

# Request for Environmental and IH Laboratory Analytical Services

**ATTENTION TO:**

Project No.:	Client No.:	Purchase Order No.:	Client Job No.:
Date Logged In:	Logged In By:		Rock Hill Quarry

Lab Use Only	Name: Andrew Gutschall	Date Results Needed	Rush Charges Authorized? <input type="checkbox"/> YES <input type="checkbox"/> NO
Report Results To	Company: Hanson Aggregates Pa, LLC	Drinking Water Sample Only	Accreditation (please list below):
	Address: 7660 Imperial Way	System ID #: N/A	
	City, State, Zip: Allentown, PA 18195	DOH Source #: N/A	
	Phone: 610-366-4819	Multiple Sources #: N/A	
	Email Results To: Andrew.Gutschall@lehighhanson.com	Sample Purpose: A <input type="checkbox"/> B <input type="checkbox"/> Other <input type="checkbox"/> N/A	

Invoice To	Name:	Chemistry Analysis Key	Matrix: <input type="checkbox"/> W=Surface Water <input type="checkbox"/> P=Plastic
	Company:	Unpres H <sub>2</sub> SO <sub>4</sub>	G=Glass
	Address:	4 °C	W=Wipe
	City, State, Zip:	HCl	A=Air (filter or tube)
	Phone:	NaOH	
	Fax:	Na <sub>2</sub> SO <sub>4</sub>	
	Email:	Other	

Special Instructions	Sample Description	Sample Date	Sample Time	Wipe Area / Air Volume	Sample Location (Please specify if NY state)	Analysis Requested	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers
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Client Sample ID	Sample Description	Sample Date	Sample Time		Wipe Area / Air Volume	Sample Location (Please specify if NY state)	Analysis Requested	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers
			Start	Stop									
11	1B Aggregate	4/18	13:30	Out	N/A							1	
12	1B Aggregate	4/18	13:35		N/A							1	
13	2A Aggregate	4/18	13:40		N/A							1	
14	2A Aggregate	4/18	13:45		N/A							1	
15	Screenings	4/18	13:50		N/A							1	
16	Screenings	4/18	13:55		N/A							1	

Chain of Custody	Relinquished By (Signature): <i>Andrew Gutschall</i>	Date: 4/18/19	Time: 1530
Chain of Custody	Relinquished By (Print Name): Andrew Gutschall	Relinquished To:	Method of Shipment:
Chain of Custody	Relinquished By (Signature): <i>Andrew Gutschall</i>	Date:	Time:
Chain of Custody	Relinquished By (Print Name):	Relinquished To:	Method of Shipment:

Pennsylvania - HQ  
350 Hochberg Road  
Monroeville, PA 15146  
724.325.1776 Phone  
724.733.1799 Fax

Washington  
Columbia Basin Analytical Laboratories  
2710 North 20th Avenue  
Pasco, WA 99301  
509.545.4989 Phone  
509.544.6010 Fax



## Attachment 1

### Sample Analysis Procedures and Methods

For obtaining a representative sample from a large bulk sample, the AASHTO procedures for reducing the sample should be used. The subsequent analyses of the submitted samples will follow a three step procedure: 1) Basic microscopic analysis to assess the presence of asbestiform mineral habitat; 2) Polarized Light Microscopy (PLM) to determine the presence and asbestos mineral type, if present; and, 3) Should positive results be indicated by PLM, follow-up Transmission Electron Microscopy (TEM) analysis will be completed to confirm the minerals present and their morphology. The techniques and methods to be employed in sample analysis are provided below:

- A geologist will inspect hand and core samples initially using a stereo binocular microscope, with magnification ranging from 10x to 60x. Using a fine steel pick (dental pick) the geologist will scrape the surface of the suspect mineralization to determine if any of the minerals display typical asbestiform habit and characteristics such as fiber bundles, splayed ends, or matted or fibrous masses.
- Further examination of the sample will then be conducted using the Polarized Light Microscope (PLM) using EPA 600/R-93/116.
- If asbestiform minerals are found, representative samples will be further analyzed by Transmission Electron Microscopy per EPA 600/R-93/116 to confirm mineral identification and morphology.
- Where appropriate, the microscopic PLM and/or TEM analyses will include a count of the asbestiform fibers, representative digital images, and measurements of the width and length dimensions of found fibers counted.

Water samples will be collected as grab samples and will be analyzed by TEM per EPA 100.2.

The samples will be analyzed using the above procedures by RJ Lee Group, which is accredited by the American Industrial Hygiene Association and is in the NIST National Voluntary Laboratory Accreditation Program for asbestos analysis. RJ Lee Group has mineralogical expertise and has vast experience to detect asbestos fibers in the natural environment (e.g. rocks, soils, water, etc.).