OCCU-TEC
ENERGY, ENVIRONMENTAL AND SAFETY SOLUTIONS

ASBESTOS ABATEMENT CLOSE-OUT REPORT – Goodfellow - Building 107 St. Louis MO (MO0602AF)

Prepared for:

GSA U.S. General Services Administration

Mr. David Hartshorn, Certified Industrial Hygienist

GSA Heartland Region Safety & Environmental Management Office
1500 East Bannister Road, Room 2101

Kansas City, Missouri 64131-3088

Project Number: 92114

October 23, 2012

GSA Advantage!
www.gsaAdvantage.gov

TABLE OF CONTENTS

Page

Appendices:

1. INTRODUCTION

As authorized by GSA-Heartland, OCCU-TEC provided air monitoring and project oversight services for an asbestos abatement project in Goodfellow - Building 107 located at 4300 Goodfellow, in St. Louis, Missouri. This final report contains the OCCU-TEC representatives' air sampling data, laboratory results, and accreditation documentation. This report has been prepared to document completion of the project in accordance with the Task Order prepared for the project.

2. PROJECT DESCRIPTION

The abatement project at Goodfellow - Building 107 took place to prevent possible asbestos exposure to employees that work in and near the Basement Crawl Space. Global Environmental Inc. (GEI), of St. Louis, Missouri, a sub-contractor for Terracon of Lenexa, Kansas, performed the asbestos abatement activities in the building from September 17, 2012 through October 09, 2012. GEI abated the following asbestos-containing materials while OCCU-TEC was on-site:

Description	Location	Quantity Removed
Thermal Pipe Insulation Debris	Basement - Crawl Space	700 Cubic Yards (Compacted)

OCCU-TEC was on-site during the entire abatement process. Appendix A contains accreditation documentation for OCCU-TEC staff on-site during asbestos abatement activities.

3. OBSERVATIONS

Airborne fiber concentrations measured outside the work area by OCCU-TEC ranged from between < 0.002 fibers per cubic centimeter (f/cc) to 0.005 f/cc. All results were below the EPA-AHERA clearance level of 0.01 f/cc.

Following completion of abatement, OCCU-TEC conducted clearance air monitoring using aggressive sampling techniques and transmission electron microscopy (TEM). These procedures were performed to indicate successful completion of the abatement activities. Airborne fiber concentrations in the clearance samples were less than 70.0 asbestos structures/mm^2 by TEM. This indicated that the area were ready for re-occupancy. Visual inspections and clearance air monitoring indicated successful completion of the asbestos abatement actions. OCCU-TEC authorized the abatement contractor to remove the containment enclosures following analysis of clearance samples.

4. AIR MONITORING

ASBESTOS PCM AREA SAMPLING

PCM air samples were collected on 25 millimeter, 0.8-micron pore size mixed cellulose ester membrane filters. The filters were contained in three piece cassettes equipped with electrically conductive 50-mm cowls. Sample flow rates ranged from 1.25 to 4.39 liters per minute. This flow rate was selected to provide a low detection limit with minimal likelihood of overloading the filter.

PCM analyses were performed according to the analysis procedures specified in the National Institute of Occupational Safety and Health, Protocol 7400, Asbestos Fibers, using the "A" counting rules. This method does not permit discrimination between asbestos fibers and non-asbestos fibers. Asbestos air monitoring PCM reports are provided in Appendix C.

ASBESTOS TEM CLEARANCE SAMPLING

TEM clearance sampling took place following completion of the visual inspections and encapsulation of the work areas. All asbestos clearances were collected on 25 millimeter; 0.45-micron pore size mixed cellulose ester membrane filters. The filters were contained in three-piece cassettes equipped with electrically conductive 50-mm cowls. TEM analyses were performed by Bureau Veritas – North America (BV) in Kennesaw, Georgia for independent analysis according to the TEM counting procedures described under AHERA. BV analyzed the samples under the EPA NVLAP program and has a laboratory ID number of 101125-0. Clearance results were all below 70.0 asbestos structures/mm^2 detected, indicating successful completion of the asbestos abatement activity.

5. RECOMMENDATIONS

OCCU-TEC recommends that the building management undertake the following:

1. Update the building asbestos management program to include the completed abatement action.

2. Continued implementation of the building's asbestos management program.

Appendix A

Accreditation Documentation

Expiration Date: **N/A** Certificate Number: 7031008MOAS11347

Training Date: **3/10/2008**

Missouri State Certificate for Asbestos Related Occupations

issued by Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102
Phone (573) 751-4817

Patricia J. Garcia

has successfully completed the requirements for certification as a AIR SAMPLING PROFESSIONAL. This Missouri State Certification is subject to review and the director may deny, suspend or revoke the certification per RSMo chapter 643.230.

3/11/2008
Date

(b) (6)
[redacted]
Director of Air Pollution Control Program

Expiration Date **10/2/2013**

Certificate Number: 7011090612MOIR11347

Training Date: **9/6/2012**

Missouri State Certificate for Asbestos Related Occupations

issued by Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102
Phone (573) 751-4817

Patricia J. Garcia

has successfully completed the requirements for certification as a INSPECTOR. This Missouri State Certification is subject to review and the director may deny, suspend or revoke the certification per RSMo chapter 643.230.

10/3/2012
Date

(b) (6)
[redacted]
Director of Air Pollution Control Program

THIS CERTIFIES THAT

Patricia Garcia

has successfully completed a NIOSH 582 Equivalency Course in

SAMPLING & EVALUATING AIRBORNE ASBESTOS DUST

Presented by:

OCCU-TEC, Inc.

6501 E. Commerce, Suite 230
Kansas City, Missouri 64120
(816) 231-5580

[redacted]

May 3 – May 7, 2004

Course Date

Training Coordinator

Appendix B

Daily Field Reports

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 09-17-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 15:00 — **OUT: 23:45**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 5

IN: 16:00 — **OUT: 23:45**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __68 Degrees** **Conditions: Clear _____, Cloudy ___X___, Rain**

TODAY'S ACTIVITIES: **Prep. _X____, Removal ____, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob._____**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____0_____

Material Description: _____Off-Loading Equipment and Setting Up Decon, Shower, Neg Air Machines__ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal ___, Glovebag ___, Friable ___, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment _____, Critical Barriers _____,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- ___ Emergency Info. Posted
- ___ Fire Extinguishers On-Site
- ___ GFCI's Used
- ___ OSHA Info.Posted
- ___ Personal Sampling Conducted
- ___ Entrance Warning Signs Posted
- ___ Entry/Exit Logs Posted
- ___ Storage Bins Labeled
- ___ Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- ___ All Edges Sealed
- ___ Penetrations Sealed
- ___ Entry Curtains
- ___ Critical Barriers
- ___ Containment Smoke Tested
- Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- ___ Disposable Suits
- ___ Boots
- ___ Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- ___ Wet Methods Used
- ___ HEPA Vacuums Used
- ___ Waste Double-Bagged or Barreled
- ___ Wastewater Filtered or Barreled
- ___ Negative Air Pressure Achieved
- ___ Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- ___ Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

No Removal; Off-loading equipment; Setting-Up equipment in Basement of BLDG 107. Building shower and decon.

