



SEX: Male
AGE: 34

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.6	< 7.0	
Antimony (Sb)	0.020	< 0.066	
Arsenic (As)	0.031	< 0.080	
Barium (Ba)	0.04	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.003	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.09	< 0.80	
Mercury (Hg)	0.82	< 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)	0.03	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	< 0.02	< 0.30	
Titanium (Ti)	0.36	< 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)	234	200- 750	
Magnesium (Mg)	17	25- 75	
Sodium (Na)	7	20- 180	
Potassium (K)	< 3	9- 80	
Copper (Cu)	12	11- 30	
Zinc (Zn)	210	130- 200	
Manganese (Mn)	0.05	0.08- 0.50	
Chromium (Cr)	0.51	0.40- 0.70	
Vanadium (V)	0.024	0.018- 0.065	
Molybdenum (Mo)	0.026	0.025- 0.060	
Boron (B)	< 0.07	0.40- 3.0	
Iodine (I)	0.28	0.25- 1.8	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	183	150- 220	
Selenium (Se)	1.0	0.70- 1.2	
Strontium (Sr)	0.10	0.30- 3.5	
Sulfur (S)	52200	44000- 50000	
Cobalt (Co)	0.004	0.004- 0.020	
Iron (Fe)	9.2	7.0- 16	
Germanium (Ge)	0.030	0.030- 0.040	
Rubidium (Rb)	0.003	0.011- 0.12	
Zirconium (Zr)	0.092	0.020- 0.44	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 06/22/2015		Ca/Mg	13.8
Date Received: 06/26/2015		Ca/P	1.28
Date Completed: 06/29/2015		Na/K	2.33
Methodology: ICP/MS		Zn/Cu	17.5
Sample Size: 0.198 g	Sample Type: Head	Zn/Cd	> 999
Hair Color:	Treatment:		
Shampoo:			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	