San Francisco • Sacramento • Las Vegas • Harrisburg

LaCroix Davis LLC

**California State Board of Equalization**
450 N Street, Sacramento, California

# Mold Remediation – 16th Floor
# Closure Report Addendum

*Project No. 2372.02-572*

**Prepared for:**
California Department of General Services
707 Third Street, 3-305
Sacramento, California 95605

**Prepared by:**
Chris Corpuz, MS, CIH, CAC
Senior Associate
LaCroix Davis LLC

**Closure Report Date:** December 8, 2009

**Addendum Date:** October 31, 2012

***Please insert this Closure Report Addendum into the rear of the Floor 16 Closure Report***

Building Environmental EHS Consulting
3685 Mt. Diablo Blvd., Ste. 210 • Lafayette, CA 94549 • p 925.299.1140 f 925.299.1185 • www.lacroixdavis.com

## 1.0 Introduction

On December 11, 2009, LaCroix Davis LLC (LCD) and the Department of General Services Mold Remediation Project Team completed the mold remediation activities initially scheduled for Floor 16 of the Board of Equalization (BOE) building located at 450 N Street, Sacramento, California. At the completion of these activities, a closure report for this floor was compiled by LCD to summarize key events of the project.

Subsequent to the completion of the closure report, a need for additional investigation and/or remediation activities was identified. Identified areas were subjected to sampling. Using a combination of surface tape lift and/or bulk samples, LCD tested stains on walls and other building materials to determine if the stains were indicative of mold growth. The sample locations are depicted in a revised Figure 2 attached to this addendum.

Any information not previously available and information documenting additional mold-related activities was compiled by LCD and included in this addendum.

## 2.0 Additional Activities

Additional mold-related activities performed on this floor after completion of the floor closure report include:

| | |
|---|---|
| April 2010<br>Fire Sprinkler Riser Cabinet | Inspection, testing, and remediation. |
| August 2011<br>Rooms 1616, 1618,<br>Adjacent Hallway | Inspection and remediation of a coolant spill from the personal refrigerator in Break room 1616. |

## KEYED SHEET NOTES

1. Stains on pipe fitting and South wall
2. Visible mold growth 1 sq.ft. on ceiling
3. Stained ceiling tile (VAV-TU-16-5)
4. Stained ceiling tile (VAV-TU-16-4)

## GENERAL NOTES

1. LCD inspection locations are approximate.
2. The locations of VAVs (terminal units) are approximate.
3. Any mold identified during the initial or supplemental water damage assessment was subsequently removed during the remediation.

## LEGEND

The terms "active", "current", and "historical" in the following legend refer to the status found at the time of inspection. All areas of active/current and historical water leaks and mold growth have been investigated and remediated.

- Active water leak (remediated)
- Current water stained surface (remediated)
- Historical water leak/ stained surface (remediated)
- Current mold growth (remediated)
- Historical mold growth (remediated)
- Current water on floor (remediated)
- Historical water on floor (no longer present, based on historical records only)
- Destructive testing location (historical)
- 325 Room number
- i LCD inspection location no findings
- A LCD inspection location active leak
- B LCD inspection location water stain
- C LCD inspection location other notation See WDA summary
- BC LCD inspection location with multiple findings "A", "B", or "C" as indicated

LaCroix Davis LLC

State of California
Department of General Services
(DGS No. 125828)
(AGMT. No. 3126150)
(LCD No. 2372.02-572)

# Water Damage Assessment - Revised (Jan 2013)

Board of Equalization Building, Mold Remediation
450 N Street, Sacramento, California

16th Floor

Figure 1

LaCroix Davis LLC

State of California
Department of General Services
(DGS No. 125828)
(AGMT. No. 3126150)
(LCD No. 2372.02-572)

# Containment and Sample Locations (Jan 2013)

Board of Equalization Building, Mold Remediation
450 N Street, Sacramento, California

16th Floor

Figure 2

# Daily Logs

| | |
|---|---|
| LaCroix Davis LLC Building & Environmental Forensics | **PROJECT LOG** DATE: 4/9/10 |
| | LACROIX DAVIS LLC<br>3685 MT. DIABLO BLVD. SUITE 210<br>LAFAYETTE, CA 94549<br>TEL 925-299-1140 FAX 925-299-1185 |
| | PAGE 1 OF 4 |

| | | | |
|---|---|---|---|
| Client | **Department of General Services (DGS)** | Contractor: **JLS Environmental** | Day ✓ Swing ✓<br>Weekend/Holiday ____ |
| Project | **Board of Equalization (BOE)** | Location(s): | Floor 3 Floor 14<br>Floor 15 Floor 16 |
| Building | **450 N Street, Sacramento CA** | Compound(s) of Concern | Mold ✓<br>ACM<br>LBP |
| LCD Project # -Task | **2372.0 2 -572; SOW 5.0** | **Description:** Floor 3 containments | |
| LCD Project # -Task | **2372.0 3 -572; SOW 5.0** } separate log | **Description:** Fire Riser Cabinets | |
| LCD Project # -Task | **2372.0 ____ -572; SOW ____** | **Description:** ____ | |

**CONTAINMENT INFORMATION**

1. Type of Containment: NPE ✓ Mini ____ Barrier Tape ____ Minor Procedures ____ HEPA ____
2. Type of Decon: Shower ____ 2-Stage ____ 1Stage ✓ Drop Sheet W/Vacuum ____ None ____
3. Manometer? Yes ✓ No ____ Strip Chart Record? Yes ✓ No ____ Adequate Pressure? Yes ✓ No ____ Comments Below.
4. Containment Entry Log? Yes ✓ No ____
5. Containment and Decon maintained in accordance with accepted practices and procedures? Yes ✓ No ____ Comment below.
6. Negative Air Machines and/or HEPA Vacuums Aerosol Challenge Tested? yes
7. Negative Air Exhaust Location: Window ____ Smoke Shaft ____ Stairs ✓ Unoccupied Space ✓
8. Site Security: 24 hr

**SUMMARY OF ACTIVITIES**

Mob/Demob FSR ✓ Prep FSR ✓ Removal FSR ✓ Waste Load Out FSR+C6 ✓ Detail Clean FSR+C6 ✓ Encapsulation FSR ✓ Clearance Testing ____ Tear Down ____

Visual Inspections: Pre-Abatement FSR ✓ Pre-Encapsulation FSR ✓ Pre-Clearance FSR ✓ Post Tear Down ____

Comments: Floor 3 Containment C6 (Room 317) scraping floor and detail cleaning

Fire Riser Cabinets Floors 14, 15, 16 in SE Stairs

Waste Generated: Hazardous ____ Non-Hazardous/Construction Debris ✓ Adequately Wet ____ Waste Load-Out? ✓

