



PATIENT: Gail Allen
 SEX: Female
 AGE: 53

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.5	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.033	< 0.060	
Barium (Ba)	0.17	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.15	< 2.0	
Cadmium (Cd)	< 0.009	< 0.050	
Lead (Pb)	0.09	< 0.60	
Mercury (Hg)	0.98	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	< 0.001	< 0.060	
Nickel (Ni)	0.32	< 0.30	
Silver (Ag)	0.01	< 0.15	
Tin (Sn)	0.03	< 0.30	
Titanium (Ti)	0.36	< 0.70	
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)	287	300- 1200	
Magnesium (Mg)	19	35- 120	
Sodium (Na)	45	20- 250	
Potassium (K)	17	8- 75	
Copper (Cu)	11	11- 37	
Zinc (Zn)	170	140- 220	
Manganese (Mn)	0.05	0.08- 0.60	
Chromium (Cr)	0.36	0.40- 0.65	
Vanadium (V)	0.022	0.018- 0.065	
Molybdenum (Mo)	0.014	0.020- 0.050	
Boron (B)	1.3	0.25- 1.5	
Iodine (I)	0.23	0.25- 1.8	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	149	150- 220	
Selenium (Se)	0.76	0.55- 1.1	
Strontium (Sr)	0.40	0.50- 7.6	
Sulfur (S)	48600	44000- 50000	
Cobalt (Co)	0.027	0.005- 0.040	
Iron (Fe)	6.5	7.0- 16	
Germanium (Ge)	0.027	0.030- 0.040	
Rubidium (Rb)	0.024	0.007- 0.096	
Zirconium (Zr)	0.010	0.020- 0.42	

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 1/5/2012	Sample Size: 0.202 g	Ca/Mg	15.1	4- 30
Date Received: 1/16/2012	Sample Type: Head	Ca/P	1.93	1- 12
Date Completed: 1/17/2012	Hair Color: Gray	Na/K	2.65	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	15.5	4- 20
	Shampoo: Envirocare	Zn/Cd	> 999	> 800

POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	3.6	< 7.0		
Antimony	0.017	< 0.050		
Arsenic	0.041	< 0.060		
Beryllium	< 0.01	< 0.020		
Bismuth	0.13	< 2.0		
Cadmium	0.049	< 0.10		
Lead	0.09	< 1.0		
Mercury	0.29	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	< 0.001	< 0.060		
Nickel	0.42	< 0.40		
Silver	0.04	< 0.15		
Tin	0.07	< 0.30		
Titanium	0.55	< 1.0		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS

ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Calcium	241	300- 1200					
Magnesium	27	35- 120					
Sodium	31	12- 90					
Potassium	9	8- 38					
Copper	14	12- 35					
Zinc	180	140- 220					
Manganese	0.11	0.15- 0.65					
Chromium	0.29	0.20- 0.40					
Vanadium	0.023	0.018- 0.065					
Molybdenum	0.053	0.028- 0.056					
Boron	0.80	0.30- 2.0					
Iodine	1.5	0.25- 1.3					
Lithium	< 0.004	0.007- 0.023					
Phosphorus	182	160- 250					
Selenium	1.1	0.95- 1.7					
Strontium	0.56	0.50- 7.6					
Sulfur	49000	44500- 52000					
Barium	0.24	0.26- 3.0					
Cobalt	0.013	0.013- 0.050					
Iron	12	5.4- 14					
Germanium	0.028	0.045- 0.065					
Rubidium	0.009	0.007- 0.096					
Zirconium	0.053	0.020- 0.42					

SPECIMEN DATA

RATIOS

COMMENTS:

Date Collected: 10/8/2008 Sample Size: 0.197 g
 Date Received: 10/18/2008 Sample Type: Head
 Date Completed: 10/21/2008 Hair Color: Black
 Treatment: Shampoo: Renew

V06.99

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	8.93	4 - 3
Ca/P	1.32	1 - 1
Na/K	3.44	0.5 - 1
Zn/Cu	12.9	4 - 2
Zn/Cd	> 999	> 80

Health history for hair test 582

As can be seen the series starts in 2004.

I had been unwell for quite a while. A sketch of the history below.

I had a lot of dental work done in 1987.

My first daughter was born in 1987. I lost a lot of blood and needed a blood transfusion - was very tired for a long time afterwards and worse by exercise.

There was pesticide exposure from a house spraying for termites in 1988.

Living in old houses and renovating, doing leadlight glass work - 1987 - 1993

1989, 1991, 2nd and 3rd daughters born.

1991 - major trauma leading to PTSD

1992 - flea bomb - seemed to make things worse

General Tired all the time, dismissed by doctors as 'well you're a sole parent, have 3 young children, and you're studying - what do you expect?'

1993 - Chronic mastoid sinus infection, Left side, found and operated on - I think it had started in 1989. So yes there had been multiple antibiotics prescribed over these years.

Used various nutritional supplements, homoeopathy, Bach Flower remedies. Food exclusion diets for sensitivities.

Had Multiple Chemical Sensitivities. Any sort of detox attempts or too much time in shopping centres resulting in increased fatigue, flare of candida, burning sensation at the back of the neck.

Around 2000 started on a systematic replacement of amalgams. One at a time was all I could afford, so it was slow going. It was also not very safe, as I didn't know about the removal protocols.

