



ARROWHEAD

Technologies LLC
Statement of Qualifications

page 1

Company Profile

Arrowhead Technologies LLC (AT), founded in 2004 by Monte L. Hall is a professional laboratory specializing in the optical analysis of bulk building materials for the presence of asbestos by polarized light microscopy (PLM).

Our personnel have more than 30 years a combined experience in the asbestos laboratory.

Mr. Hall has over seventeen year's successful experience as Lab Director for a top-rank engineering and consulting firm's Tampa asbestos laboratory. During this time he achieved a reputation for excellence of his analytical work, for his strict Quality Control/Assurance procedures and recordkeeping, and a responsive relationship with his professional clients. Though his employer maintained several asbestos laboratories, critical or difficult samples were frequently referred to Mr. Hall. Mr. Hall has analyzed more than 200,000 samples

AT is accredited by NVLAP for Analysis of Bulk Asbestos Fibers by PLM (NVLAP LAB CODE: 200703-0).

AT has designed its service for the efficient support of professional asbestos consultants. Once the samples are signed into our laboratory, all the record keeping and reporting is electronic.

We have secured professional liability insurance for the protection of our clients from a highly rated underwriter.

3151 San Bernadino St. Clearwater, Florida 33759
{813} 679-0720 fax {727} 475-8216

"The ground on which we stand is sacred ground. It is the blood of our ancestors."



ARROWHEAD

Technologies LLC
Statement of Qualifications

page 2

Our Laboratory

The Lab is fully equipped with laboratory grade microscopes, sample preparation equipment such as safety hoods, stereomicroscopes, muffle oven, a full set of Calibrated Refractive Index Liquids and NIST Reference Materials as well as technical reference literature. This fully meets the NVLAP requirements per "The Method" (Method for the Determination of Asbestos in Bulk Building Materials EPA 600/R-93-116).

The laboratory also has photographic and microscopy equipment to support specialty analyses of paints, coatings and material failures including photomicrographs of polished sections and stereographic images.

3151 San Bernadino St. Clearwater, Florida 33759
{813} 679-0720 fax {727} 475-8216

"The ground on which we stand is sacred ground. It is the blood of our ancestors."



ARROWHEAD

Technologies LLC
Statement of Qualifications

Our People

The Lab Manager and Analyst(s) are the backbone of the production. The Lab Manager directs the analytical operations and participates in the analysis, and he is responsible for direction of Quality Control/Assurance. He is required to submit periodic reports to the Lab Deputy who exercises an independent review. The Analyst(s) carry out the analysis of the samples; AT integrates the preparation of the reports with this function.

The performance of the Asbestos PLM method is strongly analyst dependent and relies on the skill, level of experience and care with which the analysis is performed. AT has designed its laboratory operations and personnel policies recognizing that the PLM method strongly depends on skill.

For this reason, the analyst must have adequate training in sample preparation, material types, and experience in the location and identification of asbestos in samples. This is accomplished through years of experience and substantial on-the-job training as well as formal education in mineralogy and microscopy. AT offers over thirty years of sample experience and visual memory to apply to your sample analysis.

We require training from recognized providers and continuing demonstrations of competence through the NIST proficiency rounds and intra-lab and inter-lab quality control rounds. In addition analyst performance is tracked through our Quality Control program, and re-training is provided when indicated.

The Bookkeeper is essential to support the efficient operation of our commercial laboratory; she is responsible for preparing invoices, recording payments and disbursing payments to vendors.



ARROWHEAD

Technologies LLC
Statement of Qualifications

page 4

Our Product – Reports

Our summary report is designed to quickly “get to the point”, it identifies the Consultant (your company), the Project (and your project number), the person submitting the samples, the date collected, the date received at the Lab, the Analyst and is signed by the Lab Director. The analysis method used and details of quantitation (CVAE or Point Counting) is specified.

Our laboratory system (The Laboratory Management System by Munch Technologies) also maintains details of the analysis identifying constituents as well as asbestos present in each layer. This report is produced on request to meet the NVLAP requirements for analysis by layers, which requires identification of each layer, fibrous components and other particles and binders.

