-110	2	20	M3

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QUALIFIERS

Project: Baycote Metal Finishing
Pace Project No.: 5070832

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-I	Pace Analytical Services - Indianapolis
PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

1d	Due to the physical characteristics of the sample a lower dilution could not be analyzed. aa 10/22/12
2d	Reported result is an average of two replicates. ddm 10-18-12
3d	Sample is a solvent.
4d	Sample was diluted at prep due to the presence of high levels of non-target analytes or other matrix interference.
5d	Waste dilution preperation; No surrogate added to Blank. KES 10-22-12
6d	Waste dilution preperation; No surrogate added to sample. KES 10-22-12
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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(614)486-5421

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metal Finishing
Pace Project No.: 5070832

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5070832006	**FL-01**	EPA 3580	OEXT/31055	EPA 8082	GCSV/10050
5070832005	**FL-01**	EPA 3050	MPRP/10036	EPA 6010	ICP/10442
5070832004	**NS9-19**	EPA 3010	MPRP/10057	EPA 6010	ICP/10466
5070832001	**NL6-16**	EPA 3010	MPRP/10058	EPA 6010	ICP/10467
5070832002	**NL7-17**	EPA 3010	MPRP/10058	EPA 6010	ICP/10467
5070832003	**NL8-18**	EPA 3010	MPRP/10058	EPA 6010	ICP/10467
5070832004	**NS9-19**	EPA 7470	MERP/4199	EPA 7470	MERC/4226
5070832001	**NL6-16**	EPA 7470	MERP/4203	EPA 7470	MERC/4233
5070832002	**NL7-17**	EPA 7470	MERP/4203	EPA 7470	MERC/4233
5070832003	**NL8-18**	EPA 7470	MERP/4203	EPA 7470	MERC/4233
5070832005	**FL-01**	EPA 7471	MERP/4205	EPA 7471	MERC/4229
5070832005	**FL-01**	EPA 3546	OEXT/31077	EPA 8270	MSSV/11204
5070832005	**FL-01**	EPA 8260	MSV/47075		
5070832004	**NS9-19**	ASTM D2974	PMST/7870		
5070832005	**FL-01**	EPA 1010	WET/10306		
5070832001	**NL6-16**	SM 4500-H B	WET/10286		
5070832002	**NL7-17**	SM 4500-H B	WET/10286		
5070832003	**NL8-18**	SM 4500-H B	WET/10286		
5070832004	**NS9-19**	EPA 9045	WET/10291		
5070832005	**FL-01**	EPA 9045	WET/10291		
5070832004	**NS9-19**	SW-846 7.3.3.2	WETA/22095		
5070832001	**NL6-16**	SW-846 7.3.3.2 Modified	WETA/22096		
5070832002	**NL7-17**	SW-846 7.3.3.2 Modified	WETA/22096		
5070832003	**NL8-18**	SW-846 7.3.3.2 Modified	WETA/22096		
5070832004	**NS9-19**	EPA 9012	WETA/8729	EPA 9012	WETA/8730
5070832001	**NL6-16**	EPA 9012	WETA/8741		
5070832002	**NL7-17**	EPA 9012	WETA/8741		
5070832003	**NL8-18**	EPA 9012	WETA/8741		

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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

1605091

Section A Required Client Information: ERLLC

Company: Environmental Restoration
Address: 1666 Fabick Drive
St. Louis, MO 63026
Email To: j.behrens@erllc.com
Phone: Fax:
Requested Due Date/TAT: 5 day TAT

Section B Required Project Information:

Report To: j.behrens@erllc.com
Copy To: l.meadows@erllc.com
Purchase Order No.: RFQ#5-101-5B
Project Name: Baycote Metal Finishing
Project Number:

Section C Invoice Information:

Attention: John Behrens
Company Name: Environmental Restoration
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: IN

5070832

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/GRAB DATE	COLLECTED 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)	TCLP VOC	TCLP SVOC	TCLP Metals	PCB	Flashpoint	Halogens	pH	CN (total/reactive)	Residual Chlorine (Y/N)	Pace Project No./Lab I.D.
1	NL6-16	WW	C	10/15/12	0900				3	X											X			X	X			-001
2	NL7-17	WW	C		0930				3	X											X			X	X			-002
3	NL8-18	WW	C		1000				3	X											X			X	X			-003
4	NS9-19	SL	C		1100				4	X											X			X	X			-004
5	FL-01	P	C		1030				4	X									X	X	X	X	X	X	X			-005 (-0010 PCB)
6																												
7																												
8																												
9																												
10																												
11																												
12																												

→ Run totals for the solvent/oil sample

→ Run total RCRA 8 for metals instead of TCLP per L. meadows 10/19/12

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Leland Meadows ER	10/15/12	1300	Frank Smith	10/15	100				
				Zeke Tahn	10/16/12	7:30am	4.9°	Y	Y	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Leland J. Meadows					
SIGNATURE of SAMPLER: Leland Meadows	DATE Signed (MM/DD/YY): 10/15/12				

NSL 170625 NDW

ORIGINAL

*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.

Temp 3.5°C

Sample Condition Upon Receipt

Pace Analytical

Client Name: Environmental Res Project # 5072832

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other NOW

Tracking #:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used 1 2 3 4 6 (A) B C D E Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable) 4.9°c, 2.4°c Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and initials of person examining contents: 10/16/12 ZL

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A	5.
Rush Turn Around Time Requested:	☐Yes	☐No	☑N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No	☐N/A	8. Water/SL/P
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☐Yes	☐No	☑N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
Headspace in VOA Vials (>6mm)	☐Yes	☐No	☑N/A	10.
Trip Blank Present:	☐Yes	☐No	☑N/A	11.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Kenneth Grant Date: 10/16/12

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

CLIENT: Environmental. Res

COC PAGE 1 of 1
COC ID# 1605091

Project # 5071837

Pace Analytical
www.pacelabs.com

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H			Comments
1		3														
2		3														
3		3														
4			4													
5		2	2													
6																
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

Chain of Custody

RUSH

Order ID: 1225094

COC

lytical®
acelabs.com

Workorder: 5070832 **Workorder Name:** Baycote Metal Finishing **Results Requested** 10/23/2012

Report / Invoice To	Subcontract To
Kenneth Hunt Pace Analytical Indianapolis 7726 Moller Road Indianapolis, IN 46268 Phone (317)875-5894 Email: kenneth.hunt@pacelabs.com	P.O. Summit Environmental Technologies 3310 Win Street Cuyahoga Falls, OH 44223 (330)-253-8211

Requested Analysis

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: 4 oz jar	Total Halogens 9075	LAB USE ONLY
1	FL-01	10/15/2012 10:30	5070832005	Solid	1	X	
2							
3							
4							
5							

1225094-01

Transfers	Released By	Date/Time	Received By	Date/Time
1	[illegible]	10/16/12/1410		
2				
3			DJR	10/17/12 11:15

Comments

Cooler Temperature on Receipt °C **Custody Seal** Y or N **Received on Ice** Y or N **Samples Intact** Y or N

08

Summit Environmental Technologies, Inc.
Cooler Receipt Form

Order ID: 1225094 **COOLER**

Client: Pace

Order #: _____

Log in Initials: _____

Date Received: 10/17/12 Time Received: 11:15 Date opened: 10/17/12

Number of Coolers/Boxes: 1 N/A Unpacked by: SFG

Shipper: FED EX UPS DHL Airborne US Postal Walk-in Pickup Other: _____

Packaging: Peanuts Bubble Wrap Paper Foam None Other: _____

Tape on cooler/box:	Y	N	N/A
Custody Seals intact	Y	N	N/A
C-O-C in plastic	Y	N	N/A

Coolant: Ice ✓ Blue ice___ Water___ None___ Sample Temperature <1.0 °C

C-O-C filled out properly	Y	N	N/A
Samples in separate bags	Y	N	N/A
Sample containers intact	Y	N	N/A

*If no, list broken sample(s): _____

Sample label(s) complete (ID, date, etc.)	Y	N	N/A
Label(s) agree with C-O-C	Y	N	N/A
Correct containers used	Y	N	N/A
Sufficient sample received	Y	N	N/A
Samples at correct pH? (list below)	Y	N	NA
Bubbles absent from 40 mL vials**	Y	N	N/A

** Samples with bubbles less than the size of a pea are acceptable.

Client contact: _____ Date/Time: _____

Comments: _____

Sample ID	pH	Sample ID	pH

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

LABORATORY REPORT

Client
Pace Analytical Indianapolis
7726 Moller Road
Indianapolis, IN 46268

Order Number
1225094

Project Number
5070832

Issued
Friday, October 19, 2012

Total Number of Pages
4 (excluding C.O.C. and cooler receipt form)

Approved By :
QA Manager

Certifications: A2LA/DOD 0724.01, Alabama 41600, Arkansas 88-0735, California 07256CA, Colorado, Connecticut PH-0105, Delaware, Florida NELAC E87688, Georgia E87688 and 943, Idaho OH00923, Illinois 200061 and Reg.5, Indiana C-OH-13, Kansas E-10347, Kentucky (underground Storage Tank) 3, Kentucky 90146, Louisiana 04061 and LA12004, Maine 2012015, Maryland 339, Massachusetts M-OPH923, Michigan (Reg.5), Minnesota 409711, Montana CERT0099, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, Ohio 4170, Ohio VAP CL0052, Oklahoma 9940, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Tennessee TN04018, Texas T104704466-11-5, Region 5 WG-15J, Region 8 8TMS-L, USDA/APHIS P330-11-00244, Utah OH009232011-1, Vermont VT-87688, Virginia 00440 and 1581, Washington C891, West Virginia 248 and 9957C and E87688, Wisconsin 399013010

Sample Summary

Client: Pace Analytical Indianapolis
Order Number: 1225094

Laboratory ID	Client ID	Matrix	Sampling Date
1225094-01	5070832005	Liquid	10/15/2012

Report Narrative

Client: Pace Analytical Indianapolis
Order Number: 1225094

No problems were encountered during analysis of this order number, except as noted.

Data Qualifiers:
B = Analyte found in the method blank
J = Estimated concentration of analyte between MDL (LOD) and Reporting Limit (LOQ)
C = Analyte has been confirmed by another instrument or method
E = Analyte exceeds the upper limit of the calibration curve.
D = Sample or extract was analyzed at a higher dilution
X = User defined data qualifier.
S = Surrogate out of control limits
U = Undetected
a = Not Accredited by NELAC

ND = Non Detected at LOQ
DF = Dilution Factor

Limit Of Quantitation (LOQ) = Laboratory Reporting Limit (not adjusted for dilution factor)
Limit Of Detection (LOD) = Method Detection Limit
Practical Quantitation Limit (PQL) = (same as LOQ)
Method Detection Limit (MDL) = (same as LOD)
Reporting Detection Limit (RDL) = (same as LOD)

Matrices:
A = Air
C = Cream
DW = Drinking Water
L = Liquid
O = Oil
SL = Sludge
SO = Soil
S = Solid
T = Tablet
TC = TCLP Extract
WW = Waste Water
W = Wipe

Estimated uncertainty values are available upon request.

October 19, 2012

Client: Pace Analytical Indianapolis
Address: 7726 Moller Road
Indianapolis, IN 46268

Date Collected: 10/15/2012
Date Received: 10/17/2012
Project #: 5070832
Client ID #: 5070832005
Laboratory ID #: 1225094-01
Matrix: Liquid

Parameter	Method	Results	Date of Analysis
Total Halogen, PPM	9075	432ppm	10/18/2012

Chain of Custody

RUSH

Order ID: 1225094

COC

lytical®
acelabs.com

Workorder: 5070832 **Workorder Name:** Baycote Metal Finishing **Results Requested** 10/23/2012

Report / Invoice To	Subcontract To
Kenneth Hunt Pace Analytical Indianapolis 7726 Moller Road Indianapolis, IN 46268 Phone (317)875-5894 Email: kenneth.hunt@pacelabs.com	P.O. Summit Environmental Technologies 3310 Win Street Cuyahoga Falls, OH 44223 (330)-253-8211

Requested Analysis

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: 4 oz jar	Total Halogens 9075	LAB USE ONLY
1	FL-01	10/15/2012 10:30	5070832005	Solid	1	X	
2							
3							
4							
5							

1225094-01

Transfers	Released By	Date/Time	Received By	Date/Time
1	[illegible]	10/16/12/1410		
2				
3			DJR	10/17/12 11:15

Comments

Cooler Temperature on Receipt °C **Custody Seal** Y or N **Received on Ice** Y or N **Samples Intact** Y or N

08

Summit Environmental Technologies, Inc.
Cooler Receipt Form

Order ID: 1225094 **COOLER**

Client: Pace

Order #: _____

Log in Initials: _____

Date Received: 10/17/12 Time Received: 11:15 Date opened: 10/17/12

Number of Coolers/Boxes: 1 N/A Unpacked by: SFG

Shipper: FED EX UPS DHL Airborne US Postal Walk-in Pickup Other: _____

Packaging: Peanuts Bubble Wrap Paper Foam None Other: _____

Tape on cooler/box:	Y	N	N/A
Custody Seals intact	Y	N	N/A
C-O-C in plastic	Y	N	N/A

Coolant: Ice ✓ Blue ice___ Water___ None___ Sample Temperature <1.0 °C

C-O-C filled out properly	Y	N	N/A
Samples in separate bags	Y	N	N/A
Sample containers intact	Y	N	N/A

*If no, list broken sample(s): _____

Sample label(s) complete (ID, date, etc.)	Y	N	N/A
Label(s) agree with C-O-C	Y	N	N/A
Correct containers used	Y	N	N/A
Sufficient sample received	Y	N	N/A
Samples at correct pH? (list below)	Y	N	NA
Bubbles absent from 40 mL vials**	Y	N	N/A

** Samples with bubbles less than the size of a pea are acceptable.

Client contact: _____ Date/Time: _____

Comments: _____

Sample ID	pH	Sample ID	pH

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

LABORATORY REPORT

Client
Pace Analytical Indianapolis
7726 Moller Road
Indianapolis, IN 46268

Order Number
1225094

Project Number
5070832

Issued
Friday, October 19, 2012

Total Number of Pages
4 (excluding C.O.C. and cooler receipt form)

Approved By :
QA Manager

Certifications: A2LA/DOD 0724.01, Alabama 41600, Arkansas 88-0735, California 07256CA, Colorado, Connecticut PH-0105, Delaware, Florida NELAC E87688, Georgia E87688 and 943, Idaho OH00923, Illinois 200061 and Reg.5, Indiana C-OH-13, Kansas E-10347, Kentucky (underground Storage Tank) 3, Kentucky 90146, Louisiana 04061 and LA12004, Maine 2012015, Maryland 339, Massachusetts M-OPH923, Michigan (Reg.5), Minnesota 409711, Montana CERT0099, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, Ohio 4170, Ohio VAP CL0052, Oklahoma 9940, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Tennessee TN04018, Texas T104704466-11-5, Region 5 WG-15J, Region 8 8TMS-L, USDA/APHIS P330-11-00244, Utah OH009232011-1, Vermont VT-87688, Virginia 00440 and 1581, Washington C891, West Virginia 248 and 9957C and E87688, Wisconsin 399013010

Sample Summary

Client: Pace Analytical Indianapolis
Order Number: 1225094

Laboratory ID	Client ID	Matrix	Sampling Date
1225094-01	5070832005	Liquid	10/15/2012

Report Narrative

Client: Pace Analytical Indianapolis
Order Number: 1225094

No problems were encountered during analysis of this order number, except as noted.

Data Qualifiers:
B = Analyte found in the method blank
J = Estimated concentration of analyte between MDL (LOD) and Reporting Limit (LOQ)
C = Analyte has been confirmed by another instrument or method
E = Analyte exceeds the upper limit of the calibration curve.
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S = Surrogate out of control limits
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ND = Non Detected at LOQ
DF = Dilution Factor

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Practical Quantitation Limit (PQL) = (same as LOQ)
Method Detection Limit (MDL) = (same as LOD)
Reporting Detection Limit (RDL) = (same as LOD)

Matrices:
A = Air
C = Cream
DW = Drinking Water
L = Liquid
O = Oil
SL = Sludge
SO = Soil
S = Solid
T = Tablet
TC = TCLP Extract
WW = Waste Water
W = Wipe

Estimated uncertainty values are available upon request.

October 19, 2012

Client: Pace Analytical Indianapolis
Address: 7726 Moller Road
Indianapolis, IN 46268

Date Collected: 10/15/2012
Date Received: 10/17/2012
Project #: 5070832
Client ID #: 5070832005
Laboratory ID #: 1225094-01
Matrix: Liquid

Parameter	Method	Results	Date of Analysis
Total Halogen, PPM	9075	432ppm	10/18/2012

ATTACHMENT B18

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

November 01, 2012

Mr. John Behrens
Environmental Restoration
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote Metal Finishings
Pace Project No.: 5071213

Dear Mr. Behrens:
Enclosed are the analytical results for sample(s) received by the laboratory on October 24, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

CERTIFICATIONS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: CL0065
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 12-019-0
Illinois Certification #: 002885
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-12-3
Utah Certification #: KS000212012-2

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE SUMMARY

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5071213001	**BMF-S01-102212**	Solid	10/22/12 11:50	10/24/12 07:35
5071213002	**BMF-S02-102212**	Solid	10/22/12 12:00	10/24/12 07:35
5071213003	**BMF-S03-102212**	Solid	10/22/12 13:50	10/24/12 07:35
5071213004	**BMF-S03-102212D**	Solid	10/22/12 14:00	10/24/12 07:35
5071213005	**BMF-S04-102212**	Solid	10/22/12 14:10	10/24/12 07:35
5071213006	**BMF-S05-102212**	Solid	10/22/12 14:20	10/24/12 07:35

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
5071213001	**BMF-S01-102212**	EPA 8082	DMT	8	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		EPA 8270	KES	18	PASI-I
		EPA 8260	RSW	13	PASI-I
		ASTM D2974-87	DAE	1	PASI-I
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	WDB	1	PASI-I
5071213002	**BMF-S02-102212**	EPA 8082	DMT	8	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		EPA 8270	KES	18	PASI-I
		EPA 8260	RSW	13	PASI-I
		ASTM D2974-87	DAE	1	PASI-I
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	WDB	1	PASI-I
5071213003	**BMF-S03-102212**	EPA 8082	DMT	8	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		EPA 8270	KES	18	PASI-I
		EPA 8260	RSW	13	PASI-I
		ASTM D2974-87	DAE	1	PASI-I
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	WDB	1	PASI-I
5071213004	**BMF-S03-102212D**	EPA 8082	DMT	8	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 7470	LLB	1	PASI-I

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7471	LLB	1	PASI-I
		EPA 8270	KES	18	PASI-I
		EPA 8260	RSW	13	PASI-I
		ASTM D2974-87	DAE	1	PASI-I
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	WDB	1	PASI-I
5071213005	**BMF-S04-102212**	EPA 8082	DMT	8	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		EPA 8270	KES	18	PASI-I
		EPA 8260	RSW	13	PASI-I
		ASTM D2974-87	DAE	1	PASI-I
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	WDB	1	PASI-I
5071213006	**BMF-S05-102212**	EPA 8082	DMT	8	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 6010	FRW	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		EPA 8270	KES	18	PASI-I
		EPA 8260	RSW	13	PASI-I
		ASTM D2974-87	DAE	1	PASI-I
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	WDB	1	PASI-I

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S01-102212 **Lab ID: 5071213001** Collected: 10/22/12 11:50 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 17:55	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 17:55	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 17:55	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 17:55	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 17:55	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 17:55	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 17:55	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	69	%.	32-105	1	10/25/12 10:03	10/25/12 17:55	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**6.7**	mg/kg	2.5	1	10/25/12 09:50	10/26/12 13:50	7440-38-2	
Barium	**59.5**	mg/kg	2.5	1	10/25/12 09:50	10/26/12 13:50	7440-39-3	
Cadmium	**17.8**	mg/kg	2.5	1	10/25/12 09:50	10/26/12 13:50	7440-43-9	
Chromium	**115**	mg/kg	2.5	1	10/25/12 09:50	10/26/12 13:50	7440-47-3	
Lead	**18.3**	mg/kg	2.5	1	10/25/12 09:50	10/26/12 13:50	7439-92-1	
Selenium	ND	mg/kg	2.5	1	10/25/12 09:50	10/26/12 13:50	7782-49-2	
Silver	ND	mg/kg	2.5	1	10/25/12 09:50	10/26/12 13:50	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Arsenic	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:29	7440-38-2	
Barium	ND	mg/L	5.0	1	10/30/12 06:00	10/30/12 13:29	7440-39-3	
Cadmium	**0.087**	mg/L	0.050	1	10/30/12 06:00	10/30/12 13:29	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:29	7440-47-3	
Lead	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:29	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:29	7782-49-2	
Silver	ND	mg/L	0.50	1	10/30/12 06:00	10/30/12 13:29	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Mercury	ND	mg/L	0.0020	1	10/30/12 10:10	10/31/12 14:18	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.30**	mg/kg	0.26	1	10/29/12 11:15	10/30/12 14:36	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
1,4-Dichlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	118-74-1	
Hexachloroethane	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	95-48-7	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S01-102212 **Lab ID: 5071213001** Collected: 10/22/12 11:50 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
3&4-Methylphenol(m&p Cresol)	ND	ug/L	200	1	10/29/12 14:50	10/30/12 14:13		
Nitrobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	98-95-3	
Pentachlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 14:13	87-86-5	
Pyridine	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 14:13	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:13	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	83	%.	33-108	1	10/29/12 14:50	10/30/12 14:13	4165-60-0	
2-Fluorobiphenyl (S)	65	%.	34-106	1	10/29/12 14:50	10/30/12 14:13	321-60-8	
p-Terphenyl-d14 (S)	99	%.	31-122	1	10/29/12 14:50	10/30/12 14:13	1718-51-0	
Phenol-d5 (S)	12	%.	10-56	1	10/29/12 14:50	10/30/12 14:13	4165-62-2	
2-Fluorophenol (S)	23	%.	10-74	1	10/29/12 14:50	10/30/12 14:13	367-12-4	
2,4,6-Tribromophenol (S)	93	%.	32-124	1	10/29/12 14:50	10/30/12 14:13	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/12 12:00							
Benzene	ND	ug/L	50.0	1		10/27/12 09:41	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/27/12 09:41	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/27/12 09:41	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/27/12 09:41	108-90-7	
Chloroform	ND	ug/L	50.0	1		10/27/12 09:41	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/27/12 09:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/27/12 09:41	75-35-4	
Tetrachloroethene	**91.2**	ug/L	50.0	1		10/27/12 09:41	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/27/12 09:41	79-01-6	
Vinyl chloride	ND	ug/L	20.0	1		10/27/12 09:41	75-01-4	
Surrogates								
Toluene-d8 (S)	99	%.	81-114	1		10/27/12 09:41	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	72-125	1		10/27/12 09:41	460-00-4	
Dibromofluoromethane (S)	96	%.	83-123	1		10/27/12 09:41	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.1**	%	0.10	1		10/25/12 17:34		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	12.7	5	10/26/12 13:27	10/29/12 10:37	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		10/29/12 14:18		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**16.3**	mg/kg	0.63	1	10/26/12 12:04	10/26/12 13:47	57-12-5	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S02-102212 **Lab ID: 5071213002** Collected: 10/22/12 12:00 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	ND	ug/kg	143	1	10/25/12 10:03	10/25/12 18:01	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	143	1	10/25/12 10:03	10/25/12 18:01	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	143	1	10/25/12 10:03	10/25/12 18:01	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	143	1	10/25/12 10:03	10/25/12 18:01	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	143	1	10/25/12 10:03	10/25/12 18:01	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	143	1	10/25/12 10:03	10/25/12 18:01	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	143	1	10/25/12 10:03	10/25/12 18:01	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	43	%.	32-105	1	10/25/12 10:03	10/25/12 18:01	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**9.9**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 13:52	7440-38-2	
Barium	**73.4**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 13:52	7440-39-3	
Cadmium	**35.3**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 13:52	7440-43-9	
Chromium	**411**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 13:52	7440-47-3	
Lead	**24.5**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 13:52	7439-92-1	
Selenium	**2.7**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 13:52	7782-49-2	
Silver	**12.5**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 13:52	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Arsenic	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:31	7440-38-2	
Barium	ND	mg/L	5.0	1	10/30/12 06:00	10/30/12 13:31	7440-39-3	
Cadmium	**0.17**	mg/L	0.050	1	10/30/12 06:00	10/30/12 13:31	7440-43-9	
Chromium	**0.18**	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:31	7440-47-3	
Lead	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:31	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:31	7782-49-2	
Silver	ND	mg/L	0.50	1	10/30/12 06:00	10/30/12 13:31	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Mercury	ND	mg/L	0.0020	1	10/30/12 10:10	10/31/12 14:20	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.30	1	10/29/12 11:15	10/30/12 14:38	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
1,4-Dichlorobenzene	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	118-74-1	
Hexachloroethane	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	95-48-7	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S02-102212 **Lab ID: 5071213002** Collected: 10/22/12 12:00 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
3&4-Methylphenol(m&p Cresol)	ND	ug/L	200	1	10/31/12 13:27	10/31/12 18:49		
Nitrobenzene	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	98-95-3	
Pentachlorophenol	ND	ug/L	500	1	10/31/12 13:27	10/31/12 18:49	87-86-5	
Pyridine	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	1	10/31/12 13:27	10/31/12 18:49	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	10/31/12 13:27	10/31/12 18:49	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	77	%.	33-108	1	10/31/12 13:27	10/31/12 18:49	4165-60-0	
2-Fluorobiphenyl (S)	67	%.	34-106	1	10/31/12 13:27	10/31/12 18:49	321-60-8	
p-Terphenyl-d14 (S)	89	%.	31-122	1	10/31/12 13:27	10/31/12 18:49	1718-51-0	
Phenol-d5 (S)	13	%.	10-56	1	10/31/12 13:27	10/31/12 18:49	4165-62-2	
2-Fluorophenol (S)	23	%.	10-74	1	10/31/12 13:27	10/31/12 18:49	367-12-4	
2,4,6-Tribromophenol (S)	79	%.	32-124	1	10/31/12 13:27	10/31/12 18:49	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/12 12:00							
Benzene	ND	ug/L	50.0	1		10/27/12 10:57	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/27/12 10:57	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/27/12 10:57	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/27/12 10:57	108-90-7	
Chloroform	ND	ug/L	50.0	1		10/27/12 10:57	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/27/12 10:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/27/12 10:57	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/27/12 10:57	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/27/12 10:57	79-01-6	
Vinyl chloride	ND	ug/L	20.0	1		10/27/12 10:57	75-01-4	
Surrogates								
Toluene-d8 (S)	98	%.	81-114	1		10/27/12 10:57	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	72-125	1		10/27/12 10:57	460-00-4	
Dibromofluoromethane (S)	98	%.	83-123	1		10/27/12 10:57	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**30.0**	%	0.10	1		10/25/12 17:34		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	14.3	5	10/26/12 13:27	10/29/12 10:37	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		10/29/12 14:18		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**20.3**	mg/kg	0.71	1	10/26/12 12:04	10/26/12 13:48	57-12-5	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S03-102212 **Lab ID: 5071213003** Collected: 10/22/12 13:50 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	ND	ug/kg	123	1	10/25/12 10:03	10/25/12 18:07	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	123	1	10/25/12 10:03	10/25/12 18:07	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	123	1	10/25/12 10:03	10/25/12 18:07	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	123	1	10/25/12 10:03	10/25/12 18:07	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	123	1	10/25/12 10:03	10/25/12 18:07	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	123	1	10/25/12 10:03	10/25/12 18:07	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	123	1	10/25/12 10:03	10/25/12 18:07	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	64	%.	32-105	1	10/25/12 10:03	10/25/12 18:07	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**6.2**	mg/kg	2.2	1	10/25/12 09:50	10/26/12 13:54	7440-38-2	
Barium	**31.4**	mg/kg	2.2	1	10/25/12 09:50	10/26/12 13:54	7440-39-3	
Cadmium	ND	mg/kg	2.2	1	10/25/12 09:50	10/26/12 13:54	7440-43-9	
Chromium	**12.9**	mg/kg	2.2	1	10/25/12 09:50	10/26/12 13:54	7440-47-3	
Lead	**8.1**	mg/kg	2.2	1	10/25/12 09:50	10/26/12 13:54	7439-92-1	
Selenium	ND	mg/kg	2.2	1	10/25/12 09:50	10/26/12 13:54	7782-49-2	
Silver	ND	mg/kg	2.2	1	10/25/12 09:50	10/26/12 13:54	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Arsenic	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:33	7440-38-2	
Barium	ND	mg/L	5.0	1	10/30/12 06:00	10/30/12 13:33	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/30/12 06:00	10/30/12 13:33	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:33	7440-47-3	
Lead	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:33	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:33	7782-49-2	
Silver	ND	mg/L	0.50	1	10/30/12 06:00	10/30/12 13:33	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Mercury	ND	mg/L	0.0020	1	10/30/12 10:10	10/31/12 14:22	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.26	1	10/29/12 11:15	10/30/12 14:40	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
1,4-Dichlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	118-74-1	
Hexachloroethane	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	95-48-7	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S03-102212 **Lab ID: 5071213003** Collected: 10/22/12 13:50 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
3&4-Methylphenol(m&p Cresol)	ND	ug/L	200	1	10/29/12 14:50	10/30/12 14:55		
Nitrobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	98-95-3	
Pentachlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 14:55	87-86-5	
Pyridine	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 14:55	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	10/29/12 14:50	10/30/12 14:55	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	86	%.	33-108	1	10/29/12 14:50	10/30/12 14:55	4165-60-0	
2-Fluorobiphenyl (S)	72	%.	34-106	1	10/29/12 14:50	10/30/12 14:55	321-60-8	
p-Terphenyl-d14 (S)	86	%.	31-122	1	10/29/12 14:50	10/30/12 14:55	1718-51-0	
Phenol-d5 (S)	13	%.	10-56	1	10/29/12 14:50	10/30/12 14:55	4165-62-2	
2-Fluorophenol (S)	22	%.	10-74	1	10/29/12 14:50	10/30/12 14:55	367-12-4	
2,4,6-Tribromophenol (S)	86	%.	32-124	1	10/29/12 14:50	10/30/12 14:55	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/12 12:00							
Benzene	ND	ug/L	50.0	1		10/27/12 11:35	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/27/12 11:35	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/27/12 11:35	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/27/12 11:35	108-90-7	
Chloroform	ND	ug/L	50.0	1		10/27/12 11:35	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/27/12 11:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/27/12 11:35	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/27/12 11:35	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/27/12 11:35	79-01-6	
Vinyl chloride	ND	ug/L	20.0	1		10/27/12 11:35	75-01-4	
Surrogates								
Toluene-d8 (S)	99	%.	81-114	1		10/27/12 11:35	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	72-125	1		10/27/12 11:35	460-00-4	
Dibromofluoromethane (S)	98	%.	83-123	1		10/27/12 11:35	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**18.4**	%	0.10	1		10/25/12 17:34		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	12.3	5	10/26/12 13:27	10/29/12 10:37	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		10/29/12 14:19		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	ND	mg/kg	0.61	1	10/26/12 12:04	10/26/12 13:49	57-12-5	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S03-102212D **Lab ID: 5071213004** Collected: 10/22/12 14:00 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 18:13	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 18:13	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 18:13	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 18:13	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 18:13	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 18:13	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	127	1	10/25/12 10:03	10/25/12 18:13	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	59	%.	32-105	1	10/25/12 10:03	10/25/12 18:13	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**6.4**	mg/kg	2.4	1	10/25/12 09:50	10/26/12 13:57	7440-38-2	
Barium	**38.9**	mg/kg	2.4	1	10/25/12 09:50	10/26/12 13:57	7440-39-3	
Cadmium	**2.8**	mg/kg	2.4	1	10/25/12 09:50	10/26/12 13:57	7440-43-9	
Chromium	**29.0**	mg/kg	2.4	1	10/25/12 09:50	10/26/12 13:57	7440-47-3	
Lead	**9.7**	mg/kg	2.4	1	10/25/12 09:50	10/26/12 13:57	7439-92-1	
Selenium	ND	mg/kg	2.4	1	10/25/12 09:50	10/26/12 13:57	7782-49-2	
Silver	ND	mg/kg	2.4	1	10/25/12 09:50	10/26/12 13:57	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Arsenic	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:41	7440-38-2	
Barium	ND	mg/L	5.0	1	10/30/12 06:00	10/30/12 13:41	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/30/12 06:00	10/30/12 13:41	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:41	7440-47-3	
Lead	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:41	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:41	7782-49-2	
Silver	ND	mg/L	0.50	1	10/30/12 06:00	10/30/12 13:41	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Mercury	ND	mg/L	0.0020	1	10/30/12 10:10	10/31/12 14:24	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.27	1	10/29/12 11:15	10/30/12 14:43	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
1,4-Dichlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	118-74-1	
Hexachloroethane	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	95-48-7	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S03-102212D **Lab ID: 5071213004** Collected: 10/22/12 14:00 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
3&4-Methylphenol(m&p Cresol)	ND	ug/L	200	1	10/29/12 14:50	10/30/12 15:17		
Nitrobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	98-95-3	
Pentachlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 15:17	87-86-5	
Pyridine	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 15:17	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:17	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	85	%.	33-108	1	10/29/12 14:50	10/30/12 15:17	4165-60-0	
2-Fluorobiphenyl (S)	69	%.	34-106	1	10/29/12 14:50	10/30/12 15:17	321-60-8	
p-Terphenyl-d14 (S)	92	%.	31-122	1	10/29/12 14:50	10/30/12 15:17	1718-51-0	
Phenol-d5 (S)	13	%.	10-56	1	10/29/12 14:50	10/30/12 15:17	4165-62-2	
2-Fluorophenol (S)	23	%.	10-74	1	10/29/12 14:50	10/30/12 15:17	367-12-4	
2,4,6-Tribromophenol (S)	92	%.	32-124	1	10/29/12 14:50	10/30/12 15:17	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/12 12:00							
Benzene	ND	ug/L	50.0	1		10/27/12 12:13	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/27/12 12:13	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/27/12 12:13	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/27/12 12:13	108-90-7	
Chloroform	ND	ug/L	50.0	1		10/27/12 12:13	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/27/12 12:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/27/12 12:13	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/27/12 12:13	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/27/12 12:13	79-01-6	
Vinyl chloride	ND	ug/L	20.0	1		10/27/12 12:13	75-01-4	
Surrogates								
Toluene-d8 (S)	98	%.	81-114	1		10/27/12 12:13	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	72-125	1		10/27/12 12:13	460-00-4	
Dibromofluoromethane (S)	98	%.	83-123	1		10/27/12 12:13	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.4**	%	0.10	1		10/25/12 17:34		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	12.7	5	10/26/12 13:27	10/29/12 10:37	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		10/29/12 14:21		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.72**	mg/kg	0.64	1	10/26/12 12:04	10/26/12 13:50	57-12-5	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S04-102212 **Lab ID: 5071213005** Collected: 10/22/12 14:10 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	ND	ug/kg	57.1	1	10/29/12 11:28	10/29/12 21:24	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	57.1	1	10/29/12 11:28	10/29/12 21:24	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	57.1	1	10/29/12 11:28	10/29/12 21:24	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	57.1	1	10/29/12 11:28	10/29/12 21:24	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	57.1	1	10/29/12 11:28	10/29/12 21:24	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	57.1	1	10/29/12 11:28	10/29/12 21:24	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	57.1	1	10/29/12 11:28	10/29/12 21:24	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	75	%.	32-105	1	10/29/12 11:28	10/29/12 21:24	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**12.7**	mg/kg	3.2	1	10/25/12 09:50	10/26/12 13:59	7440-38-2	
Barium	**88.7**	mg/kg	3.2	1	10/25/12 09:50	10/26/12 13:59	7440-39-3	
Cadmium	**6.0**	mg/kg	3.2	1	10/25/12 09:50	10/26/12 13:59	7440-43-9	
Chromium	**28.4**	mg/kg	3.2	1	10/25/12 09:50	10/26/12 13:59	7440-47-3	
Lead	**23.2**	mg/kg	3.2	1	10/25/12 09:50	10/26/12 13:59	7439-92-1	
Selenium	**3.9**	mg/kg	3.2	1	10/25/12 09:50	10/26/12 13:59	7782-49-2	
Silver	ND	mg/kg	3.2	1	10/25/12 09:50	10/26/12 13:59	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Arsenic	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:43	7440-38-2	
Barium	ND	mg/L	5.0	1	10/30/12 06:00	10/30/12 13:43	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/30/12 06:00	10/30/12 13:43	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:43	7440-47-3	
Lead	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:43	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:43	7782-49-2	
Silver	ND	mg/L	0.50	1	10/30/12 06:00	10/30/12 13:43	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Mercury	ND	mg/L	0.0020	1	10/30/12 10:10	10/31/12 14:26	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.34	1	10/29/12 11:15	10/30/12 12:48	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
1,4-Dichlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	118-74-1	
Hexachloroethane	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	95-48-7	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S04-102212 **Lab ID: 5071213005** Collected: 10/22/12 14:10 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
3&4-Methylphenol(m&p Cresol)	ND	ug/L	200	1	10/29/12 14:50	10/30/12 15:38		
Nitrobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	98-95-3	
Pentachlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 15:38	87-86-5	
Pyridine	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 15:38	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	10/29/12 14:50	10/30/12 15:38	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	85	%.	33-108	1	10/29/12 14:50	10/30/12 15:38	4165-60-0	
2-Fluorobiphenyl (S)	71	%.	34-106	1	10/29/12 14:50	10/30/12 15:38	321-60-8	
p-Terphenyl-d14 (S)	103	%.	31-122	1	10/29/12 14:50	10/30/12 15:38	1718-51-0	
Phenol-d5 (S)	16	%.	10-56	1	10/29/12 14:50	10/30/12 15:38	4165-62-2	
2-Fluorophenol (S)	28	%.	10-74	1	10/29/12 14:50	10/30/12 15:38	367-12-4	
2,4,6-Tribromophenol (S)	105	%.	32-124	1	10/29/12 14:50	10/30/12 15:38	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/12 12:00							
Benzene	ND	ug/L	50.0	1		10/27/12 12:51	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/27/12 12:51	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/27/12 12:51	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/27/12 12:51	108-90-7	
Chloroform	ND	ug/L	50.0	1		10/27/12 12:51	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/27/12 12:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/27/12 12:51	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/27/12 12:51	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/27/12 12:51	79-01-6	
Vinyl chloride	ND	ug/L	20.0	1		10/27/12 12:51	75-01-4	
Surrogates								
Toluene-d8 (S)	98	%.	81-114	1		10/27/12 12:51	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	72-125	1		10/27/12 12:51	460-00-4	
Dibromofluoromethane (S)	97	%.	83-123	1		10/27/12 12:51	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**38.7**	%	0.10	1		10/25/12 17:34		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	16.3	5	10/26/12 13:27	10/29/12 10:37	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		10/29/12 14:22		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	ND	mg/kg	0.82	1	10/26/12 12:04	10/26/12 13:51	57-12-5	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S05-102212 **Lab ID: 5071213006** Collected: 10/22/12 14:20 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	ND	ug/kg	151	1	10/25/12 10:03	10/25/12 18:39	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	151	1	10/25/12 10:03	10/25/12 18:39	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	151	1	10/25/12 10:03	10/25/12 18:39	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	151	1	10/25/12 10:03	10/25/12 18:39	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	151	1	10/25/12 10:03	10/25/12 18:39	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	151	1	10/25/12 10:03	10/25/12 18:39	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	151	1	10/25/12 10:03	10/25/12 18:39	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	51	%.	32-105	1	10/25/12 10:03	10/25/12 18:39	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**14.6**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 14:14	7440-38-2	
Barium	**85.7**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 14:14	7440-39-3	
Cadmium	**5.8**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 14:14	7440-43-9	
Chromium	**34.3**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 14:14	7440-47-3	
Lead	**23.2**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 14:14	7439-92-1	
Selenium	**3.6**	mg/kg	2.8	1	10/25/12 09:50	10/26/12 14:14	7782-49-2	
Silver	ND	mg/kg	2.8	1	10/25/12 09:50	10/26/12 14:14	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Arsenic	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:51	7440-38-2	
Barium	ND	mg/L	5.0	1	10/30/12 06:00	10/30/12 13:51	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/30/12 06:00	10/30/12 13:51	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:51	7440-47-3	
Lead	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:51	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/30/12 06:00	10/30/12 13:51	7782-49-2	
Silver	ND	mg/L	0.50	1	10/30/12 06:00	10/30/12 13:51	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
Mercury	ND	mg/L	0.0020	1	10/30/12 10:10	10/31/12 14:30	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.32	1	10/29/12 11:15	10/30/12 12:54	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
1,4-Dichlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	118-74-1	
Hexachloroethane	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	95-48-7	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Sample: BMF-S05-102212 **Lab ID: 5071213006** Collected: 10/22/12 14:20 Received: 10/24/12 07:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 10/26/12 13:00							
3&4-Methylphenol(m&p Cresol)	ND	ug/L	200	1	10/29/12 14:50	10/30/12 16:20		
Nitrobenzene	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	98-95-3	
Pentachlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 16:20	87-86-5	
Pyridine	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	1	10/29/12 14:50	10/30/12 16:20	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	10/29/12 14:50	10/30/12 16:20	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	76	%.	33-108	1	10/29/12 14:50	10/30/12 16:20	4165-60-0	
2-Fluorobiphenyl (S)	66	%.	34-106	1	10/29/12 14:50	10/30/12 16:20	321-60-8	
p-Terphenyl-d14 (S)	87	%.	31-122	1	10/29/12 14:50	10/30/12 16:20	1718-51-0	
Phenol-d5 (S)	13	%.	10-56	1	10/29/12 14:50	10/30/12 16:20	4165-62-2	
2-Fluorophenol (S)	23	%.	10-74	1	10/29/12 14:50	10/30/12 16:20	367-12-4	
2,4,6-Tribromophenol (S)	92	%.	32-124	1	10/29/12 14:50	10/30/12 16:20	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/12 12:00							
Benzene	ND	ug/L	50.0	1		10/27/12 04:57	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/27/12 04:57	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/27/12 04:57	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/27/12 04:57	108-90-7	
Chloroform	ND	ug/L	50.0	1		10/27/12 04:57	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/27/12 04:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/27/12 04:57	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/27/12 04:57	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/27/12 04:57	79-01-6	
Vinyl chloride	ND	ug/L	20.0	1		10/27/12 04:57	75-01-4	
Surrogates								
Toluene-d8 (S)	94	%.	81-114	1		10/27/12 04:57	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	72-125	1		10/27/12 04:57	460-00-4	
Dibromofluoromethane (S)	97	%.	83-123	1		10/27/12 04:57	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**33.9**	%	0.10	1		10/25/12 17:34		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	15.1	5	10/26/12 13:27	10/29/12 10:37	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		10/29/12 14:23		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**1.4**	mg/kg	0.76	1	10/26/12 12:04	10/26/12 13:57	57-12-5	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: MERP/4215 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

