

ROUTING SLIP

TO	CO	RW	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	
NAME/TITLE											CORRES. SYMBOL	RECEIVED	
												INIT'L	DATE
1. Mike Crocker / Kim Unfried											6PEC-F		
2.													
3.													
Necessary Action				Recommendation				X	As Requested				
For Signature				Comment					See Me				
Concurrence				Initial and Return					Your Information				
Approval				Per Conversation					Other (<i>Specify</i>)				
REPLY OR INTERIM REPLY				DUE				FOR SIGNATURE OF					

SUBJECT: Results of Environmental Hygiene & Safety Survey

As requested by your office, we conducted an IAQ and safety survey of the currently-unoccupied portion of Building 103 on 22 & 23 July 2003. The results of this survey are forwarded herewith.

Safety Findings: We found several items needing attention. A listing of these findings are attached. We request as these items are corrected that we be notified so that we might update our Findings database.

IAQ: We conducted an IAQ survey specifically pertaining to airborne molds. As a result of the survey, we found a number of areas of ceiling tiles showing water damage and an area showing actively-growing mold. We recommend these areas be corrected and resampling be conducted.

The full findings and recommendations are attached. Should you have any comments or questions regarding this survey, please do not hesitate to contact me.

FRC (b) (6) NAM Industrial Hygienist Safety & Environmental Management Team	R5	R6	R7	R8	R9	R10
			CORRES. SYMBOL	BUILDING ROOM NO.		
			6PEF-S			
			TELEPHONE NO.	DATE		
			816-823-2227	14 August 2003		
			Fax: 816-926-1779			



Occupational/Environmental Hygiene and Safety Surveys -- Heartland Region

REPORT OF SAFETY AUDIT FINDINGS
25-Jul-2003

Building Served:

FEDERAL CENTER, BUILDING #103D
4300 GOODFELLOW BLVD.

ST. LOUIS MO MO 5203 MO0607

Tracking Number	Location of Finding	RAC	Responsible Office	Description of Finding	Recommendation	Reference and Additional Notes
2003-0171	FLOOR 2, COL. L-32 & L-38	4-IIIC		CEILING TILES ARE DISCOLORED AND STAINED, TILE AT L-32 SHOWS SIGNIFICANT WATER IMPACT (DISTORTED, BROKEN, ETC.)		
(S)		4-IIIC				
IAQ		6PEC-F	25-Jul-2003			CORRECT LEAK, REMOVE ANY VISIBLE MOLD GROWTH, REPLACE CEILING TILES.
2003-0172	FLOOR 2, COL. L-38	4-IIIC		THE FIRE EXTINGUISHER WAS FOUND SETTING IN A WINDOW WELL RATHER THAN BEING PROPERLY MOUNTED ON THE WALL.		
(S)		4-IIIC				MOUNT ALL FIRE EXTINGUISHERS ON WALLS IN LOCATIONS WHICH ARE READILY VISIBLE TO OCCUPANTS, APPROXIMATELY BETWEEN 4 INCHES AND 4 FEET ABOVE FLOOR LEVEL.
FIRE EXTINGUISHER		6PEC-F	25-Jul-2003			NFPA 10, ARTICLE 1-6.7, 1-6.8, 1-6.10 AND OSHA 29 CFR 1910.157(C)(1)
2001-0611	REAR EXIT	4-IIIC		THE DOOR USED TO EXIT THE BUILDING IS LOCKED WITH A KEY; NO PANIC HARDWARE IS PRESENT.		
(S)		4-IIIC				INSTALL PANIC HARDWARE ON THE REAR DOOR TO THAT A KEY IS NOT NECESSARY IN ORDER TO EVACUATE THE BUILDING IN THE EVENT OF AN EMERGENCY.
EMERGENCY EGRESS		6PEC-F	23-Mar-2001			NFPA 101, ARTICLE 5-2.1.5.1

Occupational/Environmental Hygiene and Safety Survey -- Heartland Region

REPORT OF SAFETY AUDIT FINDINGS

25-Jul-2003

Building Surveyed:

FEDERAL CENTER, BUILDING #103

4300 GOODFELLOW BLVD.

ST. LOUIS

MO

5203

MO0606



Tracking Number	Location of Finding	RAC	Responsible Office	Description of Finding	Recommendation	Reference and Additional Notes
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1999-0222 PRINT PLANT AREA
NEAR COLUMNS D-35
TO D-37 AND C-34

(S) 3-IIC
6PEC-F 19-Jul-1999
EMERGENCY EGRESS

NO VISIBLE EMERGENCY EGRESS LIGHTS
IF EMERGENCY LIGHTS RETROFITTED PREVIOUSLY - PLEASE MARK WITH RED TAPE. IF NO EMERGENCY EGRESS LIGHTS THEN SOME NEED TO BE PLACED IN THIS AREA
NFPA 101, ARTICLE 5-9.1.1 AND OSHA 29 CFR 1910.36(D)(2)

2003-0162 SECTION C, FLOOR 1
(S) 4-IIC
IAQ 6PEC-F 23-Jul-2003
REPLACE CEILING TILES.

2003-0161 SECTION C, FLOOR 1
(S) 4-IIC
WALKING/WORKING SURFACE 6PEC-F 23-Jul-2003
THE RAISED FLOORING HAS NUMEROUS OPENINGS (PROVIDED FOR ELECTRICAL ACCESS) WHICH HAVE NOT BEEN COVERED.
PLACE COVERS OVER FLOOR OPENINGS.
29 CFR 1910.23

2003-0163 SECTION C, FLOOR 1,
COLUMN H-32 (SMALL OFFICE) AND H-33
(S) 4-IIC
MISCELLANEOUS 6PEC-F 23-Jul-2003
MISCELLANEOUS STORAGE OF MATERIALS (E.G., PAINT, FLOOR CLEANING COMPOUNDS, ETC). ALSO, MOP HEADS (TREATED WITH EXTREMELY FLAMMABLE MATERIAL) STORED OPEN OR IN BAGS WITH TRASH.
REMOVE ALL TRASH, PAINTS, AND CUSTODIAL SUPPLIES FROM THIS ROOM. TREATED MOP HEADS MUST BE STORED IN CLOSED, METAL CONTAINERS.
OSHA 29 CFR 1910.106(e)(9)(iii)

THE FIRE EXTINGUISHERS ARE NOT BEING CHECKED DURING THE PREVIOUS SEVERAL MONTHS.

SECTION C, FLOOR 1,
COLUMNS H-39, G-31,
D-31 (IN HALLWAY),
AND F-33

ENSURE ALL FIRE EXTINGUISHER ARE CHECKED AS PER NFPA AND THOSE CHECKS ARE DOCUMENTED.

