

**GEOLOGICAL REPORT ON PRELIMINARY EXPLORATION
(G3 STAGE) FOR LIMESTONE IN GADEGHAT KHATERA
BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.**

Under

National Mineral Exploration and Development Trust

Ministry of Mines

Wing-F, Room No. 325 & 326, Udyog Bhawan,

Rafi Ahmed Kidwai Marg,

Rajpath Area, Central Secretariat

New Delhi-110011

F.Y 2024-2025

F.No.23/554/2025-NMET/840



Prepared By

MMPL Private Limited

(Formerly Maheshwari Mining Private Limited)

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Certificate No. NABET/AEA/25/009

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LIST OF ABBREVIATIONS

General Terms & Organizations

- CAD – Computer-Aided Design
- DGM – Directorate of Geology and Mining
- DGPS – Differential Global Positioning System
- DMS – Degrees Minutes Seconds (coordinate format)
- G3 – Stage of Investigation (Preliminary Stage)
- GIS – Geographic Information System
- GSI – Geological Survey of India
- IBM – Indian Bureau of Mines
- NABL – National Accreditation Board for Testing and Calibration Laboratories
- NABET – National Accreditation Board for Education and Training
- NMEDT – National Mineral Exploration and Development Trust
- NPEA – Notified Private Exploration Agency
- GKBH – Drilled Boreholes ID for Gadeghat_Khatara block
- PPL – Plane-Polarized Light (used in microscopy to observe optical properties of minerals)
- RQD – Rock-Quality Designation
- TCC – Technical-Cum-Cost Committee
- UNFC – United Nations Framework Classification
- XPL – Cross-Polarized Light (used in microscopy to observe optical properties of minerals)
- XRF – X-ray Fluorescence (used for chemical analysis).

- **Measurement Units**
- km – Kilometer
- m – Meter
- m.a./ Ma – Million years ago
- mm – Millimeter
- cm - Centimeter
- RL – Reduced Level (elevation measurement)
- sq. km – Square Kilometer

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कार्यकारी सारांश

विभिन्न श्रेणियों के चूना पत्थर के संसाधनों का मूल्यांकन करने के उद्देश्य से जनवरी 2025 से मार्च 2026 की अवधि के दौरान महाराष्ट्र के यवतमाल जिले के गडेघाट-खतेरा क्षेत्र में प्रारंभिक चूना पत्थर अन्वेषण (जी-3) किया गया था। यह ब्लॉक टॉपशीट नंबर का एक हिस्सा है। 56I/13 लगभग 11.96 वर्ग किमी के क्षेत्र को कवर करता है। इस अन्वेषण में डीजीपीएस सर्वेक्षण उपकरण की सहायता से 1:4000 के पैमाने पर विस्तृत भूवैज्ञानिक मानचित्रण (2 मीटर के समोच्च अंतराल के साथ) शामिल था। कुल 19 बोरहोल खोदे गए, जो 800 मीटर x 800 मीटर ग्रिड स्पेसिंग के साथ कुल 950 मीटर क्षेत्र को कवर करते थे। सीमा रेखा बिंदुओं और भू-नियंत्रण बिंदुओं (जीसीपी) को स्थापित करने के लिए निम्नलिखित विधियों का उपयोग किया गया: (क) जीसीपी स्थानों का चयन: सर्वेक्षण क्षेत्र में जीसीपी के लिए स्थायी, स्थिर स्थानों का चयन करें। (ख) डीजीपीएस बेस स्टेशन सेटअप: बेस स्टेशन को ज्ञात निर्देशांक पर स्थापित करें या राष्ट्रीय संदर्भ से जुड़े लंबे स्थिर अवलोकन के माध्यम से इसे स्थापित करें। (ग) डीजीपीएस रोवर परिनियोजन: रोवर इकाई को प्रत्येक जीसीपी स्थान पर ले जाएं। (घ) अवलोकन समय: बेसलाइन की लंबाई और स्थल की स्थितियों के आधार पर न्यूनतम 15-30 मिनट का स्थिर डेटा रिकॉर्ड करें। (ङ) पोस्ट-प्रोसेसिंग: जीसीपी के सटीक निर्देशांकों की गणना करने के लिए जीएनएसएस प्रोसेसिंग सॉफ्टवेयर का उपयोग किया गया है।

चूना पत्थर के ब्लॉक से 80 सतही नमूने (बीआरएस) एकत्र किए गए। पेट्रोग्राफिक अध्ययन के लिए 5 कोर और 5 बेडरॉक नमूने चुने गए। चूना पत्थर की सामान्य प्रवृत्ति N400W है, जिसका झुकाव 1 से 70 दक्षिण-पश्चिम तक है, लेकिन नाला खंडों और नदी खंडों में मापे गए तीन स्थानों पर झुकाव 200 से 330 दक्षिण-पश्चिम तक भिन्न पाया गया। 908 कोर नमूनों और 80 बीआरएस का रासायनिक विश्लेषण एनएबीएल से मान्यता प्राप्त शिवा एनालिटिकल्स (इंडिया) प्राइवेट लिमिटेड प्रयोगशाला (अनुलग्नक - I और II) में किया गया और 10% नमूनों को एनएबीएल से मान्यता प्राप्त एसजीएस इंडिया लिमिटेड में बाहरी परीक्षण के लिए भेजा गया। प्राप्त विश्लेषणों के आधार पर, चूना पत्थर के विभिन्न ग्रेडों का वर्गीकरण और संसाधन मूल्यांकन किया गया। सीमेंट (मिश्रणीय और लाभकारी) ग्रेड चूना पत्थर की कुल मोटाई सकारात्मक बोरहोल में काफी भिन्न होती है, जैसे कि बोरहोल संख्या में 12 मीटर। जीकेबीएच-03, जीकेबीएच-04 में 17 मीटर, जीकेबीएच-06 में 3 मीटर, जीकेबीएच-07 में 13 मीटर, जीकेबीएच-08 में 20.83 मीटर, जीकेबीएच-13 में 8 मीटर, जीकेबीएच-14 में 23 मीटर, जीकेबीएच-16 में 1 मीटर और जीकेबीएच-19 में 3 मीटर और अन्य बोरहोल में केवल अवर्गीकृत चूना पत्थर पाया गया है। आईबीएम की 2018 की अधिसूचना (संख्या C-284/3/CMG/2017) के अनुसार (34% CaO और 5% MgO (अधिकतम) की सीमा मान को ध्यान में रखते हुए समग्र ग्रेड कम है, इसलिए संसाधन का अनुमान लगाया गया है और 34% CaO से कम ग्रेड को अवर्गीकृत चूना पत्थर के रूप में संरक्षित किया गया है।

Executive Summary

Preliminary limestone exploration (G-3) was carried out in Gadeghat-Khatera area, Yavatmal District, Maharashtra during the period from January 2025 to March 2026 with the objective of evaluating limestone resources of various grades. This block is a part of toposheet No. 56I/13 covering an area of about 11.96 sq. km. The exploration involved detailed geological mapping (on a scale of 1:4000) with the help of DGPS survey instrument, with contour interval of 2 m. A total 19 boreholes were drilled covering a total meterage of 950m with 800m x 800m grid spacing. To establish boundary cardinal points and ground control points (GCPs) the following methods were used (a) Selection of GCP Locations: Choose permanent, stable locations across the survey area for GCPs. (b) DGPS Base Station Setup: Install the base station at a known coordinate or establish it through long static observation tied to a national reference. (c) DGPS Rover Deployment: Move the rover unit to each GCP location. (d) Observation Time: Record minimum 15-30 minutes of static data depending on baseline length and site conditions. (e) Post-Processing: GNSS processing software was used to compute precise coordinates of GCPs.

80 numbers of surface samples (BRS) were collected from the limestone block. 5 core and 5 bedrock samples were identified for petrographic study. The general trend of limestone is N40°W with dip range from 1 to 7° south-westerly but dip found to vary from 20° to 33° south-westerly in three locations measured in nala sections and river sections. Chemical analysis of 908 core samples and 80 BRS were carried out at NABL accredited Shiva Analyticals (India) Private Limited Laboratory (Annexure – I & II) and 10% of the samples were sent for external testing at NABL accredited SGS India Ltd. Based on the analyses received, classification of different grades of limestone and resource evaluation was done. The total thickness of cement (blendable and beneficiable) grade limestone varies significantly across the positive boreholes as 12m in borehole no. GKBH-03, 17m in GKBH-04, 3m in GKBH-06, 13m in GKBH-07, 20.83m in GKBH-08, 8m in GKBH-13, 23m in GKBH-14, 1m in GKBH-16 & 3m in GKBH-19 & other boreholes contain only unclassified limestones. Since the overall grade is low when considering the threshold value of (34% CaO & 5% MgO (max) according to IBM's 2018 notification (No. C-284/3/CMG/2017), the resource is estimated and any grade below 34% CaO is preserved as unclassified limestone.

CHAPTER 1

INTRODUCTION

The present work entitled “Preliminary exploration for limestone in Gadeghat-Khatera, Yavatmal District, Maharashtra” was taken up for G-3 stage exploration during the period from January 2025 to December 2025 with F.No. 23/554/2025-NMET/840 (later extended up to 15th March 2026 by 91st TCC-1). The UNFC guideline of G-3 Stage of exploration was followed to accomplish the exploration of limestone. The study area is located in Gadeghat-Khatera, Yavatmal District, Maharashtra, India near Maharashtra-Telangana border in toposheet no No. 56I/13. Penganga River flows along the Southwestern and Northeastern corner of the Block. The exposed limestone in the block belongs to the Proterozoic sedimentary rocks of the western flank of Pranhita-Godavari (P–G) valley. The sedimentary rocks exposed in and around Adilabad area constitute the Penganga Group (Chaudhuri et al. 1989; Mukhopadhyay et al. 1996, 1999; Deb 2003 & Chaudhuri et al., 2015).

1.1 INVESTIGATION AGENCY

The Block is investigated by M/s. MMPL Pvt. Ltd (Formerly Maheshwari Mining Pvt. Ltd) a Notified Private Exploration Agency (NPEA) under second provision to sub section (1) of section-4 of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) and consequent upon accreditation provided by the National Accreditation Board for Education and Training of the Quality Council of India (QCINABET). Govt. of India notified this company as ‘Category A Exploration Agency’.

1.2 PRESENT WORK

The various work components of the preliminary exploration in the block include detailed geological mapping (on 1:4000 scale) with contour interval of 2m with the aid of DGPS surveying instrument, systematic drilling of 950m in 19 boreholes placed on 800m x 800m grid spacing, collection of 80nos of bedrock samples, 10 samples for petrographic study from bedrock and core. The quantities of the work components are given in the Table.1.1.

Table 1.1: Nature, quantum of work & achievement				
Sl No.	Toposheet no.	Nature of work	Total work envisaged	Total achievement
1	56I/13	Geological Survey Detailed Mapping on 1:4000 scale (sq.km)/reconnaissance study (G4 stage)	11.96 sq. km	11.96 sq. km
2	56I/13	Technological Survey Subsurface exploration i.e. Drilling(m)/prospecting/preliminary exploration (G3 stage)	950m	950m
3	56I/13	Sampling (in number) a. Bed Rock Sample (BRS) b. Core Sample (CS)	(a). 80 nos. (b). 800 nos.	(a). 80 nos. (b). 908 nos.
4	56I/13	Petrological/Mineralogical Studies (number) Petrographical Study (PS)	10 nos.	10
5	56I/13	Chemical Analysis (number)	800 nos.	908 nos.

1.3 OBJECTIVE OF INVESTIGATION

To assess the potentiality with estimation of resource (under 333 class of UNFC) of different grades of limestone in Gadeghat-Khatara block of Pranhita–Godavari (P–G) valley.

1.4 PERSONNEL ASSOCIATED WITH THE INVESTIGATION

Table 1.2: Overall Supervision and Geological Report Preparation	
Responsibility	Name
Overall Coordination	Mr. Ambika Prasad Samantaray, President & CEO Exploration Mr. Pradipta Tarafdar, Advisor Geology Dr. Suman Krishnan Sit, Vice President Exploration Mr. Sourabh Sarkar, DGM Geology
Headquarters Coordination	Mr. Balkrishan Vishawakarma, Manager (Geology) Ms. Moulipriya Bhakta, Deputy Manager (Geology)
Geological field report preparation and documentation	Mr. Yudhisthir Mohanta, Senior Geologist Mr. B. Srikanth, Geologist Mr. Padamata Sai Chandu, Geologist Ms Mousumi Paul, Geologist
Field Geologist & Field Coordinator	Mr. Yudhisthir Mohanta, Senior Geologist Mr. B. Srikanth, Geologist
Petrographic Study	Mr. Yudhisthir Mohanta, Senior Geologist Ms Medha Sarkar
ArcGIS	Mr.Mrityunjay Kar, Manager (Remote Sensing & GIS)
Resource Modelling	Ms. Moulipriya Bhakta, Deputy Manager (Geology)
Draughtsman	Ms. Gargi Roy Chowdhury Ms. Khaya Mahato
Peer Reviewer	Ajaya Kumar Mohanty, Ex- GM (Exploration) CIL/ CMPDI
Site In-charge (Drilling Unit)	Mr Biplab Bandyopadhyay

1.5 MODE OF OPERATIONS OF DIFFERENT WORK COMPONENTS AND ASSOCIATED AGENCIES:

Detailed geological mapping on 1:4,000 scale in G3 stage, surface and subsurface sampling, drilling, DGPS survey, and petrographic studies were conducted by Maheshwari Mining Private Limited. Core cutting and sample preparations were done by in-house resources and samples analysed from different NABL laboratories shown in **Table 1.3**.

Table 1.3: List of NABL laboratories

Agency	Methodology	Quantum of work	
		Nature of samples	No. of samples
M/s Shiva Analyticals	XRF	Core Samples	908
M/s Shiva Analyticals	XRF	Bed Rock Samples	80
M/s Shiva Analyticals	XRF	Chemical Analysis	908
M/s SGS India Ltd	XRF	Check Samples	90

1.6 ACKNOWLEDGEMENT

The authors express their sincere gratitude to the National Mineral Exploration and Development Trust (NMEDT), Ministry of Mines, Government of India for approving the project and funding it.

Geological Survey of India (GSI), Nagpur, Maharashtra is thankfully acknowledged for inspection of the exploration program. During the execution of the project constant support from Mr. Sanjiv Ganeriwala, MD of MMPL Pvt. Ltd (Formerly Maheshwari Mining Private Limited) is gratefully acknowledged. In addition, relentless support from seniors & colleagues of MMPL Pvt. Ltd (Formerly Maheshwari Mining Private Limited) is being acknowledged humbly.

Support by the local administration/authorities of Yavatmal district, Maharashtra as well as the local authorities of the gram panchayat of Gadeghat and Khatera village are being thankfully acknowledged. Thanks are due to the local authorities and local people for their cooperation for accomplishment of the project.

CHAPTER 2

PROPERTY DESCRIPTION

The land of Gadeghat-Khatera limestone block is owned by the people of Gadeghat and Khatera village under the administration and jurisdiction of Deputy Commiossioner, Yavatmal district. The lands are either privately owned or community owned. The required description in detail is given below.

2.1 DETAILS OF THE AREA

2.1.1 VILLAGE NAME, DISTRICT, STATE

Village: Gadeghat and Khatera

District: Yavatmal

State: Maharashtra

2.1.2 SURVEY OF INDIA TOPOSHEET NO.

Survey of India Toposheet No: 56I/13 on RF: 1:50000/ Representative Scale with division of 1000m-500m-0m-500m-1000m

2.1.3 CO-ORDINATES OF ALL CARDINAL POINTS OF THE INVESTIGATED BLOCK

Boundary co-ordinates are surveyed through DGPS. The details of the cardinal points of the block is given below in Table 2.1.

POINT ID	DMS		UTM (ZONE 44)		RL(m)
	Latitude	Longitude	Easting (X)	Northing (Y)	
P-1	19° 46' 46.1780" N	78° 54' 38.1513" E	281097.195	2188431.503	215.879
P-2	19° 46' 45.9487" N	78° 56' 21.9187" E	284117.991	2188387.412	183.834
P-3	19° 45' 02.2649" N	78° 56' 21.9971" E	284081.478	2185198.742	194.336
P-4	19° 45' 02.0531" N	78° 53' 26.1960" E	278962.515	2185255.205	189.858
P-5	19° 45' 37.7872" N	78° 53' 26.1081" E	278973.636	2186354.211	210.251
P-6	19° 45' 38.1346" N	78° 54' 38.1225" E	281070.531	2186338.910	198.513

To establish boundary cardinal points and ground control points (GCPs) the following methods were used (a) **Selection of GCP Locations:** Choose permanent, stable locations across the survey area for GCPs. (b) **DGPS Base Station Setup:** Install the base station at a known coordinate or establish it through long static observation tied to a national reference. (c) **DGPS Rover Deployment:** Move the rover unit to each GCP location. (d) **Observation Time:** Record minimum 15-30 minutes of static data depending on baseline length and site conditions. (e) **Post-Processing:** Use GNSS processing software to compute precise coordinates of GCPs. (Annexure-X DGPS report)

2.1.4 CADASTRAL DETAILS OF THE AREA WITH LAND USE/COVER

The block under investigation is primarily owned by private parties, particularly from Gadeghat and Khatera village and some portions come under reserve forest. It falls within the administrative/jurisdiction of the Yavatmal district of Maharashtra. The Penganga River flowing from southwest to southeast and then finally towards northeast corner of the Gadeghat-Khatera limestone block. The block area is primarily covered by cultivated lands owned by people of the Gadeghat and Khatera village and reserve forest with dense plantations. Cotton, jawar, wheat, millet, peanuts and other pulses are the main crops of cultivation throughout the year. A rough estimate of the area covered by Reserve Forest/ Protected Forest: 2 sq. km, wild animals' corridor: No, no of villages: 2 their demographic pattern / population: 600 approx. and other details are given in location and accessibility section below.

2.1.5 FREEHOLD/ LEASEHOLD. IF LEASEHOLD, GIVE THE STATUS

At present, the status of the land of the block of investigation is the leasehold premises eventually belongs to the administrative district of Yavalmal of the state Maharashtra.

