



Industrial Metal Finishing Inc. ATTN: Mr. Brian Niswonger Post Office Box 326 Pocahontas, AR 72455

This report contains the analytical results and supporting information for samples submitted on October 12, 2012. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Laboratory Director or a qualified designee.

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This document has been distributed to the following:

PDF cc: Industrial Metal Finishing Inc.

ATTN: Mr. Brian Niswonger

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### **SAMPLE INFORMATION**

# **Project Description:**

Two (2) water sample(s) received on October 12, 2012 10/12

### **Receipt Details:**

A Chain of Custody was provided. The samples were delivered in one (1) ice chest. Ice chest #1 was delivered with shipping documentation.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

# **Sample Identification:**

Laboratory ID	Client Sample ID	Sampled Date/Time Notes
161669-1	M, C 1012/1 10/10/12 3:18, 3:30	10-Oct-2012 1530
161669-2	M, C 1012/2 10/11/12 2:43, 2:50	11-Oct-2012 1450

## **Qualifiers:**

X Spiking level is invalid due to the high concentration of analyte in the spiked sample

### References:

"Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).

<sup>&</sup>quot;Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.

<sup>&</sup>quot;Standard Methods for the Examination of Water and Wastewaters", 21st edition.

<sup>&</sup>quot;American Society for Testing and Materials" (ASTM).

<sup>&</sup>quot;Association of Analytical Chemists" (AOAC).





# **ANALYTICAL RESULTS**

**AIC No.** 161669-1

Sample Identification: M, C 1012/1 10/10/12 3:18, 3:30

Analyte		Result	RL	Units	Qualifier
<b>Total Cyanide</b> SM 4500-CN C,E	Prep: 12-Oct-2012 1353 by 306	< 0.01 Analyzed: 16-Oct-2	0.01 012 1006 by 306	mg/l Batch: W41321	
<b>Cadmium</b> EPA 200.8	Prep: 12-Oct-2012 1411 by 100	< 0.004 Analyzed: 15-Oct-2	0.004 012 1625 by 270	<b>mg/l</b> Batch: S33302	
<b>Chromium</b> EPA 200.8	Prep: 12-Oct-2012 1411 by 100	<b>0.020</b> Analyzed: 15-Oct-2	0.007 012 1625 by 270	<b>mg/l</b> Batch: S33302	
Copper EPA 200.8	Prep: 12-Oct-2012 1411 by 100	<b>0.061</b> Analyzed: 15-Oct-2	0.006 012 1625 by 270	mg/l Batch: S33302	
<b>Lead</b> EPA 200.8	Prep: 12-Oct-2012 1411 by 100	< 0.04 Analyzed: 15-Oct-2	0.04 012 1625 by 270	mg/l Batch: S33302	
Nickel EPA 200.8	Prep: 12-Oct-2012 1411 by 100	< 0.01 Analyzed: 15-Oct-2	0.01 012 1625 by 270	<b>mg/l</b> Batch: S33302	
Silver EPA 200.8	Prep: 12-Oct-2012 1411 by 100	< 0.007 Analyzed: 15-Oct-20	0.007 012 1625 by 270	mg/l Batch: S33302	
Zinc EPA 200.8	Prep: 12-Oct-2012 1411 by 100	<b>0.14</b> Analyzed: 15-Oct-2	0.002 012 1625 by 270	<b>mg/l</b> Batch: S33302	

**AIC No.** 161669-2

**Sample Identification:** M, C 1012/2 10/11/12 2:43, 2:50

Analyte		Result	RL	Units	Qualifier
<b>Total Cyanide</b> SM 4500-CN C,E	Prep: 12-Oct-2012 1353 by 306	< 0.01 Analyzed: 16-Oct-2	0.01 012 1008 by 306	mg/l Batch: W41321	
Cadmium EPA 200.8	Prep: 12-Oct-2012 1411 by 100	< 0.004 Analyzed: 15-Oct-2	0.004 012 1629 by 270	<b>mg/l</b> Batch: S33302	
Chromium EPA 200.8	Prep: 12-Oct-2012 1411 by 100	<b>0.11</b> Analyzed: 15-Oct-2	0.007 012 1629 by 270	<b>mg/l</b> Batch: S33302	
Copper EPA 200.8	Prep: 12-Oct-2012 1411 by 100	<b>0.024</b> Analyzed: 15-Oct-2	0.006 012 1629 by 270	<b>mg/l</b> Batch: S33302	
Lead EPA 200.8	Prep: 12-Oct-2012 1411 by 100	< 0.04 Analyzed: 15-Oct-2	0.04 012 1629 by 270	<b>mg/l</b> Batch: S33302	
Nickel EPA 200.8	Prep: 12-Oct-2012 1411 by 100	< 0.01 Analyzed: 15-Oct-2	0.01 012 1629 by 270	<b>mg/l</b> Batch: S33302	
Silver EPA 200.8	Prep: 12-Oct-2012 1411 by 100	< 0.007 Analyzed: 15-Oct-2	0.007 012 1629 by 270	<b>mg/l</b> Batch: S33302	
<b>Zinc</b> EPA 200.8	Prep: 12-Oct-2012 1411 by 100	<b>0.70</b> Analyzed: 15-Oct-2	0.002 012 1629 by 270	<b>mg/l</b> Batch: S33302	