NFPA 10, ARTICLE 1-6.7, 1-6.8, 1-6.10 AND OSHA 29 CFR 1910.157(C)(1)

UNEVEN CARPET SQUARES RESULT IN A TRIPPING HAZARD.

REPLACE CARPET SQUARE SO THAT FLOOR HAS EVEN SURFACE.

OSHA 29 CFR 1910.23A

NUMEROUS CEILING TILE ARE DISCOLORED AND STAINED, SOME SHOW INDICATIONS OF SIGNIFICANT WATER IMPACT (DISTORTED, BROKEN, ETC.)

INVESTIGATE POSSIBLE WATER LEAKS AND CORRECT. REPLACE CEILING TILES.

THESE LOCATIONS ARE MARKED FOR FIRE EXTINGUISHER LOCATIONS. HOWEVER, NO FIRE EXTINGUISHERS ARE PRESENT

REPLACE FIRE EXTINGUISHERS AT THESE LOCATIONS OR REMOVE SIGNS THAT INDICATE THEY ARE SUPPOSED TO BE PRESENT.

OSHA 29 CFR 1910.157(C)

THE FACEPLATE OF AN ELECTRICAL OUTLET WAS MISSING.

REPLACE THE FACEPLATE.

OSHA 29 CFR 1910.305(A)(2)(I) AND NEC, ARTICLE 400-8

UNEVEN CARPET SQUARES RESULT IN A TRIPPING HAZARD.

REPLACE CARPET SQUARE SO THAT FLOOR HAS EVEN SURFACE.

OSHA 29 CFR 1910.23A

2003-0170 SECTION C, RESTROOMS THE ELECTRICAL OUTLETS ADJACENT TO THE SINKS ARE NOT EQUIPPED WITH GROUND-FAULT CIRCUIT INTERRUPT (GFCI) DEVICES.

(S) 4-IIIC INSTALL GFCI AT OUTLETS LOCATED WITHIN 6 FEET OF A SINK.

ELECTRICAL 6PEC-F 23-Jul-2003 NEC/NFPA 70, ARTICLE 370-23

2003-0168 SOUTHERN CROSSOVER BRIDGE BETWEEN BLDGS. 103 AND 103D, HALLWAY CEILING TILES ARE STAINED AND DISCOLORED WITH SUSPECTED MOLD GROWTH

(S) 4-IIIC CORRECT LEAK, REMOVE ANY VISIBLE MOLD GROWTH, REPLACE CEILING TILES.

IAQ 6PEC-F 23-Jul-2003

INDOOR AIR QUALITY SURVEY

General Services Administration
4300 Goodfellow, Building #103
St. Louis, MO

The GSA Heartland Region's Safety & Environmental Management Office assessed the indoor air quality (IAQ) at the above site on 22 & 23 July 2003. This study focused on unoccupied, but soon to be renovated spaces in this building and consisted of visual observations of the facility followed by monitoring a variety of environmental parameters. This survey was conducted at the request of GSA field office management to monitor IAQ conditions rather than as a result of a complaint.

During the course of this survey, we evaluated the following IAQ parameters:

Parameter Monitored	Instrument Used
Carbon Dioxide	TSI Q-Trak
Carbon Monoxide	TSI Q-Trak
Temperature	TSI Q-Trak
Relative Humidity	TSI Q-Trak
Airborne Particulates	TSI DustTrak
Airborne Mold	Air-O-Cell cassettes
Volatile Organic Chemicals	3M 3500 badges
Total Volatile Organic Chemicals	ppbRAE (Isobutylene calibration)
Formaldehyde	GasTech diffusion tubes

Below we discuss our monitoring and what the results mean, concluding with recommendations (where appropriate) to address outstanding items of concern. Also, we have attached data sheets summarizing the results we collected during the survey.

DISCUSSION OF RESULTS

Visual inspection of INS' spaces did not reveal any conditions which would indicate IAQ problems. The following air tests were conducted to ascertain the state of the air quality in INS' occupied areas. Individual results are listed on the attached sheet.

1. **Carbon Dioxide (CO₂).** ANSI/ASHRAE Standard 62-1989 indicates that indoor CO₂ concentrations are to be maintained at less than 1,000 parts per million (ppm). CO₂ monitoring is used in IAQ surveys to assess whether or not adequate amounts of fresh, outside air are being brought into and distributed throughout an occupied space in order to adequately flush contaminants (e.g., perfumes and colognes, formaldehyde and other chemicals from carpeting and furniture, vapors from cleaning and copier chemicals, various odors, etc.) found within the office environment. We wish to point out that concentrations exceeding 1,000 ppm are **not** at or near hazardous levels; the Occupational Safety and Health Administration (OSHA) standard for exposure to CO₂ is 5,000 ppm.

As building occupants breathe they exhale CO₂. Typical outdoor CO₂ levels are approximately 350 ppm and 450 ppm. CO₂ levels in occupied areas will exceed those levels found out-of-doors simply due to human occupancy; this is normal. However, build-up of concentrations exceeding 1,000 ppm is regarded as due to either poor ventilation or the occurrence of a source of CO₂ other than the presence of people in an area.

In the areas we monitored, we found CO₂ levels essentially at the outdoor levels. This would be expected because the area is unoccupied. When occupied, we would expect CO₂ levels to raise.

2. **Carbon Monoxide (CO).** CO is a colorless, odorless gas given off during the combustion process. Sources of CO in office spaces may be internal combustion engines operated in the vicinity, tobacco smoke, some types of custodial equipment, etc. We measured CO concentrations at 0 ppm in all areas. CO levels below 9 ppm are acceptable.
3. **Temperature.** Temperatures were monitored in INS spaces between 69 degrees Fahrenheit (°F) and 75°F. This would be expected because the area is unoccupied. When occupied, we would expect temperature levels to raise. The American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) has established thermal comfort standards as follows:
 - Summer Office Work: 73-79 °F, with 76 °F as optimum
 - Winter Office Work: 68-75 °F, with 71 °F as optimum
4. **Relative Humidity.** Indoor humidity levels were determined to be between 48% and 68%. Humidity levels below 30% can be expected to result in eye, nose, and throat irritation; this due to the drying out of the person's membranes. Humidity levels above 60% can lead to mold growth.
5. **Airborne Particulates.** The highest indoor dust level was monitored at 47 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) on the day of the survey. Dust concentrations below $100 \mu\text{g}/\text{m}^3$ are considered to be acceptable in office environments. Levels above $100 \mu\text{g}/\text{m}^3$ are not necessarily a health hazard, but may contribute to employee discomfort and indicate that additional cleaning may be in order.
6. **Total Volatile Organic Chemicals (TVOC).** Sources of VOCs in office spaces include perfumes, colognes, chemicals used in the manufacture of carpeting and furniture, vapors from cleaning and copier chemicals, etc. At present time, there is no standard for TVOC exposures. However, general office concentrations are considered normal if TVOC levels are found to be below approximately 650 parts per billion (ppb) when measured. In most areas, we found TVOC levels to be no higher than 523 ppb (and typically far lower). However, in several areas we measured TVOCs in excess of 10,000 ppb. We speculated this was due to high

