

HAIR ELEMENTS



Linda JT

POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT µg/g	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	6.6	< 7.0		
Antimony	0.011	< 0.050		
Arsenic	0.043	< 0.060		
Beryllium	< 0.01	< 0.020		
Bismuth	0.002	< 0.10		
Cadmium	0.038	< 0.10		
Lead	0.06	< 1.0		
Mercury	0.36	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.086	< 0.060		
Nickel	0.15	< 0.40		
Silver	0.03	< 0.15		
Tin	0.10	< 0.30		
Titanium	0.80	< 1.0		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS

ELEMENTS	RESULT µg/g	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Calcium	1350	300- 1200					
Magnesium	370	35- 120					
Sodium	20	12- 90					
Potassium	10	8- 38					
Copper	12	12- 35					
Zinc	170	140- 220					
Manganese	0.11	0.15- 0.65					
Chromium	0.29	0.20- 0.40					
Vanadium	0.015	0.018- 0.065					
Molybdenum	0.027	0.028- 0.056					
Boron	0.09	0.30- 2.0					
Iodine	0.16	0.25- 1.3					
Lithium	0.011	0.007- 0.023					
Phosphorus	132	160- 250					
Selenium	1.0	0.95- 1.7					
Strontium	4.6	0.50- 7.6					
Sulfur	47900	44500- 52000					
Barium	1.5	0.26- 3.0					
Cobalt	0.021	0.013- 0.050					
Iron	5.0	5.4- 14					
Germanium	0.035	0.045- 0.065					
Rubidium	0.004	0.007- 0.096					
Zirconium	1.6	0.020- 0.42					

SPECIMEN DATA

RATIOS

COMMENTS:

Date Collected: 1/14/2005
Date Received: 1/24/2005
Date Completed: 1/27/2005

Sample Size: 0.202 g
Sample Type: Head
Hair Color: Brown
Treatment:
Shampoo: Pears

Methodology: ICP-MS

V06.99

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	3.65	4- 30
Ca/P	10.2	1- 12
Na/K	2	0.5- 10
Zn/Cu	14.2	4- 20
Zn/Cd	> 999	> 800