

# EMSL Analytical, Inc.

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Attn: Sudda Grave

**Ecology & Environmental**

131 Peninsula St.

Suite B

Wheeling, WV 26003

Friday, April 12, 2002

Ref Number: GA02882

## POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method\*

RECEIVED APR 15 2002



SDMS DocID 2032703

Project: BJS

Sample	Location	Appearance	Sample Treatment	ASBESTOS		NON-ASBESTOS	
				%	Type	%	Fibrous % Non-Fibrous
1	Furnace Stack	Brown Fibrous Heterogeneous	Crushed/Dissolved	15%	Chrysotile	5%	Cellulose 80% Other
2	Hanging Pipe	White Fibrous Heterogeneous	Teased/Dissolved	50%	Chrysotile	None Detected	50% Other
3	Pipe On Ground	Tan Fibrous Heterogeneous	Teased/Dissolved	50%	Chrysotile	None Detected	50% Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also "# of Layers" refers to number of separable subsamples.

\* NY samples analyzed by ELAP 198.1 Method.

Megan Leahy  
Analyst

Approved  
Signatory

Disclaimers: PLM has been known to miss asbestos in a small percentage of samples which contain asbestos. Thus negative PLM results cannot be guaranteed. EMSL suggests that samples reported as <1% or none detected be tested with either SEM or TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL. The above test must not be used by the client to claim product endorsement by NVLAP nor any agency of the United States Government. Laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples.

Analysis performed by EMSL Atlanta (NVLAP Air and Bulk #101048-1)

AR107032



CAC2663

EMSL Rep:

House Account

Third Party Billing requires written authorization from third party

Your Company Name:

Ecology & Environmental

EMSL-Bill to:

Libby Burns

Street:

131 Pennison St

Street:

Box #:

Suite B

Box #:

City/State:

Wheeling W. Va Zip: 26063

City/State:

Zip:

Phone Results to:

Scuba Center

Fax Results to:

Name:

304 363 1275

Name:

304 363 0467

Telephone #:

Project

Name/Number:

BATS

Purchase Order #:

MATRIX

TURNAROUND

<input type="checkbox"/> Air	<input type="checkbox"/> Floor Tile	<input type="checkbox"/> Soil
<input type="checkbox"/> Bulk	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Dust
<input type="checkbox"/> Wipe	<input type="checkbox"/> Wastewater	<input type="checkbox"/> Micro-Vac

<input type="checkbox"/> 3 hrs	<input type="checkbox"/> 6 Hours	<input type="checkbox"/> Same Day or 12 Hours*	<input checked="" type="checkbox"/> 24 Hours 1 day
<input type="checkbox"/> 48 Hours 2 days	<input type="checkbox"/> 72 Hours 3 days	<input type="checkbox"/> 96 Hours 4 days	<input type="checkbox"/> 120 Hours 5 Days
<input type="checkbox"/> 144+ hours 6-10 Days			

TEM AIR 3 hours & 6 hours, please call ahead to schedule. There is a premium charge for 3-hour TAT; please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service. 12 hours (must arrive by 11:00 Am. Mon - Fri.). Please Refer to Price Quote.

<p><b>PCM - Air</b></p> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> OSHA <input type="checkbox"/> Other:	<p><b>TEM AIR</b></p> <input type="checkbox"/> AHERA <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II	<p><b>TEM WATER</b></p> <input type="checkbox"/> Wastewater <input type="checkbox"/> Drinking Water EPA 100.1 <input type="checkbox"/> Water - NY Wastewater <input type="checkbox"/> Water-NY Drinking Water
<p><b>PLM - Bulk</b></p> <input checked="" type="checkbox"/> EPA 600/R-93/116 <input type="checkbox"/> EPA Point Count <input type="checkbox"/> NY Stratified Point Count <input type="checkbox"/> PLM NOB (Gravimetric) NY 198.1 <input type="checkbox"/> Other:	<p><b>TEM BULK</b></p> <input type="checkbox"/> Drop Mount (Qualitative) <input type="checkbox"/> Chatfield <input type="checkbox"/> TEM NOB (Gravimetric) NY 198.4	<p><b>TEM MICROVAC / WIPE</b></p> <input type="checkbox"/> ASTM D 5755-95 quantitative method <p><b>XRD</b></p> <input type="checkbox"/> Asbestos <input type="checkbox"/> Silica
<p><b>SEM Air or Bulk</b></p> <input type="checkbox"/> Qualitative <input type="checkbox"/> Quantitative	<p><b>OTHER</b></p> <input type="checkbox"/>	

Client Sample # (s) \_\_\_\_\_ Total Samples #: \_\_\_\_\_

Relinquished: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

CHAIN OF CUSTODY RECORD

PROJ. NO		PROJECT NAME			
S31-0371		BJS			
SAMPLERS (Signature)				NO	
Sudha Yavez					
STA NO	DATE	TIME	COMP	GRAB	REMARKS
1	4/9/02		X		Furnace stack
2	4/9/02		X		Hanging Pipe
3	4/9/02		X		Pipe on ground
Asbestos by PLM					
Relinquished by (Signature)			Date	Time	Received by (Signature)
Sudha Yavez			4/10/02	16:30	Kurt...
Relinquished by (Signature)			Date	Time	Received by (Signature)
Relinquished by (Signature)			Date	Time	Received for Laboratory by (Signature)