METHOD BLANK: 822401 Matrix: Water
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	10/31/12 13:59	

LABORATORY CONTROL SAMPLE & LCSD: 822402 822403

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.016	0.016	109	109	80-120		20	

MATRIX SPIKE SAMPLE: 822404

Parameter	Units	5071123003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.016	108	75-125	

MATRIX SPIKE SAMPLE: 822405

Parameter	Units	5071194005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.014	90	75-125	

MATRIX SPIKE SAMPLE: 822406

Parameter	Units	5071213005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.016	107	75-125	

MATRIX SPIKE SAMPLE: 822407

Parameter	Units	5071264001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.015	101	75-125	

MATRIX SPIKE SAMPLE: 822408

Parameter	Units	5071332001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.016	107	75-125	

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Columbus, OH 43215
(614)486-5421

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7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: MERP/4218 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

METHOD BLANK: 822422 Matrix: Solid
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.20	10/30/12 14:20	

LABORATORY CONTROL SAMPLE: 822423

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.5	0.53	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 822424 822425

Parameter	Units	5071213005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	ND	.8	.82	0.99	0.94	104	96	75-125	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 822426 822427

Parameter	Units	5071268003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	<0.12	.63	.61	0.66	0.67	102	108	75-125	2	20	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: MPRP/10079 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

METHOD BLANK: 820847 Matrix: Solid
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	2.0	10/26/12 13:44	
Barium	mg/kg	ND	2.0	10/26/12 13:44	
Cadmium	mg/kg	ND	2.0	10/26/12 13:44	
Chromium	mg/kg	ND	2.0	10/26/12 13:44	
Lead	mg/kg	ND	2.0	10/26/12 13:44	
Selenium	mg/kg	ND	2.0	10/26/12 13:44	
Silver	mg/kg	ND	2.0	10/26/12 13:44	

LABORATORY CONTROL SAMPLE: 820848

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	51.8	104	80-120	
Barium	mg/kg	50	52.5	105	80-120	
Cadmium	mg/kg	50	51.2	102	80-120	
Chromium	mg/kg	50	50.6	101	80-120	
Lead	mg/kg	50	50.6	101	80-120	
Selenium	mg/kg	50	51.6	103	80-120	
Silver	mg/kg	25	25.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 820849 820850

Parameter	Units	5071213005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	12.7	72.8	76.7	81.0	84.9	94	94	75-125	5	20	
Barium	mg/kg	88.7	72.8	76.7	161	164	99	98	75-125	2	20	
Cadmium	mg/kg	6.0	72.8	76.7	73.2	77.8	92	94	75-125	6	20	
Chromium	mg/kg	28.4	72.8	76.7	94.1	96.8	90	89	75-125	3	20	
Lead	mg/kg	23.2	72.8	76.7	81.9	87.3	81	84	75-125	6	20	
Selenium	mg/kg	3.9	72.8	76.7	71.8	76.9	93	95	75-125	7	20	
Silver	mg/kg	ND	36.4	38.4	31.8	33.7	87	87	75-125	6	20	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: MPRP/10105 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

METHOD BLANK: 822846 Matrix: Water
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	10/30/12 13:19	
Barium	mg/L	ND	5.0	10/30/12 13:19	
Cadmium	mg/L	ND	0.050	10/30/12 13:19	
Chromium	mg/L	ND	0.10	10/30/12 13:19	
Lead	mg/L	ND	0.10	10/30/12 13:19	
Selenium	mg/L	ND	0.10	10/30/12 13:19	
Silver	mg/L	ND	0.50	10/30/12 13:19	

LABORATORY CONTROL SAMPLE & LCSD: 822847 822848

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	9.5	9.7	95	97	80-120	3	20	
Barium	mg/L	10	9.6	9.7	96	97	80-120	2	20	
Cadmium	mg/L	10	9.5	9.7	95	97	80-120	2	20	
Chromium	mg/L	10	9.5	9.7	95	97	80-120	2	20	
Lead	mg/L	10	9.2	9.5	92	95	80-120	3	20	
Selenium	mg/L	10	9.8	10.1	98	101	80-120	3	20	
Silver	mg/L	5	4.6	4.8	93	96	80-120	4	20	

MATRIX SPIKE SAMPLE: 822849

Parameter	Units	5071194005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.7	96	50-150	
Barium	mg/L	ND	10	10	98	50-150	
Cadmium	mg/L	0.053	10	9.7	97	50-150	
Chromium	mg/L	15.7	10	23.8	81	50-150	
Lead	mg/L	ND	10	9.4	94	50-150	
Selenium	mg/L	ND	10	10	99	50-150	
Silver	mg/L	ND	5	4.9	91	50-150	

MATRIX SPIKE SAMPLE: 822850

Parameter	Units	5071213005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.7	97	50-150	
Barium	mg/L	ND	10	10	97	50-150	
Cadmium	mg/L	ND	10	9.7	97	50-150	
Chromium	mg/L	ND	10	9.7	97	50-150	
Lead	mg/L	ND	10	9.4	94	50-150	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

MATRIX SPIKE SAMPLE: 822850

Parameter	Units	5071213005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	9.9	99	50-150	
Silver	mg/L	ND	5	4.8	96	50-150	

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1233 Dublin Road
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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: MSV/47287 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005

METHOD BLANK: 822124 Matrix: Water
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	10/27/12 02:44	
1,2-Dichloroethane	ug/L	ND	50.0	10/27/12 02:44	
2-Butanone (MEK)	ug/L	ND	1000	10/27/12 02:44	
Benzene	ug/L	ND	50.0	10/27/12 02:44	
Carbon tetrachloride	ug/L	ND	50.0	10/27/12 02:44	
Chlorobenzene	ug/L	ND	50.0	10/27/12 02:44	
Chloroform	ug/L	ND	50.0	10/27/12 02:44	
Tetrachloroethene	ug/L	ND	50.0	10/27/12 02:44	
Trichloroethene	ug/L	ND	50.0	10/27/12 02:44	
Vinyl chloride	ug/L	ND	20.0	10/27/12 02:44	
4-Bromofluorobenzene (S)	%.	99	72-125	10/27/12 02:44	
Dibromofluoromethane (S)	%.	99	83-123	10/27/12 02:44	
Toluene-d8 (S)	%.	98	81-114	10/27/12 02:44	

LABORATORY CONTROL SAMPLE: 822125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	500	529	106	75-145	
1,2-Dichloroethane	ug/L	500	559	112	71-127	
2-Butanone (MEK)	ug/L	2500	2330	93	42-177	
Benzene	ug/L	500	484	97	76-123	
Carbon tetrachloride	ug/L	500	557	111	65-125	
Chlorobenzene	ug/L	500	528	106	78-120	
Chloroform	ug/L	500	534	107	73-122	
Tetrachloroethene	ug/L	500	543	109	57-125	
Trichloroethene	ug/L	500	530	106	77-122	
Vinyl chloride	ug/L	500	407	81	61-146	
4-Bromofluorobenzene (S)	%.			95	72-125	
Dibromofluoromethane (S)	%.			100	83-123	
Toluene-d8 (S)	%.			99	81-114	

MATRIX SPIKE SAMPLE: 822126

Parameter	Units	5071194005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	500	520	104	54-152	
1,2-Dichloroethane	ug/L	ND	500	563	113	42-139	
2-Butanone (MEK)	ug/L	ND	2500	2270	91	43-142	
Benzene	ug/L	ND	500	451	90	52-134	
Carbon tetrachloride	ug/L	ND	500	515	103	26-136	
Chlorobenzene	ug/L	ND	500	397	79	33-136	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

MATRIX SPIKE SAMPLE: 822126

Parameter	Units	5071194005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	ND	500	530	106	50-134	
Tetrachloroethene	ug/L	ND	500	380	76	30-124	
Trichloroethene	ug/L	ND	500	443	89	44-130	
Vinyl chloride	ug/L	ND	500	426	85	45-159	
4-Bromofluorobenzene (S)	%.				94	72-125	
Dibromofluoromethane (S)	%.				100	83-123	
Toluene-d8 (S)	%.				100	81-114	

MATRIX SPIKE SAMPLE: 822127

Parameter	Units	5071213001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	500	486	97	54-152	
1,2-Dichloroethane	ug/L	ND	500	531	106	42-139	
2-Butanone (MEK)	ug/L	ND	2500	2250	90	43-142	
Benzene	ug/L	ND	500	401	80	52-134	
Carbon tetrachloride	ug/L	ND	500	440	88	26-136	
Chlorobenzene	ug/L	ND	500	302	60	33-136	
Chloroform	ug/L	ND	500	489	98	50-134	
Tetrachloroethene	ug/L	91.2	500	304	43	30-124	
Trichloroethene	ug/L	ND	500	368	74	44-130	
Vinyl chloride	ug/L	ND	500	404	81	45-159	
4-Bromofluorobenzene (S)	%.				94	72-125	
Dibromofluoromethane (S)	%.				101	83-123	
Toluene-d8 (S)	%.				98	81-114	

MATRIX SPIKE SAMPLE: 822128

Parameter	Units	5071213005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	500	478	96	54-152	
1,2-Dichloroethane	ug/L	ND	500	477	95	42-139	
2-Butanone (MEK)	ug/L	ND	2500	1780	71	43-142	
Benzene	ug/L	ND	500	430	86	52-134	
Carbon tetrachloride	ug/L	ND	500	499	100	26-136	
Chlorobenzene	ug/L	ND	500	453	91	33-136	
Chloroform	ug/L	ND	500	479	96	50-134	
Tetrachloroethene	ug/L	ND	500	481	96	30-124	
Trichloroethene	ug/L	ND	500	467	93	44-130	
Vinyl chloride	ug/L	ND	500	371	74	45-159	
4-Bromofluorobenzene (S)	%.				95	72-125	
Dibromofluoromethane (S)	%.				99	83-123	
Toluene-d8 (S)	%.				101	81-114	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: MSV/47288
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 5071213006

METHOD BLANK: 822130
Matrix: Water
Associated Lab Samples: 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	10/27/12 03:03	
1,2-Dichloroethane	ug/L	ND	50.0	10/27/12 03:03	
2-Butanone (MEK)	ug/L	ND	1000	10/27/12 03:03	
Benzene	ug/L	ND	50.0	10/27/12 03:03	
Carbon tetrachloride	ug/L	ND	50.0	10/27/12 03:03	
Chlorobenzene	ug/L	ND	50.0	10/27/12 03:03	
Chloroform	ug/L	ND	50.0	10/27/12 03:03	
Tetrachloroethene	ug/L	ND	50.0	10/27/12 03:03	
Trichloroethene	ug/L	ND	50.0	10/27/12 03:03	
Vinyl chloride	ug/L	ND	20.0	10/27/12 03:03	
4-Bromofluorobenzene (S)	%.	101	72-125	10/27/12 03:03	
Dibromofluoromethane (S)	%.	98	83-123	10/27/12 03:03	
Toluene-d8 (S)	%.	95	81-114	10/27/12 03:03	

LABORATORY CONTROL SAMPLE: 822131

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	500	412	82	75-145	
1,2-Dichloroethane	ug/L	500	439	88	71-127	
2-Butanone (MEK)	ug/L	2500	1970	79	42-177	
Benzene	ug/L	500	400	80	76-123	
Carbon tetrachloride	ug/L	500	428	86	65-125	
Chlorobenzene	ug/L	500	426	85	78-120	
Chloroform	ug/L	500	425	85	73-122	
Tetrachloroethene	ug/L	500	401	80	57-125	
Trichloroethene	ug/L	500	422	84	77-122	
Vinyl chloride	ug/L	500	340	68	61-146	
4-Bromofluorobenzene (S)	%.			98	72-125	
Dibromofluoromethane (S)	%.			98	83-123	
Toluene-d8 (S)	%.			99	81-114	

MATRIX SPIKE SAMPLE: 822132

Parameter	Units	5071213006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	500	475	95	54-152	
1,2-Dichloroethane	ug/L	ND	500	502	100	42-139	
2-Butanone (MEK)	ug/L	ND	2500	2290	92	43-142	
Benzene	ug/L	ND	500	423	85	52-134	
Carbon tetrachloride	ug/L	ND	500	437	87	26-136	
Chlorobenzene	ug/L	ND	500	365	73	33-136	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

MATRIX SPIKE SAMPLE: 822132

Parameter	Units	5071213006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	ND	500	479	96	50-134	
Tetrachloroethene	ug/L	ND	500	316	63	30-124	
Trichloroethene	ug/L	ND	500	411	82	44-130	
Vinyl chloride	ug/L	ND	500	417	83	45-159	
4-Bromofluorobenzene (S)	%.				98	72-125	
Dibromofluoromethane (S)	%.				101	83-123	
Toluene-d8 (S)	%.				98	81-114	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: OEXT/31121 Analysis Method: EPA 8082
QC Batch Method: EPA 3546 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213006

METHOD BLANK: 820860 Matrix: Solid
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	35.0	10/25/12 17:42	
PCB-1221 (Aroclor 1221)	ug/kg	ND	35.0	10/25/12 17:42	
PCB-1232 (Aroclor 1232)	ug/kg	ND	35.0	10/25/12 17:42	
PCB-1242 (Aroclor 1242)	ug/kg	ND	35.0	10/25/12 17:42	
PCB-1248 (Aroclor 1248)	ug/kg	ND	35.0	10/25/12 17:42	
PCB-1254 (Aroclor 1254)	ug/kg	ND	35.0	10/25/12 17:42	
PCB-1260 (Aroclor 1260)	ug/kg	ND	35.0	10/25/12 17:42	
Tetrachloro-m-xylene (S)	%.	79	32-105	10/25/12 17:42	

LABORATORY CONTROL SAMPLE: 820861

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	167	141	85	49-112	
PCB-1260 (Aroclor 1260)	ug/kg	167	160	96	58-111	
Tetrachloro-m-xylene (S)	%.			82	32-105	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: OEXT/31145
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Associated Lab Samples: 5071213005

METHOD BLANK: 822705
Matrix: Solid
Associated Lab Samples: 5071213005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	35.0	10/29/12 19:49	
PCB-1221 (Aroclor 1221)	ug/kg	ND	35.0	10/29/12 19:49	
PCB-1232 (Aroclor 1232)	ug/kg	ND	35.0	10/29/12 19:49	
PCB-1242 (Aroclor 1242)	ug/kg	ND	35.0	10/29/12 19:49	
PCB-1248 (Aroclor 1248)	ug/kg	ND	35.0	10/29/12 19:49	
PCB-1254 (Aroclor 1254)	ug/kg	ND	35.0	10/29/12 19:49	
PCB-1260 (Aroclor 1260)	ug/kg	ND	35.0	10/29/12 19:49	
Tetrachloro-m-xylene (S)	%.	77	32-105	10/29/12 19:49	

LABORATORY CONTROL SAMPLE: 822706

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	167	160	96	49-112	
PCB-1260 (Aroclor 1260)	ug/kg	167	156	93	58-111	
Tetrachloro-m-xylene (S)	%.			82	32-105	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 822707 822708

Parameter	Units	5071346001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	281	281	203	192	72	68	14-135	6	20	
PCB-1260 (Aroclor 1260)	ug/kg	ND	281	281	212	191	76	68	18-124	10	20	
Tetrachloro-m-xylene (S)	%.						69	66	32-105		20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 823427 823428

Parameter	Units	5071213005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	273	273	208	244	76	90	14-135	16	20	
PCB-1260 (Aroclor 1260)	ug/kg	ND	273	273	254	269	93	99	18-124	6	20	
Tetrachloro-m-xylene (S)	%.						77	86	32-105		20	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: OEXT/31147 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 5071213001, 5071213003, 5071213004, 5071213005, 5071213006

METHOD BLANK: 822808 Matrix: Water
Associated Lab Samples: 5071213001, 5071213003, 5071213004, 5071213005, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	10/30/12 12:28	
2,4,5-Trichlorophenol	ug/L	ND	500	10/30/12 12:28	
2,4,6-Trichlorophenol	ug/L	ND	100	10/30/12 12:28	
2,4-Dinitrotoluene	ug/L	ND	100	10/30/12 12:28	
2-Methylphenol(o-Cresol)	ug/L	ND	100	10/30/12 12:28	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	200	10/30/12 12:28	
Hexachloro-1,3-butadiene	ug/L	ND	100	10/30/12 12:28	
Hexachlorobenzene	ug/L	ND	100	10/30/12 12:28	
Hexachloroethane	ug/L	ND	100	10/30/12 12:28	
Nitrobenzene	ug/L	ND	100	10/30/12 12:28	
Pentachlorophenol	ug/L	ND	500	10/30/12 12:28	
Pyridine	ug/L	ND	100	10/30/12 12:28	
2,4,6-Tribromophenol (S)	%.	93	32-124	10/30/12 12:28	
2-Fluorobiphenyl (S)	%.	80	34-106	10/30/12 12:28	
2-Fluorophenol (S)	%.	22	10-74	10/30/12 12:28	
Nitrobenzene-d5 (S)	%.	83	33-108	10/30/12 12:28	
p-Terphenyl-d14 (S)	%.	85	31-122	10/30/12 12:28	
Phenol-d5 (S)	%.	12	10-56	10/30/12 12:28	

LABORATORY CONTROL SAMPLE: 822809

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	1000	721	72	30-92	
2,4,5-Trichlorophenol	ug/L	1000	850	85	39-125	
2,4,6-Trichlorophenol	ug/L	1000	835	84	38-125	
2,4-Dinitrotoluene	ug/L	1000	871	87	38-119	
2-Methylphenol(o-Cresol)	ug/L	1000	489	49	31-106	
3&4-Methylphenol(m&p Cresol)	ug/L	2000	777	39	24-97	
Hexachloro-1,3-butadiene	ug/L	1000	752	75	16-115	
Hexachlorobenzene	ug/L	1000	704	70	33-124	
Hexachloroethane	ug/L	1000	687	69	16-100	
Nitrobenzene	ug/L	1000	796	80	35-114	
Pentachlorophenol	ug/L	1000	841	84	14-131	
Pyridine	ug/L	1000	129	13	10-61	
2,4,6-Tribromophenol (S)	%.			92	32-124	
2-Fluorobiphenyl (S)	%.			79	34-106	
2-Fluorophenol (S)	%.			24	10-74	
Nitrobenzene-d5 (S)	%.			82	33-108	
p-Terphenyl-d14 (S)	%.			91	31-122	
Phenol-d5 (S)	%.			14	10-56	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

MATRIX SPIKE SAMPLE: 822810

Parameter	Units	5071194005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND		711			
2,4,5-Trichlorophenol	ug/L	ND		737			
2,4,6-Trichlorophenol	ug/L	ND		684			
2,4-Dinitrotoluene	ug/L	ND		671			
2-Methylphenol(o-Cresol)	ug/L	ND		346			M0
3&4-Methylphenol(m&p Cresol)	ug/L	ND		563			M0
Hexachloro-1,3-butadiene	ug/L	ND		658			
Hexachlorobenzene	ug/L	ND		737			
Hexachloroethane	ug/L	ND		608			
Nitrobenzene	ug/L	ND		747			
Pentachlorophenol	ug/L	ND		634			
Pyridine	ug/L	ND		321			
2,4,6-Tribromophenol (S)	%.				70	32-124	
2-Fluorobiphenyl (S)	%.				78	34-106	
2-Fluorophenol (S)	%.				16	10-74	
Nitrobenzene-d5 (S)	%.				76	33-108	
p-Terphenyl-d14 (S)	%.				85	31-122	
Phenol-d5 (S)	%.				11	10-56	

MATRIX SPIKE SAMPLE: 822812

Parameter	Units	5071332001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1000	690	69	35-102	
2,4,5-Trichlorophenol	ug/L	ND	1000	800	80	60-121	
2,4,6-Trichlorophenol	ug/L	ND	1000	826	83	57-125	
2,4-Dinitrotoluene	ug/L	ND	1000	773	77	37-114	
2-Methylphenol(o-Cresol)	ug/L	ND	1000	424	42	41-111	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	2000	716	36	32-111	
Hexachloro-1,3-butadiene	ug/L	ND	1000	705	70	20-114	
Hexachlorobenzene	ug/L	ND	1000	594	59	32-125	
Hexachloroethane	ug/L	ND	1000	628	63	22-101	
Nitrobenzene	ug/L	ND	1000	873	87	50-113	
Pentachlorophenol	ug/L	ND	1000	699	70	25-117	
Pyridine	ug/L	ND	1000	222	22	10-112	
2,4,6-Tribromophenol (S)	%.				92	32-124	
2-Fluorobiphenyl (S)	%.				72	34-106	
2-Fluorophenol (S)	%.				24	10-74	
Nitrobenzene-d5 (S)	%.				88	33-108	
p-Terphenyl-d14 (S)	%.				84	31-122	
Phenol-d5 (S)	%.				11	10-56	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: OEXT/31163
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 5071213002

METHOD BLANK: 823643
Matrix: Water
Associated Lab Samples: 5071213002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	10/31/12 16:46	
2,4,5-Trichlorophenol	ug/L	ND	500	10/31/12 16:46	
2,4,6-Trichlorophenol	ug/L	ND	100	10/31/12 16:46	
2,4-Dinitrotoluene	ug/L	ND	100	10/31/12 16:46	
2-Methylphenol(o-Cresol)	ug/L	ND	100	10/31/12 16:46	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	200	10/31/12 16:46	
Hexachloro-1,3-butadiene	ug/L	ND	100	10/31/12 16:46	
Hexachlorobenzene	ug/L	ND	100	10/31/12 16:46	
Hexachloroethane	ug/L	ND	100	10/31/12 16:46	
Nitrobenzene	ug/L	ND	100	10/31/12 16:46	
Pentachlorophenol	ug/L	ND	500	10/31/12 16:46	
Pyridine	ug/L	ND	100	10/31/12 16:46	
2,4,6-Tribromophenol (S)	%.	88	32-124	10/31/12 16:46	
2-Fluorobiphenyl (S)	%.	72	34-106	10/31/12 16:46	
2-Fluorophenol (S)	%.	29	10-74	10/31/12 16:46	
Nitrobenzene-d5 (S)	%.	85	33-108	10/31/12 16:46	
p-Terphenyl-d14 (S)	%.	84	31-122	10/31/12 16:46	
Phenol-d5 (S)	%.	16	10-56	10/31/12 16:46	

LABORATORY CONTROL SAMPLE: 823644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	1000	689	69	30-92	
2,4,5-Trichlorophenol	ug/L	1000	813	81	39-125	
2,4,6-Trichlorophenol	ug/L	1000	854	85	38-125	
2,4-Dinitrotoluene	ug/L	1000	789	79	38-119	
2-Methylphenol(o-Cresol)	ug/L	1000	511	51	31-106	
3&4-Methylphenol(m&p Cresol)	ug/L	2000	799	40	24-97	
Hexachloro-1,3-butadiene	ug/L	1000	615	61	16-115	
Hexachlorobenzene	ug/L	1000	721	72	33-124	
Hexachloroethane	ug/L	1000	595	60	16-100	
Nitrobenzene	ug/L	1000	738	74	35-114	
Pentachlorophenol	ug/L	1000	776	78	14-131	
Pyridine	ug/L	1000	170	17	10-61	
2,4,6-Tribromophenol (S)	%.			89	32-124	
2-Fluorobiphenyl (S)	%.			80	34-106	
2-Fluorophenol (S)	%.			27	10-74	
Nitrobenzene-d5 (S)	%.			78	33-108	
p-Terphenyl-d14 (S)	%.			74	31-122	
Phenol-d5 (S)	%.			16	10-56	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

MATRIX SPIKE SAMPLE: 823645

Parameter	Units	5071174001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1000	678	68	35-102	
2,4,5-Trichlorophenol	ug/L	ND	1000	760	76	60-121	
2,4,6-Trichlorophenol	ug/L	ND	1000	771	77	57-125	
2,4-Dinitrotoluene	ug/L	ND	1000	588	59	37-114	
2-Methylphenol(o-Cresol)	ug/L	ND	1000	545	55	41-111	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	2000	890	44	32-111	
Hexachloro-1,3-butadiene	ug/L	ND	1000	622	62	20-114	
Hexachlorobenzene	ug/L	ND	1000	767	77	32-125	
Hexachloroethane	ug/L	ND	1000	558	56	22-101	
Nitrobenzene	ug/L	ND	1000	804	80	50-113	
Pentachlorophenol	ug/L	ND	1000	351J	35	25-117	
Pyridine	ug/L	ND	1000	253	25	10-112	
2,4,6-Tribromophenol (S)	%.				79	32-124	
2-Fluorobiphenyl (S)	%.				70	34-106	
2-Fluorophenol (S)	%.				30	10-74	
Nitrobenzene-d5 (S)	%.				77	33-108	
p-Terphenyl-d14 (S)	%.				77	31-122	
Phenol-d5 (S)	%.				17	10-56	

MATRIX SPIKE SAMPLE: 823646

Parameter	Units	5071489001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1000	632	63	35-102	
2,4,5-Trichlorophenol	ug/L	ND	1000	713	71	60-121	
2,4,6-Trichlorophenol	ug/L	ND	1000	681	68	57-125	
2,4-Dinitrotoluene	ug/L	ND	1000	598	60	37-114	
2-Methylphenol(o-Cresol)	ug/L	ND	1000	457	46	41-111	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	2000	704	35	32-111	
Hexachloro-1,3-butadiene	ug/L	ND	1000	634	63	20-114	
Hexachlorobenzene	ug/L	ND	1000	620	62	32-125	
Hexachloroethane	ug/L	ND	1000	543	54	22-101	
Nitrobenzene	ug/L	ND	1000	707	71	50-113	
Pentachlorophenol	ug/L	ND	1000	737	74	25-117	
Pyridine	ug/L	ND	1000	113	11	10-112	
2,4,6-Tribromophenol (S)	%.				78	32-124	
2-Fluorobiphenyl (S)	%.				61	34-106	
2-Fluorophenol (S)	%.				0	10-74	S0
Nitrobenzene-d5 (S)	%.				74	33-108	
p-Terphenyl-d14 (S)	%.				60	31-122	
Phenol-d5 (S)	%.				15	10-56	

MATRIX SPIKE SAMPLE: 823647

Parameter	Units	5071400001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1000	593	59	35-102	

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Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

MATRIX SPIKE SAMPLE: 823647

Parameter	Units	5071400001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,4,5-Trichlorophenol	ug/L	ND	1000	878	88	60-121	
2,4,6-Trichlorophenol	ug/L	ND	1000	852	85	57-125	
2,4-Dinitrotoluene	ug/L	ND	1000	662	66	37-114	
2-Methylphenol(o-Cresol)	ug/L	ND	1000	453	45	41-111	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	2000	756	38	32-111	
Hexachloro-1,3-butadiene	ug/L	ND	1000	661	66	20-114	
Hexachlorobenzene	ug/L	ND	1000	800	80	32-125	
Hexachloroethane	ug/L	ND	1000	528	53	22-101	
Nitrobenzene	ug/L	ND	1000	770	77	50-113	
Pentachlorophenol	ug/L	ND	1000	418J	42	25-117	
Pyridine	ug/L	ND	1000	137	14	10-112	
2,4,6-Tribromophenol (S)	%.				96	32-124	
2-Fluorobiphenyl (S)	%.				72	34-106	
2-Fluorophenol (S)	%.				26	10-74	
Nitrobenzene-d5 (S)	%.				75	33-108	
p-Terphenyl-d14 (S)	%.				93	31-122	
Phenol-d5 (S)	%.				14	10-56	

MATRIX SPIKE SAMPLE: 823648

Parameter	Units	5071414001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1000	594	59	35-102	
2,4,5-Trichlorophenol	ug/L	ND	1000	818	82	60-121	
2,4,6-Trichlorophenol	ug/L	ND	1000	817	82	57-125	
2,4-Dinitrotoluene	ug/L	ND	1000	591	59	37-114	
2-Methylphenol(o-Cresol)	ug/L	ND	1000	416	42	41-111	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	2000	704	35	32-111	
Hexachloro-1,3-butadiene	ug/L	ND	1000	488	49	20-114	
Hexachlorobenzene	ug/L	ND	1000	732	73	32-125	
Hexachloroethane	ug/L	ND	1000	465	47	22-101	
Nitrobenzene	ug/L	ND	1000	641	64	50-113	
Pentachlorophenol	ug/L	ND	1000	348J	35	25-117	
Pyridine	ug/L	ND	1000	129	13	10-112	
2,4,6-Tribromophenol (S)	%.				84	32-124	
2-Fluorobiphenyl (S)	%.				70	34-106	
2-Fluorophenol (S)	%.				23	10-74	
Nitrobenzene-d5 (S)	%.				67	33-108	
p-Terphenyl-d14 (S)	%.				91	31-122	
Phenol-d5 (S)	%.				13	10-56	

MATRIX SPIKE SAMPLE: 824197

Parameter	Units	5071194005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1000	681	68	35-102	
2,4,5-Trichlorophenol	ug/L	ND	1000	543	54	60-121	M0

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

MATRIX SPIKE SAMPLE: 824197

Parameter	Units	5071194005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,4,6-Trichlorophenol	ug/L	ND	1000	566	57	57-125	
2,4-Dinitrotoluene	ug/L	ND	1000	511	51	37-114	
2-Methylphenol(o-Cresol)	ug/L	ND	1000	372	37	41-111	M0
3&4-Methylphenol(m&p Cresol)	ug/L	ND	2000	615	31	32-111	M0
Hexachloro-1,3-butadiene	ug/L	ND	1000	789	79	20-114	
Hexachlorobenzene	ug/L	ND	1000	946	95	32-125	
Hexachloroethane	ug/L	ND	1000	515	52	22-101	
Nitrobenzene	ug/L	ND	1000	738	74	50-113	
Pentachlorophenol	ug/L	ND	1000	328J	33	25-117	
Pyridine	ug/L	ND	1000	276	28	10-112	
2,4,6-Tribromophenol (S)	%.				62	32-124	
2-Fluorobiphenyl (S)	%.				78	34-106	
2-Fluorophenol (S)	%.				16	10-74	
Nitrobenzene-d5 (S)	%.				77	33-108	
p-Terphenyl-d14 (S)	%.				80	31-122	
Phenol-d5 (S)	%.				11	10-56	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: PMST/7632 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

SAMPLE DUPLICATE: 821488

Parameter	Units	5071213005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	38.7	41.6	7	5	R1

SAMPLE DUPLICATE: 821489

Parameter	Units	5071268003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.3	16.2	.3	5	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: WET/10350 Analysis Method: EPA 7196A
QC Batch Method: EPA 3060A Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

METHOD BLANK: 821751 Matrix: Solid
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	ND	2.0	10/29/12 10:37	

LABORATORY CONTROL SAMPLE: 821752

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	1000	878	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 821753 821754

Parameter	Units	5071213005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/kg	ND	1710	1660	131J	108J	7	6	75-125		20	M3

SAMPLE DUPLICATE: 821980

Parameter	Units	5070953001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	ND	ND		20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: WETA/22224 Analysis Method: SW-846 7.3.3.2
QC Batch Method: SW-846 7.3.3.2 Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

METHOD BLANK: 1087673 Matrix: Solid
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	0.025	10/29/12 14:10	

LABORATORY CONTROL SAMPLE: 1087674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	.5	0.56	111	71-123	

MATRIX SPIKE SAMPLE: 1087676

Parameter	Units	5071213005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	ND	.5	0.45	88	57-132	

SAMPLE DUPLICATE: 1087675

Parameter	Units	5071194004 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/kg	ND	ND		23	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071213

QC Batch: WETA/8758 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

METHOD BLANK: 820880 Matrix: Solid
Associated Lab Samples: 5071213001, 5071213002, 5071213003, 5071213004, 5071213005, 5071213006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	10/26/12 13:43	

LABORATORY CONTROL SAMPLE: 820881

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	10.6	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 820882 820883

Parameter	Units	5071213005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	ND	16.3	16.3	18.2	18.6	108	111	90-110	2	20	M0

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(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALIFIERS

Project: Baycote Metal Finishings
Pace Project No.: 5071213

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-I	Pace Analytical Services - Indianapolis
PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.