# **LABORATORY CONTROL SAMPLE RESULTS**

	Spike									
Analyte	Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Cyanide	0.1 mg/l	89.0	85.0-115			W41321	12Oct12 0904 by 306	16Oct12 0943 by 306		
Cadmium	0.05 mg/l	93.1	85.0-115			S33302	12Oct12 1413 by 100	15Oct12 1050 by 305		
Chromium	0.05 mg/l	98.8	85.0-115			S33302	12Oct12 1413 by 100	15Oct12 1050 by 305		
Copper	0.05 mg/l	95.7	85.0-115			S33302	12Oct12 1413 by 100	15Oct12 1050 by 305		
Lead	0.05 mg/l	94.1	85.0-115			S33302	12Oct12 1413 by 100	15Oct12 1050 by 305		
Nickel	0.05 mg/l	94.8	85.0-115			S33302	12Oct12 1413 by 100	15Oct12 1050 by 305		
Silver	0.02 mg/l	94.8	85.0-115			S33302	12Oct12 1413 by 100	15Oct12 1050 by 305		
Zinc	0.05 mg/l	96.5	85.0-115			S33302	12Oct12 1413 by 100	15Oct12 1050 by 305		

# MATRIX SPIKE SAMPLE RESULTS

Analyte	Spike Sample Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Cyanide	161638-1 0.1 mg/l 161638-1 0.1 mg/l Relative Percent Difference:	87.5 91.6 4.54	75.0-125 75.0-125 20.0	W41321 W41321 W41321	12Oct12 0904 by 306 12Oct12 0904 by 306	16Oct12 0947 by 306 16Oct12 0949 by 306		
Cadmium	161682-1 0.05 mg/l 161682-1 0.05 mg/l Relative Percent Difference:	94.0 93.0 1.01	75.0-125 75.0-125 20.0	S33302 S33302 S33302	12Oct12 1413 by 100 12Oct12 1413 by 100	15Oct12 1055 by 305 15Oct12 1059 by 305		
Chromium	161682-1 0.05 mg/l 161682-1 0.05 mg/l Relative Percent Difference:	98.9 99.4 0.477	75.0-125 75.0-125 20.0	S33302 S33302 S33302	12Oct12 1413 by 100 12Oct12 1413 by 100	15Oct12 1055 by 305 15Oct12 1059 by 305		
Copper	161682-1 0.05 mg/l 161682-1 0.05 mg/l Relative Percent Difference:	- - 0.694	75.0-125 75.0-125 20.0	S33302 S33302 S33302	12Oct12 1413 by 100 12Oct12 1413 by 100	15Oct12 1055 by 305 15Oct12 1059 by 305		X X
Lead	161682-1 0.05 mg/l 161682-1 0.05 mg/l Relative Percent Difference:	89.2 87.7 1.48	75.0-125 75.0-125 20.0	S33302 S33302 S33302	12Oct12 1413 by 100 12Oct12 1413 by 100	15Oct12 1055 by 305 15Oct12 1059 by 305		
Nickel	161682-1 0.05 mg/l 161682-1 0.05 mg/l Relative Percent Difference:	91.9 95.0 0.797	75.0-125 75.0-125 20.0	S33302 S33302 S33302	12Oct12 1413 by 100 12Oct12 1413 by 100	15Oct12 1055 by 305 15Oct12 1059 by 305		
Silver	161682-1 0.02 mg/l 161682-1 0.02 mg/l Relative Percent Difference:	85.3 85.3 0.0144	75.0-125 75.0-125 20.0	S33302 S33302 S33302	12Oct12 1413 by 100 12Oct12 1413 by 100	15Oct12 1055 by 305 15Oct12 1059 by 305		
Zinc	161682-1 0.05 mg/l 161682-1 0.05 mg/l Relative Percent Difference:	107 117 8.19	75.0-125 75.0-125 20.0	S33302 S33302 S33302	12Oct12 1413 by 100 12Oct12 1413 by 100	15Oct12 1055 by 305 15Oct12 1059 by 305		





# **LABORATORY BLANK RESULTS**

				QC			
Analyte	Result	RL	PQL	Sample	<b>Preparation Date</b>	Analysis Date	Qual
Total Cyanide	< 0.01 mg/l	0.01	0.01	W41321-1	12Oct12 0904 by 306	16Oct12 0941 by 306	- —
Cadmium	< 0.004 mg/l	0.004	0.004	S33302-1	12Oct12 1413 by 100	15Oct12 1027 by 305	
Chromium	< 0.007 mg/l	0.007	0.007	S33302-1	12Oct12 1413 by 100	15Oct12 1027 by 305	
Copper	< 0.006 mg/l	0.006	0.006	S33302-1	12Oct12 1413 by 100	15Oct12 1027 by 305	
Lead	< 0.04 mg/l	0.04	0.04	S33302-1	12Oct12 1413 by 100	15Oct12 1027 by 305	
Nickel	< 0.01 mg/l	0.01	0.01	S33302-1	12Oct12 1413 by 100	15Oct12 1027 by 305	
Silver	< 0.007 mg/l	0.007	0.007	S33302-1	12Oct12 1413 by 100	15Oct12 1027 by 305	
Zinc	< 0.002 mg/l	0.002	0.002	S33302-1	12Oct12 1413 by 100	15Oct12 1027 by 305	

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