



LAB #:
 PATIENT:
 ID:
 SEX: Male
 AGE: 31

CLIENT #:
 DOCTOR:

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	3.2	< 7.0	
Antimony (Sb)	0.015	< 0.066	
Arsenic (As)	0.069	< 0.080	
Barium (Ba)	0.05	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.012	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.07	< 0.80	
Mercury (Hg)	1.1	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.017	< 0.060	
Nickel (Ni)	0.03	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.02	< 0.30	
Titanium (Ti)	0.64	< 0.60	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 th 16 th 50 th 84 th 97.5 th		
Calcium (Ca)	242	200- 750			
Magnesium (Mg)	19	25- 75			
Sodium (Na)	13	20- 180			
Potassium (K)	5	9- 80			
Copper (Cu)	14	11- 30			
Zinc (Zn)	190	130- 200			
Manganese (Mn)	0.06	0.08- 0.50			
Chromium (Cr)	0.37	0.40- 0.70			
Vanadium (V)	0.017	0.018- 0.065			
Molybdenum (Mo)	0.061	0.025- 0.060			
Boron (B)	0.31	0.40- 3.0			
Iodine (I)	1.6	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	188	150- 220			
Selenium (Se)	0.88	0.70- 1.2			
Strontium (Sr)	0.13	0.30- 3.5			
Sulfur (S)	49700	44000- 50000			
Cobalt (Co)	0.004	0.004- 0.020			
Iron (Fe)	6.9	7.0- 16			
Germanium (Ge)	0.029	0.030- 0.040			
Rubidium (Rb)	0.007	0.011- 0.12			
Zirconium (Zr)	0.014	0.020- 0.44			

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 11/28/2013	Sample Size: 0.201 g	Ca/Mg	12.7	4- 30
Date Received: 12/02/2013	Sample Type: Head	Ca/P	1.29	0.8- 8
Date Completed: 12/03/2013	Hair Color:	Na/K	2.6	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	13.6	4- 20
	Shampoo:	Zn/Cd	> 999	> 800



TRACE ELEMENTS, INC.

4501 Sunbelt Drive · Addison, Tx · 75001 · U.S.A.

LABORATORY NO.:

PROFILE NO.:

SAMPLE TYPE: **SCALP**

PATIENT:

AGE: **31**

SEX: **M**

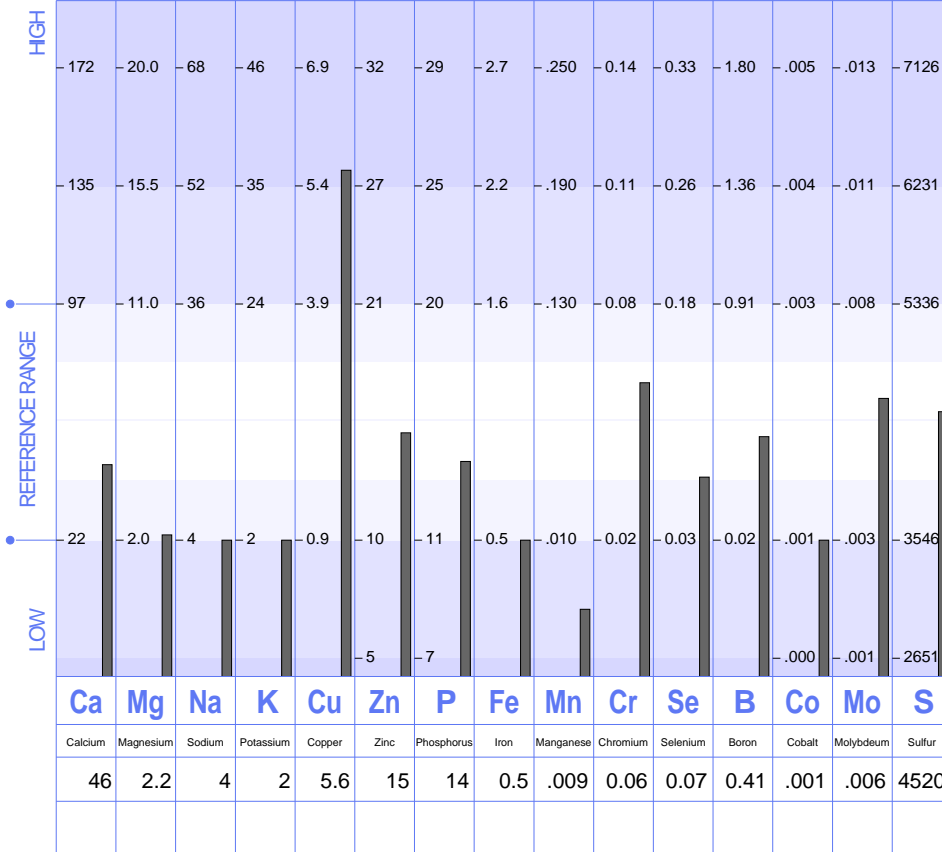
METABOLIC TYPE: **SLOW 1**

REQUESTED BY:

