



PATIENT: Number 885
 Female
 AGE: 39

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.3	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.012	< 0.060	
Barium (Ba)	2.0	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.012	< 2.0	
Cadmium (Cd)	0.011	< 0.050	
Lead (Pb)	0.22	< 0.60	
Mercury (Hg)	0.69	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.13	< 0.060	
Nickel (Ni)	0.12	< 0.30	
Silver (Ag)	0.04	< 0.15	
Tin (Sn)	0.75	< 0.30	
Titanium (Ti)	0.31	< 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)	1950	300- 1200	
Magnesium (Mg)	550	35- 120	
Sodium (Na)	17	20- 250	
Potassium (K)	5	8- 75	
Copper (Cu)	33	11- 37	
Zinc (Zn)	370	140- 220	
Manganese (Mn)	0.39	0.08- 0.60	
Chromium (Cr)	0.34	0.40- 0.65	
Vanadium (V)	0.14	0.018- 0.065	
Molybdenum (Mo)	0.046	0.020- 0.050	
Boron (B)	0.22	0.25- 1.5	
Iodine (I)	0.30	0.25- 1.8	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	134	150- 220	
Selenium (Se)	0.74	0.55- 1.1	
Strontium (Sr)	5.4	0.50- 7.6	
Sulfur (S)	46300	44000- 50000	
Cobalt (Co)	0.069	0.005- 0.040	
Iron (Fe)	8.5	7.0- 16	
Germanium (Ge)	0.026	0.030- 0.040	
Rubidium (Rb)	0.006	0.007- 0.096	
Zirconium (Zr)	0.021	0.020- 0.42	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 11/19/2013	Sample Size: 0.202 g	Ca/Mg	3.55
Date Received: 11/23/2013	Sample Type: Head	Ca/P	14.6
Date Completed: 11/27/2013	Hair Color: Brown	Na/K	3.4
Methodology: ICP/MS	Treatment:	Zn/Cu	11.2
	Shampoo: Nature Made Jojoba	Zn/Cd	> 999
		RANGE	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800