

HAIR ELEMENTS

Patient: Hair test 103
 Sex: Male
 Age: 58
 Location: Colorado, USA

POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	30	< 7.0	[Bar chart]	
Antimony	0.023	< 0.066	[Bar chart]	
Arsenic	0.13	< 0.080	[Bar chart]	
Beryllium	< 0.01	< 0.020	[Bar chart]	
Bismuth	0.12	< 2.0	[Bar chart]	
Cadmium	0.015	< 0.15	[Bar chart]	
Lead	0.55	< 2.0	[Bar chart]	
Mercury	1.0	< 1.1	[Bar chart]	
Platinum	< 0.003	< 0.005	[Bar chart]	
Thallium	0.001	< 0.010	[Bar chart]	
Thorium	< 0.001	< 0.005	[Bar chart]	
Uranium	0.22	< 0.060	[Bar chart]	
Nickel	0.08	< 0.40	[Bar chart]	
Silver	0.24	< 0.12	[Bar chart]	
Tin	0.22	< 0.30	[Bar chart]	
Titanium	0.32	< 1.0	[Bar chart]	
Total Toxic Representation			[Bar chart]	

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	289	200- 750	[Bar chart]				
Magnesium	23	25- 75	[Bar chart]				
Sodium	42	12- 90	[Bar chart]				
Potassium	100	9- 40	[Bar chart]				
Copper	10	10- 28	[Bar chart]				
Zinc	130	130- 200	[Bar chart]				
Manganese	0.11	0.15- 0.65	[Bar chart]				
Chromium	0.29	0.20- 0.40	[Bar chart]				
Vanadium	0.039	0.018- 0.065	[Bar chart]				
Molybdenum	0.060	0.025- 0.064	[Bar chart]				
Boron	14	0.40- 3.0	[Bar chart]				
Iodine	0.19	0.25- 1.3	[Bar chart]				
Lithium	< 0.004	0.007- 0.023	[Bar chart]				
Phosphorus	167	160- 250	[Bar chart]				
Selenium	1.4	0.95- 1.7	[Bar chart]				
Strontium	1.0	0.30- 3.5	[Bar chart]				
Sulfur	45700	44500- 52000	[Bar chart]				
Barium	0.47	0.16- 1.6	[Bar chart]				
Cobalt	0.005	0.013- 0.035	[Bar chart]				
Iron	25	5.4- 13	[Bar chart]				
Germanium	0.034	0.045- 0.065	[Bar chart]				
Rubidium	0.078	0.011- 0.12	[Bar chart]				
Zirconium	0.065	0.020- 0.44	[Bar chart]				

SPECIMEN DATA

COMMENTS:
 Date Collected: 7/22/2007 Sample Size: 0.196 g
 Date Received: 7/26/2007 Sample Type: Head
 Date Completed: 7/31/2007 Hair Color: Brown
 Client Reference: Treatment:
 Methodology: ICP-MS Shampoo: Mill Creek Bioter V06.99

RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	12.6	4- 30
Ca/P	1.73	0.8- 8
Na/K	0.42	0.5- 10
Zn/Cu	13	4- 20
Zn/Cd	> 999	> 800