In 2002 following one replacement I had continued jaw pain, I think it was from the site of the local injection - right at the back of the mouth. I knew my thyroid was struggling so when I was sent for Jaw Xrays, I asked for a protective thyroid collar, was treated as though I was stupid, and then subjected to a series of Xrays because there were anomalies, they didn't like the look of - result? All normal. And my thyroid crashed.

I had 2 fillings left to replace, but I stopped at this point because I realised it was making me worse.

2003 started on Thyroid replacement. Very high levels of Antibodies - Hashimoto's runs in my family - 3 out of 5 of my sisters and my father are also on thyroid replacement.

2004 on - saw a few different doctors who work with Orthomolecular Medicine - that's when the hair tests and serious supplementing start.

I had learnt to muscle test supplements by this point so avoided mistakes with chlorella

Too many different supplements to list but a few that really helped

Molybdenum in particular was a lifesaver.

I seemed to benefit from supplementing sodium and potassium.

Vitamin D levels were low, so I started supplementing - back in 2004 it was just at the 400IU RDA level, and even that amount really helped lift my mood. By 2008 I was using 5000IU daily

Digestive Enzymes

I wasn't using any specific chelating agents, just supplementing. Candida settled down and I sort of stabilised.

Late 2007 I tried the Heel homoeopathic Detox kit - and Candida flared again. Around that time is when I found this group.

2008 I completed filling removal - more safely than before and started rounds of DMSA at 3mg doses. And that takes me up to the other hair tests and information that I posted previously.

Health history hair test 582

Am forwarding 2 hair tests for posting to the Frequent Dose Chelation Group. The August 2008 test was 2 months after my last filling was removed. The other one was done in January this year. Hair tests before these weren't Doctor's Data and showed extremely low mercury.

Here are the answers to the list of questions.

1) What are your current symptoms and health history?

Currently I get very tired, especially around 2pm

I have some sort of numbness that comes and goes in my left foot - that has been happening for about the last 10 years.

I have aches and pains that move around my body.

My right shoulder and neck are consistently tight and sometimes very painful.

I have a random sort of dull pain that comes and goes over my liver. Investigation showed no gall stones.

I am prone to lower back pain.

I chelated about 1 round a month DMSA 3mg every 4 hours for about a year following filling removal in June 2008. I felt reasonably well and was fairly stable and improving using natural thyroid replacement for autoimmune thyroid, plus a lot of adrenal support nutrients. I can't remember why I stopped chelating, I think it was when I tried adding a tiny, tiny dose of ALA to the rounds and had a set back. I restabilised and then didn't keep going with DMSA again. I stayed fairly stable and improving without chelation over the next couple of years. I've been able to work in a shopping centre - previously I was too multiple chemical sensitive to spend more than an hour in one, so that is a big improvement.

Over 2011 I've been having a lot of Kinesiology sessions to help with thyroid and other issues and have moved into Menopause.- My dose of thyroid replacement has dropped to less than half what it was, Over the last 6 months I have been feeling like I need to start chelating again - (increasing fatigue, low motivation, patches of low mood days), so I had another hair test and blood work to see what is happening.

Ferritin is low

Vitamin D low (had gone above range in the beginning of 2011)

Molybdenum normal (had gone above range in the beginning of 2011)

Homocysteine is low

B12 at the top of the range

Folate is midrange

Had an intense reaction to trying Methyl B12, so I'm looking into the Methyl B12 protocols

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

Still have wisdom teeth. No root canals. Had a lot of amalgams and replacement amalgams over the years.

I have periodontal disease which I'm told goes along with Autoimmune Thyroid

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

No amalgams left. One crown.

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

My mother had dentures - she tried to make sure we all had good teeth by giving us a fluoride supplement.

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

I haven't had a vaccination since my first pregnancy in 1987, before that I had all the recommended shots for Australia, which is a lot less than required now.

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

Before the test I've been taking usually about 5 days a week

VitB2 100mg

Vit B3 500mg

Vit B6 200mg

Vit B12 1000mcg - cyanocobolamin sublingual

Magnesium 300mg

Sea Buckthorn Extract (1.6g fruit and 1.7g seed)

Fish oil

CoQ10 200mg

Sea Salt 1/2 tsp 2 or 3 times a day

Milk Thistle.

Potassium as mixed Celloids about 200mg daily.

7) Other information you feel may be relevant?

I was a very clumsy child and regularly had multiple pink merchurochrome paintings on my knees.

I have broken a lot of thermometres - I was nursing up til 1989

I get a lot of dryness - mouth and eyes - that's what the Sea Buckthorn is for and it works really well.

I don't have a lot of spare energy. I can work well at work, and I am studying, but find I don't have energy to do much outside of work, so the house garden and social life don't fare that well.

