



November 24, 2015

Lake Oswego School District
Brent Paul
Director of Facility Operations
2501 Country Club Road
Lake Oswego, Oregon 97034

Re: Oak Creek Elementary, 55 Kingsgate Road, Lake Oswego, Oregon
Fungal Particulate Air Monitoring Report
PBS Project No. 21600.023 Phase 0007

Dear Mr. Paul:

On October 30, 2015, PBS Engineering and Environmental (PBS) performed fungal particulate air sampling in Oak Creek Elementary located at 55 Kingsgate Road in Lake Oswego, Oregon. This was performed at the request of Lake Oswego School District to provide periodic screening and assessment of airborne fungal particulate conditions within the school.

PBS performed non-viable fungal particulate air sampling in nineteen (19) indoor test areas within the school. A total of two (2) outdoor samples were also collected for analytical comparison purposes. All air sampling was performed during daytime hours. Samples were collected utilizing Allergenco-D cassettes with a high-volume vacuum pump. Each sample was collected at a flow rate of 15 liters per minute for five (5) minutes (75 liters total per sample) from approximately 4-feet above floor level. Samples were submitted under chain of custody to Lab/Cor, Inc. of Seattle, Washington. The samples were analyzed for non-viable, fungal particulates.

OBSERVATIONS/FINDINGS

At the time of this monitoring event, fungal particulate concentrations for all the indoor samples collected were lower than concentrations found outdoors. In addition, the predominant types of fungal particulate found indoors were and are commonly found in outdoor environments and their presence in the indoor samples is not considered unusual.

It should be noted that a very low level of *Stachybotrys chartarum* was identified in sample NV003, which was collected from the upper level corridor near the staff work room. *Stachybotrys chartarum* spores can grow well on cellulose based building materials such as sheetrock paper and wood. PBS did not observe obvious visual indications of fungal growth on building materials in the vicinity of this test location. This is noteworthy from an assessment standpoint, however, the airborne concentration is considered low and unremarkable.

PBS observed water staining and what appeared to be potential fungal growth on ceiling tiles in the NW corner of the Music Room 146. Sample NV019 was collected from inside the music room. Sample NV019 results were not elevated in this classroom.

4412 SW Corbett Avenue, Portland, OR 97239
503.248.1939 Main
866.727.0140 Fax
888.248.1939 Toll-Free
www.pbseenv.com

CONCLUSIONS

Based on the fungal spore concentrations and predominant spore types identified in the samples collected from inside the school, it is PBS' opinion that there is not a significant or unusual airborne fungal particulate condition in the test areas. It is likely that a majority of the fungal particulate captured in the indoor samples originated from the outdoors and was carried into the building on air currents as well as the clothing and shoes of all who enter the building.

PBS recommends that the water-damaged and potentially fungal-impacted ceiling tiles identified in Music Room 146 be removed and replaced. The moisture source should be identified and corrected, if it hasn't been done so already. Until then, this area should be monitored for future impacts.

PBS recommends performing follow-up and/or periodic testing in the Upper Level Corridor 262 to monitor *Stachybotrys chartarum* concentrations in the area.

LIMITATIONS OF SCOPE

This study was limited to the tests and locations as indicated above. The site as a whole may have other environmental concerns that will not be characterized by this study. Further study may be recommended. The findings and conclusions of this work are not scientific certainties but, rather, are probabilities based on professional judgment concerning the significance of the data gathered during the course of this investigation. PBS is not able to represent conditions on the site or adjoining sites beyond those conditions detected or observed by PBS.

Sincerely,
PBS Engineering and Environmental Inc.