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM _____, TEM ___X___

Type

No. of Background Samples	10	No. of Personal Samples	0
No. of Area Samples	0	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 09-18-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT: 23:45**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 6

IN: 17:00 — **OUT: 23:45**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __70 Degrees** **Conditions: Clear ___X___, Cloudy _____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob. Wrapping Ducts**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____5 30gal bags_____

Material Description: _____Bags of Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) __Wrapping Duct Work_____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- X Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- ___ Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

19:31 - -0.026 negative air pressure
20:00 - -0.027 negative air pressure
20:40 - -0.027 negative air pressure
21:00 - -0.028 negative air pressure
22:00 - -0.028 negative air pressure
23:00 - -0.032 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA | **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 | **DATE: 09-19-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 | **OUT: 23:45**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn | **NUMBER OF WORKERS:** 5

IN: 17:00 | **OUT: 23:45**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __70 Degrees** **Conditions: Clear ___X___, Cloudy _____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob. Wrapping Ducts**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____10 30gal bags_____

Material Description: _____Bags of Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) __Wrapping Duct Work_____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- X Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- ___ Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

16:00 - -0.027 negative air pressure
17:51 - -0.027 negative air pressure
18:40 - -0.034 negative air pressure
19:11 - -0.037 negative air pressure
20:01 - -0.037 negative air pressure
21:30 - -0.040 negative air pressure
22:30 - -0.040 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA | **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 | **DATE: 09-20-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 | **OUT: 23:45**

CONTRACTOR SUPERVISOR: Matt Lour/Vicki Dunn | **NUMBER OF WORKERS:** 6

IN: 17:00 | **OUT: 23:45**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __70 Degrees** **Conditions: Clear ___X___, Cloudy _____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____45 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- X Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

16:00 - -0.037 negative air pressure
18:03 - -0.038 negative air pressure
19:03 - -0.050 negative air pressure
20:13 - -0.034 negative air pressure
21:52 - -0.037 negative air pressure
23:13 - -0.038 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 09-21-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT: 01:00**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 4

IN: 17:00 — **OUT: 01:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __70 Degrees** **Conditions: Clear ___X___, Cloudy _____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____70 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- X Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

16:00 - -0.037 negative air pressure
18:03 - -0.038 negative air pressure
19:21 - -0.038 negative air pressure
20:53 - -0.035 negative air pressure
22:00 - -0.040 negative air pressure
23:13 - -0.038 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA | **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 | **DATE: 09-24-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 | **OUT: 00:00**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn | **NUMBER OF WORKERS:** 5

IN: 17:00 | **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __70 Degrees** **Conditions: Clear ___X___, Cloudy _____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____42 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- Floor and Walls Covered
- Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- Safety Glasses/ Goggles
- Hard Hat
- Safety Vest
- Hearing Protection
- Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- Full-Face Air Purifying Respirator
- Powered Air Purifying Respirator
- Other:_____

SIGNIFICANT EVENTS

16:00 - -0.033 negative air pressure
18:17 - -0.032 negative air pressure
19:24 - -0.031 negative air pressure
20:04 - -0.032 negative air pressure
21:04 - -0.032 negative air pressure
22:12 - -0.031 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 09-25-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT: 00:00**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 6

IN: 17:00 — **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __82 Degrees** **Conditions: Clear _____, Cloudy _X_____, Raining**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____47 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

16:00 - -0.029 negative air pressure
18:06- -0.032 negative air pressure
19:14 - -0.031 negative air pressure
20:15 - -0.032 negative air pressure
21:00 - -0.031 negative air pressure
22:37 - -0.011 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 09-26-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT: 00:00**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 6

IN: 17:00 — **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __82 Degrees** **Conditions: Clear _____, Cloudy _X_____, Raining**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____47 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- Floor and Walls Covered
- Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- Safety Glasses/ Goggles
- Hard Hat
- Safety Vest
- Hearing Protection
- Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- Full-Face Air Purifying Respirator
- Powered Air Purifying Respirator
- Other:_____

SIGNIFICANT EVENTS

16:00 - -0.021 negative air pressure
17:56- -0.022 negative air pressure
19:34 - -0.011 negative air pressure
20:13 - -0.022 negative air pressure
21:00 - -0.011 negative air pressure
22:40 - -0.021 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 09-27-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT: 22:45**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 4

IN: 17:00 — **OUT: 21:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __75 Degrees** **Conditions: Clear _____, Cloudy _X_____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____0 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

16:50 - -0.024 negative air pressure

18:00- -0.020 negative air pressure

20:00 - -0.022 negative air pressure

20:15 - -0.020 negative air pressure

Crew works to remove clogged clay dirt from vacuum cyclone. It is binding the auger.

No removal from crawl space today.

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA | **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 | **DATE: 09-28-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 | **OUT: 00:00**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn | **NUMBER OF WORKERS:** 6

IN: 17:00 | **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __82 Degrees** **Conditions: Clear _____, Cloudy _X_____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____17 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

16:00 - -0.024 negative air pressure
17:36- -0.021 negative air pressure
19:07 - -0.021 negative air pressure
20:00 - -0.022 negative air pressure
21:30 - -0.011 negative air pressure
22:45 - -0.021 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	9	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 10-01-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:30 — **OUT: 00:00**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 7

IN: 17:00 — **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __76 Degrees** **Conditions: Clear _____, Cloudy _X_____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____65 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

17:00 - -0.011 negative air pressure
17:30- -0.036 negative air pressure
19:27 - -0.036 negative air pressure
20:42 - -0.034 negative air pressure
21:48 - -0.034 negative air pressure
22:45 - -0.032 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	9	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 10-02-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:30 — **OUT: 00:00**

CONTRACTOR SUPERVISOR: Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 8

IN: 17:00 — **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __70 Degrees** **Conditions: Clear _____, Cloudy _X_____, Raining**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____75 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- Floor and Walls Covered
- Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- Safety Glasses/ Goggles
- Hard Hat
- Safety Vest
- Hearing Protection
- Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- Full-Face Air Purifying Respirator
- Powered Air Purifying Respirator
- Other:_____

SIGNIFICANT EVENTS

17:10 - -0.045 negative air pressure
18:13- -0.050 negative air pressure
19:00 - -0.045 negative air pressure
20:13 - -0.045 negative air pressure
21:07 - -0.037 negative air pressure
22:37 - -0.036 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 10-03-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT: 00:00**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 8

IN: 16:00 — **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __81 Degrees** **Conditions: Clear __X____, Cloudy _____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____95 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

16:15- -0.037 negative air pressure
18:23- -0.037 negative air pressure
19:01 - -0.035 negative air pressure
20:22 - -0.034 negative air pressure
21:00 - -0.041 negative air pressure
22:22 - -0.026 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 10-04-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT: 00:00**

CONTRACTOR SUPERVISOR: Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 8

IN: 17:00 — **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __82 Degrees** **Conditions: Clear __X____, Cloudy _____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____150 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- Floor and Walls Covered
- Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- Safety Glasses/ Goggles
- Hard Hat
- Safety Vest
- Hearing Protection
- Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- Full-Face Air Purifying Respirator
- Powered Air Purifying Respirator
- Other:_____

SIGNIFICANT EVENTS

16:00- -0.016 negative air pressure
18:00- -0.025 negative air pressure
19:01 - -0.025 negative air pressure
20:22 - -0.025 negative air pressure
21:00 - -0.025 negative air pressure
22:22 - -0.025 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 10-05-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT: 00:00**

CONTRACTOR SUPERVISOR: Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 6

IN: 17:00 — **OUT: 00:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __50 Degrees** **Conditions: Clear _____, Cloudy __X____, Raining**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:_____97 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- ___ Storage Bins Labeled
- ___ Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- ___ All Edges Sealed
- ___ Penetrations Sealed
- ___ Entry Curtains
- ___ Critical Barriers
- ___ Containment Smoke Tested
- ___ Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- ___ Disposable Suits
- ___ Boots
- ___ Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- ___ Wet Methods Used
- ___ HEPA Vacuums Used
- ___ Waste Double-Bagged or Barreled
- ___ Wastewater Filtered or Barreled
- ___ Negative Air Pressure Achieved
- ___ Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- ___ Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

16:00- -0.016 negative air pressure
18:00- -0.022 negative air pressure
19:29 - -0.022 negative air pressure
21:07 - -0.023 negative air pressure
21:00 - -0.025 negative air pressure
22:22 - -0.025 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA | **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 | **DATE: 10-08-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 6:30 | **OUT: 15:00**

CONTRACTOR SUPERVISOR Matt Lour/Vicki Dunn | **NUMBER OF WORKERS:** 4

IN: 7:00 | **OUT: 15:00**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: __38 Degrees** **Conditions: Clear __X____, Cloudy _____,**

TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. _X___, Enclosure _____, Demo. _____, Teardown/Demob.**

Area of Activity:_____Basement GSA 107 Crawl Space_____ Quantity Removed:___10 30gal bags_____

Material Description: _____Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other:_____

SIGNIFICANT EVENTS

6:30- -0.016 negative air pressure

8:00- -0.022 negative air pressure

9:30 - -0.022 negative air pressure

11:07 - -0.020 negative air pressure

13:00 - -0.021 negative air pressure

14:17 - -0.020 negative air pressure

_____

_____

_____

_____

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	8	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

Appendix C

Asbestos Air Monitoring Reports (PCM)

