



SEX: Female
AGE: 44

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	5.7	< 7.0	
Antimony (Sb)	0.010	< 0.050	
Arsenic (As)	0.056	< 0.060	
Barium (Ba)	1.8	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	2.4	< 2.0	
Cadmium (Cd)	0.024	< 0.050	
Lead (Pb)	0.18	< 0.60	
Mercury (Hg)	2.2	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.35	< 0.060	
Nickel (Ni)	0.23	< 0.30	
Silver (Ag)	0.03	< 0.15	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.55	< 0.70	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 th 16 th 50 th 84 th 97.5 th		
Calcium (Ca)	1920	300- 1200			
Magnesium (Mg)	140	35- 120			
Sodium (Na)	47	20- 250			
Potassium (K)	12	8- 75			
Copper (Cu)	41	11- 37			
Zinc (Zn)	290	140- 220			
Manganese (Mn)	0.22	0.08- 0.60			
Chromium (Cr)	0.37	0.40- 0.65			
Vanadium (V)	0.091	0.018- 0.065			
Molybdenum (Mo)	0.045	0.020- 0.050			
Boron (B)	0.88	0.25- 1.5			
Iodine (I)	19	0.25- 1.8			
Lithium (Li)	0.010	0.007- 0.020			
Phosphorus (P)	211	150- 220			
Selenium (Se)	0.76	0.55- 1.1			
Strontium (Sr)	7.7	0.50- 7.6			
Sulfur (S)	50700	44000- 50000			
Cobalt (Co)	0.019	0.005- 0.040			
Iron (Fe)	15	7.0- 16			
Germanium (Ge)	0.032	0.030- 0.040			
Rubidium (Rb)	0.013	0.007- 0.096			
Zirconium (Zr)	1.1	0.020- 0.42			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 10/19/2014		Ca/Mg	13.7
Date Received: 10/24/2014		Ca/P	9.1
Date Completed: 10/25/2014		Na/K	3.92
Methodology: ICP/MS		Zn/Cu	7.07
Sample Size: 0.102 g		Zn/Cd	> 999
Sample Type: Head			
Hair Color: Brown			
Treatment:			
Shampoo: Shea Moisture			
		RANGE	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800