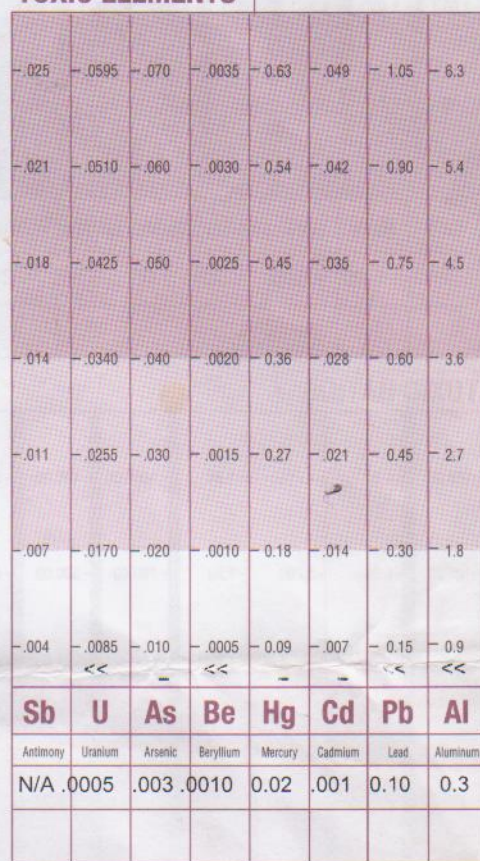
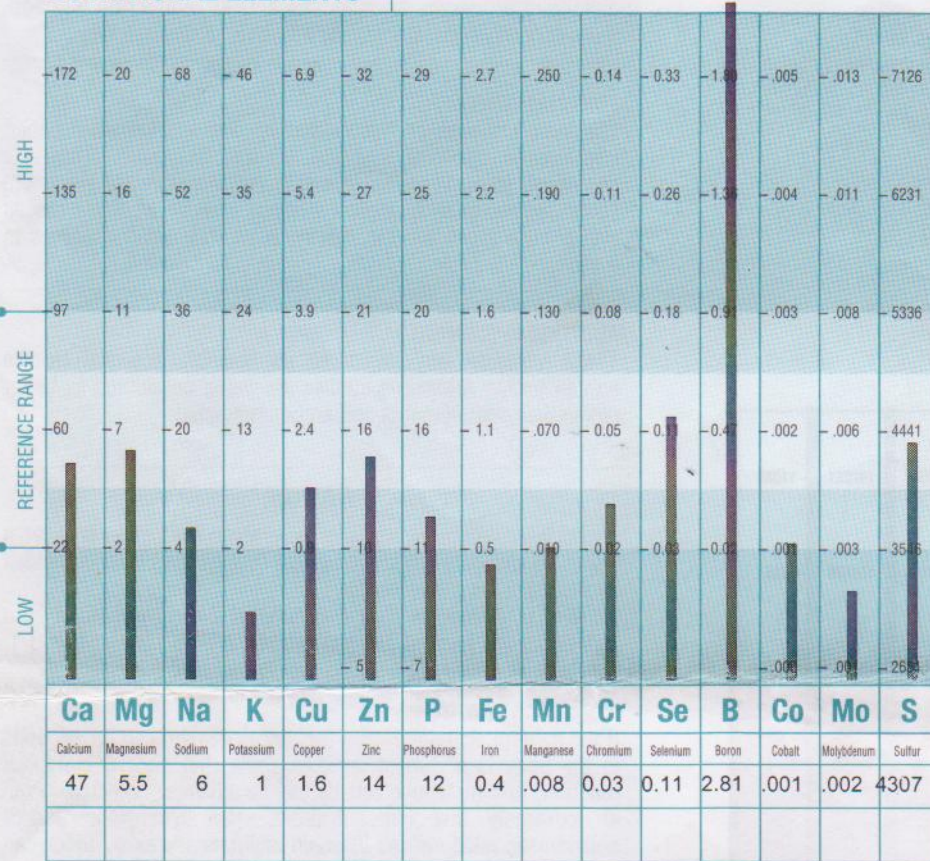
I hit a really flat spot around 2 in the afternoon.

Since the blood tests and Hair test I have added a few more supplements, and focused on being gluten free. Dairy wise I have cheese and sheep's youghurt but no other regular milk products.

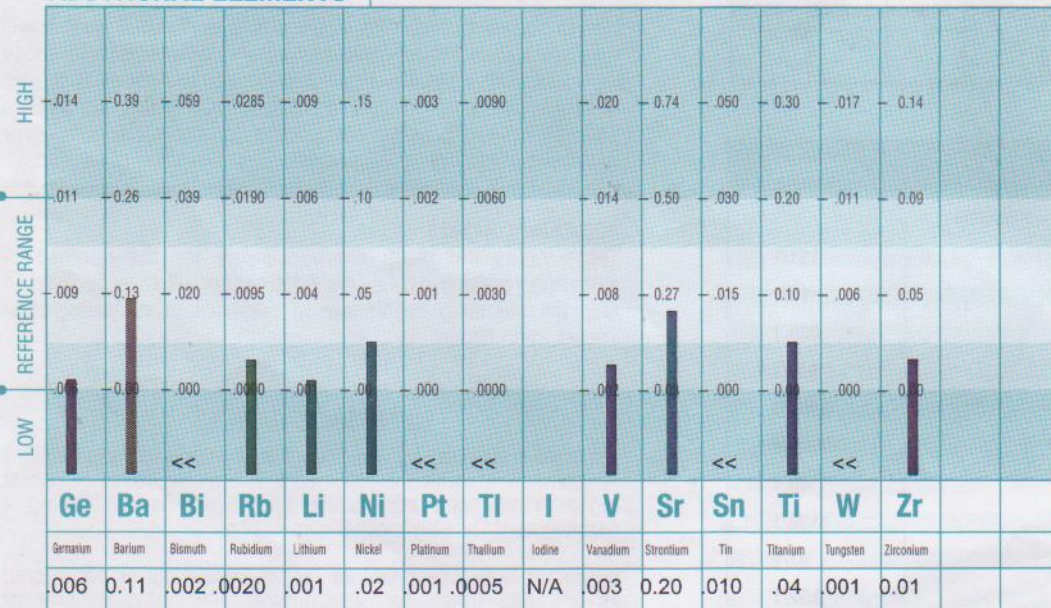
8) What is your location - city & country (so that we can learn where certain toxins are more prevalent).
I am near Fremantle, Western Australia.

