

HAIR ELEMENTS



PATIENT: Number 91
SEX: Female
AGE: 37

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	8.1	< 7.0		
Antimony	0.012	< 0.050		
Arsenic	0.022	< 0.060		
Beryllium	< 0.01	< 0.020		
Bismuth	11	< 2.0		
Cadmium	0.034	< 0.10		
Lead	< 0.01	< 1.0		
Mercury	0.04	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.023	< 0.060		
Nickel	0.08	< 0.40		
Silver	3.8	< 0.15		
Tin	0.11	< 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	1350	300- 1200					
Magnesium	220	35- 120					
Sodium	22	12- 90					
Potassium	9	8- 38					
Copper	14	12- 35					
Zinc	210	140- 220					
Manganese	0.05	0.15- 0.65					
Chromium	0.42	0.20- 0.40					
Vanadium	0.13	0.018- 0.065					
Molybdenum	0.033	0.028- 0.056					
Boron	1.2	0.30- 2.0					
Iodine	1.4	0.25- 1.3					
Lithium	< 0.004	0.007- 0.023					
Phosphorus	143	160- 250					
Selenium	1.1	0.95- 1.7					
Strontium	6.3	0.50- 7.6					
Sulfur	44300	44500- 52000					
Barium	7.2	0.26- 3.0					
Cobalt	0.006	0.013- 0.050					
Iron	5.0	5.4- 14					
Germanium	0.040	0.045- 0.065					
Rubidium	0.005	0.007- 0.096					
Zirconium	0.089	0.020- 0.42					

SPECIMEN DATA				RATIOS		
COMMENTS:				ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected: 5/2/2007	Sample Size: 0.2 g	Date Received: 5/5/2007	Sample Type: Head	Ca/Mg	6.14	4- 30
Date Completed: 5/9/2007	Hair Color: Brown	Treatment: Dye	Shampoo: Auabn Organics	Ca/P	9.44	1- 12
Methodology: ICP-MS				Na/K	2.44	0.5- 10
				Zn/Cu	15	4- 20
				Zn/Cd	> 999	> 800