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/18/2012
Analysis Date: 9/19/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-001	Field Blank										0	100		
92114-PCM-002	Field Blank										0	100		
92114-PCM-003	2nd Floor by Room 214	OWA	404	1.25	1.25	1.25	15:33	11:27	1194	1492.5	9.5	100	12.10	0.003
92114-PCM-004	2nd Floor by Room 224	OWA	399	1.25	1.25	1.25	15:55	11:28	1173	1466.3	11	100	14.01	0.004
92114-PCM-005	1st Floor Admin Office	OWA	405	3.29	3.29	3.29	16:09	23:17	428	1408.1	22	100	28.03	0.008
92114-PCM-006	1st Floor GSA Office	OWA	385	3.29	3.29	3.29	16:11	23:17	426	1401.5	10.5	100	13.38	0.004
92114-PCM-007	1st Floor North Hallway	OWA	388	3.29	3.29	3.29	16:15	23:15	420	1381.8	10.5	100	13.38	0.004
92114-PCM-008	1st Floor South Vestibule	OWA	386	3.29	3.29	3.29	16:18	23:16	418	1375.2	8.5	100	10.83	0.003
92114-PCM-009	Basement Outside	OWA	68	3.29	3.29	3.29	16:20	23:18	418	1375.2	2	100	2.55	< 0.002
92114-PCM-010	Basement Change Area	OWA	403	3.29	3.29	3.29	16:26	23:24	418	1375.2	9	100	11.46	0.003
92114-PCM-011	Basement by Sensors	OWA	406	3.29	3.29	3.29	16:30	23:26	416	1368.6	7.5	100	9.55	0.003
92114-PCM-012	Basement Decon	OWA	349	3.29	3.29	3.29	16:31	23:25	414	1362.1	9	100	11.46	0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/19/2012
Analysis Date: 9/20/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 1

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	Flow Rate (l/min) End	Flow Rate (l/min) Avg	Running Time Start	Running Time Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-013	Field Blank										1	100		
92114-PCM-014	Field Blank										1	100		
92114-PCM-015	2nd Floor by Room 214	OWA	404	1.25	1.25	1.25	16:02	11:20	1158	1447.5	3	100	2.55	< 0.002
92114-PCM-016	2nd Floor by Room 224	OWA	399	1.25	1.25	1.25	16:03	11:21	1158	1447.5	3	100	2.55	< 0.002
92114-PCM-017	1st Floor Admin Office	OWA	405	3.29	3.29	3.29	16:10	23:00	410	1348.9	7	100	7.64	< 0.003
92114-PCM-018	1st Floor GSA Office	OWA	385	3.29	3.29	3.29	16:12	23:01	409	1345.6	10	100	11.46	0.003
92114-PCM-019	1st Floor North Hallway	OWA	388	3.29	3.29	3.29	16:15	23:02	407	1339	2	100	1.27	< 0.003
92114-PCM-020	1st Floor South Vestibule	OWA	386	3.29	3.29	3.29	16:16	23:03	407	1339	4	100	3.82	< 0.003
92114-PCM-021	Basement Outside	OWA	68	3.29	3.29	3.29	16:30	23:04	394	1296.3	8.5	100	9.55	0.003
92114-PCM-022	Basement Change Area	OWA	403	3.29	3.29	3.29	16:20	23:06	406	1335.7	4	100	3.82	< 0.003
92114-PCM-023	Basement by Sensors	OWA	406	3.29	3.29	3.29	16:21	23:05	404	1329.2	9	100	10.19	0.003
92114-PCM-024	Basement Decon	OWA	349	2.29	2.29	2.29	16:25	23:08	403	922.87	1.5	100	0.64	< 0.004

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/20/2012
Analysis Date: 9/21/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0.5

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-025	Field Blank										1	100		
92114-PCM-026	Field Blank										0	100		
92114-PCM-027	2nd Floor by Room 214	OWA	404	1.25	1.25	1.25	16:33	15:54	1401	1751.3	11.5	100	14.01	0.003
92114-PCM-028	2nd Floor by Room 224	OWA	399	1.25	1.25	1.25	16:35	15:55	1400	1750	6.5	100	7.64	< 0.002
92114-PCM-029	1st Floor Admin Office	OWA	405	3.29	3.29	3.29	16:38	23:01	383	1260.1	12.5	100	15.29	0.005
92114-PCM-030	1st Floor GSA Office	OWA	385	3.29	3.29	3.29	16:40	23:02	382	1256.8	13.5	100	16.56	0.005
92114-PCM-031	1st Floor North Hallway	OWA	388	3.29	3.29	3.29	16:42	23:04	382	1256.8	5	100	5.73	< 0.003
92114-PCM-032	1st Floor South Vestibule	OWA	386	3.29	3.29	3.29	16:45	23:04	379	1246.9	5	100	5.73	< 0.003
92114-PCM-033	Basement Change Area	OWA	403	3.29	3.29	3.29	16:49	23:06	377	1240.3	11.5	100	14.01	0.004
92114-PCM-034	Basement Decon	OWA	356	2.29	2.29	2.29	16:55	23:06	371	849.59	3	100	3.18	< 0.004
92114-PCM-035	Outside Pit Entrance	OWA	68	3.29	3.29	3.29	16:58	23:11	373	1227.2	9	100	10.83	0.003
92114-PCM-036	Basement by Sensors	OWA	406	3.29	3.29	3.29	16:56	23:07	371	1220.6	6.5	100	7.64	< 0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/21/2012
Analysis Date: 9/24/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 1

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-037	Field Blank										1	100		
92114-PCM-038	Field Blank										1	100		
92114-PCM-039	1st Floor Admin Office	OWA	405	3.29	3.29	3.29	16:22	22:51	389	1279.8	2	100	1.27	< 0.003
92114-PCM-040	1st Floor GSA Office	OWA	385	3.29	3.29	3.29	16:24	22:52	388	1276.5	7	100	7.64	< 0.003
92114-PCM-041	1st Floor North Hallway	OWA	388	3.29	3.29	3.29	16:26	22:53	387	1273.2	1	100	0.00	< 0.003
92114-PCM-042	1st Floor South Vestibule	OWA	386	3.29	3.29	3.29	16:28	22:54	386	1269.9	2	100	1.27	< 0.003
92114-PCM-043	1st Floor Conference Room	OWA	356	2.29	2.29	2.29	16:30	22:55	385	881.65	1	100	0.00	< 0.004
92114-PCM-044	Basement Change Area	OWA	403	3.29	3.29	3.29	16:48	22:58	370	1217.3	11	100	12.74	0.004
92114-PCM-045	Basement Decon	OWA	348	2.29	2.29	2.29	16:33	22:59	386	883.94	5	100	5.10	< 0.004
92114-PCM-047	Basement by Sensors	OWA	406	3.29	3.29	3.29	16:52	23:00	368	1210.7	1	100	0.00	< 0.003
92114-PCM-046	Basement Neg Air Exhaust	OWA	349	2.29	2.29	2.29	16:52	23:00	368	842.72	7	100	7.64	< 0.004
92114-PCM-048	Outside Pit Entrance	OWA	68	3.29	3.29	3.29	16:33	22:57	384	1263.4	12.5	100	14.65	0.004

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/24/2012
Analysis Date: 9/25/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0.5

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-049	Field Blank										1	100		
92114-PCM-050	Field Blank										0	100		
92114-PCM-051	2nd Floor by Room 214	OWA	403	1.25	1.25	1.25	16:42	15:42	1380	1725	6.5	100	7.64	< 0.002
92114-PCM-052	2nd Floor by Room 224	OWA	399	1.25	1.25	1.25	16:44	15:44	1380	1725	4	100	4.46	< 0.002
92114-PCM-053	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:46	23:02	376	1650.6	8	100	9.55	0.002
92114-PCM-054	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:48	23:03	375	1646.3	3	100	3.18	< 0.002
92114-PCM-055	Outside Pit Entrance	OWA	68	4.39	4.39	4.39	16:50	23:08	378	1659.4	5.5	100	6.37	< 0.002
92114-PCM-056	1st Floor Admin	OWA	405	4.39	4.39	4.39	17:05	23:00	355	1558.5	5.5	100	6.37	< 0.002
92114-PCM-057	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	17:07	23:01	354	1554.1	7.5	100	8.92	0.002
92114-PCM-058	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	17:09	23:06	357	1567.2	2	100	1.91	< 0.002
92114-PCM-059	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:52	23:05	373	1637.5	2.5	100	2.55	< 0.002
92114-PCM-060	Neg Air	OWA	348	2.59	2.59	2.59	16:33	23:04	391	1012.7	0	100		