NUTRITIONAL ELEMENTS

TOXIC ELEMENTS



ADDITIONAL ELEMENTS



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Value Given Is Calibration Limit.

"QNS": Sample Size Was Inadequate For Analysis.

"NA": Currently Not Available

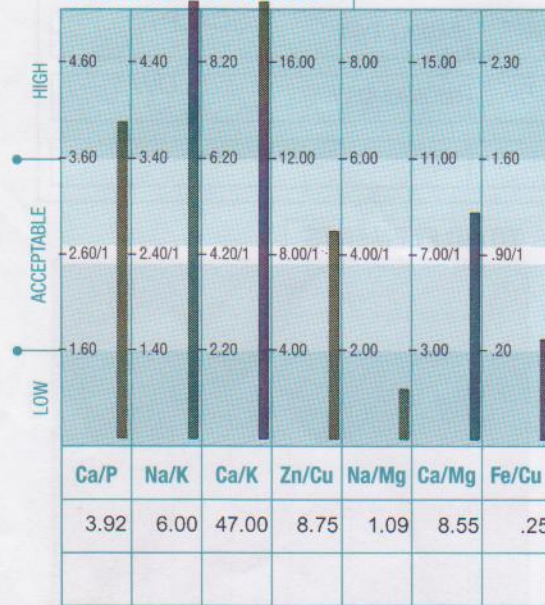
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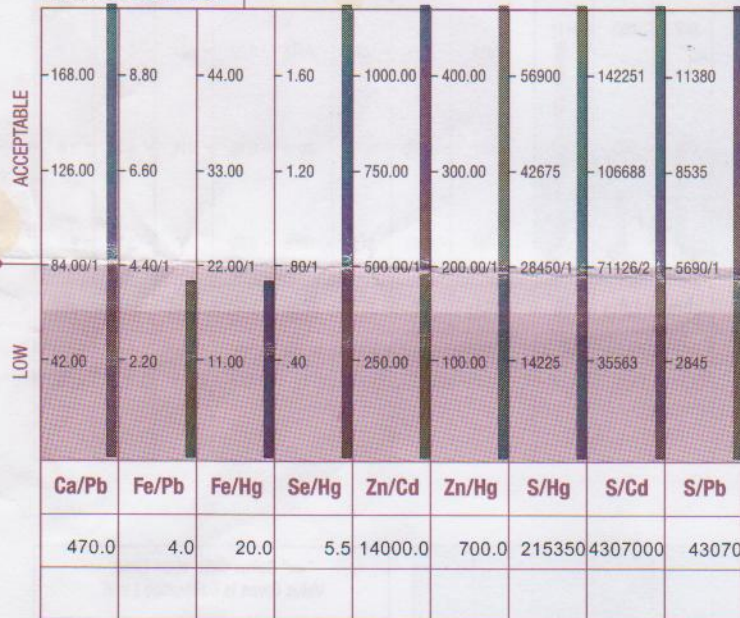
8/03/2004

CURRENT TEST RESULTS

SIGNIFICANT RATIOS



TOXIC RATIOS



ADDITIONAL RATIOS

RATIO	CALCULATED VALUE		OPTIMUM
	Current	Previous	
Ca/Sr	235.00		131/1
Cr/V	10.00		13/1
Cu/Mo	800.00		625/1
Fe/Co	400.00		440/1
K/Co	1000.00		2000/1
K/Li	1000.00		2500/1
Mg/B	1.96		40/1
S/Cu	2691.88		1138/1
Se/Tl	220.00		37/1
Se/Sn	11.00		0.67/1
Zn/Sn	1400.00		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 minerals 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 minerals 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 minerals 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 minerals 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

