

Toxic & Essential Elements; Hair

TOXIC METALS						
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE		
				68 th	95 th	
Aluminum	(Al)	5.6	< 7.0			
Antimony	(Sb)	< 0.01	< 0.066			
Arsenic	(As)	0.021	< 0.080			
Barium	(Ba)	0.12	< 1.0			
Beryllium	(Be)	< 0.01	< 0.020			
Bismuth	(Bi)	0.004	< 2.0			
Cadmium	(Cd)	< 0.009	< 0.065			
Lead	(Pb)	0.35	< 0.80			
Mercury	(Hg)	< 0.03	< 0.80			
Platinum	(Pt)	< 0.003	< 0.005			
Thallium	(Tl)	< 0.001	< 0.002			
Thorium	(Th)	< 0.001	< 0.002			
Uranium	(U)	0.002	< 0.060			
Nickel	(Ni)	0.10	< 0.20			
Silver	(Ag)	0.02	< 0.08			
Tin	(Sn)	0.08	< 0.30			
Titanium	(Ti)	0.29	< 0.60			
Total Toxic Representation						

ESSENTIAL AND OTHER ELEMENTS								
		RESULT	REFERENCE	PERCENTILE				
		µg/g	INTERVAL	2.5 th	16 th	50 th	84 th	97.5 th
Calcium	(Ca)	252	200– 750					
Magnesium	(Mg)	19	25– 75					
Sodium	(Na)	21	20– 180					
Potassium	(K)	24	9– 80					
Copper	(Cu)	9.6	11– 30					
Zinc	(Zn)	170	130– 200					
Manganese	(Mn)	0.08	0.08– 0.50					
Chromium	(Cr)	0.37	0.40– 0.70					
Vanadium	(V)	0.019	0.018– 0.065					
Molybdenum	(Mo)	0.024	0.025– 0.060					
Boron	(B)	0.38	0.40– 3.0					
Iodine	(I)	0.37	0.25– 1.8					
Lithium	(Li)	< 0.004	0.007– 0.020					
Phosphorus	(P)	163	150– 220					
Selenium	(Se)	0.48	0.70– 1.2					
Strontium	(Sr)	0.28	0.30– 3.5					
Sulfur	(S)	46800	44000– 50000					
Cobalt	(Co)	0.021	0.004– 0.020					
Iron	(Fe)	5.1	7.0– 16					
Germanium	(Ge)	0.032	0.030– 0.040					
Rubidium	(Rb)	0.027	0.011– 0.12					
Zirconium	(Zr)	0.036	0.020– 0.44					

SPECIMEN DATA			RATIOS		
COMMENTS:			ELEMENTS	RATIOS	RANGE
Date Collected: 06/20/2019			Ca/Mg	13.3	4- 30
Date Received: 07/01/2019			Ca/P	1.55	0.8- 8
Date Reported: 07/05/2019			Na/K	0.875	0.5- 10
Methodology: ICP/MS			Zn/Cu	17.7	4- 20
Sample Size: 0.198 g			Zn/Cd	> 999	> 800
Sample Type: Head					
Hair Color: Brown					
Treatment:					
Shampoo:					