# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION MCDR INSPECTION REPORT BANGALORE REGIONAL OFFICE

Mine File No: KNT/CTD/FE-45/BNG

| S.<br>N. | Particulars                        | Details                         |
|----------|------------------------------------|---------------------------------|
| 1        | Name of the Mine                   | KK Kaval Iron & Mn ore mine     |
| 2        | Date of inspection                 | 26.06.24                        |
| 3        | Name of inspecting officer         | K. Srinivas, JMG                |
| 4        | Name of accompanying mine          | Ashok Kumar Jain, Agent         |
|          | officials                          | Sarvottam, Mine Manager         |
|          |                                    | Dhananjay B.K, Mining Engineer  |
| 5        | Previous date of Inspection        | 24.07.2023                      |
| 6        | Total Lease Area (Ha) with         | 21.44ha, Forest                 |
|          | breakup of Non-forest and forest   |                                 |
|          | land                               |                                 |
| 7        | Minecode with ML no.               | 30KAR07032, ML no.2583          |
| 8        | IBM Registration Number under      | IBM/7488/2011                   |
|          | rule 45 of MCDR, 1988              |                                 |
| 9        | Name of the lessee, Address,       | M/s Garudadri Impex Pvt.Ltd     |
|          | phone, email and fax number        | No.464, Ward No.15/27,          |
|          |                                    | 1 <sup>st</sup> Floor,Dam Road, |
|          |                                    | Hospet – 583 201(Vijayanagar    |
| 10       | Village                            | District) KK Kaval              |
| 11       | Village<br>Taluk/Mandal            |                                 |
| 12       | District                           | Hosadurga<br>Chitradurga        |
| 13       | Pincode                            | 577 533                         |
| 14       | State                              | Karnataka                       |
| 15       | Post office                        | Hosadurga                       |
| 16       | Nearest police station             | Hosadurga                       |
| 17       | Nearest Railway station            | Hosadurga                       |
| 18       | Date of Grant of Mining Lease      | 31.05.2008                      |
| 19       | Date of Execution                  | 31.05.2008                      |
| 20       | Date of opening of Mine            | -                               |
| 21       | Date of expiry                     | 30.05.2028                      |
| 22       | Name of the <b>Nominated Owner</b> | Smt.Sindhu Manoj Kumar Jain,    |
|          | with Address, phone, email, fax    |                                 |
|          | number and date of appointment     |                                 |
| 23       | Name of the Mine <b>Agent</b> with | Ashok Kumar Jain, Agent         |
|          | Address, phone, email, fax         |                                 |

|              |    | T                                                                                                                                                          |                                                         |
|--------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1/37191/2024 | •  | number and date of appointment                                                                                                                             |                                                         |
|              | 24 | Name of the <b>Mines Manager</b> with Address, phone, email, fax number and date of appointment in mines                                                   | Sarvottam, Mine Manager                                 |
|              | 25 | Name of the <b>Mining Engineer</b> ,<br>Qualification and total<br>experience with Address, phone,<br>email, fax number and date of<br>appointment in mine | Dhananjay B.K, Mining Engineer                          |
|              | 26 | Whether <b>Geologist</b> appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.                                           | Dr.C P Prasanna Kumar                                   |
|              | 27 | Date of Approval of Mining plan/ Review and updation of Mining plan with five-year period and specific condition in approval letter, if any.               | RMP dated 27.02.2024(2023-24 to 2027-28) (279/903/2006) |
|              | 28 | Mineral(s) granted in lease and proved for mining                                                                                                          | Iron ore and Manganese ore                              |
|              | 29 | Method of Mining(Opencast, Underground)                                                                                                                    | opencast                                                |
|              | 30 | Category (Fully Mechanized,<br>Others or Manual)                                                                                                           | A cat.Fully Mechanized                                  |
|              | 31 | Captive/ Non captive                                                                                                                                       | Non captive                                             |
|              | 32 | Present EC Capacity                                                                                                                                        | 80,000 t                                                |