AT’s system maintains this data in an on-line database, which allows prompt retrieval and reporting.

Following (Appendix A) is an example of the Summary Report.

3151 San Bernadino St. Clearwater, Florida 33759
{813} 679-0720 fax {727} 475-8216

“The ground on which we stand is sacred ground. It is the blood of our ancestors.”



ARROWHEAD

Technologies LLC
Statement of Qualifications

page 5

Office Information and Contacts

Laboratory (please ship samples to this address)

3151 San Bernadino

Clearwater, Florida 33759

Voice Phone: 813-679-0720

Fax: 813-926-3480

Contacts:

Laboratory

Monte L. Hall, P.G., President/Lab Manager Cell: 813-679-0720

Charles E. Merrill, Technical Assistant/Analyst Cell: 813-407-0808

e-mail: ArrowheadPLM@Gmail.com

Website:

www.arrowheadplm.com

✂ to fit your Rolodex©



Arrowhead Asbestos Laboratory

NVLAP LAB CODE: 200703-0

Arrowhead Technologies, LLC

Monte L. Hall, President

3151 San Bernadino St.

Clearwater, Florida 33759

813-679-0720 office (cell)

727-475-8216 fax ArrowheadPLM@Gmail.com

3151 San Bernadino St. Clearwater, Florida 33759

{813} 679-0720 fax {727} 475-8216

"The ground on which we stand is sacred ground. It is the blood of our ancestors."



ARROWHEAD

Technologies LLC
Statement of Qualifications

Representative Clients or Projects

Environmental Engineering Consultants
Diversified Management & Construction, Inc.
Environmental Engineering Consultants
A2L Technologies, Inc.
K S Ware Associates
Cherokee Nation
Cherokee Nation Industries
District School Board Pasco County
School Board Pinellas County
J. J. Sosa & Associates, Inc.
Ardaman & Associates, Inc.
Air Quality Environmental
Greenfield Environmental
Long & Associates
American Management Resources Corp.
Progress Energy Florida, Inc. division of Progress Energy Inc.

3151 San Bernadino St. Clearwater, Florida 33759
{813} 679-0720 fax {727} 475-8216

"The ground on which we stand is sacred ground. It is the blood of our ancestors."



ARROWHEAD

Technologies LLC
Statement of Qualifications

AT Personnel Resumes

Monte L. Hall, P.G.

EDUCATION

University of Tulsa, BS Geology

Tuck Executive Education at Dartmouth

SUMMARY OF CAPABILITIES

Lab Management and Microscopy of Building Materials

REGISTRATIONS

Professional Geologist, Florida, #1658

PROFESSIONAL SUMMARY

Mr. Hall is the president of AT and his duties include management of the firm, technical oversight, as well as analysis. He has more than 20 years experience.



ARROWHEAD

Technologies LLC
Statement of Qualifications

AT Personnel Resumes

Charles E. Merrill

EDUCATION

BS Business University of South Florida

SUMMARY OF CAPABILITIES

Microscopy of Building Materials; Technical Writer

PROFESSIONAL SUMMARY

Mr. Merrill has worked for more than 14 years as a Microscopist and also has extensive field experience as surveyor and project monitor.

He is the Technical Assistant to the President of AT and has participated in writing the Lab Manual, development of the paperless analysis system and AT's website, and business strategy.



ARROWHEAD

Technologies LLC
Statement of Qualifications

page 9

APPENDIX A

Example of Summary Report


3151 San Bernadino St. Clearwater, Florida 33759
{813} 679-0720 fax {727} 475-8216

"The ground on which we stand is sacred ground. It is the blood of our ancestors."