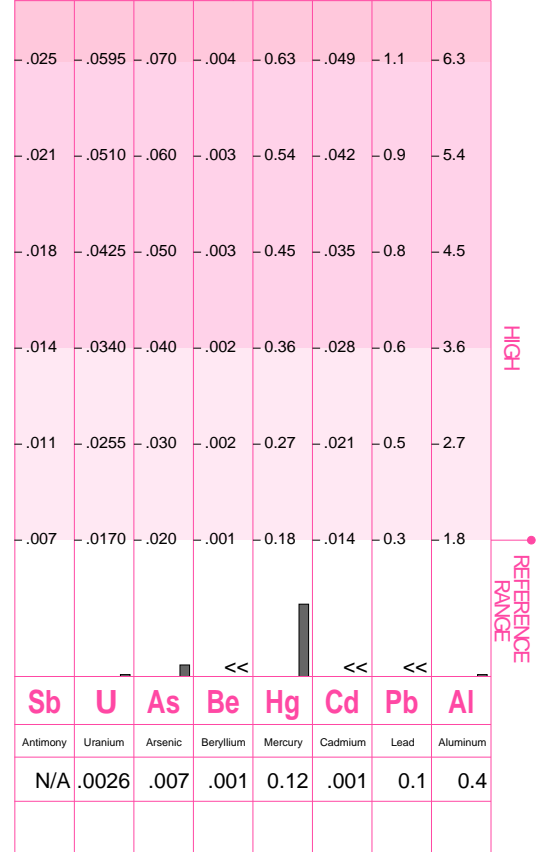
ACCOUNT NO.:

DATE: **9/17/2013**

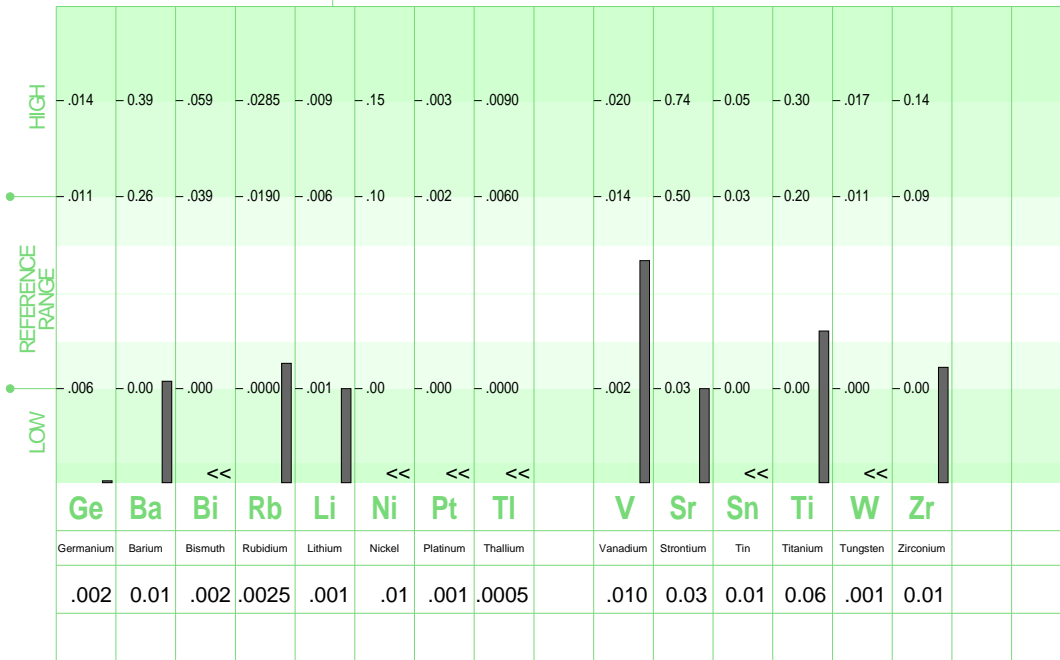
NUTRITIONAL ELEMENTS



TOXIC ELEMENTS



ADDITIONAL ELEMENTS



"<<": Below Calibration Limit; Value Given Is Calibration Limit

"QNS": Sample Size Was Inadequate For Analysis.