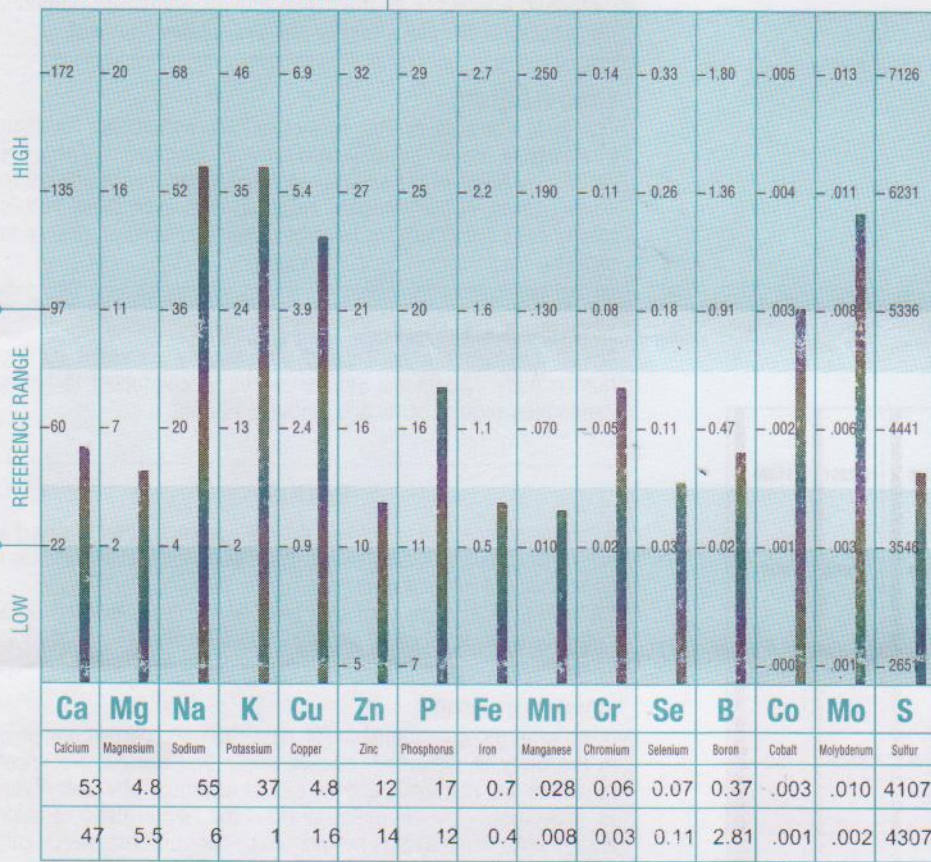
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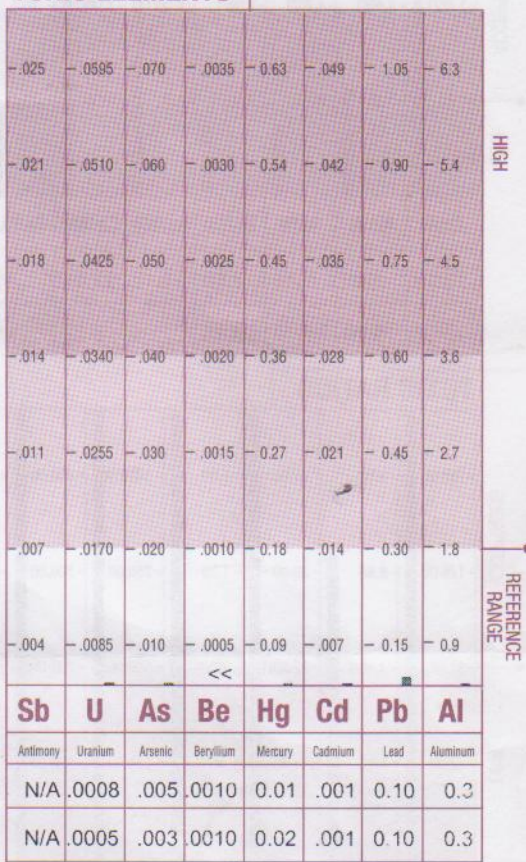
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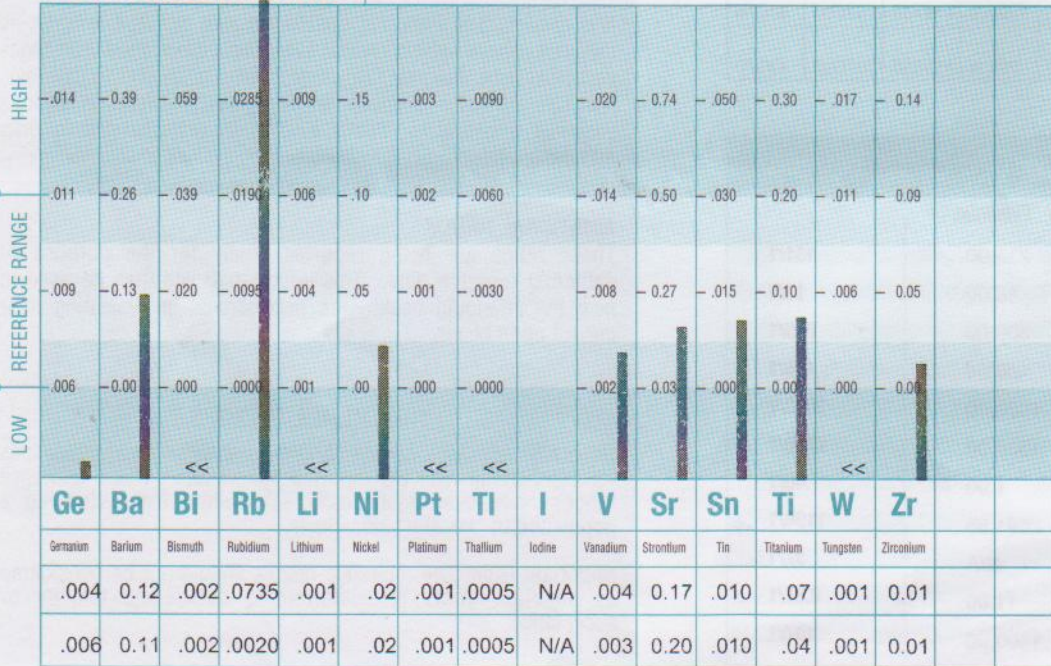
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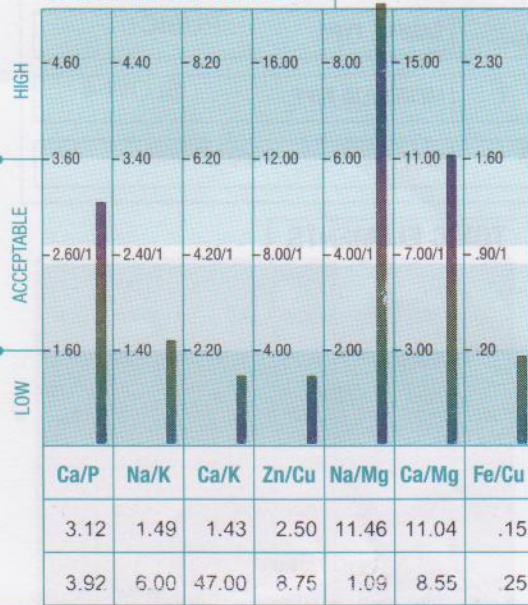
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19/01/2006
CURRENT TEST RESULTS

