

# Southwest GEOSCIENCE

2351 W. Northwest Hwy., Suite 3321  
Dallas, Texas 75220  
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September 20, 2012

Lewisville Independent School District  
340 Lake Haven  
Lewisville, Texas 75057  
Attn: Mr. Paul Siddall

Re: Mold Assessment Services  
Heritage Elementary School  
Rooms: A-15, A-16, A-17, A-18, A-19, A-20, B-12, B-13 & the Counselor's Office  
100 Barnett Boulevard  
Highland Village, Texas  
SWG Project No. 0112246

## **Introduction**

Southwest Geoscience (SWG) conducted limited mold assessment activities for the Lewisville Independent School District (Lewisville I.S.D.) within rooms A-15, A-16, A-17, A-18, A-19, A-20, B-12, B-13 and the Counselor's Office at Heritage Elementary School located at 100 Barnett Boulevard in Highland Village, Texas (hereinafter referred to as the "Site"). The investigation was limited to areas of the Site identified by Lewisville I.S.D. as described below. The assessment was performed by Mr. Nathan R. Buchanan a State of Texas licensed Mold Assessment Technician (License No. MAT1065) on September 12, 2012. SWG's mold services definitions and limitations are included as an attachment to this report.

## **Investigation Areas**

Lewisville I.S.D. identified the following physical portions of the Site as the target investigation areas ("Investigation Areas") for mold assessment: readily accessible areas within rooms A-15, A-16, A-17, A-18, A-19, A-20, B-12, B-13 and the Counselor's Office. SWG's mold assessment services were limited to the Investigation Area(s) identified by Lewisville, I.S.D. Additional areas or portions of the Site were out-of-scope and not included in SWG's mold assessment or this report at this time.

## **Scope of Work**

As set forth in SWG's Mold Assessment Proposal (No. 01121310) dated September 7, 2012, SWG's scope-of-work was to provide visual and/or analytical mold assessment and related services in the Investigation Areas which included:

Visual Reconnaissance: SWG performed a visual reconnaissance of the Investigation Areas for visible indications of moisture intrusion (as indicated by staining or visible moisture) and/or suspect mold growth. SWG's visual reconnaissance only included readily accessible or visible portions of the Investigation Areas.

Suspect Mold Growth Sampling and Analysis: SWG collected limited ambient air samples for nonviable mold spores utilizing Air-O-Cell cassettes. "Air-O-Cell" refers to slit impaction air sampling cassettes manufactured by Zefon Analytical Accessories, St. Petersburg, Florida.

## **Site Reconnaissance Observations/Findings and Recommendations**

SWG's Mold Assessment Site reconnaissance was performed on September 12, 2012 by Mr. Nathan R. Buchanan. SWG's visual reconnaissance of the Investigation areas revealed the following:

### Temperature and Relative Humidity

Temperature readings collected inside the building on September 12, 2012 ranged from 84.3 to 84.7 degrees Fahrenheit while relative humidity ranged from 27.6 to 28.0 percent. Temperature readings collected outside the building ranged from 83.6 to 83.9 degrees Fahrenheit while outside relative humidity was ranged from 37.2 to 37.8 percent.

Relative humidity is a measure of the moisture content of air and is closely tied to the comfort of the office/workplace temperature. As with temperature, there are no regulations governing acceptable office/workplace humidity ranges. Humidity levels in the office/work place are not only related to health effects, but also have operational impacts on modern office equipment.

Workplace/office temperatures have historically been considered a subjective factor because the perception of uncomfortable temperature levels is specific to each individual. There are no regulations governing acceptable office/workplace temperature ranges, but significant research has been conducted which indicates that there are temperature ranges that are not only comfortable but also result in optimum performance. ASHRAE (American Society of Heating, Refrigerating & Air Conditioning Engineers) has published guidelines describing thermal environmental conditions that at least 80% of the persons who occupy that environment will find acceptable or "comfortable." Table I below explains the applicable limits and guidelines.