"N/A": Currently Not Available

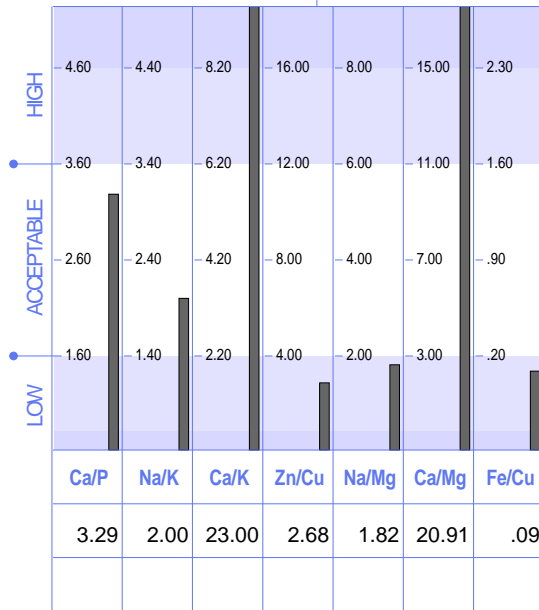
Ideal Levels And Interpretation Have Been Based On Hair Samples Obtained From The Mid-Parietal To The Occipital Region Of The Scalp.

Laboratory Analysis Provided by Trace Elements, Inc., an H. H. S. Licensed Clinical Laboratory. FNo. 45 D0481787

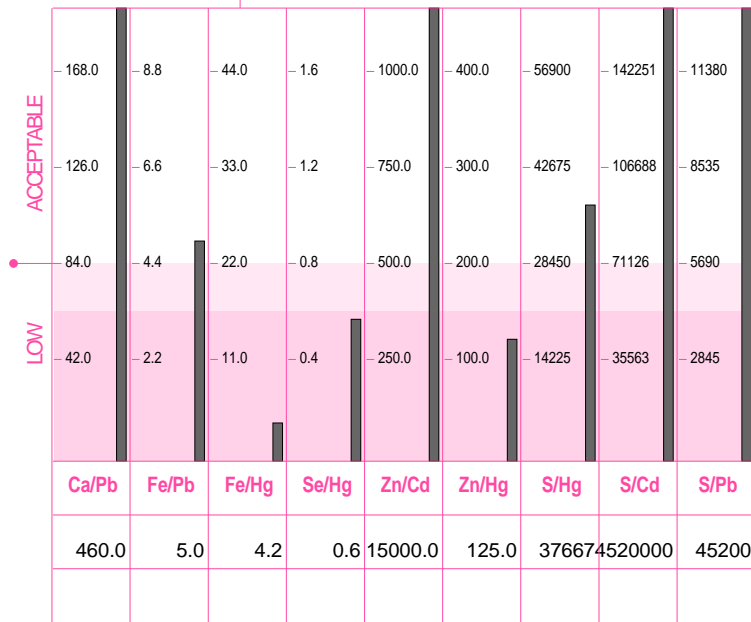
9/17/2013
CURRENT TEST RESULTS

PREVIOUS TEST RESULTS

SIGNIFICANT RATIOS



TOXIC RATIOS



ADDITIONAL RATIOS

RATIO	CALCULATED VALUE		EXPECTED
	Current	Previous	
Ca/Sr	1533.33		131/1
Cr/V	6.00		13/1
Cu/Mo	933.33		625/1
Fe/Co	500.00		440/1
K/Co	2000.00		2000/1
K/Li	2000.00		2500/1
Mg/B	5.37		40/1
S/Cu	807.14		1138/1
Se/Tl	140.00		37/1
Se/Sn	7.00		0.67/1
Zn/Sn	1500.00		167/1

LEVELS

All mineral levels are reported in milligrams percent (milligrams per one-hundred grams of hair). One milligram percent (mg%) is equal to ten parts per million (ppm).

