

# Justification

**Physiography:** The applied area is a hilly terrain with an undulating topography. The hills are slightly elevated on western side and gradually sloping towards south, east and north. The overall relief varies from 5mts to 30 mts. The area consists of dense vegetation which are scattered all along the applied area. The area surrounding quartz deposits are free from vegetation. There is no perennial water course in and around applied area. Further, on local enquiry, it is revealed that no wild animals are witnessed since long time and the human settlement is very far away from the applied area.

**Geology of the Area:** The subject area forms as part of Northern part of the Nellore Schist Belt. Schist is predominant formation in the subject area. It is light green in colour. Schist exhibits a foliation trend with sub-vertical to vertical dips. The significant and economical important of this deposit is represented by Quartz Reefs occurred along with fracture zone within country rock like The Quartz reefs show N-S strike direction with a strike length of 400 mts and width of 50 mts with gently dipping towards SE. The Quartz reefs exhibit two sets of joints namely strike and dip joints. As per the field observations, the Quartz deposit may be extended up to a maximum depth of 30 mts. Going to depth the quality of the quartz may be increased.

The Quartz mineral is used in Glass Industry as well as Ceramic Industry, Ferro Alloys. The proposed deposits in this area are having good quality of SiO<sub>2</sub> % and Electrical Conductivity. Further as seen from the office records it is reveals that the same quality of mineral is not available in the surrounding / outside Forest areas in terms of quantity, demand and supply. Now there is very much demand for the quartz and the demand may be doubled within next 2 to 3 years. Further, it is to submit that there are 67 mining leases are in forced. Out of 67 leases only 10 leases are working and remaining is having no economical values due to depletion of deposit and low % SiO<sub>2</sub>. Even though all these leases are working, yet they are unable to meet the domestic and foreign demands.

FOR: SREE SHIRDI SAI MINERALS  
G.V. [Signature]  
MANAGING PARTNER.