

## POTENTIALLY TOXIC ELEMENTS

| TOXIC ELEMENTS             | RESULT<br>µg/g | REFERENCE RANGE | PERCENTILE       |                  |
|----------------------------|----------------|-----------------|------------------|------------------|
|                            |                |                 | 68 <sup>th</sup> | 95 <sup>th</sup> |
| Aluminum                   | 14             | < 7.0           |                  |                  |
| Antimony                   | 0.15           | < 0.050         |                  |                  |
| Arsenic                    | 0.10           | < 0.060         |                  |                  |
| Barium                     | 1.3            | < 2.0           |                  |                  |
| Beryllium                  | < 0.01         | < 0.020         |                  |                  |
| Bismuth                    | 0.048          | < 2.0           |                  |                  |
| Cadmium                    | 0.18           | < 0.050         |                  |                  |
| Lead                       | 2.8            | < 0.60          |                  |                  |
| Mercury                    | 1.0            | < 0.80          |                  |                  |
| Platinum                   | < 0.003        | < 0.005         |                  |                  |
| Thallium                   | < 0.001        | < 0.002         |                  |                  |
| Thorium                    | 0.001          | < 0.002         |                  |                  |
| Uranium                    | 0.25           | < 0.060         |                  |                  |
| Nickel                     | 0.36           | < 0.30          |                  |                  |
| Silver                     | 1.1            | < 0.15          |                  |                  |
| Tin                        | 2.2            | < 0.30          |                  |                  |
| Titanium                   | 0.71           | < 0.70          |                  |                  |
| Total Toxic Representation |                |                 |                  |                  |

## ESSENTIAL AND OTHER ELEMENTS

| ELEMENTS   | RESULT<br>µg/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    | 365            | 300 - 1200      |                   |                  |                  |                  |                    |
| Magnesium  | 130            | 35 - 120        |                   |                  |                  |                  |                    |
| Sodium     | 510            | 20 - 250        |                   |                  |                  |                  |                    |
| Potassium  | 110            | 8 - 75          |                   |                  |                  |                  |                    |
| Copper     | 39             | 11 - 37         |                   |                  |                  |                  |                    |
| Zinc       | 350            | 140 - 220       |                   |                  |                  |                  |                    |
| Manganese  | 0.40           | 0.08 - 0.60     |                   |                  |                  |                  |                    |
| Chromium   | 0.60           | 0.40 - 0.65     |                   |                  |                  |                  |                    |
| Vanadium   | 0.17           | 0.018 - 0.065   |                   |                  |                  |                  |                    |
| Molybdenum | 0.058          | 0.020 - 0.050   |                   |                  |                  |                  |                    |
| Boron      | 0.77           | 0.25 - 1.5      |                   |                  |                  |                  |                    |
| Iodine     | 2.0            | 0.25 - 1.8      |                   |                  |                  |                  |                    |
| Lithium    | 0.032          | 0.007 - 0.020   |                   |                  |                  |                  |                    |
| Phosphorus | 158            | 150 - 220       |                   |                  |                  |                  |                    |
| Selenium   | 0.91           | 0.55 - 1.1      |                   |                  |                  |                  |                    |
| Strontium  | 3.1            | 0.50 - 7.6      |                   |                  |                  |                  |                    |
| Sulfur     | 43500          | 44000 - 50000   |                   |                  |                  |                  |                    |
| Cobalt     | 0.032          | 0.005 - 0.040   |                   |                  |                  |                  |                    |
| Iron       | 17             | 7.0 - 16        |                   |                  |                  |                  |                    |
| Germanium  | 0.053          | 0.030 - 0.040   |                   |                  |                  |                  |                    |
| Rubidium   | 0.14           | 0.007 - 0.096   |                   |                  |                  |                  |                    |
| Zirconium  | 0.053          | 0.020 - 0.42    |                   |                  |                  |                  |                    |

## SPECIMEN DATA

|                   |           |              |                 |
|-------------------|-----------|--------------|-----------------|
| <b>COMMENTS:</b>  |           |              |                 |
| Date Collected:   | 9/23/2010 | Sample Size: | 0.205 g         |
| Date Received:    | 9/28/2010 | Sample Type: | Head            |
| Date Completed:   | 9/30/2010 | Hair Color:  | Brown           |
| Client Reference: |           | Treatment:   |                 |
| Methodology:      | ICP-MS    | Shampoo:     | Varied Bed Head |

## RATIOS

| ELEMENTS | RATIOS | EXPECTED RANGE |
|----------|--------|----------------|
| Ca/Mg    | 2.81   | 4 - 30         |
| Ca/P     | 2.31   | 1 - 12         |
| Na/K     | 4.64   | 0.5 - 10       |
| Zn/Cu    | 8.97   | 4 - 20         |
| Zn/Cd    | > 999  | > 800          |

V012.08

### **Health history for hair test 421**

1. What are your current symptoms and health history? ALWAYS HEALTHY UNTIL 3 YEARS AGO, FOOT DROP AND LEG WEAKNESS. DIAGNOSED WITH ALS, BUT STILL NOT CONFIRMED. NO ALS SYMPTOMS OTHER THAN MUSCLE WEAKNESS AND FATIGUE/MUSCLE PAIN.
2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc: 4 MOLARS REMOVED 25 YEARS AGO, 6 AMALGAMS AND 2 CROWNS. AMALGAM REMOVAL AND CAVITATION SURGERY 2 WEEKS AGO BY BIO-DENTIST
3. What dental work do you currently have in place? What part of the dental clean-up have you completed? COMPLETED ALL DENTAL CLEANUP
4. What dentistry did your mother have at any time before or during pregnancy? AMALGAMS, NOT SURE HOW MANY
5. What vaccinations have you had and when (including flu and especially travel shots)? MANY TRAVEL SHOT, NO FLU SHOTS
6. Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken? NO SUPPLEMENTS TAKEN AT TIME OF HAIR TEST, ONLY LARGE DOSES OF IBUPROPHIN.
7. What is your age, height and weight? 47 YEAR, 5'9", 145LBS
8. Other information you feel may be relevant? I HAVE DONE A LOT OF RENOVATIONS ON OLD BUILDINGS
9. What is your location – city & country (so that we can learn where certain toxins are more prevalent). LOS ANGELES CA