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8/8/2008

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Lab ID# 191327

Dear Fabio Barreiros Nunes,

Please find your laboratory's Industrial Hygiene Proficiency Analytical Testing (IHPAT) results for **Round 174.** The proficiency demonstrated by the results of this IHPAT round is valid until the close of the retest round on October 17, 2008 if the laboratory chooses to participate or the close of the next IHPAT round on November 14, 2008.

Unacceptable performance may be improved by correctly analyzing a set of retest samples. The deadline to order a retest is August 29, 2008. Retest sample kits are mailed via USPS Mail within five days after the order deadline.

IHPAT **Round 175** sample kits will be mailed to laboratories around October 1, 2008. Your laboratory's data will be due by 11:59pm EST on November 3, 2008. The analytes for round 175 are:

- Metals cadmium, lead, zinc
- Asbestos chrysotile
- Silica coal dust
- Organics Chloroform(CFM), 1,2-Dichloroethane(DCE), 1,1,1-Trichloroethane(MCM)

Please handle, store and analyze your laboratory's PAT samples in the same manner as routine client samples. To submit your laboratory's data, please visit the Proficiency Analytical Testing (PAT) page and click on the PAT Data Entry Portal: <a href="http://www.aiha.org/Content/LQAP/PT/pt.htm">http://www.aiha.org/Content/LQAP/PT/pt.htm</a>

Your laboratory's password needed to access the PAT Data Entry Portal is provided in the upper right hand corner (next to your lab ID#) of the address label on the results submission form included with your PAT samples. **Print and save the confirmation page** after submitting data via the AIHA PAT Data Entry Portal.

The AIHA Laboratory Quality Assurance Programs Policies and Application for AIHA accreditation are available on-line.

http://www.aiha.org/Content/LQAP/documents/documents.htm

Note: The Policies for 2008 comply with ISO/IEC 17025: 2005.

I encourage you to contact me with any feedback, questions or if you wish to contest your results at (703) 846-0797.

Sincerely,

Natasha Sekitoleko PAT Data Specialist

## **Industrial Hygiene Proficiency Analytical Testing Results**

This document contains three sub-reports relating to IHPAT Round 174. The first report contains your laboratory's results listed per contaminant, per sample. The second report contains your current and 2 previous test round performance respectively (where applicable), and the final report contains summary results for all laboratories for IHPAT round 174.

# Testing Results for IHPAT Round 174

This part of the report contains your laboratory's results listed per contaminant, per sample.

Contaminant	Units	#	Result	Ref. Value	Lower Limit	Upper Limit	z-Score	Rating
Benzene (BNZ)	mg	1	0.0679	0.0649	0.0538	0.0760	0.8	А
	mg	2	0.2870	0.2564	0.2070	0.3059	1.9	Α
	mg	3	0.7898	0.7512	0.6610	0.8413	1.3	А
	mg	4	0.5119	0.4698	0.4134	0.5261	2.2	А
O-xylene (OXY)	mg	1	0.8981	0.8558	0.7145	0.9970	0.9	А
	mg	2	0.3822	0.3409	0.2681	0.4137	1.7	А
	mg	3	0.5329	0.4906	0.4240	0.5573	1.9	А
	mg	4	1.2851	1.1349	0.8798	1.3899	1.8	Α
Toluene (TOL)	mg	1	1.2963	1.2699	1.1062	1.4336	0.5	А
	mg	2	0.9756	0.8840	0.7414	1.0265	1.9	А
	mg	3	0.1120	0.1042	0.0876	0.1209	1.4	А
	mg	4	0.5776	0.5301	0.4642	0.5959	2.2	А

### Please note:

Reference value is the mean of the reference laboratories

The acceptability of reported results is based on upper and lower performance limits. This is why a reported result may appear unacceptable according to z-score, but be identified as acceptable.