ARROWHEAD

Technologies LLC
Statement of Qualifications

 ARROWHEAD TECHNOLOGIES, LLC		PLM REPORT SUMMARY	
3151 San Bernadino St. Clearwater, Florida 33759 813-679-0720 / mhall005@tampabay.rr.com		NVLAP Lab Code 200703-0	
Client :	Chris O Teal	Lab Set No. :	000001
Project :	Test Project	AT Job No. :	*-N/A
Client Project No.:	N/A	Report Date :	5/20/2013
Identification :	Asbestos, Bulk Sample Analysis	Sample Date :	Not Provided
Test Method :	Polarized Light Microscopy / Dispersion Staining (PLM/DS) EPA Method 600/R-93/116		Page 1 of 2
<p>On 2/17/2004, four (4) bulk material samples were submitted by Armo Site for asbestos analysis by PLM/DS. Copies of Bulk Sample Analysis sheets are attached; additional information may be found therein. The results are summarized below:</p>			
Lab Sample No.	Sample Description / Location	Asbestos Content	
000001-001	Ceiling Tile Kitchen	(2.25% Chrysotile-Ceiling Tile) (By Point Count)	
000001-002	Floor Tile Kitchen	5% Chrysotile-Floor Tile 5% Chrysotile-Black Mastic	
000001-003	Insulation Kitchen	10% Amosite-Insulation	
000001-004	Built Up Roofing Roof	None Detected-Bitumen Roof Mastic None Detected-Roof Felt	
<p>These samples were analyzed by layers. Specific layer or component asbestos content is indicated when relevant. The EPA considers a material to be asbestos containing only if it contains more than one percent asbestos by Calibrated Visual Area Estimation (CVAE). EPA regulations also indicate that Regulated Asbestos Containing Materials (RACM) – materials which are friable or may become friable – be further analyzed by point counting when the results indicate less than ten percent asbestos by CVAE. Arrowhead utilizes CVAE on a routine basis and does not include point counting unless specifically requested. The results may not be reproduced except in full.</p>			



3151 San Bernadino St. Clearwater, Florida 33759
{813} 679-0720 fax {727} 475-8216

"The ground on which we stand is sacred ground. It is the blood of our ancestors."



ARROWHEAD

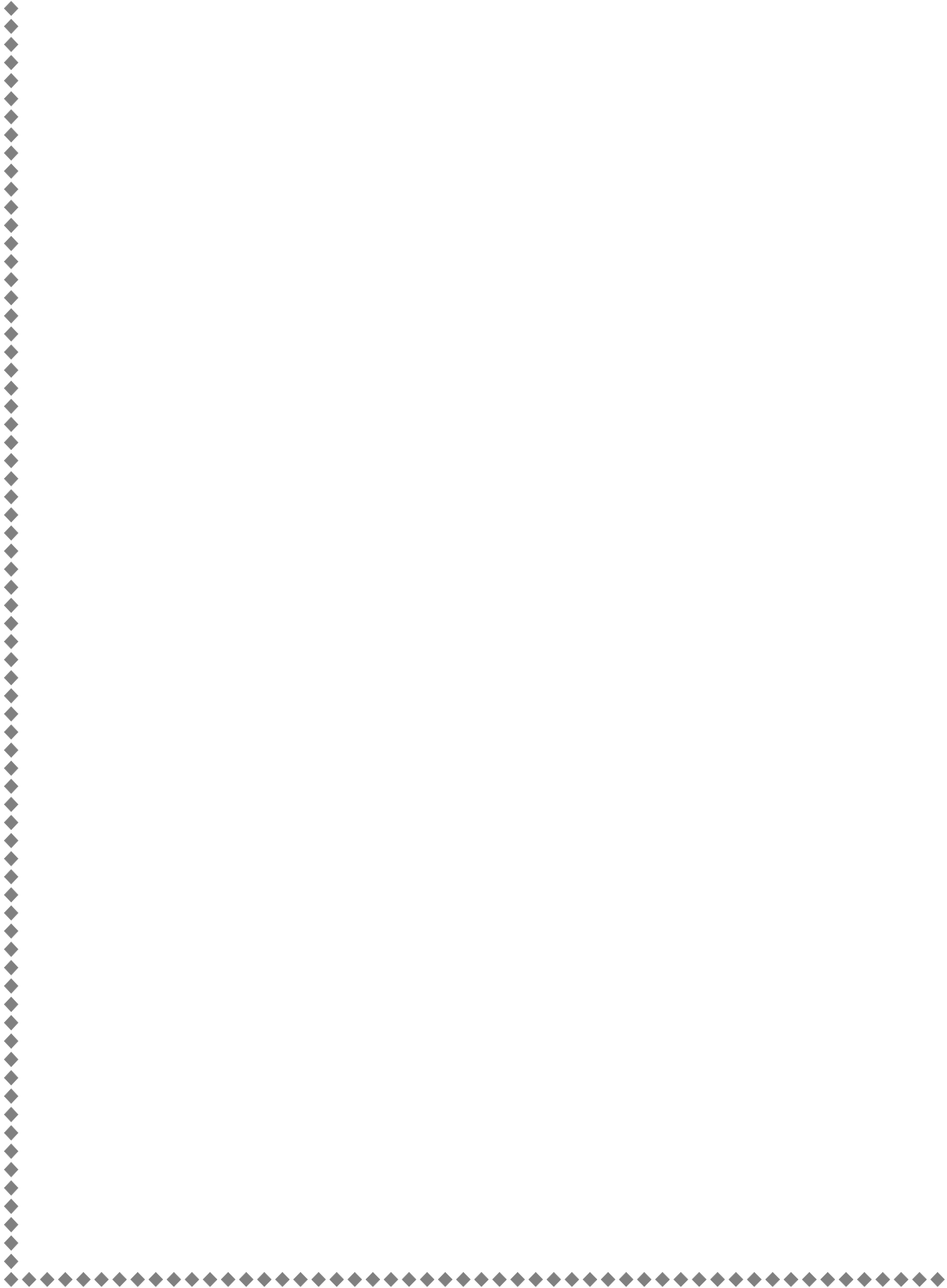
Technologies LLC
Statement of Qualifications