2.1.6 LOCATION AND ACCESSIBILITY

The area of investigation of Gadeghat-Khatera limestone block lies about 54 km eastward from Adilabad district of Telangana along NH 353B. From Nagpur it is 171km towards southwest via NH 44. The nearest airport is Dr. Babasaheb Ambedkar International Airport, Nagpur and the nearest railway station is Chandrapur railway station which is 73km towards northeast from Gadeghat-Khatera limestone block via NH 353B. The area is located in Yavatmal district of Maharashtra, India near Maharashtra-Telangana border in toposheet no. 56I/13 (**Fig.2.1**).

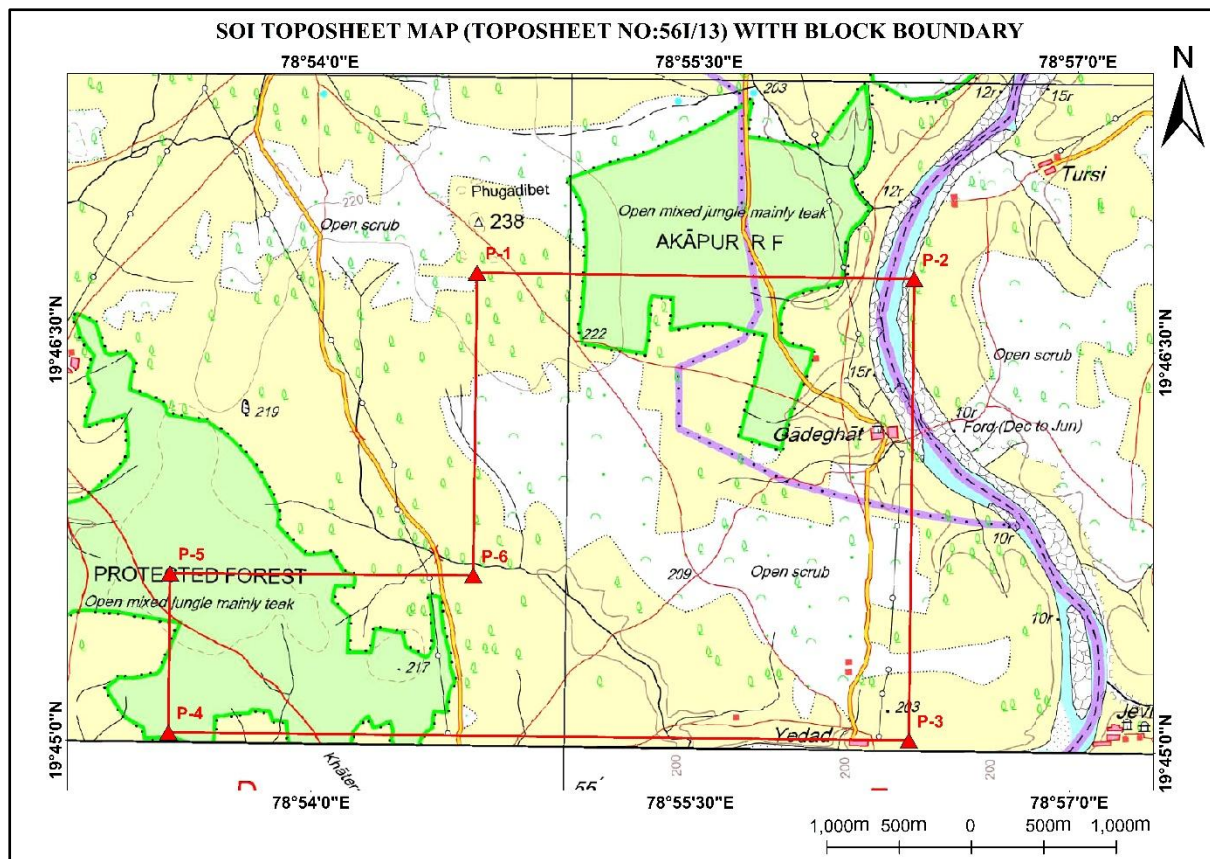


Fig.2.1: Location of Gadekhat-Khatera block, Yavatmal district, Maharashtra.

2.1.7 CLIMATE

The climate is tropical monsoon, with distinct hot summers, a rainy monsoon season, and mild winters. The average annual rainfall ranges 900 to 1100 mm. The rainy season lasts from mid-May to September. Gadeghat-Khatera limestone block of Yavatmal district is also a part of Vidarbha regions of Maharashtra where dominance of hot to very hot and semi-arid climate with black soil favours the pulses category cultivation like peanuts, cotton, jawar, pearl millet. Due to inconsistent weather mixed crop and sustainable cultivation is highly practised in this area for better yielding possibilities. During winter the temperature ranges between 12°C to 29°C (October to February) and in summer it ranges between 41°C to 47°C (March to May). (Source from <https://mausam.imd.gov.in/>).

2.1.8 FLORA AND FAUNA

The flora of the study area is characteristic of tropical dry deciduous forests, with dominant species teak (*Tectona grandis*), tendu (*Diospyros melanoxylon*), and a variety of medicinal plants. This vegetation type supports a rich and diverse fauna.

In the Gadeghat region, the wildlife is representative of the broader forest ecosystem and protected areas found in the region. Notable mammals include the Bengal tiger (*Panthera tigris tigris*), sloth bear (*Melursus ursinus*), leopard (*Panthera pardus*), Indian bison or gaur (*Bos gaurus*), Indian wild dog or dhole (*Cuon alpinus*), and striped hyena (*Hyaena hyaena*). Herbivores such as deer, sambar (*Rusa unicolor*), nilgai (*Boselaphus tragocamelus*), and wild boar (*Sus scrofa*) are also common in these forested areas. Additionally, studies conducted in Yavatmal have recorded hundreds of bird species, including waders, raptors, and various passerine birds, indicating a high level of avian biodiversity in the region.

2.2 INFRA-STRUCTURE & ENVIRONMENT

The people of Gadeghat and Khatera village of Yavatmal district of Maharashtra basically depends upon the farming, natural resources, fishing and agricultural cultivation for their livelihood. People have limited access to basic amenities such as roads, sewage systems, and drinking water. The Penganga river serves as the primary source for drinking water, fishing, and water source for cultivations.

MP Birla Cement (RCCPL Pvt. Ltd.), **Mukutban** plant is located near Mukutban, which is the closest major cement factory to Gadeghat and Khatera vilalages of Yavatmal district. Other cement factories are **Dalmia Cement (Bharat) Limited**, **Chandrapur Cement Works** Located in the village of Naranda, within the Korpana taluka of Chandrapur district, Maharashtra. **Ambuja Cements Ltd. (Maratha Cement Works)**, is located in Upparwahi, in Korpana taluka, Dist. - Chandrapur, Maharashtra, **UltraTech Cement Limited (Manikgarh Cement Works)**, is situated in Gadchandur, Chandrapur district, Maharashtra. Education levels are generally low due to the absence of good, affordable schools. There is only one government primary school in each of the village Gadeghat and Khatera village. The telephonic coverage for communication is very low and modern communications and transportations are lacking in the areas. There is no archaeological or historical site in the area.

CHAPTER 3

PREVIOUS EXPLORATION WORK

3.1 PREVIOUS EXPLORATION/INVESTIGATION

In 1986, Geological Survey of India (GSI) conducted work that identified the geological extension of the Penganga Group of sedimentary rocks. These rock formations extend to the north and east of Adilabad, reaching into the Yavatmal and Chandrapur districts of Maharashtra. The Penganga River, between Gomutri in the northwest and Mangurda in the northeast, marks the northern boundary of the mapped area. This section of the river also serves as the boundary between the two states of Maharashtra and Telangana. The Penganga Group continues across the river into northern Maharashtra; however, the northern boundary of the mapped region reflects administrative limitations rather than geological boundaries. In 1968, the Cement Corporation of India carried out an exploration on the left bank of the Mathadi Vagu, north of Bhimsari, and confirmed the occurrence of cement-grade limestone. G4 stage of exploration for limestone was carried out by Geological Survey of India in Yavatmal & Chandrapur dist. (Agarwal & Subbarao, GSI Report no. CRO 118452 F.S. 1984-1985; Guntiwar V.S. & Samji R.N. 1986). According to geological documentation, W.T. Blanford mapped the area in 1866, and a map at the scale of 1:253,440, likely attributed to him, remains preserved within the Geological Survey of India archives (Heron, 1949). In 1877, T.W.H. Hughes, in association with F. Fedden, prepared a map encompassing the region located eastward of the northeastern boundary of the area under present consideration. Cement Corporation of India Ltd (Warrier and Gupta, 1968) carried out subsurface investigations through drilling, covering a total of 983.64 meters across 32 boreholes (IBM, 1972), in the region north of Bhimsari. These investigations confirmed the presence of a significant limestone deposit, adequate to sustain the proposed cement manufacturing facility in the vicinity. The borehole logs offer detailed insights suitable for stratigraphic correlation and a broad geological setting of the area. The study area is the part of the Penganga Group of Meso to Neoproterozoic age. Rb–Sr dating of the lower part of this succession has produced ages of 770 Ma to and 790 Ma (Chaudhuri et al. 1989; Aparajit et al. 2020; & Directorate of Geology and Mining regional office Chandrapur Government of Maharashtra report, 2022-23).

3.2 DETAILS OF EARLIER AEROGEOPHYSICAL AND GEOPHYSICAL MAPPING

No Aero-geophysical and geophysical mapping was carried out in the study area.

CHAPTER 4

GEOLOGY OF THE AREA

4.1 REGIONAL GEOLOGY

PENGANGA GROUP

The rocks of the Penganga Group consist of unmetamorphosed sedimentary beds that rest nonconformably on the underlying crystalline basement rocks (likely of the Archean or Proterozoic age). This means that there is a significant gap in geological time between the formation of the basement and the deposition of the Penganga sediments. Earlier, S.A. Karim (1924) had suggested a correlation between the beds found along the lower reaches of the Kaddam River-about 60 km southeast of Adilabad and those of the Penganga Group. However, later studies (Ramaswamy and Prasannan, 1975) have shown that this correlation is untenable. The reason is that the Kaddam River beds show lithological and stratigraphic similarities to the Pakhal beds of Ramagundam, indicating that they are not part of the Penganga Group, but rather represent a northwestward extension of the Pakhal Formation. Different lithounits occur in the present area are as follows:

Shale

The shales are typically reddish-brown to purple in colour and range from soft and indurated to fissile in character. They are laminated to thinly bedded, with individual layer varying in thickness from 1 to 5 cm, and in some places display ball-like or nodular structures. Occasional bleached spots, representing deoxidation spheres, are also observed. The shales are interbedded with thin limestone bands, which are sometimes argillaceous and range in thickness from a few centimeters to about 0.5 meters. These limestone bands are grey to greenish-grey or pink to fawn in colour. In certain locations, veins of pink to white calcite occur, filling the joint planes within the shales.

Limestone and dolomitic limestone

The limestones in the area are thinly to thickly bedded, exhibiting a range of colours from light grey to dark grey, and occasionally white, pinkish white, or buff. They are generally fine-grained, compact, and often contain calcareous shale partings along the bedding planes.

The dominant variety of limestone which is thinly to thickly bedded, extends widely across the area, particularly along both banks of the Penganga River, as seen in toposheets No. 56 I/13 and I/14. In the southernmost part of the mapped area, occurrences of fine-grained, hard, compact, and pinkish white to brown-coloured dolomitic limestone are noted. According to Jain (1976–77), the limestones around Kayar and Suknegaon were identified and mapped as dolomitic limestones.

Mangurda formation

On the right bank of the Penganga River near Mangurda, occurrences of limestone are noted. These were first mapped by Hughes and Fedden (1877). At the base of the formation, the limestone sequence begins with an intraformational conglomerate, which is overlain by a succession of light grey and pale pink limestone interbedded with dark grey dolomite. In the river bed and along the river bank at Mangurda, the beds strike NW–SE and dip 20°–25° towards northeast. The western boundary of the limestone outcrop within the river bed is highly contorted, suggesting that its contact with the Bela Shale is likely faulted. The Mangurda Limestone Formation is believed to extend downstream along the Penganga River, reaching the interstate boundary of Maharashtra and Telangana.

Age	Group	Subgroup	Formation	Composite vertical lithofacies description
Recent	-	-	-	Alluvium, calcrete, calc-tufa
Quaternary	-	-	Sat Nala sandstone	Pebbly, cross-bedded sandstone
Eocene	Deccan Trap	-	-	Volcanic flows of basalt with Inter-Trap Sandstone (fossiliferous), Infra-Trap Sandstone
-----Unconformity-----				
Upper Precambrian	Penganga Group		Mangurda Formation	Grey limestone with interbedded dark grey dolostone
		-----Fault, Disconformity-----		
		Jainath Subgroup	Bela Formation	Red and green laminated shale
			Goatkur Limestone	Grey flaggy limestone, Grey massive limestone traversed by quartz veins, light grey limestone with interbedded chert-jasper (+ manganese) horizons and intra-formational flat pebble boulder conglomerates, red, green, grey limestone/granite- limestone mixtite, pale red flaggy limestone, glauconitic and feldspathic sandstone, Saorgaon laminated limestone, Saorgaon red shale/mudstone
		-----Overstep Fault-----		
		Yapalagudem Subgroup	Toyanguda Shale	Red and green laminated shale
			Jamaldri Limestone	Grey flaggy limestone, grey massive limestone with bands of white chert at the bottom, pale red limestone with lenticles of red chert in the middle and bands of white ribbon chert towards top; with intra-formational conglomerates. Yellow and red shale, pyritous at the base
			Bhimsari Sandstone	Sandstone, gritty towards base with rare conglomeratic patches. Fine grained towards top and interbedded with the overlying shale
		-----Nonconformity-----		
		Peninsular Gneissic Complex (PGC- II)		Dolerite dyke, pink and grey granite, hornblende biotite granite banded ferruginous quartzite, gneiss-migmatite, enclaves of basic granulite and crystalline magnetite-quartz rock

Source: T. Sambasivasarma, 1979

CHAPTER 5

GEOSCIENCE INVESTIGATION

5.1 DETAILED GEOLOGICAL MAPPING

An area of 11.96 sq. km was mapped on 1:4,000 scale with a contour interval of 2m using DGPS. The plan with contour lines is shown in the Fig.5.1. A Differential Global Positioning System (DGPS) survey (Fig.5.2) was conducted over the entire block to generate accurate topographic contours. High-precision DGPS equipment, supported by a fixed base station, was used to collect precise elevation data. This data was processed using GIS and CAD software to develop detailed contour map. The Gadeghat-Khatara limestone block of Yavatmal district, Maharashtra exposes the Penganga Group (Chaudhuri et. al (1989). of sedimentary rocks comprising of limestone and dolomitic limestone as seen along both banks of the Penganga River. The lithostratigraphic succession in the area is given in Table 5.1.

Table 5.1: Lithostratigraphic succession

Group	Subgroup	Formation	Composite vertical lithofacies description
Penganga Group		Mangurda Formation	Grey limestone with interbedded dark grey dolostone
	-----Fault, Disconformity-----		
	Jainath Subgroup	Bela Formation	Red and green laminated shale
		Goatkur Limestone	Grey flaggy limestone, Grey massive limestone traversed by quartz veins, red shale/mudstone
	-----Overstep Fault-----		

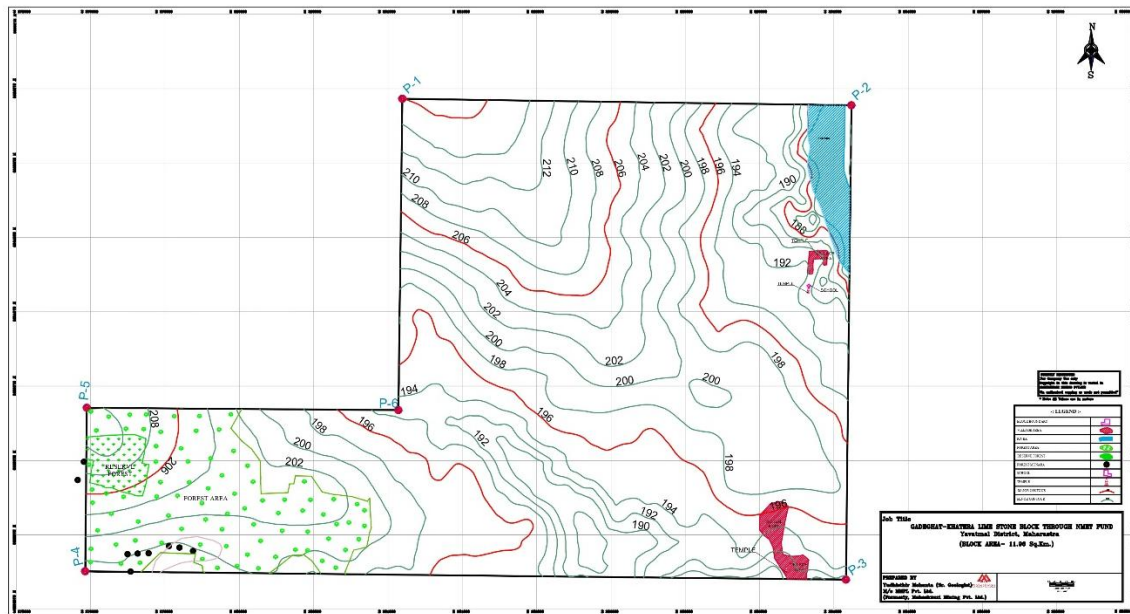


Fig.5.1: The plan with contour lines of Gadeghat-Khatra limestone block



Fig.5.2: A Differential Global Positioning System (DGPS) survey at Gadeghat-Khatra block

5.2 DESCRIPTION OF LITHOLOGY

The various litho-units are exposed in the block as well as those which are encountered in the boreholes are described below.

The Dolomitic Limestone: The dolomitic limestones are exposed in the field which are black to grey in colour and prominently show the elephant skin weathering patterns.

The grey limestones: This lithounit doesn't show any elephant skin weathering rather shows strong effervescence with dilute hydrochloric acid (HCL).

- **Strong fizzing** means the limestone contains a high amount of calcium carbonate.
- **Weak fizzing** indicates the presence of impurities or a lower calcium-carbonate content.