humidity levels in those areas (humidity levels at or above approx. 55% interfere with humidity measurements monitored by our instrument). We subsequently collected air samples for laboratory analysis for volatile organic compounds (VOCs). The results of the lab analyses confirmed our theory, as all VOCs were at negligible concentrations.

7. **Formaldehyde.** Formaldehyde is used in many modern applications, such as wrinkle-free clothing and textiles, preservatives, disinfectants, cosmetics, shampoos, and glues. Exposure to formaldehyde results in a problem when concentrations become magnified and personnel become sensitized. Airborne formaldehyde concentrations were all found to be 0 ppm. Concentrations are acceptable if they do not exceed 0.1 ppm.
8. **Mold.** Mold, as it grows, reproduces, and dies, is the source of various products (e.g., spores, fragments, mycotoxins, etc.) which are recognized as being allergenic. However, dead mold is also a problem because mold fragments are also allergenic. There are no established standards which can be referenced regarding airborne mold or mold products. Therefore, a qualitative risk approach is used. In evaluating mold concerns in our buildings, we use the following:
 - a. Visible Mold: If mold is found in our buildings, whether living or dead, it should be removed using proper procedures (e.g., simple containment, basic personal protective equipment, etc.). In these cases, air sampling to confirm the presence of mold is not prudent; its mere presence is sufficient. However, in some cases air sampling following remediation may be desired to confirm the remediation was adequate and effective. Visible mold growth was observed on floor 2 on ceiling tiles of the crossover between Bldgs. 103 and 103D. Furthermore, a number of ceiling tiles on both floors 1 and 2 were observed to be water damaged, which can be expected to result in mold growth if not effectively dealt with.
 - b. Total Airborne Counts: A "general rule of thumb" for evaluating airborne mold samples is that a "clean" building will have fewer than a total of approximately 2,000 counts per cubic meter (Counts/m³) mold spore concentrations, less than ~700 Counts/m³ of "indoor" types (e.g., Penicillium, Aspergillus), less than ~500 Counts/m³ for "outdoor" mold types (e.g., Cladosporium, Alternaria). As you can see from the summary of results, the total concentrations in areas sampled were below these "general" guidelines, with one exception (sample #5428977; collected on 23 Jul 03 at floor 1, column D-34). The total airborne count was slightly elevated at 2684 Counts/m³. The laboratory categorized this as "moderate."
 - c. Indoor-Outdoor Comparison: The types and concentrations of molds found indoors are compared to out-of-door findings. The air sample results indicated that most concentrations were significantly below those found out-of-doors.

- d. Indicator Molds: There are several molds which indicate water intrusion problems if found at elevated concentrations. Aspergillus/Penicillium-types at concentrations above approximately 900 Counts/m³ and Stachybotrys above only 1 or 2 Counts/m³. Torula is another indicator mold; it has not been identified as a human concern but can indicate that conditions may be present which could result in the growth of Stachybotrys. Air sampling results indicated that the indicator molds discussed above were present in at least on air sample. The Aspergillus/Penicillium-types were at concentrations that do not appear to be a problem. However, the presence of Stachybotrys is of concern. As noted elsewhere, a number of water-stained ceiling tiles were observed as well as an area of actively-growing mold on ceiling tiles. These areas should be addressed (specifically, replace mold- and/or water-stained tiles and correct water leaks) and resampling should be conducted.

RECOMMENDATIONS

The following recommendations are forwarded:

1. At the areas where ceiling tiles showed evidence of mold and/or water damage, correct the conditions which permitted water leakage and replace ceiling tiles.

Mold-affected ceiling tiles should be carefully removed and placed immediately in a plastic bag, the bag sealed and promptly disposed of in normal trash. Workers accomplishing this task should take steps to ensure the tile is not jostled or knocked about until it is within the sealed plastic bag. Furthermore, we recommend the workers not accomplish this work during normal working hours, and wear plastic gloves and a dust mask to minimize exposures.

2. After recommendation #1 is accomplished, have the areas where *Stachybotrys* had been detected resampled.

General Services Administration
 1500 E. Bannister Road
 Kansas City, MO 64131
 IAQ Bldg 103, 4300 Goodfellow.xls // Mold Sampling of 23 Jul 03

FACILITY ID:
 Building 103, 4300 Goodfellow Blvd., St. Louis, MO

LOCATION SURVEYED	SAMPLE ID	CONTAMINANT	PUMP ID	SAMPLE DATE	ELAP. TIME (Min.)	FLOW RATE (LPM)	VOL. (L)
Floor 1, Old Credit Union Office, Col. G-38	5429027	Mold	23021	23-Jul-2003	15	14.8	222.0
Outside, near south door	5429032	Mold	23021	23-Jul-2003	15	14.8	222.0
Floor 1, Col. E-32	5428979	Mold	23021	23-Jul-2003	15	14.8	222.0
Floor 1, Col. H-33	5429037	Mold	23021	23-Jul-2003	15	14.8	222.0
Floor 1, Col. D-34	5428977	Mold	23021	23-Jul-2003	15	14.8	222.0
Floor 2, Col. E-33	5429023	Mold	23021	23-Jul-2003	15	14.8	222.0
Floor 2, Col. G-37	5428985	Mold	23021	23-Jul-2003	15	14.8	222.0
Floor 2, Col. D-38	5429042	Mold	23021	23-Jul-2003	15	14.8	222.0
Floor 2, Break Room at Col. B-33	5428974	Mold	23021	23-Jul-2003	15	14.8	222.0
Floor 2, Crossover Bridge between Bldgs. 103 and 103D	5428975	Mold	23021	23-Jul-2003	15	14.8	222.0