Packaging: Single 6 Mil ____ Double 6 Mil ✓ Barrels ____ Boxes ____ Burrito Wrap ____ Other ____

Hazardous Waste Manifest? No Waste Characterization? ✓ Labels? No Comments: ____

Location of Dumpster: Floor 1 SW garage area

Additional Worker PPE: Disposable Suits ✓ Gloves ✓ (Respirator) Half Face ✓ Full Face ✓ PAPR ____

Contractor Worker Exposure Monitoring? No # Workers Sampled Ø

On-Site Visitors: 1. ____ 2. ____ 3. ____ 4. ____

**LaCroix Davis Project LOG**
**Date:** 4/9/10



**PERSONAL EXPENSES:**

Hotel: ✓ Per Diem: ✓ Travel: ✓ Destination: site & lab

**FIELD SUPPLIES:** PPE: Suits Day 2 | Swing? 6 to 9? Gloves (pairs) _____ Respirator filters: _____ Misc: _____

FSR Floor 3

- Gary - can you track the # of suits for the FSR separate? thanks

**LAB EXPENSES:** Type/No. Samples collected: Tape _____ Bulk _____ Air _____

Laboratory Name: EML P&K

**Notes**

DAY • JLS continues scraping mastic under cubicle partitions + general
meet w/ JLS ERamos to discuss tentative C6 schedule -
▸ cleaning under cubicles will be completed Friday 4/9
▸ detail cleaning will begin Friday 4/9 and conclude Saturday PM 4/
▸ clearance testing will occur Monday 4/12 AM
8 • meet w/ EML P&K to coordinate w/ lab analyst Brandon -
I will phone him 4/10 @ 8:00 AM to give him our plan for testing
saturday afternoon - based on when work concludes in FSR's
9 • meet w/ HTI to discuss stain floor at North perimeter wall and
probable water source (indoor plant/spill vs. outdoor leak)
enter containment and observe wall material removal at stain + floor scrap.
some rusting observed in wall cavity - source appears historic
leak beneath window - where precast panel meets metal at si
11 pk supplies at Grainger - Suits/resp. filters/resp wipes
13 JLS continues floor scrape
14 " " " " and detail
15: JLS checks all electrical covers to remove carpet
15: photo doc sealing cubicle feet and removal of
carpet remnants
15:30 Day shift concludes Swing begins - detail clean
Swing - process planned entire shift + Saturday Day shift.

Signature Monica Date 4/9/10

| | |
|---|---|
| LaCroix Davis Building & Environmental Forensics | **PROJECT LOG** **DATE:** 4/9/10<br>LACROIX DAVIS LLC<br>3685 MT. DIABLO BLVD. SUITE 210<br>LAFAYETTE, CA 94549<br>TEL 925-299-1140 FAX 925-299-1185<br>**PAGE** 3 **OF** 4 |

| | | | |
|---|---|---|---|
| Client | **Department of General Services (DGS)** | Contractor: **JLS Environmental** | Day____ Swing ✓<br>Weekend/Holiday____ |
| Project | **Board of Equalization (BOE)** | Location(s): | Floor 16 Floor 15<br>Floor 14 Floor 3 |
| Building | **450 N Street, Sacramento CA** | Compound(s) of Concern | Mold<br>ACM<br>LBP |
| LCD Project # -Task | **2372.0** 3 **-572; SOW** 5.0 | **Description:** Fire Riser Cabinets | |
| LCD Project # -Task | **2372.0** 2 **-572; SOW** 5.0 separate log | **Description:** Floor 3 Containment | |
| LCD Project # -Task | **2372.0**____**-572; SOW** _____ | **Description:**_____ | |

**CONTAINMENT INFORMATION**

1. Type of Containment: NPE ✓ Mini ✓ Barrier Tape_____ Minor Procedures _____ HEPA _____
2. Type of Decon: Shower_____ 2-Stage_____ 1Stage ✓ Drop Sheet W/Vacuum_____ None_____
3. Manometer? Yes ✓ No____ Strip Chart Record? Yes ✓ No ____ Adequate Pressure? Yes ✓ No ____ Comments Below.
4. Containment Entry Log? Yes ✓ No_____
5. Containment and Decon maintained in accordance with accepted practices and procedures? Yes___ No ___ Comment below.
6. Negative Air Machines and/or HEPA Vacuums Aerosol Challenge Tested? _____
7. Negative Air Exhaust Location: Window_____ Smoke Shaft_____ Stairs_____ Unoccupied Space_____
8. Site Security: 24 hr

**SUMMARY OF ACTIVITIES**

Mob/Demob___ Prep___ Removal___ Waste Load Out___ Detail Clean___ Encapsulation___ Clearance Testing___ Tear Down___

Visual Inspections: Pre-Abatement____ Pre-Encapsulation____ Pre-Clearance_____ Post Tear Down_____

Comments:_____

Waste Generated: Hazardous ____Non-Hazardous/Construction Debris_____ Adequately Wet_____ Waste Load-Out? _____

Packaging: Single 6 Mil_____ Double 6 Mil _____ Barrels_____ Boxes_____ Burrito Wrap_____ Other_____

Hazardous Waste Manifest? _____ Waste Characterization? _____ Labels? _____ Comments: _____

Location of Dumpster: _____

Additional Worker PPE: Disposable Suits_____ Gloves _____ (Respirator) Half Face ____ Full Face ____ PAPR _____

Contractor Worker Exposure Monitoring? _____ # Workers Sampled _____

On-Site Visitors: 1._____ 2._____ 3._____ 4._____

LaCroix Davis Project LOG
Date: 4/9/10 & 4/10/10 (AM)



**PERSONAL EXPENSES:**

Hotel: _____ Per Diem: _____ Travel: _____ Destination: _____

**FIELD SUPPLIES:** PPE: Suits 15 Gloves (pairs) 15 Respirator filters: _____ Misc: _____

**LAB EXPENSES:** Type/No. Samples collected: Tape _____ Bulk _____ Air _____

Laboratory Name: _____

**Notes**

14 & 16 West Stairway

18:10 GWB Arrive

19:24 Crew begins to complete river containments & HTI gl. Bed

19:40 Inspected ~~ca~~ and approved containments

20:45 Begin inspecting top section encapsulation, complete @ 21:15

21:21 Enter CG pictures, crew is final cleaning & about 1/2 way through

21:33 Begin initial inspecting lower cut out sections, lunch break at 22:30

22:49 Complete initial inspections of lower cutout sections.