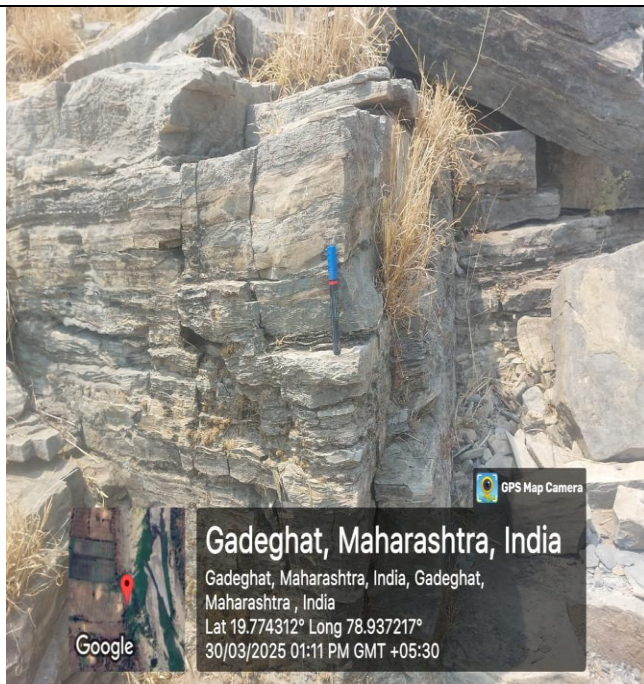
This test was used in the field to quickly identify and a rough evaluation of in situ limestone.



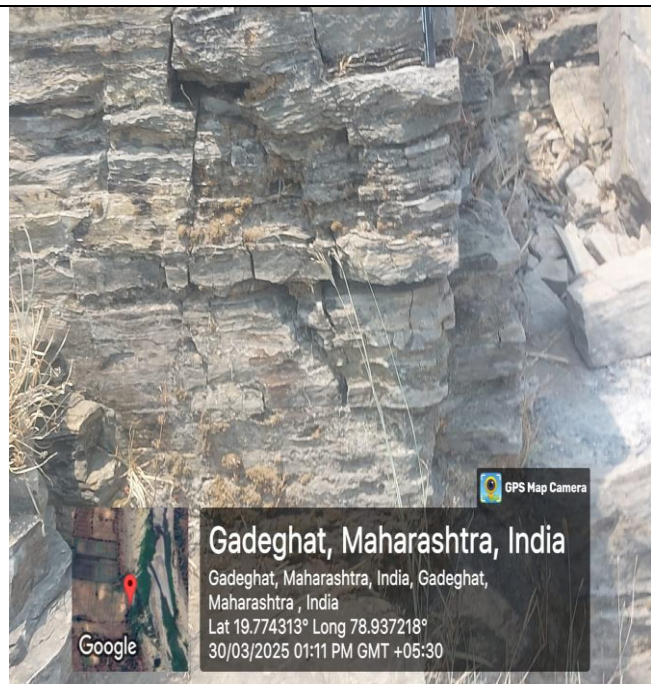
A. Dolomitic limestone exposed in the field exhibiting elephant skin weathering patterns



B. Dolomitic limestone exposed in the field



C. Grey colour bedded limestone seen in the river section at Gadeghat



D. High grade limestone in the river section

Fig. 5.3: Limestone exposures in the Gadeghat-Khatera block, Yavatmal dist. Maharashtra.



Fig 5.4. Photograph of core showing grey unclassified limestone in GKBH-01 borehole.



Fig 5.5. Photograph of core showing grey limestone in GKBH-14 borehole.

5.3 PETROGRAPHIC STUDIES

Petrographic examination of thin sections of 5 bedrock samples and 5 borehole core samples from Gadeghat-Khatera block Yavatmal, Maharashtra has been conducted. This study was aimed at elucidating the mineralogical and textural variations in the samples.

OVERVIEW OF THE OBSERVATIONS:

MEGASCOPIC DESCRIPTION

The limestones in the study area exhibit a colour range from light greyish- white to dark grey and are predominantly fine- to medium-grained. In the field the dolomitic limestone shows a unique characteristic of elephant skin weathering pattern with dark grey colours whereas limestone is light grey in colour and absence of elephant skin weathering pattern which distinguishes it from the first one.

MICROSCOPIC DESCRIPTION

Petrographic examination reveals that the limestones are primarily composed of microcrystalline calcite, calcite vein intrusions and scattered grains of magnetite, haematite, martite and the study area is devoid of any fossiliferous horizon. The samples collected for petrographic analyses are shown in Fig. 5.6.

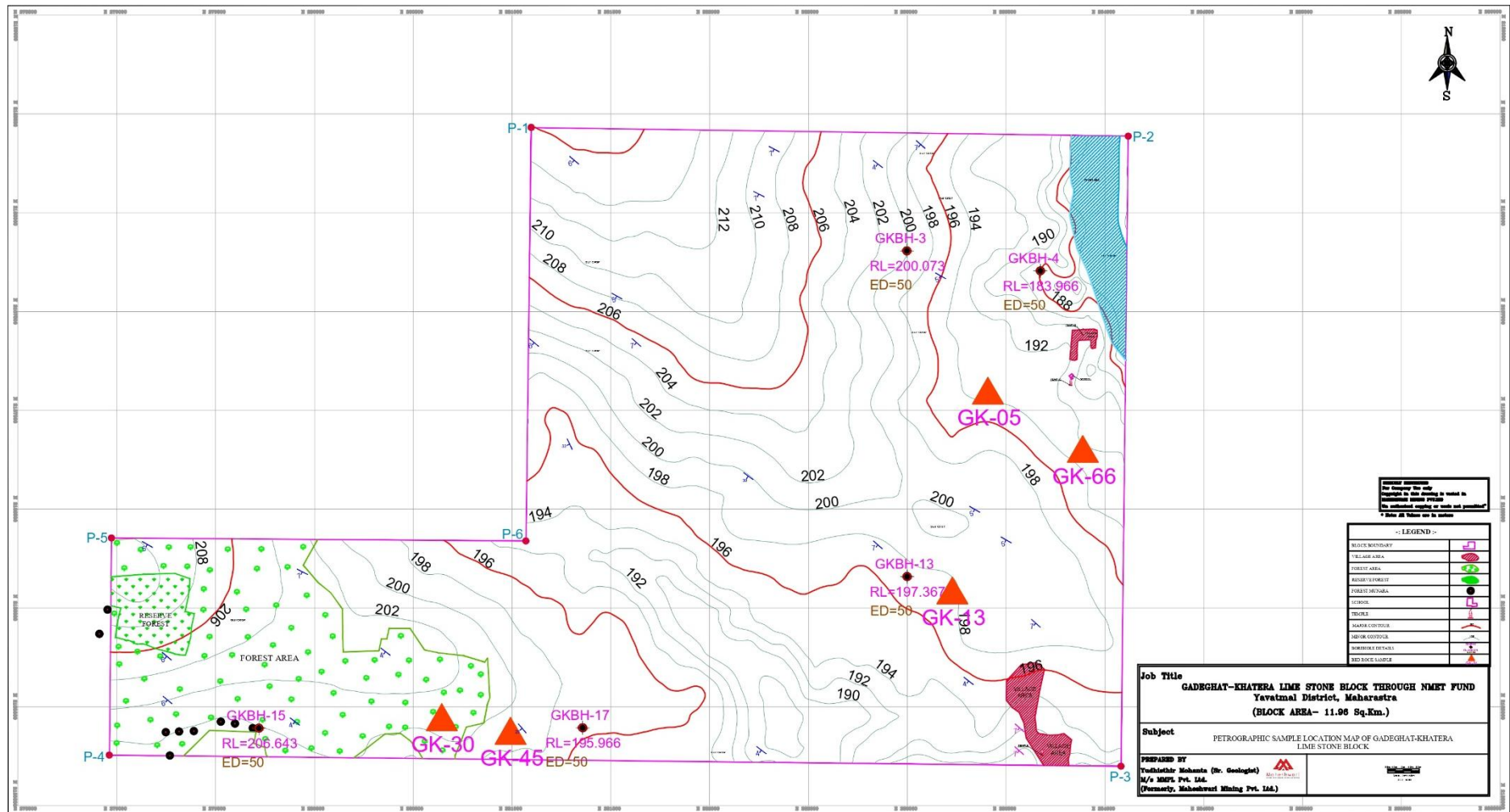


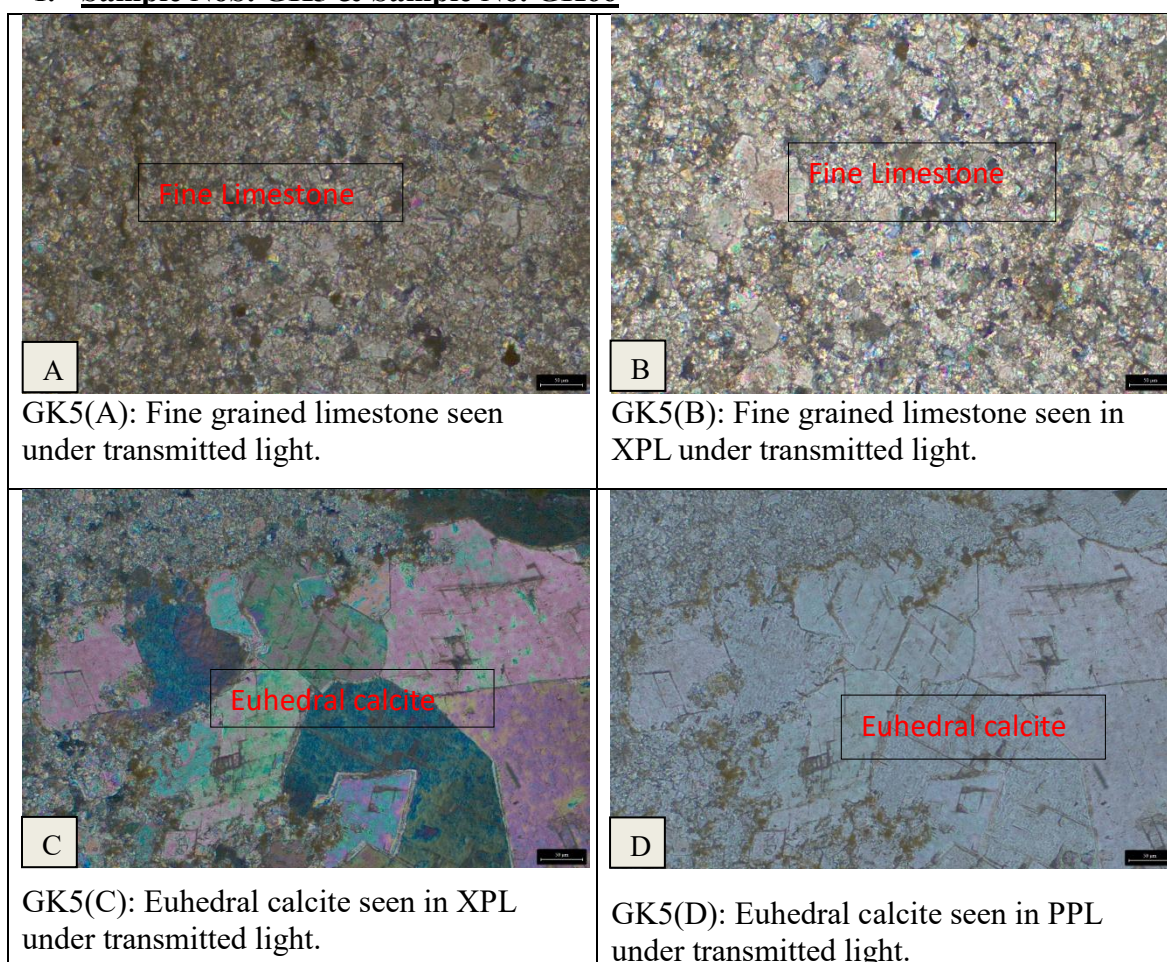
Fig 5.6: Petrographic sample location map showing the locations of BRS collected from Gadeghat-Khatera block

PETROGRAPHIC STUDIES OF THE SAMPLES FROM GADEGHAT-KHATERA LIMESTONE BLOCK, YAVATMAL DISTRICT, MAHARASHTRA STATE.

The petrographic studies were carried out for thin sections of 5 bedrock samples and 5 drill core samples from Gadeghat-Khatera limestone block, Yavatmal district, Maharashtra. The mineralogical compositions, textural behaviors exhibited by different grains were studied carefully and a comprehensive report was prepared.

Bed Rock Samples:

1. Sample NoS. GK5 & Sample No. GK66



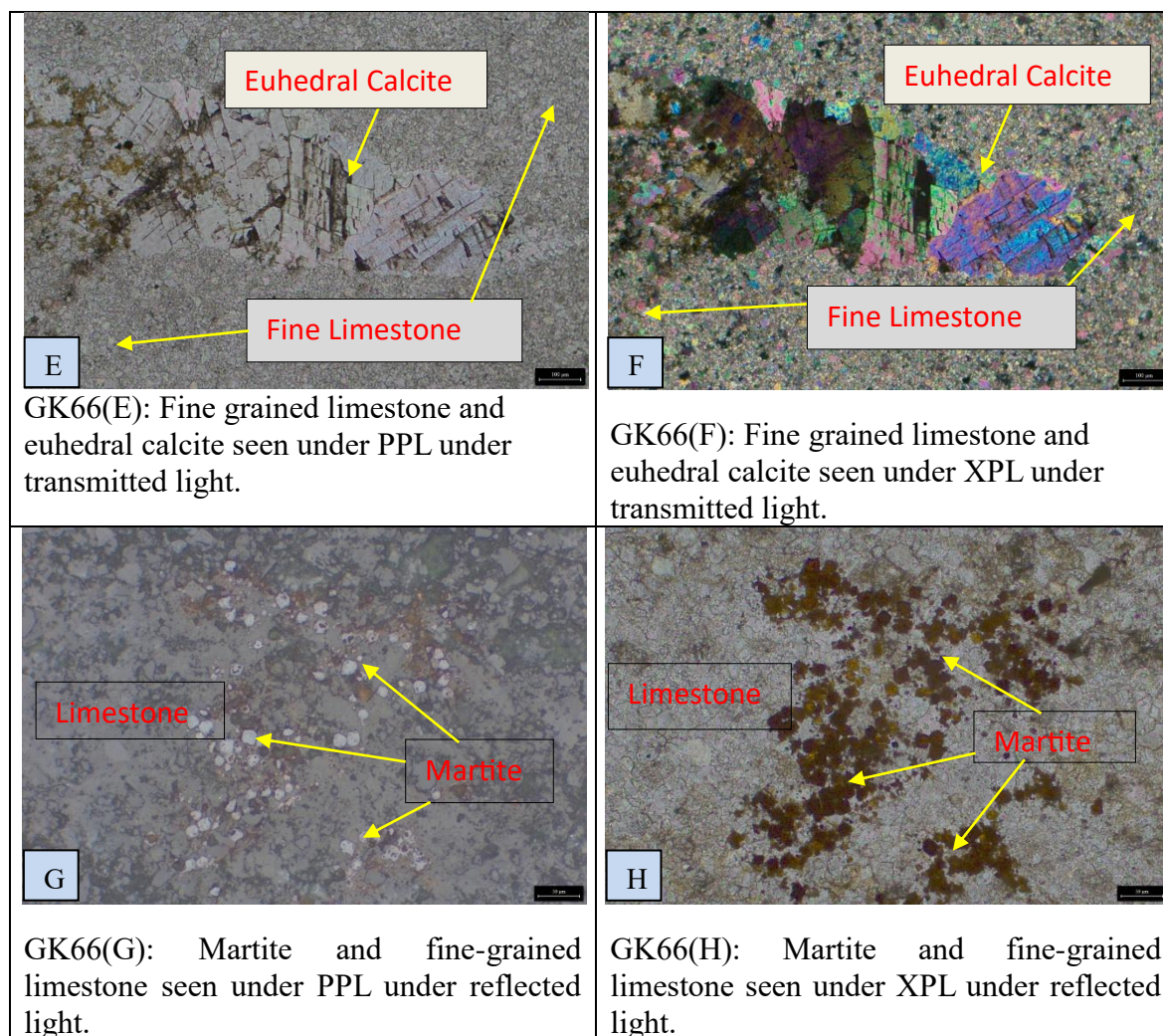


Fig. 5.7: Photomicrographs of sample NoS. GK5 & GK66

The section **GK5 & GK 66** are mainly composed of fine-grained microcrystalline calcite with the lime mud (micrites) under PPL & XPL. Fine-grained calcite consists of microcrystalline calcite particles that make up most of limestone units (**GK5A & B**). Euhedral calcite, on the other hand, appears as distinct, well-defined crystals with recognizable faces and rhombohedral forms, and develops later within the rock (**Fig. GK5C & D**). These two types reflect different stages of mineral formation: the fine-grained calcite constitutes the original carbonate sediment or early lithified matrix, whereas the euhedral calcite represents later, secondary crystal growth (**Fig. GK66E & F**). Microcrystalline limestone is the main constituent of numerous limestones, forming the fundamental rock matrix through either direct precipitation of calcium carbonate or the compaction and lithification of very fine carbonate mud. A group of martite grains are embedded within the fine-grained limestone seen under PPL and XPL. Hence, the section can be classified as fine-grained limestone with some martite grains (**Fig. GK66G & H**).

