

# HAIR ELEMENTS



**PATIENT: Number 449**  
**SEX: Female**  
**AGE: 43**  
**LOCATION: San Diego, CA**

## POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	0.8	< 7.0	█	
Antimony	0.015	< 0.050	█	
Arsenic	0.025	< 0.060	█	
Barium	5.5	< 2.0	████████████████████	
Beryllium	< 0.01	< 0.020		
Bismuth	0.006	< 2.0	●	
Cadmium	0.011	< 0.050	█	
Lead	0.27	< 0.60	██████████	
Mercury	0.99	< 0.80	████████████████████	
Platinum	< 0.003	< 0.005		
Thallium	0.001	< 0.002	●	
Thorium	< 0.001	< 0.002		
Uranium	0.26	< 0.060	██	
Nickel	0.21	< 0.30	████████████████	
Silver	0.06	< 0.15	██████████	
Tin	0.07	< 0.30	██████	
Titanium	0.42	< 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	2180	300- 1200			████████████████████		
Magnesium	290	35- 120			████████████████████		
Sodium	67	20- 250			●		
Potassium	17	8- 75			●		
Copper	19	11- 37			█		
Zinc	190	140- 220			██████		
Manganese	0.23	0.08- 0.60			██████		
Chromium	0.40	0.40- 0.65		██████████			
Vanadium	0.018	0.018- 0.065		██████████			
Molybdenum	0.052	0.020- 0.050			████████████████		
Boron	1.4	0.25- 1.5			██████████████		
Iodine	11	0.25- 1.8			████████████████████		
Lithium	0.013	0.007- 0.020			██████		
Phosphorus	167	150- 220			██████████		
Selenium	1.2	0.55- 1.1			████████████████		
Strontium	22	0.50- 7.6			████████████████████		
Sulfur	46000	44000- 50000			██████████		
Cobalt	0.016	0.005- 0.040			██████		
Iron	12	7.0- 16			██████████		
Germanium	0.027	0.030- 0.040	████████████████				
Rubidium	0.014	0.007- 0.096		██████████			
Zirconium	0.036	0.020- 0.42		██████████			

### SPECIMEN DATA

**COMMENTS:**  
 Date Collected: 2/18/2011      Sample Size: 0.196 g  
 Date Received: 2/22/2011      Sample Type: Head  
 Date Completed: 2/25/2011      Hair Color: Brown  
 Client Reference: 1266918      Treatment:  
 Methodology: ICP-MS      Shampoo: Aubrey Organics

### RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	7.52	4- 30
Ca/P	13.1	1- 12
Na/K	3.94	0.5- 10
Zn/Cu	10	4- 20
Zn/Cd	> 999	> 800

## **Health history for hair test 449**

1. Possible hypothyroid and adrenal fatigue; not Dx'ed yet, but been having symptoms for the last 3-4 years, I have an Endo appointment this Monday; borderline anemic; low iron, supplementing now at 25 mg; waiting to chelate since last of amalgams were removed in January; fairly healthy except for the typical hypothyroid symptoms; was a vegetarian then vegan in my 20's, primarily vegetarian in my 30s (best physical health in those 10-15 years, very fit), ate mostly organic, but started eating some meat again; eating more meat now and dairy, 90% organic foods; I don't exercise regularly.
2. All wisdom teeth removed; no root canals, one capped tooth - verified with dentist that there wasn't any amalgam under cap - my first amalgam was in my elementary school days. No amalgams now, not since January. Didn't have braces. I am showing some receding gums, particularly around my canines, not horrific, but I can tell.
3. No more amalgams, just one composite/enamel cap.
4. My mother immigrated to the United States in the late '60s. I can't recall her having her own teeth ever, she's always worn dentures. She was in her late 20s then, poor oral health or dental care available I think.
5. Tetanus vaccine when I was 3. I don't recall that far back, but I had one flu shot in the late-'90s, nothing after that. It's been about 10 years since that flu shot.
6. Food based multi-vitamin (1 capsule/day), kelp (1 tablet/day), vit D3 (varied when sick, but the serving size/day), vit C (1000 mg/day), organic elderberry syrup (during cold), iodide (1 drop/week, not consistently), colloidal silver spritz, beta carotene (10,000 - 25,000 IU/day), iron (25 mg/daily, inconsistent).
7. I love cilantro, and ate it often - in Mexican, Thai, Indian, Greek cooking. Didn't know it was a chelator. San Diego treats tap water with chloramine and now fluoride.
8. San Diego, CA -- suburbs 5 miles north of Miramar Airforce Base/Marine Corp Air Station Miramar.