



ALS Salt Lake City, UT Silica

Industrial Hygiene

- TO-14, 15
- Beryllium
- Diesel Particulates
- Pesticides and Herbicides Scans
- TO-17
- Silica
- Methamphetamine
- GC/MS Screens
- Metals Panels
- Aldehydes and Amines
- Antineoplastic / Chemotherapy Drugs

Environmental

- Perchlorate (6850)
- White Phosphorus (7580)
- NDMA
- Explosives/Nitroaromatics
- Vapor Intrusion
- Chemical Agent Breakdown Products by LC/MS
- SW-846 Methods
- EPA CLP
- DoD
- SEDD (Staged Electronic Data Deliverable)

Microbiology/Mycology

- Non-Viable Fungal Spore Analysis
- Viable Fungal and Bacterial Analysis
- Microbial Identification
- Endotoxins/Mycotoxins
- Coliforms and E. coli 0157:H7

Dietary Supplements

- Vitamin Analysis
- Pesticides Screens
- Minerals Analysis
- Heavy Metals

**RIGHT SOLUTIONS
RIGHT PARTNER**

Problem: Dusts containing crystalline forms of silica (quartz, cristobalite and tridymite) may cause silicosis. Interferences occur in IR and visible spectrometry methods to give false values.

Solution: ALS Laboratory Group offers analysis for Silica using NIOSH Method 7500 by X-Ray Diffraction.

NIOSH Method 7500 is able to speciate the different crystalline forms of free silica and differentiate from most interferences in bulk or air filter samples.

- Amorphous silica does not interfere
- Secondary peaks may allow quantitation if interferences are present
- Silicate interferences may be removed with acid pre-treatment
- Total weight and silica analyses may be done on same filter

Limit of Detection:	Filter:	Bulks:
	Quartz—10 µg	0.8%
	Cristobalite—20 µg	1%
Sampling Requirements:	Tridymite—20 µg	1%
	Volume: Up to 1000 L	
	Flow Rate: Prescribed by type of cyclone	

ALS Salt Lake City · 960 West LeVoy Drive · Salt Lake City, UT 84123
Toll Free: +1 800 356 9135 · Phone: +1 801 266 7700 · Fax: +1 801 268 9992



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