



SEX: Male
AGE: 36

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.0	< 7.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.059	< 0.080	
Barium (Ba)	< 0.04	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.026	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.24	< 0.80	
Mercury (Hg)	1.2	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.005	< 0.060	
Nickel (Ni)	0.06	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	< 0.02	< 0.30	
Titanium (Ti)	0.34	< 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)	468	200- 750	
Magnesium (Mg)	33	25- 75	
Sodium (Na)	15	20- 180	
Potassium (K)	6	9- 80	
Copper (Cu)	11	11- 30	
Zinc (Zn)	230	130- 200	
Manganese (Mn)	0.08	0.08- 0.50	
Chromium (Cr)	0.59	0.40- 0.70	
Vanadium (V)	0.023	0.018- 0.065	
Molybdenum (Mo)	0.11	0.025- 0.060	
Boron (B)	0.54	0.40- 3.0	
Iodine (I)	0.09	0.25- 1.8	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	235	150- 220	
Selenium (Se)	1.3	0.70- 1.2	
Strontium (Sr)	0.17	0.30- 3.5	
Sulfur (S)	47700	44000- 50000	
Cobalt (Co)	0.003	0.004- 0.020	
Iron (Fe)	12	7.0- 16	
Germanium (Ge)	0.034	0.030- 0.040	
Rubidium (Rb)	0.007	0.011- 0.12	
Zirconium (Zr)	0.073	0.020- 0.44	

COMMENTS:	SPECIMEN DATA		RATIOS	
	ELEMENTS	RATIOS	RANGE	
Date Collected: 05/12/2014	Sample Size: 0.197 g	Ca/Mg	14.2	4- 30
Date Received: 05/27/2014	Sample Type: Head	Ca/P	1.99	0.8- 8
Date Completed: 05/29/2014	Hair Color: Brown	Na/K	2.5	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	20.9	4- 20
	Shampoo:	Zn/Cd	> 999	> 800



SEX: Male
AGE: 39

TOXIC METALS				
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)		1.0	< 7.0	
Antimony (Sb)		< 0.01	< 0.066	
Arsenic (As)		0.056	< 0.080	
Barium (Ba)		0.04	< 1.0	
Beryllium (Be)		< 0.01	< 0.020	
Bismuth (Bi)		< 0.002	< 2.0	
Cadmium (Cd)		< 0.009	< 0.065	
Lead (Pb)		0.29	< 0.80	
Mercury (Hg)		0.11	< 0.80	
Platinum (Pt)		< 0.003	< 0.005	
Thallium (Tl)		< 0.001	< 0.002	
Thorium (Th)		< 0.001	< 0.002	
Uranium (U)		0.004	< 0.060	
Nickel (Ni)		0.03	< 0.20	
Silver (Ag)		0.02	< 0.08	
Tin (Sn)		0.03	< 0.30	
Titanium (Ti)		0.28	< 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)		458	200- 750	
Magnesium (Mg)		32	25- 75	
Sodium (Na)		13	20- 180	
Potassium (K)		< 3	9- 80	
Copper (Cu)		12	11- 30	
Zinc (Zn)		250	130- 200	
Manganese (Mn)		0.05	0.08- 0.50	
Chromium (Cr)		0.43	0.40- 0.70	
Vanadium (V)		0.030	0.018- 0.065	
Molybdenum (Mo)		0.059	0.025- 0.060	
Boron (B)		0.37	0.40- 3.0	
Iodine (I)		0.19	0.25- 1.8	
Lithium (Li)		< 0.004	0.007- 0.020	
Phosphorus (P)		188	150- 220	
Selenium (Se)		0.82	0.70- 1.2	
Strontium (Sr)		0.20	0.30- 3.5	
Sulfur (S)		47400	44000- 50000	
Cobalt (Co)		< 0.002	0.004- 0.020	
Iron (Fe)		4.3	7.0- 16	
Germanium (Ge)		0.036	0.030- 0.040	
Rubidium (Rb)		0.006	0.011- 0.12	
Zirconium (Zr)		0.060	0.020- 0.44	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 05/14/2017		Ca/Mg	14.3
Date Received: 05/30/2017		Ca/P	2.44
Date Completed: 05/31/2017		Na/K	4.33
Methodology: ICP/MS		Zn/Cu	20.8
Sample Size: 0.198 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Brown	Treatment:		
	Shampoo: Basic		
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	