Laboratory Quality Assurance Program
2700 Prosperity Avenue, Suite 250
Fairfax, VA 22031
(703) 849-8888 (703) 207-8558 fax

5/14/2008

Steve Green
AT Labs, a Unit of Assay Technology
250 DeBartolo Place, Suite 2525

Youngstown, OH 44512 Lab ID# 100903

Dear Steve Green,

Please find your laboratory's Industrial Hygiene Proficiency Analytical Testing (IHPAT) results for **Round 173.** The proficiency demonstrated by the results of this IHPAT round is valid until the close of the retest round on July 18, 2008 if the laboratory chooses to participate or the close of the next IHPAT round on August 15, 2008.

Unacceptable performance may be improved by correctly analyzing a set of retest samples. The deadline to order a retest is May 30, 2008. Retest sample kits are mailed via USPS Mail within five days after the order deadline.

IHPAT **Round 174** sample kits will be mailed to laboratories around July 1, 2008. Your laboratory's data will be due by 11:59pm EST on August 1, 2008. The analytes for round 174 are:

- **Metals – cadmium, chromium, lead**
- **Asbestos – amosite**
- **Silica – talc**
- **Organics – benzene(BNZ), toluene(TOL), o-xylene(OXY)**
- **Diffusive – benzene, toluene, o-xylene**

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:
http://www.aiha.org/Content/LQAP/PT/pt.htm

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 173. 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 173.

Testing Results for IHPAT Round 173

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
Cadmium (CAD)	mg	1	0.00180	0.00182	0.00149	0.00215	-0.2	A
	mg	2	0.01420	0.01511	0.01330	0.01692	-1.5	A
	mg	3	0.00880	0.00963	0.00826	0.01100	-1.8	A
	mg	4	0.00640	0.00689	0.00598	0.00781	-1.6	A
Lead (LEA)	mg	1	0.1200	0.1243	0.1094	0.1393	-0.9	A
	mg	2	0.0764	0.0805	0.0709	0.0902	-1.3	A
	mg	3	0.0327	0.0348	0.0302	0.0394	-1.4	A
	mg	4	0.0941	0.0992	0.0861	0.1123	-1.2	A
Zinc (ZIN)	mg	1	0.1400	0.1550	0.1328	0.1772	-2.0	A
	mg	2	0.1170	0.1308	0.1140	0.1476	-2.5	A
	mg	3	0.0552	0.0619	0.0531	0.0707	-2.3	A
	mg	4	0.0849	0.0949	0.0799	0.1098	-2.0	A
Asbestos / Fibers (ASB)	f/mm2	1	98	126	62	212	-1.1	A
	f/mm2	2	159	301	147	509	-2.4	A
	f/mm2	3	106	180	88	303	-2.1	A
	f/mm2	4	75	73	36	123	0.2	A
Chloroform (CFM)	mg	1	1.2100	1.0674	0.8436	1.2911	1.9	A
	mg	2	1.6400	1.3369	1.1636	1.5101	5.3	U
	mg	3	0.4610	0.4150	0.3548	0.4753	2.3	A
	mg	4	0.2730	0.2495	0.2164	0.2827	2.1	A
1,2-Dichloroethane (DCE)	mg	1	0.1210	0.1078	0.0866	0.1289	1.9	A
	mg	2	1.2700	1.0521	0.9007	1.2035	4.3	U
	mg	3	0.7200	0.6406	0.5338	0.7474	2.2	A
	mg	4	0.3600	0.3195	0.2708	0.3682	2.5	A
Trichloroethylene (TCE)	mg	1	0.2150	0.2036	0.1676	0.2396	1.0	A
	mg	2	0.7330	0.6429	0.5573	0.7285	3.2	U
	mg	3	1.6200	1.5141	1.3072	1.7211	1.5	A
	mg	4	0.8510	0.7957	0.6810	0.9104	1.4	A

Please note:
Reference value is the mean of the reference laboratories
*Lower limit = reference value - 3 standard deviations and Upper limit = reference value +3 standard deviations
*Z-score = (reported result - reference value)/standard deviation
*Asbestos is the exception because data are positively skewed therefore transformations are used to obtain approximately normal distributions.
A: Acceptable Analysis; U: Unacceptable Analysis
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.

Overall Performance Summary Concluding with 173

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
Asbestos	171	3/4	Pass	
	172	4/4	Pass	
	173	4/4	Pass	P
Metals	171	12/12	Pass	
	172	12/12	Pass	
	173	12/12	Pass	P
Organic Solvents	171	12/12	Pass	
	172	4/4	Pass	
	173	9/12	Pass	P

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 173

The following table contains aggregate results for all laboratories participating in IHPAT round 173.

Contaminant	#	Ref. Value	Std Dev	RSD (%)	Total Labs	Total Acceptable	Low Outlier	High Outlier
Cadmium (CAD)	1	0.00182	0.00011	6.1	171	163	4	4
	2	0.01511	0.00060	4.0	171	165	3	3
	3	0.00963	0.00046	4.7	171	166	2	3
	4	0.00689	0.00031	4.4	171	165	2	4
Lead (LEA)	1	0.1243	0.0050	4.0	172	164	6	2
	2	0.0805	0.0032	4.0	172	166	4	2
	3	0.0348	0.0016	4.4	172	164	3	5
	4	0.0992	0.0044	4.4	172	170	1	1
Zinc (ZIN)	1	0.1550	0.0074	4.8	169	159	6	4
	2	0.1308	0.0056	4.3	169	160	5	4
	3	0.0619	0.0029	4.8	169	157	7	5
	4	0.0949	0.0050	5.3	169	164	2	3
Silica (SIL)	1	0.0531	0.0076	14.3	56	51	1	4
	2	0.0837	0.0101	12.0	56	51	2	3
	3	0.1391	0.0128	9.2	56	54	2	0
	4	0.1440	0.0220	15.2	56	54	1	1
Asbestos / Fibers (ASB)	1	126	25	10.0	712	599	83	30
	2	301	60	10.0	712	593	89	30
	3	180	36	10.0	712	588	96	28
	4	73	15	10.0	712	668	16	28
Chloroform (CFM)	1	1.0674	0.0746	7.0	137	134	1	2
	2	1.3369	0.0577	4.3	137	132	2	3
	3	0.4150	0.0201	4.8	137	126	4	7
	4	0.2495	0.0111	4.4	137	124	6	7
1,2-Dichloroethane (DCE)	1	0.1078	0.0070	6.5	137	124	6	7
	2	1.0521	0.0505	4.8	137	131	3	3
	3	0.6406	0.0356	5.6	137	130	4	3
	4	0.3195	0.0162	5.1	137	129	4	4
Trichloroethylene (TCE)	1	0.2036	0.0120	5.9	137	127	4	6
	2	0.6429	0.0285	4.4	137	129	3	5
	3	1.5141	0.0690	4.6	137	125	5	7
	4	0.7957	0.0382	4.8	137	128	3	6