

Uranga bauxite project

The exploration work in Uranga block was carried out by CMDC for bauxite under category G-1 and G-2 levels as per the minerals (Evidence of Mineral Contents)Rule 2015. The exploration work was completed on May 2018.

Location:

The Uranga block is located in and around village Uranga and Barima, Tahsil- Mainpat, District-Sarguja and falls in toposheet no 64N/5. The block is bounded between Latitudes 22°45'04.8941"N to 22°45'40.7588"N and Longitudes 83°18'50.7355"E to 83°20'38.9222"E. The area is approachable through the tar road from the district headquarter Ambikapur which is about 65km via Darima-kamaleshwarpur.

Geology of the block area:

The Uranga Block is a part of Mainpat plateau which form the central part of Maikal range containing laterite /bauxite capping over Deccan lava flows. Most of the area is covered by laterite /laterite soil having flat topography with minor undulation. The maximum contour level is 1073mRL near the northeastern boundary and minimum is 1042 mRL near the eastern boundary of the area. The Block is trending and E-W having irregular margin and bounded by steep escarpment on southern side. It is about 3.1 km long with width varying from 0.3 to 0.5 km.

The main drainage of the area is through different seasonal water courses originating from the plateau. Streams of the plateau exhibit a combination of radial and dendritic pattern. A main nala Mangadra is about 3km on the northern side of the area, flowing towards northern direction and meet to gungata nala.

The Archean from the basement of the plateau and consists of gneisses, phyllites and schists intruded by granites, pegmatites and basic dykes. The gneisses which have a general east-west foliation are widely exposed along the base of the plateau where they are generally associated with granites. Overlying the base of the gneisses are schists and phyllites which are mostly weathered. At places, there schists and phyllites are intercalated with thin bands quartzites and black slates. On the western flank of the plateau, these Archean rocks are overlain by lower Gondwana sediment which extend further to the base of Amarkantak. The entire plateau is covered by Deccan trap basalts, which are about 80 m in thickness.

The laterite and bauxite are the weathering products of Deccan traps (Upper Cretaceous to Paleocene) developed as a result of intense weathering, substrata alteration under tropical and sub-tropical climatic condition.

The bauxite profile sequence consists of lithomargic clay at the base, followed by ferruginous laterite, ferruginous bauxite, massive to cavernous bauxite, laterite and soil at the top.

Block status:

Exploration agency name-	joint venture of m/s MAPP drilling & exploration pvt ltd Hyderabad and m/s Geosolution (p)ltd, Bhilai.
Exploration status -	G1&G2 Level
Total area -	183.094 ha
Total meterage -	5163.50m
Total resources -	8.5MT