

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 April 6, 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.

Overbey aboratory Director

This document has been distributed to the following:

PDF cc: Industrial Metal Finishing Inc. ATTN: Mr. Brian Niswonger bniswonger@indmetalfinishings.com



# **SAMPLE INFORMATION**

### Project Description:

Two (2) water sample(s) received on April 6, 2012

#### **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
156770-1	IMF4/12 1C, M 4-5-12 3:20pm, 3:21pm	05-Apr-2012 1521	
156770-2	IMF4/12 2C, M 4-5-12 3:40pm, 3:51pm	05-Apr-2012 1551	

#### Case Narrative:

There were no qualifiers for this data and all samples met quality control criteria.

#### **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).

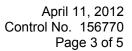
"Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.

"Standard Methods for the Examination of Water and Wastewaters", 20th edition, 1998.

"American Society for Testing and Materials" (ASTM).

"Association of Analytical Chemists" (AOAC).





# **ANALYTICAL RESULTS**

### AIC No. 156770-1

Sample Identification: IMF4/12 1C, M 4-5-12 3:20pm, 3:21pm

Total Cyanide SM4500-CN C,E         Prep: 09-Apr-2012 1317 by 302          (0.01 Analyzed: 09-Apr-2012 1751 by 302         mg/l Batch: W39482           Cadmium EPA 200.7         Prep: 09-Apr-2012 1435 by 297         0.0050 Analyzed: 10-Apr-2012 1358 by 270         mg/l Batch: S32205           Chromium EPA 200.7         Prep: 09-Apr-2012 1435 by 297         0.017 Analyzed: 10-Apr-2012 1358 by 270         mg/l Batch: S32205           Copper EPA 200.7         Prep: 09-Apr-2012 1435 by 297         0.027 Analyzed: 10-Apr-2012 1358 by 270         mg/l Batch: S32205           Lead EPA 200.7         Prep: 09-Apr-2012 1435 by 297         0.027 Analyzed: 10-Apr-2012 1358 by 270         mg/l Batch: S32205           Lead EPA 200.7         Prep: 09-Apr-2012 1435 by 297         Analyzed: 10-Apr-2012 1358 by 270         mg/l Batch: S32205           Lead EPA 200.7         Prep: 09-Apr-2012 1435 by 297         Analyzed: 10-Apr-2012 1358 by 270         mg/l Batch: S32205           Silver EPA 200.7         Prep: 09-Apr-2012 1435 by 297         Analyzed: 10-Apr-2012 1358 by 270         Batch: S32205           Silver EPA 200.7         Prep: 09-Apr-2012 1435 by 297         Analyzed: 10-Apr-2012 1358 by 270         Batch: S32205           Silver EPA 200.7         Prep: 09-Apr-2012 1435 by 297         Analyzed: 10-Apr-2012 1358 by 270         Batch: S32205           Silver EPA 200.7         Prep: 09-Apr-2012 1435 by 297         Analyzed: 10-Apr-2012 1358 by	Analyte		Result	RL	Units	Qualifier
EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Chromium EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Copper EPA 200.7       Prep: 09-Apr-2012 1435 by 297       0.007 Analyzed: 10-Apr-2012 1358 by 270       mg/l Batch: S32205         Lead EPA 200.7       Prep: 09-Apr-2012 1435 by 297       0.027 Analyzed: 10-Apr-2012 1358 by 270       mg/l Batch: S32205         Lead EPA 200.7       Prep: 09-Apr-2012 1435 by 297       < 0.04 Analyzed: 10-Apr-2012 1358 by 270       mg/l Batch: S32205         Nickel EPA 200.7       Prep: 09-Apr-2012 1435 by 297       < 0.01 Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver EPA 200.7       Prep: 09-Apr-2012 1435 by 297       < 0.01 Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver EPA 200.7       Prep: 09-Apr-2012 1435 by 297       < 0.007 Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver EPA 200.7       Prep: 09-Apr-2012 1435 by 297       < 0.007 Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver EPA 200.7       Prep: 09-Apr-2012 1435 by 297       < 0.007 Analyzed: 10-Apr-2012 1358 by 270       mg/l Batch: S32205         Silver EPA 200.7       D.002       mg/l         EPA 200.7       D.002       mg/l		Prep: 09-Apr-2012 1317 by 302			-	
EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Copper       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Lead       Prep: 09-Apr-2012 1435 by 297       O.006       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       O.04       O.04       mg/l         Batch: S32205       Co.04       O.04       mg/l       Batch: S32205         Lead       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Nickel       Prep: 09-Apr-2012 1435 by 297       Co.01       O.01       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver       Prep: 09-Apr-2012 1435 by 297       O.007       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       O.007       Batch: S32205         Silver       Prep: 09-Apr-2012 1435 by 297       O.007       Mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       O.007       Mg/l         Batch: S32205       O.007       O.007       Mg/l         Batch: S32205       O.002       Mg/l		Prep: 09-Apr-2012 1435 by 297				
EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Lead       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Nickel       Prep: 09-Apr-2012 1435 by 297       O.01       O.01       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Nickel       Prep: 09-Apr-2012 1435 by 297       O.01       O.01       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver       Prep: 09-Apr-2012 1435 by 297       O.007       Mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       O.007       Mg/l         Silver       O.007       O.007       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       O.007       Mg/l         Batch: S32205       O.007       Mg/l       Batch: S32205         Silver       O.002       mg/l		Prep: 09-Apr-2012 1435 by 297			-	
EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Nickel       0.01       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver       0.007       0.007       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver       0.007       0.007       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver       0.007       0.007       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Zinc       0.15       0.002       mg/l		Prep: 09-Apr-2012 1435 by 297				
EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Silver       < 0.007       0.007       mg/l         EPA 200.7       Prep: 09-Apr-2012 1435 by 297       Analyzed: 10-Apr-2012 1358 by 270       Batch: S32205         Zinc       0.15       0.002       mg/l		Prep: 09-Apr-2012 1435 by 297				
EPA 200.7         Prep: 09-Apr-2012 1435 by 297         Analyzed: 10-Apr-2012 1358 by 270         Batch: S32205           Zinc         0.15         0.002         mg/l		Prep: 09-Apr-2012 1435 by 297			-	
		Prep: 09-Apr-2012 1435 by 297				
EPA 200.7         Prep: 09-Apr-2012 1435 by 297         Analyzed: 10-Apr-2012 1358 by 270         Batch: S32205	<b>Zinc</b> EPA 200.7	Prep: 09-Apr-2012 1435 by 297			<b>mg/l</b> Batch: S32205	

