

HAIR ELEMENTS



PATIENT: Number 100
SEX: Female
AGE: 58
 Location: Cape Town, South Africa

POTENTIALLY TOXIC ELEMENTS					
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE		
			68 th	95 th	
Aluminum	11	< 7.0			
Antimony	1.4	< 0.050			
Arsenic	0.059	< 0.060			
Beryllium	< 0.01	< 0.020			
Bismuth	0.61	< 2.0			
Cadmium	1.1	< 0.10			
Lead	60	< 1.0			
Mercury	5.4	< 1.1			
Platinum	< 0.003	< 0.005			
Thallium	< 0.001	< 0.010			
Thorium	< 0.001	< 0.005			
Uranium	0.005	< 0.060			
Nickel	0.57	< 0.40			
Silver	0.80	< 0.15			
Tin	4.4	< 0.30			
Titanium	0.59	< 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	1370	300- 1200					
Magnesium	110	35- 120					
Sodium	530	12- 90					
Potassium	110	8- 38					
Copper	71	12- 35					
Zinc	240	140- 220					
Manganese	0.48	0.15- 0.65					
Chromium	0.50	0.20- 0.40					
Vanadium	0.073	0.018- 0.065					
Molybdenum	0.023	0.028- 0.056					
Boron	5.9	0.30- 2.0					
Iodine	0.19	0.25- 1.3					
Lithium	0.010	0.007- 0.023					
Phosphorus	181	160- 250					
Selenium	0.92	0.95- 1.7					
Strontium	3.2	0.50- 7.6					
Sulfur	47100	44500- 52000					
Barium	1.0	0.26- 3.0					
Cobalt	0.053	0.013- 0.050					
Iron	22	5.4- 14					
Germanium	0.037	0.045- 0.065					
Rubidium	0.12	0.007- 0.096					
Zirconium	0.066	0.020- 0.42					

SPECIMEN DATA				RATIOS		
COMMENTS:				ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected: 6/7/2007	Sample Size: 0.199 g			Ca/Mg	12.5	4- 30
Date Received: 7/3/2007	Sample Type: Head			Ca/P	7.57	1- 12
Date Completed: 7/17/2007	Hair Color: Brown			Na/K	4.82	0.5- 10
	Treatment:			Zn/Cu	3.38	4- 20
Methodology: ICP-MS	Shampoo: Organic Shampoo			Zn/Cd	218	> 800
				V06.99		