0:16 Begin inspection of lower sections & inspection after encapsulation

1:30 Inspection complete

1:30 GWB leave site

Signature P. Bayne

Date 4-9-10

LaCroix Davis LLC
Building & Environmental Forensics

**PROJECT LOG** **DATE:** 4/10/10

LACROIX DAVIS LLC
3685 MT. DIABLO BLVD. SUITE 210
LAFAYETTE, CA 94549
TEL 925-299-1140 FAX 925-299-1185



| | | | |
|---|---|---|---|
| Client | **Department of General Services (DGS)** | Contractor: **JLS Environmental** | Day ✓ Swing ____ Weekend/Holiday ____ |
| Project | **Board of Equalization (BOE)** | Location(s): | Floor 3 Floor 14 Floor 15 Floor 16 |
| Building | **450 N Street, Sacramento CA** | Compound(s) of Concern | Mold ✓ ACM LBP |
| LCD Project # -Task | **2372.0** 2 **-572; SOW** 5.0 | **Description:** Floor 3 Containment | |
| LCD Project # -Task | **2372.0** 3 **-572; SOW** 5.0 | **Description:** Fire Riser Cabinets F14,15 | |
| LCD Project # -Task | **2372.0** ____ **-572; SOW** ____ | **Description:** ____ | |

**CONTAINMENT INFORMATION**

1. Type of Containment: NPE ✓ Mini ✓ Barrier Tape ____ Minor Procedures ____ HEPA ____
2. Type of Decon: Shower ____ 2-Stage ____ 1Stage ✓ Drop Sheet W/Vacuum ____ None ____
3. Manometer? Yes ✓ No ____ Strip Chart Record? Yes ✓ No ____ Adequate Pressure? Yes ✓ No ____ Comments Below.
4. Containment Entry Log? Yes ✓ No ____
5. Containment and Decon maintained in accordance with accepted practices and procedures? Yes ✓ No ____ Comment below.
6. Negative Air Machines and/or HEPA Vacuums Aerosol Challenge Tested? Yes
7. Negative Air Exhaust Location: Window ____ Smoke Shaft ____ Stairs ____ Unoccupied Space ✓
8. Site Security: 24 hr.

**SUMMARY OF ACTIVITIES**

Mob/Demob ✓ Prep ✓ Removal ~C7,C8, core Hall/NW Waste Load Out ____ Detail Clean ✓ C6 Encapsulation ____ Clearance Testing ✓ FSR F14,15/16 Tear Down ____

Visual Inspections: Pre-Abatement ✓ C7,C8,C9 Pre-Encapsulation ____ Pre-Clearance ✓ C6 Post Tear Down ____

Comments: ____

Waste Generated: Hazardous ____ Non-Hazardous/Construction Debris ____ Adequately Wet ____ Waste Load-Out? ____

N/A Packaging: Single 6 Mil ____ Double 6 Mil ____ Barrels ____ Boxes ____ Burrito Wrap ____ Other ____

Hazardous Waste Manifest? ____ Waste Characterization? ____ Labels? ____ Comments: ____

Location of Dumpster: ____

Additional Worker PPE: Disposable Suits ✓ Gloves ✓ (Respirator) Half Face ✓ Full Face ✓ PAPR ____

Contractor Worker Exposure Monitoring? Ø # Workers Sampled Ø

On-Site Visitors: 1. ____ 2. ____ 3. ____ 4. ____

**LaCroix Davis Project LOG**
**Date:** 4/10/10



**PERSONAL EXPENSES:**

Hotel: ✓ Per Diem: ✓ Travel: ✓ Destination: site + lab

**FIELD SUPPLIES:** PPE: Suits #8 Gloves (pairs) #8 Respirator filters: 2 Misc: _____

**LAB EXPENSES:** Type/No. Samples collected: Tape _____ Bulk _____ Air 8

Laboratory Name: EML P&K

**Notes**

7- Detail Cleaning continues Floor 3 C6 (Room 317)
prep begins NW Core Hall at stairs door to restroom door <and with> then continues →
to prep begins C7 (Room 312); C8 (Room 322 at column M23);
C9 (Rooms 324 and 325); and C10 (Room 303)
8:40 NW corehall containment completed and removal begins at 8:45
9:08 No Visible Mold Growth was observed on any of the removed sheet rock
9:15 containment is cleaned to prepare for air testing
9:30 Final clearance performed in Fire sprinkler Riser Cabinets on Floors 14, 15, 16 with HTI WF and escort by JLS
Exterior sample collected then visual inspection performed Floor 3 Room 317 (C6) containment
10:20 continue air clearance for FSR F14, 15, 16
11:30 Sample COC and deliver to lab
13:00 inspect Room 303 containment
13:15 inspect Room 322 mini at column VMG behind column GB at base - JLS to determine additional fire wall removal
1405 inspect Room 321 containment carpet typical OK to dispose and begin scraping floor mastic
14:15 Inspect 324/325 containment - wall materials VMG at base North where elevator shaft abuts. carpet typical
Generate clearance memo for ~~elevator~~ fire riser cabinets Floors 14, 15 and 16.
15:00 crews perform clean up of gross debris and some detail cleaning of surfaces.
15:30 meet w/ GS re: tentative Monday schedule. ~~TEST 317 & corehall~~ detail cleaning 303, 312, 321, 324/325

Signature [signature] Date 4/10/10

| | |
|---|---|
| LaCroix Davis LLC Building & Environmental Forensics | **PROJECT LOG** **DATE:** 8/5/11<br>LACROIX DAVIS LLC<br>3685 MT. DIABLO BLVD. SUITE 210<br>LAFAYETTE, CA 94549<br>TEL 925-299-1140 FAX 925-299-1185<br>**LCD REPS:** TM/ ; ; **PAGE** 1 **OF** 2 |

| | | | |
|---|---|---|---|
| Client | **Department of General Services (DGS)** | Contractor: **JLS Environmental** | Day ✓ Swing ✓<br>Weekend/Holiday ___ |
| Project | **Board of Equalization (BOE)** | Location(s): | Floor 21 Floor ___<br>Floor 16 Floor ___ |
| Building | **450 N Street, Sacramento CA** | Compound(s) of Concern | Mold ✓<br>ACM LBP<br>Other |
| LCD Project # | **2372.0** 2 **-572; SOW** 4.0 | **Description:** 21 - HVAC | |
| LCD Project # | **2372.0** 2 **-572; SOW** 5.0 | **Description:** 16 - 1616 + 1618 | |
| LCD Project # | **2372.0** ___ **-572; SOW** ___ | **Description:** | |

