

HAIR ELEMENTS



PATIENT: Number 178
SEX: Male
AGE: 1

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	9.5	< 8.0		
Antimony	0.052	< 0.066		
Arsenic	0.036	< 0.080		
Beryllium	< 0.01	< 0.020		
Bismuth	0.20	< 2.0		
Cadmium	0.013	< 0.15		
Lead	0.91	< 1.0		
Mercury	< 0.03	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	0.001	< 0.005		
Uranium	0.12	< 0.060		
Nickel	0.10	< 0.40		
Silver	0.02	< 0.20		
Tin	5.7	< 0.30		
Titanium	0.67	< 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	287	125- 370					
Magnesium	44	12- 30					
Sodium	49	12- 90					
Potassium	25	12- 40					
Copper	22	8.0- 16					
Zinc	50	100- 190					
Manganese	0.08	0.20- 0.55					
Chromium	0.34	0.26- 0.50					
Vanadium	0.073	0.030- 0.10					
Molybdenum	0.092	0.050- 0.13					
Boron	2.3	0.60- 4.0					
Iodine	2.9	0.25- 1.3					
Lithium	0.016	0.007- 0.023					
Phosphorus	181	160- 250					
Selenium	0.71	0.95- 1.7					
Strontium	0.71	0.16- 1.0					
Sulfur	48100	45500- 53000					
Barium	0.41	0.16- 0.80					
Cobalt	0.006	0.013- 0.035					
Iron	12	8.0- 19					
Germanium	0.026	0.045- 0.065					
Rubidium	0.042	0.016- 0.18					
Zirconium	0.24	0.040- 1.0					

SPECIMEN DATA			RATIOS		
COMMENTS:			ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected:	Sample Size:	0.197 g	Ca/Mg	6.52	4- 30
Date Received: 8/28/2007	Sample Type:	Head	Ca/P	1.59	0.8- 8
Date Completed: 9/4/2007	Hair Color:		Na/K	1.96	0.5- 10
Methodology: ICP-MS	Treatment:		Zn/Cu	2.27	4- 20
	Shampoo:		Zn/Cd	> 999	> 800

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