Connie LaTour
Industrial Hygienist

Enclosures: Table One - Summary of Fungal Particulate Air Sample Results
Floor Plan with Air Sample Locations
Lab/Cor, Inc. Laboratory Report

Rev: DB, BK, BMP, DH

Table One: Summary of Fungal Particulate Air Sample Results

Sample Number	Location	Total Count	Count Breakdown	Spore Types
NV001	Upper Floor, Room 221, Main Administrative Office	160	95 40 10 5 5 5	Basidiospores Ascospores Aspergillus/Penicillium-like Aureobasidium Pitomyces Hyphal Fragments
NV002	Upper Floor, Room 208, Staff Room	80	45 15 15 5	Basidiospores Ascospores Cladosporium Aspergillus/Penicillium-like
NV003	Upper Floor, Corridor 262, Near Work Room	220	100 50 35 25 10	Basidiospores Ascospores Cladosporium Aspergillus/Penicillium-like Stachybotrys chartarum
NV004	Upper Floor, Classroom 204	145	100 30 10 5	Basidiospores Ascospores Cladosporium Aspergillus/Penicillium
NV005	Upper Floor, Classroom 250	595	365 135 55 35 5	Basidiospores Ascospores Cladosporium Aspergillus/Penicillium-like Myxo./Periconia/Smuts
NV006	Upper Floor, Classroom 253	180	115 30 25 10	Basidiospores Aspergillus/Penicillium-like Ascospores Cladosporium
NV007	Upper Floor, Classroom 255	1,170	800 240 60 55 10 5	Basidiospores Ascospores Aspergillus/Penicillium-like Cladosporium Ganoderma Myxo./Periconia/Smuts
NV008	Upper Floor, Classroom 241	180	125 25 20 10	Basidiospores Cladosporium Ascospores Aspergillus/Penicillium-like
NV009	Upper Floor, Classroom 243	150	110 20 15 5	Basidiospores Ascospores Aspergillus/Penicillium-like Cladosporium

