



SEX: Female  
AGE: 8

**Toxic & Essential Elements; Hair**

| TOXIC METALS               |                |                       |                                                 |
|----------------------------|----------------|-----------------------|-------------------------------------------------|
|                            | RESULT<br>µg/g | REFERENCE<br>INTERVAL | PERCENTILE<br>68 <sup>th</sup> 95 <sup>th</sup> |
| Aluminum (Al)              | 14             | < 8.0                 |                                                 |
| Antimony (Sb)              | 0.053          | < 0.066               |                                                 |
| Arsenic (As)               | 0.036          | < 0.060               |                                                 |
| Barium (Ba)                | 3.0            | < 1.5                 |                                                 |
| Beryllium (Be)             | < 0.01         | < 0.020               |                                                 |
| Bismuth (Bi)               | 0.22           | < 2.0                 |                                                 |
| Cadmium (Cd)               | 0.15           | < 0.070               |                                                 |
| Lead (Pb)                  | 1.4            | < 0.80                |                                                 |
| Mercury (Hg)               | 0.44           | < 0.40                |                                                 |
| Platinum (Pt)              | < 0.003        | < 0.005               |                                                 |
| Thallium (Tl)              | < 0.001        | < 0.002               |                                                 |
| Thorium (Th)               | 0.001          | < 0.002               |                                                 |
| Uranium (U)                | 0.008          | < 0.060               |                                                 |
| Nickel (Ni)                | 0.32           | < 0.30                |                                                 |
| Silver (Ag)                | 0.46           | < 0.18                |                                                 |
| Tin (Sn)                   | 0.42           | < 0.30                |                                                 |
| Titanium (Ti)              | 0.29           | < 0.70                |                                                 |
| Total Toxic Representation |                |                       |                                                 |

| ESSENTIAL AND OTHER ELEMENTS |                |                       |                                                                                                       |  |  |
|------------------------------|----------------|-----------------------|-------------------------------------------------------------------------------------------------------|--|--|
|                              | RESULT<br>µg/g | REFERENCE<br>INTERVAL | PERCENTILE<br>2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup> |  |  |
| Calcium (Ca)                 | 670            | 250- 800              |                                                                                                       |  |  |
| Magnesium (Mg)               | 130            | 25- 90                |                                                                                                       |  |  |
| Sodium (Na)                  | 35             | 18- 180               |                                                                                                       |  |  |
| Potassium (K)                | 46             | 10- 90                |                                                                                                       |  |  |
| Copper (Cu)                  | 42             | 11- 37                |                                                                                                       |  |  |
| Zinc (Zn)                    | 200            | 120- 220              |                                                                                                       |  |  |
| Manganese (Mn)               | 0.41           | 0.08- 0.60            |                                                                                                       |  |  |
| Chromium (Cr)                | 0.47           | 0.40- 0.65            |                                                                                                       |  |  |
| Vanadium (V)                 | 0.047          | 0.025- 0.10           |                                                                                                       |  |  |
| Molybdenum (Mo)              | 0.027          | 0.030- 0.090          |                                                                                                       |  |  |
| Boron (B)                    | 0.48           | 0.30- 1.7             |                                                                                                       |  |  |
| Iodine (I)                   | 2.5            | 0.25- 1.3             |                                                                                                       |  |  |
| Lithium (Li)                 | 0.017          | 0.007- 0.020          |                                                                                                       |  |  |
| Phosphorus (P)               | 128            | 150- 220              |                                                                                                       |  |  |
| Selenium (Se)                | 0.51           | 0.70- 1.1             |                                                                                                       |  |  |
| Strontium (Sr)               | 2.9            | 0.37- 3.6             |                                                                                                       |  |  |
| Sulfur (S)                   | 46900          | 44000- 51000          |                                                                                                       |  |  |
| Cobalt (Co)                  | 0.017          | 0.005- 0.035          |                                                                                                       |  |  |
| Iron (Fe)                    | 13             | 7.0- 16               |                                                                                                       |  |  |
| Germanium (Ge)               | 0.032          | 0.030- 0.040          |                                                                                                       |  |  |
| Rubidium (Rb)                | 0.062          | 0.008- 0.080          |                                                                                                       |  |  |
| Zirconium (Zr)               | 0.86           | 0.030- 0.40           |                                                                                                       |  |  |

| SPECIMEN DATA              |  | RATIOS          |               |
|----------------------------|--|-----------------|---------------|
| <b>COMMENTS:</b>           |  | <b>ELEMENTS</b> | <b>RATIOS</b> |
| Date Collected: 03/23/2015 |  | Ca/Mg           | 5.15          |
| Date Received: 03/30/2015  |  | Ca/P            | 5.23          |
| Date Completed: 04/03/2015 |  | Na/K            | 0.761         |
| Methodology: ICP/MS        |  | Zn/Cu           | 4.76          |
| Sample Size: 0.196 g       |  | Zn/Cd           | > 999         |
| Sample Type: Head          |  |                 |               |
| Hair Color: Brown          |  |                 |               |
| Treatment:                 |  |                 |               |
| Shampoo: L'oreal           |  |                 |               |
|                            |  | <b>RANGE</b>    |               |
|                            |  | 4- 30           |               |
|                            |  | 1- 12           |               |
|                            |  | 0.5- 10         |               |
|                            |  | 4- 20           |               |
|                            |  | > 800           |               |

## **Hair Test 1076**

**What are your current symptoms and health history?**

mood swings

**Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)**

No dental work of any kind

**What dental work do you currently have in place? What part of the dental clean-up have you completed?**

see above

**What dentistry did your mother have at any time before or during pregnancy?**

2/3 amalgam fillings

**What vaccinations have you had and when (including flu and especially travel shots)?**

No vaccinations

**Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?**

Zinc, VitC, Calcium, Magnesium

**What is your age, height and weight?**

8 years old, average height/weight

**Other information you feel may be relevant?**

Melbourne Australia