



# Anamol

## Laboratories



# Hair Mineral Analysis

To: Dr. Christy Wallace

### Patient Information

Name: COLETTE ARNETTS  
 Sex: Female  
 Age: 42  
 Hair Colour: Brown

Hair Location: Nape  
 Shampoo: Other  
 Bleach: Yes:  No:   
 Cold Wave: Yes:  No:   
 Permanent: Yes:  No:

Lab No.: 1353240041  
 Date In: 29/06/06  
 Date Out: 04/07/06

Toxic Elements	Results (ppm)	Acceptable Level (ppm)	Acceptable		Above Acceptable Limits		
			Low	High	Low	High	
Aluminum	20.62	< 10					
Antimony	0.02	< 0.6					Al
Arsenic	0.29	< 1					Sb
Barium	0.33	< 1.5					As
Beryllium	0.01	< 0.05					Ba
Bismuth	< DL *	< 1					Be
Cadmium	0.03	< 0.5					Bi
Lead	1.03	< 1.5					Cd
Mercury	< DL *	< 1					Pb
Silver	0.04	< 1					Hg

Nutritional Minerals	Results* (ppm)	Normal Range (ppm)	Normal Range					High	
			Low	-2SD	-1SD	+1SD	+2SD		
Boron	1.23	0.5-3.5							B
Calcium	365	450-1105							Ca
Chromium	0.16	0.2-1.2							Cr
Copper	33	18-50							Cu
Iron	6.56	3.94-7.36							Fe
Magnesium	27	44-98							Mg
Manganese	0.26	0.2-0.8							Mn
Molybdenum	0.07	0.04-0.15							Mo
Phosphorus	188	145-250							P
Potassium	28	5-40							K
Sulfur	42521	30000-55000							S
Selenium	0.81	0.5-2							Se
Silicon	3.23	5-28							Si
Sodium	40	18-85							Na
Strontium	0.94	0.8-12							Sr
Zinc	114	150-250							Zn

\* < DL = Less than Detection Limit    \*\* x ± 2SD acceptable

Potentially Toxic Elements	Results (ppm)	Acceptable Level (ppm)		Other Elements	Results (ppm)	Normal (ppm)		Significant Ratios	
								Results	Normal Range
Palladium	0.06	< 1	Pd	Cobalt	0.03	0.03-0.05	Co	Ca : Mg	13.6:1 (4.6-25.1):1
Thallium	0.01	< 1.5	Tl	Germanium	↓ 0.03	0.04-0.1	Ge	Fe : Cu	0.2:1 (0.1-0.4):1
Tungsten	0.03	< 2	W	Iodine	↓ 0.7	0.8-1.6	I	Na : K	1.4:1 (0.5-17):1
Uranium	< DL *	< 1.5	U	Lithium	0.08	0.01-0.2	Li	Zn : Cu	3.4:1 (3.-10.9):1
Zirconium	< DL *	< 0.5	Zr	Nickel	0.13	0.1-1	Ni	Zn : Mn	434.2:1 (187.5-1250):1
				Tin	0.32	0.3-1.6	Sn		
				Vanadium	0.02	0.02-0.1	V		

Laboratory Director: George M. Tamari, Ph.D., Member of the Canadian Association for Environmental Analytical Laboratories