

HAIR ELEMENTS



PATIENT: No 17
SEX: Female
AGE: 45

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	7.6	< 7.0		
Antimony	0.069	< 0.050		
Arsenic	0.013	< 0.060		
Beryllium	< 0.01	< 0.020		
Bismuth	0.021	< 0.10		
Cadmium	0.047	< 0.10		
Lead	0.74	< 1.0		
Mercury	4.9	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.006	< 0.060		
Nickel	0.37	< 0.40		
Silver	0.23	< 0.15		
Tin	0.18	< 0.30		
Titanium	0.65	< 1.0		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS							
ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Calcium	1450	300- 1200					
Magnesium	47	35- 120					
Sodium	45	12- 90					
Potassium	14	8- 38					
Copper	15	12- 35					
Zinc	180	140- 220					
Manganese	0.30	0.15- 0.65					
Chromium	0.34	0.20- 0.40					
Vanadium	0.015	0.018- 0.065					
Molybdenum	0.020	0.028- 0.056					
Boron	0.20	0.30- 2.0					
Iodine	2.8	0.25- 1.3					
Lithium	0.011	0.007- 0.023					
Phosphorus	189	160- 250					
Selenium	0.92	0.95- 1.7					
Strontium	3.7	0.50- 7.6					
Sulfur	47700	44500- 52000					
Barium	8.8	0.26- 3.0					
Cobalt	0.012	0.013- 0.050					
Iron	10	5.4- 14					
Germanium	0.032	0.045- 0.065					
Rubidium	0.014	0.007- 0.096					
Zirconium	0.13	0.020- 0.42					

SPECIMEN DATA				RATIOS		
COMMENTS:				ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected: 9/28/2006	Sample Size: 0.197 g			Ca/Mg	30.9	4- 30
Date Received: 10/2/2006	Sample Type: Head			Ca/P	7.67	1- 12
Date Completed: 10/5/2006	Hair Color: Blond			Na/K	3.21	0.5- 10
	Treatment:			Zn/Cu	12	4- 20
Methodology: ICP-MS	Shampoo: Revlon			Zn/Cd	> 999	> 800

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