



PATIENT: Number 791  
SEX: Female  
AGE: 55

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	3.8	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	< 0.01	< 0.060	
Barium (Ba)	5.3	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.096	< 2.0	
Cadmium (Cd)	0.027	< 0.050	
Lead (Pb)	0.17	< 0.60	
Mercury (Hg)	0.63	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.007	< 0.060	
Nickel (Ni)	0.33	< 0.30	
Silver (Ag)	0.10	< 0.15	
Tin (Sn)	0.44	< 0.30	
Titanium (Ti)	0.66	< 0.70	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup>		
Calcium (Ca)	4950	300- 1200			
Magnesium (Mg)	660	35- 120			
Sodium (Na)	29	20- 250			
Potassium (K)	11	8- 75			
Copper (Cu)	21	11- 37			
Zinc (Zn)	190	140- 220			
Manganese (Mn)	0.21	0.08- 0.60			
Chromium (Cr)	0.32	0.40- 0.65			
Vanadium (V)	0.031	0.018- 0.065			
Molybdenum (Mo)	0.018	0.020- 0.050			
Boron (B)	0.39	0.25- 1.5			
Iodine (I)	13	0.25- 1.8			
Lithium (Li)	0.010	0.007- 0.020			
Phosphorus (P)	159	150- 220			
Selenium (Se)	0.32	0.55- 1.1			
Strontium (Sr)	14	0.50- 7.6			
Sulfur (S)	44900	44000- 50000			
Cobalt (Co)	0.013	0.005- 0.040			
Iron (Fe)	12	7.0- 16			
Germanium (Ge)	0.030	0.030- 0.040			
Rubidium (Rb)	0.015	0.007- 0.096			
Zirconium (Zr)	0.27	0.020- 0.42			

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected:	Sample Size: 0.201 g	Ca/Mg	7.5	4- 30
Date Received: 06/10/2013	Sample Type: Head	Ca/P	31.1	1- 12
Date Completed: 06/12/2013	Hair Color:	Na/K	2.64	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	9.05	4- 20
	Shampoo:	Zn/Cd	> 999	> 800

## **Health history for hair test 791**

1. Bipolar, poor memory, poor concentration
2. Several lifelong amalgams
3. Still have amalgams, no dental cleanup yet.
4. unknown.
5. Fully current in order to work in a hospital.
6. unknown.
7. 55 yo, 5'6" approx 140 lbs
8. Hair has been treated and dyed.
9. Atascadero, CA