## SUMMARY OF THE MINERAL LIMESTONE BLOCK HPB-21 PART A – GENERAL INFORMATION ABOUT MINERALBLOCK

|    | Features                                  | Details                                                                                                                                                                                                                                                                                                                |                                                           |                        |                        |                         |
|----|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------|------------------------|-------------------------|
| 1. | Location                                  | N/v Khetolaw, Sarasani, Somna Tehsil Nagaur &<br>Deh, District- Nagaur<br>HPB-21 Limestone Block N/v Khetolaw, Sarasani,<br>Somna Tehsil Nagaur & Deh, District- Nagaur                                                                                                                                                |                                                           |                        |                        |                         |
|    | Mineral Block                             |                                                                                                                                                                                                                                                                                                                        |                                                           |                        | -                      |                         |
|    | Corners point (Latitude & Longitude       | POINTS                                                                                                                                                                                                                                                                                                                 | LATITUDE                                                  | L                      | ONGITUD                | E                       |
|    |                                           | L1                                                                                                                                                                                                                                                                                                                     | 27°14'5.35(                                               | )6"                    | 73°54'29.6             | 5374"                   |
|    |                                           | I1                                                                                                                                                                                                                                                                                                                     | 27°14'11.84                                               | 98"                    | 73°54'29.              | 574"                    |
|    |                                           | X1                                                                                                                                                                                                                                                                                                                     | 27°14'36.97                                               | 46"                    | 73°54'42.9             | 0049"                   |
|    |                                           | 01                                                                                                                                                                                                                                                                                                                     | 27°15'16.82                                               |                        | 73°55'4.0              |                         |
|    |                                           | N1                                                                                                                                                                                                                                                                                                                     | 27°15'7.077                                               |                        | 73°55'4.1              |                         |
|    |                                           | M1                                                                                                                                                                                                                                                                                                                     | 27°15'7.356                                               |                        | 73°55'40.5             |                         |
|    |                                           | B'                                                                                                                                                                                                                                                                                                                     | 27°14'5.908                                               |                        | 73°55'42.(             |                         |
|    | Villages                                  | Harima, Sarasani & Somna                                                                                                                                                                                                                                                                                               |                                                           |                        |                        |                         |
|    | Tehsil / Taluka                           | Nagaur & Deh                                                                                                                                                                                                                                                                                                           |                                                           |                        |                        |                         |
|    | District                                  | Nagaur                                                                                                                                                                                                                                                                                                                 |                                                           |                        |                        |                         |
|    | State                                     | Rajasthan                                                                                                                                                                                                                                                                                                              |                                                           |                        |                        |                         |
| 2. | Area (hectares/square kilometres)         | 307.1141 Hectare                                                                                                                                                                                                                                                                                                       |                                                           |                        |                        |                         |
| -  | Mineralised Area                          | 307.1141 He                                                                                                                                                                                                                                                                                                            |                                                           |                        |                        |                         |
|    | Non-mineralised Area                      | NIL                                                                                                                                                                                                                                                                                                                    |                                                           |                        |                        |                         |
| 3. | Exploration                               |                                                                                                                                                                                                                                                                                                                        |                                                           |                        |                        |                         |
|    | Status (G2/G3/G4 etc.)                    | G-2                                                                                                                                                                                                                                                                                                                    |                                                           |                        |                        |                         |
|    | Exploration Agency                        | Department of mines & Geology, Rajasthan                                                                                                                                                                                                                                                                               |                                                           |                        |                        |                         |
|    | Total Number of Boreholes<br>withmeterage | A total of 13 holes drilled in the study area & influence<br>of 13 drill hole was considered for estimating the<br>resources on the basis of polygon method of 13 drill<br>holes falls within the block. Depth of the borehole varies<br>from 6 to 53 m. Total meterage of drilling in the 13<br>boreholes is 590.8 m. |                                                           |                        |                        |                         |
|    | Borehole Spacing (Density)                | The boreholes were drilled closely spaced at 400 X 400                                                                                                                                                                                                                                                                 |                                                           |                        |                        |                         |
|    |                                           | m regular grid pattern except some of the bore holes                                                                                                                                                                                                                                                                   |                                                           |                        |                        |                         |
|    |                                           | which were shifted due to crops in the agriculture field.                                                                                                                                                                                                                                                              |                                                           |                        |                        |                         |
|    |                                           | The limestone depositof the area is of regular habit,                                                                                                                                                                                                                                                                  |                                                           |                        |                        |                         |
|    |                                           | thus it falls under G-2 (332) category, as per Part III of                                                                                                                                                                                                                                                             |                                                           |                        |                        |                         |
|    |                                           | The Minerals (Evidence of Mineral C 2015.                                                                                                                                                                                                                                                                              |                                                           | l Contents)            | Rules,                 |                         |
| 4. | Quantity of Minerals (Grade-wise)         | 2013.                                                                                                                                                                                                                                                                                                                  |                                                           |                        |                        |                         |
|    | Mineral                                   | Limestone                                                                                                                                                                                                                                                                                                              |                                                           |                        |                        |                         |
|    |                                           | Grade of<br>Limestone                                                                                                                                                                                                                                                                                                  | Net<br>Geological<br>Resources<br>(In<br>Million<br>tons) | Wt.<br>Average<br>CaO% | Wt.<br>Average<br>MgO% | Wt.<br>Average<br>SiO2% |