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/25/2012
Analysis Date: 9/26/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-71	Field Blank										0	100		
92114-PCM-072	Field Blank										0	100		
92114-PCM-061	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	15:42	16:08	1466	1832.5	5.5	100	7.01	< 0.002
92114-PCM-062	2nd Floor by Room 224	OWA	358	1.25	1.25	1.25	15:45	16:10	1465	1831.3	8.5	100	10.83	0.002
92114-PCM-063	1st Floor Admin	OWA	405	4.39	4.39	4.39	15:50	22:32	402	1764.8	5	100	6.37	< 0.002
92114-PCM-064	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	15:52	22:30	398	1747.2	9.5	100	12.10	0.003
92114-PCM-065	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:00	22:33	393	1725.3	1	100	1.27	< 0.002
92114-PCM-066	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:01	22:35	394	1729.7	6	100	7.64	< 0.002
92114-PCM-067	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:03	22:37	394	1729.7	5.5	100	7.01	< 0.002
92114-PCM-068	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:05	22:38	393	1725.3	3	100	3.82	< 0.002
92114-PCM-069	Neg Air	OWA	348	2.59	2.59	2.59	16:07	22:38	391	1012.7	3.5	100	4.46	< 0.003
92114-PCM-070	Outside Pit	OWA	68	4.39	4.39	4.39	16:10	20:25	255	1119.5	6	100	7.64	< 0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/26/2012
Analysis Date: 9/27/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-73	Field Blank										0	100		
92114-PCM-74	Field Blank										0	100		
92114-PCM-75	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	16:08	16:28	1460	1825	11.5	100	14.65	0.003
92114-PCM-76	2nd Floor by Room 224	OWA	358	1.25	1.25	1.25	16:10	16:31	1461	1826.3	11.5	100	14.65	0.003
92114-PCM-77	1st Floor Admin	OWA	405	4.39	4.39	4.39	16:14	22:35	381	1672.6	8	100	10.19	0.002
92114-PCM-78	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	16:15	22:38	383	1681.4	2.5	100	3.18	< 0.002
92114-PCM-79	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:18	22:39	381	1672.6	0	100		
92114-PCM-80	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:20	22:40	380	1668.2	2.5	100	3.18	< 0.002
92114-PCM-81	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:23	22:41	378	1659.4	3.5	100	4.46	< 0.002
92114-PCM-82	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:25	22:42	377	1655	5	100	6.37	< 0.002
92114-PCM-83	Neg Air	OWA	348	2.59	2.59	2.59	16:27	22:44	377	976.43	9.5	100	12.10	0.005
92114-PCM-84	Outside Pit	OWA	68	4.39	4.39	4.39	16:30	22:45	375	1646.3	4.5	100	5.73	< 0.002

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/27/2012
Analysis Date: 9/28/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0.5

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-85	Field Blank										1	100		
92114-PCM-86	Field Blank										0	100		
92114-PCM-87	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	16:30	16:30	1440	1800	9.5	100	11.46	0.002
92114-PCM-88	2nd Floor by Room 224	OWA	358	1.25	1.25	1.25	16:31	16:31	1440	1800	9.5	100	11.46	0.002
92114-PCM-89	1st Floor Admin	OWA	405	4.39	4.39	4.39	16:37	20:54	257	1128.2	8	100	9.55	0.003
92114-PCM-90	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	16:50	20:55	245	1075.6	3.5	100	3.82	< 0.003
92114-PCM-91	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:41	20:58	257	1128.2	2	100	1.91	< 0.003
92114-PCM-92	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:43	20:59	256	1123.8	4.5	100	5.10	< 0.003
92114-PCM-93	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:45	21:00	255	1119.5	2.5	100	2.55	< 0.003
92114-PCM-94	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:46	21:01	255	1119.5	4.5	100	5.10	< 0.003
92114-PCM-95	Neg Air	OWA	348	2.59	2.59	2.59	16:48	21:03	255	660.45	1	100	0.64	< 0.005
92114-PCM-96	Outside Pit	OWA	68	4.39	4.39	4.39	16:55	21:04	249	1093.1	5.5	100	6.37	< 0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/28/2012
Analysis Date: 10/1/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-97	Field Blank										0	100		
92114-PCM-98	Field Blank										0	100		
92114-PCM-99	1st Floor Admin	OWA	405	4.39	4.39	4.39	17:30	22:45	315	1382.9	6.5	100	8.28	< 0.002
92114-PCM-100	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	17:32	22:46	314	1378.5	8.5	100	10.83	0.003
92114-PCM-101	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	17:34	22:48	314	1378.5	4.5	100	5.73	< 0.002
92114-PCM-102	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	17:35	22:51	316	1387.2	2.5	100	3.18	< 0.002
92114-PCM-103	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	17:38	22:54	316	1387.2	6.5	100	8.28	< 0.002
92114-PCM-104	Basement by Sensors	OWA	406	4.39	4.39	4.39	17:39	22:55	316	1387.2	2	100	2.55	< 0.002
92114-PCM-105	Neg Air	OWA	348	2.59	2.59	2.59	17:40	22:56	316	818.44	8.5	100	10.83	0.005
92114-PCM-106	Outside Pit	OWA	68	4.39	4.39	4.39	17:42	22:52	310	1360.9	5.5	100	7.01	< 0.003
92114-PCM-107	1st Floor Room 110	OWA	349	2.59	2.59	2.59	17:44	22:49	305	789.95	0	100		

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/1/2012
Analysis Date: 10/2/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	Flow Rate (l/min) End	Flow Rate (l/min) Avg	Running Time Start	Running Time Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-108	Field Blank										0	100		
92114-PCM-109	Field Blank										0	100		
92114-PCM-110	1st Floor Admin	OWA	405	4.39	4.39	4.39	16:50	22:42	352	1545.3	3	100	3.82	< 0.002
92114-PCM-111	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	16:51	22:43	352	1545.3	5	100	6.37	< 0.002
92114-PCM-112	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:52	22:44	352	1545.3	2	100	2.55	< 0.002
92114-PCM-113	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:55	22:45	350	1536.5	3	100	3.82	< 0.002
92114-PCM-114	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:57	22:47	350	1536.5	3	100	3.82	< 0.002
92114-PCM-115	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:58	22:48	350	1536.5	5.5	100	7.01	< 0.002
92114-PCM-116	Neg Air	OWA	348	2.59	2.59	2.59	17:00	22:50	350	906.5	2	100	2.55	< 0.004
92114-PCM-117	Outside Pit	OWA	68	4.39	4.39	4.39	17:03	22:58	355	1558.5	5	100	6.37	< 0.002
92114-PCM-118	1st Floor Room 110	OWA	349	2.59	2.59	2.59	17:10	22:46	336	870.24	8	100	10.19	0.005

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/2/2012
Analysis Date: 10/3/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	Flow Rate (l/min) End	Flow Rate (l/min) Avg	Running Time Start	Running Time Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-119	Field Blank										0	100		
92114-PCM-120	Field Blank										0	100		
92114-PCM-121	2nd Floor by Room 214	OWA	404	1.25	1.25	1.25	16:36	15:57	1401	1751.3	11.5	100	14.65	0.003
92114-PCM-122	2nd Floor by Room 224	OWA	350	1.25	1.25	1.25	16:37	16:00	1403	1753.8	12.5	100	15.92	0.003
92114-PCM-123	1st Floor Admin	OWA	405	4.39	4.39	4.39	17:00	22:28	328	1439.9	3	100	3.82	< 0.002
92114-PCM-124	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	17:01	22:29	328	1439.9	6	100	7.64	< 0.002
92114-PCM-125	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	17:02	22:30	328	1439.9	6	100	7.64	< 0.002
92114-PCM-126	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	17:04	22:31	327	1435.5	6.5	100	8.28	< 0.002
92114-PCM-127	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	17:07	22:32	325	1426.8	3	100	3.82	< 0.002
92114-PCM-128	Basement by Sensors	OWA	406	4.39	4.39	4.39	17:08	22:33	325	1426.8	4	100	5.10	< 0.002
92114-PCM-129	Neg Air	OWA	348	2.59	2.59	2.59	17:10	22:34	324	839.16	5	100	6.37	< 0.004
92114-PCM-130	Outside Pit	OWA	68	4.39	4.39	4.39	17:05	22:35	330	1448.7	7	100	8.92	< 0.002