NOTE: Calibrations completed using Bios Corp. Dry Cal DC-Lite DCL-MH, Ser. No. 6181	PUMP CALIBRATION RECORD			Average Flow
	Flow Rates in Liters per minute (LPM)			
Pump Mfg. & Model	Pump S/N	Pre-Cal Date	Post-Cal Date	Post-Cal Flow
Zephon Hi-Vol	23021	23-Jul-2003	23-Jul-2003	14.8

IAQ Bldg 103_4300 Goodfellow.xls // Mold Results

Sampled on 22 July 2003	Outside	F1, C-32	F1, F-34	F1, G-38	F1, H-33	F2, C-34	F2, C-37	F2, G-33	F2, H-37	F2, Bridge
Category	5428972	5428971	5428984	5428983	5428973	5429043	5429029	5428978	5428986	5428987
Total Mold Spores (Cts/m ³)	49,625	247	404	68	1,243	919	570	1,695	804	620
Alternaria	439				55		22	4	13	13
Aspergillus/Penicillium-types	110	18	240		91	73		165		73
Ascospores (majority tiny, hyaline)	13,166		18	16	73	55	18	201	238	110
Basidiospores (Mixed)	13,897	73			146	128	110	201	201	91
Chaetomium								18		
Cladosporium	6,034	91	37	32	567	512	274	764	256	238
Curvularia	128				18			4		
Drechslera/Bipolaris	110									
Epicoccum	165		4	12	37		9	13		9
Nigrospora	55		4					4		
Oidium/Peronospora	91									
Pithomyces	1,243	4		8	37		9	18		
Rusts	89	4	0			4		9	4	13
Smuts/Myxomycetes	1,298	55	91		165	55	110	146	37	18
Stachybotrys			9							27
Torula										9
Other Hyaline (majority tiny, hyaline)	12,434				18	18	18	55	55	
Other Brown Fungi	329				37	73		37		18
Small Brown Round	37							55		
Hyphae fragments	274	18			146	55	91	110	18	

Sampled on 23 July 2003	Outside	F1, D-34	F1, E-32	F1, G-38	F1, H-33	F2, B-33	F2, D-38	F2, E-33	F2, G-37	F2, Bridge
Category	5429032	5428977	5428979	5429027	5429037	5428974	5429042	5429023	5428985	5428975
Total Mold Spores (Cts/m ³)	39,187	2,684	130	208	935	1,016	910	1,612	1,353	871
Alternaria	36	5		5	18					5
Aspergillus/Penicillium-types	93	204	19			204		111		37
Ascospores (majority tiny, hyaline)	22,425	1,168	37		130	204	148	222	334	185
Basidiospores (Mixed)	13,158	778	37	74	93	278	204	352	241	352
Chaetomium					19				19	
Cladosporium	1,651	155	37	74	500	293	419	815	667	130
Curvularia										
Drechslera/Bipolaris							5			
Epicoccum	14			9	9		5			5
Nigrospora										
Oidium/Peronospora										
Pithomyces	18			5						9
Rusts	14	5		5						
Smuts/Myxomycetes	111	19	19	19	19		74	37		19
Stachybotrys										
Torula							19			
Other Hyaline (majority tiny, hyaline)	1,668	297			56		19	74	93	111
Other Brown Fungi		56		19	93	37	19			
Small Brown Round										
Hyphae fragments	56		19	19	93	19	130	19	19	19

FACILITY ID: _____

Building 103, 4300 Goodfellow Blvd., St. Louis, MO

LOCATION SURVEYED	SAMPLE ID	TOXICANT	BEGINNING DATE/TIME	ENDING DATE/TIME	ELAPSED TIME (MIN)
Floor 1, Old Credit Union Office, Col. G-38	103-1	TVOCs	23-Jul-2003 11:28	26-Jul-2003 08:27	4139
Floor 1, Col. F-32	103-2	TVOCs	23-Jul-2003 11:34	26-Jul-2003 08:32	4138
Floor 2, Col F-36	103-3	TVOCs	23-Jul-2003 11:40	26-Jul-2003 08:39	4139

RESULTS

	ACGIH Standard*	103-1	103-2	103-3
Volatile Organic Compound (VOC) Detected	0.2 mg/m ³	0.11 mg/m ³	ND < 0.0.16 mg/m ³	ND < 0.0.16 mg/m ³
Naphtha (Coal Tar)	100 ppm	0.019 ppm	0.02 ppm	0.024 ppm
Petroleum Distillates	(no standard)	0.046 ppm	0.02 ppm	0.024 ppm
Total VOCs as Hexane				

NOTES: OSHA does not have a standard for these compounds. Therefore, the American Conference of Governmental Industrial Hygienists' (ACGIH) standards were used, where available.

mg/m³ = milligrams per cubic meter

ppm = parts per million

Facility Identification

Building 103, 4300 Goodfellow Blvd., St. Louis, MO

Location	Date Sampled	CO ₂ (ppm)	CO (ppm)	Temp. (°F)	Relative Humidity (%)	Formaldehyde (ppm)	Airborne Particulates (µg/m ³)	TVOC (ppb)	Comments
Floor 1, Old Credit Union Office, Col. G-38	22-Jul-2003	483	0	72	68	0	9	> 10 ppm	Humidity levels above 60% cause false readings with the ppbRAE for TVOCs.
Outside, at south door	22-Jul-2003	373	0	80	54	---	22	---	
Floor 1, Col. C-32	22-Jul-2003	464	0	75	53	---	10	523	
Floor 1, Col. F-34	22-Jul-2003	437	0	74	54	0	12	402	
Floor 1, Col. H-33	22-Jul-2003	442	0	73	57	---	29	468	
Floor 2, Col. C-37	22-Jul-2003	431	0	73	49	0	10	134	
Floor 2, Col. H-37	22-Jul-2003	435	0	73	51	---	12	205	
Floor 2, Col. C-34	22-Jul-2003	433	0	74	50	0	15	147	
Floor 2, Col. G-33	22-Jul-2003	428	0	74	50	---	26	98	
Floor 2, Crossover Bridge between Bldgs. 103 & 103D	22-Jul-2003	425	0	75	53	---	5	129	
Floor 1, Old Credit Union Office, Col. G-38	23-Jul-2003	443	0	71	67	0	9	> 15 ppm	Humidity levels above 60% cause false readings with the ppbRAE for TVOCs.
Outside, near south door	23-Jul-2003	390	0	69	64	---	19	---	Humidity levels above 60% cause false readings with the ppbRAE for TVOCs.
Floor 1, Col. E-32	23-Jul-2003	443	0	71	61	---	12	---	Humidity levels above 60% cause false readings with the ppbRAE for TVOCs.
Floor 1, Col. H-33	23-Jul-2003	431	0	72	58	---	16	---	Humidity levels above 60% cause false readings with the ppbRAE for TVOCs.
Floor 1, Col. D-34	23-Jul-2003	432	0	75	58	---	18	---	Humidity levels above 60% cause false readings with the ppbRAE for TVOCs.
Floor 2, Col. E-33	23-Jul-2003	431	0	73	48	---	47	112	
Floor 2, Col. G-37	23-Jul-2003	427	0	73	49	---	22	59	
Floor 2, Col. D-38	23-Jul-2003	430	0	72	48	---	40	36	