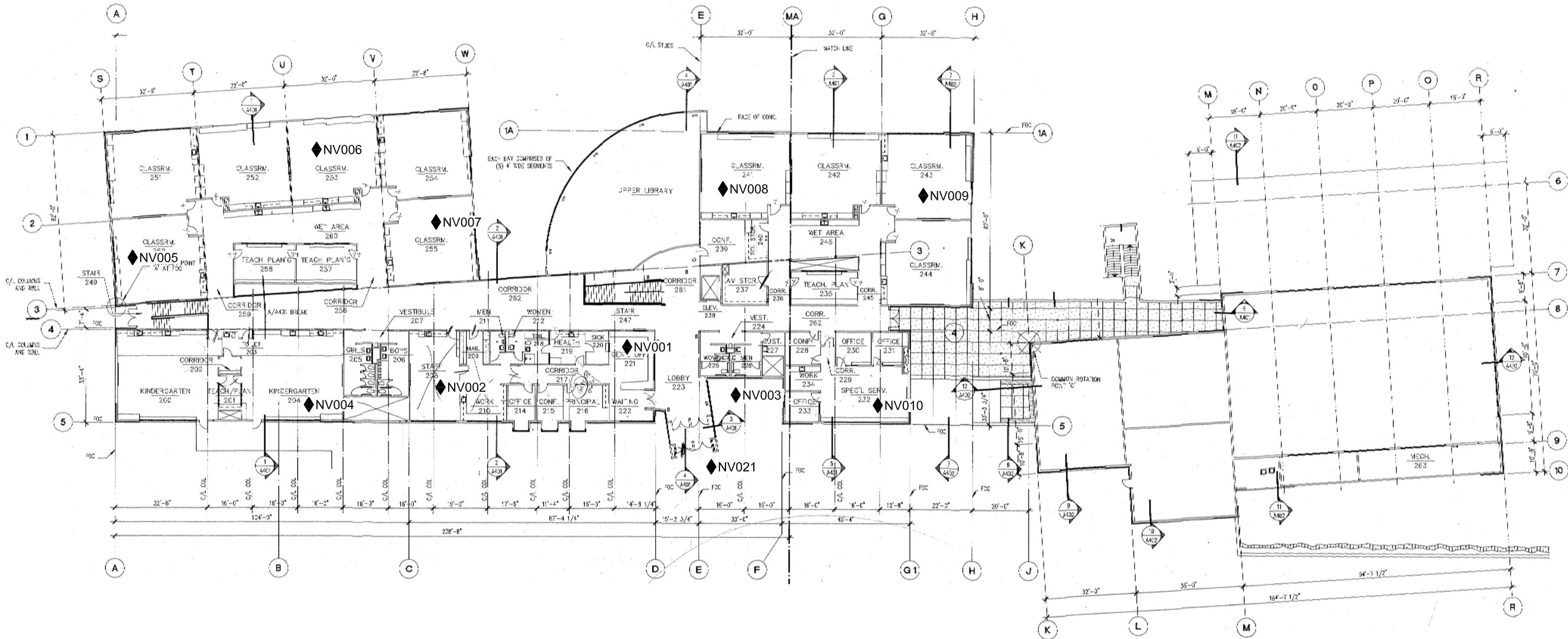
Sample Number	Location	Total Count	Count Breakdown	Spore Types
NV010	Upper Floor, Special Services, Room 232	55	40 5 5 5	Basidiospores Ascospores Aspergillus/Penicillium-like Hyphal Fragments
NV011	Lower Floor, Classroom 109	135	100 20 10 5	Basidiospores Cladosporium Aspergillus/Penicillium-like Ascospores
NV012	Lower Floor, Classroom 103	80	60 10 5 5	Basidiospores Ascospores Aspergillus/Penicillium-like Cladosporium
NV013	Lower Floor, Classroom 105	130	100 25 5	Basidiospores Cladosporium Ascospores
NV014	Lower Floor, Corridor 106, Near Computer Lab	100	85 10 5	Basidiospores Ascospores Aspergillus/Penicillium-like
NV015	Lower Floor, Upper Library 130	125	110 5 5 5	Basidiospores Aspergillus/Penicillium Cladosporium Pithomyces
NV016	Lower Floor, Classroom 133	145	95 35 15	Basidiospores Cladosporium Aspergillus/Penicillium-like
NV017	Lower Floor, Classroom 134	125	95 25 5	Basidiospores Ascospores Aspergillus/Penicillium
NV018	Lower Floor, Classroom 136	70	65 5	Basidiospores Cladosporium
NV019	Lower Floor, Music Room 146	235	185 40 10	Basidiospores Ascospores Aspergillus/Penicillium-like
NV020	Outdoors, Lower Level, South	1,395	1,015 195 100 85	Basidiospores Ascospores Cladosporium Aspergillus/Penicillium-like
NV021	Outdoors, Upper Level, Main Entrance	1,710	1,170 285 150 85 10 5 5	Basidiospores Ascospores Cladosporium Aspergillus/Penicillium-like Hyphal Fragments Ganoderma Oidium/Peronospora