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(317)875-5894

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5071213001	**BMF-S01-102212**	EPA 3546	OEXT/31121	EPA 8082	GCSV/10094
5071213002	**BMF-S02-102212**	EPA 3546	OEXT/31121	EPA 8082	GCSV/10094
5071213003	**BMF-S03-102212**	EPA 3546	OEXT/31121	EPA 8082	GCSV/10094
5071213004	**BMF-S03-102212D**	EPA 3546	OEXT/31121	EPA 8082	GCSV/10094
5071213005	**BMF-S04-102212**	EPA 3546	OEXT/31145	EPA 8082	GCSV/10100
5071213006	**BMF-S05-102212**	EPA 3546	OEXT/31121	EPA 8082	GCSV/10094
5071213001	**BMF-S01-102212**	EPA 3050	MPRP/10079	EPA 6010	ICP/10510
5071213002	**BMF-S02-102212**	EPA 3050	MPRP/10079	EPA 6010	ICP/10510
5071213003	**BMF-S03-102212**	EPA 3050	MPRP/10079	EPA 6010	ICP/10510
5071213004	**BMF-S03-102212D**	EPA 3050	MPRP/10079	EPA 6010	ICP/10510
5071213005	**BMF-S04-102212**	EPA 3050	MPRP/10079	EPA 6010	ICP/10510
5071213006	**BMF-S05-102212**	EPA 3050	MPRP/10079	EPA 6010	ICP/10510
5071213001	**BMF-S01-102212**	EPA 3010	MPRP/10105	EPA 6010	ICP/10535
5071213002	**BMF-S02-102212**	EPA 3010	MPRP/10105	EPA 6010	ICP/10535
5071213003	**BMF-S03-102212**	EPA 3010	MPRP/10105	EPA 6010	ICP/10535
5071213004	**BMF-S03-102212D**	EPA 3010	MPRP/10105	EPA 6010	ICP/10535
5071213005	**BMF-S04-102212**	EPA 3010	MPRP/10105	EPA 6010	ICP/10535
5071213006	**BMF-S05-102212**	EPA 3010	MPRP/10105	EPA 6010	ICP/10535
5071213001	**BMF-S01-102212**	EPA 7470	MERP/4215	EPA 7470	MERC/4248
5071213002	**BMF-S02-102212**	EPA 7470	MERP/4215	EPA 7470	MERC/4248
5071213003	**BMF-S03-102212**	EPA 7470	MERP/4215	EPA 7470	MERC/4248
5071213004	**BMF-S03-102212D**	EPA 7470	MERP/4215	EPA 7470	MERC/4248
5071213005	**BMF-S04-102212**	EPA 7470	MERP/4215	EPA 7470	MERC/4248
5071213006	**BMF-S05-102212**	EPA 7470	MERP/4215	EPA 7470	MERC/4248
5071213001	**BMF-S01-102212**	EPA 7471	MERP/4218	EPA 7471	MERC/4245
5071213002	**BMF-S02-102212**	EPA 7471	MERP/4218	EPA 7471	MERC/4245
5071213003	**BMF-S03-102212**	EPA 7471	MERP/4218	EPA 7471	MERC/4245
5071213004	**BMF-S03-102212D**	EPA 7471	MERP/4218	EPA 7471	MERC/4245
5071213005	**BMF-S04-102212**	EPA 7471	MERP/4218	EPA 7471	MERC/4245
5071213006	**BMF-S05-102212**	EPA 7471	MERP/4218	EPA 7471	MERC/4245
5071213001	**BMF-S01-102212**	EPA 3510	OEXT/31147	EPA 8270	MSSV/11261
5071213002	**BMF-S02-102212**	EPA 3510	OEXT/31163	EPA 8270	MSSV/11269
5071213003	**BMF-S03-102212**	EPA 3510	OEXT/31147	EPA 8270	MSSV/11261
5071213004	**BMF-S03-102212D**	EPA 3510	OEXT/31147	EPA 8270	MSSV/11261
5071213005	**BMF-S04-102212**	EPA 3510	OEXT/31147	EPA 8270	MSSV/11261
5071213006	**BMF-S05-102212**	EPA 3510	OEXT/31147	EPA 8270	MSSV/11261
5071213001	**BMF-S01-102212**	EPA 8260	MSV/47287		
5071213002	**BMF-S02-102212**	EPA 8260	MSV/47287		
5071213003	**BMF-S03-102212**	EPA 8260	MSV/47287		
5071213004	**BMF-S03-102212D**	EPA 8260	MSV/47287		
5071213005	**BMF-S04-102212**	EPA 8260	MSV/47287		
5071213006	**BMF-S05-102212**	EPA 8260	MSV/47288		
5071213001	**BMF-S01-102212**	ASTM D2974-87	PMST/7632		

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metal Finishings
Pace Project No.: 5071213

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5071213002	**BMF-S02-102212**	ASTM D2974-87	PMST/7632		
5071213003	**BMF-S03-102212**	ASTM D2974-87	PMST/7632		
5071213004	**BMF-S03-102212D**	ASTM D2974-87	PMST/7632		
5071213005	**BMF-S04-102212**	ASTM D2974-87	PMST/7632		
5071213006	**BMF-S05-102212**	ASTM D2974-87	PMST/7632		
5071213001	**BMF-S01-102212**	EPA 3060A	WET/10350	EPA 7196A	WET/10358
5071213002	**BMF-S02-102212**	EPA 3060A	WET/10350	EPA 7196A	WET/10358
5071213003	**BMF-S03-102212**	EPA 3060A	WET/10350	EPA 7196A	WET/10358
5071213004	**BMF-S03-102212D**	EPA 3060A	WET/10350	EPA 7196A	WET/10358
5071213005	**BMF-S04-102212**	EPA 3060A	WET/10350	EPA 7196A	WET/10358
5071213006	**BMF-S05-102212**	EPA 3060A	WET/10350	EPA 7196A	WET/10358
5071213001	**BMF-S01-102212**	SW-846 7.3.3.2	WETA/22224		
5071213002	**BMF-S02-102212**	SW-846 7.3.3.2	WETA/22224		
5071213003	**BMF-S03-102212**	SW-846 7.3.3.2	WETA/22224		
5071213004	**BMF-S03-102212D**	SW-846 7.3.3.2	WETA/22224		
5071213005	**BMF-S04-102212**	SW-846 7.3.3.2	WETA/22224		
5071213006	**BMF-S05-102212**	SW-846 7.3.3.2	WETA/22224		
5071213001	**BMF-S01-102212**	EPA 9012	WETA/8758	EPA 9012	WETA/8765
5071213002	**BMF-S02-102212**	EPA 9012	WETA/8758	EPA 9012	WETA/8765
5071213003	**BMF-S03-102212**	EPA 9012	WETA/8758	EPA 9012	WETA/8765
5071213004	**BMF-S03-102212D**	EPA 9012	WETA/8758	EPA 9012	WETA/8765
5071213005	**BMF-S04-102212**	EPA 9012	WETA/8758	EPA 9012	WETA/8765
5071213006	**BMF-S05-102212**	EPA 9012	WETA/8758	EPA 9012	WETA/8765

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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

1605147

Section A Required Client Information:

Company: Environmental Restoration, LLC
Address: 16606 Fabrick Dr, Fenton, MO 63026
Email To: J.Behrens@erllc.com
Phone: 708-473-7124 Fax:
Requested Due Date/TAT: Standard TAT

Section B Required Project Information:

Report To: John Behrens
Copy To: Trenna.Sundquist@WestonSolutions.com
Purchase Order No.:
Project Name: Baycote metal Finishings
Project Number:

Section C Invoice Information:

Attention: See Section A
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER ____

Site Location STATE: IN

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): 5071213

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION (°F)	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	TCLP VOCs	TCLP SVOCs	TCLP metals	PCBs	Total RCRA Metals w/Hex Cr	Total Cyanide	Reactive Cyanide	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	BMF-S01-102212	SL	G			10-22-12	1150	65	6	6									X	X	X	X	X	X	X		-001
2	BMF-S02-102212	SL	G			10-22-12	1200	65	6	6									X	X	X	X	X	X	X		-002
3	BMF-S03-102212	SL	G			10-22-12	1350	65	6	6									X	X	X	X	X	X	X		-003
4	BMF-S03-102212D	SL	G			10-22-12	1400	65	6	6									X	X	X	X	X	X	X		-004
5	BMF-S04-102212 *	SL	G			10-22-12	1410	65	12	12									X	X	X	X	X	X	X		-005
6	BMF-S05-102212	SL	G			10-22-12	1420	65	6	6									X	X	X	X	X	X	X		-006
7	*last item																										*
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Perform MS/MSD on sample BMF-S04-102212	David Sena/Weston	10-23-12	1025	[signature]	10/23	1025				
				[signature]	10/24/12	7:35am	12.5	N	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: David Sena
SIGNATURE of SAMPLER: David Sena
DATE Signed (MM/DD/YY): 10/22/12

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

NOW Kee 10-24-12 0816 ORIGINAL

*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.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Env. Restoration Project # 5071213

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other NOW

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used 1 2 3 4 6 (A) B C D E **Type of Ice:** Wet Blue (melted) None ☐ Samples on ice, cooling process has begun

Cooler Temperature 12.5°C **Ice Visible in Sample Containers:** ☐ yes ☒ no

(Corrected, if applicable)

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KLL 10-24-12

				Comments:
Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3. But not relinquished 2nd time
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Short Hold Time Analysis (<72hr):	☒Yes	☐No	☐N/A	5.
Rush Turn Around Time Requested:	☒Yes	☐No	☐N/A	6.
Containers Intact:	☒Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☒Yes	☐No	☐N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☐Yes	☐No	☒N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	
Headspace in VOA Vials (>6mm)	☐Yes	☐No	☒N/A	10.
Trip Blank Present:	☐Yes	☒No	☐N/A	11.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	12.
Sufficient Volume:	☒Yes	☐No	☐N/A	13.
Correct Containers Used:	☒Yes	☐No	☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: John Behrens Date/Time: 10/24/12

Comments/ Resolution:

No Ice remaining & Ziplock bags full of melted ice, only water left. OK to proceed with analyses per John Behrens 10/24/12

Project Manager Review: Kenneth Hunt **Date:** 10/24/12

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

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CLIENT: Env. Restoration

COC PAGE 1 of 1
COC ID# 1605147

Project # 5071213

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H			Comments
1			6													
2			↓													
3																
4			↓													
5			12													
6			6													
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B19

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

November 06, 2012

Mr. John Behrens
Environmental Restoration
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote Metal Finishings
Pace Project No.: 5071481

Dear Mr. Behrens:
Enclosed are the analytical results for sample(s) received by the laboratory on October 30, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

CERTIFICATIONS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Indiana Certification IDs
7726 Moller Road Indianapolis, IN 46268
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Ohio VAP: CL0065
Pennsylvania: 68-00791
West Virginia Certification #: 330

Kansas Certification IDs
9608 Loiret Boulevard Lenexa, KS 66219
Oh, Oh, I changed it.....
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE SUMMARY

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5071481001	**BMF-WL01-102912**	Water	10/29/12 09:00	10/30/12 08:07
5071481002	**BMF-WL01-102912D**	Water	10/29/12 09:10	10/30/12 08:07
5071481003	**BMF-WL02-102912**	Water	10/29/12 09:20	10/30/12 08:07
5071481004	**BMF-WL03-102912**	Water	10/29/12 09:30	10/30/12 08:07
5071481005	**BMF-WL04-102912**	Water	10/29/12 09:40	10/30/12 08:07
5071481006	**BMF-WL05-102912**	Water	10/29/12 09:50	10/30/12 08:07
5071481007	**BMF-WS01-102912**	Solid	10/29/12 10:00	10/30/12 08:07
5071481008	**BMF-WS01-102912D**	Solid	10/29/12 10:10	10/30/12 08:07
5071481009	**BMF-WS02-102912**	Solid	10/29/12 10:20	10/30/12 08:07
5071481010	**BMF-WS03-102912**	Solid	10/29/12 10:30	10/30/12 08:07
5071481011	**BMF-WS04-102912**	Solid	10/29/12 10:40	10/30/12 08:07
5071481012	**BMF-WS05-102912**	Solid	10/29/12 10:40	10/30/12 08:07

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
5071481001	**BMF-WL01-102912**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 1010	WDB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		EPA 7196	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481002	**BMF-WL01-102912D**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 1010	WDB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		EPA 7196	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481003	**BMF-WL02-102912**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 1010	WDB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		EPA 7196	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481004	**BMF-WL03-102912**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 1010	WDB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		EPA 7196	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481005	**BMF-WL04-102912**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 1010	WDB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		EPA 7196	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481006	**BMF-WL05-102912**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I

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(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 1010	WDB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		EPA 7196	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481007	**BMF-WS01-102912**	EPA 6010	LLB	7	PASI-I
		EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481008	**BMF-WS01-102912D**	EPA 6010	LLB	7	PASI-I
		EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481009	**BMF-WS02-102912**	EPA 6010	LLB	7	PASI-I
		EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481010	**BMF-WS03-102912**	EPA 6010	LLB	7	PASI-I
		EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I

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Columbus, OH 43215
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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
5071481011	**BMF-WS04-102912**	EPA 6010	LLB	7	PASI-I
		EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071481012	**BMF-WS05-102912**	EPA 6010	LLB	7	PASI-I
		EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		EPA 7471	LLB	1	PASI-I
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WL01-102912 **Lab ID: 5071481001** Collected: 10/29/12 09:00 Received: 10/30/12 08:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 10:58	7440-38-2	
Barium	ND	ug/L	100	1	11/01/12 16:15	11/02/12 10:58	7440-39-3	
Cadmium	ND	ug/L	5.0	1	11/01/12 16:15	11/02/12 10:58	7440-43-9	
Chromium	**41.5**	ug/L	10.0	1	11/01/12 16:15	11/02/12 10:58	7440-47-3	
Lead	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 10:58	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 10:58	7782-49-2	
Silver	ND	ug/L	50.0	1	11/01/12 16:15	11/02/12 10:58	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/01/12 12:06	11/02/12 12:01	7439-97-6	
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	**>180**	deg F		1		10/31/12 15:17		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**8.6**	Std. Units		1		10/30/12 08:22		H6
7196 Chromium, Hexavalent	Analytical Method: EPA 7196							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/30/12 09:20	18540-29-9	H1
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		11/05/12 15:08		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**0.015**	mg/L	0.010	1		11/06/12 14:44	57-12-5	

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7726 Moller Road
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ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WL01-102912D **Lab ID: 5071481002** Collected: 10/29/12 09:10 Received: 10/30/12 08:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:02	7440-38-2	
Barium	ND	ug/L	100	1	11/01/12 16:15	11/02/12 11:02	7440-39-3	
Cadmium	**5.5**	ug/L	5.0	1	11/01/12 16:15	11/02/12 11:02	7440-43-9	
Chromium	**49.0**	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:02	7440-47-3	
Lead	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:02	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:02	7782-49-2	
Silver	ND	ug/L	50.0	1	11/01/12 16:15	11/02/12 11:02	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/01/12 12:06	11/02/12 12:03	7439-97-6	
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	**>180**	deg F		1		10/31/12 15:17		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**8.7**	Std. Units		1		10/30/12 08:23		H6
7196 Chromium, Hexavalent	Analytical Method: EPA 7196							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/30/12 09:10	18540-29-9	
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		11/05/12 15:09		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**0.022**	mg/L	0.010	1		11/06/12 14:47	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WL02-102912 **Lab ID: 5071481003** Collected: 10/29/12 09:20 Received: 10/30/12 08:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:15	7440-38-2	
Barium	ND	ug/L	100	1	11/01/12 16:15	11/02/12 11:15	7440-39-3	
Cadmium	**36.0**	ug/L	5.0	1	11/01/12 16:15	11/02/12 11:15	7440-43-9	
Chromium	**362**	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:15	7440-47-3	
Lead	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:15	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:15	7782-49-2	
Silver	ND	ug/L	50.0	1	11/01/12 16:15	11/02/12 11:15	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/01/12 12:06	11/02/12 12:05	7439-97-6	
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	**>180**	deg F		1		10/31/12 15:17		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**7.7**	Std. Units		1		10/30/12 08:24		H6
7196 Chromium, Hexavalent	Analytical Method: EPA 7196							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/30/12 09:19	18540-29-9	
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		11/05/12 15:12		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**0.13**	mg/L	0.010	1		11/06/12 14:48	57-12-5	

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(614)486-5421

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7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WL03-102912 **Lab ID: 5071481004** Collected: 10/29/12 09:30 Received: 10/30/12 08:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:19	7440-38-2	
Barium	ND	ug/L	100	1	11/01/12 16:15	11/02/12 11:19	7440-39-3	
Cadmium	**183**	ug/L	5.0	1	11/01/12 16:15	11/02/12 11:19	7440-43-9	
Chromium	**408**	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:19	7440-47-3	
Lead	**10.4**	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:19	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:19	7782-49-2	
Silver	ND	ug/L	50.0	1	11/01/12 16:15	11/02/12 11:19	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/01/12 12:06	11/02/12 12:07	7439-97-6	
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	**>180**	deg F		1		11/01/12 14:56		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**7.5**	Std. Units		1		10/30/12 08:25		H6
7196 Chromium, Hexavalent	Analytical Method: EPA 7196							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/30/12 09:19	18540-29-9	
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		11/05/12 15:12		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**0.077**	mg/L	0.010	1		11/06/12 14:49	57-12-5	

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(614)486-5421

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7726 Moller Road
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ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WL04-102912 **Lab ID: 5071481005** Collected: 10/29/12 09:40 Received: 10/30/12 08:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**27.6**	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:22	7440-38-2	
Barium	ND	ug/L	100	1	11/01/12 16:15	11/02/12 11:22	7440-39-3	
Cadmium	**12.2**	ug/L	5.0	1	11/01/12 16:15	11/02/12 11:22	7440-43-9	
Chromium	**3310**	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:22	7440-47-3	
Lead	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:22	7439-92-1	
Selenium	**23.1**	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:22	7782-49-2	
Silver	ND	ug/L	50.0	1	11/01/12 16:15	11/02/12 11:22	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/01/12 12:06	11/02/12 12:09	7439-97-6	
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	**>180**	deg F		1		11/01/12 14:56		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**9.8**	Std. Units		1		10/30/12 08:27		H6
7196 Chromium, Hexavalent	Analytical Method: EPA 7196							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/30/12 09:19	18540-29-9	
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		11/05/12 15:13		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**2.8**	mg/L	0.050	5		11/06/12 16:40	57-12-5	E

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ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WL05-102912 **Lab ID: 5071481006** Collected: 10/29/12 09:50 Received: 10/30/12 08:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:26	7440-38-2	
Barium	ND	ug/L	100	1	11/01/12 16:15	11/02/12 11:26	7440-39-3	
Cadmium	**334**	ug/L	5.0	1	11/01/12 16:15	11/02/12 11:26	7440-43-9	
Chromium	**103**	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:26	7440-47-3	
Lead	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:26	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/01/12 16:15	11/02/12 11:26	7782-49-2	
Silver	ND	ug/L	50.0	1	11/01/12 16:15	11/02/12 11:26	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/01/12 12:06	11/02/12 12:11	7439-97-6	
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	**>180**	deg F		1		11/01/12 14:56		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**7.0**	Std. Units		1		10/30/12 08:28		H6
7196 Chromium, Hexavalent	Analytical Method: EPA 7196							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/30/12 09:19	18540-29-9	
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		11/05/12 15:17		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1		11/06/12 14:51	57-12-5	

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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WS01-102912 **Lab ID: 5071481007** Collected: 10/29/12 10:00 Received: 10/30/12 08:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**6.4**	mg/kg	2.0	1	11/02/12 14:52	11/05/12 21:38	7440-38-2	
Barium	**17.2**	mg/kg	2.0	1	11/02/12 14:52	11/05/12 21:38	7440-39-3	
Cadmium	**1520**	mg/kg	9.8	5	11/02/12 14:52	11/05/12 21:45	7440-43-9	
Chromium	**704**	mg/kg	2.0	1	11/02/12 14:52	11/05/12 21:38	7440-47-3	
Lead	**619**	mg/kg	2.0	1	11/02/12 14:52	11/05/12 21:38	7439-92-1	
Selenium	**102**	mg/kg	2.0	1	11/02/12 14:52	11/05/12 21:38	7782-49-2	
Silver	**10**	mg/kg	2.0	1	11/02/12 14:52	11/05/12 21:38	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Arsenic	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:22	7440-38-2	
Barium	ND	mg/L	5.0	1	11/01/12 16:15	11/05/12 11:22	7440-39-3	
Cadmium	**0.64**	mg/L	0.050	1	11/01/12 16:15	11/05/12 11:22	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:22	7440-47-3	
Lead	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:22	7439-92-1	
Selenium	**0.21**	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:22	7782-49-2	
Silver	ND	mg/L	0.50	1	11/01/12 16:15	11/05/12 11:22	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Mercury	**0.0026**	mg/L	0.0020	1	11/01/12 14:07	11/02/12 12:25	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.88**	mg/kg	0.20	1	11/05/12 11:50	11/06/12 11:04	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**18.5**	%	0.50	1		11/05/12 00:00		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	20.0	10	10/31/12 13:15	11/01/12 10:32	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/05/12 14:55		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**813**	mg/kg	20.0	40	11/01/12 10:27	11/01/12 14:32	57-12-5	

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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WS01-102912D **Lab ID: 5071481008** Collected: 10/29/12 10:10 Received: 10/30/12 08:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**4.5**	mg/kg	1.8	1	11/02/12 14:52	11/05/12 21:57	7440-38-2	
Barium	**12.8**	mg/kg	1.8	1	11/02/12 14:52	11/05/12 21:57	7440-39-3	
Cadmium	**1050**	mg/kg	1.8	1	11/02/12 14:52	11/05/12 21:57	7440-43-9	
Chromium	**415**	mg/kg	1.8	1	11/02/12 14:52	11/05/12 21:57	7440-47-3	
Lead	**558**	mg/kg	1.8	1	11/02/12 14:52	11/05/12 21:57	7439-92-1	
Selenium	**126**	mg/kg	1.8	1	11/02/12 14:52	11/05/12 21:57	7782-49-2	
Silver	ND	mg/kg	17.6	10	11/02/12 14:52	11/06/12 13:17	7440-22-4	D3
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Arsenic	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:36	7440-38-2	
Barium	ND	mg/L	5.0	1	11/01/12 16:15	11/05/12 11:36	7440-39-3	
Cadmium	**5.1**	mg/L	0.050	1	11/01/12 16:15	11/05/12 11:36	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:36	7440-47-3	
Lead	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:36	7439-92-1	
Selenium	**0.31**	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:36	7782-49-2	
Silver	ND	mg/L	0.50	1	11/01/12 16:15	11/05/12 11:36	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Mercury	**0.0024**	mg/L	0.0020	1	11/01/12 14:07	11/02/12 12:30	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.85**	mg/kg	0.19	1	11/05/12 11:50	11/06/12 11:10	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**19.0**	%	0.50	1		11/05/12 00:00		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	10.0	5	10/31/12 13:15	11/01/12 10:32	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/05/12 14:56		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**1880**	mg/kg	40.0	80	11/01/12 10:27	11/01/12 14:41	57-12-5	

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(614)486-5421

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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WS02-102912 **Lab ID: 5071481009** Collected: 10/29/12 10:20 Received: 10/30/12 08:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**2.0**	mg/kg	0.20	1	11/02/12 14:52	11/05/12 22:11	7440-38-2	
Barium	**2.8**	mg/kg	0.20	1	11/02/12 14:52	11/05/12 22:11	7440-39-3	
Cadmium	**76.3**	mg/kg	0.20	1	11/02/12 14:52	11/05/12 22:11	7440-43-9	
Chromium	**1370**	mg/kg	4.0	20	11/02/12 14:52	11/06/12 13:59	7440-47-3	
Lead	**16.2**	mg/kg	0.20	1	11/02/12 14:52	11/05/12 22:11	7439-92-1	
Selenium	ND	mg/kg	4.0	20	11/02/12 14:52	11/06/12 13:59	7782-49-2	D3
Silver	**10.3**	mg/kg	0.20	1	11/02/12 14:52	11/05/12 22:11	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Arsenic	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:39	7440-38-2	
Barium	ND	mg/L	5.0	1	11/01/12 16:15	11/05/12 11:39	7440-39-3	
Cadmium	**4.6**	mg/L	0.050	1	11/01/12 16:15	11/05/12 11:39	7440-43-9	
Chromium	**0.60**	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:39	7440-47-3	
Lead	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:39	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:39	7782-49-2	
Silver	ND	mg/L	0.50	1	11/01/12 16:15	11/05/12 11:39	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Mercury	ND	mg/L	0.0020	1	11/01/12 14:07	11/02/12 12:32	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.020	1	11/05/12 11:50	11/06/12 11:12	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**96.5**	%	0.50	1		11/05/12 00:00		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	**1.2**	mg/kg	1.0	1	10/31/12 13:15	11/01/12 10:32	18540-29-9	
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/05/12 14:59		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**12.9**	mg/kg	0.50	1	11/01/12 10:27	11/01/12 14:20	57-12-5	

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(614)486-5421

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ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WS03-102912 **Lab ID: 5071481010** Collected: 10/29/12 10:30 Received: 10/30/12 08:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**6.3**	mg/kg	0.40	1	11/02/12 14:52	11/05/12 22:15	7440-38-2	
Barium	**35.9**	mg/kg	0.40	1	11/02/12 14:52	11/05/12 22:15	7440-39-3	
Cadmium	**72.9**	mg/kg	0.40	1	11/02/12 14:52	11/05/12 22:15	7440-43-9	
Chromium	**1280**	mg/kg	4.0	10	11/02/12 14:52	11/06/12 13:25	7440-47-3	
Lead	**25.1**	mg/kg	0.40	1	11/02/12 14:52	11/05/12 22:15	7439-92-1	
Selenium	**0.78**	mg/kg	0.40	1	11/02/12 14:52	11/05/12 22:15	7782-49-2	
Silver	**110**	mg/kg	4.0	10	11/02/12 14:52	11/06/12 13:25	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Arsenic	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:42	7440-38-2	
Barium	ND	mg/L	5.0	1	11/01/12 16:15	11/05/12 11:42	7440-39-3	
Cadmium	ND	mg/L	0.050	1	11/01/12 16:15	11/05/12 11:42	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:42	7440-47-3	
Lead	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:42	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 11:42	7782-49-2	
Silver	ND	mg/L	0.50	1	11/01/12 16:15	11/05/12 11:42	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Mercury	ND	mg/L	0.0020	1	11/01/12 14:07	11/02/12 12:34	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.46**	mg/kg	0.076	2	11/05/12 11:50	11/06/12 12:04	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**80.1**	%	0.50	1		11/05/12 00:00		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	2.0	2	10/31/12 13:15	11/01/12 10:32	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	**0.31**	mg/kg	0.025	1		11/05/12 15:00		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**39.3**	mg/kg	2.0	4	11/01/12 10:27	11/01/12 14:21	57-12-5	

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1233 Dublin Road
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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WS04-102912 **Lab ID: 5071481011** Collected: 10/29/12 10:40 Received: 10/30/12 08:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**47.1**	mg/kg	20.0	100	11/02/12 14:52	11/06/12 13:28	7440-38-2	
Barium	**1.2**	mg/kg	0.20	1	11/02/12 14:52	11/05/12 22:19	7440-39-3	
Cadmium	**188**	mg/kg	20.0	100	11/02/12 14:52	11/06/12 13:28	7440-43-9	
Chromium	**9380**	mg/kg	20.0	100	11/02/12 14:52	11/06/12 13:28	7440-47-3	
Lead	ND	mg/kg	20.0	100	11/02/12 14:52	11/06/12 13:28	7439-92-1	
Selenium	**20.7**	mg/kg	0.20	1	11/02/12 14:52	11/05/12 22:19	7782-49-2	
Silver	**38.8**	mg/kg	0.20	1	11/02/12 14:52	11/05/12 22:19	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Arsenic	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 18:53	7440-38-2	
Barium	ND	mg/L	5.0	1	11/01/12 16:15	11/05/12 18:53	7440-39-3	
Cadmium	**3.0**	mg/L	0.050	1	11/01/12 16:15	11/05/12 18:53	7440-43-9	
Chromium	**9.5**	mg/L	0.10	1	11/01/12 16:15	11/05/12 18:53	7440-47-3	
Lead	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 18:53	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 18:53	7782-49-2	
Silver	ND	mg/L	0.50	1	11/01/12 16:15	11/05/12 18:53	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Mercury	ND	mg/L	0.0020	1	11/01/12 14:07	11/02/12 12:36	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.020	1	11/05/12 11:50	11/06/12 11:16	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**92.2**	%	0.50	1		11/05/12 00:00		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	2.0	2	10/31/12 13:15	11/01/12 10:32	18540-29-9	D3
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/05/12 15:01		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**36.3**	mg/kg	1.0	2	11/01/12 10:27	11/01/12 14:39	57-12-5	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Sample: BMF-WS05-102912 **Lab ID: 5071481012** Collected: 10/29/12 10:40 Received: 10/30/12 08:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**4.8**	mg/kg	1.9	1	11/02/12 14:52	11/05/12 22:23	7440-38-2	
Barium	ND	mg/kg	1.9	1	11/02/12 14:52	11/05/12 22:23	7440-39-3	
Cadmium	ND	mg/kg	1.9	1	11/02/12 14:52	11/05/12 22:23	7440-43-9	
Chromium	**61.4**	mg/kg	1.9	1	11/02/12 14:52	11/05/12 22:23	7440-47-3	
Lead	ND	mg/kg	37.4	20	11/02/12 14:52	11/06/12 14:03	7439-92-1	D3
Selenium	ND	mg/kg	37.4	20	11/02/12 14:52	11/06/12 14:03	7782-49-2	D3
Silver	**2.9**	mg/kg	1.9	1	11/02/12 14:52	11/05/12 22:23	7440-22-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Arsenic	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 14:15	7440-38-2	
Barium	ND	mg/L	5.0	1	11/01/12 16:15	11/05/12 14:15	7440-39-3	
Cadmium	ND	mg/L	0.050	1	11/01/12 16:15	11/05/12 14:15	7440-43-9	
Chromium	**0.50**	mg/L	0.10	1	11/01/12 16:15	11/05/12 14:15	7440-47-3	
Lead	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 14:15	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 14:15	7782-49-2	
Silver	ND	mg/L	0.50	1	11/01/12 16:15	11/05/12 14:15	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Mercury	ND	mg/L	0.0020	1	11/01/12 14:07	11/02/12 13:19	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.19	1	11/05/12 11:50	11/06/12 11:19	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**29.5**	%	0.50	1		11/05/12 00:00		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A							
Chromium, Hexavalent	ND	mg/kg	5.0	1	10/31/12 13:15	11/01/12 10:32	18540-29-9	
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/05/12 15:04		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.65**	mg/kg	0.50	1	11/05/12 13:59	11/06/12 14:58	57-12-5	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: MERP/4231 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011

METHOD BLANK: 824253 Matrix: Water
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	11/02/12 12:15	

LABORATORY CONTROL SAMPLE & LCSD: 824254 824255

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.016	0.016	108	110	80-120		20	

MATRIX SPIKE SAMPLE: 824257

Parameter	Units	5071481007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0026	.015	0.020	115	75-125	

MATRIX SPIKE SAMPLE: 824258

Parameter	Units	5071484002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.017	105	75-125	

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Columbus, OH 43215
(614)486-5421

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7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: MERP/4234
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5071481012

METHOD BLANK: 824266
Matrix: Water
Associated Lab Samples: 5071481012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	11/02/12 13:09	

LABORATORY CONTROL SAMPLE & LCSD: 824267 824268

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.017	0.017	112	114	80-120		20	

MATRIX SPIKE SAMPLE: 824269

Parameter	Units	5071481012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.016	106	75-125	

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Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: MERP/4230 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

METHOD BLANK: 824240 Matrix: Water
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	11/02/12 11:42	

LABORATORY CONTROL SAMPLE: 824241

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.3	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 824242 824243

Parameter	Units	5071540001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	5.1	5.2	103	104	75-125	1	20	

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7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: MERP/4237 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

METHOD BLANK: 825547 Matrix: Solid
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.20	11/06/12 11:00	

LABORATORY CONTROL SAMPLE: 825548

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.5	0.46	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825549 825550

Parameter	Units	5071481007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.88	.46	.46	1.5	1.2	137	69	75-125	23	20	1d,M3

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825551 825552

Parameter	Units	5071633003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.84	.64	.66	1.2	1.5	60	96	75-125	18	20	M0

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: MPRP/10137 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

METHOD BLANK: 825195 Matrix: Solid
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	2.0	11/05/12 21:31	
Barium	mg/kg	ND	2.0	11/05/12 21:31	
Cadmium	mg/kg	ND	2.0	11/05/12 21:31	
Chromium	mg/kg	ND	2.0	11/05/12 21:31	
Lead	mg/kg	ND	2.0	11/05/12 21:31	
Selenium	mg/kg	ND	2.0	11/05/12 21:31	
Silver	mg/kg	ND	2.0	11/05/12 21:31	

LABORATORY CONTROL SAMPLE: 825196

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	50.4	101	80-120	
Barium	mg/kg	50	50.4	101	80-120	
Cadmium	mg/kg	50	50.2	100	80-120	
Chromium	mg/kg	50	51.6	103	80-120	
Lead	mg/kg	50	49.3	99	80-120	
Selenium	mg/kg	50	50.9	102	80-120	
Silver	mg/kg	25	24.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825197 825198

Parameter	Units	5071481007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	6.4	48	45.1	58.5	55.6	108	109	75-125	5	20	
Barium	mg/kg	17.2	48	45.1	73.1	66.5	116	109	75-125	9	20	
Cadmium	mg/kg	1520	48	45.1	2620	1840	2300	715	75-125	35	20	P6,R2
Chromium	mg/kg	704	48	45.1	935	814	480	243	75-125	14	20	P6
Lead	mg/kg	619	48	45.1	493	518	-261	-223	75-125	5	20	P6
Selenium	mg/kg	102	48	45.1	142	159	83	126	75-125	11	20	M0
Silver	mg/kg	10	24	22.5	34.7	32.0	103	98	75-125	8	20	

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1233 Dublin Road
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(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: MPRP/10127 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011

METHOD BLANK: 824592 Matrix: Water
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	11/05/12 11:12	
Barium	mg/L	ND	5.0	11/05/12 11:12	
Cadmium	mg/L	ND	0.050	11/05/12 11:12	
Chromium	mg/L	ND	0.10	11/05/12 11:12	
Lead	mg/L	ND	0.10	11/05/12 11:12	
Selenium	mg/L	ND	0.10	11/05/12 11:12	
Silver	mg/L	ND	0.50	11/05/12 11:12	

LABORATORY CONTROL SAMPLE & LCSD: 824593 824594

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	9.5	9.4	95	94	80-120	.4	20	
Barium	mg/L	10	9.6	9.7	96	97	80-120	1	20	
Cadmium	mg/L	10	9.4	9.5	94	95	80-120	.4	20	
Chromium	mg/L	10	9.5	9.5	95	95	80-120	.8	20	
Lead	mg/L	10	9.3	9.3	93	93	80-120	.2	20	
Selenium	mg/L	10	9.4	9.4	94	94	80-120	.4	20	
Silver	mg/L	5	4.8	4.8	96	97	80-120	.9	20	

MATRIX SPIKE SAMPLE: 824595

Parameter	Units	5071481007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.6	96	50-150	
Barium	mg/L	ND	10	9.6	96	50-150	
Cadmium	mg/L	0.64	10	10.2	96	50-150	
Chromium	mg/L	ND	10	9.6	96	50-150	
Lead	mg/L	ND	10	8.4	84	50-150	
Selenium	mg/L	0.21	10	9.8	96	50-150	
Silver	mg/L	ND	5	4.9	98	50-150	

MATRIX SPIKE SAMPLE: 824596

Parameter	Units	5071484002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.0	100	50-150	
Barium	mg/L	ND	10	9.9	98	50-150	
Cadmium	mg/L	0.45	10	10.4	100	50-150	
Chromium	mg/L	ND	10	9.7	97	50-150	
Lead	mg/L	ND	10	9.4	94	50-150	

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(614)486-5421

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

MATRIX SPIKE SAMPLE: 824596

Parameter	Units	5071484002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	0.26	10	10.4	101	50-150	
Silver	mg/L	ND	5	4.9	99	50-150	

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Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: MPRP/10130
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5071481012

METHOD BLANK: 824605
Matrix: Water
Associated Lab Samples: 5071481012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	11/05/12 13:58	
Barium	mg/L	ND	5.0	11/05/12 13:58	
Cadmium	mg/L	ND	0.050	11/05/12 13:58	
Chromium	mg/L	ND	0.10	11/05/12 13:58	
Lead	mg/L	ND	0.10	11/05/12 13:58	
Selenium	mg/L	ND	0.10	11/05/12 13:58	
Silver	mg/L	ND	0.50	11/05/12 13:58	

LABORATORY CONTROL SAMPLE & LCSD: 824606 824607

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	9.7	9.8	97	98	80-120	.8	20	
Barium	mg/L	10	9.7	9.9	97	99	80-120	2	20	
Cadmium	mg/L	10	9.7	9.8	97	98	80-120	1	20	
Chromium	mg/L	10	9.7	9.8	97	98	80-120	1	20	
Lead	mg/L	10	9.4	9.5	94	95	80-120	1	20	
Selenium	mg/L	10	9.9	10	99	100	80-120	1	20	
Silver	mg/L	5	4.9	4.9	98	99	80-120	2	20	

MATRIX SPIKE SAMPLE: 824608

Parameter	Units	5071481012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.8	98	50-150	
Barium	mg/L	ND	10	9.8	98	50-150	
Cadmium	mg/L	ND	10	9.9	98	50-150	
Chromium	mg/L	0.50	10	10.2	97	50-150	
Lead	mg/L	ND	10	9.2	92	50-150	
Selenium	mg/L	ND	10	10.2	102	50-150	
Silver	mg/L	ND	5	5.0	100	50-150	

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1233 Dublin Road
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Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: MPRP/10131 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

METHOD BLANK: 824653 Matrix: Water
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	11/02/12 10:31	
Barium	ug/L	ND	100	11/02/12 10:31	
Cadmium	ug/L	ND	5.0	11/02/12 10:31	
Chromium	ug/L	ND	10.0	11/02/12 10:31	
Lead	ug/L	ND	10.0	11/02/12 10:31	
Selenium	ug/L	ND	10.0	11/02/12 10:31	
Silver	ug/L	ND	50.0	11/02/12 10:31	

LABORATORY CONTROL SAMPLE: 824654

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	962	96	80-120	
Barium	ug/L	1000	959	96	80-120	
Cadmium	ug/L	1000	948	95	80-120	
Chromium	ug/L	1000	954	95	80-120	
Lead	ug/L	1000	940	94	80-120	
Selenium	ug/L	1000	959	96	80-120	
Silver	ug/L	500	431	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 824655 824656

Parameter	Units	5071540001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	0.12 mg/L	1000	1000	1100	1100	98	98	75-125	.5	20	
Barium	ug/L	ND	1000	1000	1020	1020	97	97	75-125	.1	20	
Cadmium	ug/L	ND	1000	1000	972	969	97	97	75-125	.3	20	
Chromium	ug/L	ND	1000	1000	960	961	96	96	75-125	.1	20	
Lead	ug/L	ND	1000	1000	930	925	93	92	75-125	.5	20	
Selenium	ug/L	ND	1000	1000	973	973	97	97	75-125	.01	20	
Silver	ug/L	ND	500	500	463	407	93	81	75-125	13	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: PMST/7935 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

METHOD BLANK: 1093140 Matrix: Solid
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	11/05/12 00:00	

SAMPLE DUPLICATE: 1093142

Parameter	Units	5071481007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	18.5	20.1	8	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: WET/10369 Analysis Method: SM 4500-H B
QC Batch Method: SM 4500-H B Analysis Description: 4500H+B pH
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

SAMPLE DUPLICATE: 823232

Parameter	Units	5071481001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.6	8.6	.2		H6

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: WET/10375 Analysis Method: EPA 7196A
QC Batch Method: EPA 3060A Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

METHOD BLANK: 823629 Matrix: Solid
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	ND	2.0	11/01/12 10:32	

LABORATORY CONTROL SAMPLE: 823630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	940	806	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 823632 823633

Parameter	Units	5071481007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/kg	ND	972	966	ND	ND	1	.9	75-125		20	M3

SAMPLE DUPLICATE: 823631

Parameter	Units	60131838002 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	ND	ND		20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: WET/10368 Analysis Method: EPA 7196
QC Batch Method: EPA 7196 Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

METHOD BLANK: 823227 Matrix: Water
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	10/30/12 09:10	

LABORATORY CONTROL SAMPLE: 823228

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.5	0.48	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 823229 823230

Parameter	Units	5071481001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	ND	.5	.5	0.48	0.50	96	100	85-115	4	20	H1

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: WETA/22330 Analysis Method: SW-846 7.3.3.2
QC Batch Method: SW-846 7.3.3.2 Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

METHOD BLANK: 1092537 Matrix: Solid
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011, 5071481012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	0.025	11/05/12 14:52	

LABORATORY CONTROL SAMPLE: 1092538

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	.5	0.55	109	71-123	

MATRIX SPIKE SAMPLE: 1092539

Parameter	Units	5071481007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	ND	.5	0.55	108	57-132	

SAMPLE DUPLICATE: 1092540

Parameter	Units	5071481008 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/kg	ND	.013J		23	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: WETA/22331 Analysis Method: SW-846 7.3.3.2 Modified
QC Batch Method: SW-846 7.3.3.2 Modified Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

METHOD BLANK: 1092541 Matrix: Water
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/L	ND	0.0050	11/05/12 15:05	

LABORATORY CONTROL SAMPLE: 1092542

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/L	.05	0.051	101	74-121	

MATRIX SPIKE SAMPLE: 1092543

Parameter	Units	5071481001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/L	ND	.05	0.054	105	57-125	

SAMPLE DUPLICATE: 1092544

Parameter	Units	5071481002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/L	ND	ND		26	

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7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: WETA/8785 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011

METHOD BLANK: 824112 Matrix: Solid
Associated Lab Samples: 5071481007, 5071481008, 5071481009, 5071481010, 5071481011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	11/01/12 13:37	

LABORATORY CONTROL SAMPLE: 824113

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	10.8	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 824114 824115

Parameter	Units	5071481007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	813	10	10	734	828	-784	155	90-110	12	20	P6

MATRIX SPIKE SAMPLE: 824116

Parameter	Units	5071555008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	ND	11.5	13.2	114	90-110	M0

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: WETA/8789 | Analysis Method: EPA 9012
QC Batch Method: EPA 9012 | Analysis Description: 9012 Cyanide
Associated Lab Samples: 5071481012

METHOD BLANK: 825073 | Matrix: Solid
Associated Lab Samples: 5071481012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	11/06/12 14:56	

LABORATORY CONTROL SAMPLE: 825074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	10.7	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825075 825076

Parameter	Units	5071665002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	ND	10	10	11.3	10.6	113	106	90-110	6	20	M0

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071481

QC Batch: WETA/8790 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

METHOD BLANK: 825077 Matrix: Water
Associated Lab Samples: 5071481001, 5071481002, 5071481003, 5071481004, 5071481005, 5071481006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	11/06/12 14:42	

LABORATORY CONTROL SAMPLE: 825078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.21	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825079 825080

Parameter	Units	5071481001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.015	.2	.2	0.23	0.23	106	107	90-110	1	20	

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(317)875-5894

QUALIFIERS

Project: Baycote Metal Finishings
Pace Project No.: 5071481

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-I	Pace Analytical Services - Indianapolis
PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

1d	RPD value was outside control limits due to non-homogeneity of the analyte in the sample matrix.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H1	Analysis conducted outside the EPA method holding time.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R2	RPD value was outside control limits due to matrix interference

