



< 5 F H9 GH'%&'  
 SEX: Male  
 AGE: 53

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	1.2	< 7.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.030	< 0.080	
Barium (Ba)	1.4	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.13	< 0.80	
Mercury (Hg)	0.06	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.002	< 0.060	
Nickel (Ni)	0.05	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.06	< 0.30	
Titanium (Ti)	0.14	< 0.60	
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)	206	200- 750			
Magnesium (Mg)	31	25- 75			
Sodium (Na)	52	20- 180			
Potassium (K)	< 3	9- 80			
Copper (Cu)	26	11- 30			
Zinc (Zn)	240	130- 200			
Manganese (Mn)	0.16	0.08- 0.50			
Chromium (Cr)	0.35	0.40- 0.70			
Vanadium (V)	0.034	0.018- 0.065			
Molybdenum (Mo)	0.031	0.025- 0.060			
Boron (B)	0.37	0.40- 3.0			
Iodine (I)	0.72	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	141	150- 220			
Selenium (Se)	0.84	0.70- 1.2			
Strontium (Sr)	1.8	0.30- 3.5			
Sulfur (S)	43900	44000- 50000			
Cobalt (Co)	< 0.002	0.004- 0.020			
Iron (Fe)	5.3	7.0- 16			
Germanium (Ge)	0.031	0.030- 0.040			
Rubidium (Rb)	0.005	0.011- 0.12			
Zirconium (Zr)	0.011	0.020- 0.44			

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 02/20/2016	Sample Size: 0.203 g	Ca/Mg	6.65	4- 30
Date Received: 02/26/2016	Sample Type: Head	Ca/P	1.46	0.8- 8
Date Completed: 03/01/2016	Hair Color: Red	Na/K	17.3	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	9.23	4- 20
	Shampoo: Manetail	Zn/Cd	> 999	> 800

### **Health history for hair test 1173**

1. Current symptoms/health history - Mostly have joint pain and stiffness, minor digestive issues, don't sleep like I used to.
2. 1 root canal/crown, braces as a teenager, first amalgams in as a teenager, 2 wisdom teeth have been removed.
3. 11 amalgams in place currently.
4. Not sure about mother's history. She had all her teeth capped in her early twenties, so I don't know anything else about her dental history. She did use mercolized wax (this is in the 30's and 40's)consistently for a few years to fade the freckles on her face.
5. I had the standard vaccinations growing up in the 60's and 70's. I've had a couple of flu shots, but I don't recall any travel shots.
6. 10,000 mg of biotin every day. I've been taking 250 mg/day of turmeric for the past month.
7. age 53, 215 pounds, 6'4"
8. Live in East Texas, USA