#### AIC No. 156770-2

Sample Identification: IMF4/12 2C, M 4-5-12 3:40pm, 3:51pm

Analyte		Result	RL	Units	Qualifier
Total Cyanide SM4500-CN C,E	Prep: 09-Apr-2012 1317 by 302	<b>&lt; 0.01</b> Analyzed: 09-A	0.01 pr-2012 1753 by 302	<b>mg/l</b> Batch: W39482	
Cadmium EPA 200.7	Prep: 09-Apr-2012 1435 by 297	<b>0.0088</b> Analyzed: 10-A	0.004 pr-2012 1402 by 270	<b>mg/l</b> Batch: S32205	
Chromium EPA 200.7	Prep: 09-Apr-2012 1435 by 297	<b>0.010</b> Analyzed: 10-A	0.007 pr-2012 1402 by 270	<b>mg/l</b> Batch: S32205	
Copper EPA 200.7	Prep: 09-Apr-2012 1435 by 297	<b>0.036</b> Analyzed: 10-A	0.006 pr-2012 1402 by 270	<b>mg/l</b> Batch: S32205	
<b>Lead</b> EPA 200.7	Prep: 09-Apr-2012 1435 by 297	< 0.04 Analyzed: 10-A	0.04 pr-2012 1402 by 270	<b>mg/l</b> Batch: S32205	
Nickel EPA 200.7	Prep: 09-Apr-2012 1435 by 297	< 0.01 Analyzed: 10-A	0.01 pr-2012 1402 by 270	<b>mg/l</b> Batch: S32205	
<b>Silver</b> EPA 200.7	Prep: 09-Apr-2012 1435 by 297	< 0.007 Analyzed: 10-A	0.007 pr-2012 1402 by 270	<b>mg/l</b> Batch: S32205	
<b>Zinc</b> EPA 200.7	Prep: 09-Apr-2012 1435 by 297	<b>0.34</b> Analyzed: 10-A	0.002 pr-2012 1402 by 270	<b>mg/l</b> Batch: S32205	





### LABORATORY CONTROL SAMPLE RESULTS

A	Spike	0/	1 1			Datab	Dura and in Data	Analysis Dete		0
Analyte	Amount	%	Limits	RPD	_ Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Cyanide	0.1 mg/l	94.4	85.0-115			W39482	09Apr12 1319 by 302	09Apr12 1729 by 302		
Cadmium	5 mg/l	101	85.0-115			S32205	09Apr12 1436 by 297	10Apr12 1127 by 270		
Chromium	0.5 mg/l	101	85.0-115			S32205	09Apr12 1436 by 297	10Apr12 1127 by 270		
Copper	0.5 mg/l	103	85.0-115			S32205	09Apr12 1436 by 297	10Apr12 1127 by 270		
Lead	5 mg/l	101	85.0-115			S32205	09Apr12 1436 by 297	10Apr12 1127 by 270		
Nickel	0.5 mg/l	103	85.0-115			S32205	09Apr12 1436 by 297	10Apr12 1127 by 270		
Silver	0.1 mg/l	101	85.0-115			S32205	09Apr12 1436 by 297	10Apr12 1127 by 270		
Zinc	0.5 mg/l	101	85.0-115			S32205	09Apr12 1436 by 297	10Apr12 1127 by 270		