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(317)875-5894

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5071481007	**BMF-WS01-102912**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071481008	**BMF-WS01-102912D**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071481009	**BMF-WS02-102912**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071481010	**BMF-WS03-102912**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071481011	**BMF-WS04-102912**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071481012	**BMF-WS05-102912**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071481007	**BMF-WS01-102912**	EPA 3010	MPRP/10127	EPA 6010	ICP/10564
5071481008	**BMF-WS01-102912D**	EPA 3010	MPRP/10127	EPA 6010	ICP/10564
5071481009	**BMF-WS02-102912**	EPA 3010	MPRP/10127	EPA 6010	ICP/10564
5071481010	**BMF-WS03-102912**	EPA 3010	MPRP/10127	EPA 6010	ICP/10564
5071481011	**BMF-WS04-102912**	EPA 3010	MPRP/10127	EPA 6010	ICP/10564
5071481012	**BMF-WS05-102912**	EPA 3010	MPRP/10130	EPA 6010	ICP/10567
5071481001	**BMF-WL01-102912**	EPA 3010	MPRP/10131	EPA 6010	ICP/10559
5071481002	**BMF-WL01-102912D**	EPA 3010	MPRP/10131	EPA 6010	ICP/10559
5071481003	**BMF-WL02-102912**	EPA 3010	MPRP/10131	EPA 6010	ICP/10559
5071481004	**BMF-WL03-102912**	EPA 3010	MPRP/10131	EPA 6010	ICP/10559
5071481005	**BMF-WL04-102912**	EPA 3010	MPRP/10131	EPA 6010	ICP/10559
5071481006	**BMF-WL05-102912**	EPA 3010	MPRP/10131	EPA 6010	ICP/10559
5071481007	**BMF-WS01-102912**	EPA 7470	MERP/4231	EPA 7470	MERC/4267
5071481008	**BMF-WS01-102912D**	EPA 7470	MERP/4231	EPA 7470	MERC/4267
5071481009	**BMF-WS02-102912**	EPA 7470	MERP/4231	EPA 7470	MERC/4267
5071481010	**BMF-WS03-102912**	EPA 7470	MERP/4231	EPA 7470	MERC/4267
5071481011	**BMF-WS04-102912**	EPA 7470	MERP/4231	EPA 7470	MERC/4267
5071481012	**BMF-WS05-102912**	EPA 7470	MERP/4234	EPA 7470	MERC/4270
5071481001	**BMF-WL01-102912**	EPA 7470	MERP/4230	EPA 7470	MERC/4266
5071481002	**BMF-WL01-102912D**	EPA 7470	MERP/4230	EPA 7470	MERC/4266
5071481003	**BMF-WL02-102912**	EPA 7470	MERP/4230	EPA 7470	MERC/4266
5071481004	**BMF-WL03-102912**	EPA 7470	MERP/4230	EPA 7470	MERC/4266
5071481005	**BMF-WL04-102912**	EPA 7470	MERP/4230	EPA 7470	MERC/4266
5071481006	**BMF-WL05-102912**	EPA 7470	MERP/4230	EPA 7470	MERC/4266
5071481007	**BMF-WS01-102912**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071481008	**BMF-WS01-102912D**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071481009	**BMF-WS02-102912**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071481010	**BMF-WS03-102912**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071481011	**BMF-WS04-102912**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071481012	**BMF-WS05-102912**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071481007	**BMF-WS01-102912**	ASTM D2974	PMST/7935		
5071481008	**BMF-WS01-102912D**	ASTM D2974	PMST/7935		
5071481009	**BMF-WS02-102912**	ASTM D2974	PMST/7935		
5071481010	**BMF-WS03-102912**	ASTM D2974	PMST/7935		
5071481011	**BMF-WS04-102912**	ASTM D2974	PMST/7935		
5071481012	**BMF-WS05-102912**	ASTM D2974	PMST/7935		
5071481001	**BMF-WL01-102912**	EPA 1010	WET/10379		
5071481002	**BMF-WL01-102912D**	EPA 1010	WET/10379		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5071481003	**BMF-WL02-102912**	EPA 1010	WET/10379		
5071481004	**BMF-WL03-102912**	EPA 1010	WET/10386		
5071481005	**BMF-WL04-102912**	EPA 1010	WET/10386		
5071481006	**BMF-WL05-102912**	EPA 1010	WET/10386		
5071481001	**BMF-WL01-102912**	SM 4500-H B	WET/10369		
5071481002	**BMF-WL01-102912D**	SM 4500-H B	WET/10369		
5071481003	**BMF-WL02-102912**	SM 4500-H B	WET/10369		
5071481004	**BMF-WL03-102912**	SM 4500-H B	WET/10369		
5071481005	**BMF-WL04-102912**	SM 4500-H B	WET/10369		
5071481006	**BMF-WL05-102912**	SM 4500-H B	WET/10369		
5071481007	**BMF-WS01-102912**	EPA 3060A	WET/10375	EPA 7196A	WET/10383
5071481008	**BMF-WS01-102912D**	EPA 3060A	WET/10375	EPA 7196A	WET/10383
5071481009	**BMF-WS02-102912**	EPA 3060A	WET/10375	EPA 7196A	WET/10383
5071481010	**BMF-WS03-102912**	EPA 3060A	WET/10375	EPA 7196A	WET/10383
5071481011	**BMF-WS04-102912**	EPA 3060A	WET/10375	EPA 7196A	WET/10383
5071481012	**BMF-WS05-102912**	EPA 3060A	WET/10375	EPA 7196A	WET/10383
5071481001	**BMF-WL01-102912**	EPA 7196	WET/10368		
5071481002	**BMF-WL01-102912D**	EPA 7196	WET/10368		
5071481003	**BMF-WL02-102912**	EPA 7196	WET/10368		
5071481004	**BMF-WL03-102912**	EPA 7196	WET/10368		
5071481005	**BMF-WL04-102912**	EPA 7196	WET/10368		
5071481006	**BMF-WL05-102912**	EPA 7196	WET/10368		
5071481007	**BMF-WS01-102912**	SW-846 7.3.3.2	WETA/22330		
5071481008	**BMF-WS01-102912D**	SW-846 7.3.3.2	WETA/22330		
5071481009	**BMF-WS02-102912**	SW-846 7.3.3.2	WETA/22330		
5071481010	**BMF-WS03-102912**	SW-846 7.3.3.2	WETA/22330		
5071481011	**BMF-WS04-102912**	SW-846 7.3.3.2	WETA/22330		
5071481012	**BMF-WS05-102912**	SW-846 7.3.3.2	WETA/22330		
5071481001	**BMF-WL01-102912**	SW-846 7.3.3.2 Modified	WETA/22331		
5071481002	**BMF-WL01-102912D**	SW-846 7.3.3.2 Modified	WETA/22331		
5071481003	**BMF-WL02-102912**	SW-846 7.3.3.2 Modified	WETA/22331		
5071481004	**BMF-WL03-102912**	SW-846 7.3.3.2 Modified	WETA/22331		
5071481005	**BMF-WL04-102912**	SW-846 7.3.3.2 Modified	WETA/22331		
5071481006	**BMF-WL05-102912**	SW-846 7.3.3.2 Modified	WETA/22331		
5071481007	**BMF-WS01-102912**	EPA 9012	WETA/8785	EPA 9012	WETA/8787
5071481008	**BMF-WS01-102912D**	EPA 9012	WETA/8785	EPA 9012	WETA/8787
5071481009	**BMF-WS02-102912**	EPA 9012	WETA/8785	EPA 9012	WETA/8787
5071481010	**BMF-WS03-102912**	EPA 9012	WETA/8785	EPA 9012	WETA/8787
5071481011	**BMF-WS04-102912**	EPA 9012	WETA/8785	EPA 9012	WETA/8787
5071481012	**BMF-WS05-102912**	EPA 9012	WETA/8789	EPA 9012	WETA/8800
5071481001	**BMF-WL01-102912**	EPA 9012	WETA/8790		
5071481002	**BMF-WL01-102912D**	EPA 9012	WETA/8790		
5071481003	**BMF-WL02-102912**	EPA 9012	WETA/8790		
5071481004	**BMF-WL03-102912**	EPA 9012	WETA/8790		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metal Finishings
Pace Project No.: 5071481

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5071481005	**BMF-WL04-102912**	EPA 9012	WETA/8790		
5071481006	**BMF-WL05-102912**	EPA 9012	WETA/8790		

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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

1605148

Section A Required Client Information:

Company: Environmental Restoration, LLC
Address: 16666 Fabrick Drive, St. Louis, MO 63026
Email To: J.Behrens@ERLLC.com
Phone: 708-473-7124 Fax:
Requested Due Date/TAT: Standard TAT

Section B Required Project Information:

Report To: J.Behrens@erllc.com
Copy To: Trenna.Sundquist@WestonSolutions.com
Purchase Order No.:
Project Name: Barcote Metal Finishings
Project Number:

Section C Invoice Information:

Attention: See Section A
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: IN

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): N N N N N N

SD71481

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION (°C)	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	RCRA metals incl. Cr^{6+}	pH	Flashpoint	Total Cyanide	Reactive Cyanide	TCLP metals	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	BMF-WL01-102912	WT	G			10-29-12	0900	42	4	2		1		1				X	X	X	X	X			-001
2	BMF-WL01-102912D	WT	G				0910		4	2		1		1				X	X	X	X	X			-002
3	BMF-WL02-102912	WT	G				0920		4	2		1		1				X	X	X	X	X			-003
4	BMF-WL03-102912	WT	G				0930		4	2		1		1				X	X	X	X	X			-004
5	BMF-WL04-102912	WT	G				0940		4	2		1		1				X	X	X	X	X			-005
6	BMF-WL05-102912	WT	G				0950		4	2		1		1				X	X	X	X	X			-006
7	BMF-WS01-102912	SL	G				1000		2	2								X			X	X	X		-007
8	BMF-WS01-102912D	SL	G				1010		1	1								X			X	X	X		-008
9	BMF-WS02-102912	SL	G				1020		3	3								X			X	X	X		-009
10	BMF-WS03-102912	SL	G				1030		3	3								X			X	X	X		-010
11	BMF-WS04-102912	SL	G				1040		3	3								X			X	X	X		-011
12	BMF-WS05-102912	SL	G				1050		1	1								X			X	X	X		-012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Perform MS/MSD on Sample BMF-WS01-102912	David Sena/Weston	10-29-11	1300	[signature]		
SL=Sludge						
May be LNAPL in BMF-WL02-102912						

SAMPLE CONDITIONS: Temp in °C 0.6 / 0.3; Received on Ice (Y/N): Y; Custody Sealed Cooler (Y/N): Y; Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE: David Sena [signature]
PRINT Name of SAMPLER: David Sena
SIGNATURE of SAMPLER: David Sena
DATE Signed (MM/DD/YY): 10-29-12

WF/NOW Kee 10-30-12 0807

ORIGINAL

*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.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Env. Restoration Project # 5071481

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other NOW

Tracking #:

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used 1 2 3 4 6 A B C D E **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.6°C, 0.3°C **Ice Visible in Sample Containers:** ☐ yes ☒ no
(Corrected, if applicable)

Temp should be above freezing to 6°C

Date and Initials of person examining contents: Kee 10-30-12

				Comments:
Chain of Custody Present:	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes	☐ No	☐ N/A	3. Not sure who accepted + they didn't relinquish
Sampler Name & Signature on COC:	☒ Yes	☐ No	☐ N/A	4.
Short Hold Time Analysis (<72hr):	☒ Yes	☐ No	☐ N/A	5. pH
Rush Turn Around Time Requested:	☐ Yes	☒ No	☐ N/A	6.
Containers Intact:	☒ Yes	☐ No	☐ N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☐ Yes	☒ No	☐ N/A	8. NaOH containers for WL-01 & WL-01D — lids labeled incorrectly from (see below) Kee 10-30
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☒ Yes	☐ No	☐ N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes	☒ No	☐ N/A	WL-04
Headspace in VOA Vials (>6mm)	☐ Yes	☐ No	☒ N/A	10.
Trip Blank Present:	☐ Yes	☒ No	☐ N/A	11.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☒ N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☒ Yes	☐ No	☐ N/A	12.
Sufficient Volume:	☒ Yes	☐ No	☐ N/A	13.
Correct Containers Used:	☒ Yes	☐ No	☐ N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

(8) What labels on containers say.

Project Manager Review: Kenneth Hunt **Date:** 10/30/12

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

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CLIENT: Env. Restoration

COC PAGE 1 of 1
COC ID# 1605148

Project # 5071481

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	BP1U	Comments
1							1		1	1				1		
2							↓		↓	↓				↓		
3							↓		↓	↓				↓		
4							↓		↓	↓				↓		
5							↓		↓	↓				↓		
6							↓		↓	↓				↓		
7															2	
8															1	
9															3	
10															3	
11															3	
12															1	

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B20

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(317)875-5894

November 06, 2012

Mr. John Behrens
Environmental Restoration
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote Metal Finishings
Pace Project No.: 5071484

Dear Mr. Behrens:
Enclosed are the analytical results for sample(s) received by the laboratory on October 30, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

CERTIFICATIONS

Project: Baycote Metal Finishings
Pace Project No.: 5071484

Indiana Certification IDs
7726 Moller Road Indianapolis, IN 46268
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Ohio VAP: CL0065
Pennsylvania: 68-00791
West Virginia Certification #: 330

Kansas Certification IDs
9608 Loiret Boulevard Lenexa, KS 66219
Oh, Oh, I changed it.....
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

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SAMPLE SUMMARY

Project: Baycote Metal Finishings
Pace Project No.: 5071484

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5071484001	**X318**	Water	10/26/12 16:00	10/30/12 09:28
5071484002	**BS-002**	Solid	10/26/12 15:00	10/30/12 09:28

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SAMPLE ANALYTE COUNT

Project: Baycote Metal Finishings
Pace Project No.: 5071484

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
5071484001	**X318**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071484002	**BS-002**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		ASTM D2974	DWC	1	PASI-K
		EPA 9045	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I

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ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071484

Sample: X318 **Lab ID: 5071484001** Collected: 10/26/12 16:00 Received: 10/30/12 09:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**101**	ug/L	50.0	1	11/02/12 09:42	11/05/12 14:35	7440-38-2	
Barium	ND	ug/L	500	1	11/02/12 09:42	11/05/12 14:35	7440-39-3	
Cadmium	**25600**	ug/L	25.0	1	11/02/12 09:42	11/05/12 14:35	7440-43-9	
Chromium	**8000**	ug/L	50.0	1	11/02/12 09:42	11/05/12 14:35	7440-47-3	
Lead	ND	ug/L	250	5	11/02/12 09:42	11/05/12 19:37	7439-92-1	
Selenium	**288**	ug/L	50.0	1	11/02/12 09:42	11/05/12 14:35	7782-49-2	
Silver	**3980**	ug/L	250	1	11/02/12 09:42	11/05/12 14:35	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	**11.8**	ug/L	10.0	1	11/01/12 12:06	11/02/12 12:13	7439-97-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**13.1**	Std. Units		1		10/30/12 09:42		H6
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	ND	mg/L	0.0050	1		11/05/12 14:48		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**228**	mg/L	4.0	40		11/06/12 16:43	57-12-5	E

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ANALYTICAL RESULTS

Project: Baycote Metal Finishings
Pace Project No.: 5071484

Sample: BS-002 **Lab ID: 5071484002** Collected: 10/26/12 15:00 Received: 10/30/12 09:28 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Arsenic	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 18:56	7440-38-2	
Barium	ND	mg/L	5.0	1	11/01/12 16:15	11/05/12 18:56	7440-39-3	
Cadmium	**0.45**	mg/L	0.050	1	11/01/12 16:15	11/05/12 18:56	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 18:56	7440-47-3	
Lead	ND	mg/L	0.10	1	11/01/12 16:15	11/05/12 18:56	7439-92-1	
Selenium	**0.26**	mg/L	0.10	1	11/01/12 16:15	11/05/12 18:56	7782-49-2	
Silver	ND	mg/L	0.50	1	11/01/12 16:15	11/05/12 18:56	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 10/31/12 14:45							
Mercury	ND	mg/L	0.0020	1	11/01/12 14:07	11/02/12 12:38	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**48.1**	%	0.50	1		11/05/12 00:00		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**9.5**	Std. Units		1		11/01/12 08:18		
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/05/12 10:12		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	ND	mg/kg	0.50	1	11/01/12 10:27	11/01/12 14:27	57-12-5	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: MERP/4231
QC Batch Method: EPA 7470
Associated Lab Samples: 5071484002

Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP

METHOD BLANK: 824253
Matrix: Water
Associated Lab Samples: 5071484002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	11/02/12 12:15	

LABORATORY CONTROL SAMPLE & LCSD: 824254 824255

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.016	0.016	108	110	80-120		20	

MATRIX SPIKE SAMPLE: 824257

Parameter	Units	5071481007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0026	.015	0.020	115	75-125	

MATRIX SPIKE SAMPLE: 824258

Parameter	Units	5071484002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.017	105	75-125	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: MERP/4230
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Associated Lab Samples: 5071484001

METHOD BLANK: 824240
Matrix: Water
Associated Lab Samples: 5071484001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	11/02/12 11:42	

LABORATORY CONTROL SAMPLE: 824241

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.3	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 824242 824243

Parameter	Units	5071540001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	5.1	5.2	103	104	75-125	1	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: MPRP/10127
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5071484002

METHOD BLANK: 824592
Matrix: Water
Associated Lab Samples: 5071484002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	11/05/12 11:12	
Barium	mg/L	ND	5.0	11/05/12 11:12	
Cadmium	mg/L	ND	0.050	11/05/12 11:12	
Chromium	mg/L	ND	0.10	11/05/12 11:12	
Lead	mg/L	ND	0.10	11/05/12 11:12	
Selenium	mg/L	ND	0.10	11/05/12 11:12	
Silver	mg/L	ND	0.50	11/05/12 11:12	

LABORATORY CONTROL SAMPLE & LCSD: 824593 824594

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	9.5	9.4	95	94	80-120	.4	20	
Barium	mg/L	10	9.6	9.7	96	97	80-120	1	20	
Cadmium	mg/L	10	9.4	9.5	94	95	80-120	.4	20	
Chromium	mg/L	10	9.5	9.5	95	95	80-120	.8	20	
Lead	mg/L	10	9.3	9.3	93	93	80-120	.2	20	
Selenium	mg/L	10	9.4	9.4	94	94	80-120	.4	20	
Silver	mg/L	5	4.8	4.8	96	97	80-120	.9	20	

MATRIX SPIKE SAMPLE: 824595

Parameter	Units	5071481007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.6	96	50-150	
Barium	mg/L	ND	10	9.6	96	50-150	
Cadmium	mg/L	0.64	10	10.2	96	50-150	
Chromium	mg/L	ND	10	9.6	96	50-150	
Lead	mg/L	ND	10	8.4	84	50-150	
Selenium	mg/L	0.21	10	9.8	96	50-150	
Silver	mg/L	ND	5	4.9	98	50-150	

MATRIX SPIKE SAMPLE: 824596

Parameter	Units	5071484002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.0	100	50-150	
Barium	mg/L	ND	10	9.9	98	50-150	
Cadmium	mg/L	0.45	10	10.4	100	50-150	
Chromium	mg/L	ND	10	9.7	97	50-150	
Lead	mg/L	ND	10	9.4	94	50-150	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

MATRIX SPIKE SAMPLE: 824596

Parameter	Units	5071484002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	0.26	10	10.4	101	50-150	
Silver	mg/L	ND	5	4.9	99	50-150	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: MPRP/10134
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 5071484001

METHOD BLANK: 824927
Matrix: Water
Associated Lab Samples: 5071484001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	11/05/12 14:28	
Barium	ug/L	ND	100	11/05/12 14:28	
Cadmium	ug/L	ND	5.0	11/05/12 14:28	
Chromium	ug/L	ND	10.0	11/05/12 14:28	
Lead	ug/L	ND	10.0	11/05/12 14:28	
Selenium	ug/L	ND	10.0	11/05/12 14:28	
Silver	ug/L	ND	50.0	11/05/12 14:28	

LABORATORY CONTROL SAMPLE: 824928

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	956	96	80-120	
Barium	ug/L	1000	982	98	80-120	
Cadmium	ug/L	1000	964	96	80-120	
Chromium	ug/L	1000	965	97	80-120	
Lead	ug/L	1000	947	95	80-120	
Selenium	ug/L	1000	973	97	80-120	
Silver	ug/L	500	480	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 824929 824930

Parameter	Units	5071561003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	1020	1030	101	103	75-125	2	20	
Barium	ug/L	738	1000	1000	1730	1760	99	102	75-125	2	20	
Cadmium	ug/L	ND	1000	1000	1020	1030	102	103	75-125	1	20	
Chromium	ug/L	ND	1000	1000	964	974	96	97	75-125	1	20	
Lead	ug/L	ND	1000	1000	919	929	92	93	75-125	1	20	
Selenium	ug/L	ND	1000	1000	1030	1040	103	104	75-125	1	20	
Silver	ug/L	ND	500	500	518	524	103	105	75-125	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 824931 824932

Parameter	Units	5071571003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	1040	1050	104	104	75-125	.2	20	
Barium	ug/L	197	1000	1000	1220	1210	102	102	75-125	.4	20	
Cadmium	ug/L	ND	1000	1000	1040	1040	104	104	75-125	.1	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 824931 824932

Parameter	Units	5071571003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	ND	1000	1000	975	987	97	99	75-125	1	20	
Lead	ug/L	ND	1000	1000	942	943	94	94	75-125	.1	20	
Selenium	ug/L	ND	1000	1000	1040	1050	104	105	75-125	.2	20	
Silver	ug/L	ND	500	500	518	520	104	104	75-125	.3	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: PMST/7935
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5071484002

METHOD BLANK: 1093140
Matrix: Solid
Associated Lab Samples: 5071484002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	11/05/12 00:00	

SAMPLE DUPLICATE: 1093142

Parameter	Units	5071481007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	18.5	20.1	8	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: WET/10369
QC Batch Method: SM 4500-H B
Analysis Method: SM 4500-H B
Analysis Description: 4500H+B pH
Associated Lab Samples: 5071484001

SAMPLE DUPLICATE: 823232

Parameter	Units	5071481001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.6	8.6	.2		H6

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: WET/10378
QC Batch Method: EPA 9045
Analysis Method: EPA 9045
Analysis Description: 9045 pH
Associated Lab Samples: 5071484002

SAMPLE DUPLICATE: 823979

Parameter	Units	5071563001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.8	6.8	1	20	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: WETA/22292
QC Batch Method: SW-846 7.3.3.2
Analysis Method: SW-846 7.3.3.2
Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5071484002

METHOD BLANK: 1091294
Matrix: Solid
Associated Lab Samples: 5071484002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	0.025	11/05/12 10:20	

LABORATORY CONTROL SAMPLE: 1091295

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	.5	0.56	111	71-123	

MATRIX SPIKE SAMPLE: 1091296

Parameter	Units	60131787001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	ND	.5	0.56	110	57-132	

SAMPLE DUPLICATE: 1091297

Parameter	Units	60131961001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/kg	ND	ND		23	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: WETA/22293
Analysis Method: SW-846 7.3.3.2 Modified
QC Batch Method: SW-846 7.3.3.2 Modified
Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5071484001

METHOD BLANK: 1091298
Matrix: Water
Associated Lab Samples: 5071484001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/L	ND	0.0050	11/05/12 14:40	

LABORATORY CONTROL SAMPLE: 1091299

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/L	.05	0.054	108	74-121	

MATRIX SPIKE SAMPLE: 1091300

Parameter	Units	92136046001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/L	ND	.05	0.053	105	57-125	

SAMPLE DUPLICATE: 1091301

Parameter	Units	92136175001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/L	ND	ND		26	

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: WETA/8785 | Analysis Method: EPA 9012
QC Batch Method: EPA 9012 | Analysis Description: 9012 Cyanide
Associated Lab Samples: 5071484002

METHOD BLANK: 824112 | Matrix: Solid
Associated Lab Samples: 5071484002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	11/01/12 13:37	

LABORATORY CONTROL SAMPLE: 824113

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	10.8	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 824114 824115

Parameter	Units	5071481007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	813	10	10	734	828	-784	155	90-110	12	20	P6

MATRIX SPIKE SAMPLE: 824116

Parameter	Units	5071555008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	ND	11.5	13.2	114	90-110	M0

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QUALITY CONTROL DATA

Project: Baycote Metal Finishings
Pace Project No.: 5071484

QC Batch: WETA/8803
QC Batch Method: EPA 9012
Analysis Method: EPA 9012
Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5071484001

METHOD BLANK: 826206
Matrix: Water
Associated Lab Samples: 5071484001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	11/06/12 15:37	

LABORATORY CONTROL SAMPLE: 826207

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.23	113	90-110	1d

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 826208 826209

Parameter	Units	5071419004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.2	.2	0.21	0.22	107	110	90-110	3	20	

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QUALIFIERS

Project: Baycote Metal Finishings
Pace Project No.: 5071484

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-I	Pace Analytical Services - Indianapolis
PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

1d	LCS is biased high. Batch acceptance based on Matrix Spike recovery passing LCS criteria.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metal Finishings
Pace Project No.: 5071484

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5071484002	**BS-002**	EPA 3010	MPRP/10127	EPA 6010	ICP/10564
5071484001	**X318**	EPA 3010	MPRP/10134	EPA 6010	ICP/10568
5071484002	**BS-002**	EPA 7470	MERP/4231	EPA 7470	MERC/4267
5071484001	**X318**	EPA 7470	MERP/4230	EPA 7470	MERC/4266
5071484002	**BS-002**	ASTM D2974	PMST/7935		
5071484001	**X318**	SM 4500-H B	WET/10369		
5071484002	**BS-002**	EPA 9045	WET/10378		
5071484002	**BS-002**	SW-846 7.3.3.2	WETA/22292		
5071484001	**X318**	SW-846 7.3.3.2 Modified	WETA/22293		
5071484002	**BS-002**	EPA 9012	WETA/8785	EPA 9012	WETA/8787
5071484001	**X318**	EPA 9012	WETA/8803		

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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

1605092

Section A Required Client Information:

Company: Environmental Restoration
Address: 16660 CANAL ST. South Holland, IL
Email To: J.Behrens@ERLLC.com
Phone: 708 473-7124 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: J.Behrens@ERLLC.com
Copy To:
Purchase Order No.: B5-101
Project Name: Baycote Metal finishing
Project Number:

Section C Invoice Information:

Attention: Justin AuBuchon
Company Name: Environmental Restoration
Address: 1666 Fabick Dr. St. Louis, MO
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): 5071484

ITEM #	SAMPLE ID	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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: TCLP Metals	Total CN	Reactive CN	pH	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	X318	WW	G	10/26	9:00	1600			3	X								/	/	/	/		-001
2	BS-002	SL	C	10/26	10:30	1500			4	X								/	/	/	/		-002
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	J.Behrens ERLLC	10/29	1900	Frances Jones	10/29	1900	5.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: John Behrens
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 10/26/12

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

WI/NOW Kee 10-30-12 ORIGINAL 0928

*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.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Env. Restoration Project # 5071484

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other NOW

Tracking #: _____

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Date/Time 5035A kits placed in freezer: _____

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used (1) 2 3 4 6 A B C D E Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable) 5.7°C Ice Visible in Sample Containers: ☐ yes ☒ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KEL 10-30-12

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3. but person who accepted didn't relinquish
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Short Hold Time Analysis (<72hr):	☒Yes ☐No ☐N/A	5. pH - out of hold time
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	6.
Containers Intact:	☒Yes ☐No ☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☐Yes ☒No ☐N/A	8. X-318 Containers have times of 0900, 1600, & 1600.
All containers needing acid/base pres have been checked? exceptions: VOA, coliform, TOC, O&G	☐Yes ☐No ☒N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	
Headspace in VOA Vials (>6mm)	☐Yes ☐No ☒N/A	10.
Trip Blank Present:	☐Yes ☒No ☐N/A	11.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Project Manager Review		
Samples Arrived within Hold Time:	☐Yes ☒No ☐N/A	12. pH past HT for WW
Sufficient Volume:	☒Yes ☐No ☐N/A	13.
Correct Containers Used:	☒Yes ☐No ☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Kenneth Trent Date: 10/30/12

Sample Container Count

CLIENT: Env. Restoration

COC PAGE 1 of 1
COC ID# 1605092

Project # 5071484

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BG1U		Comments
1														3		
2			4													
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B21

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1233 Dublin Road
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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

November 09, 2012

Mr. John Behrens
Environmental Restoration
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote Metals Finishing
Pace Project No.: 5071665

Dear Mr. Behrens:
Enclosed are the analytical results for sample(s) received by the laboratory on November 02, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

CERTIFICATIONS

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: CL0065
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 12-019-0
Illinois Certification #: 002885
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-12-3
Utah Certification #: KS000212012-2

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE SUMMARY

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5071665001	**X337-459**	Water	10/31/12 11:00	11/02/12 07:30
5071665002	**X521**	Solid	10/31/12 10:30	11/02/12 07:30
5071665003	**X519**	Solid	10/31/12 09:50	11/02/12 07:30
5071665004	**X522**	Solid	10/31/12 10:10	11/02/12 07:30
5071665005	**Z27-SL**	Water	11/01/12 08:00	11/02/12 07:30
5071665006	**Z MISC**	Water	11/01/12 08:00	11/02/12 07:30

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(614)486-5421

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7726 Moller Road
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SAMPLE ANALYTE COUNT

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
5071665001	**X337-459**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071665002	**X521**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		ASTM D2974	TMD	1	PASI-K
		SW-846 7.3.4.2	SEL	1	PASI-K
		EPA 9045	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071665003	**X519**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		ASTM D2974	TMD	1	PASI-K
		SW-846 7.3.4.2	SEL	1	PASI-K
		EPA 9045	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071665004	**X522**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		ASTM D2974	TMD	1	PASI-K
		SW-846 7.3.4.2	SEL	1	PASI-K
		EPA 9045	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071665005	**Z27-SL**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		SM 4500-H B	TPD	1	PASI-I
		SW-846 7.3.3.2 Modified	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I
5071665006	**Z MISC**	EPA 6010	LLB	7	PASI-I
		EPA 7470	LLB	1	PASI-I
		ASTM D2974	TMD	1	PASI-K
		SM 4500-H B	TPD	1	PASI-I
		SW-846 7.3.3.2	OL	1	PASI-K
		EPA 9012	ILP	1	PASI-I

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Columbus, OH 43215
(614)486-5421

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7726 Moller Road
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ANALYTICAL RESULTS

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Sample: X337-459 **Lab ID: 5071665001** Collected: 10/31/12 11:00 Received: 11/02/12 07:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/06/12 14:56							
Arsenic	ND	mg/L	0.10	1	11/08/12 16:28	11/09/12 11:19	7440-38-2	
Barium	ND	mg/L	5.0	1	11/08/12 16:28	11/09/12 11:19	7440-39-3	
Cadmium	ND	mg/L	0.050	1	11/08/12 16:28	11/09/12 11:19	7440-43-9	
Chromium	**2.3**	mg/L	0.10	1	11/08/12 16:28	11/09/12 11:19	7440-47-3	
Lead	ND	mg/L	10.0	100	11/08/12 16:28	11/09/12 14:55	7439-92-1	D3
Selenium	ND	mg/L	0.10	1	11/08/12 16:28	11/09/12 11:19	7782-49-2	
Silver	ND	mg/L	0.50	1	11/08/12 16:28	11/09/12 11:19	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/06/12 14:56							
Mercury	ND	mg/L	0.0067	1	11/08/12 13:24	11/09/12 11:38	7439-97-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**9.4**	Std. Units		1		11/02/12 10:02		H3,H6
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	**5.3**	mg/L	0.50	100		11/07/12 10:43		M6
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**992**	mg/L	8.0	80		11/06/12 16:52	57-12-5	E

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ANALYTICAL RESULTS

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Sample: X521 **Lab ID: 5071665002** Collected: 10/31/12 10:30 Received: 11/02/12 07:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Arsenic	ND	mg/L	0.10	1	11/08/12 16:29	11/09/12 11:50	7440-38-2	
Barium	ND	mg/L	5.0	1	11/08/12 16:29	11/09/12 11:50	7440-39-3	
Cadmium	ND	mg/L	0.050	1	11/08/12 16:29	11/09/12 11:50	7440-43-9	
Chromium	**8.6**	mg/L	0.10	1	11/08/12 16:29	11/09/12 11:50	7440-47-3	
Lead	ND	mg/L	0.10	1	11/08/12 16:29	11/09/12 11:50	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/08/12 16:29	11/09/12 11:50	7782-49-2	
Silver	ND	mg/L	0.50	1	11/08/12 16:29	11/09/12 11:50	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Mercury	ND	mg/L	0.0020	1	11/08/12 13:25	11/09/12 11:48	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**12.6**	%	0.50	1		11/07/12 00:00		
Reactive Sulfide	Analytical Method: SW-846 7.3.4.2							
Sulfide, Reactive	ND	mg/kg	100	1		11/06/12 14:00		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**5.7**	Std. Units		1		11/06/12 08:17		
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/07/12 09:08		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	ND	mg/kg	0.50	1	11/05/12 13:59	11/06/12 14:59	57-12-5	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Sample: X519 **Lab ID: 5071665003** Collected: 10/31/12 09:50 Received: 11/02/12 07:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Arsenic	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 12:36	7440-38-2	
Barium	ND	mg/L	5.0	1	11/08/12 16:30	11/09/12 12:36	7440-39-3	
Cadmium	ND	mg/L	0.050	1	11/08/12 16:30	11/09/12 12:36	7440-43-9	
Chromium	**6.2**	mg/L	0.10	1	11/08/12 16:30	11/09/12 12:36	7440-47-3	
Lead	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 12:36	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 12:36	7782-49-2	
Silver	ND	mg/L	0.50	1	11/08/12 16:30	11/09/12 12:36	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Mercury	ND	mg/L	0.0020	1	11/08/12 13:28	11/09/12 12:09	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**36.1**	%	0.50	1		11/07/12 00:00		
Reactive Sulfide	Analytical Method: SW-846 7.3.4.2							
Sulfide, Reactive	ND	mg/kg	100	1		11/06/12 14:00		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**8.6**	Std. Units		1		11/06/12 08:18		
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/07/12 09:09		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	ND	mg/kg	2.0	1	11/05/12 13:59	11/06/12 15:02	57-12-5	D3

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Sample: X522 **Lab ID: 5071665004** Collected: 10/31/12 10:10 Received: 11/02/12 07:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Arsenic	ND	mg/L	0.10	1	11/08/12 16:29	11/09/12 12:05	7440-38-2	
Barium	ND	mg/L	5.0	1	11/08/12 16:29	11/09/12 12:05	7440-39-3	
Cadmium	**0.23**	mg/L	0.050	1	11/08/12 16:29	11/09/12 12:05	7440-43-9	
Chromium	**0.14**	mg/L	0.10	1	11/08/12 16:29	11/09/12 12:05	7440-47-3	
Lead	**0.23**	mg/L	0.10	1	11/08/12 16:29	11/09/12 12:05	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/08/12 16:29	11/09/12 12:05	7782-49-2	
Silver	ND	mg/L	0.50	1	11/08/12 16:29	11/09/12 12:05	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Mercury	**0.0071**	mg/L	0.0020	1	11/08/12 13:25	11/09/12 11:56	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	ND	%	0.50	1		11/07/12 00:00		
Reactive Sulfide	Analytical Method: SW-846 7.3.4.2							
Sulfide, Reactive	ND	mg/kg	100	1		11/06/12 14:00		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**6.8**	Std. Units		1		11/06/12 08:19		
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	0.025	1		11/07/12 09:12		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**54.6**	mg/kg	2.0	1	11/05/12 13:51	11/06/12 15:08	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Sample: Z27-SL **Lab ID: 5071665005** Collected: 11/01/12 08:00 Received: 11/02/12 07:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Arsenic	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 12:50	7440-38-2	
Barium	ND	mg/L	5.0	1	11/08/12 16:30	11/09/12 12:50	7440-39-3	
Cadmium	**0.050**	mg/L	0.050	1	11/08/12 16:30	11/09/12 12:50	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 12:50	7440-47-3	
Lead	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 12:50	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 12:50	7782-49-2	
Silver	**0.64**	mg/L	0.50	1	11/08/12 16:30	11/09/12 12:50	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Mercury	ND	mg/L	0.0020	1	11/08/12 13:28	11/09/12 12:13	7439-97-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**10.2**	Std. Units		1		11/02/12 10:00		H1,H6
733C Reactive Cyanide	Analytical Method: SW-846 7.3.3.2 Modified							
Cyanide, Reactive	**0.027**	mg/L	0.0050	1		11/07/12 09:20		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**124**	mg/L	2.0	20		11/06/12 16:18	57-12-5	E

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ANALYTICAL RESULTS

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Sample: Z MISC **Lab ID: 5071665006** Collected: 11/01/12 08:00 Received: 11/02/12 07:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Arsenic	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 14:44	7440-38-2	
Barium	ND	mg/L	5.0	1	11/08/12 16:30	11/09/12 14:44	7440-39-3	
Cadmium	**9.1**	mg/L	0.050	1	11/08/12 16:30	11/09/12 14:44	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 14:44	7440-47-3	
Lead	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 14:44	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/08/12 16:30	11/09/12 14:44	7782-49-2	
Silver	ND	mg/L	0.50	1	11/08/12 16:30	11/09/12 14:44	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Mercury	ND	mg/L	0.0020	1	11/08/12 13:28	11/09/12 12:15	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**66.4**	%	0.50	1		11/07/12 00:00		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H B							
pH at 25 Degrees C	**6.1**	Std. Units		1		11/02/12 09:58		H1,H6
733C S Reactive Cyanide	Analytical Method: SW-846 7.3.3.2							
Cyanide, Reactive	**0.053**	mg/kg	0.025	1		11/07/12 09:13		
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	**1.9**	mg/L	0.10	1		11/06/12 16:19	57-12-5	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: MERP/4243
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5071665001

METHOD BLANK: 827601
Matrix: Water
Associated Lab Samples: 5071665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	11/09/12 11:32	

LABORATORY CONTROL SAMPLE & LCSD: 827602 827603

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.014	0.015	93	98	80-120	5	20	

MATRIX SPIKE SAMPLE: 827604

Parameter	Units	5071665001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.05	0.049	97	75-125	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: MERP/4244 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5071665002, 5071665004

METHOD BLANK: 827606 | Matrix: Water
Associated Lab Samples: 5071665002, 5071665004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	11/09/12 11:42	

LABORATORY CONTROL SAMPLE & LCSD: 827607 827608

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.016	0.017	106	111	80-120	4	20	

MATRIX SPIKE SAMPLE: 827610

Parameter	Units	5071665002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.017	108	75-125	

MATRIX SPIKE SAMPLE: 827611

Parameter	Units	5071809001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.016	107	75-125	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: MERP/4245 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5071665003, 5071665005, 5071665006

METHOD BLANK: 827612 Matrix: Water
Associated Lab Samples: 5071665003, 5071665005, 5071665006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	11/09/12 12:03	

LABORATORY CONTROL SAMPLE & LCSD: 827613 827614

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.016	0.017	108	112	80-120	4	20	

MATRIX SPIKE SAMPLE: 827615

Parameter	Units	5071665003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.016	105	75-125	

MATRIX SPIKE SAMPLE: 827616

Parameter	Units	5071806001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.017	108	75-125	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: MPRP/10168
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5071665001

METHOD BLANK: 827801
Matrix: Water
Associated Lab Samples: 5071665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	11/09/12 11:09	
Barium	mg/L	ND	5.0	11/09/12 11:09	
Cadmium	mg/L	ND	0.050	11/09/12 11:09	
Chromium	mg/L	ND	0.10	11/09/12 11:09	
Lead	mg/L	ND	0.10	11/09/12 11:09	
Selenium	mg/L	ND	0.10	11/09/12 11:09	
Silver	mg/L	ND	0.50	11/09/12 11:09	

