



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.

Lead

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 Methodology	EPA	Standard Methods	ASTM	Other
Atomic Absorption Graphite Furnace		3113 B (18 th , 19 th 21 st , 22 nd editions) 3113 B-99, 04, 10 (SM online)	D3559-96, 03, 08 D	
ICP Mass Spectrometry	200.8			
Atomic Absorption, Platform	200.9			
Differential Pulse Anodic Stripping Voltammetry				Method 1001
Axially Viewed ICP- atomic emission spectrometry	200.5, Revision 4.2			



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 [here](#) in sections 141.23 (k)(1) and Subpart C Appendix A of 40 CFR 141.

Copper Methodology	EPA	Standard Methods	ASTM	Other
Atomic Absorption; Graphite Furnace		3113 B (18 th , 19 th , 21 st , 22 nd editions) 3113B-99, 04,10 online	D1688-95, 02, 07, 12 C	
Atomic Absorption; Direct Aspiration		3111 B (18 th 19 th , 21 st , 22 nd editions) 3111 B-99 (online)	D 1688-95, 02, 07, 12 A	
Inductively Coupled Plasma	200.7	3120 B (18 th , 19 th , 20 th , 21 st , 22 nd editions) 3120B-99 (online)		
ICP- Mass Spectrometry	200.8			
Atomic Absorption Platform	200.9			
Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES)	200.5, Revision 4.2			
Colorimetric				Hach Method 8026 Hach Method 10272

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.