Table I Acceptable Ranges Of Temperature And Humidity		
Relative Humidity	Winter Temperatures	Summer Temperatures
30%	68.5 to 76°F	74 to 80°F
40%	68.5 to 75.5°F	73 to 79.5°F
50%	68.5 to 74.5°F	73 to 79°F
60%	68 to 74°F	72.5 to 78°F

SWG utilized a Protimeter Moisture Measurement System (MMS) instrument (Model No. BLD2000) to measure and diagnose dampness of the affected drywall. The MMS is a battery powered handheld unit that is equipped with hydrostick probes to measure moisture content in wood, drywall and other and non-conductive materials. The device measures electrical conductivity of building materials and compares the conductivity readings to an internal, electronic standard reading for normal or "dry" materials.

Moisture content readings were obtained by pushing the moisture probe pins into surfaces. The measured values were then displayed on a colored scale depicting if the materials measured were normal (dry), higher than normal but not critical (at risk) or contained excessive moisture levels (wet). Based on the manufacturer's guidelines, the instrument measurement values are described below:

< 5%	Out of Range
> 5% but < 16%	Normal
> 17% but < 20%	Higher than Normal but Not Critical
> 20	Excessive Moisture Levels

Moisture meter readings of the drywall collected in the investigation areas ranged from 9 to 11% relative humidity which is considered normal by the manufacturer.

### Air Monitoring Results

SWG collected nine (9) samples from the interior of the building and two (2) samples from the exterior of the building. The microbial samples were analyzed by Steve Moody Micro Services, L.L.C. (SMMS) in Farmers Branch, Texas; SMMS is a State of Texas licensed mold analysis laboratory and accredited under the AIHA Laboratory Quality Assurance Program for Environmental Microbiology.

Air testing performed using spore traps found that airborne mold spores in the investigation areas were considerably lower and were qualitatively similar to those measured outside of the building at the time the sampling was performed. Total interior fungal spore concentration within the investigation areas ranged from 280 to 5,660 counts/m<sup>3</sup> while exterior levels ranged from 12,720 to 18,800 counts/m<sup>3</sup>. Molds identified in higher concentrations inside the building as compared to the exterior samples are listed in the table below.

<b>Molds Identified at Higher Concentration Inside the Building as Compared to the Exterior Samples</b>				
<b>Sample No.</b>	<b>Location</b>	<b>Identification</b>	<b>Indoor Reading counts/m<sup>3</sup></b>	<b>Outdoor Reading counts/m<sup>3</sup></b>
H-1	Room A-15	Ascospores	1,360	280
H-1	Room A-15	Curvularia	260	80
H-1	Room A-15	Drechslera/Bipolaris Group	1,020	280
H-3	Room A-17	Cercospora/ Pseudocercospora	20	None Detected
H-3	Room A-17	Drechslera/Bipolaris Group	640	280
H-3	Room A-17	Pithomyces	20	None Detected
H-5	Room A-19	Stachybotrys	20	None Detected
H-6	Room A-20	Epicoccum	20	None Detected
H-6	Room A-20	Stachybotrys	20	None Detected
H-8	Room B-13	Stachybotrys	20	None Detected
H-9	Counselor's Office	Stachybotrys	100	None Detected

The American Conference of Governmental Industrial Hygienists (ACGIH) sets forth assessment criteria related to the "indoor/outdoor" relationship where the indoor air quality should be at or below that of outdoor air quality with regard to fungal spores (see ACGIH Bioaerosols, Assessment and Controls publication, 1999).

### Suspect Mold

Visible mold was not observed during the assessment.

**Conclusions and Recommendations**

Based on SWG's limited assessment and the analytical results, SWG recommends that rooms A-15, A-19, A-20, B-12, B-13 and the Counselor's Office be cleaned and retested. If you have any questions regarding this report or if we can assist you with any other matter, please contact the undersigned at (214) 350-5469.