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/3/2012
Analysis Date: 10/4/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0.5

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-131	Field Blank										0	100		
92114-PCM-132	Field Blank										1	100		
92114-PCM-133	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	16:36	15:59	1403	1753.8	4.5	100	5.10	< 0.002
92114-PCM-134	2nd Floor by Room 224	OWA	350	1.25	1.25	1.25	16:37	16:00	1403	1753.8	9.5	100	11.46	0.003
92114-PCM-135	1st Floor Admin	OWA	405	4.39	4.39	4.39	17:00	22:49	349	1532.1	6	100	7.01	< 0.002
92114-PCM-136	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	17:01	22:51	350	1536.5	5.5	100	6.37	< 0.002
92114-PCM-137	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	17:02	22:55	353	1549.7	7.5	100	8.92	0.002
92114-PCM-138	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	17:04	22:56	352	1545.3	6	100	7.01	< 0.002
92114-PCM-139	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	17:07	22:22	315	1382.9	2	100	1.91	< 0.002
92114-PCM-140	Basement by Sensors	OWA	406	4.39	4.39	4.39	17:08	22:23	315	1382.9	5.5	100	6.37	< 0.002
92114-PCM-141	Neg Air	OWA	348	2.59	2.59	2.59	17:10	22:24	314	813.26	3.5	100	3.82	< 0.004
92114-PCM-142	Outside Pit	OWA	68	4.39	4.39	4.39	17:05	22:50	345	1514.6	8.5	100	10.19	0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/4/2012
Analysis Date: 10/5/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 1

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-143	Field Blank										1	100		
92114-PCM-144	Field Blank										1	100		
92114-PCM-145	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	14:50	*						
92114-PCM-146	2nd Floor by Room 224	OWA	350	1.25	1.25	1.25	14:51	16:16	1292	1615	5	100	5.10	< 0.002
92114-PCM-147	1st Floor Admin	OWA	405	4.39	4.39	4.39	14:54	22:55	481	2111.6	1.5	100	0.64	< 0.002
92114-PCM-148	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	14:55	22:56	481	2111.6	1.5	100	0.64	< 0.002
92114-PCM-149	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	14:57	22:57	480	2107.2	4.5	100	4.46	< 0.002
92114-PCM-150	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	14:58	22:58	480	2107.2	3	100	2.55	< 0.002
92114-PCM-151	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	15:00	22:59	479	2102.8	4.5	100	4.46	< 0.002
92114-PCM-152	Basement by Sensors	OWA	406	4.39	4.39	4.39	15:01	23:00	479	2102.8	2	100	1.27	< 0.002
92114-PCM-153	Neg Air	OWA	348	2.59	2.59	2.59	15:03	23:00	477	1235.4	7.5	100	8.28	0.003
92114-PCM-154	Outside Pit	OWA	68	4.39	4.39	4.39	15:05	23:02	477	2094	1	100	0.00	< 0.002

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

* = Pump stopped; aborted sample

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/5/2012
Analysis Date: 10/8/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-155	Field Blank										0	100		
92114-PCM-156	Field Blank										0	100		
92114-PCM-157	1st Floor Admin	OWA	405	4.39	4.39	4.39	16:23	22:25	362	1589.2	3	100	3.82	< 0.002
92114-PCM-158	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	16:24	22:26	362	1589.2	12.5	100	15.92	0.004
92114-PCM-159	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:26	22:27	361	1584.8	3	100	3.82	< 0.002
92114-PCM-160	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:28	22:32	364	1598	11	100	14.01	0.003
92114-PCM-161	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:30	22:33	363	1593.6	5	100	6.37	< 0.002
92114-PCM-162	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:31	22:35	364	1598	8	100	10.19	0.002
92114-PCM-163	Neg Air	OWA	348	2.59	2.59	2.59	16:32	22:34	362	937.58	6.5	100	8.28	< 0.004
92114-PCM-164	Outside Pit	OWA	68	4.39	4.39	4.39	16:39	22:45	366	1606.7	13	100	16.56	0.004
92114-PCM-165	1st Floor Room 111	OWA	350	2.59	2.59	2.59	16:44	22:29	345	893.55	8.5	100	10.83	0.005
92114-PCM-166	1st Floor Room 114	OWA	349	2.59	2.59	2.59	16:44	22:28	344	890.96	1	100	1.27	< 0.004

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/8/2012
Analysis Date: 10/9/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-167	Field Blank										0	100		
92114-PCM-168	Field Blank										0	100		
92114-PCM-169	1st Floor Admin	OWA	405	4.39	4.39	4.39	7:05	14:00	415	1821.9	7.5	100	9.55	0.002
92114-PCM-170	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	7:06	14:01	415	1821.9	5	100	6.37	< 0.002
92114-PCM-171	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	7:08	14:02	414	1817.5	2	100	2.55	< 0.002
92114-PCM-172	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	7:09	14:05	416	1826.2	3.5	100	4.46	< 0.002
92114-PCM-173	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	7:09	14:03	414	1817.5	3	100	3.82	< 0.002
92114-PCM-174	Basement by Sensors	OWA	406	4.39	4.39	4.39	7:12	14:06	414	1817.5	10	100	12.74	0.003
92114-PCM-175	1st Floor Room 111	OWA	350	2.59	2.59	2.59	7:15	14:09	414	1072.3	0	100		
92114-PCM-176	1st Floor Room 114	OWA	349	2.59	2.59	2.59	7:17	14:10	413	1069.7	8	100	10.19	0.004

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.

The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.

Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is **0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).**

Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers

The estimated interlaboratory CV for the quality control program that this laboratory participates in is **0.45**.

Appendix D

Asbestos Clearance Reports (TEM)

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

TEM ANALYSIS OF AIR SAMPLES

4151 North Mulberry Drive, Suite 275
Kansas City, Missouri 64116
(816) 231-5580
Toll Free: (800) 950-1953
Fax: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 E. Bannister
PROJECT NAME: GSA 3rd Party Air Monitoring and Oversite

OCCU-TEC Project # : 92114
Sample Date: 10/9/2012
Analysis Date: 10/10/2012
Report Date: 10/23/2012
Rotometer # 412

FILTER TYPE: 25mm, 0.45 um

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	# Asbestos Stuctures	Asbestos Structures/mm^2	Concentration Structures/cc
				Start	End	Avg	Start	Stop					
92114-014	Field Blank	BLK											
92114-015	Inside Blank	BLK											
92114-016	Outside Blank	BLK											
92114-017	Northend of Crawl Space	CL	385	6.93	6.93	6.93	10:10	14:30	270	1871.1	None Detected	<22	<0.0046
92114-018	Northend of Crawl Space	CL	404	6.93	6.93	6.93	10:11	14:42	271	1878	None Detected	<22	<0.0046
92114-019	Center of Crawl Space	CL	399	6.93	6.93	6.93	10:12	14:44	272	1885	None Detected	<22	<0.0045
92114-020	Southend of Crawl Space	CL	405	6.93	6.93	6.93	10:14	14:46	272	1885	None Detected	<22	<0.0045
92114-021	Southend of Crawl Space	CL	388	6.93	6.93	6.93	10:15	14:48	273	1891.9	None Detected	<22	<0.0045
92114-022	1st FL South Vestibule	CL	386	6.93	6.93	6.93	10:22	15:14	292	2023.6	None Detected	<22	<0.0042
92114-023	Basement OWA Crawl Space	CL	403	6.93	6.93	6.93	10:24	15:10	286	1982	None Detected	<22	<0.0043
92114-024	Basement by Sensors	CL	406	6.93	6.93	6.93	10:25	15:12	287	1988.9	None Detected	<22	<0.0043

SAMPLE TYPE

PRS=personal	IWA=inside work area
BLK= blank	OWA= outside work area
ICL=inside clearance	OCL=outside clearance
BGD=background	NAE=negative air exhaust

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained breathing apparatus	

Sampled By: Pat Garcia

Appendix E

Laboratory Reports (TEM)

September 25, 2012

Jeff Smith
OCCU-TEC INC.
6501 E. Commerce
Suite 230
Kansas City, MO 64120-

Bureau Veritas Work Order No. A1209155

Reference: 92114-BLDG 107 CRAWL SPACE

Dear Jeff Smith:

Bureau Veritas North America, Inc. received 10 samples on September 19, 2012 for the analyses presented in the following report.