2. Sample no. GK30:

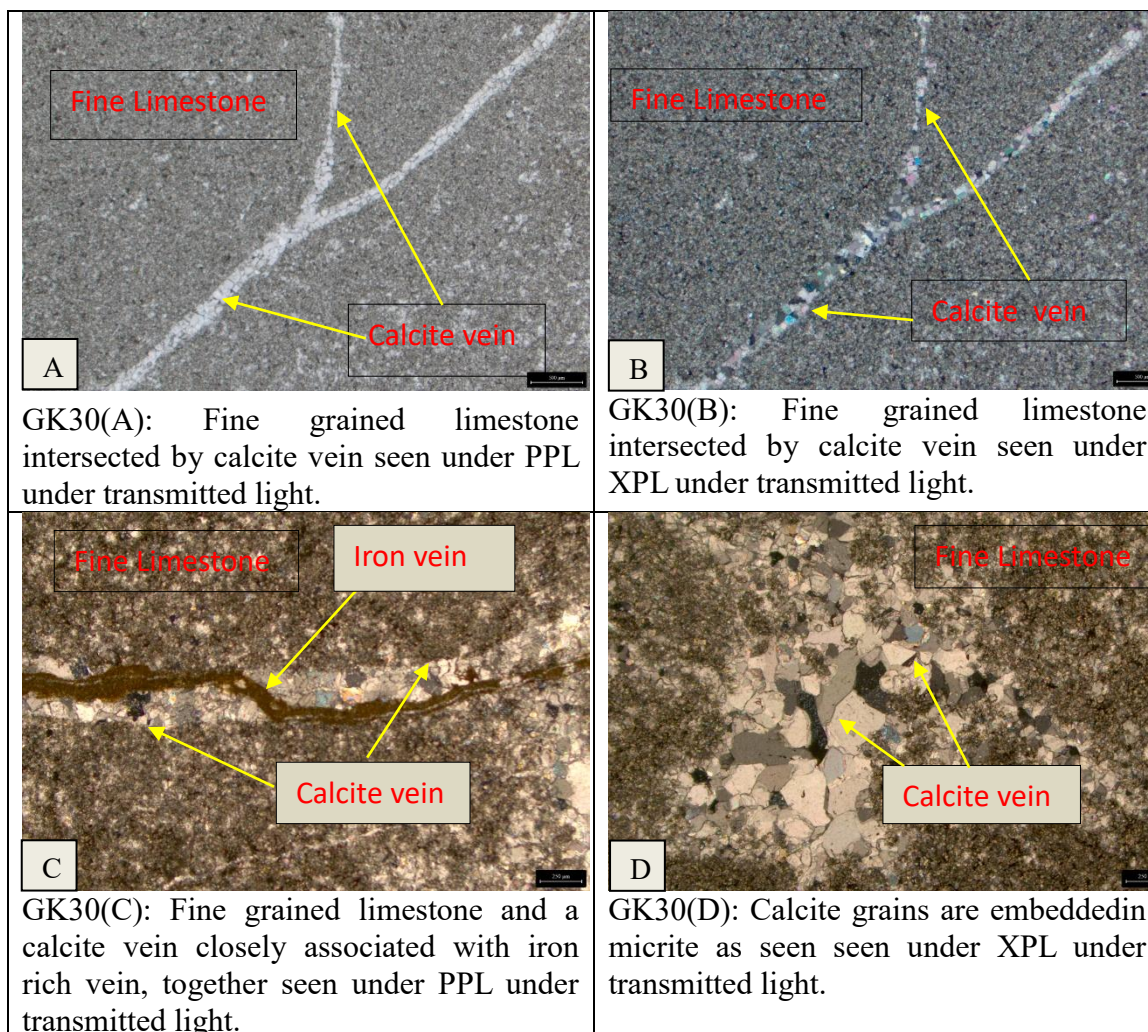


Fig. 5.8: Photomicrographs of sample No. GK30

The bed rock samples are mainly composed of fine-grained microcrystalline calcite with the lime mud (micrites). This fine-grained compact calcite bearing section might be resulted from the low energy environment such as shelf areas where such fine grains of calcite get enough time to settle with micrites (**Fig. S9 A & B**) as seen under PPL and XPL.

Calcite veins and iron rich veins are post depositional features formed as fractures fillings may be due to some post depositional tectonic disturbances where the hydrothermal fluid precipitated the calcium carbonate along small fractures zone thus forming the calcite veins in the fine-grained limestone (**Fig. GK30 C**) as seen under PPL. In **GK30(D)** calcite veins are seen within micrite in higher microscopic resolutions.

3. Sample no. GK 13 & GK45:

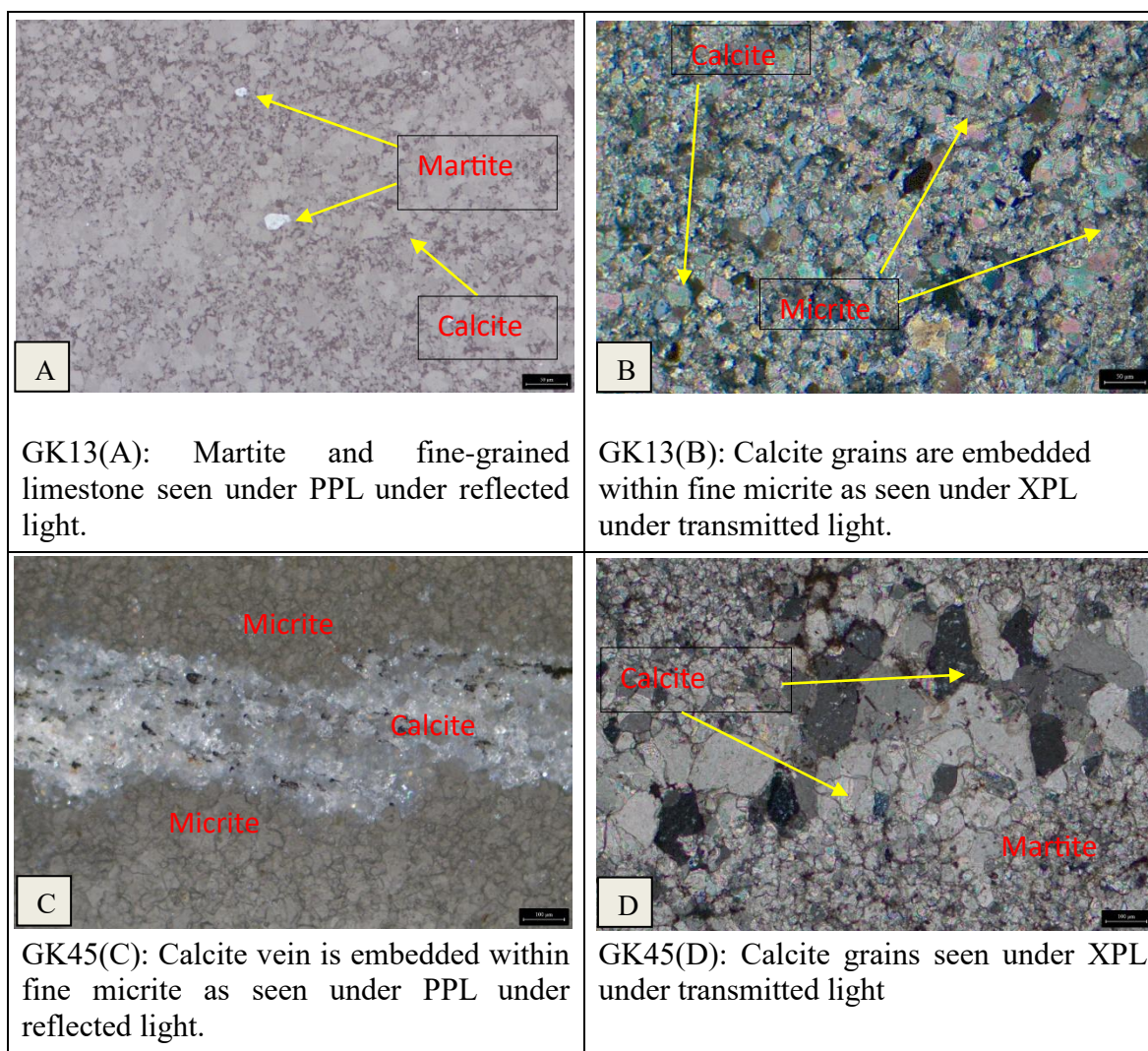


Fig. 5.9: Photomicrographs of sample No Sample NoS. GK 13 & GK 45

Thin polished section study under PPL shows the rock is mainly composed of fine-grained microcrystalline calcite with the lime mud (micrites) and within this limestone pseudomorph of haematite are seen. These crystals of iron oxides are compositionally haematite but the external shape is of euhedral magnetite and these are intermediate products between haematite and magnetite also known as martite. This hybrid product may be formed due to chemical substitution of magnetite by haematite (**Fig. GK13A**) & **B**) shows calcite grains are embedded within fine micrite as seen under XPL under transmitted light. Calcite vein is embedded within fine micrite as seen under PPL under reflected light (**Fig. GK 45C**) and calcite grains seen under XPL under transmitted light (**Fig. GK 45 D**).

Drill Core Samples

1. Sample no. GKBH-13, GKBH-15 & GKBH-17

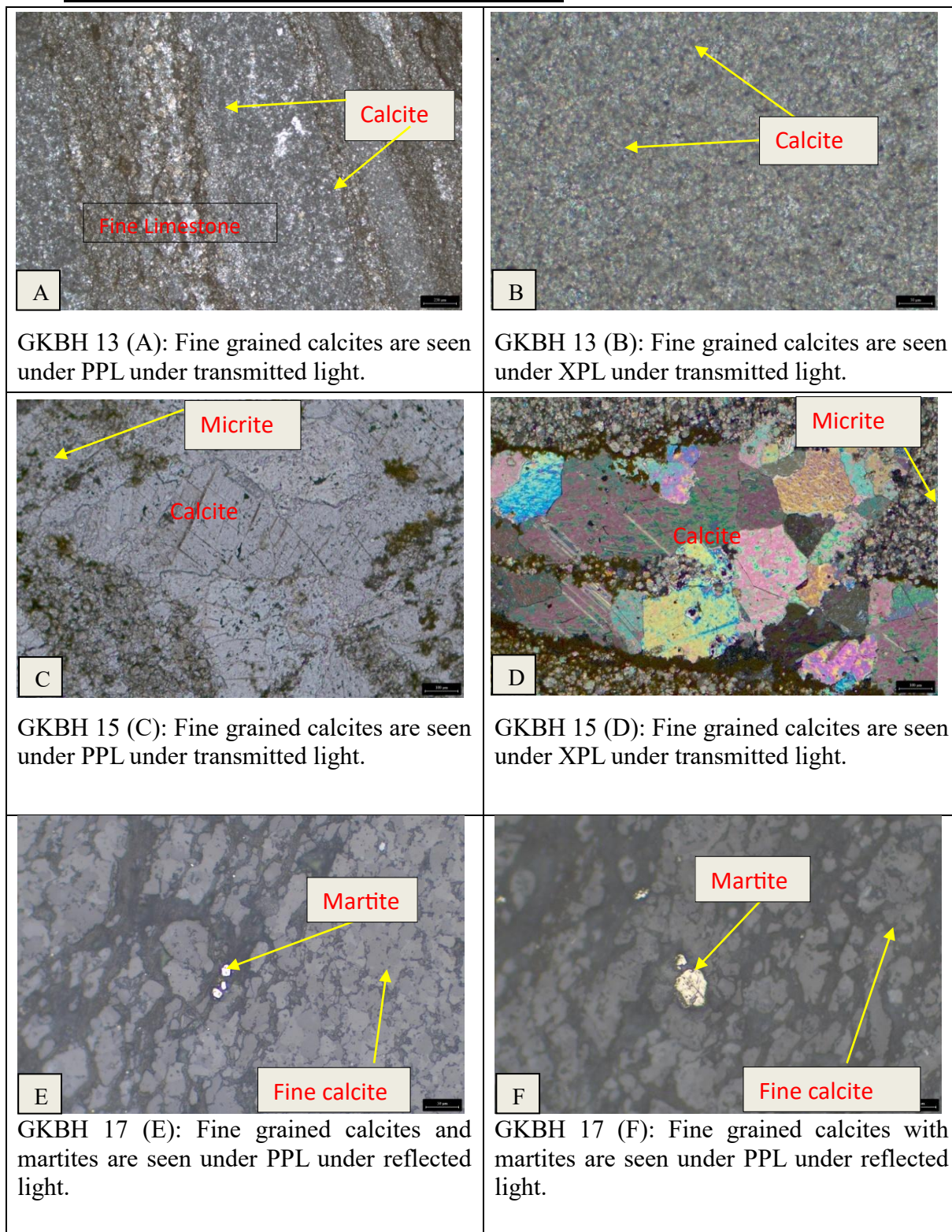


Fig. 5.10: Sample No. GKBH-13 GKBH-15 & GKBH-17

The section **GKBH-13** is mainly composed of microcrystalline calcite with the lime mud (micrites), the fine-grained calcites are primary carbonate (**Fig. GKBH 13A & 13 B**), whereas **GKBH-15** consists of microcrystalline calcite with the euhedral calcite grains which represent the secondary crystal growth (**Fig. GKBH 15C & D**). Section **GKBH-17** consists of microcrystalline calcite with martite (intermediate product/hybrid product between magnetite and haematite) grains (**Fig. GKBH-17E & F**), under PPL in reflected light.

2. Sample no. GKBH-03 & GKBH -04

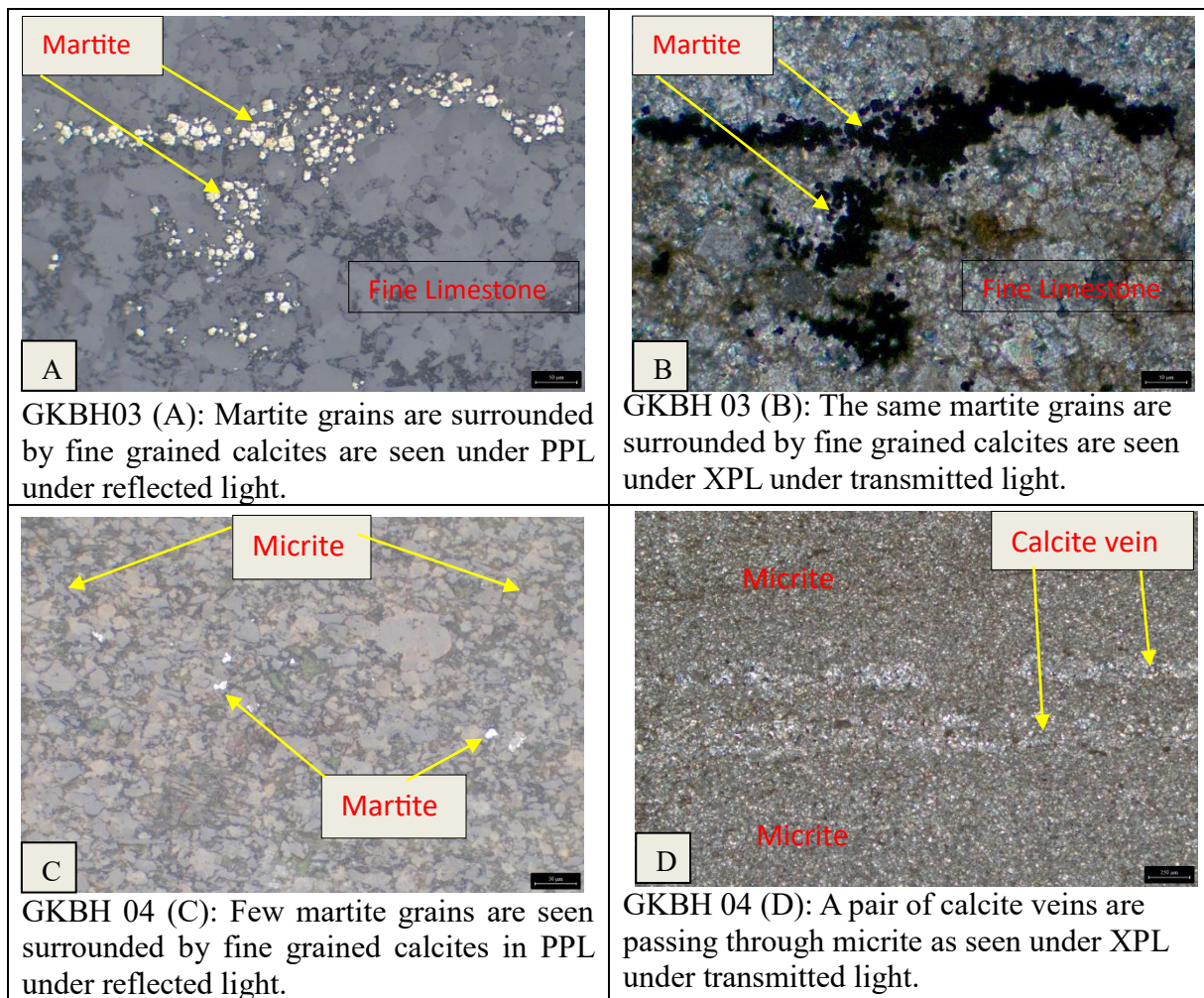


Fig. 5.11: Sample No. GKBH-03 & GKBH-04

The **GKBH-03** section is mainly composed of fine-grained microcrystalline calcite within micrites and might have formed in low energy environment. The martite which are intermediate hybrid products of magnetite and haematite are well observed in some parts of the section which might have formed by supergene enrichment processes where martite commonly develops when magnetite undergoes oxidation at low temperatures in the presence of water and abundant oxygen under higher

oxygen fugacity (**Fig. 03A & B**). Thus, the section may be identified as of fine-grained limestone. The **GKBH-04** section consists of microcrystalline calcite and micrite with intrusions of calcite veins (**Fig. GKBH-04 D**).

5.4 STRUCTURE

Primary structures: Bedding plane is the most common primary structure which is clearly visible in nala and river bed sections. The general attitude of all the litho-units is sub-horizontal to horizontal. The subhorizontal beds strike N40°W and dipping 1°-7° towards south west.

Secondary structures: Some vertical fractures are also observed in the cores.

5.5 METAMORPHISM

No metamorphic imprint is there in the rocks of the present block.

5.6 MINERALOGY OF THE ORE ZONES AND ORE TEXTURES

Dolomitic limestone and grey limestone exposed in the study areas are fine to medium grained and mainly associated with calcite veins and iron minerals. Microcrystalline calcite grains occur as groundmass.

5.7 SAMPLING

5.7.1 Petrological samples: 10 nos. of petrological samples of different rock types or lithology were collected from outcrops and borehole cores. Thin sections were prepared by Narayani Lab Private Limited.

5.7.2 Core sampling: 908 nos. of core samples were collected from the limestone bearing zones of the cores and chemical analyses were carried out at Shiva Analytical (INDIA) Private Limited (Annexure-II). Sample length was maintained at 1m interval. The processing of the analysed samples was described in the later section.

5.8 GEOPHYSICAL EXPLORATION

In Gadeghat-Khatera limestone block there was no component of geophysical exploration in the NQT.

5.9 GEOCHEMICAL EXPLORATION

Correlation matrix of the major oxide (**Table 5.2**) was prepared from the chemical analysis of 908 nos. of cores samples. It is observed that the CaO have negative correlation with other oxides i.e., MgO, Fe₂O₃, K₂O, TiO₂ & SiO₂. The grade of limestone decreases in intercalation with silica

& alumina as the value of CaO have inverse correlation with SiO₂ and Al₂O₃. The inverse relationship of CaO with other oxides is also shown in Bivariant plot in **Fig.5.11**.