Sincerely,  
**Southwest Geoscience**



Darren G. Bowden  
Corporate Director  
Industrial Hygiene Services  
Texas Mold Assessment Consultant  
Lic. No. MAC0321

Attachments: Analytical Results/Chain of Custody  
Mold Services Definitions & Limitations/Standard of Care and Reliance

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Analytical Results/Chain of Custody

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# IAQ Mold Report

Steve Moody Micro Services, LLC

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

## Summary

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

**Client :** Southwest Geoscience - Dallas, TX

**Lab Job No.** 12F-11157

**Project :** Heritage Elementary School

**Report Date** 09/17/2012 2:49 PM

**Project # :** 0112246

**Sample Date :** 09/12/2012

**Sample Type:** Spore Trap, Non-cultured

**Spore Trap Type:** Zefon - Air-O-Cell

**Test Method:** Mold: ASTM D7391-09 - Standard Profile

Page 1 of 6

On 9/14/2012, eleven (11) samples were submitted by Nathan Buchanan of Southwest Geoscience - Dallas, TX (located at 2351 W NW Hwy #3321, Dallas, TX 75220) for Spore Trap, Non-cultured mold analysis. This report consists of three sections; a summary section, a data detail section, and an analytical notes section.

Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
H-1	150	Room A15, MM-10 * See Analytical Notes report for further details	Agaricus / Agrocybe	100
			Alternaria	280
			Ascospores	1360
			Aspergillus / Penicillium	740
			Cladosporium	1060
			Curvularia	260
			Drechslera / Bipolaris group	1020
			Myxomycete / Periconia / Rust / Smut	840
			Total:	5660
H-2	150	Room A16, 10 * See Analytical Notes report for further details	Alternaria	220
			Aspergillus / Penicillium	560
			Basidiospores	540
			Cladosporium	340
			Curvularia	60
			Drechslera / Bipolaris group	180
			Hyphal / Spore Fragments	560
			Myxomycete / Periconia / Rust / Smut	260
			Total:	2720

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
H-3	150	Room A17, 11 * See Analytical Notes report for further details	Alternaria Ascospores Aspergillus / Penicillium Basidiospores Cercospora / Pseudocercospora Cladosporium Curvularia Drechslera / Bipolaris group Myxomycete / Periconia / Rust / Smut Pithomyces  <div style="text-align: right;">Total:</div>	120 60 660 1140 20 860 140 640 780 20  4440
H-4	150	Room A18, 10	Agaricus / Agrocybe Cladosporium Drechslera / Bipolaris group Hyphal / Spore Fragments Myxomycete / Periconia / Rust / Smut  <div style="text-align: right;">Total:</div>	80 40 20 80 60  280

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
H-5	150	Room A19, 8 * See Analytical Notes report for further details	Alternaria Ascospores Aspergillus / Penicillium Basidiospores Cladosporium Drechslera / Bipolaris group Hyphal / Spore Fragments Myxomycete / Periconia / Rust / Smut Stachybotrys  <div style="text-align: right;">Total:</div>	80 20 220 60 100 120 320 140 20  1080
H-6	150	Room A20, 10	Agaricus / Agrocybe Alternaria Aspergillus / Penicillium Basidiospores Curvularia Drechslera / Bipolaris group Epicoccum Hyphal / Spore Fragments Myxomycete / Periconia / Rust / Smut Stachybotrys  <div style="text-align: right;">Total:</div>	40 40 140 80 20 80 20 280 300 20  1020



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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
H-7	150	Room B12, 8	Agaricus / Agrocybe Alternaria Aspergillus / Penicillium Basidiospores Cladosporium Curvularia Drechslera / Bipolaris group Hyphal / Spore Fragments Myxomycete / Periconia / Rust / Smut <div style="text-align: right;">Total:</div>	80 40 3300 300 100 60 40 360 220 4500
H-8	150	Room B13, 9	Aspergillus / Penicillium Basidiospores Cladosporium Drechslera / Bipolaris group Hyphal / Spore Fragments Stachybotrys <div style="text-align: right;">Total:</div>	240 160 20 60 180 20 680