8/03/2004
PREVIOUS TEST RESULTS

SIGNIFICANT RATIOS



TOXIC RATIOS



ADDITIONAL RATIOS

RATIO	CALCULATED VALUE		OPTIMUM
	Current	Previous	
Ca/Sr	311.76	235.00	131/1
Cr/V	15.00	10.00	13/1
Cu/Mo	480.00	800.00	625/1
Fe/Co	233.33	400.00	440/1
K/Co	12333.33	1000.00	2000/1
K/Li	37000.00	1000.00	2500/1
Mg/B	12.97	1.96	40/1
S/Cu	855.63	2691.88	1138/1
Se/Tl	140.00	N/A	37/1
Se/Sn	7.00	11.00	0.67/1
Zn/Sn	1200.00	1400.00	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

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RATIOS

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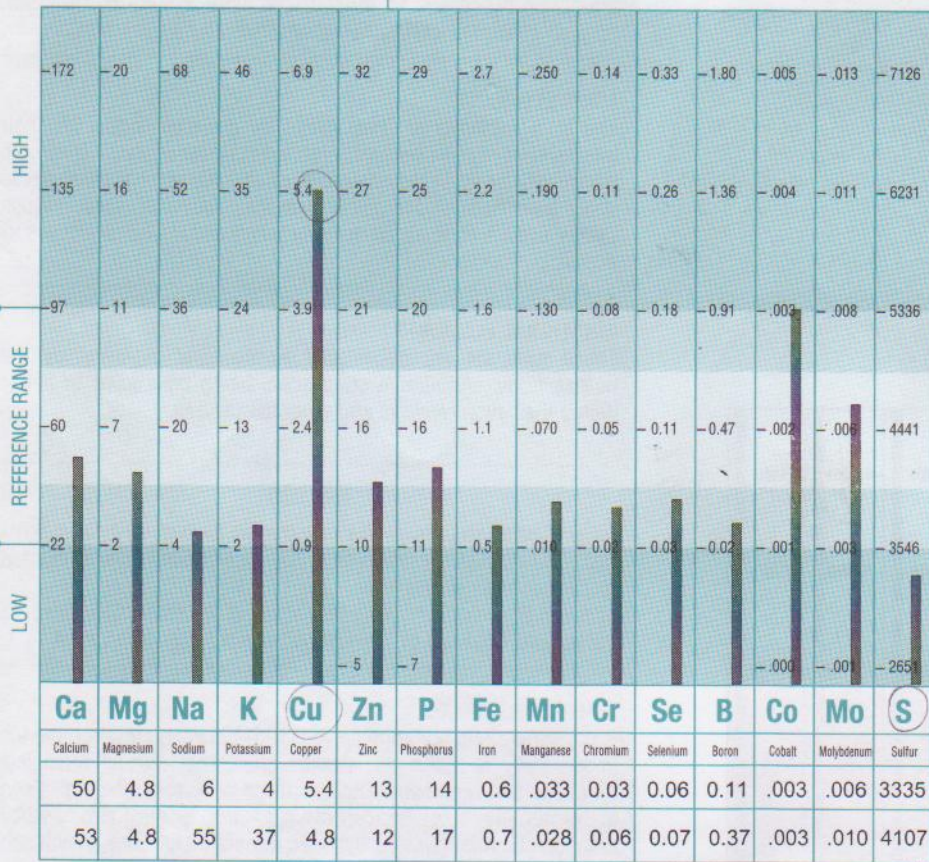
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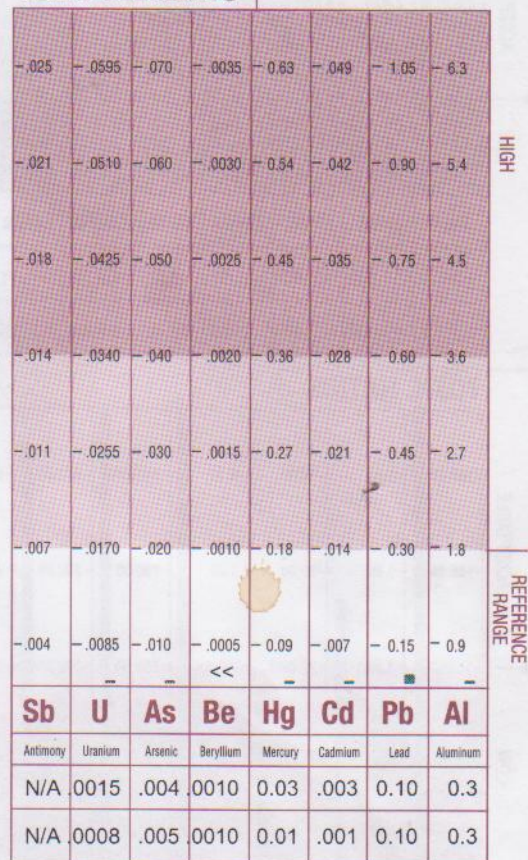
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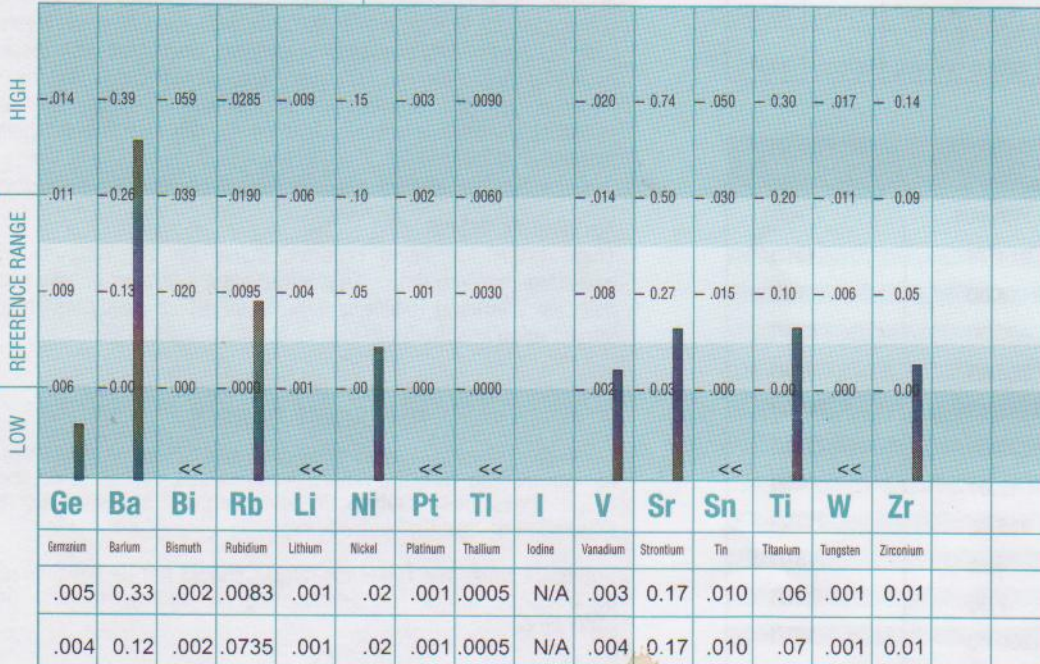
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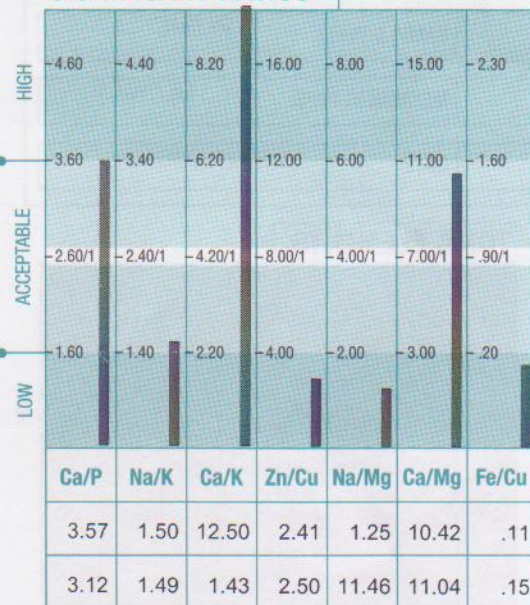
10/11/2006