Exploration

| S.N | Item                                                            | Proposals        | Actual work                          | Remarks                                 |
|-----|-----------------------------------------------------------------|------------------|--------------------------------------|-----------------------------------------|
| •   |                                                                 |                  |                                      |                                         |
| 1a  | Backlog of previous year                                        | No<br>proposals  | Nil                                  | -                                       |
| 1b  | Exploration over lease area for Geological axis 1 or 2.         | No<br>proposals  | Nil                                  | No proposals<br>for the year<br>2023-24 |
| 1c  | Exploration Agency & Expenditure in lakh Rupees during the year | No<br>proposals  | nil                                  | -                                       |
| 1d  | Balance area to be explored to bring Geological axis in 1 or    | Not<br>specified | G1-6.14ha<br>G2-6.64ha<br>Area to be | As reported by the lessee               |

| l/37191/2024 | 1  | 2                                                                  |                                                     | explored-<br>7.86ha                                                                                            |                                                                    |
|--------------|----|--------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
|              | 1e | Balance reserves as on 01.04.2024                                  | -                                                   | The resources<br>of Manganese<br>ore as on<br>1.4.2024 is<br>90003.68<br>tonnes.                               | The reserves of Iron ore as on 1.4.2024 is (111)872118. 55 tonnes. |
|              | 1f | General remarks of inspecting officer on geology, exploration etc. | year 2023<br>operations<br>01.04.2023<br>Control Bo | no exploration pro<br>3-24. However,<br>are not carrie<br>for want of CFO<br>ard. Temporary<br>Form-E has been | the mining d out since from Pollution Discontinuance               |

#### **Development**

| velopi |                        |                                               |                  |                 |  |  |
|--------|------------------------|-----------------------------------------------|------------------|-----------------|--|--|
| S.N    | Item                   | Proposals                                     | Actual work      | Remarks         |  |  |
| •      |                        |                                               |                  |                 |  |  |
| 2a     | Location of            | Pit-1                                         | Development      | the mining      |  |  |
|        | development w.r.t.     |                                               | has not been     | operations are  |  |  |
|        | lease area             |                                               | carried out as   | not carried     |  |  |
|        |                        |                                               | proposed.        | out during the  |  |  |
|        |                        |                                               |                  | year 2023-24    |  |  |
| 2b     | Separate benches in    | Separate                                      | Work not         | Not working     |  |  |
|        | topsoil, overburden    | benches                                       | carried out.     | for want of     |  |  |
|        | and mineral (Rule      | proposed in OB                                |                  | CFO.            |  |  |
|        | 15)                    | and mineral.                                  |                  |                 |  |  |
| 2c     | Stripping ratio or ore | 1:0                                           | NT:1             | -               |  |  |
|        | to OB ratio            | (in tonnes)                                   | Nil              |                 |  |  |
| 2d     | Quantity of topsoil    | No proposal                                   | nil              | No top soil     |  |  |
|        | generation in m3       | No proposal                                   | 1111             | generated.      |  |  |
| 2e     | Quantity of            |                                               |                  | -               |  |  |
|        | overburden             | nil                                           | nil              |                 |  |  |
|        | generation in m3       |                                               |                  |                 |  |  |
| 2f     | General remarks of     | The development                               | has not been     | carried out for |  |  |
|        | inspecting officer on  | want of CFO. The mining operations are not    |                  |                 |  |  |
|        | development of pit     | carried out during the year 2023-24.Hence the |                  |                 |  |  |
|        | w.r.t. type of deposit | violation has not l                           | oeen pointed out |                 |  |  |
|        | etc.                   |                                               |                  |                 |  |  |