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
H-9	150	Counselor's Office, 10	Alternaria	80
			Ascospores	60
			Aspergillus / Penicillium	240
			Basidiospores	160
			Cladosporium	40
			Drechslera / Bipolaris group	140
			Hyphal / Spore Fragments	240
			Myxomycete / Periconia / Rust / Smut	20
			Stachybotrys	100
			<b>Total:</b>	<b>1080</b>
H-10	75	Outside	Agaricus / Agrocybe	120
			Ascospores	280
			Aspergillus / Penicillium	2200
			Basidiospores	3120
			Chaetomium	40
			Cladosporium	2840
			Coprinus	160
			Curvularia	80
			Drechslera / Bipolaris group	280
			Fusarium	120
			Hyphal / Spore Fragments	2360
			Myxomycete / Periconia / Rust / Smut	1120
			<b>Total:</b>	<b>12720</b>

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
H-11	75	Outside * See Analytical Notes report for further details	Agaricus / Agrocybe Alternaria Ascospores Aspergillus / Penicillium Basidiospores Chaetomium Cladosporium Coprinus Curvularia Drechslera / Bipolaris group Fusarium Hyphal / Spore Fragments Myxomycete / Periconia / Rust / Smut  <div style="text-align: right;">Total:</div>	240 400 280 3680 5720 120 4600 360 40 80 320 1840 1120  18800

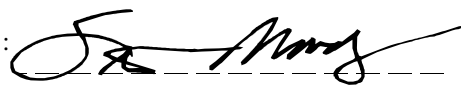
Results may not be reported except in full. Data contained in this test report relates only to the samples tested. This report does not express or imply interpretation of the results contained herein. Interpretation should be made by a qualified professional.

Steve Moody Micro Services assumes no responsibility for the manner in which these samples were collected or handled prior to being received at this laboratory. SMMS assumes no responsibility for the qualifications of personnel performing sampling and/or interpretations of this data.

Analyst(s): Rob Greene

Lab Director: Steve Moody

Approved Signatory :



Thank you for choosing Steve Moody Micro Services

# IAQ Mold Report

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 2051 Valley View Lane  
 Farmers Branch, TX 75234 Phone: (972) 241-8460

## Data Detail

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Sample ID:	H-1			H-2			H-3			H-4		
Location:	Room A15, MM-10			Room A16, 10			Room A17, 11			Room A18, 10		
Debris Rating:	5			5			5			3		
Media Expires On:	May 2013			May 2013			May 2013			May 2013		
Notes Included?:												
Volume:	150			150			150			150		
	raw ct.	MDL	spores/m <sup>3</sup>	raw ct.	MDL	spores/m <sup>3</sup>	raw ct.	MDL	spores/m <sup>3</sup>	raw ct.	MDL	spores/m <sup>3</sup>
Agaricus / Agrocybe	5	20.00	100							4	20.00	80
Alternaria	14	20.00	280	11	20.00	220	6	20.00	120			
Ascospores	68	20.00	1360				3	20.00	60			
Aspergillus / Penicillium	37	20.00	740	28	20.00	560	33	20.00	660			
Basidiospores				27	20.00	540	57	20.00	1140			
Cercospora / Pseudocercospora							1	20.00	20			
Chaetomium												
Cladosporium	53	20.00	1060	17	20.00	340	43	20.00	860	2	20.00	40
Coprinus												
Curvularia	13	20.00	260	3	20.00	60	7	20.00	140			
Drechslera / Bipolaris group	51	20.00	1020	9	20.00	180	32	20.00	640	1	20.00	20
Epicoccum												
Fusarium												
Hyphal / Spore Fragments				28	20.00	560				4	20.00	80
Memnoniella												
Myxomycete / Periconia / Rust / Smut	42	20.00	840	13	20.00	260	39	20.00	780	3	20.00	60
Non-specified Fungal Spore(s)												
Pithomyces							1	20.00	20			
Pollen												
Stachybotrys												
<b>TOTALS</b>	<b>283</b>		<b>5660</b>	<b>136</b>		<b>2720</b>	<b>222</b>		<b>4440</b>	<b>14</b>		<b>280</b>
Analyst	Rob Greene			Rob Greene			Rob Greene			Rob Greene		
Analysis Date	9/17/2012			9/17/2012			9/17/2012			9/17/2012		