# MATRIX SPIKE SAMPLE RESULTS

Analyte	Spike Sample Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Cyanide	156754-3 0.1 mg/l 156754-3 0.1 mg/l Relative Percent Difference:	94.2 87.0 7.82	75.0-125 75.0-125 20.0	W39482 W39482 W39482	09Apr12 1319 by 302 09Apr12 1319 by 302	09Apr12 1732 by 302 09Apr12 1734 by 302		
Cadmium	156775-2 5 mg/l 156775-2 5 mg/l Relative Percent Difference:	104 99.4 4.38	75.0-125 75.0-125 20.0	S32205 S32205 S32205	09Apr12 1436 by 297 09Apr12 1436 by 297	10Apr12 1130 by 270 10Apr12 1133 by 270		
Chromium	156775-2 0.5 mg/l 156775-2 0.5 mg/l Relative Percent Difference:	103 102 1.01	75.0-125 75.0-125 20.0	S32205 S32205 S32205	09Apr12 1436 by 297 09Apr12 1436 by 297	10Apr12 1130 by 270 10Apr12 1133 by 270		
Copper	156775-2 0.5 mg/l 156775-2 0.5 mg/l Relative Percent Difference:	105 103 1.86	75.0-125 75.0-125 20.0	S32205 S32205 S32205	09Apr12 1436 by 297 09Apr12 1436 by 297	10Apr12 1130 by 270 10Apr12 1133 by 270		
Lead	156775-2 5 mg/l 156775-2 5 mg/l Relative Percent Difference:	103 102 1.54	75.0-125 75.0-125 20.0	S32205 S32205 S32205	09Apr12 1436 by 297 09Apr12 1436 by 297	10Apr12 1130 by 270 10Apr12 1133 by 270		
Nickel	156775-2 0.5 mg/l 156775-2 0.5 mg/l Relative Percent Difference:	104 103 1.18	75.0-125 75.0-125 20.0	S32205 S32205 S32205	09Apr12 1436 by 297 09Apr12 1436 by 297	10Apr12 1130 by 270 10Apr12 1133 by 270		
Silver	156775-2 0.1 mg/l 156775-2 0.1 mg/l Relative Percent Difference:	101 95.9 5.26	75.0-125 75.0-125 20.0	S32205 S32205 S32205	09Apr12 1436 by 297 09Apr12 1436 by 297	10Apr12 1130 by 270 10Apr12 1133 by 270		
Zinc	156775-2 0.5 mg/l 156775-2 0.5 mg/l Relative Percent Difference:	102 99.8 2.02	75.0-125 75.0-125 20.0	S32205 S32205 S32205	09Apr12 1436 by 297 09Apr12 1436 by 297	10Apr12 1130 by 270 10Apr12 1133 by 270		



# LABORATORY BLANK RESULTS

				QC			
Analyte	Result	RL	PQL	Sample	Preparation Date	Analysis Date	Qual
Total Cyanide	< 0.01 mg/l	0.01	0.01	W39482-1	09Apr12 1319 by 302	09Apr12 1727 by 302	
Cadmium	< 0.004 mg/l	0.004	0.004	S32205-1	09Apr12 1436 by 297	10Apr12 1124 by 270	
Chromium	< 0.007 mg/l	0.007	0.007	S32205-1	09Apr12 1436 by 297	10Apr12 1124 by 270	
Copper	< 0.006 mg/l	0.006	0.006	S32205-1	09Apr12 1436 by 297	10Apr12 1124 by 270	
Lead	< 0.04 mg/l	0.04	0.04	S32205-1	09Apr12 1436 by 297	10Apr12 1124 by 270	
Nickel	< 0.01 mg/l	0.01	0.01	S32205-1	09Apr12 1436 by 297	10Apr12 1124 by 270	
Silver	< 0.007 mg/l	0.007	0.007	S32205-1	09Apr12 1436 by 297	10Apr12 1124 by 270	
Zinc	< 0.002 mg/l	0.002	0.002	S32205-1	09Apr12 1436 by 297	10Apr12 1124 by 270	

AIC Control No.	12/2/	AIC Proposal No:	Carrier: $\mu \rho \zeta$	Received Temperature °C	Remarks							Field pH calibration	@u		T = Sodium I niosurrate Z = Zinc acetate	Recei By:	Deceived in Lab	By: linger Hyton 0945	aken every shes	work period	
CHAIN OF CUSTODY / ANALYSIS REQUEST FORM	No Analyses Requested		3/ 7/ 3/- 0/-	127 010	To hi					2						pH2 i B = NaON to print guished Date/Time	here - et lost Hing	Relinquished By:	Comments: samples vere ca	dungs an 8 hr. 4	
A AMERICAN INTERPLEX CORPORATION LABORATORIES CHAIN OF CL	1 NOU	Industrial Metal Finishing	Project Sample Reference: Matrix	Brian Assonger W	1917 Liseponser R 0	Sample Date: I nue P R Identification Collected B P R	TmF4/121C 4-5-12 / / 0	4	┣_─	7 TMFU/132C 4-4-12 m V V	21-4-4 WE T// Hum			Container Type	]	<ul> <li>S = Sulfuric acid pH2</li> <li>(Please circle)</li> </ul>	NORMAL OF EXPEDITED IN DAYS	Who should AIC contact with questions:	Rece		

J.XCOC Templates/Blank COC.XIs

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