Table 5.2: Correlation matrix of oxides of limestone core samples

Sl. No	Toposheet No.	Oxides	Al ₂ O ₃	CaO	SiO ₂	MgO	Fe ₂ O ₃	K ₂ O	TiO ₂
01	56I/13	Al ₂ O ₃	1						
02	56I/13	CaO	-0.4284	1					
03	56I/13	SiO ₂	0.933423	-0.40142	1				
04	56I/13	MgO	-0.43576	-0.5951	-0.49015	1			
05	56I/13	Fe ₂ O ₃	0.911571	-0.50485	0.886338	-0.31748	1		
06	56I/13	K ₂ O	0.921791	-0.27044	0.885982	-0.54185	0.865823	1	
07	56I/13	TiO ₂	0.964711	-0.41752	0.925175	-0.43341	0.938446	0.915973	1

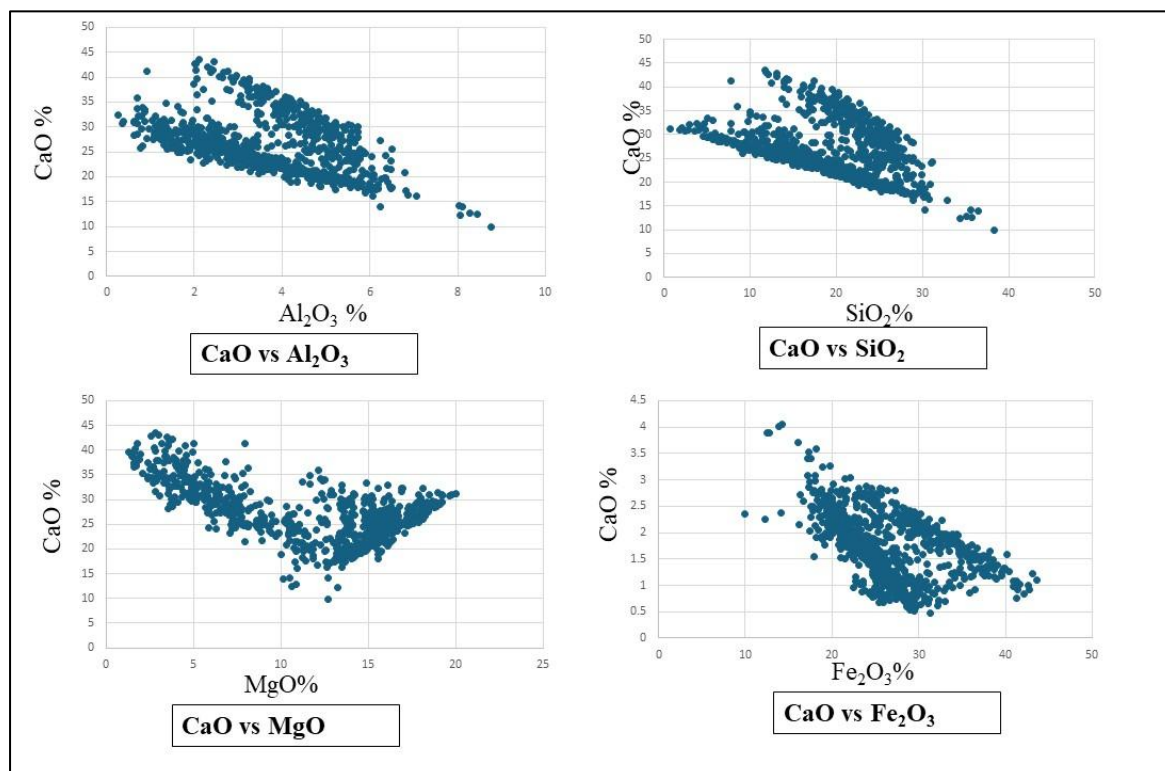


Fig 5.12. Bivariate plots showing relationship between CaO and Al₂O₃, SiO₂, MgO & Fe₂O₃

CHAPTER 6

INTEGRATION OF GEOLOGY, GEOPHYSICS (WITH AVAILABLE AERO GEOPHYSICAL DATA) AND GEOCHEMICAL EXPLORATION DATA AND THE INTERPRETATION

Not required for bedded type deposit as well as it is also not a part of the NQT.

CHAPTER 7

MINERAL DEPOSIT

7.1 SURFACE INDICATION OF MINERALIZED ZONE

The Gadeghat-Khatera block which exposes a part of the Penganga Group of rocks is rich in limestone. Limestones are well exposed in river beds with thickness ranges from 1 to 4m. General trend of limestone is N40°W with dip range from 1 to 7° south-westerly but dip found to vary from 20° to 33° south-westerly in three locations measured in nala sections and river sections. The outcrops of limestone are fine to medium grained, hard, compact and non-fossiliferous in nature. A major part of the block is covered by thick soil.

7.2 MODE OF OCCURRENCE

The limestone is formed by accumulation of microcrystalline grains of calcite and its concomitant cementation by chemically precipitated calcium carbonate. It occurs in the form of a regular, almost sub-horizontal to horizontal, primary bedded deposit with a N40°W, strike and dipping 1° to 7° towards the SW.

7.3 NATURE OF MINERALIZATION

The limestone mineralization is of marine origin exhibits a bedded sedimentary nature, formed by the accumulation of carbonates. The bed rock of the study area is mainly of packstones and mudstones composed of fine-grained microcrystalline calcite with the lime mud (micrites) and absence of any stratification (Kale, et al, 1998). This fine-grained compact rock might be resulted in the low energy environment such as shelf areas where such fine grains of calcite get enough time to settle with micrites. Calcite veins are post depositional features formed as fracture fillings where fractures produced due to some tectonic disturbances of the basin.

7.4 DETAILS OF MINERALISED ZONES

The thickness of the limestone zone varies significantly in the positive boreholes, the total cumulative thickness of the cement (blendable and beneficiable) grade limestones estimated as 100.83m and tabulated as follows.

Table 7.1: Thickness of cement (blendable and beneficiable) grade limestones horizons from the drilling data

S. No.	Bore Hole ID	From (m)	To (m)	Thickness (m)	Description
1	GKBH-03	15.00	18.00	3.00	Limestone
2	GKBH-03	41.00	50.00	9.00	Limestone
3	GKBH-04	6.00	7.00	1.00	Limestone
4	GKBH-04	12.00	13.00	1.00	Limestone
5	GKBH-04	17.00	18.00	1.00	Limestone
6	GKBH-04	20.00	29.00	9.00	Limestone
7	GKBH-04	34.00	35.00	1.00	Limestone
8	GKBH-04	36.00	37.00	1.00	Limestone
9	GKBH-04	39.00	40.00	1.00	Limestone
10	GKBH-04	45.00	46.00	1.00	Limestone
11	GKBH-04	47.00	48.00	1.00	Limestone
12	GKBH-06	47.00	50.00	3.00	Limestone
13	GKBH-07	15.00	16.00	1.00	Limestone
14	GKBH-07	19.00	26.00	7.00	Limestone
15	GKBH-07	32.00	33.00	1.00	Limestone
16	GKBH-07	40.00	41.00	1.00	Limestone
17	GKBH-07	43.00	44.00	1.00	Limestone
18	GKBH-07	48.00	50.00	2.00	Limestone
19	GKBH-08	1.17	3.00	1.83	Limestone
20	GKBH-08	15.00	26.00	11.00	Limestone
21	GKBH-08	30.00	31.00	1.00	Limestone
22	GKBH-08	38.00	39.00	1.00	Limestone
23	GKBH-08	40.00	41.00	1.00	Limestone
24	GKBH-08	43.00	48.00	5.00	Limestone
25	GKBH-13	15.00	17.00	2.00	Limestone
26	GKBH-13	18.00	19.00	1.00	Limestone
27	GKBH-13	23.00	26.00	3.00	Limestone
28	GKBH-13	35.00	36.00	1.00	Limestone
29	GKBH-13	47.00	48.00	1.00	Limestone
30	GKBH-14	5.00	7.00	2.00	Limestone
31	GKBH-14	8.00	9.00	1.00	Limestone
32	GKBH-14	12.00	24.00	12.00	Limestone
33	GKBH-14	26.00	27.00	1.00	Limestone
34	GKBH-14	40.00	45.00	5.00	Limestone
35	GKBH-14	47.00	49.00	2.00	Limestone
36	GKBH-16	0.00	1.00	1.00	Limestone
37	GKBH-19	30.00	31.00	1.00	Limestone
38	GKBH-19	32.00	34.00	2.00	Limestone
Total cumulative thickness of cement grade limestone is 100.83m					

CHAPTER 8

EXPLORATION BY DRILLING

Exploration by drilling (core) was carried out in Gadeghat-Khatara Limestone block, Yavatmal district of Maharashtra in an area of 11.96 sq. km to assess the potentiality of different grades of limestone. A total of 950m drilling was carried out in 19 vertical boreholes (in a grid spacing of 800m x 800m interval) i.e., GKBH-01, GKBH-02, GKBH-03, GKBH-04, GKBH-05, GKBH-06, GKBH-07, GKBH-08, GKBH-09, GKBH-10, GKBH-11, GKBH-12, GKBH-13, GKBH-14, GKBH-15, GKBH-16, GKBH-17, GKBH-18 and GKBH-19. The location of nineteen boreholes on the detailed geological map is shown in **Fig.8.1**.

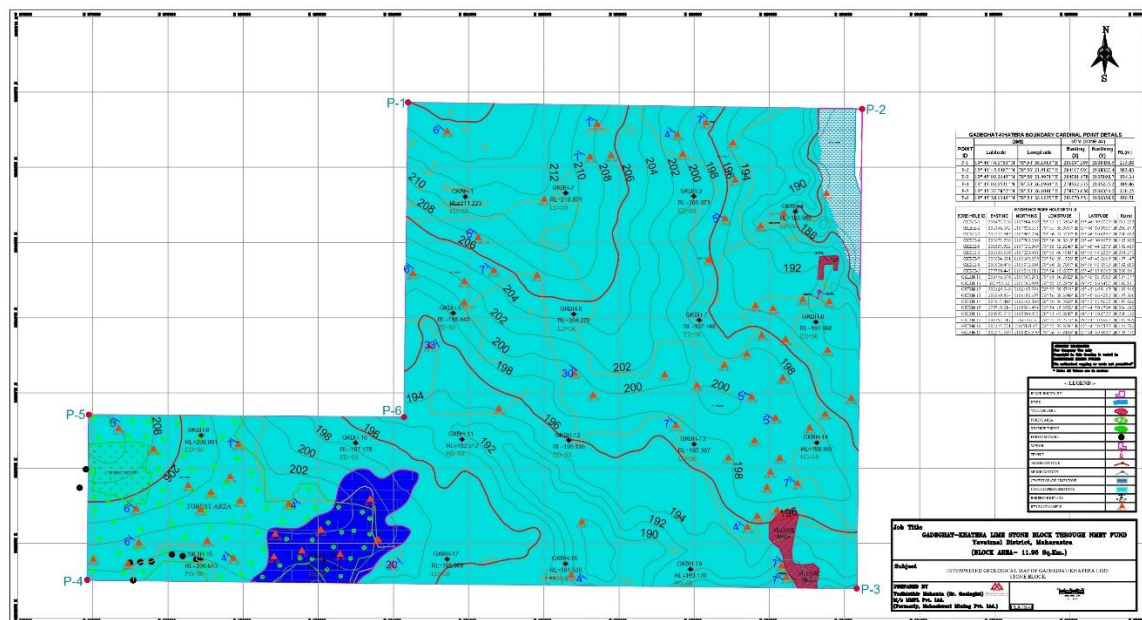


Fig. 8.1: Interpreted geological map of Gadeghat-Khatara block Yavatmal, Maharashtra showing boreholes and lithology

8.1 STAGE OF EXPLORATION

The investigation of the block was done under G-3 stage of UNFC, i.e. 'Preliminary Exploration Stage to study the grade of limestone in drilled core samples and assessment of the resources of the same. Detailed mapping of 11.96 sq. km in 1:4000 scale, Bed Rock Sampling, Drilling, Core Sampling followed by petrographic studies and chemical analyses of Bed Rock and Drilled Core Samples are the different component of this project.

8.2 DRILLING METHODOLOGY

Two rigs were deployed to carry out the drilling in the block. Drill machines were hydrostatic rigs with model KDR 500, CSD 1300L having the capacity of drilling up to 300m and 500m respectively. Diamond bits were used for the core drilling process. The azimuth of all the drilling boreholes was vertical as the targeted strata is sub-horizontal to horizontal. Generally wet drilling method was adopted except in the overburden and loose rock materials.

8.3 CO-ORDINATES AND RLS OF THE COLLARS OF THE BOREHOLES

The co-ordinates and RLs of the collars of the boreholes are taken from DGPS survey, given in the Table 8.1 below & in Annexure – VII.

Table 8.1: Gadeghat-Khatera block's borehole collar data

BOREHOLE ID	EASTING	NORTHING	LONGITUDE	LATITUDE	RL (m)
GKBH-1	281477.858	2187804.689	78° 55' 15.3634" E	19° 46' 09.3339" N	211.222
GKBH-2	282146.042	2187828.953	78° 55' 38.3007" E	19° 46' 10.3891" N	210.873
GKBH-3	282997.619	2187807.394	78° 56' 07.5557" E	19° 46' 10.0265" N	200.072
GKBH-4	283673.258	2187706.009	78° 56' 30.8018" E	19° 46' 06.9978" N	183.965
GKBH-5	281397.332	2187030.349	78° 55' 12.9246" E	19° 45' 44.1270" N	198.439
GKBH-6	282198.886	2187023.461	78° 55' 40.4541" E	19° 45' 44.2225" N	204.270
GKBH-7	283034.081	2186983.859	78° 56' 09.1528" E	19° 45' 43.2666" N	197.147
GKBH-8	283809.448	2186970.864	78° 56' 35.7857" E	19° 45' 43.1508" N	192.659
GKBH-9	279720.443	2186216.811	78° 54' 15.6837" E	19° 45' 17.0060" N	208.961
GKBH-10	280748.046	2186167.241	78° 54' 50.9922" E	19° 45' 15.8068" N	197.177
GKBH-11	281456.120	2186190.494	78° 55' 15.2975" E	19° 45' 16.8457" N	192.511
GKBH-12	282166.048	2186183.981	78° 55' 39.6791" E	19° 45' 16.9168" N	195.915
GKBH-13	282999.334	2186158.697	78° 56' 08.3049" E	19° 45' 16.4256" N	197.366
GKBH-14	283815.498	2186168.306	78° 56' 36.3282" E	19° 45' 17.0607" N	198.666
GKBH-15	279719.214	2185391.454	78° 54' 15.9920" E	19° 44' 50.1724" N	206.642
GKBH-16	280537.248	2185384.435	78° 54' 44.0847" E	19° 44' 50.2725" N	200.166
GKBH-17	281357.217	2185393.600	78° 55' 12.2371" E	19° 44' 50.8982" N	195.965
GKBH-18	282145.071	2185363.470	78° 55' 39.3034" E	19° 44' 50.2325" N	191.530
GKBH-19	282975.939	2185326.699	78° 56' 07.8496" E	19° 44' 49.3667" N	193.170

The methodology adopted in establishing RLs and Co-ordinates were used by DGPS methods and details are given in the DGPS survey annexures.

8.4 BOREHOLE PLANNING

19 boreholes were planned at a grid spacing on 800m x 800m with a borehole density of 1.59 bhs/ sq km, the limestone beds are sub-horizontal to horizontal in attitude. The grid interval was planned as per guideline of G3 stage of exploration defined in MEMC Rule 2015 for regular bedded type of deposit and the same was approved by TCC committee of NMEDT. However, slight deviations for a few borehole locations are there due to inaccessibility of the rigs in the dense forest and lands of cultivation. Details of boreholes and intersection depths of limestone are given in the Table 8.2.

Table 8.2: Details of boreholes and thickness of limestone

S. No.	Bore Hole ID	From (m)	To (m)	Thickness (m)	Description
1	GKBH-03	15.00	18.00	3.00	Cement Grade Limestone
2	GKBH-03	41.00	50.00	9.00	Cement Grade Limestone
3	GKBH-04	6.00	7.00	1.00	Cement Grade Limestone
4	GKBH-04	12.00	13.00	1.00	Cement Grade Limestone
5	GKBH-04	17.00	18.00	1.00	Cement Grade Limestone
6	GKBH-04	20.00	29.00	9.00	Cement Grade Limestone
7	GKBH-04	34.00	35.00	1.00	Cement Grade Limestone
8	GKBH-04	36.00	37.00	1.00	Cement Grade Limestone
9	GKBH-04	39.00	40.00	1.00	Cement Grade Limestone
10	GKBH-04	45.00	46.00	1.00	Cement Grade Limestone
11	GKBH-04	47.00	48.00	1.00	Cement Grade Limestone
12	GKBH-06	47.00	50.00	3.00	Cement Grade Limestone
13	GKBH-07	15.00	16.00	1.00	Cement Grade Limestone
14	GKBH-07	19.00	26.00	7.00	Cement Grade Limestone
15	GKBH-07	32.00	33.00	1.00	Cement Grade

					Limestone
16	GKBH-07	40.00	41.00	1.00	Cement Grade Limestone
17	GKBH-07	43.00	44.00	1.00	Cement Grade Limestone
18	GKBH-07	48.00	50.00	2.00	Cement Grade Limestone
19	GKBH-08	1.17	3.00	1.83	Cement Grade Limestone
20	GKBH-08	15.00	26.00	11.00	Cement Grade Limestone
21	GKBH-08	30.00	31.00	1.00	Cement Grade Limestone
22	GKBH-08	38.00	39.00	1.00	Cement Grade Limestone
23	GKBH-08	40.00	41.00	1.00	Cement Grade Limestone
24	GKBH-08	43.00	48.00	5.00	Cement Grade Limestone
25	GKBH-13	15.00	17.00	2.00	Cement Grade Limestone
26	GKBH-13	18.00	19.00	1.00	Cement Grade Limestone
27	GKBH-13	23.00	26.00	3.00	Cement Grade Limestone
28	GKBH-13	35.00	36.00	1.00	Cement Grade Limestone
29	GKBH-13	47.00	48.00	1.00	Cement Grade Limestone
30	GKBH-14	5.00	7.00	2.00	Cement Grade Limestone
31	GKBH-14	8.00	9.00	1.00	Cement Grade Limestone
32	GKBH-14	12.00	24.00	12.00	Cement Grade Limestone
33	GKBH-14	26.00	27.00	1.00	Cement Grade Limestone
34	GKBH-14	40.00	45.00	5.00	Cement Grade Limestone
35	GKBH-14	47.00	49.00	2.00	Cement Grade Limestone
36	GKBH-16	0.00	1.00	1.00	Cement Grade Limestone
37	GKBH-19	30.00	31.00	1.00	Cement Grade Limestone
38	GKBH-19	32.00	34.00	2.00	Cement Grade Limestone

8.5 BOREHOLE LOGGING

The drill cores were logged in detail to study the lithology, variation in colour, grain size, nature and detailed structural features. During detailed logging, special care was taken to distinguish variation in grain size, shape and any other texture present in the drilled core samples. The details lithology of drilled boreholes was given in annexure-III and lithologs of boreholes are given in summarized form in Annexure-IV and graphical lithologs in Plate-IV. A brief description of all nineteen boreholes is given below.