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**Sample Type:** Spore Trap, Non-cultured **Spore Trap Type:** Zefon - Air-O-Cell  
**Test Method:** Mold: ASTM D7391-09 - Standard Profile Page 2 of 4

This report consists of three sections; a summary section, a data detail section, and an analytical notes section. Results may not be reported except in full.

Sample ID:	H-5			H-6			H-7			H-8		
Location:	Room A19, 8			Room A20, 10			Room B12, 8			Room B13, 9		
Debris Rating:	5			4			4			3		
Media Expires On:	May 2013			May 2013			May 2013			May 2013		
Notes Included?:												
Volume:	150			150			150			150		
	raw ct.	MDL	spores/m <sup>3</sup>	raw ct.	MDL	spores/m <sup>3</sup>	raw ct.	MDL	spores/m <sup>3</sup>	raw ct.	MDL	spores/m <sup>3</sup>
Agaricus / Agrocybe				2	20.00	40	4	20.00	80			
Alternaria	4	20.00	80	2	20.00	40	2	20.00	40			
Ascospores	1	20.00	20									
Aspergillus / Penicillium	11	20.00	220	7	20.00	140	165	20.00	3300	12	20.00	240
Basidiospores	3	20.00	60	4	20.00	80	15	20.00	300	8	20.00	160
Cercospora / Pseudocercospora												
Chaetomium												
Cladosporium	5	20.00	100				5	20.00	100	1	20.00	20
Coprinus												
Curvularia				1	20.00	20	3	20.00	60			
Drechslera / Bipolaris group	6	20.00	120	4	20.00	80	2	20.00	40	3	20.00	60
Epicoccum				1	20.00	20						
Fusarium												
Hyphal / Spore Fragments	16	20.00	320	14	20.00	280	18	20.00	360	9	20.00	180
Memnoniella												
Myxomycete / Periconia / Rust / Smut	7	20.00	140	15	20.00	300	11	20.00	220			
Non-specified Fungal Spore(s)												
Pithomyces												
Pollen												
Stachybotrys	1	20.00	20	1	20.00	20				1	20.00	20
<b>TOTALS</b>	<b>54</b>		<b>1080</b>	<b>51</b>		<b>1020</b>	<b>225</b>		<b>4500</b>	<b>34</b>		<b>680</b>
Analyst	Rob Greene			Rob Greene			Rob Greene			Rob Greene		
Analysis Date	9/17/2012			9/17/2012			9/17/2012			9/17/2012		

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Sample ID:	H-9			H-10			H-11					
Location:	Counselor's Office, 10			Outside			Outside					
Debris Rating:	4			4			5					
Media Expires On:	May 2013			May 2013			May 2013					
Notes Included?:												
Volume:	150			75			75					
	raw ct.	MDL	spores/m <sup>3</sup>	raw ct.	MDL	spores/m <sup>3</sup>	raw ct.	MDL	spores/m <sup>3</sup>			
Agaricus / Agrocybe				3	40.00	120	6	40.00	240			
Alternaria	4	20.00	80				10	40.00	400			
Ascospores	3	20.00	60	7	40.00	280	7	40.00	280			
Aspergillus / Penicillium	12	20.00	240	55	40.00	2200	92	40.00	3680			
Basidiospores	8	20.00	160	78	40.00	3120	143	40.00	5720			
Cercospora / Pseudocercospora												
Chaetomium				1	40.00	40	3	40.00	120			
Cladosporium	2	20.00	40	71	40.00	2840	115	40.00	4600			
Coprinus				4	40.00	160	9	40.00	360			
Curvularia				2	40.00	80	1	40.00	40			
Drechslera / Bipolaris group	7	20.00	140	7	40.00	280	2	40.00	80			
Epicoccum												
Fusarium				3	40.00	120	8	40.00	320			
Hyphal / Spore Fragments	12	20.00	240	59	40.00	2360	46	40.00	1840			
Memnoniella												
Myxomycete / Periconia / Rust / Smut	1	20.00	20	28	40.00	1120	28	40.00	1120			
Non-specified Fungal Spore(s)												
Pithomyces												
Pollen												
Stachybotrys	5	20.00	100									
<b>TOTALS</b>	<b>54</b>		<b>1080</b>	<b>318</b>		<b>12720</b>	<b>470</b>		<b>18800</b>			
Analyst	Rob Greene			Rob Greene			Rob Greene					
Analysis Date	9/17/2012			9/17/2012			9/17/2012					