Location	Date Sampled	CO ₂ (ppm)	CO (ppm)	Temp. (°F)	Relative Humidity (%)	Formaldehyde (ppm)	Airborne Particulates (µg/m ³)	TVOC (ppb)	Comments
Floor 2, Break Room at Col. B-33	23-Jul-2003	432	0	75	49	---	33	80	
Floor 2, Crossover Bridge between Bldgs. 103 and 103D	23-Jul-2003	456	0	75	50	---	15	63	

The following notations are used:

ppm: parts per million	µg/m ³ : micrograms per cubic meter
ppb: parts per billion	CO ₂ : Carbon Dioxide
°F: degrees Fahrenheit	CO: Carbon Monoxide
%: percent	TVOC: Total Volatile Organic Volatiles

ENVIRONMENTAL AIRBORNE AEROSOL ANALYSIS

Client Name: General Services Administration
 Client Project #: 103 Goodfellow IAQ
 EAA Project #: O3-O729

Project Desc: 103 Goodfellow IAQ

Client Sample #	Sample Description / Location	Analysis Comments
5428971	AIR-O-CELL	Low debris & mold noted
5428972	AIR-O-CELL	Moderate debris; High mold levels **
5428973	AIR-O-CELL	High debris present, all concs are likely greater than reported values
5428974	AIR-O-CELL	Low-moderate debris; Low mold levels
5428975	AIR-O-CELL	Low debris & mold noted

AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis						
Category	Sample #-->	5428971	5428972	5428973	5428974	5428975
Total Mold Spores (Cts/m³)		247	49625	1243	1016	871
Alternaria			439	55		5
Aspergillus/Penicillium-types		18	110	91	204	37
Aureobasidium/Hormonema						
Ascospores (majority tiny, hyaline)			13166	73	204	185
Basidiospores (Mixed)		73	13897	146	278	352
Botrytis						
Chaetomium						
Cladosporium		91	6034	567	293	130
Curvularia			128	18		
Drechslera/Bipolaris			110			
Epicoccum			165	37		5
Fusarium						
Nigrospora			55			
Oidium/Peronospora			91			
Pithomyces		4	1243	37		9
Rusts		4	89			
Smuts/Myxomycetes		55	1298	165		19
Stachybotrys						
Stemphylium						
Torula						
Polythrincium trifolii						
Other Hyaline (majority tiny, hyaline)			12434	18		111
Other Brown Fungi			329	37	37	
Small Brown Round			37			19
Hyphae fragments		18	274	146	19	19
Algal spores						
Fern spores						
POLLEN (Total Cts/m³)		not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
not specified						
OTHER AEROSOLS (Cts/m³)		not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
Skin cell fragments						
Fiberglass / Mineral wool						
Cellulosic fibers						
Opaque particles						
Other						
Statistical Parameters						
Vol. analyzed (m ³)--mold/aerosols:		0.055	0.027	0.055	0.054	0.054
Detect limit(Cts/m ³)--molds/aerosols:		18.3	36.6	18.3	18.5	18.5
% Sample analyzed--mold/aerosols:		24.3%	12.2%	24.3%	24.3%	24.3%
Volume analyzed(m ³)--pollen:		0.225	0.225	0.225	0.222	0.222
Detection limit (Cts/m ³)--pollen		4.4	4.4	4.4	4.5	4.5
Sample flow rate (lpm):		15.00	15.00	15.00	15.00	15.00
Sample trace length (mm):		14.40	14.40	14.40	14.40	14.40
Microscope field diameter (mm):		0.350	0.350	0.350	0.350	0.350

* Outdoor mold ranges are based on So. California data. Other areas may vary.

** Note: Ascospores, Basidiospores & other hyaline spores on 2nd sample were counted at 1pass of trace. Detection limit for them is 182.9 (Cts/m³)

Analyst:



Date: 07/28/2003

ENVIRONMENTAL AIRBORNE AEROSOL ANALYSIS

Client Name: General Services Administration
 Client Project #: 103 Goodfellow IAQ
 EAA Project #: O3-O729

Project Desc: 103 Goodfellow IAQ

Client Sample #	Sample Description / Location	Analysis Comments
5428977	AIR-O-CELL	Low debris; Moderate mold levels
5428978	AIR-O-CELL	Moderate-high debris; Low mold levels
5428979	AIR-O-CELL	Low debris & mold noted
5428983	AIR-O-CELL	Low-moderate debris; Low mold levels
5428984	AIR-O-CELL	Low debris & mold noted

AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis					
Category Sample #-->	5428977	5428978	5428979	5428983	5428984
Total Mold Spores (Cts/m³)	2684	1695	130	68	404
Alternaria	5	4			
Aspergillus/Penicillium-types	204	165	19		240
Aureobasidium/Hormonema					
Ascospores (majority tiny, hyaline)	1168	201	37	16	18
Basidiospores (Mixed)	778	201	37		
Botrytis					
Chaetomium		18			
Cladosporium	155	764	37	32	37
Curvularia		4			
Drechslera/Bipolaris					
Epicoccum		13		12	4
Fusarium					
Nigrospora		4			4
Oidium/Peronospora					
Pithomyces		18		8	
Rusts	5	9			
Smuts/Myxomycetes	19	146			91
Stachybotrys					9
Stemphylium					
Torula					
Polythrincium trifolii					
Other Hyaline (majority tiny, hyaline)	297	55			
Other Brown Fungi	56	37			
Small Brown Round		55			
Hyphae fragments		110			
Algal spores					
Fern spores					
POLLEN (Total Cts/m³)	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
not specified					
OTHER AEROSOLS (Cts/m³)	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
Skin cell fragments					
Fiberglass / Mineral wool					
Cellulosic fibers					
Opaque particles					
Other					
Statistical Parameters					
Vol. analyzed (m ³)--mold/aerosols:	0.054	0.055	0.054	0.062	0.055
Detect limit(Cts/m ³)--molds/aerosols:	18.5	18.3	18.5	16.1	18.3
% Sample analyzed--mold/aerosols:	24.3%	24.3%	24.3%	24.3%	24.3%
Volume analyzed(m ³)--pollen:	0.222	0.225	0.222	0.255	0.225
Detection limit (Cts/m ³)--pollen	4.5	4.4	4.5	3.9	4.4
Sample flow rate (lpm):	15.00	15.00	15.00	15.00	15.00
Sample trace length (mm):	14.40	14.40	14.40	14.40	14.40
Microscope field diameter (mm):	0.350	0.350	0.350	0.350	0.350

* Outdoor mold ranges are based on So. California data. Other areas may vary.