GENERAL NOTES

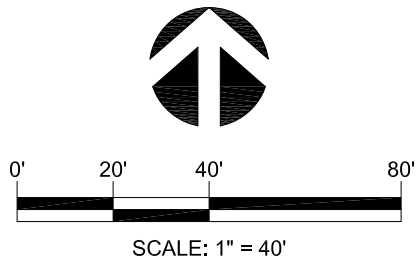
1. THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS.

LEGEND

- ◆ NV001 NON-VIABLE AIR SAMPLE NUMBER AND APPROXIMATE LOCATION



UPPER FLOOR PLAN



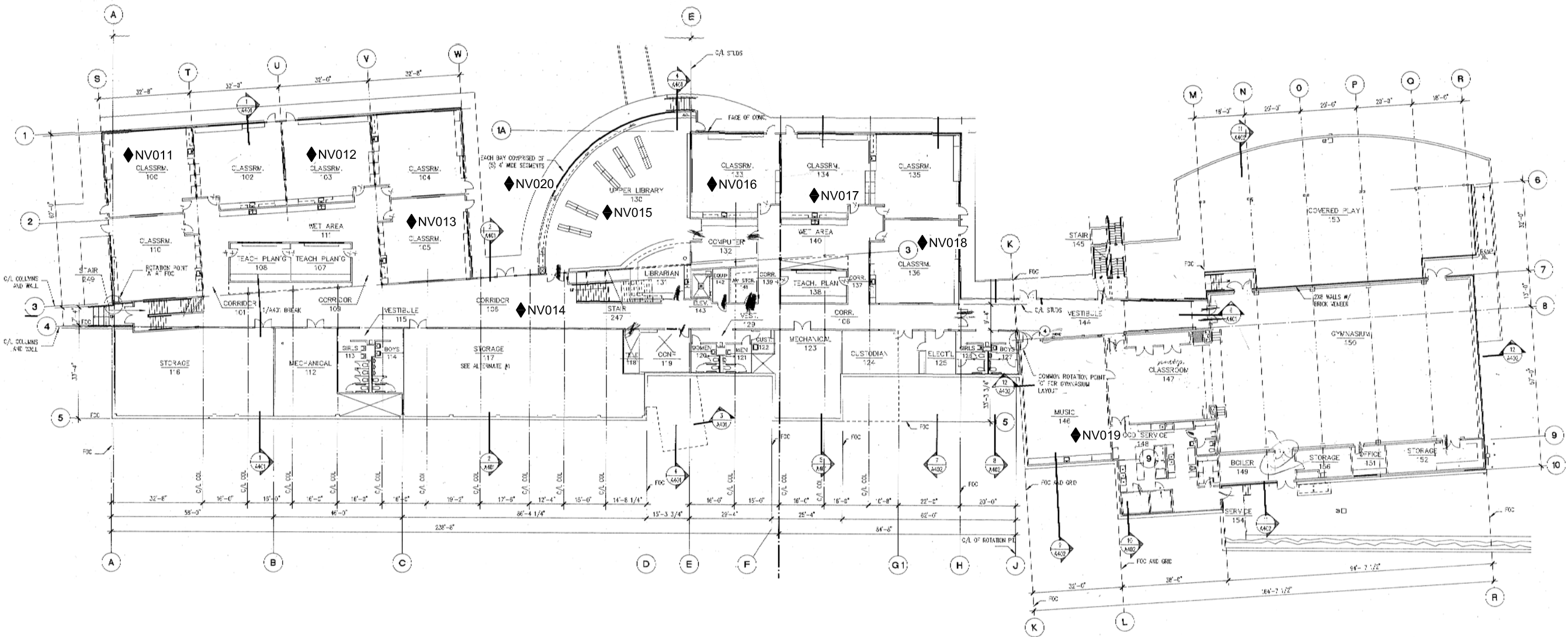
L:\Projects\2100021600_LakeOswegoSchoolDistrict\21600.023_OakCreekElementary\DWG\21600.023_0007_Figure 1-2.dwg Nov 24, 2015 09:20am Jimb

GENERAL NOTES

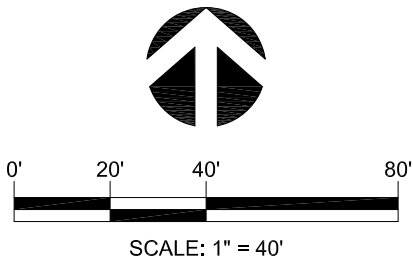
1. THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS.

LEGEND

- ◆ NV011 NON-VIABLE AIR SAMPLE NUMBER AND APPROXIMATE LOCATION



LOWER FLOOR PLAN



PBS
Engineering +
Environmental
4412 SW Corbett Ave
Portland, OR 97239
503.248.1939 Main
www.pbsenv.com

OAK CREEK ELEMENTARY
LAKE OSWEGO SCHOOL DISTRICT
55 KINGS GATE ROAD
LAKE OSWEGO, OREGON

FUNGAL
PARTICULATE
AIR MONITORING
PROJECT: 21600.023_0007
DATE: NOVEMBER 2015
FIGURE:
HM2



Lab/Cor, Inc.

7619 6th Ave NW
Seattle, WA 98117

Analysis Report Cover
Final Report

A Professional Service Corporation in the Northwest

Phone: (206) 781-0155
Fax: (206) 789-8424
<http://www.labcor.net>

Job Number: 150910 **SEA**
Client: PBS Engineering + Environmental
Address: 4412 SW Corbett Ave
Portland, OR 97239
Project Name: LOSD - Oak Grove Elementary
Project No.: 21600.023 Ph 0007
PO Number:
Sub Project:
Reference No.:

Report Number: 150910R01
Report Date: 11/5/2015

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
150910 - S1	1 - Office, Admin	NV, Air, Fungal ID		11/2/2015
150910 - S2	2 - Staff Room	NV, Air, Fungal ID		11/2/2015
150910 - S3	3 - Upper, Corridor, Near Work Room	NV, Air, Fungal ID		11/2/2015
150910 - S4	4 - Upper, Classroom 15	NV, Air, Fungal ID		11/2/2015
150910 - S5	5 - Upper, Classroom 1	NV, Air, Fungal ID		11/2/2015
150910 - S6	6 - Upper, Classroom 4	NV, Air, Fungal ID		11/2/2015
150910 - S7	7 - Upper, Classroom 6	NV, Air, Fungal ID		11/2/2015
150910 - S8	8 - Upper, Classroom 7	NV, Air, Fungal ID		11/2/2015
150910 - S9	9 - Upper, Classroom 9	NV, Air, Fungal ID		11/2/2015
150910 - S10	10 - Upper, Classroom 11	NV, Air, Fungal ID		11/2/2015
150910 - S11	11 - Lower, Classroom 22	NV, Air, Fungal ID		11/2/2015
150910 - S12	12 - Lower, Classroom 24	NV, Air, Fungal ID		11/2/2015
150910 - S13	13 - Lower, Classroom 26	NV, Air, Fungal ID		11/2/2015
150910 - S14	14 - Lower, Corridor, Near Computer Lab	NV, Air, Fungal ID		11/2/2015
150910 - S15	15 - Lower, Library	NV, Air, Fungal ID		11/2/2015
150910 - S16	16 - Lower, Room 27	NV, Air, Fungal ID		11/2/2015
150910 - S17	17 - Lower, Room 28	NV, Air, Fungal ID		11/2/2015
150910 - S18	18 - Lower, Room 30	NV, Air, Fungal ID		11/2/2015
150910 - S19	19 - Lower, Room 32	NV, Air, Fungal ID		11/2/2015
150910 - S20	20 - Outdoors, Lower, South	NV, Air, Fungal ID		11/2/2015
150910 - S21	21 - Outdoors, Upper, Entrance	NV, Air, Fungal ID		11/2/2015



Lab/Cor, Inc.

7619 6th Ave NW
Seattle, WA 98117

Final Report

Phone: (206) 781-0155

Fax: (206) 789-8424

<http://www.labcor.net>

A Professional Service Corporation in the Northwest

Job Number: 150910 **SEA**
Client: PBS Engineering + Environmental
Project Name: LOSD - Oak Grove Elementary

Report Number: 150910R01
Report Date: 11/5/2015

Nonviable Air Air samples follow preparation and analysis techniques outlined in Method 5 of the laboratory SOP; this method is based on guidelines from the Pan-American Aerobiology Association Standardized Protocol and ASTM Method 7391-09. Samples were collected using either an Air-O-Cell, Cyclex-D, Allergenco-D, or M2 Multi-Mold nonviable air sampling cassette. Characteristic morphologies were observed by optical microscopy at a magnification of 600x. For each individual particle type observed, data was reported in particles per cubic meter of air (m3).

Due to various factors that influence uncertainty (media type, particle loading, staining, instrumentation and other variable aspects of the method), only the first two figures reported are considered to be significant. The area analyzed on each sample is 20%.

Disclaimer The results reported relate only to the samples tested or analyzed; the laboratory is not responsible for data collected by personnel who are not affiliated with the laboratory. Results reported in both structures/cm3 and structures/mm2 are dependent on the sample volume and area. These parameters are measured and recorded by non-laboratory personnel and are not covered by the laboratory's accreditation. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with the analytical services.

Sincerely,



Ashley Tonge
Technician/Analyst

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S1	S2
Sample No.:	1	2
Description:	Office, Admin	Staff Room
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/2/2015	AT - 11/2/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores	8	40	533	3	15	200
Aspergillus/ Penicillium-like	2	10	133	1	5	67
Aureobasidium	1	5	67			
Basidiospores	19	95	1267	9	45	600
Cladosporium				3	15	200
Ganoderma						
Hyphal Fragments	1	5	67			
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora						
Pithomyces	1	5	67			
Stachybotrys chartarum						
Summary Total:	32	160	2134	16	80	1067