|    |                                              | Limestone<br>(CaO<br>>34%,         108.96         47.08         3.4         4.1           MgO <5.00%<br>Sio2<16%<br>wt.average<br>%)         108.96         47.08         3.4         4.1                                                                                                                                                                                 |  |  |  |
|----|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|    | Total Geological Resources                   | A total geological resource of HPB-21 block is<br>108.96 mT with an average grade of CaO 47.08 %,<br>SiO2 4.1%, and MgO 3.4% has been estimated in<br>the block based on cumulative thickness of limestone<br>intersected in each borehole and chemical analysis<br>received.                                                                                             |  |  |  |
| 5. | Mineralised Zones                            |                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|    | Number of Mineral Zones                      | 1 to 7                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
|    | Trend (Dip and Strike)                       | The nature of limestone deposit is of sedimentary stratiform is trending almost N-S with rolling dip.                                                                                                                                                                                                                                                                     |  |  |  |
|    | Total Thickness                              | Cumulative thickness of mineralized zone is 1.5 to 24.96 mts.                                                                                                                                                                                                                                                                                                             |  |  |  |
| 6. | Accessibility                                |                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|    | Nearest Rail Head                            | Nagaur (18 kms)                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|    | Road                                         | The block is located 1 km South of Harima village. The area lies at around 18 kms NE of Nagaur town on Nagaur-Ladnun N.H 65. The area lies at around 18 kms NE of Nagaur town on Nagaur-Ladnun N.H 65. The investigated area is well connected by tar road.                                                                                                               |  |  |  |
|    | Airport                                      | Nagaur (18 kms)                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
| 7. | Hydrography                                  |                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|    | Local Surface Drainage<br>Pattern (Channels) | No perennial river originates or flows from this part of investigated area.                                                                                                                                                                                                                                                                                               |  |  |  |
|    | Rivers/Streams                               | Seasonal nallas, ponds etc. are available in the area,<br>which fulfils the water requirement along with recent<br>developed tube wells and dug wells.                                                                                                                                                                                                                    |  |  |  |
| 8. | Climate                                      |                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|    | Mean Annual Rainfall                         | Min. 270 max. 410.0 Avg. 393                                                                                                                                                                                                                                                                                                                                              |  |  |  |
|    | Temperatures (December)                      | 1°C min.                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |
| 9. | Temperatures (June) Topography               | 50 °C max. recorded                                                                                                                                                                                                                                                                                                                                                       |  |  |  |
|    | Toposheet No.                                | 45E/15 and 45E/16                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
|    | Morphology of the area                       | The area is almost plain with small mounds and<br>knolls. The area shows a plain topography with scanty<br>and scattered outcrops of limestone which are partially<br>concealed under windblown sand and at some places<br>with agriculture farm soil. Most of the limestone<br>exposures are on ground level except some low to<br>moderate high linear isolated mounds. |  |  |  |

## PART B – PARTICULARS OF STATUTORY LICENSES, PERMITS, PERMISSIONS, CONCESSIONS, APPROVALS AND CONSENTS RELATED TO MINING OPERATIONS

| S.N. | Particulars                                       | Details/Status                   |  |  |
|------|---------------------------------------------------|----------------------------------|--|--|
| 1    | Forest Clearance                                  |                                  |  |  |
| 2    | Wildlife clearance (sanctuary, reserve or         |                                  |  |  |
|      | special zone clearances)                          | _                                |  |  |
| 3    | Environment clearance                             |                                  |  |  |
| 4    | Mining Plan Approval                              |                                  |  |  |
| 5    | Consent to establish                              |                                  |  |  |
| 6    | Explosive license                                 |                                  |  |  |
| 7    | Permission for mining opening                     |                                  |  |  |
| 8    | Permission of installation/trial operation of     |                                  |  |  |
|      | equipment                                         |                                  |  |  |
| 9    | Ground water clearance (Centre/State)             | To be obtained by the successful |  |  |
| 10   | Railway siding approval                           | Bidder                           |  |  |
| 11   | Approval for diesel storage                       |                                  |  |  |
| 12   | Power line from State Discom                      |                                  |  |  |
| 13   | Clearances relating to work under an existing     |                                  |  |  |
|      | transmission line or shifting of the transmission |                                  |  |  |
|      | line                                              |                                  |  |  |
| 14   | GramaSabha consent                                |                                  |  |  |
| 15   | Any other clearances to start mining operation    |                                  |  |  |

## PART C – PARTICULARS OF LAND

|    | LAND TYPE                          | Area (in. Hectares) |
|----|------------------------------------|---------------------|
| 1. | Total Concession Area              | 306.6941            |
| 2. | Forest Land with status            | NIL                 |
| 3. | Government Land with status        | 25.2014             |
| 4. | Charagah Land with status          | 68.7944             |
| 5. | Private Land with status           | 212.6983            |
| 6. | Revenue survey details of the Area | Available           |

## Note:

- The variation in the total block area (307.1141 hectare) and area calculated by superimposition of block on revenue record (306.6941 hectare) is due to partial Khasras falling in the block and also due to differences of area in digitized settlement sheet and revenue record.
- The cadastral Khasra detail of the block verified by concerned Patwari & Tehsildar is enclosed with the report.
- Total area has been calculated based on area falling with in the coordinates but when superimposed on revenue map, slightly it may differ being both on different projections, one is spherical and other is linear.