Analyst: (b) (6)

Date: 07/28/2003

ENVIRONMENTAL AIRBORNE AEROSOL ANALYSIS

Client Name: General Services Administration
 Client Project #: 103 Goodfellow IAQ
 EAA Project #: O3-O729

Project Desc: 103 Goodfellow IAQ

Client Sample #	Sample Description / Location	Analysis Comments
5428985	AIR-O-CELL	Moderate debris; Low mold levels
5428986	AIR-O-CELL	Low debris & mold noted
5428987	AIR-O-CELL	Low debris & mold noted
5429023	AIR-O-CELL	Moderate debris; Low mold levels
5429027	AIR-O-CELL	Low-moderate debris; Low mold levels

AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis						
Category	Sample #-->	5428985	5428986	5428987	5429023	5429027
Total Mold Spores (Cts/m³)		1353	804	620	1612	208
Alternaria			13	13		5
Aspergillus/Penicillium-types				73	111	
Aureobasidium/Hormonema						
Ascospores (majority tiny, hyaline)		334	238	110	222	
Basidiospores (Mixed)		241	201	91	352	74
Botrytis						
Chaetomium		19				
Cladosporium		667	256	238	815	74
Curvularia						
Drechslera/Bipolaris				9		9
Epicoccum						
Fusarium						
Nigrospora						
Oidium/Peronospora						5
Pithomyces						5
Rusts			4	13		5
Smuts/Myxomycetes			37	18	37	19
Stachybotrys				27		
Stemphylium				9		
Torula						
Polythrincium trifolii						
Other Hyaline (majority tiny, hyaline)		93	55		74	
Other Brown Fungi				18		19
Small Brown Round						
Hyphae fragments		19	18		19	19
Algal spores						
Fern spores						
POLLEN (Total Cts/m³)		not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
not specified						
OTHER AEROSOLS (Cts/m³)		not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
Skin cell fragments						
Fiberglass / Mineral wool						
Cellulosic fibers						
Opaque particles						
Other						
Statistical Parameters						
Vol. analyzed (m ³)--mold/aerosols:		0.054	0.055	0.055	0.054	0.054
Detect limit(Cts/m ³)--molds/aerosols:		18.5	18.3	18.3	18.5	18.5
% Sample analyzed--mold/aerosols:		24.3%	24.3%	24.3%	24.3%	24.3%
Volume analyzed(m ³)--pollen:		0.222	0.225	0.225	0.222	0.222
Detection limit (Cts/m ³)--pollen		4.5	4.4	4.4	4.5	4.5
Sample flow rate (lpm):		15.00	15.00	15.00	15.00	15.00
Sample trace length (mm):		14.40	14.40	14.40	14.40	14.40
Microscope field diameter (mm):		0.350	0.350	0.350	0.350	0.350

* Outdoor mold ranges are based on So. California data. Other areas may vary.

Analyst: (b) (6)

Date: 07/28/2003

ENVIRONMENTAL AIRBORNE AEROSOL ANALYSIS

Client Name: General Services Administration
 Client Project #: 103 Goodfellow IAQ
 EAA Project #: O3-O729

Project Desc: 103 Goodfellow IAQ

Client Sample #	Sample Description / Location	Analysis Comments
5429029	AIR-O-CELL	Low-moderate debris; Low mold levels
5429032	AIR-O-CELL	Low debris; High mold levels **
5429037	AIR-O-CELL	Low debris & mold noted
5429042	AIR-O-CELL	Low debris & mold noted
5429043	AIR-O-CELL	Low-moderate debris; Low mold levels

AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis					
Category Sample #-->	5429029	5429032	5429037	5429042	5429043
Total Mold Spores (Cts/m³)	570	39187	935	910	919
Alternaria	22	36	18		
Aspergillus/Penicillium-types		93			73
Aureobasidium/Hormonema					
Ascospores (majority tiny, hyaline)	18	22425	130	148	55
Basidiospores (Mixed)	110	13158	93	204	128
Botrytis			19		
Chaetomium			500	419	512
Cladosporium	274	1651			
Curvularia				5	
Drechslera/Bipolaris				5	
Epicoccum	9	14	9		
Fusarium					
Nigrospora					
Oldium/Peronospora					
Pithomyces	9	18			
Rusts		14			4
Smuts/Myxomycetes	110	111	19	74	55
Stachybotrys					
Stemphylium				19	
Torula					
Polythrincium trifolii					
Other Hyaline (majority tiny, hyaline)	18	1668	56	19	18
Other Brown Fungi			93	19	73
Small Brown Round					
Hyphae fragments	91	56	93	130	55
Algal spores					
Fern spores					
POLLEN (Total Cts/m³)	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
not specified					
OTHER AEROSOLS (Cts/m³)	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
Skin cell fragments					
Fiberglass / Mineral wool					
Cellulosic fibers					
Opaque particles					
Other					
Statistical Parameters					
Vol. analyzed (m ³)--mold/aerosols:	0.055	0.016	0.054	0.054	0.055
Detect limit(Cts/m ³)--molds/aerosols:	18.3	61.8	18.5	18.5	18.3
% Sample analyzed--mold/aerosols:	24.3%	7.3%	24.3%	24.3%	24.3%
Volume analyzed(m ³)--pollen:	0.225	0.222	0.222	0.222	0.225
Detection limit (Cts/m ³)--pollen	4.4	4.5	4.5	4.5	4.4
Sample flow rate (lpm):	15.00	15.00	15.00	15.00	15.00
Sample trace length (mm):	14.40	14.40	14.40	14.40	14.40
Microscope field diameter (mm):	0.350	0.350	0.350	0.350	0.350

* Outdoor mold ranges are based on So. California data. Other areas may vary.

