

# Earth Origins

## BARITES-DRILLING GRADE- CERTIFICATE OF ANALYSIS

### BARITES POWDER-API

<u>NO</u>	<u>PARAMETER</u>	<u>SPECIFICATION</u>
1	200Mesh Powder	97.50% Passing
2	Calcium	250 mg/kg Max.
3	Density	4.10 gm/cc
4	BaSO <sub>4</sub>	92% Min
5	Humidity	0.30% Max.
6	Solubility in Water	Insoluble
7	Calcium Carbonate(CaCO <sub>3</sub> )	6% Max.
9	Appearance	Grey Powder

#### Description:

Barite is a mineral consisting of barium sulfate. It most often occurs in hydrothermal veins and has veins in limestones. It is a relatively inert mineral with a high density. It is the primary ore of barium. The most common use of barite is as a weighting agent in drilling muds.

#### Uses:

Most barite produced is used as a weighting agent in drilling muds. These high density muds are circulated down the drill stem and return to the surface between the drill stem and the wall of the well. This action effectively flushes the cuttings produced by the drill and carries them to the surface.

#### Benefits:

Used by the petroleum industry as a weighting material in the formulation of drilling mud. Barite increases the hydrostatic pressure of the drilling mud allowing it to compensate for high-pressure zones experienced during drilling. The softness of the mineral also prevents it from damaging drilling tools during drilling and enables it to serve as a lubricant. The American Petroleum Institute (API) has established specifications for the use of barite in drilling mud.