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S3	S4
Sample No.:	3	4
Description:	Upper, Corridor, Near Work Room	Upper, Classroom 15
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/2/2015	AT - 11/2/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m ³	Raw Count*	Total Count**	Total/m ³
Ascospores	10	50	667	6	30	400
Aspergillus/ Penicillium-like	5	25	333	1	5	67
Aureobasidium						
Basidiospores	20	100	1333	20	100	1333
Cladosporium	7	35	467	2	10	133
Ganoderma						
Hyphal Fragments						
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora						
Pithomyces						
Stachybotrys chartarum	2	10	133			
Summary Total:	44	220	2933	29	145	1933

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S5	S6
Sample No.:	5	6
Description:	Upper, Classroom 1	Upper, Classroom 4
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/2/2015	AT - 11/2/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores	27	135	1800	5	25	333
Aspergillus/ Penicillium-like	7	35	467	6	30	400
Aureobasidium						
Basidiospores	73	365	4867	23	115	1533
Cladosporium	11	55	733	2	10	133
Ganoderma						
Hyphal Fragments						
Myxo./ Periconia/ Smuts	1	5	67			
Oidium/ Peronospora						
Pithomyces						
Stachybotrys chartarum						
Summary Total:	119	595	7934	36	180	2399

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S7	S8
Sample No.:	7	8
Description:	Upper, Classroom 6	Upper, Classroom 7
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/2/2015	AT - 11/3/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores	48	240	3200	4	20	267
Aspergillus/ Penicillium-like	12	60	800	2	10	133
Aureobasidium						
Basidiospores	160	800	10667	25	125	1667
Cladosporium	11	55	733	5	25	333
Ganoderma	2	10	133			
Hyphal Fragments						
Myxo./ Periconia/ Smuts	1	5	67			
Oidium/ Peronospora						
Pithomyces						
Stachybotrys chartarum						
Summary Total:	234	1170	15600	36	180	2400

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S9	S10
Sample No.:	9	10
Description:	Upper, Classroom 9	Upper, Classroom 11
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/3/2015	AT - 11/3/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores	4	20	267	1	5	67
Aspergillus/ Penicillium-like	3	15	200	1	5	67
Aureobasidium						
Basidiospores	22	110	1467	8	40	533
Cladosporium	1	5	67			
Ganoderma						
Hyphal Fragments				1	5	67
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora						
Pithomyces						
Stachybotrys chartarum						
Summary Total:	30	150	2001	11	55	734

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S11	S12
Sample No.:	11	12
Description:	Lower, Classroom 22	Lower, Classroom 24
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/3/2015	AT - 11/3/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores	1	5	67	2	10	133
Aspergillus/ Penicillium-like	2	10	133	1	5	67
Aureobasidium						
Basidiospores	20	100	1333	12	60	800
Cladosporium	4	20	267	1	5	67
Ganoderma						
Hyphal Fragments						
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora						
Pithomyces						
Stachybotrys chartarum						
Summary Total:	27	135	1800	16	80	1067

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S13	S14
Sample No.:	13	14
Description:	Lower, Classroom 26	Lower, Corridor, Near Computer Lab
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/3/2015	AT - 11/3/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores	1	5	67	2	10	133
Aspergillus/ Penicillium-like				1	5	67
Aureobasidium						
Basidiospores	20	100	1333	17	85	1133
Cladosporium	5	25	333			
Ganoderma						
Hyphal Fragments						
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora						
Pithomyces						
Stachybotrys chartarum						
Summary Total:	26	130	1733	20	100	1333

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S15	S16
Sample No.:	15	16
Description:	Lower, Library	Lower, Room 27
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/4/2015	AT - 11/4/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores						
Aspergillus/ Penicillium-like	1	5	67	3	15	200
Aureobasidium						
Basidiospores	22	110	1467	19	95	1267
Cladosporium	1	5	67	7	35	467
Ganoderma						
Hyphal Fragments						
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora						
Pithomyces	1	5	67			
Stachybotrys chartarum						
Summary Total:	25	125	1668	29	145	1934

