

HAIR ELEMENTS



PATIENT No: 39
SEX: Female
AGE: 36

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	13	< 7.0		
Antimony	0.019	< 0.050		
Arsenic	0.024	< 0.060		
Beryllium	< 0.01	< 0.020		
Bismuth	0.012	< 0.10		
Cadmium	< 0.009	< 0.10		
Lead	0.26	< 1.0		
Mercury	0.29	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.004	< 0.060		
Nickel	0.13	< 0.40		
Silver	0.52	< 0.15		
Tin	0.55	< 0.30		
Titanium	0.56	< 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
Calcium	696	300- 1200				
Magnesium	46	35- 120				
Sodium	90	12- 90				
Potassium	120	8- 38				
Copper	11	12- 35				
Zinc	170	140- 220				
Manganese	0.15	0.15- 0.65				
Chromium	0.26	0.20- 0.40				
Vanadium	0.020	0.018- 0.065				
Molybdenum	0.028	0.028- 0.056				
Boron	0.30	0.30- 2.0				
Iodine	0.41	0.25- 1.3				
Lithium	0.010	0.007- 0.023				
Phosphorus	202	160- 250				
Selenium	0.79	0.95- 1.7				
Strontium	1.9	0.50- 7.6				
Sulfur	47400	44500- 52000				
Barium	0.56	0.26- 3.0				
Cobalt	0.006	0.013- 0.050				
Iron	5.6	5.4- 14				
Germanium	0.032	0.045- 0.065				
Rubidium	0.092	0.007- 0.096				
Zirconium	0.063	0.020- 0.42				

SPECIMEN DATA				RATIOS		
COMMENTS:				ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected:	11/29/2006	Sample Size:	0.196 g	Ca/Mg	15.1	4- 30
Date Received:	12/11/2006	Sample Type:	Head	Ca/P	3.45	1- 12
Date Completed:	12/14/2006	Hair Color:	Brown	Na/K	0.75	0.5- 10
		Treatment:	Dye	Zn/Cu	15.5	4- 20
Methodology:	ICP-MS	Shampoo:	Redkin	Zn/Cd	> 999	> 800

V06.99