LABORATORY CONTROL SAMPLE & LCSD: 827802 827803

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.4	10.3	104	103	80-120	.8	20	
Barium	mg/L	10	10.8	10.8	108	108	80-120	.09	20	
Cadmium	mg/L	10	10.0	9.9	100	99	80-120	.9	20	
Chromium	mg/L	10	10.5	10.5	105	105	80-120	.09	20	
Lead	mg/L	10	10.3	10.3	103	103	80-120	.2	20	
Selenium	mg/L	10	10.5	10.4	105	104	80-120	.3	20	
Silver	mg/L	5	5.1	5.1	102	103	80-120	.8	20	

MATRIX SPIKE SAMPLE: 827804

Parameter	Units	5071665001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	11.4	114	50-150	
Barium	mg/L	ND	10	11.4	111	50-150	
Cadmium	mg/L	ND	10	10.8	108	50-150	
Chromium	mg/L	2.3	10	12.9	105	50-150	
Lead	mg/L	ND	10	ND	0	50-150	M3
Selenium	mg/L	ND	10	12.0	120	50-150	
Silver	mg/L	ND	5	5.6	112	50-150	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: MPRP/10170 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5071665002, 5071665004

METHOD BLANK: 827811 | Matrix: Water
Associated Lab Samples: 5071665002, 5071665004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	11/09/12 11:40	
Barium	mg/L	ND	5.0	11/09/12 11:40	
Cadmium	mg/L	ND	0.050	11/09/12 11:40	
Chromium	mg/L	ND	0.10	11/09/12 11:40	
Lead	mg/L	ND	0.10	11/09/12 11:40	
Selenium	mg/L	ND	0.10	11/09/12 11:40	
Silver	mg/L	ND	0.50	11/09/12 11:40	

LABORATORY CONTROL SAMPLE & LCSD: 827812 827813

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.5	10.5	105	105	80-120	.4	20	
Barium	mg/L	10	11.0	11.0	110	110	80-120	.3	20	
Cadmium	mg/L	10	10.1	10.2	101	102	80-120	.7	20	
Chromium	mg/L	10	10.7	10.7	107	107	80-120	.6	20	
Lead	mg/L	10	10.3	10.3	103	103	80-120	.2	20	
Selenium	mg/L	10	10.7	10.6	107	106	80-120	.5	20	
Silver	mg/L	5	5.2	5.2	105	104	80-120	.3	20	

MATRIX SPIKE SAMPLE: 827814

Parameter	Units	5071665002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.5	104	50-150	
Barium	mg/L	ND	10	11.0	108	50-150	
Cadmium	mg/L	ND	10	10.1	101	50-150	
Chromium	mg/L	8.6	10	18.0	94	50-150	
Lead	mg/L	ND	10	9.8	98	50-150	
Selenium	mg/L	ND	10	10.2	102	50-150	
Silver	mg/L	ND	5	5.1	102	50-150	

MATRIX SPIKE SAMPLE: 827815

Parameter	Units	5071809001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.2	102	50-150	
Barium	mg/L	ND	10	16.3	114	50-150	
Cadmium	mg/L	ND	10	9.9	99	50-150	
Chromium	mg/L	ND	10	10.4	104	50-150	
Lead	mg/L	ND	10	10	100	50-150	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

MATRIX SPIKE SAMPLE: 827815

Parameter	Units	5071809001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	10.4	104	50-150	
Silver	mg/L	ND	5	5.2	103	50-150	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: MPRP/10171 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5071665003, 5071665005, 5071665006

METHOD BLANK: 827816 Matrix: Water
Associated Lab Samples: 5071665003, 5071665005, 5071665006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	11/09/12 12:26	
Barium	mg/L	ND	5.0	11/09/12 12:26	
Cadmium	mg/L	ND	0.050	11/09/12 12:26	
Chromium	mg/L	ND	0.10	11/09/12 12:26	
Lead	mg/L	ND	0.10	11/09/12 12:26	
Selenium	mg/L	ND	0.10	11/09/12 12:26	
Silver	mg/L	ND	0.50	11/09/12 12:26	

LABORATORY CONTROL SAMPLE & LCSD: 827817 827818

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10	10	100	100	80-120	.02	20	
Barium	mg/L	10	10.7	10.8	107	108	80-120	.7	20	
Cadmium	mg/L	10	9.7	9.7	97	97	80-120	.2	20	
Chromium	mg/L	10	10.4	10.4	104	104	80-120	.8	20	
Lead	mg/L	10	10	10.0	100	100	80-120	.3	20	
Selenium	mg/L	10	10.2	10.3	102	103	80-120	.6	20	
Silver	mg/L	5	5.1	5.2	102	103	80-120	1	20	

MATRIX SPIKE SAMPLE: 827819

Parameter	Units	5071665003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.6	106	50-150	
Barium	mg/L	ND	10	10.7	106	50-150	
Cadmium	mg/L	ND	10	10.2	102	50-150	
Chromium	mg/L	6.2	10	17.1	109	50-150	
Lead	mg/L	ND	10	9.5	95	50-150	
Selenium	mg/L	ND	10	10.8	108	50-150	
Silver	mg/L	ND	5	5.5	110	50-150	

MATRIX SPIKE SAMPLE: 827820

Parameter	Units	5071806001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.3	103	50-150	
Barium	mg/L	ND	10	11.0	104	50-150	
Cadmium	mg/L	ND	10	10.2	102	50-150	
Chromium	mg/L	0.17	10	10.3	101	50-150	
Lead	mg/L	ND	10	9.8	98	50-150	

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Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

MATRIX SPIKE SAMPLE: 827820

Parameter	Units	5071806001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	10.3	103	50-150	
Silver	mg/L	ND	5	5.1	103	50-150	

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Columbus, OH 43215
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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: PMST/7949 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5071665002, 5071665003, 5071665004, 5071665006

METHOD BLANK: 1094082 Matrix: Solid
Associated Lab Samples: 5071665002, 5071665003, 5071665004, 5071665006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	11/07/12 00:00	

SAMPLE DUPLICATE: 1094083

Parameter	Units	60132317001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	26.5	25.8	3	20	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: WET/10396 Analysis Method: SM 4500-H B
QC Batch Method: SM 4500-H B Analysis Description: 4500H+B pH
Associated Lab Samples: 5071665001, 5071665005, 5071665006

SAMPLE DUPLICATE: 825066

Parameter	Units	5071665001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	9.4	9.4	.2		H3,H6

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: WET/38086 Analysis Method: SW-846 7.3.4.2
QC Batch Method: SW-846 7.3.4.2 Analysis Description: Reactive Sulfide
Associated Lab Samples: 5071665002, 5071665003, 5071665004

METHOD BLANK: 1093712 Matrix: Solid
Associated Lab Samples: 5071665002, 5071665003, 5071665004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Reactive	mg/kg	ND	100	11/06/12 14:00	

LABORATORY CONTROL SAMPLE: 1093713

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	200	176	88	77-110	

MATRIX SPIKE SAMPLE: 1093714

Parameter	Units	10211304001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	270	500	610	68	67-116	

SAMPLE DUPLICATE: 1093715

Parameter	Units	5071665002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Reactive	mg/kg	ND	ND		30	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: WET/10411 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: 9045 pH
Associated Lab Samples: 5071665002, 5071665003, 5071665004

SAMPLE DUPLICATE: 826002

Parameter	Units	5071725001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.5	7.3	12	20	H3

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: WETA/22360 | Analysis Method: SW-846 7.3.3.2
QC Batch Method: SW-846 7.3.3.2 | Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5071665002, 5071665003, 5071665004, 5071665006

METHOD BLANK: 1093596 | Matrix: Solid
Associated Lab Samples: 5071665002, 5071665003, 5071665004, 5071665006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	0.025	11/07/12 09:05	

LABORATORY CONTROL SAMPLE: 1093597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	.5	0.57	112	71-123	

MATRIX SPIKE SAMPLE: 1093598

Parameter	Units	5071665002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	ND	.5	0.46	91	57-132	

SAMPLE DUPLICATE: 1093599

Parameter	Units	5071665003 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/kg	ND	ND		23	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: WETA/22361 | Analysis Method: SW-846 7.3.3.2 Modified
QC Batch Method: SW-846 7.3.3.2 Modified | Analysis Description: 733C Reactive Cyanide
Associated Lab Samples: 5071665001, 5071665005

METHOD BLANK: 1093609 | Matrix: Water
Associated Lab Samples: 5071665001, 5071665005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/L	ND	0.0050	11/07/12 09:16	

LABORATORY CONTROL SAMPLE: 1093610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/L	.05	0.048	96	74-121	

MATRIX SPIKE SAMPLE: 1093611

Parameter	Units	5071665001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/L	5.3	5	5.9	12	57-125	M6

SAMPLE DUPLICATE: 1093612

Parameter	Units	5071665005 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/L	0.027	0.028	4	26	

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: WETA/8789 | Analysis Method: EPA 9012
QC Batch Method: EPA 9012 | Analysis Description: 9012 Cyanide
Associated Lab Samples: 5071665002, 5071665003

METHOD BLANK: 825073 | Matrix: Solid
Associated Lab Samples: 5071665002, 5071665003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	11/06/12 14:56	

LABORATORY CONTROL SAMPLE: 825074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	10.7	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825075 825076

Parameter	Units	5071665002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	ND	10	10	11.3	10.6	113	106	90-110	6	20	M0

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QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: WETA/8792 | Analysis Method: EPA 9012
QC Batch Method: EPA 9012 | Analysis Description: 9012 Cyanide
Associated Lab Samples: 5071665004

METHOD BLANK: 825679 | Matrix: Solid
Associated Lab Samples: 5071665004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	11/06/12 15:03	

LABORATORY CONTROL SAMPLE: 825680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	11.0	110	90-110	

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metals Finishing
Pace Project No.: 5071665

QC Batch: WETA/8805 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5071665001, 5071665005, 5071665006

METHOD BLANK: 826303 Matrix: Water
Associated Lab Samples: 5071665001, 5071665005, 5071665006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	11/06/12 16:13	

LABORATORY CONTROL SAMPLE: 826304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.20	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 826305 826306

Parameter	Units	5071665001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	992	2	2	1030	1050	1860	2900	90-110	2	20	E,P6

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALIFIERS

Project: Baycote Metals Finishing
Pace Project No.: 5071665

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-I	Pace Analytical Services - Indianapolis
PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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1233 Dublin Road
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(614)486-5421

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metals Finishing
Pace Project No.: 5071665

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5071665001	**X337-459**	EPA 3010	MPRP/10168	EPA 6010	ICP/10610
5071665002	**X521**	EPA 3010	MPRP/10170	EPA 6010	ICP/10611
5071665003	**X519**	EPA 3010	MPRP/10171	EPA 6010	ICP/10612
5071665004	**X522**	EPA 3010	MPRP/10170	EPA 6010	ICP/10611
5071665005	**Z27-SL**	EPA 3010	MPRP/10171	EPA 6010	ICP/10612
5071665006	**Z MISC**	EPA 3010	MPRP/10171	EPA 6010	ICP/10612
5071665001	**X337-459**	EPA 7470	MERP/4243	EPA 7470	MERC/4284
5071665002	**X521**	EPA 7470	MERP/4244	EPA 7470	MERC/4285
5071665003	**X519**	EPA 7470	MERP/4245	EPA 7470	MERC/4286
5071665004	**X522**	EPA 7470	MERP/4244	EPA 7470	MERC/4285
5071665005	**Z27-SL**	EPA 7470	MERP/4245	EPA 7470	MERC/4286
5071665006	**Z MISC**	EPA 7470	MERP/4245	EPA 7470	MERC/4286
5071665002	**X521**	ASTM D2974	PMST/7949		
5071665003	**X519**	ASTM D2974	PMST/7949		
5071665004	**X522**	ASTM D2974	PMST/7949		
5071665006	**Z MISC**	ASTM D2974	PMST/7949		
5071665001	**X337-459**	SM 4500-H B	WET/10396		
5071665005	**Z27-SL**	SM 4500-H B	WET/10396		
5071665006	**Z MISC**	SM 4500-H B	WET/10396		
5071665002	**X521**	SW-846 7.3.4.2	WET/38086		
5071665003	**X519**	SW-846 7.3.4.2	WET/38086		
5071665004	**X522**	SW-846 7.3.4.2	WET/38086		
5071665002	**X521**	EPA 9045	WET/10411		
5071665003	**X519**	EPA 9045	WET/10411		
5071665004	**X522**	EPA 9045	WET/10411		
5071665002	**X521**	SW-846 7.3.3.2	WETA/22360		
5071665003	**X519**	SW-846 7.3.3.2	WETA/22360		
5071665004	**X522**	SW-846 7.3.3.2	WETA/22360		
5071665006	**Z MISC**	SW-846 7.3.3.2	WETA/22360		
5071665001	**X337-459**	SW-846 7.3.3.2 Modified	WETA/22361		
5071665005	**Z27-SL**	SW-846 7.3.3.2 Modified	WETA/22361		
5071665002	**X521**	EPA 9012	WETA/8789	EPA 9012	WETA/8800
5071665003	**X519**	EPA 9012	WETA/8789	EPA 9012	WETA/8800
5071665004	**X522**	EPA 9012	WETA/8792	EPA 9012	WETA/8801
5071665001	**X337-459**	EPA 9012	WETA/8805		
5071665005	**Z27-SL**	EPA 9012	WETA/8805		
5071665006	**Z MISC**	EPA 9012	WETA/8805		

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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

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Section A Required Client Information:

Company: Environmental Restoration
Address:
Email To: J.Behrens@ERLLC.com
Phone: 238 473-2124 Fax: 636 680 2553
Requested Due Date/TAT:

Section B Required Project Information:

Report To: J. Behrens@ERLLC.com
Copy To:
Purchase Order No.: BS-101
Project Name: Baylote Metal Finishing
Project Number: BS-101

Section C Invoice Information:

Attention: Justin AuBuchon
Company Name: Environmental Rest
Address: 1666 Fabick Drive
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Requested Analysis Filtered (Y/N)

5271665

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED 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	PH	TCLP Metals	Total CN	Reactive CN	Reactive Sulfide	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	X337-459	WW	C	10/31	1100				3	✓									✓	✓	✓	✓		-001
2	X521	S	C	10/31	10:30				4	✓									✓	✓	✓	✓	✓	-002
3	X519	S	C	10/31	9:50				4	✓									✓	✓	✓	✓	✓	-003
4	X522	S	G	10/31	1010				4	✓									✓	✓	✓	✓	✓	-004
5	Z27-SL	WW	C	11/1					5	✓									✓	✓	✓	✓		-005
6	2 Misc	WW	C	11/1					4	✓									✓	✓	✓	✓		-006
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	J Behrens/ERLLC	11/1	1035	[illegible]	11/1	10:35	
				Zeleme Tesfa	11/2/12	7:30am	✓ ✓ ✓

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

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

W. Mandel
W Mandel 11/2/12 0837

ORIGINAL

*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.

F-ALL-Q-020rev.07, 15-May-2007

Sample Condition Upon Receipt

Pace Analytical

Client Name: Environmental Restoration Project # 52071665

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☒ Commercial ☐ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Date/Time 5035A kits placed in freezer _____

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☒ Other 2 small zpl of ice

Thermometer Used 1 2 3 4 5 6 A B C D E **Type of Ice:** Wet Blue None ☒ Samples on ice, cooling process has begun

Cooler Temperature 8.1 C **Ice Visible in Sample Containers:** ☐ yes ☒ no

(Corrected, if applicable)

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 11/2/12 [illegible]

				Comments:
Chain of Custody Present:	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes	☐ No	☐ N/A	3.
Sampler Name & Signature on COC:	☐ Yes	☒ No	☐ N/A	4. not completed
Short Hold Time Analysis (<72hr):	☒ Yes	☐ No	☐ N/A	5. pH took run to wetchem
Rush Turn Around Time Requested:	☐ Yes	☒ No	☐ N/A	6.
Containers Intact:	☒ Yes	☐ No	☐ N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☒ Yes	☐ No	☐ N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☐ Yes	☐ No	☒ N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes	☐ No	☒ N/A	
Headspace in VOA Vials (>6mm)	☐ Yes	☐ No	☒ N/A	10.
Trip Blank Present:	☐ Yes	☐ No	☒ N/A	11.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☒ N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☒ Yes	☐ No	☐ N/A	12.
Sufficient Volume:	☒ Yes	☐ No	☐ N/A	13.
Correct Containers Used:	☒ Yes	☐ No	☐ N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: J. Behrens Date/Time: 11/2/12 email

Comments/ Resolution:

OK to proceed per J. Behrens 11/2/12

Project Manager Review: Kenneth Hunt **Date:** 11/2/12

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

CLIENT: Environmental Restoration

Pace Analytical
www.pacelabs.com

COC PAGE 1 of 1
COC ID# 1605093

Project # 50716665

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BG1U 8oz soil jar		Comments
1														3		
2			4													
3			4													
4			4													
5														4	1	
6			1											3		
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B22

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

April 01, 2013

Mr. Toby Viehweg
Environmental Restoration LLC
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote B5-101
Pace Project No.: 5078039

Dear Mr. Viehweg:
Enclosed are the analytical results for sample(s) received by the laboratory on March 27, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer for
Kenneth Hunt
kenneth.hunt@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

CERTIFICATIONS

Project: Baycote B5-101
Pace Project No.: 5078039

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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1233 Dublin Road
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(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE SUMMARY

Project: Baycote B5-101
Pace Project No.: 5078039

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5078039001	**W-13-T-1**	Water	03/25/13 16:00	03/27/13 07:35
5078039002	**W-13-P-2**	Water	03/25/13 16:30	03/27/13 07:35
5078039003	**W-12-T-3**	Water	03/25/13 16:30	03/27/13 07:35
5078039004	**W-12-P-4**	Water	03/25/13 16:30	03/27/13 07:35

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1233 Dublin Road
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7726 Moller Road
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(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote B5-101
Pace Project No.: 5078039

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5078039001	**W-13-T-1**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		SM 2540D	MLS	1
		SM 4500-H+B	TPD	1
		EPA 9012	ILP	1
5078039002	**W-13-P-2**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 8270	KES	18
		EPA 8260	ALA	12
		SM 2540D	MLS	1
		SM 4500-H+B	TPD	1
		EPA 9012	ILP	1
5078039003	**W-12-T-3**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		SM 2540D	MLS	1
		SM 4500-H+B	TPD	1
		EPA 9012	ILP	1
5078039004	**W-12-P-4**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		SM 2540D	MLS	1
		SM 4500-H+B	TPD	1
		EPA 9012	ILP	1

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078039

Sample: W-13-T-1 **Lab ID: 5078039001** Collected: 03/25/13 16:00 Received: 03/27/13 07:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	100	10	03/28/13 15:06	04/01/13 10:02	7440-38-2	
Barium	ND	ug/L	200	2	03/28/13 15:06	03/29/13 12:44	7440-39-3	
Cadmium	**34600**	ug/L	10.0	2	03/28/13 15:06	03/29/13 12:44	7440-43-9	
Chromium	**1780**	ug/L	20.0	2	03/28/13 15:06	03/29/13 12:44	7440-47-3	
Lead	**695**	ug/L	20.0	2	03/28/13 15:06	03/29/13 12:44	7439-92-1	
Selenium	ND	ug/L	100	10	03/28/13 15:06	04/01/13 10:02	7782-49-2	D3
Silver	**948**	ug/L	100	2	03/28/13 15:06	03/29/13 12:44	7440-22-4	D3
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	03/28/13 11:18	03/29/13 12:18	7439-97-6	
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	**136**	mg/L	10.0	1		03/28/13 09:00		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**3.9**	Std. Units		1		03/27/13 09:09		H3,H6
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.070**	mg/L	0.010	1	03/29/13 11:43	03/29/13 17:05	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078039

Sample: W-13-P-2 **Lab ID: 5078039002** Collected: 03/25/13 16:30 Received: 03/27/13 07:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	03/28/13 15:06	03/29/13 12:48	7440-38-2	
Barium	ND	ug/L	100	1	03/28/13 15:06	03/29/13 12:48	7440-39-3	
Cadmium	**3500**	ug/L	5.0	1	03/28/13 15:06	03/29/13 12:48	7440-43-9	
Chromium	**574**	ug/L	10.0	1	03/28/13 15:06	03/29/13 12:48	7440-47-3	
Lead	**74.5**	ug/L	10.0	1	03/28/13 15:06	03/29/13 12:48	7439-92-1	
Selenium	ND	ug/L	10.0	1	03/28/13 15:06	03/29/13 12:48	7782-49-2	
Silver	ND	ug/L	50.0	1	03/28/13 15:06	03/29/13 12:48	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	03/28/13 11:18	03/29/13 12:20	7439-97-6	
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
1,4-Dichlorobenzene	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	106-46-7	P1,P2
2-Methylphenol(o-Cresol)	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	95.2	1	03/28/13 10:02	03/29/13 15:00		
Hexachloroethane	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	67-72-1	
Nitrobenzene	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	98-95-3	
Hexachloro-1,3-butadiene	ND	ug/L	23.8	1	03/28/13 10:02	03/29/13 15:00	87-68-3	
2,4,6-Trichlorophenol	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	88-06-2	
2,4,5-Trichlorophenol	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	95-95-4	
2,4-Dinitrotoluene	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	121-14-2	
Hexachlorobenzene	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	118-74-1	
Pentachlorophenol	ND	ug/L	238	1	03/28/13 10:02	03/29/13 15:00	87-86-5	
Pyridine	ND	ug/L	47.6	1	03/28/13 10:02	03/29/13 15:00	110-86-1	
Surrogates								
Nitrobenzene-d5 (S)	65	%.	33-108	1	03/28/13 10:02	03/29/13 15:00	4165-60-0	
2-Fluorobiphenyl (S)	66	%.	34-106	1	03/28/13 10:02	03/29/13 15:00	321-60-8	
p-Terphenyl-d14 (S)	72	%.	31-122	1	03/28/13 10:02	03/29/13 15:00	1718-51-0	
Phenol-d5 (S)	43	%.	10-56	1	03/28/13 10:02	03/29/13 15:00	4165-62-2	
2-Fluorophenol (S)	55	%.	10-74	1	03/28/13 10:02	03/29/13 15:00	367-12-4	
2,4,6-Tribromophenol (S)	86	%.	32-124	1	03/28/13 10:02	03/29/13 15:00	118-79-6	
8260 MSV	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		03/28/13 08:14	71-43-2	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/28/13 08:14	78-93-3	
Carbon tetrachloride	ND	ug/L	5.0	1		03/28/13 08:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/28/13 08:14	108-90-7	
Chloroform	ND	ug/L	5.0	1		03/28/13 08:14	67-66-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/28/13 08:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/28/13 08:14	75-35-4	
Tetrachloroethene	ND	ug/L	5.0	1		03/28/13 08:14	127-18-4	
Trichloroethene	ND	ug/L	5.0	1		03/28/13 08:14	79-01-6	
Surrogates								
Dibromofluoromethane (S)	111	%.	83-123	1		03/28/13 08:14	1868-53-7	
4-Bromofluorobenzene (S)	104	%.	72-125	1		03/28/13 08:14	460-00-4	
Toluene-d8 (S)	96	%.	81-114	1		03/28/13 08:14	2037-26-5	

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Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078039

Sample: W-13-P-2 **Lab ID: 5078039002** Collected: 03/25/13 16:30 Received: 03/27/13 07:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	**134**	mg/L	10.0	1		03/28/13 09:00		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**5.5**	Std. Units		1		03/27/13 09:10		H3,H6
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.089**	mg/L	0.010	1	03/29/13 11:43	03/29/13 17:08	57-12-5	

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7726 Moller Road
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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078039

Sample: W-12-T-3 **Lab ID: 5078039003** Collected: 03/25/13 16:30 Received: 03/27/13 07:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	200	20	03/28/13 15:06	04/01/13 10:05	7440-38-2	
Barium	ND	ug/L	500	5	03/28/13 15:06	03/29/13 12:52	7440-39-3	
Cadmium	**35500**	ug/L	25.0	5	03/28/13 15:06	03/29/13 12:52	7440-43-9	
Chromium	**11100**	ug/L	50.0	5	03/28/13 15:06	03/29/13 12:52	7440-47-3	
Lead	**1860**	ug/L	50.0	5	03/28/13 15:06	03/29/13 12:52	7439-92-1	
Selenium	ND	ug/L	200	20	03/28/13 15:06	04/01/13 10:05	7782-49-2	D3
Silver	ND	ug/L	250	5	03/28/13 15:06	03/29/13 12:52	7440-22-4	D3
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	03/28/13 11:18	03/29/13 12:23	7439-97-6	
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	**1320**	mg/L	25.0	1		03/28/13 09:00		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**4.4**	Std. Units		1		03/27/13 09:11		H3,H6
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.23**	mg/L	0.010	1	03/29/13 11:43	03/29/13 17:09	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078039

Sample: W-12-P-4 **Lab ID: 5078039004** Collected: 03/25/13 16:30 Received: 03/27/13 07:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	03/28/13 15:06	03/29/13 13:02	7440-38-2	
Barium	ND	ug/L	100	1	03/28/13 15:06	03/29/13 13:02	7440-39-3	
Cadmium	**1490**	ug/L	5.0	1	03/28/13 15:06	03/29/13 13:02	7440-43-9	
Chromium	**266**	ug/L	10.0	1	03/28/13 15:06	03/29/13 13:02	7440-47-3	
Lead	**44.0**	ug/L	10.0	1	03/28/13 15:06	03/29/13 13:02	7439-92-1	
Selenium	ND	ug/L	10.0	1	03/28/13 15:06	03/29/13 13:02	7782-49-2	
Silver	ND	ug/L	50.0	1	03/28/13 15:06	03/29/13 13:02	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	03/28/13 11:18	03/29/13 12:25	7439-97-6	
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	**52**	mg/L	10.0	1		03/28/13 09:00		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**4.7**	Std. Units		1		03/27/13 09:14		H3,H6
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.028**	mg/L	0.010	1	03/29/13 11:43	03/29/13 17:13	57-12-5	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078039

QC Batch: MERP/4526 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

METHOD BLANK: 891477 Matrix: Water
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	03/29/13 11:29	

LABORATORY CONTROL SAMPLE: 891478

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.2	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 891479 891480

Parameter	Units	5078039001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	3.5	3.4	67	66	75-125	1	20	M3

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078039

QC Batch: MPRP/10946 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

METHOD BLANK: 891818 Matrix: Water
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	03/29/13 12:38	
Barium	ug/L	ND	100	03/29/13 12:38	
Cadmium	ug/L	ND	5.0	03/29/13 12:38	
Chromium	ug/L	ND	10.0	03/29/13 12:38	
Lead	ug/L	ND	10.0	03/29/13 12:38	
Selenium	ug/L	ND	10.0	03/29/13 12:38	
Silver	ug/L	ND	50.0	03/29/13 12:38	

LABORATORY CONTROL SAMPLE: 891819

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	1040	104	80-120	
Barium	ug/L	1000	1020	102	80-120	
Cadmium	ug/L	1000	988	99	80-120	
Chromium	ug/L	1000	974	97	80-120	
Lead	ug/L	1000	982	98	80-120	
Selenium	ug/L	1000	1000	100	80-120	
Silver	ug/L	500	478	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 891820 891821

Parameter	Units	5078066005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	1090	1070	109	107	75-125	2	20	
Barium	ug/L	260	1000	1000	1330	1320	107	106	75-125	1	20	
Cadmium	ug/L	ND	1000	1000	1030	1010	103	101	75-125	2	20	
Chromium	ug/L	ND	1000	1000	1000	984	100	98	75-125	2	20	
Lead	ug/L	ND	1000	1000	1000	981	100	98	75-125	2	20	
Selenium	ug/L	ND	1000	1000	1040	1020	104	102	75-125	2	20	
Silver	ug/L	ND	500	500	486	482	97	96	75-125	1	20	

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Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078039

QC Batch: MSV/51623
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 5078039002

METHOD BLANK: 891358
Matrix: Water
Associated Lab Samples: 5078039002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	5.0	03/28/13 03:49	
1,2-Dichloroethane	ug/L	ND	5.0	03/28/13 03:49	
2-Butanone (MEK)	ug/L	ND	25.0	03/28/13 03:49	
Benzene	ug/L	ND	5.0	03/28/13 03:49	
Carbon tetrachloride	ug/L	ND	5.0	03/28/13 03:49	
Chlorobenzene	ug/L	ND	5.0	03/28/13 03:49	
Chloroform	ug/L	ND	5.0	03/28/13 03:49	
Tetrachloroethene	ug/L	ND	5.0	03/28/13 03:49	
Trichloroethene	ug/L	ND	5.0	03/28/13 03:49	
4-Bromofluorobenzene (S)	%.	103	72-125	03/28/13 03:49	
Dibromofluoromethane (S)	%.	108	83-123	03/28/13 03:49	
Toluene-d8 (S)	%.	96	81-114	03/28/13 03:49	

LABORATORY CONTROL SAMPLE: 891359

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	58.3	117	75-145	
1,2-Dichloroethane	ug/L	50	55.7	111	71-127	
2-Butanone (MEK)	ug/L	250	259	104	42-177	
Benzene	ug/L	50	57.5	115	76-123	
Carbon tetrachloride	ug/L	50	56.4	113	65-125	
Chlorobenzene	ug/L	50	52.4	105	78-120	
Chloroform	ug/L	50	57.6	115	73-122	
Tetrachloroethene	ug/L	50	53.5	107	57-125	
Trichloroethene	ug/L	50	57.4	115	77-122	
4-Bromofluorobenzene (S)	%.			103	72-125	
Dibromofluoromethane (S)	%.			98	83-123	
Toluene-d8 (S)	%.			101	81-114	

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(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078039

QC Batch: OEXT/32338
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 Water MSSV
Associated Lab Samples: 5078039002

METHOD BLANK: 891510
Matrix: Water
Associated Lab Samples: 5078039002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	10.0	03/29/13 14:17	
2,4,5-Trichlorophenol	ug/L	ND	10.0	03/29/13 14:17	
2,4,6-Trichlorophenol	ug/L	ND	10.0	03/29/13 14:17	
2,4-Dinitrotoluene	ug/L	ND	10.0	03/29/13 14:17	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	03/29/13 14:17	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	20.0	03/29/13 14:17	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/29/13 14:17	
Hexachlorobenzene	ug/L	ND	10.0	03/29/13 14:17	
Hexachloroethane	ug/L	ND	10.0	03/29/13 14:17	
Nitrobenzene	ug/L	ND	10.0	03/29/13 14:17	
Pentachlorophenol	ug/L	ND	50.0	03/29/13 14:17	
Pyridine	ug/L	ND	10.0	03/29/13 14:17	
2,4,6-Tribromophenol (S)	%.	73	32-124	03/29/13 14:17	
2-Fluorobiphenyl (S)	%.	63	34-106	03/29/13 14:17	
2-Fluorophenol (S)	%.	24	10-74	03/29/13 14:17	
Nitrobenzene-d5 (S)	%.	73	33-108	03/29/13 14:17	
p-Terphenyl-d14 (S)	%.	74	31-122	03/29/13 14:17	
Phenol-d5 (S)	%.	14	10-56	03/29/13 14:17	

LABORATORY CONTROL SAMPLE: 891511

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	100	39.5	40	30-92	
2,4-Dinitrotoluene	ug/L	100	39.4	39	38-119	
Pentachlorophenol	ug/L	100	39.5J	40	14-131	
2,4,6-Tribromophenol (S)	%.			51	32-124	
2-Fluorobiphenyl (S)	%.			42	34-106	
2-Fluorophenol (S)	%.			20	10-74	
Nitrobenzene-d5 (S)	%.			46	33-108	
p-Terphenyl-d14 (S)	%.			60	31-122	
Phenol-d5 (S)	%.			12	10-56	

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1233 Dublin Road
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(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078039

QC Batch: WET/11405 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

METHOD BLANK: 891456 Matrix: Water
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	03/28/13 08:59	

LABORATORY CONTROL SAMPLE: 891457

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	100	83	83	80-120	

SAMPLE DUPLICATE: 891458

Parameter	Units	5077999003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 891459

Parameter	Units	5078063004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		10	

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078039

QC Batch: WET/11394 Analysis Method: SM 4500-H+B
QC Batch Method: SM 4500-H+B Analysis Description: 4500H+B pH
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

SAMPLE DUPLICATE: 890959

Parameter	Units	5078018001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.9	8.0	0		H6

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078039

QC Batch: WETA/9436 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

METHOD BLANK: 892277 Matrix: Water
Associated Lab Samples: 5078039001, 5078039002, 5078039003, 5078039004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	03/29/13 17:03	

LABORATORY CONTROL SAMPLE: 892278

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.22	111	90-110	1d

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 892279 892280

Parameter	Units	5078039001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.070	.2	.2	0.29	0.27	108	98	90-110	7	20	

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Indianapolis, IN 46268
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QUALIFIERS

Project: Baycote B5-101
Pace Project No.: 5078039

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1d	LCS is biased high.Batch acceptable based on Maxtrix Spike recovery passing LCS criteria per NELAC.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H3	Sample was received or analysis requested beyond the recognized method holding time.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
P1	Routine initial sample volume or weight was not used for extraction, resulting in elevated reporting limits.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote B5-101
Pace Project No.: 5078039

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5078039001	**W-13-T-1**	EPA 3010	MPRP/10946	EPA 6010	ICP/11645
5078039002	**W-13-P-2**	EPA 3010	MPRP/10946	EPA 6010	ICP/11645
5078039003	**W-12-T-3**	EPA 3010	MPRP/10946	EPA 6010	ICP/11645
5078039004	**W-12-P-4**	EPA 3010	MPRP/10946	EPA 6010	ICP/11645
5078039001	**W-13-T-1**	EPA 7470	MERP/4526	EPA 7470	MERC/4675
5078039002	**W-13-P-2**	EPA 7470	MERP/4526	EPA 7470	MERC/4675
5078039003	**W-12-T-3**	EPA 7470	MERP/4526	EPA 7470	MERC/4675
5078039004	**W-12-P-4**	EPA 7470	MERP/4526	EPA 7470	MERC/4675
5078039002	**W-13-P-2**	EPA 3510	OEXT/32338	EPA 8270	MSSV/12175
5078039002	**W-13-P-2**	EPA 8260	MSV/51623		
5078039001	**W-13-T-1**	SM 2540D	WET/11405		
5078039002	**W-13-P-2**	SM 2540D	WET/11405		
5078039003	**W-12-T-3**	SM 2540D	WET/11405		
5078039004	**W-12-P-4**	SM 2540D	WET/11405		
5078039001	**W-13-T-1**	SM 4500-H+B	WET/11394		
5078039002	**W-13-P-2**	SM 4500-H+B	WET/11394		
5078039003	**W-12-T-3**	SM 4500-H+B	WET/11394		
5078039004	**W-12-P-4**	SM 4500-H+B	WET/11394		
5078039001	**W-13-T-1**	EPA 9012	WETA/9436	EPA 9012	WETA/9447
5078039002	**W-13-P-2**	EPA 9012	WETA/9436	EPA 9012	WETA/9447
5078039003	**W-12-T-3**	EPA 9012	WETA/9436	EPA 9012	WETA/9447
5078039004	**W-12-P-4**	EPA 9012	WETA/9436	EPA 9012	WETA/9447

VBj

ENVIRONMENTAL RESTORATION LLC

1666 Fabick Drive
Fenton, MO 63026
(636) 227-7477
Fax (636) 227-6447

Alternate billing information:

Report to: Toby Viehweg
Email to: t.viehweg@erllc.com

Project Description:

City/State Collected: Mishawaka IN

Phone: 312-446-6325
Fax: 636-680-2476

Client: USEPA

Project Name: Baycote

Collected by: Viehweg

Site/Facility ID#:

P.O. #: B5-101

Collected by (signature): Viehweg

Packed on Ice N Y

Rush (Lab MUST Be Notified)
_____ Same Day
_____ Next Day
_____ Two Day

Date Results Needed:
Email? ___ No ___ Yes
Fax? No Yes

Analysis/Container/Preservative

Chain of Custody

Page 1 of 1

Prepared by: Viehweg

5078039

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Containers	Total - RCRA Volatiles, Semi-Volatiles	Total - RCRA Metals	pH	Total Cyanide	Total Suspended Solids	Remarks/Containment	Sample # (lab only)
W-13-T-1				3/25/13	1630	1	X	X	X	X	X		001
W-13-P-2				3/25/13	1630	1		X	X	X	X		002
W-12-T-3				3/25/13	1630	1		X	X	X	X		003
W-12-P-4				3/25/13	1630	1		X	X	X	X		004

CoCode (lab use only)
Template/Prelogin
Shipped Via:

*Matrix SS - Soil/Solid GW - GroundWater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____
Flow _____ Other _____

Remarks: 5 Day TAT

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Toby Viehweg	3-26-13	0740	Francis Santos
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
			3/27/13 7.35a
Relinquished by: (Signature)	Date:	Time:	Received for Lab by: (Signature)

Samples returned via: ___ UPS ___ Fed Ex ___ Courier ___

Condition: (lab use only)
Total
Bottles Received
Date
Time
pH Checked (if OK)

WI/NOW
ZL

Temp. 3.4°C

Sample Condition Upon Receipt

Pace Analytical

Client Name: ER. Env. Res. Project # 5028039

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Now

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used 1 2 3 4 (6) A B C D E Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable) 3.4°C Ice Visible in Sample Containers: ☐ yes ☐ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3/27/13 ZA

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A	5. Out of Hold.
Rush Turn Around Time Requested:	☐Yes	☐No	☑N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No	☐N/A	8. Water
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☐Yes	☐No	☑N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
Headspace in VOA Vials (>6mm)	☐Yes	☐No	☑N/A	10.
Trip Blank Present:	☐Yes	☐No	☑N/A	11.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Project Manager Review:				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14. only for pH + TSS others Not appropriate

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Toby Viehweg Date/Time: 3/27/13 8:20

Comments/ Resolution:

Run parameters as received pour up + preserve appropriately - per Toby.

Project Manager Review: Kenneth [signature] Date: 3/27/13

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

Pace Analytical
www.pacelabs.com

CLIENT: El. Env. Res.