** Note: Ascus, Basidiospores on 2nd sample were counted at 1pass of trace. Detection limit for them is 185.3 (Cts/m³)

Analyst:

(b) (6)

Date: 07/28/2003

Analytical Laboratory Report

Report ID: 9009342

August 05, 2003

DAVE HARTSHORN 6PEFS
GENERAL SERVICES ADMIN - KC
FACILITY SUPPORT 6PMF
1500 E BANNISTER RD
KANSAS CITY MO 64131-3088

Company Number: 5582

PROJ 103 GOODFELLOW

Date Received: 7/29/2003
Date of Analysis: 7/30/2003
Date Reported: 8/5/2003

Analyst: _____

(b) (6)

CHERI JOHNSON, Chemist
cj@mail.slh.wisc.edu

Reviewer: _____

(b) (6)

STEVE STREBEL, Organic Supervisor
ss@mail.slh.wisc.edu

WOHL uses only verified, secured electronic signatures on reports.

These signatures are as valid as original handwritten signatures.

If you have any questions regarding this report please feel free to contact the laboratory via email (as listed above) or via telephone at 800-446-0403



Wisconsin State Laboratory of Hygiene

University of Wisconsin

Analytical Results

LAB NUMBER FIELD NUMBER DESCRIPTION AIR VOLUME

1038970 SKC575-001MC N/A

1031

Table with 4 columns: Component, Sample Concentration, Air Concentration, and Air Concentration in ppm. Rows include Solvent Scan, Naphtha (Coal Tar), Petroleum Distillates, and Total VOCs as Hexane.

COMMENTS: Results for samples 1038970 and 1038972 based on 4139 minutes.

1038971 SKC575-001MC N/A

1032

Table with 4 columns: Component, Sample Concentration, Air Concentration, and Air Concentration in ppm. Rows include Solvent Scan, Naphtha (Coal Tar), Petroleum Distillates, and Total VOCs as Hexane.

COMMENTS: Results for sample 1038971 based on 4138 minutes.

1038972 SKC575-001MC N/A

1033

Table with 4 columns: Component, Sample Concentration, Air Concentration, and Air Concentration in ppm. Rows include Solvent Scan, Naphtha (Coal Tar), Petroleum Distillates, and Total VOCs as Hexane.

ND = None Detected. Results are less than the method detection limit

Analytical Methodology

Analytes on SKC Series 575 Badge Media in CS₂:

These samples are analyzed by WOHL method WG059, which is an in-house adaptation of SKC analytical techniques and OSHA methods 111, 1001, 1002, and 1004.

The samples are passively collected on SKC 575-001 badges (contain activated charcoal sorbent), SKC 575-002 badges (contain Anasorb 747 sorbent), or SKC 575-003 badges (contain Anasorb 727 sorbent).

The badges are desorbed in 2 mL of carbon disulfide for 30 minutes prior to analysis. The samples are then analyzed by gas chromatography with flame ionization detection (GC-FID). Primary and confirming columns are chosen from the following:

Supelcowax-10 capillary packed	SP-1000 capillary	Carbopack C/0.1% SP-1000
HP-5 capillary	Nukol capillary	
SPB-624 capillary	Vocol capillary	

Samples may have also been confirmed on a model 5972 Hewlett Packard gas chromatograph mass-selective detector (GC/MS) equipped with a capillary column.

All results are calculated using SKC-derived sampling rates and recovery coefficients. If several different SKC factors exist for the same analyte, WOHL has chosen to use the sampling rates and recovery coefficients associated with 8-hour sampling time intervals in all result calculations. WOHL does not currently verify any SKC badge factors.

Reporting limits are specific for each analyte and are derived from lot 2000 charcoal tube media. WOHL does not currently establish reporting limits on SKC series 575 badge media.

Samples are not blank corrected unless otherwise noted in the sample report.

TOTAL VOC AS REQUESTED ANALYTE ON CHARCOAL TUBE OR BADGE MEDIA:

These samples are analyzed by WOHL methods WG034 or WG059, which are based on in-house modifications of OSHA 7, 3M organic vapor monitor, and SKC series 575 organic vapor monitor protocols.

Samples are either actively collected on small(sct), large(lct), or jumbo(jct) activated charcoal tubes or passively collected on 3M organic vapor monitor badges or SKC series 575 organic vapor monitors. Front & back sections of the media are separately desorbed in an appropriate amount of carbon disulfide following WOHL, 3M, or SKC series 575 media preparation procedures.

Samples are injected on Hewlett-Packard gas chromatographs equipped with flame ionization detectors (GC-FID). Primary and confirming columns are chosen from the following:

Carbopack C/0.1% SP-1000
VoCol 105M Capillary
Supelcowax-10 Capillary
HP-5 capillary
SPB-624 capillary



Analytical Methodology

Samples may also have been confirmed on a Model 5972 Hewlett-Packard Gas Chromatograph Mass-Selective Detector containing a capillary column.

All of the organic vapor amount in the sample is quantitated using a requested analyte as the reference standard. The method provides an estimate of the overall organic vapor content in the samples. Results indicate a "worst case" scenario because they include every detected VOC in the sample, with the assumption that the response for all of the detected VOC's is similar to that of the requested analyte.

Samples are not blank corrected unless noted in the analytical report. Results for badge media are calculated using manufacturer-supplied factors. All reporting limits for all types of media are derived from lot 2000 charcoal tube media.

REPORTING LIMITS:

This table contains the WOHL determined reporting limits for the compounds specified in this report. These numbers are based on the historical statistical data for a particular analyte or are based on WOHL determined values.

Analyte	Reporting Limit
Naphtha (Coal Tar) on SKC575-001MC	1.6 µg/sample
Petroleum Distillates on SKC575-001MC	1.6 µg/sample
Total VOCs as Hexane on SKC575-001MC	1.6 µg/sample

Analytical Quality Control

Laboratory prepared quality control (QC) samples were analyzed along with the samples included in the analytical report. The analysis results for these QC samples are listed below.

