

Name: _____ Age: _____

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.9	< 7.0	
Antimony (Sb)	0.013	< 0.050	
Arsenic (As)	0.024	< 0.060	
Barium (Ba)	0.68	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.008	< 2.0	
Cadmium (Cd)	< 0.009	< 0.050	
Lead (Pb)	0.09	< 0.60	
Mercury (Hg)	0.41	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.003	< 0.060	
Nickel (Ni)	0.04	< 0.30	
Silver (Ag)	0.01	< 0.15	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.24	< 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)	453	300- 1200	
Magnesium (Mg)	120	35- 120	
Sodium (Na)	84	20- 250	
Potassium (K)	190	8- 75	
Copper (Cu)	12	11- 37	
Zinc (Zn)	190	140- 220	
Manganese (Mn)	0.13	0.08- 0.60	
Chromium (Cr)	0.31	0.40- 0.65	
Vanadium (V)	0.012	0.018- 0.065	
Molybdenum (Mo)	0.027	0.020- 0.050	
Boron (B)	7.0	0.25- 1.5	
Iodine (I)	0.13	0.25- 1.8	
Lithium (Li)	0.006	0.007- 0.020	
Phosphorus (P)	157	150- 220	
Selenium (Se)	0.46	0.55- 1.1	
Strontium (Sr)	4.2	0.50- 7.6	
Sulfur (S)	45300	44000- 50000	
Cobalt (Co)	0.005	0.005- 0.040	
Iron (Fe)	6.1	7.0- 16	
Germanium (Ge)	0.023	0.030- 0.040	
Rubidium (Rb)	0.043	0.007- 0.096	
Zirconium (Zr)	< 0.007	0.020- 0.42	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 9/23/2012	Sample Size: 0.195 g	Ca/Mg	3.78
Date Received: 10/9/2012	Sample Type: Head	Ca/P	2.89
Date Completed: 10/11/2012	Hair Color: Black	Na/K	0.442
Methodology: ICP/MS	Treatment:	Zn/Cu	15.8
	Shampoo: 7 Oils Alepp	Zn/Cd	> 999
		RANGE	
		4- 30	
		1- 12	
		0.5- 10	
		4- 20	
		> 800	