 ARROWHEAD TECHNOLOGIES, LLC 3151 San Bernadino St. Clearwater, Florida 33759 813-679-0720 / mhall005@tampabay.rr.com		PLM REPORT SUMMARY	
		NVLAP Lab Code 200703-0	
Client :	Chris O Teal	Lab Set No. :	000001
Project :	Test Project	AT Job No. :	*-N/A
Client Project No.:	N/A	Report Date :	5/20/2013
Identification :	Asbestos, Bulk Sample Analysis	Sample Date :	Not Provided
Test Method :	Polarized Light Microscopy / Dispersion Staining (PLM/DS) EPA Method 600/R-93/116		Page 2 of 2
SCOPE OF THIS REPORT			
<p>These samples were obtained as a part of a building survey; this report is only intended to be used as a part of the survey report issued by the surveyor. This report explains the laboratory analysis and results. The surveyor's report explains the sampling protocol used, when the samples were obtained, the location(s) of the samples, where the materials were observed in the building, quantities of materials observed, condition of the materials and the extent of his/her survey. Sample locations and material descriptions are given by the surveyor on the chain of custody but included here (possibly abbreviated) only as a convenience for the reader.</p> <p>This report may not be reproduced without written permission of Arrowhead and must be reproduced in full.</p>			
STATEMENT OF LABORATORY ACCREDITATION			
<p>The samples were analyzed in general accordance with the procedures outlined in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116 or the U.S. Environmental Protection Agency method, under AHERA, for the analysis of asbestos in building materials by polarized light microscopy. The results of each bulk sample relate only to the material tested and the results shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.</p> <p>Floor tile and other resinously bound materials, when analyzed by the EPA method, may yield false negative results because of limitations in separating closely bound fibers and in detecting fibers of small length and diameter. When a definitive result is required, Arrowhead recommends utilizing alternative methods of identification, including Transmission Electron Microscopy.</p> <p>Specific questions concerning bulk sample results shall be directed to the Laboratory Director.</p>			
Analyst :	Monte Hall, P.G.		
Laboratory Director :	Monte Hall, P.G. Florida Registration No. 1658		
Approved Signatory :			



ARROWHEAD

Technologies LLC
Statement of Qualifications



3151 San Bernadino St. Clearwater, Florida 33759
{813} 679-0720 fax {727} 475-8216

"The ground on which we stand is sacred ground. It is the blood of our ancestors."