The results apply only to the samples analyzed in this project. Please note that any unused portion of the samples will be discarded after a sixty-day holding period, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning the report, please contact the analyst whose name appears on the report or myself at (770) 499-7701.

Sincerely,
(b) (6)

Jon Perrenoud

Senior Microscopist
Electronic signature authorized through password protection

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144

Main: (770) 499-7701
Fax: (770) 499-7511
www.us.bureauveritas.com

CASE NARRATIVE

Date: *25-Sep-12*

CLIENT: OCCU-TEC INC.

Project: 92114-BLDG 107 CRAWL SPACE

Work Order No A1209155

ANALYTICAL METHOD FOR AIRBORNE ASBESTOS FIBERS USING TRANSMISSION ELECTRON MICROSCOPY (TEM) BY THE AHERA METHOD

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

Upon receipt in the laboratory, filters are transferred to a glass slide with a drop of dimethyl formamide/acetic acid clearing solution. After clearing, samples are partially ashed in a plasma asher. The filters are then carbon coated in a vacuum evaporator. Portions of the cleared/ashed/coated filters are excised and placed on 200-mesh copper TEM grids in a wick-type solutional washer containing 100% acetone.

Two grids are placed consecutively in the TEM for examination. An equal number of openings are examined on each grid at 15,000X magnification. Asbestos structures containing fibers which meet a >5:1 length:width aspect ratio and a minimum length of 0.5 micrometers are identified using morphology, selected area electron diffraction, and energy-dispersive x-ray spectroscopy. Fibers are classified by structure type, are sized (length and width), and are identified as chrysotile, amphibole, ambiguous, or non-asbestos. Results are reported as total asbestos structures per square millimeter of filter and asbestos structures per cubic centimeter of air (asbestos structures/cc). The Kennesaw, Georgia laboratory is accredited by NVLAP –Lab Code 101125-0.

For clearance of a work area in schools (k-12) the requirement is that the average of the results of the five inside samples is <70 str/mm2 assuming an analytical sensitivity of <0.005 structures/cubic centimeter.

References

USEPA. 1987. Asbestos Hazard Emergency Response Act. Appendix A to 40 CFR 763, Subpart E. Washington: GPO. (AHERA protocol).

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air

Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample ID	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chrysotile	Amphibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
A1209155-001A	004	18	< 18	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019
A1209155-002A	005	18	< 18	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019
A1209155-003A	006	18	< 18	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020
A1209155-004A	007	22	< 22	0	0	0	< 0.0050	< 0.0050	< 0.0050	0.0050	0	< 0.022
A1209155-005A	008	18	< 18	0	0	0	< 0.0047	< 0.0047	< 0.0047	0.0047	0	< 0.021
A1209155-006A	009	18	< 18	0	0	0	< 0.0047	< 0.0047	< 0.0047	0.0047	0	< 0.021

MCEF: Mixed Cellulose Ester Filter
s/mm²: Structures per square millimeter
"--" : No Results (Air Volume is 0)

s/cc: Structures per cubic centimeter of air collected.
<: Result is less than the indicated limit of detection.

Note 1: AHERA Structures counted contain fibers which met a ≥ 5:1 (length:width) aspect ratio and were ≥ 0.5um in length.
Note 2: AHERA sampling criteria requires that >1200 liters of air be collected on 0.45um filters. Deviation from thses requirements
Note 3: Yamate Level II Structures counted contain fibers which meet a ≥ 3:1 (length:width) aspect ratio.

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air

Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample ID	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chrysotile	Amphibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
A1209155-007A	010	18	< 18	0	0	0	< 0.0049	< 0.0049	< 0.0049	0.0049	0	< 0.022
A1209155-008A	011	18	< 18	0	0	0	< 0.0049	< 0.0049	< 0.0049	0.0049	0	< 0.022
A1209155-009A	012	15	< 15	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019
A1209155-010A	013	18	< 18	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

MCEF: Mixed Cellulose Ester Filter
s/mm²: Structures per square millimeter
"--" : No Results (Air Volume is 0)

s/cc: Structures per cubic centimeter of air collected.
<: Result is less than the indicated limit of detection.

Note 1: AHERA Structures counted contain fibers which met a ≥ 5:1 (length:width) aspect ratio and were ≥ 0.5um in length.
Note 2: AHERA sampling criteria requires that >1200 liters of air be collected on 0.45um filters. Deviation from thses requirements
Note 3: Yamate Level II Structures counted contain fibers which meet a ≥ 3:1 (length:width) aspect ratio.

Analyst(s) Name/Date: (b) (6) 9/25/2012

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²
Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-001A	004	09/17/12 @12:00 am	09/20/12 @9:14 am	1559	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	A1	C4A	0	0.00	0.00	None Detected			0
2	A1	C4C	0	0.00	0.00	None Detected			0
3	A1	E4A	0	0.00	0.00	None Detected			0
4	A2	C4A	0	0.00	0.00	None Detected			0
5	A2	C4C	0	0.00	0.00	None Detected			0
		Total Fibers:	0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method:	TEM AHERA	Filtration Filter:	MCE Filter, .45um
Sample Type:	Air	Effective Filter Area:	385 mm²
Date Received:	9/19/2012 10:49:00 AM	Grid Opening Size:	0.0112 mm²
Report Date:	9/25/2012 4:12:51 PM		

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-002A	005	09/17/12 @12:00 am	09/20/12 @9:14 am	1559	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	B1	C4A	0	0.00	0.00	None Detected			0
2	B1	C4C	0	0.00	0.00	None Detected			0
3	B1	E4A	0	0.00	0.00	None Detected			0
4	B2	C4A	0	0.00	0.00	None Detected			0
5	B2	C4C	0	0.00	0.00	None Detected			0
		Total Fibers:	0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²
Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-003A	006	09/17/12 @12:00 am	09/20/12 @9:14 am	1539	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	C1	C4A	0	0.00	0.00	None Detected			0
2	C1	C4C	0	0.00	0.00	None Detected			0
3	C1	E4A	0	0.00	0.00	None Detected			0
4	C2	C4A	0	0.00	0.00	None Detected			0
5	C2	C4C	0	0.00	0.00	None Detected			0
		Total Fibers:	0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method:	TEM AHERA	Filtration Filter:	MCE Filter, .45um
Sample Type:	Air	Effective Filter Area:	385 mm²
Date Received:	9/19/2012 10:49:00 AM	Grid Opening Size:	0.0112 mm²
Report Date:	9/25/2012 4:12:51 PM		

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-004A	007	09/17/12 @12:00 am	09/20/12 @9:14 am	1719	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0050	< 0.0050	< 0.0050	0.0050	0	< 0.022

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	D1	C4A	0	0.00	0.00	None Detected			0
2	D1	C4C	0	0.00	0.00	None Detected			0
3	D2	C4A	0	0.00	0.00	None Detected			0
4	D2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method:	TEM AHERA	Filtration Filter:	MCE Filter, .45um
Sample Type:	Air	Effective Filter Area:	385 mm²
Date Received:	9/19/2012 10:49:00 AM	Grid Opening Size:	0.0112 mm²
Report Date:	9/25/2012 4:12:51 PM		

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-005A	008	09/17/12 @12:00 am	09/20/12 @9:14 am	1450	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0047	< 0.0047	< 0.0047	0.0047	0	< 0.021

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	E1	C4A	0	0.00	0.00	None Detected			0
2	E1	C4C	0	0.00	0.00	None Detected			0
3	E2	C4A	0	0.00	0.00	None Detected			0
4	E2	C4C	0	0.00	0.00	None Detected			0
5	E2	E4A	0	0.00	0.00	None Detected			0
		Total Fibers:	0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method:	TEM AHERA	Filtration Filter:	MCE Filter, .45um
Sample Type:	Air	Effective Filter Area:	385 mm²
Date Received:	9/19/2012 10:49:00 AM	Grid Opening Size:	0.0112 mm²
Report Date:	9/25/2012 4:12:51 PM		

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-006A	009	09/17/12 @12:00 am	09/20/12 @9:14 am	1450	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0047	< 0.0047	< 0.0047	0.0047	0	< 0.021