CURRENT TEST RESULTS

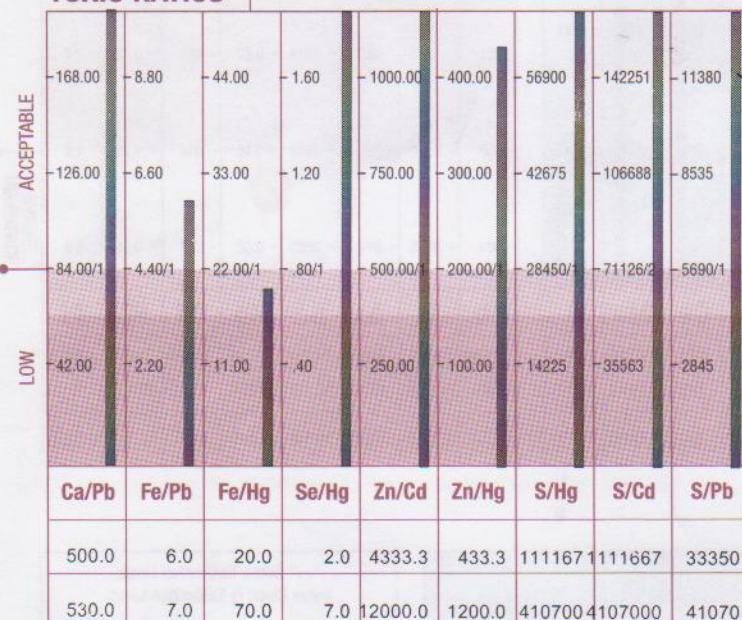
19/01/2006

PREVIOUS TEST RESULTS

SIGNIFICANT RATIOS



TOXIC RATIOS



ADDITIONAL RATIOS

RATIO	CALCULATED VALUE		OPTIMUM
	Current	Previous	
Ca/Sr	294.12	311.76	131/1
Cr/V	10.00	15.00	13/1
Cu/Mo	900.00	480.00	625/1
Fe/Co	200.00	233.33	440/1
K/Co	1333.33	12333.33	2000/1
K/Li	4000.00	37000.00	2500/1
Mg/B	43.64	12.97	40/1
S/Cu	617.59	855.63	1138/1
Se/Tl	120.00	N/A	37/1
Se/Sn	6.00	7.00	0.67/1
Zn/Sn	1300.00	1200.00	167/1

