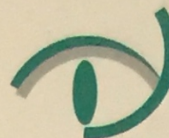


LAB#: H141027-2356-1  
 PATIENT: Ulf Lunge  
 ID: LUNGE-U-00002  
 SEX: Male  
 AGE: 53

CLIENT#: 25965



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**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	68 <sup>th</sup> 95 <sup>th</sup>
Aluminium (Al)	1.3	< 7.0	
Antimon (Sb)	0.020	< 0.066	
Arsen (As)	0.11	< 0.080	
Barium (Ba)	0.17	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Wismut (Bi)	0.004	< 2.0	
Cadmium (Cd)	0.060	< 0.065	
Blei (Pb)	0.19	< 0.80	
Quecksilber (Hg)	0.34	< 0.80	
Platin (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uran (U)	0.001	< 0.060	
Nickel (Ni)	0.06	< 0.20	
Silber (Ag)	0.02	< 0.08	
Zinn (Sn)	0.04	< 0.30	
Titan (Ti)	0.37	< 0.60	
toxische Gesamtbelastung			

ESSENTIAL AND OTHER ELEMENTS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup>
Calcium (Ca)	248	200- 750	
Magnesium (Mg)	27	25- 75	
Natrium (Na)	19	20- 180	
Kalium (K)	13	9- 80	
Kupfer (Cu)	26	11- 30	
Zink (Zn)	200	130- 200	
Mangan (Mn)	0.05	0.08- 0.50	
Chrom (Cr)	0.76	0.40- 0.70	
Vanadium (V)	0.047	0.018- 0.065	
Molybdaen (Mo)	0.023	0.025- 0.060	
Bor (B)	1.8	0.40- 3.0	
Jod (I)	0.48	0.25- 1.8	
Lithium (Li)	0.005	0.007- 0.020	
Phosphor (P)	174	150- 220	
Selen (Se)	0.48	0.70- 1.2	
Strontium (Sr)	0.14	0.30- 3.5	
Schwefel (S)	49200	44000- 50000	
Kobalt (Co)	0.003	0.004- 0.020	
Eisen (Fe)	7.2	7.0- 16	
Germanium (Ge)	0.030	0.030- 0.040	
Rubidium (Rb)	0.011	0.011- 0.12	
Zirkonium (Zr)	< 0.007	0.020- 0.44	

COMMENTS:	SPECIMEN DATA		RATIOS	
	ELEMENTS	RATIOS	RANGE	
Date Collected: 10/15/2014	Sample Size: 0.199 g	Ca/Mg	9.19	4- 30
Date Received: 10/27/2014	Sample Type: Head	Ca/P	1.43	0.8- 8
Date Completed: 10/30/2014	Hair Color:	Na/K	1.46	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	7.69	4- 20
	Shampoo:	Zn/Cd	> 999	> 800