Instrument Used for Analysis: Gas Chromatograph with FID

Laboratory Control Sample: 102391

QC Sample Media: SCT lot 2000 charcoal

<u>Analyte</u>	<u>Target Value</u>	<u>Recovery (%)</u>	<u>Acceptable Recovery (%)</u>	<u>Pass/Fail</u>
Benzene	218.5 µg/sample	100.2	79 - 121	PASS
Methyl chloroform (1,1,1-TCE)	1338 µg/sample	99.4	79 - 121	PASS
Methylene chloride	1325 µg/sample	97.3	88 - 112	PASS

Laboratory Control Sample: 102392

QC Sample Media: SCT lot 2000 charcoal

<u>Analyte</u>	<u>Target Value</u>	<u>Recovery (%)</u>	<u>Acceptable Recovery (%)</u>	<u>Pass/Fail</u>
Benzene	874 µg/sample	94.5	79 - 121	PASS
Methyl chloroform (1,1,1-TCE)	5352 µg/sample	93.3	79 - 121	PASS
Methylene chloride	5300 µg/sample	93.7	88 - 112	PASS

Laboratory Control Sample: 104573

QC Sample Media: SCT lot 2000 charcoal

<u>Analyte</u>	<u>Target Value</u>	<u>Recovery (%)</u>	<u>Acceptable Recovery (%)</u>	<u>Pass/Fail</u>
Trichloroethylene (TCE)	1463 µg/sample	94.7	76 - 124	PASS

Laboratory Control Sample: 104574

QC Sample Media: SCT lot 2000 charcoal

<u>Analyte</u>	<u>Target Value</u>	<u>Recovery (%)</u>	<u>Acceptable Recovery (%)</u>	<u>Pass/Fail</u>
Trichloroethylene (TCE)	5852 µg/sample	98.3	76 - 124	PASS

The acceptable range for an analyte is based on the standard deviation of each analyte, which has been determined from statistical evaluation of the historical performance of the assay. The acceptable range includes up to 3 standard deviations, so a result within 3 standard deviations is considered to have passed the QC requirements. A result outside of the acceptable range is considered to have failed QC and may indicate the direction of possible bias for the samples included in the analytical report. The analytes used for QC determination will not always be the same analytes that appear in the samples for the report, however they are representative of the compounds found in the samples and indicative of overall assay performance.



End of Analytical Report

The results in this report apply only to the samples, specifically listed above, tested at the Wisconsin Occupational Health Laboratory .
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Chain of Custody

GSA

#5582

GENERAL SERVICES ADMINISTRATION
Regional Safety and Environmental Technical Team (6PMF)
 1500 E. Bannister Road, Kansas City, MO 64131-3088

To:	Wisconsin Occupational Health Laboratory 2601 Agriculture Drive P.O. Box 7996 Madison, WI 53707-7996	(800) 446-0403
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Please Send Report Via:	<input type="radio"/> Phone (816-823-2227) <input checked="" type="checkbox"/> e:Mail (david.Hartshorn@gsa.gov) or Fax (816-926-1779) <input checked="" type="checkbox"/> Mail (below)
--------------------------------	---

Please Send Report To:	General Services Administration Attn: Dave L. Hartshorn (6PEF-S) 1500 E. Bannister Road Kansas City, MO 64131
-------------------------------	--

Method of Transport:	FedEx	Analytical Priority Requested:	NORMAL
Date Shipped:	26-Jul-2003		

PROJECT NAME:	103 Goodfellow IAQ
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1038970
1038971
1038972

Sample ID	Analysis Requested	Sample Type	Sample Duration (min)
103-1	TVOC as Hexane and Solvent Scan	3M 3500	4139
103-2	TVOC as Hexane and Solvent Scan	3M 3500	4138
103-3	TVOC as Hexane and Solvent Scan	3M 3500	4139

Relinquished by: (b) (6)	Date: 26 Jul 03
Accepted by: (b) (6)	Date: JUL 29 2003

Please Return this Form With the Sample Results

skc. 575-001mc lot 656

27014

Chain of Custody



GENERAL SERVICES ADMINISTRATION
Regional Safety and Environmental Technical Team (6PMF)
 1500 E. Bannister Road, Kansas City, MO 64131-3088

To:	Environmental Analysis Associates, Inc. Attn: Dr. Daniel M. Baxter 5290 Soledad Road San Diego, CA 92109	(858) 272-7747
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Please Send Report Via:	<input type="radio"/> Phone (816-823-2227) <input checked="" type="checkbox"/> e:Mail (david.Hartshorn@gsa.gov) or Fax (816-926-1779) <input checked="" type="checkbox"/> Snail Mail (below)
Snail Mail Address:	General Services Administration Attn: Dave L. Hartshorn (6PEF-S) 1500 E. Bannister Road Kansas City, MO 64131

Please Invoice To:	Same as Above
---------------------------	---------------

Method of Transport:	FedEx	Analytical Priority Requested:	Regular
Date Shipped:	24-Jul-2003		

PROJECT NAME:	103 Goodfellow IAQ
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SAMPLE ID	VOL. (L)	Comments	SAMPLE ID	VOL. (L)	Comments
5428971	225	Quantitative mold analysis	5428985	222	Quantitative mold analysis
5428972	225	Quantitative mold analysis	5428986	225	Quantitative mold analysis
5428973	225	Quantitative mold analysis	5428987	225	Quantitative mold analysis
5428974	222	Quantitative mold analysis	5429023	222	Quantitative mold analysis
5428975	222	Quantitative mold analysis	5429027	222	Quantitative mold analysis
5428977	222	Quantitative mold analysis	5429029	225	Quantitative mold analysis
5428978	225	Quantitative mold analysis	5429032	222	Quantitative mold analysis
5428979	222	Quantitative mold analysis	5429037	222	Quantitative mold analysis
5428983	255	Quantitative mold analysis	5429042	222	Quantitative mold analysis
5428984	225	Quantitative mold analysis	5429043	225	Quantitative mold analysis

Relinquished by: _____	Date: _____
Accepted by: _____	Date: _____

Please Return this Form With the Sample Results

Chain of Custody



GENERAL SERVICES ADMINISTRATION
Regional Safety and Environmental Technical Team (6PMF)
1500 E. Bannister Road, Kansas City, MO 64131-3088

To:	Wisconsin Occupational Health Laboratory 2601 Agriculture Drive P.O. Box 7996 Madison, WI 53707-7996	(800) 446-0403
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Please Send Report Via:	<input type="radio"/> Phone (816-823-2227) <input checked="" type="checkbox"/> e:Mail (david.Hartshorn@gsa.gov) or Fax (816-926-1779) <input checked="" type="checkbox"/> Mail (below)
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Please Send Report To:	General Services Administration Attn: Dave L. Hartshorn (6PEF-S) 1500 E. Bannister Road Kansas City, MO 64131
-------------------------------	--

Method of Transport:	FedEx	Analytical Priority Requested:	NORMAL
Date Shipped:	24-Jul-2003		

PROJECT NAME:	103 Goodfellow IAQ		
Sample ID	Analysis Requested	Sample Type	Sample Duration (min)
103-1	TVOC as Hexane and Solvent Scan	3M 3500	
103-2	TVOC as Hexane and Solvent Scan	3M 3500	
103-3	TVOC as Hexane and Solvent Scan	3M 3500	

Relinquished by: _____	Date: _____
Accepted by: _____	Date: _____

Please Return this Form With the Sample Results