Exploitation

| ploita | ploitation                                                                                  |              |             |                                                                 |  |  |  |  |
|--------|---------------------------------------------------------------------------------------------|--------------|-------------|-----------------------------------------------------------------|--|--|--|--|
| S.N    | Item                                                                                        | Proposals    | Actual work | Remarks                                                         |  |  |  |  |
| 3a     | Number of pits<br>proposed for<br>production                                                | One pit      | nil         | -                                                               |  |  |  |  |
| 3b     | Quantity of ROM mineral production proposed                                                 | 29999 tonnes | Nil         | the mining operations are not carried out during the year 2023- |  |  |  |  |
| 3c     | Recovery of salable/<br>usable mineral from<br>ROM production                               | 100%         | nil         | -                                                               |  |  |  |  |
| 3d     | Quantity of mineral reject generation                                                       | No proposal  | Nil         | -                                                               |  |  |  |  |
| 3e     | Grade of mineral reject generation and threshold value declared                             | No proposal  | Nil         | -                                                               |  |  |  |  |
| 3f     | Quantity of sub-<br>grade mineral<br>generation                                             | No proposal  | Nil         | -                                                               |  |  |  |  |
| 3g     | Grade of sub-grade mineral generation                                                       | No proposal  | Nil         | -                                                               |  |  |  |  |
| 3h     | Manual / Mechanised method adopted for segregating from ROM                                 | Mechanised   | nil         | -                                                               |  |  |  |  |
| 3i     | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject | No proposal  | Nil         | -                                                               |  |  |  |  |
| 3j     | Provision of drilling                                                                       | ino proposal | nil         | -                                                               |  |  |  |  |

| 24 | & blasting in mineral benches                                                                        |                                                                                                      |                                                                                                      |                                                                  |
|----|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 3k | Provision of mining machineries in mineral benches                                                   | Machineries<br>proposed-<br>Excavators- 3<br>Wheel loader-1<br>Tippers- 1                            | nil                                                                                                  | -                                                                |
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Proposed bench<br>height 6m<br>proposed.                                                             | nil                                                                                                  | -                                                                |
| 3m | Total area covered under excavation/pits                                                             | 5.08 Ha                                                                                              | 3.98 Ha                                                                                              | As per the AR 2023-24.                                           |
| 3n | Ore to OB ratio for the pit/mine during the year                                                     | 1:0 (in tonnes)                                                                                      | Nil                                                                                                  | -                                                                |
| 30 | Total area put in use under different heads at the end of year                                       | Area under mining — 5.08ha OB Dumping - 3.66ha Mineral storage-1.11ha Infrastructure & Roads -0.66ha | Area under mining — 3.98ha OB Dumping - 2.12ha Mineral storage-1.30ha Infrastructure & Roads -0.05ha | As per the<br>AR 2023-<br>24.                                    |
| 3p | Production of ROM mineral during last five-year period, as applicable                                | Iron ore: 2019-20: 30000 2020-21: 30000 2021-22: 30000 2022-23: 30000 2023-24:29999 (in tonnes)      | 2019-20: Nil<br>2020-21: Nil<br>2021-22:10000<br>2022-23:30000<br>2023-24: nil<br>(in tonnes)        | Violation<br>not pointed<br>out due to<br>non-working<br>of mine |

| 1/37191/2024 |    |                       |                                                 |
|--------------|----|-----------------------|-------------------------------------------------|
|              | 3q | General remarks of    | The mining operations are not carried out since |
|              |    | inspecting officer on | 01.04.2023 for want of CFO from Pollution       |
|              |    | method of mining      | Control Board. Temporary Discontinuance         |
|              |    | etc.                  | Notice in Form-E has been submitted on          |
|              |    |                       | 17.04.2023. The violation has not been pointed  |
|              |    |                       | out.                                            |