**CONTAINMENT INFORMATION**

1. Floor Occupied ✓ Floor Vacant ✓
2. Containments: a) 1616, 1618, Hall b) ___ c) ___ d) ___ e) ___ f) ___
3. Type of Containment: NPE ✓ Mini ___ Barrier Tape ___ Minor Procedures ___ N/A ___
4. Type of Decon: Shower ___ 2-Stage ___ 1Stage ✓ Drop Sheet W/Vacuum ✓ None ___
5. Manometer: Yes ✓ No ___ Strip Chart Record: Yes ✓ No ___ Adequate Pressure: Yes ✓ No ___
6. Containment Entry Log: Yes ✓ No ___
7. Containment and Decon maintained in accordance with accepted practices and procedures: Yes ✓ No ___
8. HEPA Fans and Vacuums have current aerosol challenge test sticker: Yes ✓ No ___
9. Negative Air Exhaust Location: Window ___ Shaft ___ Stairs ___ Interior ✓ Exterior ___
10. Security: Owner ✓ Contractor ___ Private ___ 24 hour ✓ Secure Building ✓

**SUMMARY OF ACTIVITIES**

Mob ✓ Prep ✓ Removal/Load Out ✓ Detail Clean ✓ Encapsulation ___ Clearance Testing ___ Tear Down ___ DeMob ___

Phase Completion Visual Inspection: Prep ✓ Removal ✓ Encapsulation ___ Clearance ___ Tear Down ___

Summary: perform remediation of Breakroom 1616 and expand to include adjacent areas in conference room 1618 and hall

Day - Floor 21 - collect samples HVAC Grids 1 → 13 w/ HT,

Waste: Non-Hazardous Construction Debris ✓ Hazardous Waste ___ Hazardous Waste Manifest ___

Container: 6 Mil ___ Double 6 Mil ✓ Barrel ___ Drum ___ Box ___ Burrito Wrap ___ Labels ___ Other ___

Location of Dumpster: Floor 16

Additional Worker PPE: Disposable Suit ✓ Gloves ✓ Eye Protection ___ Steel Toe ___ Hard Hat ___ Chem Apron ___

Respirator: Half Face ✓ Full Face ✓ PAPR ___ Supplied Air ___

Contractor Worker Exposure Monitoring Yes ___ No ✓ # Workers Sampled ___

On-Site Visitors: 1. ___ 2. ___ 3. ___ 4. ___

LaCroix Davis Project LOG
Date: 8/5/11 and 8/6/11



**PERSONAL EXPENSES:**

Hotel: ✓ Per Diem: ✓ Travel: ✓ Destination: site & lab

**FIELD SUPPLIES:** PPE: Suits /// Gloves (pairs) /// Respirator filters: ____ Misc: ____

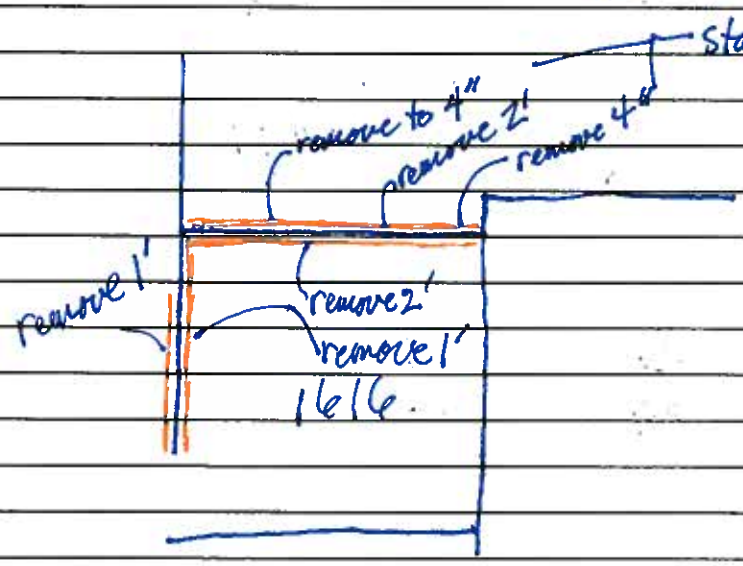
**LAB EXPENSES:** Type/No. Samples collected: Tape 8/5 13; 8/6 ____ Bulk 8/5 1; 8/6 ____ Air 8/6 4

Laboratory Name/Location: EML P&K, W. Sacto

**Notes**

8-1 meet w/ HTI - and perform surface sample collection at Floor 21 from GRID #1 thru GRID 13

1800 - prep begins Floor 16 - room 1616
complete containment and begin removal of wall/cabinet
expand containment to address staining in conference room 1618 and hallway at 1616. (2 popup/tents)




8/6 - testing 1616
continue sample collection Floor 21 Grids 14 to 30
develop assessment plan for Floor 21 and Floor 1 -
perform visual inspection Floor 1 NW HVAC room (mezzanine)

Signature ____ Date ____

# Laboratory Reports

When quality and accuracy are critical.

9/26/2012

LaCroix Davis, LLC
3685 Mt. Diablo Blvd. Suite 210
Lafayette, CA 94549

To Whom It May Concern:

The following data qualifier is reported for all samples in which prior to the release, the replicate quality control sample was not completed:

"Analysis of replicate sample is delayed."

In all instances where this data qualifier was reported for LaCroix Davis, LLC projects "DGS-BOE", all replicate samples have since been analyzed and quality control reviews have been completed. All reported data should therefore be considered accurate and final.

Please feel free to contact me if you have any further questions in this regard.

Sincerely,

Dr. Kamashwaran Ramanathan
Laboratory Director

**EMLab P&K**

Report for:

**Mr. Chris Corpuz, Mr. Ted Ice, Ms. Andrea Steinbach**
**LaCroix Davis, LLC**
3685 Mt. Diablo Blvd.
Suite 210
Lafayette, CA 94549

Regarding: Project: DGS-BOE; Floors 14, 15, 16 FS Cabs
EML ID: 646538

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 04-10-2010

Service SOPs: Spore trap analysis (I100000)

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

**EMLab P&K**
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: LaCroix Davis, LLC
C/O: Mr. Chris Corpuz, Mr. Ted Ice, Ms. Andrea Steinbach
Re: DGS-BOE; Floors 14, 15, 16 FS Cabs

Date of Sampling: 04-10-2010
Date of Receipt: 04-10-2010
Date of Report: 04-10-2010

## SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

| Location: | 2372-410-A01: Exterior North | | 2372-410-F16A02: Floor 16 Ambient SE Stairs | | 2372-410-F16A03: Floor 16 Containment FR Cabinet | | 2372-410-F15A04: Floor 15 Ambient SE Stairs | |
|---|---|---|---|---|---|---|---|---|
| Comments (see below) | None | | None | | None | | None | |
| Lab ID-Version‡: | 2864886-1 | | 2864887-1 | | 2864888-1 | | 2864889-1 | |
| | raw ct. | spores/m3 | raw ct. | spores/m3 | raw ct. | spores/m3 | raw ct. | spores/m3 |
| Alternaria | 1 | 13 | | | | | | |
| Arthrinium | | | | | | | | |
| Ascospores* | | | | | | | | |
| Aureobasidium | | | | | | | | |
| Basidiospores* | 24 | 1,300 | | | | | | |
| Bipolaris/Drechslera group | | | | | | | | |
| Botrytis | | | | | | | | |
| Chaetomium | | | | | | | | |
| Cladosporium | 7 | 370 | 1 | 53 | 1 | 53 | | |
| Curvularia | | | | | | | | |
| Epicoccum | | | 1 | 13 | | | | |
| Fusarium | | | | | | | | |
| Nigrospora | | | | | | | | |
| Oidium | | | | | | | | |
| Penicillium/Aspergillus types† | 7 | 370 | | | | | | |
| Pithomyces | | | | | | | | |
| Rusts* | | | 1 | 13 | | | | |
| Smuts*, Periconia, Myxomycetes* | 3 | 40 | 1 | 13 | 1 | 13 | 1 | 13 |
| Stachybotrys | | | | | | | | |
| Stemphylium | | | | | | | | |
| Torula | | | | | | | | |
| Ulocladium | | | | | | | | |
| Background debris (1-4+)†† | 2+ | | 3+ | | 2+ | | 2+ | |
| Hyphal fragments/m3 | 40 | | 13 | | < 13 | | < 13 | |
| Pollen/m3 | 93 | | 13 | | < 13 | | < 13 | |
| Skin cells (1-4+) | < 1+ | | 1+ | | < 1+ | | < 1+ | |
| Sample volume (liters) | 75 | | 75 | | 75 | | 75 | |
| **§ TOTAL SPORES/m3** | | 2,100 | | 93 | | 67 | | 13 |

**Comments:**
* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.
The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

**EMLab P&K**
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: LaCroix Davis, LLC
C/O: Mr. Chris Corpuz, Mr. Ted Ice, Ms. Andrea Steinbach
Re: DGS-BOE; Floors 14, 15, 16 FS Cabs

Date of Sampling: 04-10-2010
Date of Receipt: 04-10-2010
Date of Report: 04-10-2010

## SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

| Location: | 2372-410-F15A05: Floor 15 Containment FR Cabinet | | 2372-410-F14A06: Floor 14 Ambient SE Stairs | | 2372-410-F14A07: Floor 14 Containment FR Cabinet | | 2372-410-A08: Exterior SW | |
|---|---|---|---|---|---|---|---|---|
| Comments (see below) | None | | None | | A | | None | |
| Lab ID-Version‡: | 2864890-1 | | 2864891-1 | | 2864892-1 | | 2864893-1 | |
| | raw ct. | spores/m3 | raw ct. | spores/m3 | raw ct. | spores/m3 | raw ct. | spores/m3 |
| Alternaria | | | | | | | | |
| Arthrinium | | | | | | | | |
| Ascospores* | | | | | | | | |
| Aureobasidium | | | | | | | | |
| Basidiospores* | | | | | | | 45 | 2,400 |
| Bipolaris/Drechslera group | | | | | | | | |
| Botrytis | | | | | | | | |
| Chaetomium | | | | | | | | |
| Cladosporium | 1 | 53 | | | | | 8 | 430 |
| Curvularia | | | | | | | | |
| Epicoccum | | | | | | | | |
| Fusarium | | | | | | | | |
| Nigrospora | | | | | | | | |
| Oidium | | | | | | | 1 | 13 |
| Penicillium/Aspergillus types† | | | | | | | 1 | 53 |
| Pithomyces | | | | | | | | |
| Rusts* | | | 1 | 13 | | | 1 | 13 |
| Smuts*, Periconia, Myxomycetes* | | | | | | | 70 | 930 |
| Stachybotrys | | | | | | | | |
| Stemphylium | | | | | | | | |
| Torula | | | | | | | | |
| Ulocladium | | | | | | | | |
| Background debris (1-4+)†† | 2+ | | 3+ | | 3+ | | 2+ | |
| Hyphal fragments/m3 | < 13 | | < 13 | | < 13 | | 53 | |
| Pollen/m3 | < 13 | | < 13 | | 13 | | 330 | |
| Skin cells (1-4+) | < 1+ | | < 1+ | | 1+ | | < 1+ | |
| Sample volume (liters) | 75 | | 75 | | 75 | | 75 | |
| **§ TOTAL SPORES/m3** | | 53 | | 13 | | < 13 | | 3,800 |

**Comments:** A) No spores detected.
* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.
The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

**EMLab P&K**
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: LaCroix Davis, LLC
C/O: Mr. Chris Corpuz, Mr. Ted Ice, Ms. Andrea Steinbach
Re: DGS-BOE; Floors 14, 15, 16 FS Cabs

Date of Sampling: 04-10-2010
Date of Receipt: 04-10-2010
Date of Report: 04-10-2010

## MoldRANGE™: Extended Outdoor Comparison

## Outdoor Location: 2372-410-A01, Exterior North

| Fungi Identified | Outdoor data | Typical Outdoor Data by Date† Month: April | | | | Typical Outdoor Data by Location‡ State: CA | | | |
|---|---|---|---|---|---|---|---|---|---|
| | spores/m3 | low | med | high | freq % | low | med | high | freq % |
| **Generally able to grow indoors*** | | | | | | | | | |
| Alternaria | 13 | 7 | 27 | 220 | 43 | 7 | 27 | 230 | 56 |
| Bipolaris/Drechslera group | - | 7 | 13 | 140 | 12 | 7 | 13 | 130 | 13 |
| Chaetomium | - | 7 | 13 | 120 | 12 | 7 | 13 | 120 | 20 |
| Cladosporium | 370 | 27 | 310 | 4,200 | 91 | 53 | 630 | 7,100 | 97 |
| Curvularia | - | 7 | 13 | 240 | 7 | 7 | 13 | 230 | 7 |
| Nigrospora | - | 7 | 13 | 95 | 8 | 7 | 13 | 180 | 8 |
| Penicillium/Aspergillus types | 370 | 14 | 160 | 1,500 | 72 | 33 | 210 | 2,500 | 85 |
| Stachybotrys | - | 7 | 13 | 310 | 3 | 7 | 13 | 250 | 5 |
| Torula | - | 7 | 13 | 170 | 11 | 7 | 13 | 150 | 12 |
| **Seldom found growing indoors**** | | | | | | | | | |
| Ascospores | - | 13 | 110 | 2,900 | 74 | 13 | 110 | 2,000 | 70 |
| Basidiospores | 1,300 | 13 | 200 | 5,500 | 88 | 13 | 210 | 8,000 | 93 |
| Oidium | - | 7 | 20 | 240 | 21 | 7 | 13 | 190 | 20 |
| Rusts | - | 7 | 20 | 250 | 22 | 7 | 13 | 270 | 28 |
| Smuts, Periconia, Myxomycetes | 40 | 7 | 33 | 440 | 60 | 8 | 40 | 510 | 69 |
| **§ TOTAL SPORES/m3** | 2,100 | | | | | | | | |

