



SEX: Male
AGE: 41

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	16	< 7.0	
Antimony (Sb)	0.015	< 0.066	
Arsenic (As)	0.045	< 0.080	
Barium (Ba)	0.12	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.035	< 2.0	
Cadmium (Cd)	0.035	< 0.065	
Lead (Pb)	6.0	< 0.80	
Mercury (Hg)	1.0	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.014	< 0.060	
Nickel (Ni)	0.09	< 0.20	
Silver (Ag)	0.02	< 0.08	
Tin (Sn)	0.09	< 0.30	
Titanium (Ti)	0.35	< 0.60	
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)	186	200- 750			
Magnesium (Mg)	15	25- 75			
Sodium (Na)	56	20- 180			
Potassium (K)	40	9- 80			
Copper (Cu)	6.7	11- 30			
Zinc (Zn)	170	130- 200			
Manganese (Mn)	0.10	0.08- 0.50			
Chromium (Cr)	0.49	0.40- 0.70			
Vanadium (V)	0.030	0.018- 0.065			
Molybdenum (Mo)	0.023	0.025- 0.060			
Boron (B)	0.75	0.40- 3.0			
Iodine (I)	0.49	0.25- 1.8			
Lithium (Li)	0.005	0.007- 0.020			
Phosphorus (P)	161	150- 220			
Selenium (Se)	0.61	0.70- 1.2			
Strontium (Sr)	0.31	0.30- 3.5			
Sulfur (S)	45700	44000- 50000			
Cobalt (Co)	0.005	0.004- 0.020			
Iron (Fe)	6.5	7.0- 16			
Germanium (Ge)	0.036	0.030- 0.040			
Rubidium (Rb)	0.050	0.011- 0.12			
Zirconium (Zr)	0.021	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 03/28/2014		Ca/Mg	12.4
Date Received: 04/21/2014		Ca/P	1.16
Date Completed: 04/22/2014		Na/K	1.4
Methodology: ICP/MS		Zn/Cu	25.4
Sample Size: 0.198 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Brown	Treatment:		
Shampoo:			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	