

HAIR EL



PATIENT: Number 127
SEX: Female
AGE: 45

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	1.3	< 7.0		
Antimony	0.013	< 0.050		
Arsenic	0.051	< 0.060		
Beryllium	< 0.01	< 0.020		
Bismuth	0.014	< 2.0		
Cadmium	0.022	< 0.10		
Lead	0.35	< 1.0		
Mercury	0.31	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	< 0.001	< 0.060		
Nickel	0.08	< 0.40		
Silver	0.01	< 0.15		
Tin	0.03	< 0.30		
Titanium	0.36	< 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	438	300- 1200					
Magnesium	49	35- 120					
Sodium	21	12- 90					
Potassium	7	8- 38					
Copper	47	12- 35					
Zinc	190	140- 220					
Manganese	0.25	0.15- 0.65					
Chromium	0.61	0.20- 0.40					
Vanadium	0.048	0.018- 0.065					
Molybdenum	0.030	0.028- 0.056					
Boron	1.2	0.30- 2.0					
Iodine	0.59	0.25- 1.3					
Lithium	0.005	0.007- 0.023					
Phosphorus	192	160- 250					
Selenium	0.89	0.95- 1.7					
Strontium	1.6	0.50- 7.6					
Sulfur	50200	44500- 52000					
Barium	0.53	0.26- 3.0					
Cobalt	0.003	0.013- 0.050					
Iron	12	5.4- 14					
Germanium	0.032	0.045- 0.065					
Rubidium	0.008	0.007- 0.096					
Zirconium	0.027	0.020- 0.42					

SPECIMEN DATA				RATIOS		
COMMENTS:				ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected: 10/7/2007	Sample Size: 0.203 g			Ca/Mg	8.94	4- 30
Date Received: 10/10/2007	Sample Type: Head			Ca/P	2.28	1- 12
Date Completed: 10/15/2007	Hair Color: Black			Na/K	3	0.5- 10
	Treatment:			Zn/Cu	4.04	4- 20
Methodology: ICP-MS	Shampoo: Aussie Moist			Zn/Cd	> 999	> 800