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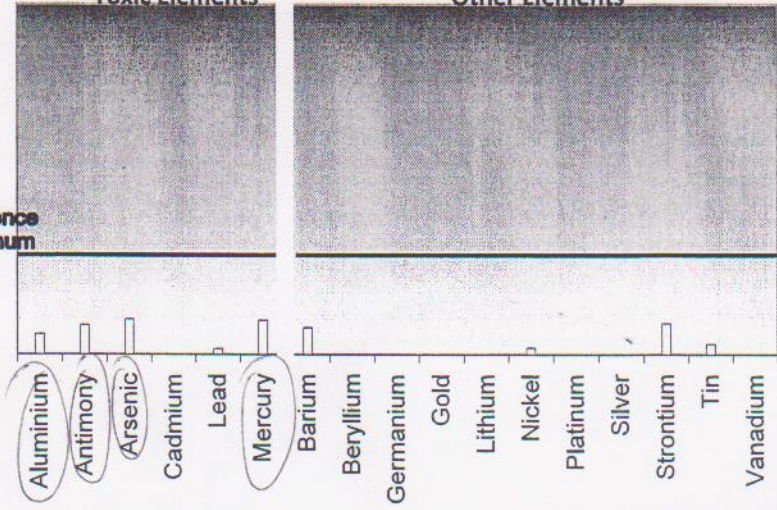
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Toxic Elements

Other Elements

Reference Maximum

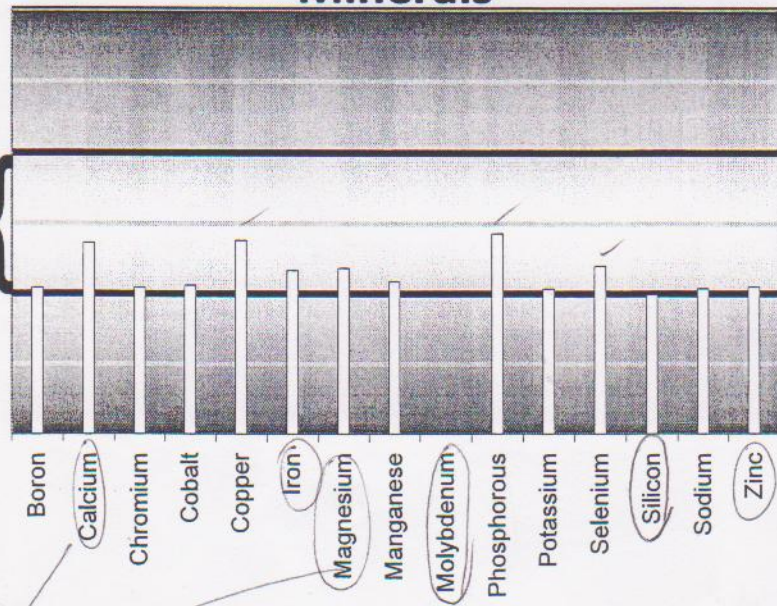


Element	Measured	Reference
Aluminium	2.44	0 - 12
Antimony	0.06	0 - 0.2
Arsenic	0.0708	0 - 0.2
Cadmium	< 0.01	0 - 0.12
Lead	0.189	0 - 3.3
Mercury	0.344	0 - 1.0

Element	Measured	Reference
Barium	0.81	0 - 3.0
Beryllium	< 0.002	0 - 0.1
Germanium	< 0.1	0 - 0.4
Gold	< 0.04	0 - 0.3
Lithium	< 0.01	0 - 0.2
Nickel	0.06	0 - 0.8
Platinum	< 0.13	0 - 0.6
Silver	< 0.02	0 - 1.2
Strontium	2.181	0 - 7.0
Tin	0.13	0 - 1.2
Vanadium	< 0.01	0 - 0.2

Minerals

Reference Range



Element	Measured	Reference
Boron	0.42	0.3 - 3
Calcium	847	300 - 1800
Chromium	0.05	0.04 - 0.3
Cobalt	0.04	0.02 - 0.3
Copper	16.5	10 - 27
Iron	7.3	6 - 14
Magnesium	34.8	20 - 100
Manganese	0.10	0.07 - 0.4
Molybdenum	< 0.02	0.02 - 0.3
Phosphorous	143	115 - 180
Potassium	1.7	1 - 20
Selenium	0.80	0.6 - 1.6
Silicon	6.7	7 - 55
Sodium	3.4	2 - 40
Zinc	149	145 - 220

Ratios:	Measured	Ideal
Na/K	2.04	2.4
Ca/K	503.87	42
Zn/Cu	9.05	8
Cu/Mo	1645000.00	625

Overt or hidden copper overload	
Ca/K > 100	K < 2
Na/K < 2.2	
Mo < 0.03	
Cu/Mo > 625	