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

**EMLab P&K**
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: LaCroix Davis, LLC
C/O: Mr. Chris Corpuz, Mr. Ted Ice, Ms. Andrea Steinbach
Re: DGS-BOE; Floors 14, 15, 16 FS Cabs

Date of Sampling: 04-10-2010
Date of Receipt: 04-10-2010
Date of Report: 04-10-2010

## MoldRANGE™: Extended Outdoor Comparison

## Outdoor Location: 2372-410-A08, Exterior SW

| Fungi Identified | Outdoor data | Typical Outdoor Data by Date† Month: April | | | | Typical Outdoor Data by Location‡ State: CA | | | |
|---|---|---|---|---|---|---|---|---|---|
| | spores/m3 | low | med | high | freq % | low | med | high | freq % |
| **Generally able to grow indoors*** | | | | | | | | | |
| Alternaria | - | 7 | 27 | 220 | 43 | 7 | 27 | 230 | 56 |
| Bipolaris/Drechslera group | - | 7 | 13 | 140 | 12 | 7 | 13 | 130 | 13 |
| Chaetomium | - | 7 | 13 | 120 | 12 | 7 | 13 | 120 | 20 |
| Cladosporium | 430 | 27 | 310 | 4,200 | 91 | 53 | 630 | 7,100 | 97 |
| Curvularia | - | 7 | 13 | 240 | 7 | 7 | 13 | 230 | 7 |
| Nigrospora | - | 7 | 13 | 95 | 8 | 7 | 13 | 180 | 8 |
| Penicillium/Aspergillus types | 53 | 14 | 160 | 1,500 | 72 | 33 | 210 | 2,500 | 85 |
| Stachybotrys | - | 7 | 13 | 310 | 3 | 7 | 13 | 250 | 5 |
| Torula | - | 7 | 13 | 170 | 11 | 7 | 13 | 150 | 12 |
| **Seldom found growing indoors**** | | | | | | | | | |
| Ascospores | - | 13 | 110 | 2,900 | 74 | 13 | 110 | 2,000 | 70 |
| Basidiospores | 2,400 | 13 | 200 | 5,500 | 88 | 13 | 210 | 8,000 | 93 |
| Oidium | 13 | 7 | 20 | 240 | 21 | 7 | 13 | 190 | 20 |
| Rusts | 13 | 7 | 20 | 250 | 22 | 7 | 13 | 270 | 28 |
| Smuts, Periconia, Myxomycetes | 930 | 7 | 33 | 440 | 60 | 8 | 40 | 510 | 69 |
| **§ TOTAL SPORES/m3** | 3,800 | | | | | | | | |

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

# CHAIN OF CUSTODY EMLab P&K

www.EMLabPK.com

Cherry Hill, NJ: 1936 Olney Avenue, Cherry Hill, NJ 08003 * (866) 871-1984
Phoenix, AZ: 1501 West Knudsen Drive, Phoenix, AZ 85027 * (800) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 888-6653

| WEATHER | Fog | Rain | Snow | Wind | Clear |
|---|---|---|---|---|---|
| None | X | X | X | | |
| Light | | | | | |
| Moderate | | | | X | |
| Heavy | | | | | |

LEVEL

000646538

## CONTACT INFORMATION

Company: LaCroix Davis, LLC
Contact: C Carpio; T. Ices; A. Stembach
Phone:
Address: 3685 Mt. Diablo Blvd. Ste 210 Lafayette, CA 94549
Special Instructions:

## PROJECT INFORMATION

Project ID: DGS - BOE
Project Desc.: Floors 14, 15, 16 FS Cabs
Project Zip Code:
Sampling Date & Time: 4/10/10 9:30
PO Number: 2372.03 - 572

## TURNAROUND TIME CODES (TAT)

STD - Standard (DEFAULT)
ND - Next Business Day
SD - Same Business Day Rush
WH - Weekend/Holiday

Rushes received after 2pm or on weekends will be considered received the next business day. Please alert us in advance of weekend analysis needs.

## REQUESTED SERVICES (✓ Box)

| Sample ID | Description | Sample Type (Below) | TAT (Above) | Total Volume/Area (as applicable) | Notes (Time origin, Temp, RH, etc.) | Fungi - Spore Trap Analysis | Spore Trap Analysis - Other particles | Direct Microscopic Exam (Qualitative) | Quantitative Spore Count, Direct Exam | 1-Media Surface Fungi (Genus ID + Agg. spp.) | 2-Media Surface Fungi (Genus ID + Agg. spp.) | 3-Media Surface Fungi (Genus ID + Agg. spp.) | Culturable Air Fungi (Genus ID + Agg. spp.) | Gram Stain and Counts (Culturable Air and Surface Bacteria) | Legionella culture | Total Coliform, E.coli (Presence/Absence) | Membrane Filtration (Please specify organism) | MPN Bacteria (Please specify organism) | QuantiTray - Sewage Screen | Asbestos Analysis - PCM Airborne Fiber Count (NIOSH 7400) | Asbestos Analysis - PLM (EPA method 600/R-93-116) | PCR (please specify test) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2372 410-A01 | Exterior North | ST | WH | 75 | 9:30 | X | | | | | | | | | | | | | | | | |
| 2372 410-F16A02 | Floor 16 Ambient SE Stairs | ST | WH | 75 | | X | | | | | | | | | | | | | | | | |
| 2372 410-F16A03 | Floor 16 Containment FR Cabinet | ST | WH | 75 | | X | | | | | | | | | | | | | | | | |
| 2372 410-F15A04 | Floor 15 Ambient SE Stairs | ST | WH | 75 | | X | | | | | | | | | | | | | | | | |
| 2372 410-F15A05 | Floor 15 Containment FR Cabinet | ST | WH | 75 | | X | | | | | | | | | | | | | | | | |
| 2372 410-F14A06 | Floor 14 Ambient SE Stairs | ST | WH | 75 | | X | | | | | | | | | | | | | | | | |
| 2372 410-F14A07 | Floor 14 Containment FR Cabinet | ST | WH | 75 | | X | | | | | | | | | | | | | | | | |
| 2372 410-A08 | Exterior SW | ST | WH | 75 | 11:30 | X | | | | | | | | | | | | | | | | |