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	A6	C4A	0	0.00	0.00	None Detected			0
2	A6	C4C	0	0.00	0.00	None Detected			0
3	A6	E4A	0	0.00	0.00	None Detected			0
4	A7	C4A	0	0.00	0.00	None Detected			0
5	A7	C4C	0	0.00	0.00	None Detected			0
		Total Fibers:	0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²
Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-007A	010	09/17/12 @12:00 am	09/20/12 @9:14 am	1386	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0049	< 0.0049	< 0.0049	0.0049	0	< 0.022

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	B6	C4A	0	0.00	0.00	None Detected			0
2	B6	C4C	0	0.00	0.00	None Detected			0
3	B6	E4A	0	0.00	0.00	None Detected			0
4	B7	C4A	0	0.00	0.00	None Detected			0
5	B7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method:	TEM AHERA	Filtration Filter:	MCE Filter, .45um
Sample Type:	Air	Effective Filter Area:	385 mm²
Date Received:	9/19/2012 10:49:00 AM	Grid Opening Size:	0.0112 mm²
Report Date:	9/25/2012 4:12:51 PM		

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-008A	011	09/17/12 @12:00 am	09/20/12 @9:14 am	1386	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0049	< 0.0049	< 0.0049	0.0049	0	< 0.022

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	C6	C4A	0	0.00	0.00	None Detected			0
2	C6	C4C	0	0.00	0.00	None Detected			0
3	C6	E4A	0	0.00	0.00	None Detected			0
4	C7	C4A	0	0.00	0.00	None Detected			0
5	C7	C4C	0	0.00	0.00	None Detected			0
		Total Fibers:	0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method:	TEM AHERA	Filtration Filter:	MCE Filter, .45um
Sample Type:	Air	Effective Filter Area:	385 mm²
Date Received:	9/19/2012 10:49:00 AM	Grid Opening Size:	0.0112 mm²
Report Date:	9/25/2012 4:12:51 PM		

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-009A	012	09/17/12 @12:00 am	09/20/12 @9:14 am	1300	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	6	15	< 15	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	D6	C4A	0	0.00	0.00	None Detected			0
2	D6	C4C	0	0.00	0.00	None Detected			0
3	D6	E4A	0	0.00	0.00	None Detected			0
4	D7	C4A	0	0.00	0.00	None Detected			0
5	D7	C4C	0	0.00	0.00	None Detected			0
6	D7	E4A	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²
Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-010A	013	09/17/12 @12:00 am	09/20/12 @9:14 am	1539	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	E6	E4A	0	0.00	0.00	None Detected			0
2	E6	E4C	0	0.00	0.00	None Detected			0
3	E6	F4A	0	0.00	0.00	None Detected			0
4	E7	C4A	0	0.00	0.00	None Detected			0
5	E7	C4C	0	0.00	0.00	None Detected			0
		Total Fibers:	0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

Analyst(s) Name/Date: (b) (6) 9/25/2012

BUG 107 CRAWLSPACE

A1209155

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Bureau Veritas Use Only
Bureau Veritas Lab Project No.

Bureau Veritas North America, Inc.

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5887
(248) 344-1770
Fax (248) 344-2655

Atlanta Lab
3380 Chastain Meadows Pky, Ste 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
Fax (770) 499-7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
(888) 576-7522
(847) 726-3320
Fax (847) 726-3323

RUSH ANALYSIS
CONTACT LAB IN ADVANCE
Need Results by: STANDARD
Charges Authorized? ☒ Yes ☐ No
(if yes, initial here) _____
☒ Email Results ☒ Fax

REPORT RESULTS TO

Name	JEFF SMITH
Company	OCCUTEC
Mailing Address	4151 N. MULBERRY STE 275
City, State, Zip	KANSAS CITY, MO 64116
Telephone No.	816.231.5580
Client Job. No.	92114
Dept.	
Fax No.	816.231.5641

BILLING/INVOICE INFORMATION

☐ PO # _____ ☐ Call for Credit Card Information ☐ Direct Bill

Name	DAVID HARTSHORN
Company	GSA
Address	1500 EAST BANNISTER, ROOM 2101
City, State, Zip	KANSAS CITY, MO 64131-3088

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)
CALL PAT GARCIA W/ QUESTIONS
816.719.6149

* Explanation of Preservation STANDARD T-A-T

Soils: Which state are these from? _____

Waters: ☐ Drinking Water ☐ Groundwater ☐ Wastewater

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.*)

	CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	AHERA ASB TEM PROTOCOL	FOR LAB USE ONLY
004	GSA ADMIN 1ST FLOOR	09/17	15:15	TEM CASSETTE	1559	1		
005	GSA OFFICES 1ST FLOOR		15:20		1559	1		
006	ROOM 110 1ST FLOOR		15:25		1539	1		
007	ROOM 112 1ST FLOOR		15:30		1719	1		
008	BY ROOM 214 2ND FLOOR		15:42		1450	1		
009	BY ROOM 224 2ND FLOOR		15:45		1450	1		
010	BASEMENT BY SENSORS		16:10		1386	1		
011	BASEMENT OUTSIDE CRAWLSPACE		16:15		1386	1		
012	BASEMENT CRAWL SPACE		16:25		1300	1		
013	OUTSIDE EAST PARKING LOT		16:35		1539	1		

CHAIN OF CUSTODY

Collected by: PATRICIA GARCIA 11:24 (print) Collector's Signature:
Relinquished by: [redacted] Date/Time 9/19/17 Received by: [redacted] Date/Time
Relinquished by: Date/Time Received by: Date/Time 9/19/2012
Method of Shipment: FED EX Received at Lab by: Date/Time
Authorized by: [redacted] Date 09/12/12 Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain) 1644

(Client Signature **MUST** Accompany Request)

Page 1 of 1

LABORATORY COPY

October 11, 2012

Jeff Smith
OCCU-TEC INC.
4151 N. Mulberry Suite 275
Kansas City, MO 64116

Bureau Veritas Work Order No. A1210109

Reference: 92114 - BLDG 107 CRAWLSPACE

Dear Jeff Smith:

Bureau Veritas North America, Inc. received 8 samples on October 10, 2012 for the analyses presented in the following report.

The results apply only to the samples analyzed in this project. Please note that any unused portion of the samples will be discarded after a sixty-day holding period, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning the report, please contact the analyst whose name appears on the report or myself at (770) 499-7701.

Sincerely,

(b) (6)

Kuntal Parikh

Senior Microscopist

Electronic signature authorized through password protection

cc: Michael Wantland

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144

Main: (770) 499-7701
Fax: (770) 499-7511
www.us.bureauveritas.com

CASE NARRATIVE

Date: *11-Oct-12*

CLIENT: OCCU-TEC INC.

Project: 92114 - BLDG 107 CRAWLSPACE

Work Order No A1210109

ANALYTICAL METHOD FOR AIRBORNE ASBESTOS FIBERS USING TRANSMISSION ELECTRON MICROSCOPY (TEM) BY THE AHERA METHOD

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

Upon receipt in the laboratory, filters are transferred to a glass slide with a drop of dimethyl formamide/acetic acid clearing solution. After clearing, samples are partially ashed in a plasma asher. The filters are then carbon coated in a vacuum evaporator. Portions of the cleared/ashed/coated filters are excised and placed on 200-mesh copper TEM grids in a wick-type solutional washer containing 100% acetone.

Two grids are placed consecutively in the TEM for examination. An equal number of openings are examined on each grid at 15,000X magnification. Asbestos structures containing fibers which meet a >5:1 length:width aspect ratio and a minimum length of 0.5 micrometers are identified using morphology, selected area electron diffraction, and energy-dispersive x-ray spectroscopy. Fibers are classified by structure type, are sized (length and width), and are identified as chrysotile, amphibole, ambiguous, or non-asbestos. Results are reported as total asbestos structures per square millimeter of filter and asbestos structures per cubic centimeter of air (asbestos structures/cc). The Kennesaw, Georgia laboratory is accredited by NVLAP –Lab Code 101125-0.

For clearance of a work area in schools (k-12) the requirement is that the average of the results of the five inside samples is <70 str/mm2 assuming an analytical sensitivity of <0.005 structures/cubic centimeter.