COC PAGE 1 of 1
COC ID#

Project # 5028039

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	1L Jar	Comments
1														1	
2														1	
3														1	
4														1	
5															
6															
7															
8															
9															
10															
11															
12															

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B23

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

April 03, 2013

Mr. Toby Viehweg
Environmental Restoration LLC
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote B5-101
Pace Project No.: 5078202

Dear Mr. Viehweg:
Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

CERTIFICATIONS

Project: Baycote B5-101
Pace Project No.: 5078202

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE SUMMARY

Project: Baycote B5-101
Pace Project No.: 5078202

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5078202001	**B5-W8**	Water	03/28/13 08:00	03/30/13 09:40
5078202002	**B5-W9**	Water	03/28/13 08:00	03/30/13 09:40
5078202003	**B5-W10**	Water	03/28/13 08:00	03/30/13 09:40
5078202004	**B5-W11**	Water	03/28/13 08:00	03/30/13 09:40
5078202005	**B5-W17**	Water	03/28/13 08:00	03/30/13 09:40
5078202006	**B5-W26**	Water	03/28/13 08:00	03/30/13 09:40
5078202007	**B5-W27**	Water	03/28/13 08:00	03/30/13 09:40
5078202008	**B5-W28**	Water	03/28/13 08:00	03/30/13 09:40
5078202009	**B5-W29**	Water	03/28/13 08:00	03/30/13 09:40
5078202010	**B5-W30**	Water	03/28/13 08:00	03/30/13 09:40
5078202011	**B5-Pit 1**	Water	03/28/13 08:00	03/30/13 09:40
5078202012	**B5-Pit 2**	Water	03/28/13 08:00	03/30/13 09:40

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Columbus, OH 43215
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7726 Moller Road
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(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote B5-101
Pace Project No.: 5078202

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5078202001	**B5-W8**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 8270	KES	18
		EPA 8260	JLZ	12
		EPA 9012	ILP	1
5078202002	**B5-W9**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202003	**B5-W10**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202004	**B5-W11**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202005	**B5-W17**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202006	**B5-W26**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202007	**B5-W27**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202008	**B5-W28**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202009	**B5-W29**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202010	**B5-W30**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202011	**B5-Pit 1**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078202012	**B5-Pit 2**	EPA 6010	FRW	7
		EPA 7470	LLB	1

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SAMPLE ANALYTE COUNT

Project: Baycote B5-101
Pace Project No.: 5078202

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 9012	ILP	1

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7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W8 **Lab ID: 5078202001** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:17	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 12:17	7440-39-3	
Cadmium	**43.9**	ug/L	5.0	1	04/01/13 15:05	04/02/13 12:17	7440-43-9	
Chromium	**78.1**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:17	7440-47-3	
Lead	**12.6**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:17	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:17	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:17	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:17	7439-97-6	
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
1,4-Dichlorobenzene	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	106-46-7	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	20.0	1	04/01/13 10:00	04/02/13 15:10		
Hexachloroethane	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	67-72-1	
Nitrobenzene	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	98-95-3	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1	04/01/13 10:00	04/02/13 15:10	87-68-3	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	88-06-2	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	95-95-4	
2,4-Dinitrotoluene	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	121-14-2	
Hexachlorobenzene	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	118-74-1	
Pentachlorophenol	ND	ug/L	50.0	1	04/01/13 10:00	04/02/13 15:10	87-86-5	
Pyridine	ND	ug/L	10.0	1	04/01/13 10:00	04/02/13 15:10	110-86-1	
Surrogates								
Nitrobenzene-d5 (S)	78	%.	33-108	1	04/01/13 10:00	04/02/13 15:10	4165-60-0	
2-Fluorobiphenyl (S)	74	%.	34-106	1	04/01/13 10:00	04/02/13 15:10	321-60-8	
p-Terphenyl-d14 (S)	64	%.	31-122	1	04/01/13 10:00	04/02/13 15:10	1718-51-0	
Phenol-d5 (S)	27	%.	10-56	1	04/01/13 10:00	04/02/13 15:10	4165-62-2	
2-Fluorophenol (S)	42	%.	10-74	1	04/01/13 10:00	04/02/13 15:10	367-12-4	
2,4,6-Tribromophenol (S)	99	%.	32-124	1	04/01/13 10:00	04/02/13 15:10	118-79-6	
8260 MSV	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		04/02/13 13:03	71-43-2	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/02/13 13:03	78-93-3	
Carbon tetrachloride	ND	ug/L	5.0	1		04/02/13 13:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/02/13 13:03	108-90-7	
Chloroform	ND	ug/L	5.0	1		04/02/13 13:03	67-66-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/02/13 13:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/02/13 13:03	75-35-4	
Tetrachloroethene	ND	ug/L	5.0	1		04/02/13 13:03	127-18-4	
Trichloroethene	ND	ug/L	5.0	1		04/02/13 13:03	79-01-6	
Surrogates								
Dibromofluoromethane (S)	101	%.	79-116	1		04/02/13 13:03	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	80-114	1		04/02/13 13:03	460-00-4	
Toluene-d8 (S)	93	%.	81-110	1		04/02/13 13:03	2037-26-5	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W8 **Lab ID: 5078202001** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.34**	mg/L	0.020	2	04/01/13 13:52	04/03/13 14:20	57-12-5	

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Columbus, OH 43215
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Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W9 **Lab ID: 5078202002** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:37	7440-38-2	
Barium	**259**	ug/L	100	1	04/01/13 15:05	04/02/13 12:37	7440-39-3	
Cadmium	**95.8**	ug/L	5.0	1	04/01/13 15:05	04/02/13 12:37	7440-43-9	
Chromium	**817**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:37	7440-47-3	
Lead	**110**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:37	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:37	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:37	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:19	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.21**	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:00	57-12-5	

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Pace Analytical Services, Inc.
7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W10 **Lab ID: 5078202003** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:39	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 12:39	7440-39-3	
Cadmium	**1900**	ug/L	5.0	1	04/01/13 15:05	04/02/13 12:39	7440-43-9	
Chromium	**12600**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:39	7440-47-3	
Lead	**21.6**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:39	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:39	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:39	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:21	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	ND	mg/L	0.50	1	04/01/13 13:52	04/03/13 13:01	57-12-5	

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Pace Analytical Services, Inc.
7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W11 **Lab ID: 5078202004** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**117**	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:41	7440-38-2	
Barium	ND	ug/L	500	1	04/01/13 15:05	04/02/13 12:41	7440-39-3	
Cadmium	**428**	ug/L	25.0	1	04/01/13 15:05	04/02/13 12:41	7440-43-9	
Chromium	**107**	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:41	7440-47-3	
Lead	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:41	7439-92-1	
Selenium	**77.2**	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:41	7782-49-2	
Silver	ND	ug/L	250	1	04/01/13 15:05	04/02/13 12:41	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	10.0	1	04/01/13 12:00	04/02/13 11:23	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**16.6**	mg/L	0.50	1	04/01/13 13:52	04/03/13 13:02	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W17 **Lab ID: 5078202005** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:43	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 12:43	7440-39-3	
Cadmium	**57.1**	ug/L	5.0	1	04/01/13 15:05	04/02/13 12:43	7440-43-9	
Chromium	**204**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:43	7440-47-3	
Lead	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:43	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:43	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:43	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:25	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.035**	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:03	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W26 **Lab ID: 5078202006** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:46	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 12:46	7440-39-3	
Cadmium	**83.7**	ug/L	5.0	1	04/01/13 15:05	04/02/13 12:46	7440-43-9	
Chromium	**499**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:46	7440-47-3	
Lead	**45.0**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:46	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:46	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:46	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:27	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.031**	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:04	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W27 **Lab ID: 5078202007** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:54	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 12:54	7440-39-3	
Cadmium	**141**	ug/L	5.0	1	04/01/13 15:05	04/02/13 12:54	7440-43-9	
Chromium	**137**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:54	7440-47-3	
Lead	**14.2**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:54	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:54	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:54	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:36	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.034**	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:08	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W28 **Lab ID: 5078202008** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:57	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 12:57	7440-39-3	
Cadmium	**819**	ug/L	5.0	1	04/01/13 15:05	04/02/13 12:57	7440-43-9	
Chromium	**1680**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:57	7440-47-3	
Lead	**49.1**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:57	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:57	7782-49-2	
Silver	**72.1**	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:57	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:38	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.12**	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:09	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W29 **Lab ID: 5078202009** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:59	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 12:59	7440-39-3	
Cadmium	**112**	ug/L	5.0	1	04/01/13 15:05	04/02/13 12:59	7440-43-9	
Chromium	**98.5**	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:59	7440-47-3	
Lead	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:59	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 12:59	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 12:59	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:40	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.020**	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:10	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-W30 **Lab ID: 5078202010** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:01	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 13:01	7440-39-3	
Cadmium	**62.7**	ug/L	5.0	1	04/01/13 15:05	04/02/13 13:01	7440-43-9	
Chromium	**97.5**	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:01	7440-47-3	
Lead	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:01	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:01	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 13:01	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 11:42	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.071**	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:11	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-Pit 1 **Lab ID: 5078202011** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:04	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 13:04	7440-39-3	
Cadmium	**37.8**	ug/L	5.0	1	04/01/13 15:05	04/02/13 13:04	7440-43-9	
Chromium	**512**	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:04	7440-47-3	
Lead	**29.0**	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:04	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:04	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 13:04	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 12:33	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:12	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078202

Sample: B5-Pit 2 **Lab ID: 5078202012** Collected: 03/28/13 08:00 Received: 03/30/13 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:06	7440-38-2	
Barium	ND	ug/L	100	1	04/01/13 15:05	04/02/13 13:06	7440-39-3	
Cadmium	**11.6**	ug/L	5.0	1	04/01/13 15:05	04/02/13 13:06	7440-43-9	
Chromium	**88.6**	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:06	7440-47-3	
Lead	**14.1**	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:06	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/01/13 15:05	04/02/13 13:06	7782-49-2	
Silver	ND	ug/L	50.0	1	04/01/13 15:05	04/02/13 13:06	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/01/13 12:00	04/02/13 12:35	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1	04/01/13 13:52	04/03/13 13:13	57-12-5	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078202

QC Batch: MERP/4531 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 5078202001, 5078202002, 5078202003, 5078202004, 5078202005, 5078202006, 5078202007, 5078202008, 5078202009, 5078202010

METHOD BLANK: 893397 Matrix: Water
Associated Lab Samples: 5078202001, 5078202002, 5078202003, 5078202004, 5078202005, 5078202006, 5078202007, 5078202008, 5078202009, 5078202010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/02/13 10:44	

LABORATORY CONTROL SAMPLE: 893398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 893399 893400

Parameter	Units	5078046001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	5.1	5.1	103	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078202

QC Batch: MERP/4532 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 5078202011, 5078202012

METHOD BLANK: 893403 | Matrix: Water
Associated Lab Samples: 5078202011, 5078202012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/02/13 11:44	

LABORATORY CONTROL SAMPLE: 893404

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 893405 893406

Parameter	Units	5077938019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	5.2	5.1	103	102	75-125	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 893407 893408

Parameter	Units	5077954005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	5.1	5.0	102	99	75-125	3	20	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078202

QC Batch: MPRP/10968 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 5078202001, 5078202002, 5078202003, 5078202004, 5078202005, 5078202006, 5078202007, 5078202008, 5078202009, 5078202010, 5078202011, 5078202012

METHOD BLANK: 893315 Matrix: Water
Associated Lab Samples: 5078202001, 5078202002, 5078202003, 5078202004, 5078202005, 5078202006, 5078202007, 5078202008, 5078202009, 5078202010, 5078202011, 5078202012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	04/02/13 11:59	
Barium	ug/L	ND	100	04/02/13 11:59	
Cadmium	ug/L	ND	5.0	04/02/13 11:59	
Chromium	ug/L	ND	10.0	04/02/13 11:59	
Lead	ug/L	ND	10.0	04/02/13 11:59	
Selenium	ug/L	ND	10.0	04/02/13 11:59	
Silver	ug/L	ND	50.0	04/02/13 11:59	

LABORATORY CONTROL SAMPLE: 893316

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	1010	101	80-120	
Barium	ug/L	1000	971	97	80-120	
Cadmium	ug/L	1000	984	98	80-120	
Chromium	ug/L	1000	975	98	80-120	
Lead	ug/L	1000	978	98	80-120	
Selenium	ug/L	1000	1010	101	80-120	
Silver	ug/L	500	473	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 893317 893318

Parameter	Units	5078202001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	1010	1050	101	105	75-125	4	20	
Barium	ug/L	ND	1000	1000	974	1010	96	100	75-125	3	20	
Cadmium	ug/L	43.9	1000	1000	1020	1060	98	102	75-125	4	20	
Chromium	ug/L	78.1	1000	1000	1040	1090	96	101	75-125	5	20	
Lead	ug/L	12.6	1000	1000	976	1020	96	100	75-125	4	20	
Selenium	ug/L	ND	1000	1000	1010	1040	101	103	75-125	2	20	
Silver	ug/L	ND	500	500	470	470	94	94	75-125	0	20	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078202

QC Batch: MSV/51751 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 5078202001

METHOD BLANK: 893998 | Matrix: Water
Associated Lab Samples: 5078202001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	5.0	04/02/13 12:30	
1,2-Dichloroethane	ug/L	ND	5.0	04/02/13 12:30	
2-Butanone (MEK)	ug/L	ND	25.0	04/02/13 12:30	
Benzene	ug/L	ND	5.0	04/02/13 12:30	
Carbon tetrachloride	ug/L	ND	5.0	04/02/13 12:30	
Chlorobenzene	ug/L	ND	5.0	04/02/13 12:30	
Chloroform	ug/L	ND	5.0	04/02/13 12:30	
Tetrachloroethene	ug/L	ND	5.0	04/02/13 12:30	
Trichloroethene	ug/L	ND	5.0	04/02/13 12:30	
4-Bromofluorobenzene (S)	%.	100	80-114	04/02/13 12:30	
Dibromofluoromethane (S)	%.	97	79-116	04/02/13 12:30	
Toluene-d8 (S)	%.	93	81-110	04/02/13 12:30	

LABORATORY CONTROL SAMPLE: 893999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	44.8	90	68-127	
1,2-Dichloroethane	ug/L	50	51.7	103	75-128	
2-Butanone (MEK)	ug/L	250	196	78	58-139	
Benzene	ug/L	50	44.8	90	74-122	
Carbon tetrachloride	ug/L	50	28.3	57	56-137	
Chlorobenzene	ug/L	50	43.5	87	78-123	
Chloroform	ug/L	50	50.8	102	78-126	
Tetrachloroethene	ug/L	50	44.2	88	69-130	
Trichloroethene	ug/L	50	49.6	99	76-126	
4-Bromofluorobenzene (S)	%.			104	80-114	
Dibromofluoromethane (S)	%.			103	79-116	
Toluene-d8 (S)	%.			93	81-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 894000 894001

Parameter	Units	5077939063 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	42.0	44.7	84	89	55-145	6	20	
1,2-Dichloroethane	ug/L	ND	50	50	47.7	51.6	95	103	62-138	8	20	
2-Butanone (MEK)	ug/L	ND	250	250	186	226	74	90	37-156	19	20	
Benzene	ug/L	ND	50	50	37.6	41.0	75	82	62-129	9	20	
Carbon tetrachloride	ug/L	ND	50	50	25.9	35.2	52	70	46-142	30	20	R1
Chlorobenzene	ug/L	ND	50	50	26.8	30.2	54	60	49-136	12	20	
Chloroform	ug/L	ND	50	50	45.3	49.3	91	99	54-150	8	20	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078202

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 894000 894001

Parameter	Units	5077939063 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Tetrachloroethene	ug/L	7.4	50	50	31.3	34.9	48	55	33-151	11	20	
Trichloroethene	ug/L	71.7	50	50	93.6	98.6	44	54	50-143	5	20	M0
4-Bromofluorobenzene (S)	%.						101	104	80-114			
Dibromofluoromethane (S)	%.						102	106	79-116			
Toluene-d8 (S)	%.						93	92	81-110			

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078202

QC Batch: OEXT/32360
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 Water MSSV
Associated Lab Samples: 5078202001

METHOD BLANK: 893374
Matrix: Water
Associated Lab Samples: 5078202001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	10.0	04/02/13 14:25	
2,4,5-Trichlorophenol	ug/L	ND	10.0	04/02/13 14:25	
2,4,6-Trichlorophenol	ug/L	ND	10.0	04/02/13 14:25	
2,4-Dinitrotoluene	ug/L	ND	10.0	04/02/13 14:25	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	04/02/13 14:25	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	20.0	04/02/13 14:25	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/02/13 14:25	
Hexachlorobenzene	ug/L	ND	10.0	04/02/13 14:25	
Hexachloroethane	ug/L	ND	10.0	04/02/13 14:25	
Nitrobenzene	ug/L	ND	10.0	04/02/13 14:25	
Pentachlorophenol	ug/L	ND	50.0	04/02/13 14:25	
Pyridine	ug/L	ND	10.0	04/02/13 14:25	
2,4,6-Tribromophenol (S)	%.	101	32-124	04/02/13 14:25	
2-Fluorobiphenyl (S)	%.	75	34-106	04/02/13 14:25	
2-Fluorophenol (S)	%.	34	10-74	04/02/13 14:25	
Nitrobenzene-d5 (S)	%.	81	33-108	04/02/13 14:25	
p-Terphenyl-d14 (S)	%.	95	31-122	04/02/13 14:25	
Phenol-d5 (S)	%.	17	10-56	04/02/13 14:25	

LABORATORY CONTROL SAMPLE: 893375

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	100	62.7	63	30-92	
2,4-Dinitrotoluene	ug/L	100	75.7	76	38-119	
Pentachlorophenol	ug/L	100	87.2	87	14-131	
2,4,6-Tribromophenol (S)	%.			101	32-124	
2-Fluorobiphenyl (S)	%.			81	34-106	
2-Fluorophenol (S)	%.			32	10-74	
Nitrobenzene-d5 (S)	%.			85	33-108	
p-Terphenyl-d14 (S)	%.			93	31-122	
Phenol-d5 (S)	%.			17	10-56	

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Columbus, OH 43215
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Pace Analytical Services, Inc.
7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078202

QC Batch: WETA/9459 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5078202001, 5078202002, 5078202003, 5078202004, 5078202005, 5078202006, 5078202007, 5078202008, 5078202009, 5078202010, 5078202011, 5078202012

METHOD BLANK: 893522 Matrix: Water
Associated Lab Samples: 5078202001, 5078202002, 5078202003, 5078202004, 5078202005, 5078202006, 5078202007, 5078202008, 5078202009, 5078202010, 5078202011, 5078202012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	04/03/13 12:55	

LABORATORY CONTROL SAMPLE: 893523

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.22	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 893524 893525

Parameter	Units	5078202001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.34	.2	.2	0.57	0.60	117	134	90-110	6	20	M3

MATRIX SPIKE SAMPLE: 893526

Parameter	Units	5078202012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.2	0.018	9	90-110	M0

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Columbus, OH 43215
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Pace Analytical Services, Inc.
7726 Moller Road
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QUALIFIERS

Project: Baycote B5-101
Pace Project No.: 5078202

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
R1	RPD value was outside control limits.

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote B5-101
Pace Project No.: 5078202

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5078202001	**B5-W8**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202002	**B5-W9**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202003	**B5-W10**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202004	**B5-W11**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202005	**B5-W17**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202006	**B5-W26**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202007	**B5-W27**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202008	**B5-W28**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202009	**B5-W29**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202010	**B5-W30**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202011	**B5-Pit 1**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202012	**B5-Pit 2**	EPA 3010	MPRP/10968	EPA 6010	ICP/11670
5078202001	**B5-W8**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202002	**B5-W9**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202003	**B5-W10**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202004	**B5-W11**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202005	**B5-W17**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202006	**B5-W26**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202007	**B5-W27**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202008	**B5-W28**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202009	**B5-W29**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202010	**B5-W30**	EPA 7470	MERP/4531	EPA 7470	MERC/4682
5078202011	**B5-Pit 1**	EPA 7470	MERP/4532	EPA 7470	MERC/4683
5078202012	**B5-Pit 2**	EPA 7470	MERP/4532	EPA 7470	MERC/4683
5078202001	**B5-W8**	EPA 3510	OEXT/32360	EPA 8270	MSSV/12195
5078202001	**B5-W8**	EPA 8260	MSV/51751		
5078202001	**B5-W8**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202002	**B5-W9**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202003	**B5-W10**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202004	**B5-W11**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202005	**B5-W17**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202006	**B5-W26**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202007	**B5-W27**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202008	**B5-W28**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202009	**B5-W29**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202010	**B5-W30**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202011	**B5-Pit 1**	EPA 9012	WETA/9459	EPA 9012	WETA/9469
5078202012	**B5-Pit 2**	EPA 9012	WETA/9459	EPA 9012	WETA/9469

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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

1600142

Section A Required Client Information:

Company: Environmental
Address: Restoration
Email To: T. Viehweg@erlle.com
Phone: Fax:
Requested Due Date/TAT: 48hr

Section B Required Project Information:

Report To: T Viehweg
Copy To:
Purchase Order No.: B5-101
Project Name: Baycote
Project Number:

Section C Invoice Information:

Attention: Toby Viehweg
Company Name: ER
Address:
Pace Quote Reference:
Pace Project Manager: K Hunt
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: Mishawaka IN

5078202

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: Total RCRA 8 Metals	Total CN	Total RCRA Volatile	Total RCRA Semi Volatile	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	B5-W8			3-28-13					3									X	X	X			-001
2	B5-W9								2									X	X				-002
3	B5-W10								2									X	X				-003
4	B5-W11								2									X	X				-004
5	B5-W17								2									X	X				-005
6	B5-W26								2									X	X				-006
7	B5-W27								2									X	X				-007
8	B5-W28								2									X	X				-008
9	B5-W29								2									X	X				-009
10	B5-W30								2									X	X				-010
11	B5-Pit1								2									X	X				-011
12	B5-Pit2								2									X	X				-012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Toby Viehweg ER	3-29-13	946	Scott Keller	3.29.13	9:40am	4°C	Y	Y	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY):

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

W/Now Courier 033013@0951 CW

ORIGINAL

*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.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Environmental Restoration Project # 5078202

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other New Courier

Tracking #:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Date/Time 5035A kits placed in freezer

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used 1 2 3 4 5 A B C D E Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable) 4.4c Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 033013 CW

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	5.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	6. 48 hour
Containers Intact:	☑Yes ☐No ☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☐Yes ☑No ☐N/A	8. No sample times on COC but is on containers
All containers needing acid/base pres have been checked? exceptions: VOA, coliform, TOC, O&G	☑Yes ☐No ☐N/A	9. (Circle) HNO3 H2SO4 NaOH HCl B5-W10, B5-W11, B5-W17, & B5-Pit1.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	
Headspace in VOA Vials (>6mm)	☐Yes ☐No ☑N/A	10.
Trip Blank Present:	☐Yes ☐No ☑N/A	11.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Project Manager Review		
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	12.
Sufficient Volume:	☑Yes ☐No ☐N/A	13.
Correct Containers Used:	☐Yes ☑No ☐N/A	14. SVOC clear glass VOC 1L glass w/headspace

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Toby Vichweg Date/Time: 3/30/13

Comments/ Resolution:

VOC OK to proceed? →

VOC OK TO PROCEED, PER TOBY V. via email 4/1 8:22 a.m. VKC.

Project Manager Review: Kenneth Hunt Date: 3/30/13

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

CLIENT: Environmental

COC PAGE 1 of 1

COC ID# 1600142

Project # 5078202

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BG1U	BP3C	Comments
1									1					1	1	
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12									1						1	

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B24

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

April 10, 2013

Mr. Toby Viehweg
Environmental Restoration LLC
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote B5-101
Pace Project No.: 5078528

Dear Mr. Viehweg:
Enclosed are the analytical results for sample(s) received by the laboratory on April 06, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

CERTIFICATIONS

Project: Baycote B5-101
Pace Project No.: 5078528

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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SAMPLE SUMMARY

Project: Baycote B5-101
Pace Project No.: 5078528

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5078528001	**B5-7**	Solid	04/04/13 14:30	04/06/13 09:10
5078528002	**B5-8**	Solid	04/04/13 14:30	04/06/13 09:10

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SAMPLE ANALYTE COUNT

Project: Baycote B5-101
Pace Project No.: 5078528

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5078528001	**B5-7**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078528002	**B5-8**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078528

Sample: B5-7 **Lab ID: 5078528001** Collected: 04/04/13 14:30 Received: 04/06/13 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Arsenic	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 09:56	7440-38-2	
Barium	ND	mg/L	5.0	1	04/09/13 14:17	04/10/13 09:56	7440-39-3	
Cadmium	**2.6**	mg/L	0.050	1	04/09/13 14:17	04/10/13 09:56	7440-43-9	
Chromium	**3.4**	mg/L	0.10	1	04/09/13 14:17	04/10/13 09:56	7440-47-3	
Lead	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 09:56	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 09:56	7782-49-2	1d
Silver	ND	mg/L	0.50	1	04/09/13 14:17	04/10/13 09:56	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Mercury	ND	ug/L	2.0	1	04/09/13 09:22	04/10/13 10:23	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**55.8**	%	0.10	1		04/08/13 07:16		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**64.0**	mg/kg	4.4	4	04/08/13 12:01	04/10/13 11:06	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078528

Sample: B5-8 **Lab ID: 5078528002** Collected: 04/04/13 14:30 Received: 04/06/13 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Arsenic	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:03	7440-38-2	
Barium	ND	mg/L	5.0	1	04/09/13 14:17	04/10/13 10:03	7440-39-3	
Cadmium	**32.1**	mg/L	0.050	1	04/09/13 14:17	04/10/13 10:03	7440-43-9	
Chromium	**4.3**	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:03	7440-47-3	
Lead	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:03	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:03	7782-49-2	1d
Silver	ND	mg/L	0.50	1	04/09/13 14:17	04/10/13 10:03	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Mercury	ND	ug/L	2.0	1	04/09/13 09:22	04/10/13 10:31	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**64.9**	%	0.10	1		04/08/13 07:16		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**317**	mg/kg	7.1	5	04/08/13 12:01	04/10/13 11:12	57-12-5	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078528

QC Batch: MERP/4545 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5078528001, 5078528002

METHOD BLANK: 896969 | Matrix: Water
Associated Lab Samples: 5078528001, 5078528002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/10/13 10:17	

LABORATORY CONTROL SAMPLE & LCSD: 896970 896971

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	15.6	15.1	104	101	80-120	3	20	

MATRIX SPIKE SAMPLE: 896972

Parameter	Units	5078528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	14.2	94	75-125	

MATRIX SPIKE SAMPLE: 896973

Parameter	Units	5078339001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	14.8	99	75-125	

MATRIX SPIKE SAMPLE: 896974

Parameter	Units	5078529002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.4	102	75-125	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078528

QC Batch: MPRP/11006 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5078528001, 5078528002

METHOD BLANK: 896938 | Matrix: Water
Associated Lab Samples: 5078528001, 5078528002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	04/10/13 09:39	
Barium	mg/L	ND	5.0	04/10/13 09:39	
Cadmium	mg/L	ND	0.050	04/10/13 09:39	
Chromium	mg/L	ND	0.10	04/10/13 09:39	
Lead	mg/L	ND	0.10	04/10/13 09:39	
Selenium	mg/L	ND	0.10	04/10/13 09:39	1d
Silver	mg/L	ND	0.50	04/10/13 09:39	

LABORATORY CONTROL SAMPLE & LCSD: 896939 896940

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.5	10.6	105	106	80-120	1	20	
Barium	mg/L	10	9.9	9.8	99	98	80-120	0	20	
Cadmium	mg/L	10	10.1	10.0	101	100	80-120	0	20	
Chromium	mg/L	10	10	10	100	100	80-120	0	20	
Lead	mg/L	10	10.0	10.0	100	100	80-120	0	20	
Selenium	mg/L	10	10.2	10.2	102	102	80-120	0	20	1d
Silver	mg/L	5	4.9	4.9	98	99	80-120	1	20	

MATRIX SPIKE SAMPLE: 896941

Parameter	Units	5078528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.9	109	50-150	
Barium	mg/L	ND	10	10.5	100	50-150	
Cadmium	mg/L	2.6	10	13.1	105	50-150	
Chromium	mg/L	3.4	10	13.4	101	50-150	
Lead	mg/L	ND	10	10.1	101	50-150	
Selenium	mg/L	ND	10	10.6	106	50-150	1d
Silver	mg/L	ND	5	5.1	102	50-150	

MATRIX SPIKE SAMPLE: 896942

Parameter	Units	5078529002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.7	107	50-150	
Barium	mg/L	ND	10	10.5	100	50-150	
Cadmium	mg/L	7.6	10	17.6	100	50-150	
Chromium	mg/L	6.2	10	16.0	98	50-150	
Lead	mg/L	ND	10	10	100	50-150	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078528

MATRIX SPIKE SAMPLE: 896942

Parameter	Units	5078529002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	10.4	104	50-150	1d
Silver	mg/L	ND	5	5.0	99	50-150	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078528

QC Batch: PMST/8113
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5078528001, 5078528002

SAMPLE DUPLICATE: 896478

Parameter	Units	5078528001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	55.8	55.1	1	5	

SAMPLE DUPLICATE: 896482

Parameter	Units	5078486006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	55.3	55.0	1	5	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078528

QC Batch: WETA/9513 | Analysis Method: EPA 9012
QC Batch Method: EPA 9012 | Analysis Description: 9012 Cyanide
Associated Lab Samples: 5078528001, 5078528002

METHOD BLANK: 896536 | Matrix: Solid
Associated Lab Samples: 5078528001, 5078528002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.49	04/10/13 10:07	

LABORATORY CONTROL SAMPLE: 896537

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	9.8	10.3	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 896538 896539

Parameter	Units	5078528001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	64.0	21.9	21.9	77.2	89.0	60	114	90-110	14	20	M3

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QUALIFIERS

Project: Baycote B5-101
Pace Project No.: 5078528

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1d	ICSA greater than +2 times of reporting limit(RL). Reported samples are less than RL. Results unaffected by high bias. 041013LLB
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote B5-101
Pace Project No.: 5078528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5078528001	**B5-7**	EPA 3010	MPRP/11006	EPA 6010	ICP/11727
5078528002	**B5-8**	EPA 3010	MPRP/11006	EPA 6010	ICP/11727
5078528001	**B5-7**	EPA 7470	MERP/4545	EPA 7470	MERC/4701
5078528002	**B5-8**	EPA 7470	MERP/4545	EPA 7470	MERC/4701
5078528001	**B5-7**	ASTM D2974-87	PMST/8113		
5078528002	**B5-8**	ASTM D2974-87	PMST/8113		
5078528001	**B5-7**	EPA 9012	WETA/9513	EPA 9012	WETA/9520
5078528002	**B5-8**	EPA 9012	WETA/9513	EPA 9012	WETA/9520

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CHAIN-OF-CUSTODY / Analytical Request Document

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

NOW

Page: 1 of 1

1600143

Section A Required Client Information:

Company: Environmental Restoration
Address:
Email To: tiviehweg@erlkc
Phone: 317 446 6325 Fax:
Requested Due Date/TAT: 48 hr

Section B Required Project Information:

Report To: T Viehweg
Copy To:
Purchase Order No.: B5-101
Project Name: Baycote
Project Number:

Section C Invoice Information:

Attention: Bby Viehweg
Company Name: Environmental Restoration
Address:
Pace Quote Reference:
Pace Project Manager: K Hunt
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: IN

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): TCLP Metals; Total Cyanide

ITEM #	SAMPLE ID	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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: TCLP Metals	Total Cyanide	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	B5-7	SL	G			4-4-13	1430		1	✓								Y	Y		5078528 001
2	B5-8	SL	G			4-4-13	1430		1	✓								Y	Y		002
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Tom Viehweg	4-5-13	938	NOW COURIER	4-5-13	9:40am	
				James Jones	4/6	9:10	4.4

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: T Viehweg

SIGNATURE of SAMPLER: T Viehweg

DATE Signed (MM/DD/YY): 4-4-13

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

ORIGINAL

*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.

F-ALL-Q-020rev.07, 15-May-2007

Sample Condition Upon Receipt

Pace Analytical

Client Name: Enviro Rest Now

Project # 5078528

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Date/Time 5035A kits placed in freezer

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used 1 2 3 ~~4~~ 6 A B C D E Type of Ice: ~~Wet~~ Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 4.4 Ice Visible in Sample Containers: ☐ yes ☑ no

(Corrected, if applicable)

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 4-6-13 JJ

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	5.
Rush Turn Around Time Requested:	☑Yes	☐No	☐N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No	☐N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☐Yes	☐No	☑N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	10.
Trip Blank Present:	☐Yes	☐No	☑N/A	11.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: M M Bell Date: 4/6/13

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

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CLIENT: Enviro Rest

COC PAGE 1 of 1
COC ID#

Project # 5078528

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H			Comments
1			1													
2			1													
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B25

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April 11, 2013

Mr. Toby Viehweg
Environmental Restoration LLC
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote B5-101
Pace Project No.: 5078529

Dear Mr. Viehweg:
Enclosed are the analytical results for sample(s) received by the laboratory on April 06, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

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1233 Dublin Road
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(614)486-5421

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7726 Moller Road
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CERTIFICATIONS

Project: Baycote B5-101
Pace Project No.: 5078529

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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SAMPLE SUMMARY

Project: Baycote B5-101
Pace Project No.: 5078529

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5078529001	**B5-01**	Solid	04/04/13 15:00	04/06/13 09:10
5078529002	**B5-02**	Solid	04/04/13 15:00	04/06/13 09:10
5078529003	**B5-03**	Solid	04/04/13 15:00	04/06/13 09:10
5078529004	**B5-04**	Solid	04/04/13 15:00	04/06/13 09:10
5078529005	**B5-05**	Solid	04/04/13 15:00	04/06/13 09:10
5078529006	**B5-06**	Solid	04/04/13 15:00	04/06/13 09:10

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SAMPLE ANALYTE COUNT

Project: Baycote B5-101
Pace Project No.: 5078529

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5078529001	**B5-01**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078529002	**B5-02**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078529003	**B5-03**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078529004	**B5-04**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078529005	**B5-05**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078529006	**B5-06**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078529

Sample: B5-01 **Lab ID: 5078529001** Collected: 04/04/13 15:00 Received: 04/06/13 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Arsenic	ND	mg/L	0.10	1	04/09/13 09:12	04/10/13 09:22	7440-38-2	
Barium	ND	mg/L	5.0	1	04/09/13 09:12	04/10/13 09:22	7440-39-3	
Cadmium	**0.25**	mg/L	0.050	1	04/09/13 09:12	04/10/13 09:22	7440-43-9	
Chromium	**0.26**	mg/L	0.10	1	04/09/13 09:12	04/10/13 09:22	7440-47-3	
Lead	ND	mg/L	0.10	1	04/09/13 09:12	04/10/13 09:22	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/09/13 09:12	04/10/13 09:22	7782-49-2	1d
Silver	ND	mg/L	0.50	1	04/09/13 09:12	04/10/13 09:22	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Mercury	ND	ug/L	2.0	1	04/09/13 09:20	04/10/13 10:10	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**16.6**	%	0.10	1		04/08/13 07:17		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**90.7**	mg/kg	2.9	5	04/08/13 12:01	04/10/13 11:13	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078529

Sample: B5-02 **Lab ID: 5078529002** Collected: 04/04/13 15:00 Received: 04/06/13 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Arsenic	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:06	7440-38-2	
Barium	ND	mg/L	5.0	1	04/09/13 14:17	04/10/13 10:06	7440-39-3	
Cadmium	**7.6**	mg/L	0.050	1	04/09/13 14:17	04/10/13 10:06	7440-43-9	
Chromium	**6.2**	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:06	7440-47-3	
Lead	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:06	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:06	7782-49-2	1d
Silver	ND	mg/L	0.50	1	04/09/13 14:17	04/10/13 10:06	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Mercury	ND	ug/L	2.0	1	04/09/13 09:22	04/10/13 10:37	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**72.6**	%	0.10	1		04/08/13 07:17		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**222**	mg/kg	7.1	4	04/08/13 12:01	04/10/13 11:14	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078529

Sample: B5-03 **Lab ID: 5078529003** Collected: 04/04/13 15:00 Received: 04/06/13 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Arsenic	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:20	7440-38-2	
Barium	ND	mg/L	5.0	1	04/09/13 14:17	04/10/13 10:20	7440-39-3	
Cadmium	**31.0**	mg/L	0.050	1	04/09/13 14:17	04/10/13 10:20	7440-43-9	
Chromium	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:20	7440-47-3	
Lead	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:20	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:20	7782-49-2	1d
Silver	ND	mg/L	0.50	1	04/09/13 14:17	04/10/13 10:20	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Mercury	ND	ug/L	2.0	1	04/09/13 09:22	04/10/13 10:41	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**25.3**	%	0.10	1		04/08/13 07:17		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**447**	mg/kg	13.0	20	04/08/13 12:01	04/10/13 11:26	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078529

Sample: B5-04 **Lab ID: 5078529004** Collected: 04/04/13 15:00 Received: 04/06/13 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Arsenic	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:23	7440-38-2	
Barium	ND	mg/L	5.0	1	04/09/13 14:17	04/10/13 10:23	7440-39-3	
Cadmium	ND	mg/L	0.050	1	04/09/13 14:17	04/10/13 10:23	7440-43-9	
Chromium	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:23	7440-47-3	
Lead	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:23	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:23	7782-49-2	1d
Silver	ND	mg/L	0.50	1	04/09/13 14:17	04/10/13 10:23	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Mercury	ND	ug/L	2.0	1	04/09/13 09:22	04/10/13 10:43	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**20.3**	%	0.10	1		04/08/13 07:17		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**5.3**	mg/kg	0.62	1	04/08/13 12:01	04/10/13 10:16	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078529

Sample: B5-05 **Lab ID: 5078529005** Collected: 04/04/13 15:00 Received: 04/06/13 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Arsenic	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:37	7440-38-2	
Barium	ND	mg/L	5.0	1	04/09/13 14:17	04/10/13 10:37	7440-39-3	
Cadmium	**92.2**	mg/L	0.050	1	04/09/13 14:17	04/10/13 10:37	7440-43-9	
Chromium	**0.93**	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:37	7440-47-3	
Lead	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:37	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/09/13 14:17	04/10/13 10:37	7782-49-2	1d
Silver	ND	mg/L	0.50	1	04/09/13 14:17	04/10/13 10:37	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Mercury	ND	ug/L	2.0	1	04/09/13 09:22	04/10/13 10:45	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**57.1**	%	0.10	1		04/08/13 07:17		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**1040**	mg/kg	22.9	20	04/08/13 12:01	04/10/13 11:27	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078529

Sample: B5-06 **Lab ID: 5078529006** Collected: 04/04/13 15:00 Received: 04/06/13 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Arsenic	ND	mg/L	0.10	1	04/09/13 09:12	04/10/13 09:25	7440-38-2	
Barium	ND	mg/L	5.0	1	04/09/13 09:12	04/10/13 09:25	7440-39-3	
Cadmium	**1.1**	mg/L	0.050	1	04/09/13 09:12	04/10/13 09:25	7440-43-9	
Chromium	**0.90**	mg/L	0.10	1	04/09/13 09:12	04/10/13 09:25	7440-47-3	
Lead	**0.40**	mg/L	0.10	1	04/09/13 09:12	04/10/13 09:25	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/09/13 09:12	04/10/13 09:25	7782-49-2	1d
Silver	ND	mg/L	0.50	1	04/09/13 09:12	04/10/13 09:25	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/08/13 00:00							
Mercury	ND	ug/L	2.0	1	04/09/13 09:20	04/10/13 10:15	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**2.2**	%	0.10	1		04/08/13 07:17		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**10**	mg/kg	0.50	1	04/08/13 12:01	04/10/13 10:21	57-12-5	

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(614)486-5421

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078529

QC Batch: MERP/4544 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5078529001, 5078529006

METHOD BLANK: 896965 | Matrix: Water
Associated Lab Samples: 5078529001, 5078529006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/10/13 10:04	

LABORATORY CONTROL SAMPLE & LCSD: 896966 896967

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	15.3	15.6	102	104	80-120	2	20	

MATRIX SPIKE SAMPLE: 896968

Parameter	Units	5078529001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.2	102	75-125	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078529

QC Batch: MERP/4545 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5078529002, 5078529003, 5078529004, 5078529005

METHOD BLANK: 896969 Matrix: Water
Associated Lab Samples: 5078529002, 5078529003, 5078529004, 5078529005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/10/13 10:17	

LABORATORY CONTROL SAMPLE & LCSD: 896970 896971

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	15.6	15.1	104	101	80-120	3	20	

MATRIX SPIKE SAMPLE: 896972

Parameter	Units	5078528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	14.2	94	75-125	

MATRIX SPIKE SAMPLE: 896973

Parameter	Units	5078339001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	14.8	99	75-125	

MATRIX SPIKE SAMPLE: 896974

Parameter	Units	5078529002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.4	102	75-125	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078529

QC Batch: MPRP/11005 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5078529001, 5078529006

METHOD BLANK: 896932 | Matrix: Water
Associated Lab Samples: 5078529001, 5078529006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	04/10/13 09:12	
Barium	mg/L	ND	5.0	04/10/13 09:12	
Cadmium	mg/L	ND	0.050	04/10/13 09:12	
Chromium	mg/L	ND	0.10	04/10/13 09:12	
Lead	mg/L	ND	0.10	04/10/13 09:12	
Selenium	mg/L	ND	0.10	04/10/13 09:12	1d
Silver	mg/L	ND	0.50	04/10/13 09:12	