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S17	S18
Sample No.:	17	18
Description:	Lower, Room 28	Lower, Room 30
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/4/2015	AT - 11/4/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores	5	25	333			
Aspergillus/ Penicillium-like	1	5	67			
Aureobasidium						
Basidiospores	19	95	1267	13	65	867
Cladosporium				1	5	67
Ganoderma						
Hyphal Fragments						
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora						
Pithomyces						
Stachybotrys chartarum						
Summary Total:	25	125	1667	14	70	934

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Nonviable Air

Job Number: 150910

Client: PBS Engineering + Environmental

Project Name: LOSD - Oak Grove Elementary

Project No.: 21600.023 Ph 0007

Reference No.:

Report Number: 150910R01

Date Received: 11/2/2015

Lab/Cor ID:	S19	S20
Sample No.:	19	20
Description:	Lower, Room 32	Outdoors, Lower, South
Sample Measure:	75 L	75 L
Media Type:	Fungal-AllergencoD	Fungal-AllergencoD
Analyst - Analysis Date:	AT - 11/4/2015	AT - 11/4/2015
MRL:	67	67
Scope - Magnification:	Olympus BHT-BH2 - 600	Olympus BHT-BH2 - 600
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m ³	Raw Count*	Total Count**	Total/m ³
Ascospores	8	40	533	39	195	2600
Aspergillus/ Penicillium-like	2	10	133	17	85	1133
Aureobasidium						
Basidiospores	37	185	2467	203	1015	13533
Cladosporium				20	100	1333
Ganoderma						
Hyphal Fragments						
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora						
Pithomyces						
Stachybotrys chartarum						
Summary Total:	47	235	3133	279	1395	18599

* - Raw Counts per 20% of Sample

** - Total Count per Sample

**Lab/Cor, Inc.**7619 6th Ave NW
Seattle, WA 98117**Final Report**

Phone: (206) 781-0155

Fax: (206) 789-8424

<http://www.labcor.net>*A Professional Service Corporation in the Northwest***Nonviable Air****Job Number:** 150910**Client:** PBS Engineering + Environmental**Project Name:** LOSD - Oak Grove Elementary**Project No.:** 21600.023 Ph 0007**Reference No.:****Report Number:** 150910R01**Date Received:** 11/2/2015

Lab/Cor ID:	S21	
Sample No.:	21	
Description:	Outdoors, Upper, Entrance	
Sample Measure:	75 L	
Media Type:	Fungal-AllergencoD	
Analyst - Analysis Date:	AT - 11/4/2015	
MRL:	67	
Scope - Magnification:	Olympus BHT-BH2 - 600	
Notes:		

Fungal Identification	Raw Count*	Total Count**	Total/m³	Raw Count*	Total Count**	Total/m³
Ascospores	57	285	3800			
Aspergillus/ Penicillium-like	17	85	1133			
Aureobasidium						
Basidiospores	234	1170	15600			
Cladosporium	30	150	2000			
Ganoderma	1	5	67			
Hyphal Fragments	2	10	133			
Myxo./ Periconia/ Smuts						
Oidium/ Peronospora	1	5	67			
Pithomyces						
Stachybotrys chartarum						
Summary Total:	342	1710	22800			

Reviewed by:

Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
X Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature

Ashley Tonge
Technician/Analyst

* - Raw Counts per 20% of Sample

** - Total Count per Sample

Fungal / Particulate Sample Chain of Custody Record

150910 113

Lab/Cor, Inc
 7619 6th Ave NW
 Seattle, WA 98117
 Office (206) 781-0155
 Fax (206) 789-8424
 mail@labcor.net
 www.labcor.net

Client: PBS ENG AND ENV
Address: 4412 SW Corbett Ave
City, State, Zip: Portland, OR 97239
Contact: Connie Latour
Phone: 503.248.1939 **Fax:**
Email: connie.latour@pbsenv.com
Other Info:

Analysis Type:
Nonviable Options:
☒ Fungal ID
☐ Fungal & Particulate ID
☐ Particulate ID
☐ Quantitative Analysis
☐ (Total Count)
☐ Qualitative Analysis
☐ (Relative Abundance)
Viable Options:
☐ Complete Analysis
☐ Genera Only ☐ Stachy Only

Turnaround Time:
 6 hr RUSH*
 24 hours*
 48 hours
☒ 3 days
 (NV Std)
 5 days
 Viable
 (7-10 days)