GKBH-01: This borehole is located at longitude 78°55'15.3634" E and latitude 19°46'09.3339" N. Drilling of this borehole commenced on 17.07.2025 and finished on 19.07.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-02: This borehole is located at longitude 78° 55' 38.3007" E and latitude 19° 46' 10.3891" N. Drilling of this borehole commenced on 14.07.2025 and finished on 16.07.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-03: This borehole is located at longitude 78°56'07.5557" E and latitude 19°46'10.0265" N. Drilling of this borehole commenced on 15.06.2025 and finished on 17.06.2025. Final depth of this borehole is 50m. The borehole contains top soil, unclassified limestone and cement (blendable and beneficiable) grade limestone.

GKBH-04: This borehole is located at longitude 78°56'30.8018" E and latitude 19°46'06.9978" N. Drilling of this borehole commenced on 27.06.2025 and finished on 05.07.2025. Final depth of this borehole is 50m. The borehole contains top soil, unclassified limestone and cement (blendable and beneficiable) grade limestone.

GKBH-05: This borehole is located at longitude 78°55'12.9246" E and latitude 19°45'44.1270" N. Drilling of this borehole commenced on 21.07.2025 and finished on 24.07.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-06: This borehole is located at longitude 78°55'40.4541" E and latitude 19°45'44.2225" N. Drilling of this borehole commenced on 07.07.2025 and finished on 12.07.2025. Final depth of this borehole is 50m. The borehole contains top soil, unclassified limestone and cement (blendable and beneficiable) grade limestone.

GKBH-07: This borehole is located at longitude 78°56'09.1528" E and latitude 19°45'43.2666" N. Drilling of this borehole commenced on 10.07.2025 and finished on 19.07.2025. Final depth of this borehole is 50m. The borehole contains top soil, unclassified limestone and cement (blendable and beneficiable) grade limestone.

GKBH-08: This borehole is located at longitude 78°56'35.7857" E and latitude 19°45'43.1508" N. Drilling of this borehole commenced on 19.06.2025 and finished on 22.06.2025. Final depth of this borehole is 50m. The borehole contains top soil, unclassified limestone and cement (blendable and beneficiable) grade limestone.

GKBH-09: This borehole is located at longitude 78°54'15.6837" E and latitude 19°45'17.0060" N. Drilling of this borehole commenced on 03.08.2025 and finished on 05.08.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-10: This borehole is located at longitude 78°54'50.9922" E and latitude 19°45'15.8068" N. Drilling of this borehole commenced on 28.07.2025 and finished on 01.08.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-11: This borehole is located at longitude 78°55'15.2975" E and latitude 19°45'16.8457" N. Drilling of this borehole commenced on 27.07.2025 and finished on 02.08.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-12: This borehole is located at longitude 78°55'39.3634" E and latitude 19°45'16.9168" N. Drilling of this borehole commenced on 01.07.2025 and finished on 04.07.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-13: This borehole is located at longitude 78°56'08.3049" E and latitude 19°45'16.4256" N. Drilling of this borehole commenced on 27.06.2025 and finished on 29.06.2025. Final depth of this borehole is 50m. The borehole contains top soil, unclassified limestone and cement (blendable and beneficiable) grade limestone.

GKBH-14: This borehole is located at longitude 78°56'15.3282" E and latitude 19°45'17.0607" N. Drilling of this borehole commenced on 23.06.2025 and finished on 25.06.2025. Final depth of this borehole is 50m. The borehole contains top soil, unclassified limestone and cement (blendable and beneficiable) grade limestone.

GKBH-15: This borehole is located at longitude 78°54'15.9920" E and latitude 19°44'50.1724" N. Drilling of this borehole commenced on 06.08.2025 and finished on 08.08.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-16: This borehole is located at longitude 78°54'44.0847" E and latitude 19°44'50.2725" N. Drilling of this borehole commenced on 07.08.2025 and finished on 13.08.2025. Final depth of this borehole is 50m. The borehole contains cement (blendable and beneficiable) grade limestone and unclassified limestone.

GKBH-17: This borehole is located at longitude 78°55'12.2371" E and latitude 19°44'50.8982" N. Drilling of this borehole commenced on 20.07.2025 and finished on 24.07.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-18: This borehole is located at longitude 78°55'39.3034" E and latitude 19°44'50.2325" N. Drilling of this borehole commenced on 15.07.2025 and finished on 17.07.2025. Final depth of this borehole is 50m. The borehole contains top soil and unclassified limestone.

GKBH-19: This borehole is located at longitude 78°56'15.8496" E and latitude 19°44'49.3667" N. Drilling of this borehole commenced on 11.07.2025 and finished on 14.07.2025. Final depth of this borehole is 50m. The borehole contains top soil, unclassified limestone and cement (blendable and beneficiable) grade limestone.

8.6 CORE RECOVERY PERCENTAGE

The core recovery of all boreholes is good on an average. The core recovery of the targeted strata, limestone is very good (60-90%) where there are no fracture zones. However, in areas where the borehole passes through fracture zones, the core recovery is reduced. Borehole-wise details of core recovery are provided in the Table 8.3.

Table 8.3: Borehole-wise the core recovery percentages

Summarized core recovery percentage of boreholes				
Sl. No.	Toposheet No.	Borehole No.	Lithology	Core Recovery (%)
01	56I/13	GKBH-01	Grey limestones with fractures and calcite veins	98.18
02	56I/13	GKBH-02	Grey limestones with calcite veins	98.57
03	56I/13	GKBH-03	Compact grey limestones	98.44
04	56I/13	GKBH-04	Grey limestones with calcite veins	97.90
05	56I/13	GKBH-05	Grey limestones with fractures	98.94
06	56I/13	GKBH-06	Grey limestones with fractures and silica content	98.61
07	56I/13	GKBH-07	Compact grey limestone	99.07
08	56I/13	GKBH-08	Fine grained compact grey limestone	98.36
09	56I/13	GKBH-09	Grey limestones with silica content	97.66
10	56I/13	GKBH-10	Grey limestones with fractures and silica content	99.15
11	56I/13	GKBH-11	Grey limestones with very high fractures	86.54
12	56I/13	GKBH-12	Grey limestones with many fractures	97.57
13	56I/13	GKBH-13	Grey limestone with few calcite veins	98.17
14	56I/13	GKBH-14	Fine grained limestone with a few calcite veins	98.10
15	56I/13	GKBH-15	Grey limestone with high silica content	98.01
16	56I/13	GKBH-16	Highly fractured limestones	93.50
17	56I/13	GKBH-17	Grey limestone with many fractures with few calcite veins	95.76
18	56I/13	GKBH-18	Grey limestone with many fractures with few calcite veins	98.60
19	56I/13	GKBH-19	Grey limestone with few calcite veins	99.06

8.7 Geophysical logging of boreholes

As per the Nature and Quantum of work approved for this limestone block, there was no geophysical logging.

8.8 Minerology of the ore zone

Mineralogically, the Gadeghat-Khatera block is mainly consists of microcrystalline calcite embedded in the micrite groundmass thus forming the fine-grained limestone. These limestones are sometimes intersected by calcite veins and sometimes consists of euhedral calcite grains indicating the secondary growth after formation of the fine-grained limestone.

8.9 Borehole deviation test and methodology

As the boreholes were drilled out at vertical angle, no deviation test was carried out.

8.10 Methodology of ore zone sampling

Core samples were taken from the mineralized zone at one-meter intervals, with each sample corresponding to one meter of recovered core. During sampling, core recovery was monitored and adjustments were made as needed to ensure the zone was accurately represented.

8.11 Sample powder preparation & chemical analysis with laboratory procedures

Core samples were collected at 1.00 m intervals from the mineralized zone. Each core was then split longitudinally into two equal halves using a core splitter. From one half of the core, 6 mm chip samples were prepared. After coning and quartering the 500–600 g chip samples, a subsample of 200–300 g was pulverized to a fine powder of –100 mesh size. The remaining chip samples were preserved for future reference. The remaining half of the core was preserved in the core box and sent to the core repository. The 200–300 g powdered sample was repeatedly coned and quartered to obtain a primary sample of approximately 150–200 g. This primary sample was then divided into two equal portions: one half was submitted to the NABL-accredited laboratory (Shiva Analytics) for chemical analysis, and the other half was preserved as a duplicate sample. The primary samples were analysed for CaO, MgO, SiO₂, Al₂O₃, Fe₂O₃, SO₃, P₂O₅, Na₂O, K₂O, and LOI using an X-ray fluorescence (XRF) instrument with appropriate standards. A total of 908 core samples from 19 boreholes were collected, processed, and analysed. In addition to the core samples, 80 bedrock samples were also collected and subjected to chemical analysis.

8.12 Check samples

Ninety core samples and eight bedrock samples were prepared as check samples and analysed at the SGS Laboratory (Annexure-V & Annexure-VI) to compare the accuracy of the chemical composition of the original samples. Comparison of the analytical results between the check samples and the original samples indicates that the values are largely consistent, with only minor deviations.

8.13 Details of the intersected limestone

A total of 950m drilling was carried out in 19 nos of boreholes. However, the grade of limestone in the block is considered by cut-off value of CaO to be 34% (IBM, 2019). The limestone was intersected in all the boreholes at different depth as in Table No 8.2.

8.14 Depth of Groundwater

Based on data obtained from drilled boreholes, the depth to the water table within the block area varies between 15 m and 25 m, primarily influenced by local topographic variations. In the southern, north-western, and north-eastern sectors of the block, the presence of the Penganga River and several associated nalas contributes to a comparatively shallow water table. In these zones, the groundwater level is typically encountered at a depth of approximately 15 m.

CHAPTER-9

GEOTECHNICAL STUDIES

As part of geotechnical investigations, the in-situ bulk density of limestone and the **Rock Quality Designation (RQD)** derived from drill core samples are systematically determined using standard testing and logging procedures.

9.1 BULK DENSITY

The bulk density of the limestone samples was determined at Shiva Analyticals Laboratory using the pycnometer method, a standardized laboratory technique for precise determination of the density of solid materials. In this method, finely crushed limestone specimens are oven-dried to constant mass and subsequently introduced into a calibrated pycnometer, which enables accurate evaluation of the sample density based on mass–volume relationships. The sample volume is subsequently evaluated through liquid displacement measurements conducted within the pycnometer, generally employing deaired distilled water as the reference fluid. The bulk density of the limestone is then derived by relating the constant dry mass of the specimen to the measured displaced fluid volume, yielding density values in g/cm³ or t/m³ with a high level of analytical accuracy and repeatability. The method is well suited for irregular and porous geological samples, providing a reliable estimate of particle (true) density by excluding pore spaces. An average bulk density of 2.71 t/m³ (Table 9.1) was applied uniformly across the deposit for resource estimation, with detailed laboratory results presented in Annexure-IX.

Table 9.1: Average bulk density of limestone samples collected

Average bulk density of limestone samples collected			
Sl. No.	Toposheet No.	Sample No.	Bulk Density (gm/cc)
01	56I/13	GKBH-03/S-16	2.72
02	56I/13	GKBH-08/S-45	2.70
03	56I/13	GKBH-13/S-25	2.68
04	56I/13	GKBH-14/S-48	2.74
05	56I/13	GKBH-19/S-30	2.71
		Average	2.71

9.2 RQD (ROCK QUALITY DESIGNATION)

The RQD for all the cores of the drilled boreholes is calculated as per the formula $RQD = (\text{Sum of the length of core pieces} > 100\text{mm} / \text{total length of the core run}) \times 100\%$. The average RQD of the limestone encountered in all the borehole is above 53.33%.

Table 9.2 Summarized RQD of Boreholes

Summarized RQD of Boreholes				
Sl. No.	Toposheet No.	Borehole No.	Lithology	RQD (%)
01	56I/13	GKBH-01	Grey limestones with fractures and calcite veins	38.04
02	56I/13	GKBH-02	Grey limestones with calcite veins	73.18
03	56I/13	GKBH-03	Compact grey limestones	69.43
04	56I/13	GKBH-04	Grey limestones with calcite veins	58.82
05	56I/13	GKBH-05	Grey limestones with fractures	53.94
06	56I/13	GKBH-06	Grey limestones with fractures and silica content	47.51
07	56I/13	GKBH-07	Compact grey limestone	83.80
08	56I/13	GKBH-08	Fine grained compact grey limestone	78.59
09	56I/13	GKBH-09	Grey limestones with silica content	57.29
10	56I/13	GKBH-10	Grey limestones with fractures and silica content	37.73
11	56I/13	GKBH-11	Grey limestones with very high fractures	00
12	56I/13	GKBH-12	Grey limestones with many fractures	43.31
13	56I/13	GKBH-13	Grey limestone with few calcite veins	69.77
14	56I/13	GKBH-14	Fine grained limestone with a few calcite veins	80.55
15	56I/13	GKBH-15	Grey limestone with high silica content	43.18
16	56I/13	GKBH-16	Highly fractured limestones	30.14
17	56I/13	GKBH-17	Grey limestone with many fractures with few calcite veins	44.54
18	56I/13	GKBH-18	Grey limestone with many fractures with few calcite veins	38.26
19	56I/13	GKBH-19	Grey limestone with few calcite veins	65.19

CHAPTER 10

RESOURCE ESTIMATION

10.1 INTRODUCTION

A G-3 stage investigation (Preliminary Exploration) was conducted over 11.96 sq. km in the Gadeghat–Khatera block, Yavatmal district of Maharashtra to assess grade-wise limestone resources. Nineteen vertical boreholes were drilled at a grid spacing on 800m x 800m with a borehole density of 1.59 bhs/ sq km, completing 950 meters of core drilling, with each hole of 50 meters depth. The work aimed to confirm depth continuity of limestone and grade-wise resource estimation through lithological logging and chemical analyses. Surface studies and drilling together confirm that the entire area is covered by limestone (Fig. 8.1).

10.2 DETAILED DESCRIPTION OF LIMESTONE

Cement (Blendable/Beneficiable) grade limestone is encountered in borehole NoS. GKBH-03, GKBH-04, GKBH-06, GKBH-07, GKBH-08, GKBH-13, GKBH-14, GKBH-16 and GKBH-19 whereas unclassified limestone is encountered in rest of the boreholes in the Gadeghat-Khatera block. The cement grade limestone is grey to light grey in colour, fine to medium grained, hard and compact and mostly unfossiliferous. The unclassified limestone is dark grey in colour and sometimes with elephant skin weathering on surface and sometimes the limestone is light grey in colour without any elephant skin weathering features. From the exposed outcrops and subsurface data of the drilled boreholes, it is observed that the overall limestone in the study area is thickly bedded with low dip of 1° to 7° south-westerly but at three locations the dip found to vary from 20° to 33° south-westerly. The detailed description of the limestone encountered in drilled boreholes are given in the **Table 10.1**

Table 10.1: Thickness of limestone bands borehole wise

Sl. No.	Bore Hole ID	From	To	Thickness (m)	Total Thickness of Limestone (m)	Description
1	GKBH-03	15.00	18.00	3.00	12	Limestone with fine grained, highly compacted, alternate grey and light grey colour banding. Few calcite veins & quartz grains are present.
		41.00	50.00	9.00		
3	GKBH-04	6.00	7.00	1.00	17	Limestone with fine grained, highly compacted, alternate grey and light grey colour banding. Few calcite veins & quartz grains are present.
4	GKBH-04	12.00	13.00	1.00		
5	GKBH-04	17.00	18.00	1.00		
6	GKBH-04	20.00	29.00	9.00		
7	GKBH-04	34.00	35.00	1.00		

8	GKBH-04	36.00	37.00	1.00		
9	GKBH-04	39.00	40.00	1.00		
10	GKBH-04	45.00	46.00	1.00		
11	GKBH-04	47.00	48.00	1.00		
12	GKBH-06	47.00	50.00	3.00	3	Limestone with fine grained, alternate grey and light grey colour banding & few calcite veins are present.
13	GKBH-07	15.00	16.00	1.00	13	Limestone with fine grained, alternate grey and light grey colour banding & few calcite veins are present.
14	GKBH-07	19.00	26.00	7.00		
15	GKBH-07	32.00	33.00	1.00		
16	GKBH-07	40.00	41.00	1.00		
17	GKBH-07	43.00	44.00	1.00		
18	GKBH-07	48.00	50.00	2.00		
19	GKBH-08	1.17	3.00	1.83	20.83	Limestone with alternate grey and light grey colour banding & few calcite veins are present.
20	GKBH-08	15.00	26.00	11.00		
21	GKBH-08	30.00	31.00	1.00		
22	GKBH-08	38.00	39.00	1.00		
23	GKBH-08	40.00	41.00	1.00		
24	GKBH-08	43.00	48.00	5.00		
25	GKBH-13	15.00	17.00	2.00	8	Limestone with fine grained, highly compacted and alternating light grey and dark grey banding with presence of some calcite veins.
26	GKBH-13	18.00	19.00	1.00		
27	GKBH-13	23.00	26.00	3.00		
28	GKBH-13	35.00	36.00	1.00		
29	GKBH-13	47.00	48.00	1.00		
30	GKBH-14	5.00	7.00	2.00	23	Weathered fine grey limestone, highly compact and alternating light grey and dark grey banding and with calcite veins
31	GKBH-14	8.00	9.00	1.00		
32	GKBH-14	12.00	24.00	12.00		
33	GKBH-14	26.00	27.00	1.00		
34	GKBH-14	40.00	45.00	5.00		
35	GKBH-14	47.00	49.00	2.00		
36	GKBH-16	0.00	1.00	1.00	1	Grey Limestone with buff colour because of silica content.
37	GKBH-19	30.00	31.00	1.00	3	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
38	GKBH-19	32.00	34.00	2.00		

10.3 CORE RECOVERY

Average core recovery of the all boreholes is good. The average core recovery percentage is 97.23 within the mineralized zone. Hence, the recovered length of core is considered to represent actual thickness.