# IAQ Mold Report

Steve Moody Micro Services, LLC  
2051 Valley View Lane  
Farmers Branch, TX 75234 Phone: (972) 241-8460

## Data Detail

DSHS License No.: LAB0117  
AIHA EMPAT ID: 102577

**Client :** Southwest Geoscience - Dallas, TX

**Lab Job No. :** 12F-11157

**Project :** Heritage Elementary School

**Report Date :** 09/17/2012 2:49 PM

**Project # :** 0112246

**Sample Date :** 09/12/2012

**Sample Type:** Spore Trap, Non-cultured

**Spore Trap Type:** Zefon - Air-O-Cell

**Test Method:** Mold: ASTM D7391-09 - Standard Profile

Page 4 of 4

This report consists of three sections; a summary section, a data detail section, and an analytical notes section. Results may not be reported except in full.

### Debris Rating Key:

- 0 - No debris detected.
- 1 - Trace debris.
- 2 - Light debris.
- 3 - Moderate debris.
- 4 - Substantial debris.
- 5 - Extensive debris.
- 6 - Field blank.

NOTE: Debris defined as skin, fibers, pollen grains, insect parts, and/or other non-fungal particles.

# IAQ Mold Report

Steve Moody Micro Services, LLC  
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Farmers Branch, TX 75234 Phone: (972) 241-8460

## Analytical Notes

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Page 1 of 2

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## Samples Analyzed

Sample No: H-1 : Room A15, MM-10

Notes: 70% Occluded.

Sample No: H-2 : Room A16, 10

Notes: 40% Occluded.

Sample No: H-3 : Room A17, 11

Notes: 60% Occluded.

Sample No: H-5 : Room A19, 8

Notes: 25% Occluded.

Sample No: H-11 : Outside

Notes: 25% Occluded.

## Field Blanks

No discernable field blanks were submitted with this set of samples.

**NOTE: All remaining samples suitable for analysis.**

## Methods

Method: ASTM D7391-09: Categorization and Quantification of Airborne Fungal Structures in an Inertial Impaction Sample by Optical Microscopy.

Calculation: Spores/cubic meter = (Raw spore count)\*(MDL)

Note: MDL (Minimum Detection Limit) is calculated based upon 1 raw spore count.

Steve Moody Micro Services recommends two significant figures for calculated values based ASTM D7391-09.



# IAQ Mold Report

Steve Moody Micro Services, LLC

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

## Analytical Notes

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LAB # 102577

Chain of Custody

Page 1 of 1



Lab Job # 12F1157 ADC 11  
 Lab Job # \_\_\_\_\_  
 Lab Job # \_\_\_\_\_

**\*\*Please call in advance for immediate, after-hour, & weekend pricing & availability\*\***

**ASBESTOS PLM**

Bulk  1 day  2 day  3 day  5 day  Immediate  
 Analyze All  Positive Stop

**LEAD** Paint / Soil / Wipe  1 day  2 day  3 day  5 day  Immediate  
 PCM Air (7400)  1 day  2 day  3 day  5 day  Immediate  
**TOTAL DUST** (0500/0600)  1 day  2 day