Project Name: LOST - OAK Grove Etc, **Project Number:** Z1600.023 PH 0007 **P.O. Number:**

Sample #	Sample Description	Sample Information						Sampling Information					
		Sample Type						Media Type			Sample		
		Air	Swab	Bulk	Dust	Tape	MEA	Stachy	Other	Date	Time	Rate	Total Volume / Area
1	OFFICE, Admin	X							X	10/30/15	5 min	15 L/min	75 L
2	Staff Room	X							X				
3	Upper, Corridor, Near Work Room	X							X				
4	Upper, Classroom 15	X							X				
5	Upper, Classroom 1	X							X				
6	Upper, Classroom 4	X							X				
7	Upper, Classroom 6	X							X				
8	Upper, Classroom 7	X							X				
9	Upper, Classroom 9	X							X				
10	Upper, Classroom 11	X							X				

Information Use Only:
 Prelim Released: ☐ By: ☐ Phone: ☐ E-mail: ☐ Verbal: ☐
 Final Results Released: ☐ By: ☐ Phone: ☐ E-mail: ☐
 Handcopy/Invoice Mailed: ☐
 QC & Data Reviewed By: ☐

By signing below you are agreeing to comply with Lab/Cor's Requests, Tenders and Contracts.

Relinquished by: C. J. Johnston Date: 10/30/15 Time: 1545 Relinquished by: Date: Time:
 Received by: *Connie Latour* Date: 11/2/15 Time: 10:18 AM Received by: Date: Time:

* Call ahead for TATs of 24hrs or less

Fungal / Particulate Sample Chain of Custody Record

150910 243

Lab/Cor, Inc
 7619 6th Ave NW
 Seattle, WA 98117
 Office (206) 781-0155
 Fax (206) 789-8424
 mail@labcor.net
 www.labcor.net

Client: PBS Eng And Env
 Address: 4412 SW Corbett Ave
 City, State, Zip: Portland, OR 97239
 Contact: Connie Latour
 Phone: 503.248.1939 Fax: _____
 Email: Connie.Latour@pbsenv.com
 Other Info: _____

Analysis Type:
 Nonviable Options:
☒ Fungal ID
☐ Fungal & Particulate ID
☐ Particulate ID
☐ Quantitative Analysis
☐ (Total Count)
☐ Qualitative Analysis
☐ (Relative Abundance)
 Viable Options:
☐ Complete Analysis
☐ Genera Only ☐ Stachy Only

Turnaround Time:
 6 hr RUSH*
 24 hours*
 48 hours
☒ 3 days
 (NV Std)
 5 days
 Viable
 (7-10 days)

Project Name: LESD - OAK Grove Etc Project Number: 21600-023 PH 0007 P.O. Number: _____

Sample Information										Sampling Information							
Sample #	Sample Description	Sample Type						Media Type			Sample Date	Sample Time		Sample Flow Rate			Total Volume / Area
		Air	Swab	Bulk	Dust	Tape	MRA	Stachy	Other	On		Off	Start	End	Avg		
11	Lower, Classroom 22	X							X	10/30/15	5PM	15L/min			75L		
12	Lower, Classroom 24																
13	Lower, Classroom 26																
14	Lower, Corridor, ^{near} Computer Lab																
15	Lower, Library																
16	Lower, Room 27																
17	Lower, Room 28																
18	Lower, Room 30																
19	Lower, Room 32																
20	Outdoors, Lower, South	X							X								

Internal Lab Use Only:
 Printed/Released: _____
 By: ☐ Phone ☐ Email ☐ Verbal ☐ Fax ☐ Phone ☐ Email
 Final Results Released: _____
 By: ☐ Phone ☐ Email
 Hardcopy / Invoices Mailed: _____
 QC & Data Reviewed By: _____

By signing below you are agreeing to comply with Lab/Cor's Requests, Tenders and Contracts. * Call ahead for TATs of 24hrs or less

Relinquished by: C.E. Latour Date: 10/30/15 Time: 1545 Relinquished by: _____ Date: _____ Time: _____
 Received by: Michael Nadeau Date: 10/21/15 Time: 10:18 Received by: _____ Date: _____ Time: _____

