

MANGANESE RESOURCE ESTIMATION FOR SHIVRAJPUR, PANI AND BHABHAR LEASE AREAS OF GMDC – MARCH, 2012

GMDC being involved in mining and upgradation of mineral wealth of Gujarat, GMDC Science & Research Centre engaged M/s. Scanpoint Geomatic Ltd., Ahmedabad and M/s. Antrix Corporation Ltd., Bangalore for carrying out rapid assessment of manganese deposits of Panchmahal (Shivrajpur) and Vadodara districts (Pani and Bhabhar) lease areas of GMDC using high resolution satellite imageries and data processing.

Land use / Land cover analysis and related thematic mapping and modelling also carried out as support systems for decision making with respect to resource extraction and mine planning.

Conclusions and Recommendations :

1. Geologically lease areas belong to Champaner group of rocks. Phyllite and quartzite are main rock types with manganese ores and quartz veins.
2. Rocks are highly folded. Mostly ore bodies are steeply dipping.
3. Shivrajpur and Pani lease areas are mined out extensively for high grade manganese in past (1904 – 1953) low grade material dumped is commercially usable now.
4. Manganese resource estimated to be about 2.6 million tonnes in Shivrajpur and about 2.2 million tonnes in Pani.
5. Manganese ore bodies are extending beyond present lease areas of GMDC. Further exploration necessary in view of this.
6. Recommended to carry out detailed exploration through geophysical mapping, drilling and chemical analysis of samples in Shivrajpur and Pani areas for exact reserve estimation and grade variation at the depth.