

## Typical Analysis - Compiled March 17, 2005:

### Mineral Analysis

Alumina	11.43%	Hydrogen	.38%	Potassium oxide	5.23%
Barium	.09%	Magnesium oxide	.78%	Silica oxide	65.85%
Calcium	3.67%	Manganese oxide	.02%	Sodium oxide	2.07%
Carbon	.61%	Nitrogen	.15%	Strontium oxide	.03%
Chlorine	.22%	Oxygen	.73%	Sulfur trioxide	.21%
Ferric oxide	1.37%	Phosphorous pentoxide	.15%	Titania	.20%
Trace Elements		(below).38%	LOI @ 750°	C** 6.43%	

\* The alumina is not biologically available. It is bound to the silica and is an aluminosilicate. Sand, clay, most rock deposits, and soil deposits are primarily aluminosilicates.

\*\*LOI - "Loss on Incineration" during the trace analysis by Spark Source Mass Spectrometry. Underline = essential for most living species of Plants and animals.

### Element Analysis

<u>Elements</u>	<u>PPM</u>	<u>Elements</u>	<u>PPM</u>	<u>Elements</u>	<u>PPM</u>
Antimony (Sb)	0.4	Hafnium (Hf)	21	Scandium (sc)	2.7
Arsenic (As)	1.1	Holmium (Ho)	0.6	Selenium (Se)	0.7
Beryllium (Be)	3.3	Indium (In)	.010	Silver (Ag)	.005
Bismuth (Bi)	3.5	<u>Iodine (I)</u>	2.2	Strontium (Sr)	380
Boron (B)	29	Lanthanum (La)	220	Sulfur (S)	240
Bromine (Br)	6.6	Lead (Pb)	6.2	Tantalum (Ta)	2.7
Cadmium (Cd)	0.3	Lithium (Li)	859	Tellurium (Te)	.022
Cerium (Ce)	230	Lutetium (Lu)	0.5	Terbium (Tb)	0.8
Cesium (Cs)	21.7	Mercury (Hg)	0.01	Thallium (Tl)	5.9
<u>Chromium (Cr)</u>	6.1	<u>Molybdenum (Mo)</u>	12.6	Thorium (Th)	180
<u>Cobalt (Co)</u>	22.3	Neodymium (Nd)	5.1	Thulium (Tm)	0.6
<u>Copper (Cu)</u>	12	Nickel (Ni)	2.6	Tin (s)	2.9
Dysprosium (Dy)	2.7	Niobium (Nb)	40	Tungsten (W)	26
Erbium (Er)	1.7	Palladium (Pd)	.008	Uranium (U)	6
Europium (Eu)	3.7	Praseodymium (Pr)	27	<u>Vanadium (V)</u>	7.8
Fluorine (F)	900	Rhenium (Re)	.011	Ytterbium (Y)	1.4
Gadolinium (Gd)	3.7	Rhodium (Rh)	.002	Yttrium (Y)	23
Gallium (Ga)	15	Rubidium (Rb)	325	Zinc (Zn)	64.3

Germanium (Ge)	6.1	Ruthenium (Ru)	.013	Zirconium (Zr)	62.7
Gold (Au)	.005	Samarium (Sm)	6.2		