References

USEPA. 1987. Asbestos Hazard Emergency Response Act. Appendix A to 40 CFR 763, Subpart E. Washington: GPO. (AHERA protocol).

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Sample Type: Air

Date Received: 10/10/2012 12:23:12 PM
Report Date: 10/11/2012 2:58:02 PM
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample ID	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chrysotile	Amphibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
A1210109-001A	017	22	< 22	0	0	0	< 0.0046	< 0.0046	< 0.0046	0.0046	0	< 0.020
A1210109-002A	018	22	< 22	0	0	0	< 0.0046	< 0.0046	< 0.0046	0.0046	0	< 0.020
A1210109-003A	019	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020
A1210109-004A	020	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020
A1210109-005A	021	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020
A1210109-006A	022	22	< 22	0	0	0	< 0.0042	< 0.0042	< 0.0042	0.0042	0	< 0.019

MCEF: Mixed Cellulose Ester Filter
s/mm²: Structures per square millimeter
"--" : No Results (Air Volume is 0)

s/cc: Structures per cubic centimeter of air collected.
<: Result is less than the indicated limit of detection.

Note 1: AHERA Structures counted contain fibers which met a ≥ 5:1 (length:width) aspect ratio and were ≥ 0.5um in length.
Note 2: AHERA sampling criteria requires that >1200 liters of air be collected on 0.45um filters. Deviation from thses requirements
Note 3: Yamate Level II Structures counted contain fibers which meet a ≥ 3:1 (length:width) aspect ratio.

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Sample Type: Air

Date Received: 10/10/2012 12:23:12 PM
Report Date: 10/11/2012 2:58:02 PM
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample ID	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chrysotile	Amphibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
A1210109-007A	023	22	< 22	0	0	0	< 0.0043	< 0.0043	< 0.0043	0.0043	0	< 0.019
A1210109-008A	024	22	< 22	0	0	0	< 0.0043	< 0.0043	< 0.0043	0.0043	0	< 0.019

MCEF: Mixed Cellulose Ester Filter
s/mm²: Structures per square millimeter
"--" : No Results (Air Volume is 0)

s/cc: Structures per cubic centimeter of air collected.
<: Result is less than the indicated limit of detection.

Note 1: AHERA Structures counted contain fibers which met a ≥ 5:1 (length:width) aspect ratio and were ≥ 0.5um in length.
Note 2: AHERA sampling criteria requires that >1200 liters of air be collected on 0.45um filters. Deviation from thses requirements
Note 3: Yamate Level II Structures counted contain fibers which meet a ≥ 3:1 (length:width) aspect ratio.

Analyst(s) Name/Date: (b) (6) 10/11/2012

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-001A	017	10/09/12 @12:00 am	10/10/12 @12:34 pm	1871	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0046	< 0.0046	< 0.0046	0.0046	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	A1	C4A	0	0.00	0.00	None Detected			0
2	A1	C4C	0	0.00	0.00	None Detected			0
3	A2	C4A	0	0.00	0.00	None Detected			0
4	A2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-002A	018	10/09/12 @12:00 am	10/10/12 @12:34 pm	1878	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0046	< 0.0046	< 0.0046	0.0046	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	B1	C4A	0	0.00	0.00	None Detected			0
2	B1	C4C	0	0.00	0.00	None Detected			0
3	B2	C4A	0	0.00	0.00	None Detected			0
4	B2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-003A	019	10/09/12 @12:00 am	10/10/12 @12:34 pm	1885	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	C1	C4A	0	0.00	0.00	None Detected			0
2	C1	C4C	0	0.00	0.00	None Detected			0
3	C2	C4A	0	0.00	0.00	None Detected			0
4	C2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-004A	020	10/09/12 @12:00 am	10/10/12 @12:34 pm	1885	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	D1	C4A	0	0.00	0.00	None Detected			0
2	D1	C4C	0	0.00	0.00	None Detected			0
3	D2	C4A	0	0.00	0.00	None Detected			0
4	D2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-005A	021	10/09/12 @12:00 am	10/10/12 @12:34 pm	1891	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	E1	C4A	0	0.00	0.00	None Detected			0
2	E1	C4C	0	0.00	0.00	None Detected			0
3	E2	C4A	0	0.00	0.00	None Detected			0
4	E2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-006A	022	10/09/12 @12:00 am	10/10/12 @12:34 pm	2024	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0042	< 0.0042	< 0.0042	0.0042	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	A6	G4C	0	0.00	0.00	None Detected			0
2	A6	H4A	0	0.00	0.00	None Detected			0
3	A7	C4A	0	0.00	0.00	None Detected			0
4	A7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-007A	023	10/09/12 @12:00 am	10/10/12 @12:34 pm	1982	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0043	< 0.0043	< 0.0043	0.0043	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	B6	C4A	0	0.00	0.00	None Detected			0
2	B6	C4C	0	0.00	0.00	None Detected			0
3	B7	C4C	0	0.00	0.00	None Detected			0
4	B7	E4A	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-008A	024	10/09/12 @12:00 am	10/10/12 @12:34 pm	1989	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0043	< 0.0043	< 0.0043	0.0043	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	C6	C4A	0	0.00	0.00	None Detected			0
2	C6	C4C	0	0.00	0.00	None Detected			0
3	C7	C4A	0	0.00	0.00	None Detected			0
4	C7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

Analyst(s) Name/Date: (b) (6) 10/11/2012

BLDG 107 CRAWLSPACE

24HR TAT

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Bureau Veritas Use Only
Bureau Veritas Lab Project No.

Bureau Veritas North America, Inc.

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5887
(248) 344-1770
Fax (248) 344-2655

Atlanta Lab
3380 Chastain Meadows Pky, Ste 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
Fax (770) 499-7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
(888) 576-7522
(847) 726-3320
Fax (847) 726-3323

A12/10109

RUSH ANALYSIS
CONTACT LAB IN ADVANCE
Need Results by: 10/10/12 — 10/11/12 13:00 HRS
Charges Authorized? ☒ Yes ☐ No
(if yes, initial here) VG
☒ Email Results ☒ Fax

JSMITH@OCCUTEC.COM

REPORT RESULTS TO

Name	JEFF SMITH
Company	OCCUTEC
Mailing Address	4151 N. MULBERRY STE 275
City, State, Zip	KANSAS CITY, MO 64116
Telephone No.	816.231.5580
Fax No.	816.231.5641
Client Job. No.	92114
Dept.	ENV.

BILLING/INVOICE INFORMATION

☐ PO # _____ ☐ Call for Credit Card Information ☐ Direct Bill

Name	DAVID HARTSHORN
Company	GSA
Address	1500 EAST BANNISTER ROOM 2101
City, State, Zip	KANSAS CITY, MO 64131-3088

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)
PHONE PAT GARCIA W/ VERBAL RESULTS 816.719.6149

* Explanation of Preservation

Soils: Which state are these from? _____

Waters: ☐ Drinking Water ☐ Groundwater ☐ Wastewater

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.*)

	CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	AHERA ASB TEM PROTOCOL	FOR LAB USE ONLY
017	NORTH END OF CRAWL SPACE #395	10/09/12	10:10	TEM CASSETTE	1,871	1		
018	NORTH END OF CRAWL SPACE #404		10:11		1,878	1		
019	CENTER OF CRAWLSPACE #399		10:12		1,885	1		
020	SOUTH END OF CRAWL SPACE #405		10:14		1,935	1		
021	SOUTH END OF CRAWL SPACE #398		10:15		1,891	1		
022	1ST FL S VESTIBULE #396		10:22		2,024	1		
023	1ST FL BASEMENT OWA CRAWLSPACE #403		10:24		1,992	1		
024	BASEMENT BY SUNSOR #406		10:25		1,939	1		

CHAIN OF CUSTODY

Collected by:	PATRICIA GARCIA (print)	Collector's Signature:	[redacted]
Relinquished by:	[redacted]	Date/Time 10/09/12	Received by: [redacted] Date/Time
Relinquished by:		Date/Time	Received by: Date/Time 10/10/2012
Method of Shipment:	FEDEX		Received at Lab by: Date/Time 1225 PM
Authorized by:	[redacted] Date 10/09/12		Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

(Client Signature MUST Accompany Request)

CLEARANCE 24 HR TURN AROUND TIME

LABORATORY COPY

BLANKS NOT SUBMITTED