



# Analysis of Respirable Airborne Crystalline Silica

By X-Ray Diffraction (XRD)  
NIOSH 0600 / Modified from NIOSH Method 7500 & OSHA ID-142



**Customer:** Scientific Analytical Institute, Inc.  
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Greensboro, NC 27407

**Attn:** Nathan Durham

**Lab Order ID:** 10033056

**Analysis:** XSA

**Date Received:** 09/20/2023

**Date Reported:** 09/20/2023

**Project:** SAI XRD Demonstration Report

Sample ID	Description	Air Volume (m <sup>3</sup> )	Analyte	Analyte Detected	LOD (µg Analyte)	µg Analyte	Concentration (µg/m <sup>3</sup> )
Lab Sample ID	Lab Notes						
ABC-01  10033056_0001	Area 1	0.816	Alpha Quartz	BDL	5	<5.0	<6.1
			Cristobalite	BDL	5	<5.0	<6.1
			Tridymite	BDL	10	<10.	<12
			<b>Total Silica</b>	N/A	N/A	N/A	BDL
ABC-02  10033056_0002	Area 2	0.816	Alpha Quartz	Detected	5	87	110
			Cristobalite	BDL	5	<5.0	<6.1
			Tridymite	BDL	10	<10.	<12
			<b>Total Silica</b>	N/A	N/A	N/A	110
ABC-03  10033056_0003	Area 3	0.816	Alpha Quartz	Detected	5	78	96
			Cristobalite	BDL	5	<5.0	<6.1
			Tridymite	BDL	10	<10.	<12
			<b>Total Silica</b>	N/A	N/A	N/A	96

Disclaimer: Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA IHPAT program. IHPAT Laboratory ID: 173190. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request. Time-weighted average (TWA) calculations are based on customer supplied data and valid only for samples included in the specified TWA group. Unless indicated, areas and volumes were provided by the customer.

BDL: Below Detectable Limit

Yanelis Delgado (3)

Analyst

Approved Signatory

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