NUTRITIONAL ELEMENTS

Extensively studied, the nutrient elements have been well defined and are considered essential for many biological functions in the human body. They play key roles in such metabolic processes as muscular activity, endocrine function, reproduction, skeletal integrity and overall development.

TOXIC ELEMENTS

The toxic elements or "heavy metals" are well-known for their interference upon normal biochemical function. They are commonly found in the environment and therefore are present to some degree, in all biological systems. However, these metals clearly pose a concern for toxicity when accumulation occurs to excess.

ADDITIONAL ELEMENTS

These elements are considered as possibly essential by the human body. Additional studies are being conducted to better define their requirements and amounts needed.

RATIOS

A calculated comparison of two elements to each other is called a ratio. To calculate a ratio value, the first mineral level is divided by the second mineral level.

EXAMPLE: A sodium (Na) test level of 24 mg% divided by a potassium (K) level of 10 mg% equals a Na/K ratio of 2.4 to 1.

SIGNIFICANT RATIOS

If the synergistic relationship (or ratio) between certain minerals in the body is disturbed, studies show that normal biological functions and metabolic activity can be adversely affected. Even at extremely low concentrations, the synergistic and/or antagonistic relationships between minerals still exist, which can indirectly affect metabolism.

TOXIC RATIOS

It is important to note that individuals with elevated toxic levels may not always exhibit clinical symptoms associated with those particular toxic minerals. However, research has shown that toxic minerals can also produce an antagonistic effect on various essential minerals eventually leading to disturbances in their metabolic utilization.

ADDITIONAL RATIOS

These ratios are being reported solely for the purpose of gathering research data. This information will then be used to help the attending health-care professional in evaluating their impact upon health.

REFERENCE RANGES

Generally, reference ranges should be considered as guidelines for comparison with the reported test values. These reference ranges have been statistically established from studying an international population of "healthy" individuals.

Important Note: The reference ranges should not be considered as absolute limits for determining deficiency, toxicity or acceptance.

Health history for hair test 903

1) What are your current symptoms and health history?

Hypothyroidism (Hashimoto's), low cortisol, low DHEA, mid-range LH and FSH in spite of low testosterone, low triglycerides, low HDL cholesterol, low body temperature, cold hands and feet, joint pains, anxiety, elevated precoporphyrin.

2) Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc...)

3 wisdom teeth removed, no root canals, first amalgam when around 12 years old, two amalgams at most, last one removed in 2011. Braces during teens.

3) What dental work do you currently have in place? What part of the dental cleanup have you completed?

Composite fillings.

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

Unknown.

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

10 TBE
09 Hepatitis A
09 TBE
09 TBE
09 Swine Flu
06 Flu
05 Flu
99 Hapatitis A
98 Yellow fever
98 Hepatitis B
93 Hepatitis B
92 Hepatitis B
92 Hepatitis B
92 Hepatitis B
86 Measles, Mumps and Rubella
83 Measles

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

Cortef 40 mg
Cytomel 160 mcg
DHEA 50 mg

Betaine HCl x5 (per meal)
Biogest x2 (per meal)
Innate Flora-50 x2
Perma Clear x6
CarotenAll 2,500 IU

A 20,000
Gamma E tocopherol/tocotrienols
Super K with Advanced K2 complex
Basic B complex x4
Methyl B12 3000 mcg
Pantethine 2700 mg
C 6000 mg
Iodoral 50 mg
Zinc 150 mg
Manganese 90 mg
Chelated Magnesium 200 mg x3
Magnesium Citrate 320 mg
Ultra Chrome 900 mcg
Super Selenium Complex 200 mcg
Selenomethionine 100 mcg
Boron 3 mg
Molybdenum 1000 mcg
ACL 2000 mg
Inositol 2 g
TMG 2 g
Borage Oil 2,000 mg
Omega 3 2,600 g
Advanced Bio-Curcumin 630 mg
Resveratrol 100 mg
Cinnamon Extract 125 mg
CoQ10 with PQQ 100 mg
Milk Thistle 800 mg

7) Other information you feel may be relevant?

Exercise several times per week.

Have had copper toxicity for at least 2.5 years before this hair test.

May 2011: First hair test copper 75 ug/g (TEI)

Feb 2012: 214 ug/g (TEI)

Feb 2013: 134 ug/g (TEI)

Sep 2013: 56 ug/g (TEI)

Dec 2013: 14 ug/g (DDI)

8) What is your location - city & country (so that we can learn where certain toxins are more prevalent).

Sweden, Linköping