**Solid Waste Management-Dumping** 

| S.N        | Item                                                                    | Proposals                                                      | Actual work                          | Remarks                       |
|------------|-------------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------|-------------------------------|
| <b>4</b> a | Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)          | Separate Dumping of Overburden, Mineral proposed.              | Not carried out                      | _                             |
| 4b         | Location of topsoil, OB & mineral reject dumps                          | Eastern side of the working pit.                               | nil                                  | -                             |
| 4c         | Number of dumps within lease area and outside lease area                | 1 OB dump within the Mining lease.                             | 1 OB dump within the Mining lease.   | _                             |
| 4d         | Location of dumps w.r.t. ultimate pit limit (Rule 16)                   | Outside the<br>Ultimate Pit<br>Limit                           | Outside the<br>Ultimate Pit<br>Limit | -                             |
| 4e         | Number of active & alive dumps                                          | 1 active waste dump                                            | 1 active waste dump                  | -                             |
| 4f         | Number of dead dumps                                                    | no dead dumps within ML area.                                  | no dead dumps<br>within ML area      | _                             |
| 4g         | Number of dumps stabilized                                              | nil                                                            | nil                                  | -                             |
| 4h         | Whether Retaining wall<br>or garland drain all<br>along dumps are there | 60m Retaining wall,406m Fencing & 120m Garland drain proposed. | Not carried out.                     | -                             |
| 4i         | Length of Retaining wall or garland drain all along dump                | 60m Retaining wall,406m Fencing &                              | Not carried out.                     | The mining operations are not |

| 1/37191/2024 | 1  |                          |                  |                     | carried out |
|--------------|----|--------------------------|------------------|---------------------|-------------|
|              |    |                          |                  |                     | since       |
|              |    |                          |                  |                     | 01.04.2023  |
|              |    |                          | 120m Garland     |                     | for want of |
|              |    |                          | drain proposed.  |                     | CFO from    |
|              |    |                          |                  |                     | Pollution   |
|              |    |                          |                  |                     | Control     |
|              |    |                          |                  |                     | Board.      |
|              | 4j | Number of settling ponds | No proposals     | nil.                | -           |
|              | 4k | Specific comments of     | The mining oper  | rations are not car | ried out    |
|              |    | inspecting officer on    | since 01.04.2023 | I for want of CFO   | from        |
|              |    | waste dump               | Pollution Contro | l Board. Tempora    | nry         |
|              |    | management.              | Discontinuance 1 | Notice in Form-E    | has been    |
|              |    |                          | submitted on 17. | .04.2023. The vio   | lation has  |
|              |    |                          | not been pointed | out.                |             |

**Solid Waste Management-Backfilling** 

| S.N | Item                                                                                             | Proposals      | Actual<br>work   | Remarks     |
|-----|--------------------------------------------------------------------------------------------------|----------------|------------------|-------------|
| 5a  | Status on part or full extraction of mineral from mined out area before starting backfilling     | No proposal    | Nil              | -           |
| 5b  | Area under backfilling of mined out area                                                         | No proposal    | Nil              | -           |
| 5c  | Concurrent use of topsoil<br>for restoration or<br>rehabilitation of mined<br>out area (Rule 32) | No proposal    | Nil              | -           |
| 5d  | Total area fully reclaimed & rehabilitated                                                       | No proposal    | Nil              | -           |
| 5e  | General remarks of inspecting officer on backfilling, reclamation etc                            | There are no p | proposals for ba | nckfilling. |

**Progressive Mine Closure Plan** 

| S.N | Item                                                                                                                                                       | Proposals                                                 | Actual work                                                                 | Remarks                                           |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------|
| 6a  | Whether Annual report<br>on PMCP submitted on<br>time and correctly - Rule<br>23E(2). Details should be<br>given in the format as<br>given in Annexure-20. | To be submitted the annual report on PMCP under Rule26(2) | Annual PMCP<br>Report for the<br>year 2021-22<br>submitted on<br>29.06.2024 |                                                   |
| 6b  | Area available for rehabilitation (ha)                                                                                                                     | 0.3ha                                                     | Nil                                                                         | -                                                 |
| 6c  | Afforestation done (ha)                                                                                                                                    | 0.3ha within<br>lease                                     | nil                                                                         | As reported by the lessee during the inspectio n. |
| 6d  | No. of saplings planted during the year                                                                                                                    | 500                                                       | nil                                                                         | As reported in AR2023-24.                         |
| 6e  | Cumulative no. of plants                                                                                                                                   | Not specified                                             | 4000                                                                        | As reported by the lessee                         |
| 6f  | Any other specific method of rehabilitation                                                                                                                | No proposals                                              | Nil                                                                         | -                                                 |
| 6g  | Cost incurred on watch & care during the year                                                                                                              | Rs 100000/-                                               | Nil                                                                         | -                                                 |
| 6h  | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)                                                | No proposals                                              | Nil                                                                         | -                                                 |
| 6i  | Compliance on reclamation and rehabilitation by backfilling (ii) Void                                                                                      | No proposals                                              | Nil                                                                         | -                                                 |