## SAMPLE TYPE CODES

| | | | |
|---|---|---|---|
| BC - BioCassette™ | ST - Spore Trap: Zefon, Allergenco, Burkard... | T - Tape | D - Dust |
| AIS - Andersen | | SW - Swab | SO - Soil |
| SAS - Surface Air Sampler | P - Potable Water | B - Bulk | |
| CP - Contact Plate | NP - Non-Potable Water | O - Other: | |

| RELINQUISHED BY | DATE & TIME | RECEIVED BY | DATE & TIME |
|---|---|---|---|
| Ohernicka | 4/10/10 1200 | Brandon Bedan | 4/10/10 @ 1145 |

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at www.emlabpk.com/terms.html
Copyright © 2002-2009 EMLab P&K



4/10/10 F14 F15 F16 Fire Sprinkler Riser Cabinets AIR

**EMLab P&K**

Report for:

**Mr. Chris Corpuz, Mr. Ted Ice**
**LaCroix Davis, LLC**
3685 Mt. Diablo Blvd.
Suite 210
Lafayette, CA 94549

Regarding: Project: DGS-BOE; Floor 16 Room 1616
EML ID: 814257

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 08-06-2011

Service SOPs: Spore trap analysis (1038)

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

**EMLab P&K**
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: LaCroix Davis, LLC
C/O: Mr. Chris Corpuz, Mr. Ted Ice
Re: DGS-BOE; Floor 16 Room 1616

Date of Sampling: 08-06-2011
Date of Receipt: 08-06-2011
Date of Report: 08-06-2011

## SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

| Location: | 2372-806-F16A01: Exterior NE | | 2372-806-F16A02: Floor 16 Ambient - Hall | | 2372-806-F16A03: Room 1616 Containment | | 2372-806-F16A04: Exterior SW | |
|---|---|---|---|---|---|---|---|---|
| Comments (see below) | A | | B | | B | | B | |
| Lab ID-Version‡: | 3610048-1 | | 3610049-1 | | 3610050-1 | | 3610051-1 | |
| | raw ct. | spores/m3 | raw ct. | spores/m3 | raw ct. | spores/m3 | raw ct. | spores/m3 |
| Alternaria | 2 | 27 | | | | | 3 | 40 |
| Arthrinium | | | | | | | | |
| Ascospores* | 1 | 53 | | | | | 1 | 53 |
| Aureobasidium | | | | | | | | |
| Basidiospores* | | | | | | | 1 | 53 |
| Bipolaris/Drechslera group | | | | | | | | |
| Chaetomium | 1 | 13 | | | | | | |
| Cladosporium | 40 | 2,100 | | | | | 33 | 1,800 |
| Curvularia | | | | | | | | |
| Epicoccum | | | | | | | | |
| Fusarium | | | | | | | | |
| Nigrospora | | | | | | | | |
| Oidium | 1 | 13 | | | | | | |
| Penicillium/Aspergillus types† | 33 | 480 | | | | | | |
| Pithomyces | | | | | | | | |
| Rusts* | 2 | 27 | | | | | 1 | 13 |
| Smuts*, Periconia, Myxomycetes* | 14 | 190 | 1 | 13 | | | 7 | 93 |
| Stachybotrys | | | | | | | | |
| Stemphylium | | | | | | | | |
| Torula | | | | | | | 3 | 40 |
| Ulocladium | | | | | | | | |
| Background debris (1-4+)†† | 3+ | | 2+ | | 2+ | | 2+ | |
| Hyphal fragments/m3 | 110 | | < 13 | | < 13 | | 40 | |
| Pollen/m3 | 40 | | 13 | | < 13 | | 80 | |
| Skin cells (1-4+) | 1+ | | 1+ | | 2+ | | 1+ | |
| Sample volume (liters) | 75 | | 75 | | 75 | | 75 | |
| **§ TOTAL SPORES/m3** | | 2,900 | | 13 | | < 13 | | 2,100 |

**Comments:** A) 32 of the raw count *Penicillium/Aspergillus* type spores were present as a single clump. Analysis of replicate sample is delayed. Secondary data review is delayed. B) Analysis of replicate sample is delayed. Secondary data review is delayed.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.
The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.
For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

**EMLab P&K**
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: LaCroix Davis, LLC
C/O: Mr. Chris Corpuz, Mr. Ted Ice
Re: DGS-BOE; Floor 16 Room 1616

Date of Sampling: 08-06-2011
Date of Receipt: 08-06-2011
Date of Report: 08-06-2011

## MoldRANGE™: Extended Outdoor Comparison

## Outdoor Location: 2372-806-F16A01, Exterior NE

| Fungi Identified | Outdoor data | Typical Outdoor Data by Date† Month: August | | | | Typical Outdoor Data by Location‡ State: CA | | | |
|---|---|---|---|---|---|---|---|---|---|
| | spores/m3 | low | med | high | freq % | low | med | high | freq % |
| **Generally able to grow indoors*** | | | | | | | | | |
| Alternaria | 27 | 7 | 40 | 600 | 67 | 7 | 27 | 210 | 51 |
| Bipolaris/Drechslera group | - | 7 | 13 | 290 | 27 | 7 | 13 | 130 | 12 |
| Chaetomium | 13 | 7 | 13 | 160 | 12 | 7 | 13 | 120 | 19 |
| Cladosporium | 2,100 | 53 | 830 | 13,000 | 97 | 53 | 590 | 7,800 | 96 |
| Curvularia | - | 7 | 27 | 810 | 33 | 7 | 13 | 230 | 7 |
| Nigrospora | - | 7 | 20 | 280 | 26 | 7 | 13 | 200 | 9 |
| Penicillium/Aspergillus types | 480 | 27 | 240 | 3,500 | 79 | 33 | 210 | 2,400 | 83 |
| Stachybotrys | - | 7 | 13 | 310 | 3 | 7 | 13 | 210 | 4 |
| Torula | - | 7 | 13 | 170 | 15 | 7 | 13 | 160 | 11 |
| **Seldom found growing indoors**** | | | | | | | | | |
| Ascospores | 53 | 13 | 310 | 6,200 | 85 | 13 | 110 | 2,100 | 69 |
| Basidiospores | - | 27 | 640 | 28,000 | 95 | 13 | 210 | 8,800 | 92 |
| Oidium | 13 | 7 | 13 | 210 | 17 | 7 | 13 | 200 | 18 |
| Rusts | 27 | 7 | 25 | 390 | 29 | 7 | 13 | 270 | 24 |
| Smuts, Periconia, Myxomycetes | 190 | 7 | 53 | 970 | 75 | 7 | 40 | 570 | 66 |
| **§ TOTAL SPORES/m3** | 2,900 | | | | | | | | |