10.4 CUT-OFF GRADE CONSIDERATION

Resource estimation was carried out by classifying the limestone into different grades based on end-use classification, primarily determined by chemical composition by Indian Bureau of Mines. A cut-off of **34% CaO** was applied to include only limestone that meets minimum industrial standards. The principal limestone grade categories, defined by their chemical characteristics, follow the classification system published by the Indian Bureau of Mines (IBM Annual Report, 2019) and are presented in **Table 10.2**.

Table 10.2: End Use Grade Classification for Limestone

Grade	CaO%	MgO%	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %
Cement (Portland)	44 to 52%	3.5 % (max)			
Cement (Blendable/Beneficiable)	34 to 44 %	5% (max)			
Steel Melting Shop (Open Hearth)	48 % (max)	4% (max)	4% (max)		
Steel Melting Shop (Linz-Donawitz)	52 % (min)	Below 2%	1% (max)		
Chemical	50% (min)		2% (max)		0.25%(max)
B.F.	42% (min)	6% (max)	4% (max)		
White Cement	48% (min)			1% (max)	1% (max)
Others (Unclassified)	Estimation for such grade though usable cannot be classified under any grades				

The key chemical constituents of limestone - CaO, MgO, SiO₂, Fe₂O₃, and Al₂O₃ are essential for determining its grade and industrial suitability, particularly for cement, steel, chemical, fertilizer, and glass industries. Additional components such as SO₃, P₂O₅, Na₂O, K₂O, and MnO are also analysed, as they affect both quality and usability. Limestone is especially important in steelmaking, where it is used as flux in Steel Melting Shops (SMS) operating with Open Hearth (OH) furnaces or Linz–Donawitz (LD) furnace or Basic Oxygen Furnace (BOF).

10.5 MINIMUM STOPPING WIDTH CONSIDERATION

Stopping width is not applicable for open cast mining.

10.6 GRADE OF LIMESTONE AND CORRELATION

The limestone encountered in each borehole can be classified into different grades based on key chemical constituents such as CaO, MgO, SiO₂, Fe₂O₃, and Al₂O₃. Chemical analyses show that the majority of the limestone falls into the cement (blendable and beneficiable) grade, and the unclassified grade. Limestones are with CaO content greater than 34% and MgO is maximum up to 5% are classified under cement (blendable and beneficiable) category and the part with CaO content lesser than 34% is categorized as unclassified.

10.7 GRADE WISE CORRELATION OF LIMESTONE

Fence diagram has been prepared for correlation of the grade variation of limestone in each borehole. The analysis of the 3D fence diagram reveals that limestone of cement (blendable and beneficiable) are rich in the southwestern and northern part of the block, whereas the rest part of the block is covered with unclassified limestone. This indicates that the beds are sub-horizontally dipping toward the southwest.

10.8 METHODOLOGY OF RESOURCE ESTIMATION

Estimation of resources of limestone for the Gadeghat-Khatera block was carried out using the Polygonal Area Method. The following steps were undertaken for the estimation of resources:

- a) According to The Minerals (Evidence of Mineral Contents) Rules, 2015 (as amended up to 14th December, 2021), Ministry of Mines, Government of India, issued by the Controller General, IBM, Nagpur (January, 2022) rule boreholes were approved with space of 800m, considering the horizontal to sub-horizontal attitude of the limestone with regular habits NMET-TCC approved these nineteen boreholes.
- b) As the boreholes are given in 800m x 800m spacing in both the directions which are at right angle to each other, the area of influence for each positive borehole is limited to half the distance between two positive borehole points in both the directions.
- c) Towards either extremity of the lines of boreholes the area of influence is limited either to 25% of distance between the boreholes or up to the block boundary whichever is less.

d) The block boundary of the block is irregular in outline. Therefore, the area near to the boundary where the influence of the boreholes is beyond the permissible limit is excluded from the area of resource estimation.

e) The thickness of limestone measured in each borehole was considered as uniform throughout the area influence for that particular borehole.

f) The grade of limestone is considered to be of uniform throughout a single volume of influence of limestone in a borehole.

g) Bulk density of 2.71 has been considered/ assumed to the entire deposit as calculated from the borehole cores. It was determined using the pycnometry method, and the analysis was carried out at Shiva Analyticals Laboratory, given in Annexure -IX.

Surface indications of limestones were confirmed from their grey colour and positive effervescence test with dilute hydrochloric acid. The thickness of the limestone is determined from the borehole intersections and to calculate the volume, the area of influence is multiplied by the limestone thickness. This volume is then multiplied by the bulk density to estimate the resource. To calculate the net tonnage for each borehole, 15% of the gross tonnage is subtracted, accounting for the likely presence of underground caverns, solution cavities, or structural discontinuities within the limestone deposit. The bulk density of the limestone is calculated from the core of the limestone, given in Section 9.1. Bulk density is 2.71 gm/ cm³ or tonnes/m³.

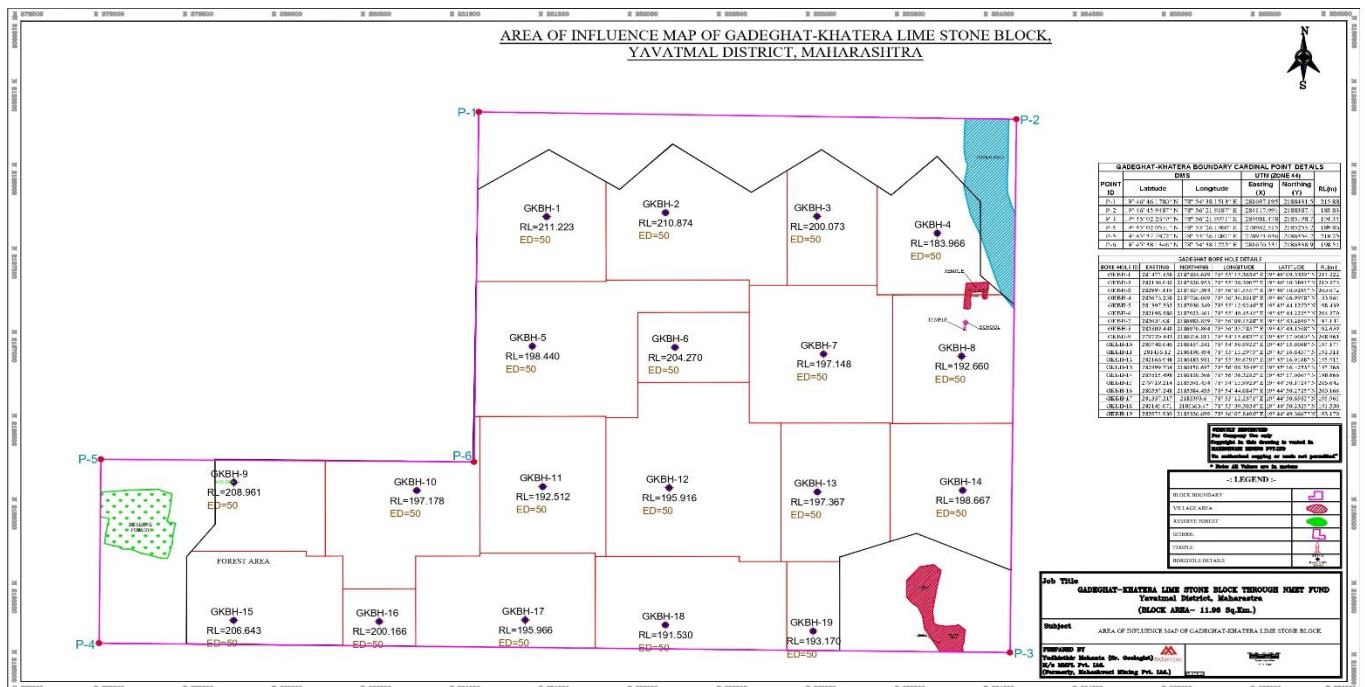


Fig. 10.1: Schematic diagram showing construction of polygons for determining area of influence in Polygonal Area Method

In Polygonal Area Method the volume of the polygonal area has been calculated by considering the assumption given below.

Volume of polygon = $S \times T$, Where S = Area of polygon on surface, T = Thickness of limestone intersected in borehole. Resources have been estimated by the formula

Resource of one block of individual polygonal area = $R = V \times Bd = S \times T \times Bd$

Where V = Volume, Bd = Bulk density

R = Resource of one rectangle/polygon

Resource of total deposit = $RE = R1 + R2 + R3 + \dots + Rn$

Grade of the deposit is calculated as per the chemical grade of the limestone for each borehole.

10.9 RESOURCE**Table 10.3: Showing Category wise Net Resource by using Polygonal Area Method**

Method	Category	Total Resource (mt)	Grade wise resources (million tonnes)		UNFC Classification
			Cement (Blendable/Beneficiable) grade	Unclassified / Others	
Polygonal Area	G3	1072.74	87.84	984.90	Class 333

Table 10.4 a: Showing the Total Gross Resource of Cement grade limestone (Blendable and Beneficiable) (Class 333 of UNFC) by using Polygonal Area Method

Sl. No	Bore Hole ID	Limestone Zone	Depth From (m)	Depth To (m)	Thickness (m)	CaO (%)	MgO (%)	SiO ₂ (%)	Description Cement (blendable and beneficiable) Grade, Limestone	Area (sq.m)	Volume (m ³)	Bulk Density (gm/cc)	Resource (tonnes)
1	GKBH-03	L2	15.00	18.00	3.00	37.08	5.54	16.42	Cement Grade Limestone	364236.402	1092709	2.71	2961241.95
2	GKBH-03	L3	41.00	50.00	9.00	38.26	3.83	17.04	Cement Grade Limestone	364236.402	3278128	2.71	8883725.84
3	GKBH-04	L2	20.00	29.00	9.00	38.94	4.04	16.61	Cement Grade Limestone	407956.587	3671609	2.71	9950061.16
4	GKBH-06	L2	47.00	50.00	3.00	39.76	3.78	15.22	Cement Grade Limestone	262252.347	786757	2.71	2132111.58
5	GKBH-07	L2	19.00	26.00	7.00	37.99	4.72	15.97	Cement Grade Limestone	658919.593	4612437	2.71	12499704.7
6	GKBH-07	L3	48.00	50.00	2.00	37.51	1.75	20.57	Cement Grade Limestone	658919.593	1317839	2.71	3571344.19

7	GKBH-08	L2	15.00	26.00	11.00	34.83	4.04	21.04	Cement Grade Limestone	520639.812	5727038	2.71	15520272.8
8	GKBH-08	L3	43.00	48.00	5.00	35.32	4.82	19.41	Cement Grade Limestone	520639.812	2603199	2.71	7054669.45
9	GKBH-13	L2	15.00	17.00	2.00	36.28	2.73	21.51	Cement Grade Limestone	486321.304	972642.6	2.71	2635861.47
10	GKBH-13	L3	23.00	26.00	3.00	38.32	4.65	15.14	Cement Grade Limestone	486321.304	1458964	2.71	3953792.2
11	GKBH-14	L2	5.00	7.00	2.00	34.76	3.09	22.20	Cement Grade Limestone	513787.174	1027574	2.71	2784726.48
12	GKBH-14	L3	12.00	24.00	12.00	35.90	2.97	20.55	Cement Grade Limestone	513787.174	6165446	2.71	16708358.9
13	GKBH-14	L4	40.00	49.00	9.00	34.10	2.97	23.03	Cement Grade Limestone	513787.174	4624085	2.71	12531269.2
14	GKBH-16	L1	0.00	1.00	1.00	38.71	3.34	19.96	Cement Grade Limestone	139569.224	139569.2	2.71	378232.597
15	GKBH-19	L2	32.00	34.00	2.00	35.58	5.92	17.12	Cement Grade Limestone	327112.891	654225.8	2.71	1772951.87
Gross Geological Resource in Tonnes													103338324
Gross Geological Resource in MT													103.34
Net Geological Resource in MT (after 15% reduction)													87.84

Note: Limestone zones L1, L2, L3 and L4: The limestone zones were selected as per the chemical analysis of the samples from each borehole.

Table 10.4 b: Showing the Total Resource of unclassified limestone (Class 333 of UNFC) by using Polygonal Area Method

Sl. No	Bore Hole ID	Unclassified Limestone Zone	Depth From (m)	Depth To (m)	Thickness (m)	CaO (%)	MgO (%)	SiO ₂ (%)	Description	Area (sq. m)	Volume (m ³)	Bulk Density (gm/cc)	Resource (tonnes)
1	GKBH-01	UC1	0.66	50.00	49.34	24.63	14.83	17.68	Unclassified Limestone	492038.205	24277165	2.71	65791117.24
2	GKBH-02	UC1	0.40	50.00	49.60	20.03	13.89	24.63	Unclassified Limestone	665319.687	32999856	2.71	89429611.05
3	GKBH-03	UC1	0.60	15.00	14.40	24.53	10.45	24.03	Unclassified Limestone	364236.402	5245004.2	2.71	14213961.35
4	GKBH-03	UC2	18.00	41.00	23.00	27.45	7.05	25.78	Unclassified Limestone	364236.402	8377437.2	2.71	22702854.94
5	GKBH-04	UC1	1.50	20.00	18.50	29.98	6.29	24.55	Unclassified Limestone	407956.587	7547196.9	2.71	20452903.49
6	GKBH-04	UC2	29.00	50.00	21.00	30.31	5.82	24.48	Unclassified Limestone	407956.587	8567088.3	2.71	23216809.37
7	GKBH-05	UC1	1.82	50.00	48.18	21.53	15.25	20.54	Unclassified Limestone	862783.186	41568894	2.71	112651702.5
8	GKBH-06	UC1	1.50	47.00	45.50	21.03	14.18	22.86	Unclassified Limestone	262252.347	11932482	2.71	32337025.65
9	GKBH-07	UC1	0.50	19.00	18.50	29.89	6.54	23.85	Unclassified Limestone	658919.593	12190012	2.71	33034933.8
10	GKBH-07	UC2	26.00	48.00	22.00	29.72	6.25	23.79	Unclassified Limestone	658919.593	14496231	2.71	39284786.13
11	GKBH-08	UC1	1.17	15.00	13.83	30.98	5.17	24.23	Unclassified Limestone	520639.812	7200448.6	2.71	19513215.71
12	GKBH-08	UC2	26.00	43.00	17.00	25.56	8.24	25.92	Unclassified Limestone	520639.812	8850876.8	2.71	23985876.14
13	GKBH-08	UC2	48.00	50.00	2.00	29.72	6.48	23.95	Unclassified Limestone	520639.812	1041279.6	2.71	2821867.781
14	GKBH-09	UC1	1.50	50.00	48.50	28.11	14.41	14.09	Unclassified Limestone	353057.427	17123285	2.71	46404102.92
15	GKBH-10	UC1	0.50	50.00	49.50	27.06	15.52	13.98	Unclassified	582683.127	28842815	2.71	78164028.07

									Limestone				
16	GKBH-11	UC1	1.76	50.00	48.24	25.38	16.50	15.39	Unclassified Limestone	581326.319	28043182	2.71	75997022.21
17	GKBH-12	UC1	4.17	50.00	45.83	21.84	15.41	20.13	Unclassified Limestone	949834.665	43530923	2.71	117968800.5
18	GKBH-13	UC1	0.92	15.00	14.08	25.51	9.07	25.14	Unclassified Limestone	486321.304	6847404	2.71	18556464.73
19	GKBH-13	UC2	17.00	23.00	6.00	29.18	8.08	22.11	Unclassified Limestone	486321.304	2917927.8	2.71	7907584.403
20	GKBH-13	UC3	26.00	50.00	24.00	29.43	6.04	24.28	Unclassified Limestone	486321.304	11671711	2.71	31630337.61
21	GKBH-14	UC1	0.50	5.00	4.50	31.34	4.49	24.06	Unclassified Limestone	513787.174	2312042.3	2.71	6265634.587
22	GKBH-14	UC2	7.00	12.00	5.00	28.95	4.83	26.20	Unclassified Limestone	513787.174	2568935.9	2.71	6961816.208
23	GKBH-14	UC3	24.00	40.00	16.00	25.21	7.42	26.41	Unclassified Limestone	513787.174	8220594.8	2.71	22277811.86
24	GKBH-14	UC4	49.00	50.00	1.00	31.68	2.80	26.24	Unclassified Limestone	513787.174	513787.17	2.71	1392363.242
25	GKBH-15	UC1	2.20	50.00	47.80	24.04	15.60	13.86	Unclassified Limestone	482837.245	23079620	2.71	62545771.04
26	GKBH-16	UC1	1.00	50.00	49.00	28.10	16.18	11.56	Unclassified Limestone	139569.224	6838892	2.71	18533397.25
27	GKBH-17	UC1	2.82	50.00	47.18	23.08	16.38	16.89	Unclassified Limestone	559834.905	26413011	2.71	71579259.32
28	GKBH-18	UC1	3.44	50.00	46.56	24.07	15.87	15.69	Unclassified Limestone	588410.564	27396396	2.71	74244232.78
29	GKBH-19	UC1	4.00	32.00	28.00	24.74	9.89	24.79	Unclassified Limestone	158077.366	4426166.2	2.71	11994910.53
30	GKBH-19	UC2	34.00	50.00	16.00	26.08	10.46	22.14	Unclassified Limestone	158077.366	2529237.9	2.71	6854234.59
Gross Geological Resource in Tonnes													1158714437
Gross Geological Resource in million tonnes													1158.71
Net Geological Resource in million tonnes (after 15% reduction)													984.90

Note: Unclassified Limestone zones UC1, UC2, UC3 and UC4: The unclassified limestone zones were selected as per the chemical analysis of the samples from each borehole where CaO% is below 34%.

10.10 RESOURCE ESTIMATION BY BLOCK MODEL FOR VALIDATION

In order to validate the resource estimation carried out using the Polygonal Area Method, an alternative estimation was conducted using a three-dimensional Block Model. The validated resource corresponds to the total block area, under the class 333 of UNFC.

A total resource of **1103.61** million tonnes was estimated using the Solid Block Model (Table 10.5 & Table 10.6), in comparison to **1072.74** million tonnes (G3) estimated through the Polygonal Area Method (Table 10.4a & 10.4b).