LABORATORY CONTROL SAMPLE & LCSD: 896933 896934

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.5	10.3	105	103	80-120	2	20	
Barium	mg/L	10	9.8	9.7	98	97	80-120	1	20	
Cadmium	mg/L	10	10.0	9.9	100	99	80-120	1	20	
Chromium	mg/L	10	9.9	9.9	99	99	80-120	0	20	
Lead	mg/L	10	9.9	9.7	99	97	80-120	2	20	
Selenium	mg/L	10	10.2	10.0	102	100	80-120	2	20	1d
Silver	mg/L	5	4.9	4.9	98	98	80-120	0	20	

MATRIX SPIKE SAMPLE: 896935

Parameter	Units	5078529006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.2	102	50-150	
Barium	mg/L	ND	10	10.3	96	50-150	
Cadmium	mg/L	1.1	10	10.9	98	50-150	
Chromium	mg/L	0.90	10	10.5	96	50-150	
Lead	mg/L	0.40	10	10.1	97	50-150	
Selenium	mg/L	ND	10	10	100	50-150	1d
Silver	mg/L	ND	5	4.8	96	50-150	

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Columbus, OH 43215
(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078529

QC Batch: MPRP/11006 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5078529002, 5078529003, 5078529004, 5078529005

METHOD BLANK: 896938 Matrix: Water
Associated Lab Samples: 5078529002, 5078529003, 5078529004, 5078529005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	04/10/13 09:39	
Barium	mg/L	ND	5.0	04/10/13 09:39	
Cadmium	mg/L	ND	0.050	04/10/13 09:39	
Chromium	mg/L	ND	0.10	04/10/13 09:39	
Lead	mg/L	ND	0.10	04/10/13 09:39	
Selenium	mg/L	ND	0.10	04/10/13 09:39	1d
Silver	mg/L	ND	0.50	04/10/13 09:39	

LABORATORY CONTROL SAMPLE & LCSD: 896939 896940

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.5	10.6	105	106	80-120	1	20	
Barium	mg/L	10	9.9	9.8	99	98	80-120	0	20	
Cadmium	mg/L	10	10.1	10.0	101	100	80-120	0	20	
Chromium	mg/L	10	10	10	100	100	80-120	0	20	
Lead	mg/L	10	10.0	10.0	100	100	80-120	0	20	
Selenium	mg/L	10	10.2	10.2	102	102	80-120	0	20	1d
Silver	mg/L	5	4.9	4.9	98	99	80-120	1	20	

MATRIX SPIKE SAMPLE: 896941

Parameter	Units	5078528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.9	109	50-150	
Barium	mg/L	ND	10	10.5	100	50-150	
Cadmium	mg/L	2.6	10	13.1	105	50-150	
Chromium	mg/L	3.4	10	13.4	101	50-150	
Lead	mg/L	ND	10	10.1	101	50-150	
Selenium	mg/L	ND	10	10.6	106	50-150	1d
Silver	mg/L	ND	5	5.1	102	50-150	

MATRIX SPIKE SAMPLE: 896942

Parameter	Units	5078529002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.7	107	50-150	
Barium	mg/L	ND	10	10.5	100	50-150	
Cadmium	mg/L	7.6	10	17.6	100	50-150	
Chromium	mg/L	6.2	10	16.0	98	50-150	
Lead	mg/L	ND	10	10	100	50-150	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078529

MATRIX SPIKE SAMPLE: 896942

Parameter	Units	5078529002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	10.4	104	50-150	1d
Silver	mg/L	ND	5	5.0	99	50-150	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078529

QC Batch: PMST/8113 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5078529001, 5078529002, 5078529003, 5078529004, 5078529005, 5078529006

SAMPLE DUPLICATE: 896478

Parameter	Units	5078528001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	55.8	55.1	1	5	

SAMPLE DUPLICATE: 896482

Parameter	Units	5078486006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	55.3	55.0	1	5	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078529

QC Batch: WETA/9513 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide
Associated Lab Samples: 5078529001, 5078529002, 5078529003, 5078529004, 5078529005, 5078529006

METHOD BLANK: 896536 Matrix: Solid
Associated Lab Samples: 5078529001, 5078529002, 5078529003, 5078529004, 5078529005, 5078529006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.49	04/10/13 10:07	

LABORATORY CONTROL SAMPLE: 896537

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	9.8	10.3	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 896538 896539

Parameter	Units	5078528001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	64.0	21.9	21.9	77.2	89.0	60	114	90-110	14	20	M3

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QUALIFIERS

Project: Baycote B5-101
Pace Project No.: 5078529

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1d	ICSA greater than +2 times of reporting limit(RL). Reported samples are less than RL. Results unaffected by high bias. 041013LLB
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote B5-101
Pace Project No.: 5078529

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5078529001	**B5-01**	EPA 3010	MPRP/11005	EPA 6010	ICP/11726
5078529002	**B5-02**	EPA 3010	MPRP/11006	EPA 6010	ICP/11727
5078529003	**B5-03**	EPA 3010	MPRP/11006	EPA 6010	ICP/11727
5078529004	**B5-04**	EPA 3010	MPRP/11006	EPA 6010	ICP/11727
5078529005	**B5-05**	EPA 3010	MPRP/11006	EPA 6010	ICP/11727
5078529006	**B5-06**	EPA 3010	MPRP/11005	EPA 6010	ICP/11726
5078529001	**B5-01**	EPA 7470	MERP/4544	EPA 7470	MERC/4700
5078529002	**B5-02**	EPA 7470	MERP/4545	EPA 7470	MERC/4701
5078529003	**B5-03**	EPA 7470	MERP/4545	EPA 7470	MERC/4701
5078529004	**B5-04**	EPA 7470	MERP/4545	EPA 7470	MERC/4701
5078529005	**B5-05**	EPA 7470	MERP/4545	EPA 7470	MERC/4701
5078529006	**B5-06**	EPA 7470	MERP/4544	EPA 7470	MERC/4700
5078529001	**B5-01**	ASTM D2974-87	PMST/8113		
5078529002	**B5-02**	ASTM D2974-87	PMST/8113		
5078529003	**B5-03**	ASTM D2974-87	PMST/8113		
5078529004	**B5-04**	ASTM D2974-87	PMST/8113		
5078529005	**B5-05**	ASTM D2974-87	PMST/8113		
5078529006	**B5-06**	ASTM D2974-87	PMST/8113		
5078529001	**B5-01**	EPA 9012	WETA/9513	EPA 9012	WETA/9520
5078529002	**B5-02**	EPA 9012	WETA/9513	EPA 9012	WETA/9520
5078529003	**B5-03**	EPA 9012	WETA/9513	EPA 9012	WETA/9520
5078529004	**B5-04**	EPA 9012	WETA/9513	EPA 9012	WETA/9520
5078529005	**B5-05**	EPA 9012	WETA/9513	EPA 9012	WETA/9520
5078529006	**B5-06**	EPA 9012	WETA/9513	EPA 9012	WETA/9520

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Now

Page: 1 of 1

1600141

Section A Required Client Information:

Company: Environmental Rest.
Address:
Email To: T.Vieht weg@erllc.com
Phone: 312 446 6325 Fax:
Requested Due Date/TAT: 5DAY

Section B Required Project Information:

Report To: T.Vieht weg@erllc.com
Copy To:
Purchase Order No.: B5-101
Project Name: Baycote
Project Number:

Section C Invoice Information:

Attention: T Vieht weg
Company Name: Environmental Rest.
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: IN

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED 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): TCLP Metals	Total Cyanide	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 5078529
1	B5-01	SL	G	4-4-13	1600				1	✓								X	X		001
2	B5-02	SL	G	↓	↓				1	✓								X	X		002
3	B5-03	SL	G						1	✓								X	X		003
4	B5-04	SL	G						1	✓								X	X		004
5	B5-05	SL	G						1	✓								X	X		005
6	B5-06	SL	G						1	✓								X	X		006
7	~~B5-07~~																				
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Tom Vieht	4-5-13	937	Now courier	4-5-13	9:40am				
				James Jones	4/6	9:10	4.4			

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

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tom Vieht weg

SIGNATURE of SAMPLER: Tom Vieht

DATE Signed (MM/DD/YY): 4-4-13

*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.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Envi Rest Now Project # 5078529

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Date/Time 5035A kits placed in freezer _____

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used ☑ 2 3 4 6 A B C D E Type of Ice: ☑ Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable) 4.4 Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 4-6-13 JN

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	5.
Rush Turn Around Time Requested:	☑Yes	☐No	☐N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No	☐N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☐Yes	☐No	☑N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	10.
Trip Blank Present:	☐Yes	☐No	☑N/A	11.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Project Manager Review:				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 4/6/13

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

Pace Analytical
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CLIENT: Enviro Rest

COC PAGE 1 of 1
COC ID#

Project # 5078

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H		Comments
1			1												
2			1												
3			1												
4			1												
5			1												
6			1												
7															
8															
9															
10															
11															
12															

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B26

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

April 17, 2013

Mr. Toby Viehweg
Environmental Restoration LLC
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote B5-101
Pace Project No.: 5078790

Dear Mr. Viehweg:
Enclosed are the analytical results for sample(s) received by the laboratory on April 12, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

CERTIFICATIONS

Project: Baycote B5-101
Pace Project No.: 5078790

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

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7726 Moller Road
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(317)875-5894

SAMPLE SUMMARY

Project: Baycote B5-101
Pace Project No.: 5078790

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5078790001	**B5-HLT**	Water	04/10/13 17:00	04/12/13 07:30
5078790002	**B5-NLT**	Water	04/10/13 17:00	04/12/13 07:30
5078790003	**B5-12119**	Solid	04/10/13 17:00	04/12/13 07:30
5078790004	**B5-ANW**	Solid	04/10/13 17:00	04/12/13 07:30
5078790005	**B5-29130**	Solid	04/10/13 17:00	04/12/13 07:30
5078790006	**B5-11118**	Solid	04/10/13 17:00	04/12/13 07:30

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1233 Dublin Road
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7726 Moller Road
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SAMPLE ANALYTE COUNT

Project: Baycote B5-101
Pace Project No.: 5078790

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5078790001	**B5-HLT**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078790002	**B5-NLT**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5078790003	**B5-12119**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078790004	**B5-ANW**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078790005	**B5-29130**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5078790006	**B5-11118**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078790

Sample: B5-HLT **Lab ID: 5078790001** Collected: 04/10/13 17:00 Received: 04/12/13 07:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	200	20	04/13/13 09:20	04/15/13 19:18	7440-38-2	D3
Barium	ND	ug/L	200	2	04/13/13 09:20	04/15/13 19:07	7440-39-3	D3
Cadmium	**24800**	ug/L	10.0	2	04/13/13 09:20	04/15/13 19:07	7440-43-9	D3
Chromium	**581**	ug/L	20.0	2	04/13/13 09:20	04/15/13 19:07	7440-47-3	D3
Lead	ND	ug/L	200	20	04/13/13 09:20	04/15/13 19:18	7439-92-1	D3
Selenium	ND	ug/L	200	20	04/13/13 09:20	04/15/13 19:18	7782-49-2	D3
Silver	ND	ug/L	100	2	04/13/13 09:20	04/15/13 19:07	7440-22-4	D3
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/15/13 09:55	04/16/13 11:13	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.34**	mg/L	0.050	5	04/16/13 08:13	04/16/13 11:07	57-12-5	

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7726 Moller Road
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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078790

Sample: B5-NLT **Lab ID: 5078790002** Collected: 04/10/13 17:00 Received: 04/12/13 07:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**12.8**	ug/L	10.0	1	04/13/13 09:20	04/15/13 16:10	7440-38-2	
Barium	ND	ug/L	100	1	04/13/13 09:20	04/15/13 16:10	7440-39-3	
Cadmium	**72.0**	ug/L	5.0	1	04/13/13 09:20	04/15/13 16:10	7440-43-9	
Chromium	**142**	ug/L	10.0	1	04/13/13 09:20	04/15/13 16:10	7440-47-3	
Lead	ND	ug/L	10.0	1	04/13/13 09:20	04/15/13 16:10	7439-92-1	
Selenium	**14.8**	ug/L	10.0	1	04/13/13 09:20	04/15/13 16:10	7782-49-2	
Silver	ND	ug/L	50.0	1	04/13/13 09:20	04/15/13 16:10	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/15/13 09:55	04/16/13 11:15	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**1.8**	mg/L	0.10	1	04/16/13 08:13	04/16/13 10:44	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078790

Sample: B5-12119 **Lab ID: 5078790003** Collected: 04/10/13 17:00 Received: 04/12/13 07:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/12/13 13:10							
Arsenic	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 12:32	7440-38-2	
Barium	ND	mg/L	5.0	1	04/13/13 15:30	04/16/13 12:32	7440-39-3	
Cadmium	**5.2**	mg/L	0.050	1	04/13/13 15:30	04/16/13 12:32	7440-43-9	
Chromium	**0.20**	mg/L	0.10	1	04/13/13 15:30	04/16/13 12:32	7440-47-3	
Lead	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 12:32	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 12:32	7782-49-2	
Silver	ND	mg/L	0.50	1	04/13/13 15:30	04/16/13 12:32	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/12/13 13:10							
Mercury	ND	ug/L	2.0	1	04/15/13 09:55	04/16/13 10:32	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**46.0**	%	0.10	1		04/12/13 12:15		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**18.0**	mg/kg	0.89	1	04/12/13 12:15	04/16/13 10:15	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078790

Sample: B5-ANW **Lab ID: 5078790004** Collected: 04/10/13 17:00 Received: 04/12/13 07:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/12/13 13:10							
Arsenic	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 12:39	7440-38-2	
Barium	ND	mg/L	5.0	1	04/13/13 15:30	04/16/13 12:39	7440-39-3	
Cadmium	**0.48**	mg/L	0.050	1	04/13/13 15:30	04/16/13 12:39	7440-43-9	
Chromium	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 12:39	7440-47-3	
Lead	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 12:39	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 12:39	7782-49-2	
Silver	ND	mg/L	0.50	1	04/13/13 15:30	04/16/13 12:39	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/12/13 13:10							
Mercury	ND	ug/L	2.0	1	04/15/13 09:55	04/16/13 10:36	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**27.3**	%	0.10	1		04/12/13 12:15		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**79.7**	mg/kg	3.3	5	04/12/13 12:15	04/16/13 11:03	57-12-5	

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7726 Moller Road
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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078790

Sample: B5-29130 **Lab ID: 5078790005** Collected: 04/10/13 17:00 Received: 04/12/13 07:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/12/13 13:10							
Arsenic	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 11:22	7440-38-2	
Barium	ND	mg/L	5.0	1	04/13/13 15:30	04/16/13 11:22	7440-39-3	
Cadmium	**5.5**	mg/L	0.050	1	04/13/13 15:30	04/16/13 11:22	7440-43-9	
Chromium	**0.14**	mg/L	0.10	1	04/13/13 15:30	04/16/13 11:22	7440-47-3	
Lead	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 11:22	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 11:22	7782-49-2	
Silver	ND	mg/L	0.50	1	04/13/13 15:30	04/16/13 11:22	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/12/13 13:10							
Mercury	ND	ug/L	2.0	1	04/15/13 09:55	04/16/13 10:48	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**42.3**	%	0.10	1		04/12/13 12:16		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**105**	mg/kg	4.2	5	04/12/13 12:15	04/16/13 11:04	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote B5-101
Pace Project No.: 5078790

Sample: B5-11118 **Lab ID: 5078790006** Collected: 04/10/13 17:00 Received: 04/12/13 07:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/12/13 13:10							
Arsenic	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 11:43	7440-38-2	
Barium	ND	mg/L	5.0	1	04/13/13 15:30	04/16/13 11:43	7440-39-3	
Cadmium	**3.5**	mg/L	0.050	1	04/13/13 15:30	04/16/13 11:43	7440-43-9	
Chromium	**0.79**	mg/L	0.10	1	04/13/13 15:30	04/16/13 11:43	7440-47-3	
Lead	**0.46**	mg/L	0.10	1	04/13/13 15:30	04/16/13 11:43	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/13/13 15:30	04/16/13 11:43	7782-49-2	
Silver	ND	mg/L	0.50	1	04/13/13 15:30	04/16/13 11:43	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/12/13 13:10							
Mercury	ND	ug/L	2.0	1	04/15/13 09:55	04/16/13 10:52	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**65.6**	%	0.10	1		04/12/13 12:16		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**83.5**	mg/kg	7.1	5	04/12/13 12:15	04/16/13 11:06	57-12-5	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: MERP/4552 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5078790003, 5078790004

METHOD BLANK: 899717 | Matrix: Water
Associated Lab Samples: 5078790003, 5078790004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/16/13 10:19	

LABORATORY CONTROL SAMPLE & LCSD: 899718 899719

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	16.8	16.8	112	112	80-120	0	20	

MATRIX SPIKE SAMPLE: 899720

Parameter	Units	5078590028 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	17.3	115	75-125	

MATRIX SPIKE SAMPLE: 899721

Parameter	Units	5078790003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	16.4	110	75-125	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: MERP/4553
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5078790005, 5078790006

METHOD BLANK: 899722
Matrix: Water
Associated Lab Samples: 5078790005, 5078790006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/16/13 10:38	

LABORATORY CONTROL SAMPLE & LCSD: 899723 899724

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	14.6	16.4	97	110	80-120	12	20	

MATRIX SPIKE SAMPLE: 899725

Parameter	Units	5078790005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	16.0	107	75-125	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: MERP/4554 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 5078790001, 5078790002

METHOD BLANK: 899777 Matrix: Water
Associated Lab Samples: 5078790001, 5078790002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/16/13 10:54	

LABORATORY CONTROL SAMPLE: 899778

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.2	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 899779 899780

Parameter	Units	5078715005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	5.2	5.3	104	105	75-125	1	20	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: MPRP/11038 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5078790003, 5078790004

METHOD BLANK: 899704 | Matrix: Water
Associated Lab Samples: 5078790003, 5078790004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	04/16/13 11:46	
Barium	mg/L	ND	5.0	04/16/13 11:46	
Cadmium	mg/L	ND	0.050	04/16/13 11:46	
Chromium	mg/L	ND	0.10	04/16/13 11:46	
Lead	mg/L	ND	0.10	04/16/13 11:46	
Selenium	mg/L	ND	0.10	04/16/13 11:46	
Silver	mg/L	ND	0.50	04/16/13 11:46	

LABORATORY CONTROL SAMPLE & LCSD: 899705 899706

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	9.7	10	97	100	80-120	2	20	
Barium	mg/L	10	9.3	10	93	100	80-120	7	20	
Cadmium	mg/L	10	9.3	9.5	93	95	80-120	2	20	
Chromium	mg/L	10	9.3	9.6	93	96	80-120	3	20	
Lead	mg/L	10	9.2	9.5	92	95	80-120	3	20	
Selenium	mg/L	10	9.4	9.6	94	96	80-120	3	20	
Silver	mg/L	5	4.6	4.7	92	94	80-120	2	20	

MATRIX SPIKE SAMPLE: 899707

Parameter	Units	5078590028 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.2	101	50-150	
Barium	mg/L	ND	10	12.0	97	50-150	
Cadmium	mg/L	ND	10	9.8	98	50-150	
Chromium	mg/L	ND	10	9.7	97	50-150	
Lead	mg/L	0.32	10	9.9	96	50-150	
Selenium	mg/L	ND	10	9.8	98	50-150	
Silver	mg/L	ND	5	4.8	96	50-150	

MATRIX SPIKE SAMPLE: 899708

Parameter	Units	5078790003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.9	99	50-150	
Barium	mg/L	ND	10	9.5	93	50-150	
Cadmium	mg/L	5.2	10	14.7	95	50-150	
Chromium	mg/L	0.20	10	9.4	92	50-150	
Lead	mg/L	ND	10	9.1	91	50-150	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

MATRIX SPIKE SAMPLE: 899708

Parameter	Units	5078790003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	9.5	95	50-150	
Silver	mg/L	ND	5	4.6	93	50-150	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: MPRP/11039 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5078790005, 5078790006

METHOD BLANK: 899709 | Matrix: Water
Associated Lab Samples: 5078790005, 5078790006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	04/16/13 11:12	
Barium	mg/L	ND	5.0	04/16/13 11:12	
Cadmium	mg/L	ND	0.050	04/16/13 11:12	
Chromium	mg/L	ND	0.10	04/16/13 11:12	
Lead	mg/L	ND	0.10	04/16/13 11:12	
Selenium	mg/L	ND	0.10	04/16/13 11:12	
Silver	mg/L	ND	0.50	04/16/13 11:12	

LABORATORY CONTROL SAMPLE & LCSD: 899710 899711

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	9.9	9.7	99	97	80-120	2	20	
Barium	mg/L	10	9.5	9.4	95	94	80-120	1	20	
Cadmium	mg/L	10	9.5	9.3	95	93	80-120	2	20	
Chromium	mg/L	10	9.6	9.5	96	95	80-120	1	20	
Lead	mg/L	10	9.6	9.4	96	94	80-120	2	20	
Selenium	mg/L	10	9.6	9.4	96	94	80-120	2	20	
Silver	mg/L	5	4.7	4.6	93	92	80-120	1	20	

MATRIX SPIKE SAMPLE: 899712

Parameter	Units	5078790005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.1	101	50-150	
Barium	mg/L	ND	10	10.1	96	50-150	
Cadmium	mg/L	5.5	10	15.4	99	50-150	
Chromium	mg/L	0.14	10	9.7	96	50-150	
Lead	mg/L	ND	10	9.6	95	50-150	
Selenium	mg/L	ND	10	9.8	98	50-150	
Silver	mg/L	ND	5	4.8	96	50-150	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: MPRP/11035 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 5078790001, 5078790002

METHOD BLANK: 899692 | Matrix: Water
Associated Lab Samples: 5078790001, 5078790002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	04/15/13 15:39	
Barium	ug/L	ND	100	04/15/13 15:39	
Cadmium	ug/L	ND	5.0	04/15/13 15:39	
Chromium	ug/L	ND	10.0	04/15/13 15:39	
Lead	ug/L	ND	10.0	04/15/13 15:39	
Selenium	ug/L	ND	10.0	04/15/13 15:39	
Silver	ug/L	ND	50.0	04/15/13 15:39	

LABORATORY CONTROL SAMPLE: 899693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	1060	106	80-120	
Barium	ug/L	1000	988	99	80-120	
Cadmium	ug/L	1000	998	100	80-120	
Chromium	ug/L	1000	984	98	80-120	
Lead	ug/L	1000	993	99	80-120	
Selenium	ug/L	1000	1010	101	80-120	
Silver	ug/L	500	492	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 899694 899695

Parameter	Units	5078833001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	12.6	1000	1000	1070	1070	106	106	75-125	0	20	
Barium	ug/L	ND	1000	1000	1080	1080	99	99	75-125	0	20	
Cadmium	ug/L	ND	1000	1000	1010	1000	101	100	75-125	0	20	
Chromium	ug/L	ND	1000	1000	970	970	97	97	75-125	0	20	
Lead	ug/L	ND	1000	1000	977	977	98	98	75-125	0	20	
Selenium	ug/L	ND	1000	1000	1010	1010	101	101	75-125	0	20	
Silver	ug/L	ND	500	500	489	490	98	98	75-125	0	20	

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: PMST/8132 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5078790003, 5078790004, 5078790005, 5078790006

SAMPLE DUPLICATE: 899262

Parameter	Units	5078798001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.5	17.5	12	5	R1

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: WETA/9551 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide
Associated Lab Samples: 5078790003, 5078790004, 5078790005, 5078790006

METHOD BLANK: 899027 Matrix: Solid
Associated Lab Samples: 5078790003, 5078790004, 5078790005, 5078790006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	04/16/13 09:58	

LABORATORY CONTROL SAMPLE: 899028

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	9.7	10.3	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 899029 899030

Parameter	Units	5078547006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	1.2	12.1	11.9	13.7	13.3	103	101	90-110	3	20	

MATRIX SPIKE SAMPLE: 899031

Parameter	Units	5078790005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	105	17	128	139	90-110	M0

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QUALITY CONTROL DATA

Project: Baycote B5-101
Pace Project No.: 5078790

QC Batch: WETA/9570 | Analysis Method: EPA 9012
QC Batch Method: EPA 9012 | Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5078790001, 5078790002

METHOD BLANK: 900223 | Matrix: Water
Associated Lab Samples: 5078790001, 5078790002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	04/16/13 10:40	

LABORATORY CONTROL SAMPLE: 900224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.21	107	90-110	

MATRIX SPIKE SAMPLE: 900225

Parameter	Units	5078790001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.34	.2	0.67	162	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 900226 900227

Parameter	Units	5078724002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.2	.2	0.23	0.23	114	113	90-110	0	20	M3

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QUALIFIERS

Project: Baycote B5-101
Pace Project No.: 5078790

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote B5-101
Pace Project No.: 5078790

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5078790003	**B5-12119**	EPA 3010	MPRP/11038	EPA 6010	ICP/11764
5078790004	**B5-ANW**	EPA 3010	MPRP/11038	EPA 6010	ICP/11764
5078790005	**B5-29130**	EPA 3010	MPRP/11039	EPA 6010	ICP/11763
5078790006	**B5-11118**	EPA 3010	MPRP/11039	EPA 6010	ICP/11763
5078790001	**B5-HLT**	EPA 3010	MPRP/11035	EPA 6010	ICP/11749
5078790002	**B5-NLT**	EPA 3010	MPRP/11035	EPA 6010	ICP/11749
5078790003	**B5-12119**	EPA 7470	MERP/4552	EPA 7470	MERC/4713
5078790004	**B5-ANW**	EPA 7470	MERP/4552	EPA 7470	MERC/4713
5078790005	**B5-29130**	EPA 7470	MERP/4553	EPA 7470	MERC/4714
5078790006	**B5-11118**	EPA 7470	MERP/4553	EPA 7470	MERC/4714
5078790001	**B5-HLT**	EPA 7470	MERP/4554	EPA 7470	MERC/4715
5078790002	**B5-NLT**	EPA 7470	MERP/4554	EPA 7470	MERC/4715
5078790003	**B5-12119**	ASTM D2974-87	PMST/8132		
5078790004	**B5-ANW**	ASTM D2974-87	PMST/8132		
5078790005	**B5-29130**	ASTM D2974-87	PMST/8132		
5078790006	**B5-11118**	ASTM D2974-87	PMST/8132		
5078790003	**B5-12119**	EPA 9012	WETA/9551	EPA 9012	WETA/9567
5078790004	**B5-ANW**	EPA 9012	WETA/9551	EPA 9012	WETA/9567
5078790005	**B5-29130**	EPA 9012	WETA/9551	EPA 9012	WETA/9567
5078790006	**B5-11118**	EPA 9012	WETA/9551	EPA 9012	WETA/9567
5078790001	**B5-HLT**	EPA 9012	WETA/9570	EPA 9012	WETA/9573
5078790002	**B5-NLT**	EPA 9012	WETA/9570	EPA 9012	WETA/9573

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CHAIN-OF-CUSTODY / Analytical Request Document

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

✓TMS

Page: 1 of 1

1600148

Section A Required Client Information:

Company: Environmental Restoration
Address:
Email To: t.vieth@eerllc.com
Phone: 312-446-6325 Fax:
Requested Due Date/TAT: 3Day TAT

Section B Required Project Information:

Report To: Toby Vieth
Copy To:
Purchase Order No.: B5-101
Project Name: Baylotte
Project Number:

Section C Invoice Information:

Attention: Toby Vieth
Company Name: Environmental Restoration
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: IN

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): Total RCRA Metal; Total Cyanide; TCLP RCRA Metals; Total Cyanide

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Total RCRA Metal	Total Cyanide	TCLP RCRA Metals	Total Cyanide	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	B5-HLT	WT				4-10-13	1700		2									X	X				001
2	B5-NLT	WT							2									X	X				002
3	B5-12/19	S							1											X	X		003
4	B5-ANW	S							1											X	X		004
5	B5-29/30	S							1											X	X		005
6	B5-11/18	S							1											X	X		006
7																							
8																							
9																							
10																							
11																							
12																							

5078790

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Toby Vieth ER	4-11-13	10:15	[signature]	4-11-13	10:15				
				Reliance Tech	4/12/13	7:30	24°C	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

WE 8 OK 22
NOW

ORIGINAL

*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.

Sample Condition Upon Receipt

Pace Analytical™ Client Name: Env. Restoration. Project # 5078790

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Now

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used (1) 2 3 4 6 A B C D E **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 2.4°C **Ice Visible in Sample Containers:** ☐ yes ☐ no

(Corrected, if applicable)

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 4/12/13 ZL

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Short Hold Time Analysis (<72hr):	☐Yes	☐No	☑N/A	5.
Rush Turn Around Time Requested:	☑Yes	☐No	☐N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No	☐N/A	8. Water/SL
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☑Yes	☐No	☐N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☑No	☐N/A	NLT Not Correct pH. PH-7 = BS-HLT
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	10.
Trip Blank Present:	☐Yes	☐No	☑N/A	11.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Project Manager Review:				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: K.O. Mer **Date:** 4-12-13

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

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CLIENT: Env. Restoration.

COC PAGE 1 of 1
COC ID# 1600148.

Project # 5078790

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	8oz Jar	Comments
1									1					1		
2									1					1		
3															1	
4															1	
5															1	
6															1	
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B27

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

April 25, 2013

Mr. Toby Viehweg
Environmental Restoration LLC
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote / B5-101
Pace Project No.: 5079258

Dear Mr. Viehweg:
Enclosed are the analytical results for sample(s) received by the laboratory on April 20, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

CERTIFICATIONS

Project: Baycote / B5-101
Pace Project No.: 5079258

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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7726 Moller Road
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(317)875-5894

SAMPLE SUMMARY

Project: Baycote / B5-101
Pace Project No.: 5079258

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5079258001	**B5-0916**	Solid	04/18/13 15:00	04/20/13 10:13
5079258002	**B5-282726**	Solid	04/18/13 15:00	04/20/13 10:13
5079258003	**B5-31**	Solid	04/18/13 15:00	04/20/13 10:13
5079258004	**B5-W33**	Water	04/18/13 15:00	04/20/13 10:13
5079258005	**B5-W34**	Water	04/18/13 15:00	04/20/13 10:13

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE ANALYTE COUNT

Project: Baycote / B5-101
Pace Project No.: 5079258

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5079258001	**B5-0916**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5079258002	**B5-282726**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5079258003	**B5-31**	EPA 6010	FRW	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5079258004	**B5-W33**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1
5079258005	**B5-W34**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 9012	ILP	1

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ANALYTICAL RESULTS

Project: Baycote / B5-101
Pace Project No.: 5079258

Sample: B5-0916 **Lab ID: 5079258001** Collected: 04/18/13 15:00 Received: 04/20/13 10:13 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/22/13 12:25							
Arsenic	ND	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:48	7440-38-2	
Barium	ND	mg/L	5.0	1	04/23/13 16:17	04/24/13 08:48	7440-39-3	
Cadmium	**0.093**	mg/L	0.050	1	04/23/13 16:17	04/24/13 08:48	7440-43-9	
Chromium	**0.31**	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:48	7440-47-3	
Lead	ND	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:48	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:48	7782-49-2	
Silver	ND	mg/L	0.50	1	04/23/13 16:17	04/24/13 08:48	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/22/13 12:25							
Mercury	ND	ug/L	2.0	1	04/23/13 10:45	04/24/13 10:11	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.4**	%	0.10	1		04/23/13 12:11		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**521**	mg/kg	12.9	20	04/22/13 09:30	04/22/13 12:14	57-12-5	

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Columbus, OH 43215
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ANALYTICAL RESULTS

Project: Baycote / B5-101
Pace Project No.: 5079258

Sample: B5-282726 **Lab ID: 5079258002** Collected: 04/18/13 15:00 Received: 04/20/13 10:13 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/22/13 12:25							
Arsenic	ND	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:52	7440-38-2	
Barium	ND	mg/L	5.0	1	04/23/13 16:17	04/24/13 08:52	7440-39-3	
Cadmium	**10.8**	mg/L	0.050	1	04/23/13 16:17	04/24/13 08:52	7440-43-9	
Chromium	**0.62**	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:52	7440-47-3	
Lead	**0.16**	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:52	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:52	7782-49-2	
Silver	ND	mg/L	0.50	1	04/23/13 16:17	04/24/13 08:52	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/22/13 12:25							
Mercury	**2.3**	ug/L	2.0	1	04/23/13 10:45	04/24/13 10:15	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**62.1**	%	0.10	1		04/23/13 12:12		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**449**	mg/kg	26.4	20	04/22/13 09:30	04/22/13 12:17	57-12-5	

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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
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(317)875-5894

ANALYTICAL RESULTS

Project: Baycote / B5-101
Pace Project No.: 5079258

Sample: B5-31 **Lab ID: 5079258003** Collected: 04/18/13 15:00 Received: 04/20/13 10:13 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/22/13 12:25							
Arsenic	ND	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:54	7440-38-2	
Barium	ND	mg/L	5.0	1	04/23/13 16:17	04/24/13 08:54	7440-39-3	
Cadmium	**5.8**	mg/L	0.050	1	04/23/13 16:17	04/24/13 08:54	7440-43-9	
Chromium	**3.5**	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:54	7440-47-3	
Lead	ND	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:54	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/23/13 16:17	04/24/13 08:54	7782-49-2	
Silver	ND	mg/L	0.50	1	04/23/13 16:17	04/24/13 08:54	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/22/13 12:25							
Mercury	ND	ug/L	2.0	1	04/23/13 10:45	04/24/13 10:17	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**37.6**	%	0.10	1		04/23/13 12:12		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**79.1**	mg/kg	3.2	4	04/22/13 09:30	04/22/13 12:18	57-12-5	

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7726 Moller Road
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ANALYTICAL RESULTS

Project: Baycote / B5-101
Pace Project No.: 5079258

Sample: B5-W33 **Lab ID: 5079258004** Collected: 04/18/13 15:00 Received: 04/20/13 10:13 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/23/13 16:06	04/24/13 13:32	7440-38-2	
Barium	ND	ug/L	100	1	04/23/13 16:06	04/24/13 13:32	7440-39-3	
Cadmium	**55.2**	ug/L	5.0	1	04/23/13 16:06	04/24/13 13:32	7440-43-9	
Chromium	**244**	ug/L	10.0	1	04/23/13 16:06	04/24/13 13:32	7440-47-3	
Lead	ND	ug/L	10.0	1	04/23/13 16:06	04/24/13 13:32	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/23/13 16:06	04/24/13 13:32	7782-49-2	
Silver	ND	ug/L	50.0	1	04/23/13 16:06	04/24/13 13:32	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/23/13 08:40	04/24/13 11:19	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.068**	mg/L	0.010	1	04/22/13 09:27	04/22/13 11:51	57-12-5	

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ANALYTICAL RESULTS

Project: Baycote / B5-101
Pace Project No.: 5079258

Sample: B5-W34 **Lab ID: 5079258005** Collected: 04/18/13 15:00 Received: 04/20/13 10:13 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	04/23/13 16:06	04/24/13 13:36	7440-38-2	
Barium	ND	ug/L	100	1	04/23/13 16:06	04/24/13 13:36	7440-39-3	
Cadmium	**40.3**	ug/L	5.0	1	04/23/13 16:06	04/24/13 13:36	7440-43-9	
Chromium	**116**	ug/L	10.0	1	04/23/13 16:06	04/24/13 13:36	7440-47-3	
Lead	ND	ug/L	10.0	1	04/23/13 16:06	04/24/13 13:36	7439-92-1	
Selenium	ND	ug/L	10.0	1	04/23/13 16:06	04/24/13 13:36	7782-49-2	
Silver	ND	ug/L	50.0	1	04/23/13 16:06	04/24/13 13:36	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	04/23/13 08:40	04/24/13 11:21	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**0.032**	mg/L	0.010	1	04/22/13 09:27	04/22/13 11:57	57-12-5	

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7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

QC Batch: MERP/4563 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5079258001, 5079258002, 5079258003

METHOD BLANK: 903451 Matrix: Water
Associated Lab Samples: 5079258001, 5079258002, 5079258003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/24/13 09:47	

LABORATORY CONTROL SAMPLE & LCSD: 903452 903453

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	15.8	15.6	105	104	80-120	1	20	

MATRIX SPIKE SAMPLE: 903454

Parameter	Units	5079047001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.8	106	75-125	

MATRIX SPIKE SAMPLE: 904033

Parameter	Units	5079178001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.5	103	75-125	

MATRIX SPIKE SAMPLE: 904034

Parameter	Units	5079258001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.4	102	75-125	

MATRIX SPIKE SAMPLE: 904035

Parameter	Units	5079269001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.2	102	75-125	

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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

QC Batch: MERP/4565 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 5079258004, 5079258005

METHOD BLANK: 903467 | Matrix: Water
Associated Lab Samples: 5079258004, 5079258005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/24/13 10:28	

LABORATORY CONTROL SAMPLE: 903468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 903469 903470

Parameter	Units	5078921031 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.8	5.1	97	102	75-125	5	20	

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Pace Analytical Services, Inc.
7726 Moller Road
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QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

QC Batch: MPRP/11102 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5079258001, 5079258002, 5079258003

METHOD BLANK: 904014 | Matrix: Water
Associated Lab Samples: 5079258001, 5079258002, 5079258003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	04/24/13 08:36	
Barium	mg/L	ND	5.0	04/24/13 08:36	
Cadmium	mg/L	ND	0.050	04/24/13 08:36	
Chromium	mg/L	ND	0.10	04/24/13 08:36	
Lead	mg/L	ND	0.10	04/24/13 08:36	
Selenium	mg/L	ND	0.10	04/24/13 08:36	
Silver	mg/L	ND	0.50	04/24/13 08:36	

LABORATORY CONTROL SAMPLE & LCSD: 904015 904016

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	9.8	9.7	98	97	80-120	1	20	
Barium	mg/L	10	9.4	9.4	94	94	80-120	1	20	
Cadmium	mg/L	10	9.4	9.3	94	93	80-120	1	20	
Chromium	mg/L	10	9.4	9.3	94	93	80-120	0	20	
Lead	mg/L	10	9.3	9.2	93	92	80-120	1	20	
Selenium	mg/L	10	9.5	9.4	95	94	80-120	1	20	
Silver	mg/L	5	4.6	4.6	92	92	80-120	0	20	

MATRIX SPIKE SAMPLE: 904017

Parameter	Units	5079178001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.0	100	50-150	
Barium	mg/L	ND	10	11.0	95	50-150	
Cadmium	mg/L	ND	10	9.6	96	50-150	
Chromium	mg/L	ND	10	9.3	93	50-150	
Lead	mg/L	ND	10	9.3	93	50-150	
Selenium	mg/L	ND	10	9.7	97	50-150	
Silver	mg/L	ND	5	4.7	93	50-150	

MATRIX SPIKE SAMPLE: 904018

Parameter	Units	5079258001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.9	99	50-150	
Barium	mg/L	ND	10	9.6	92	50-150	
Cadmium	mg/L	0.093	10	9.5	94	50-150	
Chromium	mg/L	0.31	10	9.5	92	50-150	
Lead	mg/L	ND	10	9.2	91	50-150	

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QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

MATRIX SPIKE SAMPLE: 904018

Parameter	Units	5079258001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	9.6	96	50-150	
Silver	mg/L	ND	5	4.5	91	50-150	

MATRIX SPIKE SAMPLE: 904019

Parameter	Units	5079269001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.6	96	50-150	
Barium	mg/L	ND	10	9.1	90	50-150	
Cadmium	mg/L	ND	10	9.1	91	50-150	
Chromium	mg/L	ND	10	8.8	88	50-150	
Lead	mg/L	ND	10	8.8	88	50-150	
Selenium	mg/L	ND	10	9.2	92	50-150	
Silver	mg/L	ND	5	4.4	87	50-150	