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

**EMLab P&K**
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: LaCroix Davis, LLC
C/O: Mr. Chris Corpuz, Mr. Ted Ice
Re: DGS-BOE; Floor 16 Room 1616

Date of Sampling: 08-06-2011
Date of Receipt: 08-06-2011
Date of Report: 08-06-2011

## MoldRANGE™: Extended Outdoor Comparison

## Outdoor Location: 2372-806-F16A04, Exterior SW

| Fungi Identified | Outdoor data | Typical Outdoor Data by Date† Month: August | | | | Typical Outdoor Data by Location‡ State: CA | | | |
|---|---|---|---|---|---|---|---|---|---|
| | spores/m3 | low | med | high | freq % | low | med | high | freq % |
| **Generally able to grow indoors*** | | | | | | | | | |
| Alternaria | 40 | 7 | 40 | 600 | 67 | 7 | 27 | 210 | 51 |
| Bipolaris/Drechslera group | - | 7 | 13 | 290 | 27 | 7 | 13 | 130 | 12 |
| Chaetomium | - | 7 | 13 | 160 | 12 | 7 | 13 | 120 | 19 |
| Cladosporium | 1,800 | 53 | 830 | 13,000 | 97 | 53 | 590 | 7,800 | 96 |
| Curvularia | - | 7 | 27 | 810 | 33 | 7 | 13 | 230 | 7 |
| Nigrospora | - | 7 | 20 | 280 | 26 | 7 | 13 | 200 | 9 |
| Penicillium/Aspergillus types | - | 27 | 240 | 3,500 | 79 | 33 | 210 | 2,400 | 83 |
| Stachybotrys | - | 7 | 13 | 310 | 3 | 7 | 13 | 210 | 4 |
| Torula | 40 | 7 | 13 | 170 | 15 | 7 | 13 | 160 | 11 |
| **Seldom found growing indoors**** | | | | | | | | | |
| Ascospores | 53 | 13 | 310 | 6,200 | 85 | 13 | 110 | 2,100 | 69 |
| Basidiospores | 53 | 27 | 640 | 28,000 | 95 | 13 | 210 | 8,800 | 92 |
| Oidium | - | 7 | 13 | 210 | 17 | 7 | 13 | 200 | 18 |
| Rusts | 13 | 7 | 25 | 390 | 29 | 7 | 13 | 270 | 24 |
| Smuts, Periconia, Myxomycetes | 93 | 7 | 53 | 970 | 75 | 7 | 40 | 570 | 66 |
| **§ TOTAL SPORES/m3** | 2,100 | | | | | | | | |

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

# CHAIN OF CUSTODY EMLab P&K

www.EMLabPK.com

Cherry Hill, NJ: 1936 Olney Avenue, Cherry Hill, NJ 08003 * (866) 871-1984
Phoenix, AZ: 1501 West Knudsen Drive, Phoenix, AZ 85027 * (800) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 888-6653

000814257

| WEATHER | Fog | Rain | Snow | Wind | Clear |
|---|---|---|---|---|---|
| LEVEL: None | | | | | ✓ |
| Light | | | | | |
| Moderate | | | | | |
| Heavy | | | | | |

**CONTACT INFORMATION**

Company: LaCroix Davis, LLC
Contact: C. Corpuz; T. Tice
Phone: 925-799-5842
Address: 3685 Mt. Diablo Blvd Ste 210 Lafayette, CA 94549
Special Instructions: email contacts

**PROJECT INFORMATION**

Project ID: DGS-BOE
Project Desc.: Floor 16 room 1616
Project Zip Code:
Sampling Date & Time: 8/6/11 1530
PO Number: 2372.02-572

**TURN AROUND TIME CODES (TAT)**

STD - Standard (DEFAULT)
ND - Next Business Day
SD - Same Business Day Rush
WH - Weekend/Holiday

Bushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

**REQUESTED SERVICES (✓ Box)**

| Sample ID | Description | Sample Type (Below) | TAT (Above) | Total Volume/Area (as applicable) | NOTES (Time of Day, Temp, RH, etc.) | Fungi - Spore Trap Analysis | Spore Trap Analysis - Other particles | Direct Microscopic Exam (Qualitative) | Quantitative Spore Count Direct Exam | 1-Media Surface Fungi (Genus ID + Aspl. spp.) | 2-Media Surface Fungi (Genus ID + Asp. spp.) | 3-Media Surface Fungi (Genus ID + Asp. spp.) | Culturable Air Fungi (Genus ID + Asp. spp.) | Gram Stain and Counts (Culturable Air and Surface Bacteria) | Legionella culture | Total Coliform, E.coli (Presence/Absence) | Membrane Filtration (Please specify organism) | MPN Bacteria (Please specify organism) | QuantiTray - Sewage Screen | Asbestos Analysis - PCM Airborne Fiber Count (NIOSH 7400) | Asbestos Analysis - PLM (EPA method 600/R-93-116) | PCR (please specify test) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2372-806-F16A01 | Exterior NE | ST | WH | 75 | 14:31 | X | | | | | | | | | | | | | | | | |
| 2372-806-F16A02 | Floor 16 Ambient - Hall | ST | WH | 75 | | X | | | | | | | | | | | | | | | | |
| 2372-806-F16A03 | Room 1616 Contaminant | ST | WH | 75 | | X | | | | | | | | | | | | | | | | |
| 2372-806-F16A04 | Exterior SW | ST | WH | 75 | 15:20 | X | | | | | | | | | | | | | | | | |

**SAMPLE TYPE CODES**

| | | | |
|---|---|---|---|
| BC - BioCassette™ | ST - Spore Trap: Zefon, Allergenco, Burkard... | T - Tape | D - Dust |
| AS - Andersen | | SW - Swab | SO - Soil |
| SAS - Surface Air Sampler | P - Potable Water | B - Bulk | |
| CP - Contact Plate | NP - Non-Potable Water | O - Other | |

| RELINQUISHED BY | DATE & TIME | RECEIVED BY | DATE & TIME |
|---|---|---|---|
| [illegible] | 8/6/11 1526 | [illegible] | 8/6/11 1545 |

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at http://www.emlab.com/s/main/serviceterms.html
Copyright © 2002-2009 EMLab P&K



8/6/11 F16 Room 1616 AIR