**MOLD**

Non-culture (Tape / Bulk / Air)  1 day  2 day  Immediate  
 Air Standard Profile  Air Expanded Profile  
 Analyze Blanks  Yes  No  
 Culture (Swab / Bulk / Plate)  7-14 day

**ASBESTOS TEM**

Air AHERA Method  6 hr  12hr  24 hr  
 Air 7402 (Modified)  1 day  2 day  3 day  
 Bulk/Wipe/Micro Vac  1 day  2 day  3 day  
 Water  1 day  2 day  3 day  
 Analyze Blanks  Yes  No

**BACTERIA**

Heterotrophic Plate Count (HPC)  3 day  
 HPC + Gram Stain  3 day  5 day  
 HPC + 3 Gram Neg ID  6-8 day  
 HPC + 5 Gram Neg ID  6-8 day  
 Fecal Coliform (MPN)  3 day  
 Total Coliform & E Coli (P/A)  2 day

Billing Company / City: Southwest Geoscience, Dallas

Submitter / Company: Nathan Buchanan

Project: Heritage Elementary School

Contact Information: Name: Darren Bowden

E-mail Results to: darren.bowden@southwestgeosciece.com

Invoice Address: \_\_\_\_\_

# of Samples: 11  
 Sample Date: 9/12/2012  
 Project #: 0112246  
 Phone #: \_\_\_\_\_  
 Mobile #: 214-364-8142  
 P.O. #: \_\_\_\_\_

**\*\*\* Please review paperwork and samples before submitting to lab. Uncontained / improperly packaged samples or excessive administrative requests may incur additional fees.\*\*\***

Notes:

Sample #	Sample Description	Vol. / Area if applicable	Location / Notes
H-1	Room A15	150	mm-10
H-2	Room A16		10
H-3	Room A17		11
H-4	Room A18		10
H-5	Room A19		8
H-6	Room A20		10
H-7	Room B12		8
H-8	Room B13		9
H-9	Counselors office		10
H-10	outside		75
H-11	outside	75	

Released By: <u>Nathan Buchanan</u>	Date / Time: <u>9/12/2012</u>	Received By: <u>AB Via drop box</u>	Date / Time: <u>9-14-12 / 7:45A</u>
Released By: _____	Date / Time: _____	Received By: _____	Date / Time: _____

Mold Services Definitions & Limitations/  
Standard of Care and Reliance

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## Mold Services Definitions & Limitations

*“Mold” defined.* Mold is a general term used to describe various types of single-celled naturally occurring biological organisms occurring worldwide. For purposes of this report (and the Texas Mold Assessment & Remediation Rules), the term “mold” is broadly defined to include any living or dead fungi or related products or parts, including spores, hyphae, and mycotoxins.

*Limited Scope of Mold Assessment.* The scope of SWG’s mold assessment services as reflected in the Proposal and this report are limited in that (i) they were physically limited to certain portions of the building structure (e.g., the Client identified Investigation Areas); and (ii) limited by accessibility to building materials or components within the Investigation Area(s). In contrast to a Limited Assessment” is a comprehensive assessment, which involves destructive sampling methods and the scope of the assessment typically extending to the entire building structure.

*Time sensitive.* Mold assessments are essentially a “snap shot in time,” and the results are only relevant at the time of site reconnaissance. Because mold, when biologically active, is a living organism, its presence is influenced and controlled by environmental conditions. Mold assessments, therefore, are “time sensitive” in that the presence and concentration of mold and similar organisms in building structures or in the air is directly influenced by environmental conditions (such as humidity, moisture, nutrients and substrates), whether natural or caused by man, which conditions may vary significantly over relatively short periods of time.