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QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

QC Batch: MPRP/11098 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 5079258004, 5079258005

METHOD BLANK: 903794 | Matrix: Water
Associated Lab Samples: 5079258004, 5079258005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	04/24/13 13:18	
Barium	ug/L	ND	100	04/24/13 13:18	
Cadmium	ug/L	ND	5.0	04/24/13 13:18	
Chromium	ug/L	ND	10.0	04/24/13 13:18	
Lead	ug/L	ND	10.0	04/24/13 13:18	
Selenium	ug/L	ND	10.0	04/24/13 13:18	
Silver	ug/L	ND	50.0	04/24/13 13:18	

LABORATORY CONTROL SAMPLE: 903795

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	924	92	80-120	
Barium	ug/L	1000	979	98	80-120	
Cadmium	ug/L	1000	896	90	80-120	
Chromium	ug/L	1000	920	92	80-120	
Lead	ug/L	1000	917	92	80-120	
Selenium	ug/L	1000	927	93	80-120	
Silver	ug/L	500	459	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 903796 903797

Parameter	Units	5079255001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	960	964	96	96	75-125	0	20	
Barium	ug/L	135	1000	1000	1140	1140	101	100	75-125	1	20	
Cadmium	ug/L	ND	1000	1000	932	941	93	94	75-125	1	20	
Chromium	ug/L	ND	1000	1000	932	933	93	93	75-125	0	20	
Lead	ug/L	ND	1000	1000	915	917	91	91	75-125	0	20	
Selenium	ug/L	ND	1000	1000	962	962	96	96	75-125	0	20	
Silver	ug/L	ND	500	500	486	48.6J	97	10	75-125		20	M0,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 903804 903805

Parameter	Units	5079180007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	985	999	98	100	75-125	1	20	
Barium	ug/L	516	1000	1000	1440	1460	93	94	75-125	1	20	
Cadmium	ug/L	ND	1000	1000	958	976	96	98	75-125	2	20	

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Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 903804 903805

Parameter	Units	5079180007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	ND	1000	1000	892	908	89	91	75-125	2	20	
Lead	ug/L	ND	1000	1000	881	899	88	90	75-125	2	20	
Selenium	ug/L	ND	1000	1000	968	988	97	99	75-125	2	20	
Silver	ug/L	ND	500	500	488	497	97	99	75-125	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 903806 903807

Parameter	Units	5079267005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	18.3	1000	1000	963	976	94	96	75-125	1	20	
Barium	ug/L	95.6J	1000	1000	1010	1020	92	93	75-125	1	20	
Cadmium	ug/L	ND	1000	1000	912	924	91	92	75-125	1	20	
Chromium	ug/L	ND	1000	1000	896	906	90	90	75-125	1	20	
Lead	ug/L	ND	1000	1000	892	907	89	90	75-125	2	20	
Selenium	ug/L	ND	1000	1000	935	946	93	95	75-125	1	20	
Silver	ug/L	ND	500	500	459	463	92	93	75-125	1	20	

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QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

QC Batch: PMST/8165 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5079258001, 5079258002, 5079258003

SAMPLE DUPLICATE: 904154

Parameter	Units	5079258001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.4	25.4	13	5	R1

SAMPLE DUPLICATE: 904155

Parameter	Units	5079300001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	21.6	20.7	4	5	

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QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

QC Batch: WETA/9615 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide
Associated Lab Samples: 5079258001, 5079258002, 5079258003

METHOD BLANK: 903549 Matrix: Solid
Associated Lab Samples: 5079258001, 5079258002, 5079258003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	04/22/13 11:58	

LABORATORY CONTROL SAMPLE: 903550

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	10.9	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 903551 903552

Parameter	Units	5079258001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	521	12.9	12.9	242	284	-2160	-1840	90-110	16	20	P6

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QUALITY CONTROL DATA

Project: Baycote / B5-101
Pace Project No.: 5079258

QC Batch: WETA/9614 — Analysis Method: EPA 9012
QC Batch Method: EPA 9012 — Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5079258004, 5079258005

METHOD BLANK: 903545 — Matrix: Water
Associated Lab Samples: 5079258004, 5079258005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	04/22/13 11:49	

LABORATORY CONTROL SAMPLE: 903546

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.22	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 903547 903548

Parameter	Units	5079258004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.068	.2	.2	0.20	0.23	68	83	90-110	14	20	M3

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QUALIFIERS

Project: Baycote / B5-101
Pace Project No.: 5079258

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote / B5-101
Pace Project No.: 5079258

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5079258001	**B5-0916**	EPA 3010	MPRP/11102	EPA 6010	ICP/11831
5079258002	**B5-282726**	EPA 3010	MPRP/11102	EPA 6010	ICP/11831
5079258003	**B5-31**	EPA 3010	MPRP/11102	EPA 6010	ICP/11831
5079258004	**B5-W33**	EPA 3010	MPRP/11098	EPA 6010	ICP/11836
5079258005	**B5-W34**	EPA 3010	MPRP/11098	EPA 6010	ICP/11836
5079258001	**B5-0916**	EPA 7470	MERP/4563	EPA 7470	MERC/4728
5079258002	**B5-282726**	EPA 7470	MERP/4563	EPA 7470	MERC/4728
5079258003	**B5-31**	EPA 7470	MERP/4563	EPA 7470	MERC/4728
5079258004	**B5-W33**	EPA 7470	MERP/4565	EPA 7470	MERC/4729
5079258005	**B5-W34**	EPA 7470	MERP/4565	EPA 7470	MERC/4729
5079258001	**B5-0916**	ASTM D2974-87	PMST/8165		
5079258002	**B5-282726**	ASTM D2974-87	PMST/8165		
5079258003	**B5-31**	ASTM D2974-87	PMST/8165		
5079258001	**B5-0916**	EPA 9012	WETA/9615	EPA 9012	WETA/9621
5079258002	**B5-282726**	EPA 9012	WETA/9615	EPA 9012	WETA/9621
5079258003	**B5-31**	EPA 9012	WETA/9615	EPA 9012	WETA/9621
5079258004	**B5-W33**	EPA 9012	WETA/9614	EPA 9012	WETA/9620
5079258005	**B5-W34**	EPA 9012	WETA/9614	EPA 9012	WETA/9620

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Now

Page: 1 of 1

1600145

Section A Required Client Information:

Company: Environmental Rest.
Address:
Email To: T.Viehweg@erllc.com
Phone: 312 446 6325 Fax:
Requested Due Date/TAT: 3 DAY TAT

Section B Required Project Information:

Report To: Tony Viehweg
Copy To:
Purchase Order No.: B5-101
Project Name: Baylote
Project Number:

Section C Invoice Information:

Attention: T. Viehweg
Company Name: Environmental Rest.
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: IN

5079258

Section D Required Client Information

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

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED 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): TCLP RCRA Metals	Total Cyanide	Total RCRA Metals	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	B5-0916	S	G	4-18-13	1500				1									X	X			-001
2	B5-282226	S	G	4-18-13	1500				1									X	X			-002
3	B5-31	S	G	4-18-13	1500				1									X	X			-003
4	B5-W33	W	G	4-18-13	1500				2									X	X	X		-004
5	B5-W34	W	G	4-18-13	1500				2									X	X	X		-005
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Tony Viehweg	4-19-13	1020	[signature]	4-19-13	1020				
				James Jones	4/19/13	1023	4.3	Y	N	Y

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

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY):

ORIGINAL

*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.

Sample Condition Upon Receipt

Pace Analytical™ Client Name: Environmental Rest Project # 5079258

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used 1 2 3 4 6 A B C D E Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable) 4.3 Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 4-20-13 D

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	5.
Rush Turn Around Time Requested:	☑Yes	☐No	☐N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No	☐N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☑Yes	☐No	☐N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	10.
Trip Blank Present:	☐Yes	☐No	☑N/A	11.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Tony V. Date/Time: 4/20/13 e-mail

Comments/ Resolution: Run total RCRA 8 on the two waters? yes per Tony V. 4/20/13

Project Manager Review: Kenneth Hunt **Date:** 4/20/13

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

CLIENT: Environmental Rsf

COC PAGE 1 of 1

COC ID#

Project # 5079258

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Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	4oz	Comments
1															1	
2															1	
3															1	
4									1					1		
5									1					1		
6																
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B28

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May 01, 2013

Mr. Toby Viehweg
Environmental Restoration LLC
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote
Pace Project No.: 5079489

Dear Mr. Viehweg:
Enclosed are the analytical results for sample(s) received by the laboratory on April 26, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
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CERTIFICATIONS

Project: Baycote
Pace Project No.: 5079489

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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SAMPLE SUMMARY

Project: Baycote
Pace Project No.: 5079489

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5079489001	**B5-32**	Solid	04/24/13 17:00	04/26/13 07:33
5079489002	**B5-0815**	Solid	04/24/13 17:00	04/26/13 07:33
5079489003	**B5-BT**	Solid	04/24/13 17:00	04/26/13 07:33

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SAMPLE ANALYTE COUNT

Project: Baycote
Pace Project No.: 5079489

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5079489001	**B5-32**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5079489002	**B5-0815**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 8270	KES	18
		EPA 8260	GRM	13
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1
5079489003	**B5-BT**	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1

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ANALYTICAL RESULTS

Project: Baycote
Pace Project No.: 5079489

Sample: B5-32 **Lab ID: 5079489001** Collected: 04/24/13 17:00 Received: 04/26/13 07:33 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/26/13 13:30							
Arsenic	ND	mg/L	0.10	1	04/27/13 09:01	04/29/13 16:29	7440-38-2	
Barium	ND	mg/L	5.0	1	04/27/13 09:01	04/29/13 16:29	7440-39-3	
Cadmium	**23.7**	mg/L	0.050	1	04/27/13 09:01	04/29/13 16:29	7440-43-9	
Chromium	**12.4**	mg/L	0.10	1	04/27/13 09:01	04/29/13 16:29	7440-47-3	
Lead	ND	mg/L	0.10	1	04/27/13 09:01	04/29/13 16:29	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/27/13 09:01	04/29/13 16:29	7782-49-2	
Silver	ND	mg/L	0.50	1	04/27/13 09:01	04/29/13 16:29	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/26/13 13:30							
Mercury	ND	ug/L	2.0	1	04/29/13 08:50	04/30/13 10:53	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**64.8**	%	0.10	1		04/26/13 12:47		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**31.3**	mg/kg	1.4	1	04/26/13 15:16	04/29/13 12:10	57-12-5	

Pace Analytical Services, Inc.
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote
Pace Project No.: 5079489

Sample: B5-0815 **Lab ID: 5079489002** Collected: 04/24/13 17:00 Received: 04/26/13 07:33 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/26/13 13:30							
Arsenic	ND	mg/L	0.10	1	04/27/13 08:59	04/29/13 15:58	7440-38-2	
Barium	ND	mg/L	5.0	1	04/27/13 08:59	04/29/13 15:58	7440-39-3	
Cadmium	**0.37**	mg/L	0.050	1	04/27/13 08:59	04/29/13 15:58	7440-43-9	
Chromium	**0.50**	mg/L	0.10	1	04/27/13 08:59	04/29/13 15:58	7440-47-3	
Lead	ND	mg/L	0.10	1	04/27/13 08:59	04/29/13 15:58	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/27/13 08:59	04/29/13 15:58	7782-49-2	
Silver	ND	mg/L	0.50	1	04/27/13 08:59	04/29/13 15:58	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/26/13 13:30							
Mercury	ND	ug/L	2.0	1	04/29/13 08:50	04/30/13 10:26	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 04/26/13 13:30							
1,4-Dichlorobenzene	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	118-74-1	
Hexachloroethane	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	200	1	04/29/13 11:26	04/29/13 20:12		
Nitrobenzene	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	98-95-3	
Pentachlorophenol	ND	ug/L	500	1	04/29/13 11:26	04/29/13 20:12	87-86-5	
Pyridine	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	1	04/29/13 11:26	04/29/13 20:12	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	04/29/13 11:26	04/29/13 20:12	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	86	%.	33-108	1	04/29/13 11:26	04/29/13 20:12	4165-60-0	
2-Fluorobiphenyl (S)	84	%.	34-106	1	04/29/13 11:26	04/29/13 20:12	321-60-8	
p-Terphenyl-d14 (S)	99	%.	31-122	1	04/29/13 11:26	04/29/13 20:12	1718-51-0	
Phenol-d5 (S)	27	%.	10-56	1	04/29/13 11:26	04/29/13 20:12	4165-62-2	
2-Fluorophenol (S)	40	%.	10-74	1	04/29/13 11:26	04/29/13 20:12	367-12-4	
2,4,6-Tribromophenol (S)	103	%.	32-124	1	04/29/13 11:26	04/29/13 20:12	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 04/26/13 13:30							
Benzene	ND	ug/L	50.0	1		04/29/13 19:54	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		04/29/13 19:54	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		04/29/13 19:54	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		04/29/13 19:54	108-90-7	
Chloroform	ND	ug/L	50.0	1		04/29/13 19:54	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		04/29/13 19:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		04/29/13 19:54	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		04/29/13 19:54	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		04/29/13 19:54	79-01-6	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote
Pace Project No.: 5079489

Sample: B5-0815 **Lab ID: 5079489002** Collected: 04/24/13 17:00 Received: 04/26/13 07:33 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 04/26/13 13:30							
Vinyl chloride	ND	ug/L	20.0	1		04/29/13 19:54	75-01-4	
Surrogates								
Toluene-d8 (S)	104	%.	81-110	1		04/29/13 19:54	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	80-114	1		04/29/13 19:54	460-00-4	
Dibromofluoromethane (S)	101	%.	79-116	1		04/29/13 19:54	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**55.5**	%	0.10	1		04/26/13 12:47		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**402**	mg/kg	10.8	10	04/26/13 15:16	04/29/13 13:38	57-12-5	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Baycote
Pace Project No.: 5079489

Sample: B5-BT **Lab ID: 5079489003** Collected: 04/24/13 17:00 Received: 04/26/13 07:33 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 04/26/13 13:30							
Arsenic	ND	mg/L	0.10	1	04/27/13 08:59	04/29/13 16:05	7440-38-2	
Barium	ND	mg/L	5.0	1	04/27/13 08:59	04/29/13 16:05	7440-39-3	
Cadmium	**0.071**	mg/L	0.050	1	04/27/13 08:59	04/29/13 16:05	7440-43-9	
Chromium	**1.5**	mg/L	0.10	1	04/27/13 08:59	04/29/13 16:05	7440-47-3	
Lead	ND	mg/L	0.10	1	04/27/13 08:59	04/29/13 16:05	7439-92-1	
Selenium	ND	mg/L	0.10	1	04/27/13 08:59	04/29/13 16:05	7782-49-2	
Silver	ND	mg/L	0.50	1	04/27/13 08:59	04/29/13 16:05	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 04/26/13 13:30							
Mercury	ND	ug/L	2.0	1	04/29/13 08:50	04/30/13 10:30	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**32.4**	%	0.10	1		04/26/13 12:47		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**2.0**	mg/kg	0.72	1	04/26/13 15:16	04/29/13 12:12	57-12-5	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
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QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

QC Batch: MERP/4574 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5079489002, 5079489003

METHOD BLANK: 906796 | Matrix: Water
Associated Lab Samples: 5079489002, 5079489003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/30/13 10:01	

LABORATORY CONTROL SAMPLE & LCSD: 906797 906798

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	15.3	15.0	102	100	80-120	2	20	

MATRIX SPIKE SAMPLE: 906799

Parameter	Units	5079436001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	14.6	95	75-125	

MATRIX SPIKE SAMPLE: 906800

Parameter	Units	5079175001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	14.3	94	75-125	

MATRIX SPIKE SAMPLE: 906801

Parameter	Units	5079507001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	11.6	15	23.5	80	75-125	

MATRIX SPIKE SAMPLE: 906802

Parameter	Units	5079489002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.2	99	75-125	

MATRIX SPIKE SAMPLE: 906803

Parameter	Units	5079359001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.0	98	75-125	

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(614)486-5421

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QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

QC Batch: MERP/4575
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5079489001

METHOD BLANK: 906804
Matrix: Water
Associated Lab Samples: 5079489001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	04/30/13 10:36	

LABORATORY CONTROL SAMPLE & LCSD: 906805 906806

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	15.5	16.2	103	108	80-120	4	20	

MATRIX SPIKE SAMPLE: 906807

Parameter	Units	5079175002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.3	100	75-125	

MATRIX SPIKE SAMPLE: 906808

Parameter	Units	5079489001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.7	103	75-125	

MATRIX SPIKE SAMPLE: 906809

Parameter	Units	5079446001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	15.9	105	75-125	

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QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

QC Batch: MPRP/11136 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5079489002, 5079489003

METHOD BLANK: 906637 | Matrix: Water
Associated Lab Samples: 5079489002, 5079489003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	04/29/13 15:17	
Barium	mg/L	ND	5.0	04/29/13 15:17	
Cadmium	mg/L	ND	0.050	04/29/13 15:17	
Chromium	mg/L	ND	0.10	04/29/13 15:17	
Lead	mg/L	ND	0.10	04/29/13 15:17	
Selenium	mg/L	ND	0.10	04/29/13 15:17	
Silver	mg/L	ND	0.50	04/29/13 15:17	

LABORATORY CONTROL SAMPLE & LCSD: 906638 906639

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.2	10.1	102	101	80-120	1	20	
Barium	mg/L	10	9.7	9.5	97	95	80-120	2	20	
Cadmium	mg/L	10	9.8	9.7	98	97	80-120	1	20	
Chromium	mg/L	10	9.8	9.7	98	97	80-120	1	20	
Lead	mg/L	10	9.6	9.5	96	95	80-120	1	20	
Selenium	mg/L	10	9.9	9.8	99	98	80-120	1	20	
Silver	mg/L	5	5.0	4.9	99	98	80-120	1	20	

MATRIX SPIKE SAMPLE: 906640

Parameter	Units	5079436001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.4	104	50-150	
Barium	mg/L	ND	10	10.5	99	50-150	
Cadmium	mg/L	ND	10	10.1	101	50-150	
Chromium	mg/L	ND	10	9.9	99	50-150	
Lead	mg/L	ND	10	9.8	97	50-150	
Selenium	mg/L	ND	10	10.2	102	50-150	
Silver	mg/L	ND	5	5.1	101	50-150	

MATRIX SPIKE SAMPLE: 906641

Parameter	Units	5079507001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.16	10	11.3	112	50-150	
Barium	mg/L	50.8	10	61.1	104	50-150	
Cadmium	mg/L	ND	10	10.3	103	50-150	
Chromium	mg/L	0.23	10	10	98	50-150	
Lead	mg/L	5.5	10	15.4	99	50-150	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
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(317)875-5894

QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

MATRIX SPIKE SAMPLE: 906641

Parameter	Units	5079507001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	11.4	114	50-150	
Silver	mg/L	ND	5	5.0	99	50-150	

MATRIX SPIKE SAMPLE: 906642

Parameter	Units	5079489002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.4	104	50-150	
Barium	mg/L	ND	10	10	97	50-150	
Cadmium	mg/L	0.37	10	10.2	99	50-150	
Chromium	mg/L	0.50	10	10.2	97	50-150	
Lead	mg/L	ND	10	9.6	96	50-150	
Selenium	mg/L	ND	10	10.0	100	50-150	
Silver	mg/L	ND	5	5.0	99	50-150	

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(614)486-5421

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(317)875-5894

QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

QC Batch: MPRP/11137
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5079489001

METHOD BLANK: 906643
Matrix: Water
Associated Lab Samples: 5079489001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	04/29/13 16:08	
Barium	mg/L	ND	5.0	04/29/13 16:08	
Cadmium	mg/L	ND	0.050	04/29/13 16:08	
Chromium	mg/L	ND	0.10	04/29/13 16:08	
Lead	mg/L	ND	0.10	04/29/13 16:08	
Selenium	mg/L	ND	0.10	04/29/13 16:08	
Silver	mg/L	ND	0.50	04/29/13 16:08	

LABORATORY CONTROL SAMPLE & LCSD: 906644 906645

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.1	10.2	101	102	80-120	1	20	
Barium	mg/L	10	9.5	9.6	95	96	80-120	1	20	
Cadmium	mg/L	10	9.6	9.7	96	97	80-120	1	20	
Chromium	mg/L	10	9.6	9.7	96	97	80-120	1	20	
Lead	mg/L	10	9.6	9.7	96	97	80-120	1	20	
Selenium	mg/L	10	9.8	9.9	98	99	80-120	1	20	
Silver	mg/L	5	4.9	4.9	97	98	80-120	0	20	

MATRIX SPIKE SAMPLE: 906646

Parameter	Units	5079489001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.2	102	50-150	
Barium	mg/L	ND	10	9.9	95	50-150	
Cadmium	mg/L	23.7	10	31.4	78	50-150	
Chromium	mg/L	12.4	10	21.1	87	50-150	
Lead	mg/L	ND	10	9.5	94	50-150	
Selenium	mg/L	ND	10	9.9	99	50-150	
Silver	mg/L	ND	5	4.9	98	50-150	

MATRIX SPIKE SAMPLE: 906647

Parameter	Units	5079446001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.1	101	50-150	
Barium	mg/L	ND	10	13.5	93	50-150	
Cadmium	mg/L	ND	10	9.7	97	50-150	
Chromium	mg/L	ND	10	9.5	95	50-150	
Lead	mg/L	ND	10	9.4	94	50-150	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

MATRIX SPIKE SAMPLE: 906647

Parameter	Units	5079446001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	9.7	97	50-150	
Silver	mg/L	ND	5	5.0	96	50-150	

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(317)875-5894

QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

QC Batch: MSV/52627
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 5079489002

METHOD BLANK: 907239
Matrix: Water
Associated Lab Samples: 5079489002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	04/29/13 14:45	
1,2-Dichloroethane	ug/L	ND	50.0	04/29/13 14:45	
2-Butanone (MEK)	ug/L	ND	1000	04/29/13 14:45	
Benzene	ug/L	ND	50.0	04/29/13 14:45	
Carbon tetrachloride	ug/L	ND	50.0	04/29/13 14:45	
Chlorobenzene	ug/L	ND	50.0	04/29/13 14:45	
Chloroform	ug/L	ND	50.0	04/29/13 14:45	
Tetrachloroethene	ug/L	ND	50.0	04/29/13 14:45	
Trichloroethene	ug/L	ND	50.0	04/29/13 14:45	
Vinyl chloride	ug/L	ND	20.0	04/29/13 14:45	
4-Bromofluorobenzene (S)	%.	96	80-114	04/29/13 14:45	
Dibromofluoromethane (S)	%.	96	79-116	04/29/13 14:45	
Toluene-d8 (S)	%.	104	81-110	04/29/13 14:45	

LABORATORY CONTROL SAMPLE: 907240

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	500	565	113	68-127	
1,2-Dichloroethane	ug/L	500	503	101	75-128	
2-Butanone (MEK)	ug/L	2500	2960	118	58-139	
Benzene	ug/L	500	520	104	74-122	
Carbon tetrachloride	ug/L	500	492	98	56-137	
Chlorobenzene	ug/L	500	515	103	78-123	
Chloroform	ug/L	500	535	107	78-126	
Tetrachloroethene	ug/L	500	548	110	69-130	
Trichloroethene	ug/L	500	577	115	76-126	
Vinyl chloride	ug/L	500	591	118	59-126	
4-Bromofluorobenzene (S)	%.			93	80-114	
Dibromofluoromethane (S)	%.			99	79-116	
Toluene-d8 (S)	%.			100	81-110	

MATRIX SPIKE SAMPLE: 907241

Parameter	Units	5079507001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	500	630	126	55-145	
1,2-Dichloroethane	ug/L	ND	500	578	116	62-138	
2-Butanone (MEK)	ug/L	ND	2500	2680	107	37-156	
Benzene	ug/L	ND	500	591	115	62-129	
Carbon tetrachloride	ug/L	ND	500	513	103	46-142	
Chlorobenzene	ug/L	ND	500	583	117	49-136	

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

MATRIX SPIKE SAMPLE: 907241

Parameter	Units	5079507001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	ND	500	607	121	54-150	
Tetrachloroethene	ug/L	ND	500	632	126	33-151	
Trichloroethene	ug/L	ND	500	636	127	50-143	
Vinyl chloride	ug/L	ND	500	665	133	44-145	
4-Bromofluorobenzene (S)	%.				93	80-114	
Dibromofluoromethane (S)	%.				99	79-116	
Toluene-d8 (S)	%.				107	81-110	

MATRIX SPIKE SAMPLE: 907242

Parameter	Units	5079489002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	500	622	124	55-145	
1,2-Dichloroethane	ug/L	ND	500	555	111	62-138	
2-Butanone (MEK)	ug/L	ND	2500	2650	106	37-156	
Benzene	ug/L	ND	500	571	114	62-129	
Carbon tetrachloride	ug/L	ND	500	538	108	46-142	
Chlorobenzene	ug/L	ND	500	569	114	49-136	
Chloroform	ug/L	ND	500	594	119	54-150	
Tetrachloroethene	ug/L	ND	500	602	120	33-151	
Trichloroethene	ug/L	ND	500	634	127	50-143	
Vinyl chloride	ug/L	ND	500	646	129	44-145	
4-Bromofluorobenzene (S)	%.				93	80-114	
Dibromofluoromethane (S)	%.				102	79-116	
Toluene-d8 (S)	%.				101	81-110	

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QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

QC Batch: OEXT/32566
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 5079489002

METHOD BLANK: 906906
Matrix: Water
Associated Lab Samples: 5079489002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	04/29/13 18:22	
2,4,5-Trichlorophenol	ug/L	ND	500	04/29/13 18:22	
2,4,6-Trichlorophenol	ug/L	ND	100	04/29/13 18:22	
2,4-Dinitrotoluene	ug/L	ND	100	04/29/13 18:22	
2-Methylphenol(o-Cresol)	ug/L	ND	100	04/29/13 18:22	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	200	04/29/13 18:22	
Hexachloro-1,3-butadiene	ug/L	ND	100	04/29/13 18:22	
Hexachlorobenzene	ug/L	ND	100	04/29/13 18:22	
Hexachloroethane	ug/L	ND	100	04/29/13 18:22	
Nitrobenzene	ug/L	ND	100	04/29/13 18:22	
Pentachlorophenol	ug/L	ND	500	04/29/13 18:22	
Pyridine	ug/L	ND	100	04/29/13 18:22	
2,4,6-Tribromophenol (S)	%.	98	32-124	04/29/13 18:22	
2-Fluorobiphenyl (S)	%.	80	34-106	04/29/13 18:22	
2-Fluorophenol (S)	%.	42	10-74	04/29/13 18:22	
Nitrobenzene-d5 (S)	%.	87	33-108	04/29/13 18:22	
p-Terphenyl-d14 (S)	%.	116	31-122	04/29/13 18:22	
Phenol-d5 (S)	%.	25	10-56	04/29/13 18:22	

LABORATORY CONTROL SAMPLE: 906907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	1000	838	84	30-92	
2,4,5-Trichlorophenol	ug/L	1000	1060	106	39-125	
2,4,6-Trichlorophenol	ug/L	1000	1070	107	38-125	
2,4-Dinitrotoluene	ug/L	1000	910	91	38-119	
2-Methylphenol(o-Cresol)	ug/L	1000	758	76	31-106	
3&4-Methylphenol(m&p Cresol)	ug/L	2000	1310	66	24-97	
Hexachloro-1,3-butadiene	ug/L	1000	813	81	16-115	
Hexachlorobenzene	ug/L	1000	980	98	33-124	
Hexachloroethane	ug/L	1000	813	81	16-100	
Nitrobenzene	ug/L	1000	821	82	35-114	
Pentachlorophenol	ug/L	1000	1230	123	14-131	
Pyridine	ug/L	1000	190	19	10-61	
2,4,6-Tribromophenol (S)	%.			105	32-124	
2-Fluorobiphenyl (S)	%.			92	34-106	
2-Fluorophenol (S)	%.			45	10-74	
Nitrobenzene-d5 (S)	%.			95	33-108	
p-Terphenyl-d14 (S)	%.			117	31-122	
Phenol-d5 (S)	%.			29	10-56	

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QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

MATRIX SPIKE SAMPLE: 906908

Parameter	Units	5079436001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1000	684	68	35-102	
2,4,5-Trichlorophenol	ug/L	ND	1000	1070	107	60-121	
2,4,6-Trichlorophenol	ug/L	ND	1000	1040	104	57-125	
2,4-Dinitrotoluene	ug/L	ND	1000	810	81	37-114	
2-Methylphenol(o-Cresol)	ug/L	ND	1000	724	72	41-111	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	2000	1240	62	32-111	
Hexachloro-1,3-butadiene	ug/L	ND	1000	734	73	20-114	
Hexachlorobenzene	ug/L	ND	1000	898	90	32-125	
Hexachloroethane	ug/L	ND	1000	721	72	22-101	
Nitrobenzene	ug/L	ND	1000	750	75	50-113	
Pentachlorophenol	ug/L	ND	1000	1240	124	25-117	M0
Pyridine	ug/L	ND	1000	184	18	10-112	
2,4,6-Tribromophenol (S)	%.				104	32-124	
2-Fluorobiphenyl (S)	%.				89	34-106	
2-Fluorophenol (S)	%.				44	10-74	
Nitrobenzene-d5 (S)	%.				87	33-108	
p-Terphenyl-d14 (S)	%.				98	31-122	
Phenol-d5 (S)	%.				27	10-56	

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QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

QC Batch: PMST/8176 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5079489001, 5079489002, 5079489003

SAMPLE DUPLICATE: 905962

Parameter	Units	5079502001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.6	15.7	0	5	

SAMPLE DUPLICATE: 905963

Parameter	Units	5079489003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	32.4	40.1	21	5	R1

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QUALITY CONTROL DATA

Project: Baycote
Pace Project No.: 5079489

QC Batch: WETA/9650 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide
Associated Lab Samples: 5079489001, 5079489002, 5079489003

METHOD BLANK: 905759 Matrix: Solid
Associated Lab Samples: 5079489001, 5079489002, 5079489003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	04/29/13 12:05	

LABORATORY CONTROL SAMPLE: 905760

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	9.7	10.7	110	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 905761 905762

Parameter	Units	5079300001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	ND	12.4	12.5	13.5	14.3	109	115	90-110	6	20	M0

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QUALIFIERS

Project: Baycote
Pace Project No.: 5079489

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote
Pace Project No.: 5079489

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5079489001	**B5-32**	EPA 3010	MPRP/11137	EPA 6010	ICP/11877
5079489002	**B5-0815**	EPA 3010	MPRP/11136	EPA 6010	ICP/11876
5079489003	**B5-BT**	EPA 3010	MPRP/11136	EPA 6010	ICP/11876
5079489001	**B5-32**	EPA 7470	MERP/4575	EPA 7470	MERC/4741
5079489002	**B5-0815**	EPA 7470	MERP/4574	EPA 7470	MERC/4740
5079489003	**B5-BT**	EPA 7470	MERP/4574	EPA 7470	MERC/4740
5079489002	**B5-0815**	EPA 3510	OEXT/32566	EPA 8270	MSSV/12379
5079489002	**B5-0815**	EPA 8260	MSV/52627		
5079489001	**B5-32**	ASTM D2974-87	PMST/8176		
5079489002	**B5-0815**	ASTM D2974-87	PMST/8176		
5079489003	**B5-BT**	ASTM D2974-87	PMST/8176		
5079489001	**B5-32**	EPA 9012	WETA/9650	EPA 9012	WETA/9663
5079489002	**B5-0815**	EPA 9012	WETA/9650	EPA 9012	WETA/9663
5079489003	**B5-BT**	EPA 9012	WETA/9650	EPA 9012	WETA/9663

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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

1600146

Section A Required Client Information:

Company: Environmental Restoration
Address:
Email To: t.viehweg@erllc.com
Phone: 312-446-6325 Fax: 636-880-2476
Requested Due Date/TAT: 3 Day

Section B Required Project Information:

Report To: Toby Viehweg
Copy To:
Purchase Order No.:
Project Name: Baxcote
Project Number:

Section C Invoice Information:

Attention: T. Viehweg
Company Name: Environmental Rest.
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: IN

Section D Required Client Information

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

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	COLLECTED Composite Start Time	COLLECTED Composite End/Grab Date	COLLECTED 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): TCLP RCRA Metals	Total Cyanide	TCLP Volatiles	TCLP Semivolatiles	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	B5-32	S	G	4-24-13	1700				1									X	X				001
2	B5-0815	S	G	4-24-13	1700				1									X	X	X	X		002
3	B5-BT	S	G	4-24-13	1700				1									X	X				003
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

5079489

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp In °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Toby Viehweg ER	4-25-13	850a	[signature]	4-26-13	850				
				Zeleen Tah	4/26/13	7:33a	3.7°C	Y	N	Y

WI/NOW ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

*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.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Env. Restoration Project # 5075489

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other NOW

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used 1 2 3 4 6 (A) B C D E **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.7°C **Ice Visible in Sample Containers:** ☐ yes ☐ no
(Corrected, if applicable)

Temp should be above freezing to 6°C

Date and initials of person examining contents: 4/26/13 SL

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☐Yes	☑No	☐N/A	4.
Short Hold Time Analysis (<72hr):	☐Yes	☐No	☑N/A	5.
Rush Turn Around Time Requested:	☑Yes	☐No	☐N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes SL	☐No	☐N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☐Yes	☐No	☑N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	10.
Trip Blank Present:	☐Yes	☐No	☑N/A	11.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: K.G. Miller **Date:** 4-26-13

Form F-IN-Q290-rev.04, 28Apr2011

Sample Container Count

CLIENT: Env. Restoration.

COC PAGE 1 of 1
COC ID# 1600146.

Project # 5079489

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Sample Line Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	8oz Jar		Comments
1														1		
2														1		
3														1		
4																
5																
6																
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

ATTACHMENT B29

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May 07, 2013

Mr. Toby Viehweg
Environmental Restoration LLC
1666 Fabick Drive
Fenton, MO 63026

RE: Project: Baycote Metals
Pace Project No.: 5079745

Dear Mr. Viehweg:
Enclosed are the analytical results for sample(s) received by the laboratory on May 02, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

kenneth.hunt@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: Baycote Metals
Pace Project No.: 5079745

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042

Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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SAMPLE SUMMARY

Project: Baycote Metals
Pace Project No.: 5079745

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5079745001	**B5-1421**	Solid	04/30/13 16:00	05/02/13 07:49

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SAMPLE ANALYTE COUNT

Project: Baycote Metals
Pace Project No.: 5079745

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5079745001	B5-1421	EPA 6010	LLB	7
		EPA 7470	LLB	1
		ASTM D2974-87	SLB	1
		EPA 9012	ILP	1

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ANALYTICAL RESULTS

Project: Baycote Metals
Pace Project No.: 5079745

Sample: B5-1421 **Lab ID: 5079745001** Collected: 04/30/13 16:00 Received: 05/02/13 07:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 05/02/13 11:00							
Arsenic	ND	mg/L	0.10	1	05/03/13 08:15	05/06/13 13:18	7440-38-2	
Barium	ND	mg/L	5.0	1	05/03/13 08:15	05/06/13 13:18	7440-39-3	
Cadmium	**2.0**	mg/L	0.050	1	05/03/13 08:15	05/06/13 13:18	7440-43-9	
Chromium	**10.2**	mg/L	0.10	1	05/03/13 08:15	05/06/13 13:18	7440-47-3	
Lead	ND	mg/L	0.10	1	05/03/13 08:15	05/06/13 13:18	7439-92-1	
Selenium	ND	mg/L	0.10	1	05/03/13 08:15	05/06/13 13:18	7782-49-2	
Silver	ND	mg/L	0.50	1	05/03/13 08:15	05/06/13 13:18	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 05/02/13 11:00							
Mercury	ND	ug/L	2.0	1	05/06/13 08:50	05/06/13 14:30	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**56.6**	%	0.10	1		05/02/13 13:47		
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012							
Cyanide	**183**	mg/kg	4.5	4	05/06/13 13:05	05/07/13 12:10	57-12-5	

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1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
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Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: Baycote Metals
Pace Project No.: 5079745

QC Batch: MERP/4586
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5079745001

METHOD BLANK: 910090
Matrix: Water
Associated Lab Samples: 5079745001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	05/06/13 14:24	

LABORATORY CONTROL SAMPLE & LCSD: 910091 910092

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ug/L	15	14.4	14.6	96	98	80-120	1	20	

MATRIX SPIKE SAMPLE: 910093

Parameter	Units	5079745001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	15	14.0	92	75-125	

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QUALITY CONTROL DATA

Project: Baycote Metals
Pace Project No.: 5079745

QC Batch: MPRP/11171
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5079745001

METHOD BLANK: 909336
Matrix: Water
Associated Lab Samples: 5079745001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	05/06/13 13:01	
Barium	mg/L	ND	5.0	05/06/13 13:01	
Cadmium	mg/L	ND	0.050	05/06/13 13:01	
Chromium	mg/L	ND	0.10	05/06/13 13:01	
Lead	mg/L	ND	0.10	05/06/13 13:01	
Selenium	mg/L	ND	0.10	05/06/13 13:01	
Silver	mg/L	ND	0.50	05/06/13 13:01	

LABORATORY CONTROL SAMPLE & LCSD: 909337 909338

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.5	10.6	105	106	80-120	1	20	
Barium	mg/L	10	10.1	10.1	101	101	80-120	0	20	
Cadmium	mg/L	10	10.1	10.1	101	101	80-120	0	20	
Chromium	mg/L	10	10.1	10.1	101	101	80-120	0	20	
Lead	mg/L	10	10.0	10.1	100	101	80-120	0	20	
Selenium	mg/L	10	10.3	10.3	103	103	80-120	0	20	
Silver	mg/L	5	5.1	5.1	102	102	80-120	0	20	

MATRIX SPIKE SAMPLE: 909339

Parameter	Units	5079745001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.9	109	50-150	
Barium	mg/L	ND	10	10.6	103	50-150	
Cadmium	mg/L	2.0	10	12.5	105	50-150	
Chromium	mg/L	10.2	10	21.5	113	50-150	
Lead	mg/L	ND	10	10.1	100	50-150	
Selenium	mg/L	ND	10	10.6	106	50-150	
Silver	mg/L	ND	5	5.4	105	50-150	

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QUALITY CONTROL DATA

Project: Baycote Metals
Pace Project No.: 5079745

QC Batch: PMST/8196
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5079745001

SAMPLE DUPLICATE: 908837

Parameter	Units	5079649001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.2	17.9	7	5	R1

SAMPLE DUPLICATE: 908838

Parameter	Units	5079745001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	56.6	53.9	5	5	

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QUALITY CONTROL DATA

Project: Baycote Metals
Pace Project No.: 5079745

QC Batch: WETA/9702
QC Batch Method: EPA 9012
Analysis Method: EPA 9012
Analysis Description: 9012 Cyanide
Associated Lab Samples: 5079745001

METHOD BLANK: 909297
Matrix: Solid
Associated Lab Samples: 5079745001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	05/07/13 11:20	

LABORATORY CONTROL SAMPLE: 909298

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	9.8	10.7	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 910485 910486

Parameter	Units	5079875001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	124	22.7	22.5	170	161	200	163	90-110	5	20	P6

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QUALIFIERS

Project: Baycote Metals
Pace Project No.: 5079745

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Baycote Metals
Pace Project No.: 5079745

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5079745001	**B5-1421**	EPA 3010	MPRP/11171	EPA 6010	ICP/11931
5079745001	**B5-1421**	EPA 7470	MERP/4586	EPA 7470	MERC/4756
5079745001	**B5-1421**	ASTM D2974-87	PMST/8196		
5079745001	**B5-1421**	EPA 9012	WETA/9702	EPA 9012	WETA/9712