

# HAIR ELEMENTS



**PATIENT: Number 402**  
**SEX: Female**  
**AGE: 74**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	20	< 7.0		
Antimony	0.021	< 0.050		
Arsenic	0.045	< 0.060		
Barium	0.46	< 2.0		
Beryllium	< 0.01	< 0.020		
Bismuth	0.39	< 2.0		
Cadmium	0.052	< 0.050		
Lead	0.41	< 0.60		
Mercury	1.1	< 0.80		
Platinum	< 0.003	< 0.005		
Thallium	0.001	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.10	< 0.060		
Nickel	0.19	< 0.30		
Silver	0.02	< 0.15		
Tin	0.13	< 0.30		
Titanium	0.98	< 0.70		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS							
ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium	305	300- 1200					
Magnesium	31	35- 120					
Sodium	65	20- 250					
Potassium	47	8- 75					
Copper	18	11- 37					
Zinc	200	140- 220					
Manganese	0.07	0.08- 0.60					
Chromium	0.57	0.40- 0.65					
Vanadium	0.070	0.018- 0.065					
Molybdenum	0.041	0.020- 0.050					
Boron	7.6	0.25- 1.5					
Iodine	6.3	0.25- 1.8					
Lithium	0.010	0.007- 0.020					
Phosphorus	193	150- 220					
Selenium	1.1	0.55- 1.1					
Strontium	1.2	0.50- 7.6					
Sulfur	44600	44000- 50000					
Cobalt	0.009	0.005- 0.040					
Iron	13	7.0- 16					
Germanium	0.034	0.030- 0.040					
Rubidium	0.062	0.007- 0.096					
Zirconium	0.054	0.020- 0.42					

SPECIMEN DATA				RATIOS		
<b>COMMENTS:</b>				<b>ELEMENTS</b>	<b>RATIOS</b>	<b>EXPECTED RANGE</b>
Date Collected: 7/22/2010	Sample Size: 0.205 g			Ca/Mg	9.84	4- 30
Date Received: 7/26/2010	Sample Type: Head			Ca/P	1.58	1- 12
Date Completed: 7/27/2010	Hair Color: Black			Na/K	1.38	0.5- 10
Client Reference: 1229609	Treatment: Dye			Zn/Cu	11.1	4- 20
Methodology: ICP-MS	Shampoo: Whole Foods			Zn/Cd	> 999	> 800

### **Health history for hair test 402**

- 1) Arthritis, shortness of breath, knee problems
- 2-4) Not sure
- 5) Some flu and travel shots
- 6) Norvasc, Thyroid med