<sup>\*</sup>Lower limit = reference value - 3 standard deviations and Upper limit = reference value +3 standard deviations

<sup>\*</sup>Z-score = (reported result - reference value)/standard deviation

<sup>\*</sup>Asbestos is the exception because data are positively skewed therefore transformations are used to obtain approximately normal distributions.

A: Acceptable Analysis; U: Unacceptable Analysis

Overall Performance Summary Concluding with 174

The following table contains your laboratory's current and 2 previous test rounds performance respectively (where applicable). For more information in regard to the determination of proficiency, please see Policy Module 6B, Section 6B.2 for IHPAT and Policy Module 6C Section 6C.2 for ELPAT Lead-in-Air located at: http://www.aiha.org/Content/LQAP/documents/accredpolicymods.htm

Sample	Round	Round Performance	Round Score	Proficiency Status -Three Round Score	
	174	12/12	Pass	I	

## Please note:

The denominators represent the total number of samples analyzed.

The numerators represent the number of acceptable results.

Pass: Round Score ≥ 75% Fail: Round Score < 75%

P - Proficient; NP - Non-proficient.

A laboratory is rated proficient (P) for the associated FoT/Method(s), if the laboratory has a passing score for the applicable PT analyte class in two (2) of the last three (3) consecutive PT rounds. A laboratory is rated non-proficient (NP) for the applicable FoT/Method if the laboratory has failing scores for the associated PT analyte class in two (2) of the last three (3) consecutive PT rounds.

If a laboratory receives samples and does not report the data, the results will be treated as outliers.

# **Performance of all Labs for IHPAT Round 174**The following table contains aggregate results for all laboratories participating in IHPAT round 174.

Contaminant	#	Ref. Value	Std Dev	RSD (%)	Total Labs	Total Acceptable	Low Outlier	High Outlier
Cadmium (CAD)	1	0.01720	0.00080	4.7	176	165	4	7
	2	0.00309	0.00013	4.0	176	152	11	13
	3	0.01188	0.00048	4.0	176	161	9	6
	4	0.00672	0.00027	4.0	176	162	6	8
	1	0.0834	0.0037	4.4	176	162	6	8
Chromium (CHR)	2	0.0990	0.0045	4.6	176	162	8	6
	3	0.0321	0.0015	4.7	176	166	4	6
	4	0.1717	0.0083	4.8	176	160	7	9
	1	0.0789	0.0032	4.0	176	166	4	6
Land (LEA)	2	0.0439	0.0018	4.0	176	169	2	5
Lead (LEA)	3	0.1467	0.0060	4.1	176	168	4	4
	4	0.1030	0.0044	4.3	176	168	2	6
	1	0.1194	0.0093	7.8	58	49	5	4
011 (011.)	2	0.1751	0.0233	13.3	58	57	0	1
Silica (SIL)	3	0.0911	0.0072	7.9	58	50	3	5
	4	0.0627	0.0085	13.6	58	54	2	2
	1	186	37	20.0	731	684	7	40
Askartas (Fibers (AOR)	2	310	51	16.6	731	648	11	72
Asbestos / Fibers (ASB)	3	403	68	17.0	731	681	21	29
	4	108	22	20.0	731	684	24	23
Benzene (BNZ)	1	0.0649	0.0037	5.7	141	129	2	10
	2	0.2564	0.0165	6.4	141	131	5	5
	3	0.7512	0.0300	4.0	141	129	8	4
	4	0.4698	0.0188	4.0	141	125	8	8
	1	0.8558	0.0471	5.5	141	124	8	9
0 1 2 2 (0)00	2	0.3409	0.0243	7.1	141	127	5	9
O-xylene (OXY)	3	0.4906	0.0222	4.5	141	120	15	6
	4	1.1349	0.0850	7.5	141	129	7	5
	1	1.2699	0.0546	4.3	141	123	12	6
T. I. (TOL)	2	0.8840	0.0475	5.4	141	124	11	6
Toluene (TOL)	3	0.1042	0.0056	5.3	141	125	6	10
	4	0.5301	0.0220	4.1	141	123	5	13