| 24 | filled by waste/tailings                                                                                  |                                                                                                   |                                                      |                               |
|----|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------|
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area    | No proposals                                                                                      | Nil                                                  | -                             |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No proposals                                                                                      | Nil                                                  | -                             |
| 61 | Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means                  | No proposals                                                                                      | Nil                                                  | -                             |
| 6m | Compliance of Rehabilitation of waste land within lease (i) Afforestation                                 | No proposals                                                                                      | Nil                                                  | -                             |
| 6n | Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha)                      | No proposals                                                                                      | Nil                                                  | -                             |
| 60 | Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation                    | No proposals                                                                                      | Nil                                                  | -                             |
| 6p | Compliance of Environmental monitoring (core zone & buffer zone)                                          | Environment<br>monitoring<br>proposed for<br>Air, Water &<br>Noise.                               | nil                                                  | -                             |
| 6q | General remarks of inspecting officer on PMCP compliance & progressive closure operations                 | The mining operations of the since 01.04.2023 Pollution Control Discontinuance I submitted on 17. | B for want of (<br>trol Board. '<br>Notice in Form-F | CFO from Temporary E has been |

not been pointed out.

## **Mineral Conservation**

| S.N. | Item                                                                     | Proposals                                                                                                                                                                                                                    | Actual<br>work | Remarks |
|------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------|
| 7a   | ROM Mineral<br>dispatch or grade-<br>wise sorting<br>within lease area   | Mechanical crushing and screening proposed                                                                                                                                                                                   | nil            | -       |
| 7b   | Method of grade-<br>wise mineral<br>sorting i.e. manual<br>or mechanical | Mechanical crushing and screening proposed                                                                                                                                                                                   | nil            | -       |
| 7c   | Different grade of mineral sorted out at mines                           | 10mm to -40mm                                                                                                                                                                                                                | nil            | -       |
| 7d   | Any beneficiation process at mines                                       | No proposal                                                                                                                                                                                                                  | nil            | -       |
| 7e   | of inspecting officer on Mineral                                         | The mining operations are not carried out since 01.04.2023 for want of CFO from Pollution Control Board. Temporary Discontinuance Notice in Form-E has been submitted on 17.04.2023. The violation has not been pointed out. |                |         |

## **Environment**

| S. | Item                                                                   | Proposals           | Actual work | Remarks               |
|----|------------------------------------------------------------------------|---------------------|-------------|-----------------------|
| N. |                                                                        | _                   |             |                       |
| 8a | Separate removal and utilization of topsoil (Rule 32)                  | No proposal         | nil         | No top soil generated |
| 8b | Concurrent use or storage of topsoil                                   | No proposal         | nil         | -                     |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Separate dumping of | nil         | -                     |
| 8d | Use of overburden, waste rock, rejects and fines dumps for             | No proposal         | nil         |                       |