*Methodologies.* Currently, mold assessment methodologies and protocols in Texas are governed by persuasive guidelines (rather than promulgated federal/state or local regulations). Presently, there is no data that supports a threshold limit or dose-response relationship for exposure to mold aeroallergens, individual pathogens, opportunistic pathogens and/or mycotoxins. The Occupational Safety and Health Administration (OSHA), the National Institute of Occupational Safety and Health (NIOSH) and other non-governmental associations, have not yet established permissible exposure limits (PELs), recommended exposure limits (RELs), or other limit values for aeroallergens. Because no limit values presently exist, SWG will not and cannot represent that the site contains no harmful microbes, mold, fungi, or their metabolites, or other latent conditions beyond those identified by the limited scope of this mold assessment.

*Findings limited.* Findings from a limited mold assessment are limited because of the nature of the information obtained (e.g., visual reconnaissance of readily accessible areas of building structures, interview information, anecdotal information, and limited sampling data derived from one or more specific sampling events). SWG cannot warrant the accuracy of prior or subsequent information/data, reports and services performed by other firms at the Site. SWG assumes no responsibility or liability for errors in information or data provided by or through the client or third party sources. SWG’s services are not to be construed as legal or medical interpretation or advice.

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*Moisture Intrusion Limitation.* SWG performs mold assessment services and is not a moisture intrusion, HVAC, roofing, plumbing or building envelope specialist. However, during the course of conducting its mold assessment services, SWG will report observed areas of apparent moisture intrusion. SWG does not and will not investigate the cause or causes of such observed moisture intrusion. In the event apparent moisture intrusion is observed, SWG will recommend that the client contact a specialist (i.e., plumbing contractor, building envelope specialist, HVAC contractor, water intrusion specialist, etc.) to assist the client in determining the specific cause or causes of the moisture intrusion and remedial options.

*Texas Licensing Requirements.* SWG (and/or its personnel) will render the services set forth in this proposal in the capacity of a Texas licensed Mold Assessor. SWG is not licensed as a Mold Remediation Contractor and does not perform mold remediation. As of January 1, 2005, Texas law has required that Mold Assessors and Mold Remediation Contractors be licensed.

*Mold Remediation Certificate.* For mold remediation projects (above certain size thresholds), applicable Texas law (i.e., Texas Occupation Code Section 1958.54 and T.A.C. Section 295.397 (the Texas Mold Assessment and Remediation Rules), requires that a "Certificate of Mold Remediation" be issued by the Mold Remediation Contractor upon successful completion of the project. This certificate must be provided to property owners no later than the 10<sup>th</sup> day after the date on which the mold remediation is completed at a property. The Mold Remediation Certificate issued by the Mold Remediation Contractor must include a certification by the Mold Assessor that the mold remediation project has been successfully completed in accordance with the mold remediation protocol.

Be advised that SWG's issuance of a Mold Remediation Certificate upon successful completion of a Mold Remediation project does not mean, warrant or otherwise guarantee that mold will not be subsequently found in any portion of the Investigation Area or the Site. In the event that SWG is engaged to render services in connection with a mold remediation project, SWG will require *Client to provide to SWG a signed certificate prepared by Client's moisture intrusion specialist or appropriate contractor stating that all sources of moisture which resulted in the presence of mold in the Investigation Area have been fully remediated and corrected.*

#### **Standard of Care**

SWG performed its Services in accordance with generally accepted practices of the profession undertaken in similar services at the same time and in the same geographical area. No other warranties, expressed or implied, apply to the Services hereunder or this report.

#### **Reliance**

SWG's proposal for this project, services and this report have been prepared on behalf of and for the exclusive use of Lewisville Independent School District solely for their use and reliance in assessing the presence of mold in the Investigation Areas of the site. Lewisville Independent School District is the only party to which SWG explained the risks and limitations of the services and was solely involved in shaping the scope of services. Accordingly, reliance on this report by any other party may involve assumptions leading to an unintended interpretation of findings and opinions. With the consent of the client, SWG may offer reliance to third parties

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or contract with other parties to develop findings and opinions related to such party's unique risk management concerns. Notwithstanding the foregoing, reliance by any and all third parties upon the proposal, the Services or this report shall be limited in the aggregate to all relying parties to the fair market value of the Services provided by SWG.

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