Guidance for Lead and Copper - Approved Analytical Methods and Reporting Requirements

Lead and Copper

The lead (Pb) Practical Quantitation Limit (PQL) is 0.005 mg/L and the copper (Cu) PQL is 0.050 mg/L [40 CFR 141.89(a) (1) (ii)]. For compliance with the federal Safe Drinking Water Lead and Copper Rule, the Division of Water Supply and Geoscience (DWSG) requires that lead and copper results be submitted using reporting limits no higher than their respective regulatory PQLs. Lower reporting limits are allowed.

<u>Lead</u>

The approved US Environmental Protection Agency methods for lead are categorized below by methodology and the source of the approved method. The most current listing of EPA approved methods for lead analysis can be accessed here in sections 141.23 (k)(1) and Subpart C Appendix A of 40 CFR 141.

Lead	EPA	Standard Methods	ASTM	Other
Methodology				
Atomic		3113 B (18th, 19th)	D3559-96, 03 D	
Absorption		3113 B-99, (SM online)		
Graphite Furnace				
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ICP Mass	200.8			
Spectrometry				
Atomic	200.9			
Absorption,				
Platform				
Differential Pulse				Method 1001
Anodic Stripping				
Voltammetry				

Copper

The approved EPA methods for copper are categorized below by methodology and the source of the approved method. The most current listing of EPA approved methods for lead analysis can be accessed <u>here</u> in sections 141.23 (k)(1) and Subpart C Appendix A of 40 CFR 141.

Copper	EPA	Standard Methods	ASTM	Other
Methodology				
Atomic Absorption;		3113 B (18th, 19th editions)	D1688-95, 02, C	
Graphite Furnace		3113B-99 (SM online)		
Atomic Absorption;		3111 B (18th 19th editions)	D 1688-95, 02, A	
Direct Aspiration		3111 B-99 (SM online)		
Inductively Coupled	200.7	3120 B (18th, 19th)		
Plasma		editions)		
		3120B-99 (SM online)		
ICP- Mass	200.8			
Spectrometry				
Atomic Absorption	200.9			
Platform				

Water Quality Parameters

The most current list of approved EPA methods for water quality parameters (i.e. pH, alkalinity, orthophosphate, silica, calcium, conductivity, temperature) can be accessed here in sections 141.23 (k)(1) and Subpart C Appendix A of 40 CFR 141.