|          | restoring the land           |                                           |      |            |           |            |
|----------|------------------------------|-------------------------------------------|------|------------|-----------|------------|
|          | to its original use          |                                           |      |            |           |            |
| 8e       | Phased restoration,          |                                           |      |            |           |            |
|          | reclamation and              |                                           |      |            |           |            |
|          | rehabilitation of            | No proposal                               | nil  |            |           |            |
|          | lands affected by            | rio proposar                              |      |            |           |            |
|          | mining operations            |                                           |      |            |           |            |
|          | (Pits, dumps etc)            |                                           |      |            |           |            |
| 8f       | Baseline                     |                                           |      |            |           |            |
|          | information on               | 500nos. of                                |      |            |           |            |
|          | existence of                 | saplings                                  |      |            | Asr       | eported in |
|          | plantation &                 | inside the                                | nil  | •          |           | 2023-24    |
|          | additional                   | ML area.                                  |      |            | 71112     | 1025 2 1   |
|          | plantation done              |                                           |      |            |           |            |
| 0 -      | (Rule 41)                    | 750/                                      | . •1 |            |           |            |
| 8g<br>8h | Survival rate                | 75%                                       | nil  |            | _         |            |
| OII      | Water sprinkling on roads to | sprinkling                                |      |            |           |            |
|          | control airborne             | 1 - 0                                     |      |            |           |            |
|          | dust                         | roads                                     |      |            |           |            |
|          | dust                         | proposed to                               | Nil  |            | -         |            |
|          |                              | control                                   |      |            |           |            |
|          |                              | airborne                                  |      |            |           |            |
|          |                              | dust.                                     |      |            |           |            |
| 8i       | General remarks              | There is no change in aesthetic beauty in |      |            | beauty in |            |
|          | of inspecting                | _                                         |      |            |           |            |
|          | officer on                   |                                           |      |            |           |            |
|          | aesthetic beauty             |                                           |      |            |           |            |
|          | in and around                |                                           |      |            |           |            |
|          | mines area                   |                                           |      |            |           |            |
| Con      | npliance of Rule 45          |                                           |      |            |           |            |
| S.       | Item                         | COMMENTS                                  |      | Re         | marks     |            |
| N.       |                              |                                           |      |            |           |            |
| 9a       | Status of                    |                                           | ed 1 | up to May, |           |            |
|          | submission of                | -                                         |      |            |           |            |
|          | Monthly and                  |                                           |      |            |           |            |
| <u>C</u> | Annual returns               | 24submitted on 29.06.2024.                |      |            |           |            |
| S.       | Item                         | Details Observati                         |      | maulza     |           |            |
| N.       |                              | GIVEN in on of Remarks A.R. I/Officer     |      | шагкѕ      |           |            |
| 9b       | Scrutiny of                  | Sri Sarvottam                             | ı,   | Appears to | -         |            |
|          | Annual return for            | Mine Manager be correct                   |      |            |           |            |
|          |                              |                                           |      |            |           |            |

|    | information on<br>Mining Engineer,<br>Geologist and<br>Manager                                | Dhananjay B.K, Mining Engineer Dr.C P Prasanna Kumar, Geologist                                       |                       |   |
|----|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------|---|
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Area under mining – 3.98ha OB Dumping - 2.12ha Mineral storage-1.30ha Infrastructure & Roads - 0.05ha | Appears to be correct | - |
| 9d | Scrutiny of Annual return on afforestation                                                    | Nil                                                                                                   | Appears to be correct | - |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity)                     | Nil                                                                                                   | Appears to be correct | - |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore                                      | O/S –31500t<br>Production -nil<br>C/S – 31500t                                                        | Appears to be correct | - |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost                     | Cost of production-Nil/tonne Ex-price mine-Rs nil/tonne                                               | Appears to be correct | - |
| 9i | Scrutiny of Annual return on fixed assets                                                     | Fixed Assets-<br>Rs 13913743/-                                                                        | Appears to be correct | - |
| 9k | Scrutiny of Annual return on mining machineries                                               | Nil                                                                                                   | Appears to be correct | - |

| 1/2 | 71 | <b>a</b> 1 | 12  | 024  |
|-----|----|------------|-----|------|
| 1/3 | /  | 9          | /// | 1)/4 |

Date:

(K. Srinivas) Junior Mining Geologist Indian bureau of Mines