- **Borehole intercepts with CaO > 34% were classified as ore.**
- **Borehole intercepts with CaO < 34% were considered as unclassified limestone.**

Using the block model, the total resources were calculated on a depth-wise and grade-wise basis. The block model allowed the estimation of:

- **Total volume and tonnage of ore**
- **Average grade (CaO%) per block**
- **Spatial distribution of grade**

The output provided a comprehensive picture of the resource distribution across the block, supporting further mine planning and economic evaluation. The grade-tonnage relationship, as well as sectional and 3D visualizations, were generated and represented in the accompanying figures (**Fig.10.2 & Fig.10.3**).

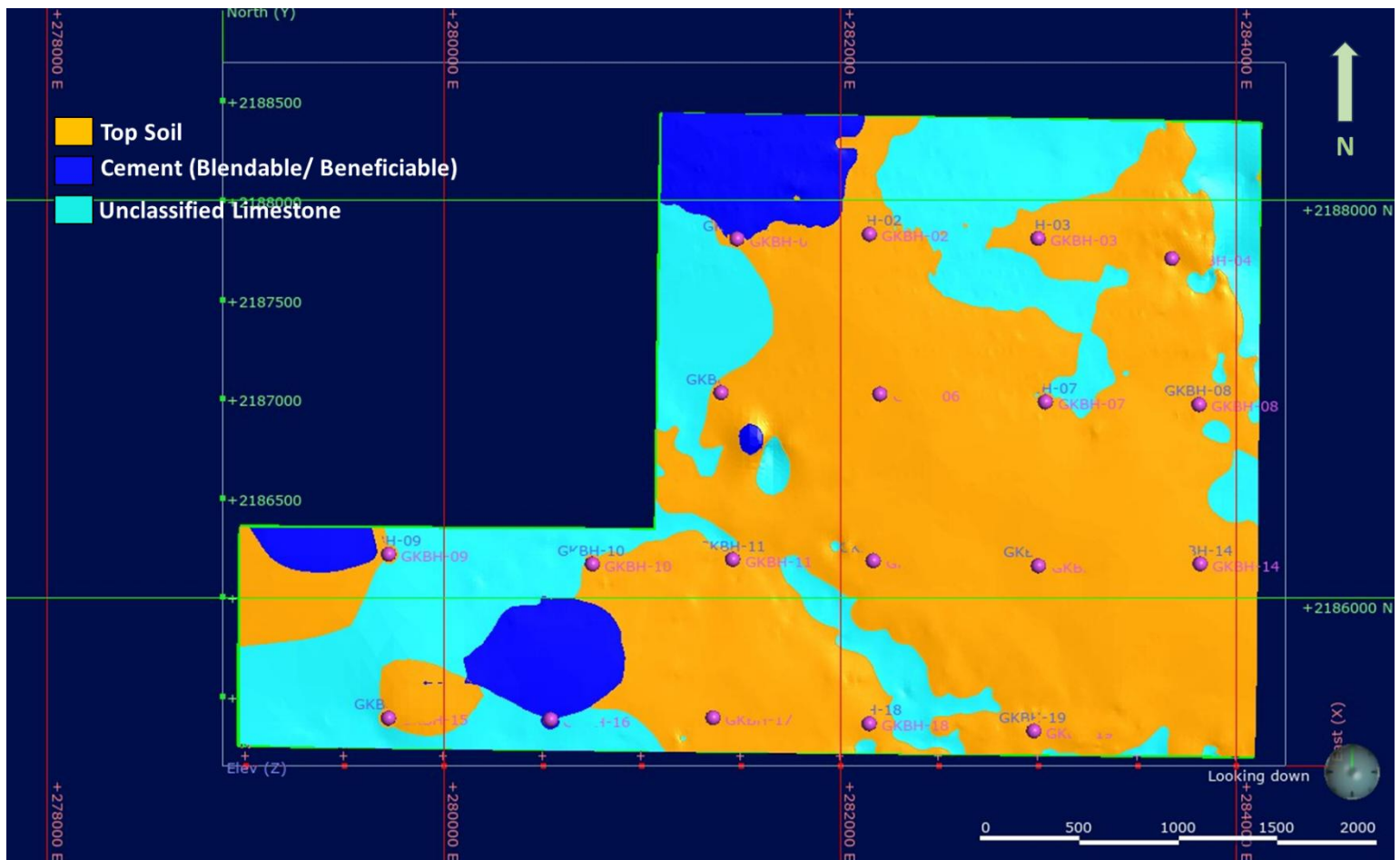


Fig 10.2: Solid model showing top soil, limestone and unclassified limestones.

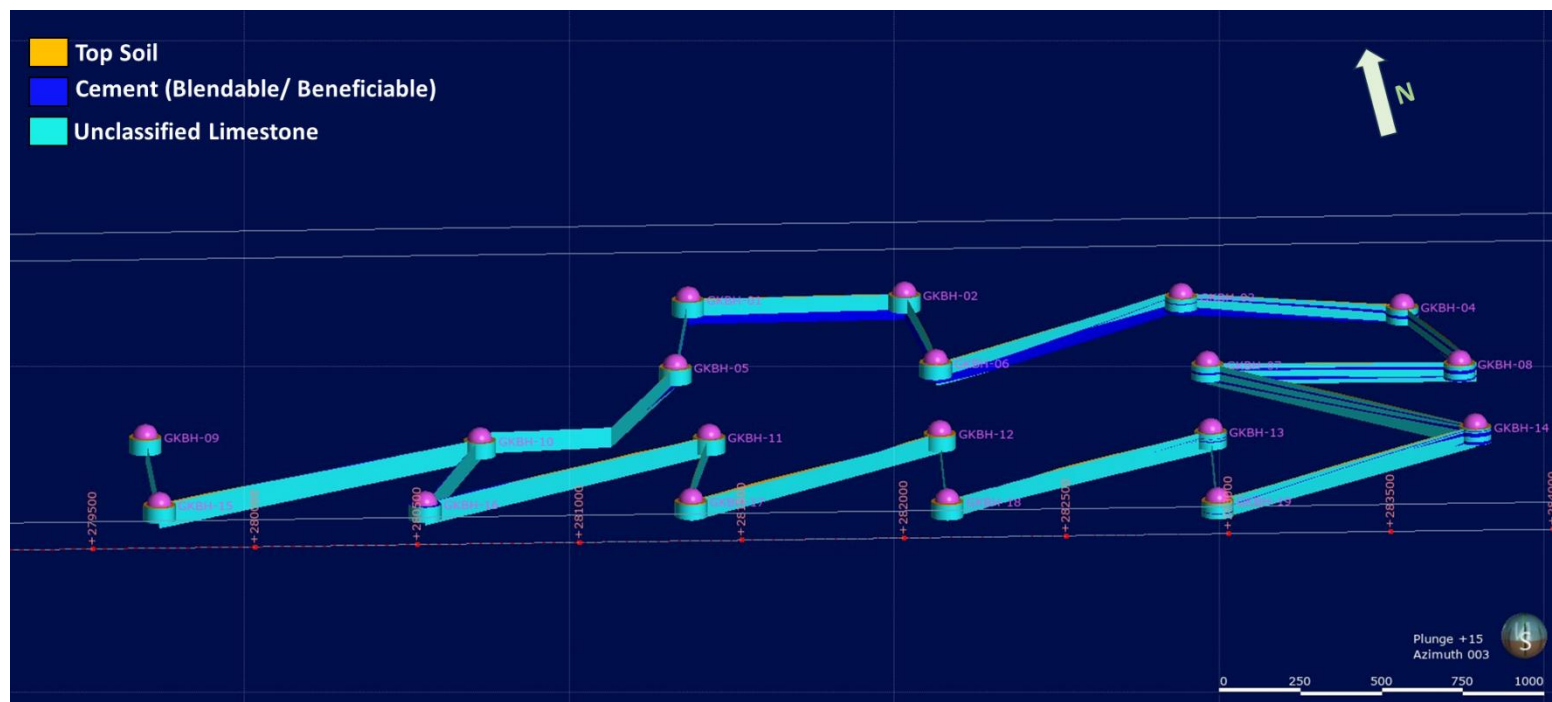


Fig 10.3: Fence diagram showing correlation of all 19 boreholes

Table 10.5: Showing the Gross Total Resource of the cement (Blendable/Beneficiable) grade limestone of the block by using Solid Model

Limestone Grade	Limestone Zone	Borehole ID	CaO (%)	MgO (%)	Volume (cubic meter)	Bulk Density (gm/cc)	Gross Geological Resource in Tonnes	Gross Geological Resource in million tonne	Net Geological Resource in million tonne (15% reduction)
Cement Blendable	L1	GKBH-16	38.71	3.34	110210.00	2.71	298669.1	0.2986691	0.253868735
	L2	GKBH-03	37	4.23	18317000.00	2.71	49639070	49.63907	42.1932095
		GKBH-04							
		GKBH-06							
		GKBH-07							
		GKBH-08							
		GKBH-13							
		GKBH-14							
		GKBH-19							
	L3	GKBH-03	36.83	3.6	14332000.00	2.71	38839720	38.83972	33.013762
		GKBH-07							
		GKBH-08							
		GKBH-13							
		GKBH-14							
	L4	GKBH-14	34.1	2.97	3819700.00	2.71	10351387	10.351387	8.79867895
Total Geological Resource							99128846.1	99.1288461	84.25951919

Note: Limestone zones L1, L2, L3 and L4: The limestone zones were selected as per the chemical analysis of the samples from each borehole.

Table 10.6: Showing the Gross Total Resource of the unclassified limestone of the block by using Solid Model

Limestone Grade	Limestone Zone	Borehole ID	CaO (%)	MgO (%)	Volume (cubic meter)	Bulk Density (gm/cc)	Gross Geological Resource in Tonnes	Gross Geological Resource in million tonne	Net Geological Resource in million tonne (15% reduction)
Unclassified limestone	UC1	GKBH-01	24.86	14.11	353480000.00	2.71	957930800	957.9308	814.24118
		GKBH-02							
		GKBH-03							
		GKBH-04							
		GKBH-05							
		GKBH-06							
		GKBH-07							
		GKBH-08							
		GKBH-09							
		GKBH-10							
		GKBH-11							
		GKBH-12							
		GKBH-13							
		GKBH-14							
		GKBH-15							
		GKBH-16							
		GKBH-17							
		GKBH-18							
		GKBH-19							
	UC2	GKBH-03	28.18	7.29	41514000.00	2.71	112502940.00	112.50	95.63
		GKBH-04							
		GKBH-07							
		GKBH-08							
		GKBH-13							

		GKBH-14							
		GKBH-19							
	UC3	GKBH-08	27.84	6.58	47056000.00	2.71	127521760	127.52176	108.393496
		GKBH-13							
		GKBH-14							
	UC4	GKBH-14	31.68	2.8	474080.00	2.71	1284756.8	1.2847568	1.09204328
Total Geological Resource							1199240257	1199.24	1019.35
Note: Unclassified Limestone zones UC1, UC2, UC3 and UC4: The unclassified limestone zones were selected as per the chemical analysis of the samples from each borehole where CaO% is below 34%.									

CHAPTER 11

CONCULSION AND RECOMMENDATION

11.1 CONCLUSION:

Preliminary exploration (G3 Stage) for limestone in the Gadeghat-Khatera block was undertaken during the financial year 2025. The primary objective of this exploration was to assess the potential of different grades of limestone within the area. The planned quantum of work for FY 2025 was successfully achieved and included detailed geological mapping on a 1:4000 scale, collection of 80 bedrock samples, and five core and five bedrock samples for petrological studies. Additionally, a total of 950 meters of vertical drilling was carried out through nineteen boreholes. The target mineralized horizon for limestone exploration is the part of the Jainath Subgroup of Penganga Group of rocks. The Limestone encountered during drilling is light to medium grey in colour, compact, and with no traces of any fossil. Structurally, the limestone unit trends N30°W and dips gently (up to 7°) towards the southwest.

Resource estimation through Polygonal Area Method: Based on the exploration results, a net total of 1072.74 million tonnes of limestone resource was estimated after 15% deduction of the gross resource and classified under Class 333 of the UNFC classification. The grade wise distribution of the net resource is as follows:

Cement (Blendable/Beneficiable): 87.84 million tonnes.

Unclassified Limestone: 984.90 million tonnes.

Resource estimation through Block Model for validation: For validation of resources estimated through polygonal area method a three-dimensional block model was adopted and resource validated as follows:

Net total of 1103.61 million tonnes of limestone resource was estimated after 15% deduction of the gross resource and the grade wise distribution of the net resource is as follows:

Cement (Blendable/Beneficiable): 84.26 million tonnes.

Unclassified Limestone: 1019.35 million tonnes.

11.2 RECOMMENDATION:

During the G3 stage of exploration in the Gadeghat–Khatera Block, the net geological resource of limestone, estimated from 19 exploratory boreholes and classified under class 333 of UNFC, classification, total net resource estimated as 1072.74 million tonnes. This includes 87.84 million tonnes of cement-grade limestone (blendable/beneficiable) and 984.90 million tonnes categorized as unclassified limestone.

In view of the established lithological continuity and significant resource base, progression to the G1 stage of Detailed Exploration with reduced borehole spacing may be recommended for arriving at Measured Category of in-situ Limestone Resource and increasing level of confidence for onward studying the potential and economic viability for future opencast mining of different grades of Limestone (Cement (Portland)/ Blendable/ Beneficiable/ Threshold grades/ Unclassified etc.), occurring within the block under report for its various industrial use in different industries viz. cement/ fertilizers/ Iron and steel/ chemical/ glass/ foundry etc. and also feeding the raw materials, required for nearby major cement industries like, MP Birla Cement (RCCPL Pvt. Ltd.), Mukutban, Yavatmal District, Dalmia Cement (Bharat) Limited, Chandrapur Cement Woks, Ambuja Cements Ltd. (Maratha Cement Works), Chandrapur District, Maharashtra, UltraTech Cement Limited (Manikgarh Cement Works), Gadchandur, Chadrapur District, Maharashtra State etc. The favourable stripping ratio indicates technical feasibility for largescale opencast mining using mechanized mining technology, contingent upon completion of the G1- stage investigation.

LOCALITY INDEX

Sl. no	Toposheet No	Locality	Latitude (DMS)	D	M	S	Lat	Longitude (DMS)	D1	M1	S1	Long
01	56I/13	Gadeghat	19°45'56.74"	19	45	56.74	19.765	78°55'59.58"	78	55	59.58	78.933
02	56I/13	Khatera	19°45'13.49"	19	45	13.49	19.753	78°54'19.38"	78	54	19.38	78.905

References:

- Agarwal R.K., & V Subbarao 1986; Geology of parts of Yavatmal and Chandrapur district, Maharashtra, Geological Survey of India.
- Aparajit, N.M., Ahmad S.A. K.C, 2020; Report on General Exploration for establishing Limestone deposit in Jevra-Tulshi Area (STAGE-G2) Ta: Korpana, Dist: Chandrapur.
- Chaudhuri, A. K., Dasgupta, S., Bandopadhyay, G., Sarkar, S., Bandopadhyay, P. C. & Gopalan, K. (1989). Stratigraphy of Penganga Group around Adilabad, Andhra Pradesh. *Journal of the Geological Society of India*, 34, 291–302.
- Chaudhuri, A. K., Deb, G. K., & Patranabis-Deb, S. (2015). Chapter 12 Conflicts in stratigraphic classification of the Puranas of the Pranhita–Godavari Valley: review, recommendations and status of the ‘Penganga’ sequence. *Geological Society, London, Memoirs*, 43(1), 165–183. <https://doi.org/10.1144/M43.12>
- Deb G K 2003 Deformation pattern and evolution of the structures in the Penganga Group, the Pranhita–Godavari Valley, India: Probable effects of Grenvillian movement on a Mesoproterozoic basin; *J. Asian Earth Sci.* 21 567–577.
- Directorate of geology and mining regional office Chandrapur Government of Maharashtra report, 2022-23; Proposal for preliminary exploration for limestone in Savalhira block, tahsil- Korpana, Chandrapur district, Maharashtra for G3 stage of mineral exploration under NMET T.S. No. 56 I/14 commodity- limestone (industrial mineral) field season 2022-2023.
- Fedden, F. (1877) Flexible sandstone. In: Hughes (Ed.) Wardha Valley Coal Field. *Mem. Geol. Surv. India*, V.XIII Pt. 1, pp.16.
- Hughes, T.W.H., 1877. The Wardha Valley Coalfield. *Mem. Geol, surv. India*, Vol.13, Pt. 1.
- Guntiwar V.S. & Samji R.N. 1986; Report on prospecting for limestone in Jawra-Tulsi area, Tah-Rajura, Chandrapur District Maharashtra, Directorate of Geology and Mining, Maharashtra.

- Kale V S, Nair S and Patil S (1998). Testimony of intraformational limestone breccias on Lokapur-Simikeri disconformity, Kaladgi Basin. Journal of the Geological Society of India, a 51 43-48.
- Mukhopadhyay J, Chaudhuri A K and Chanda S K 1999 Fabric development in Proterozoic bedded chert, Penganga Group, Adilabad, India: Sedimentologic implications; J. Sedim. Res. 69 738–746.
- Mukhopadhyay J and Chanda S K 1996 Deep-water dolomites from the Proterozoic Penganga Group in the Pranhita-Godavari Valley, Andhra Pradesh, India; SEPM J. Sedim. Res. 66.
- Sambasivasarma T. (1979). Geology of the penganga group Adilabad taluk, Adilabad district, Andhra Pradesh, pp.19-35.

ANNEXURE I: DETAILS OF ANALYTICAL RESULTS OF BED ROCK SAMPLES

Sl. No.	Sample ID	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe (T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
1	GK-01	3.34	<0.05	32.84	<0.05	0.95	1.35	1.50	7.50	<0.05	<0.08	<0.05	0.13	0.22	18.79	<0.05	<0.05	34.17
2	GK-02	3.83	<0.05	31.26	<0.05	1.09	1.56	1.45	7.66	<0.05	<0.08	<0.05	0.09	0.26	20.44	<0.05	<0.05	33.30
3	GK-03	1.50	<0.05	45.02	<0.05	0.49	0.70	0.61	3.83	<0.05	<0.08	<0.05	0.17	0.09	8.73	<0.05	<0.05	39.23
4	GK-04	1.25	<0.05	46.66	<0.05	0.47	0.67	0.50	1.99	<0.05	<0.08	<0.05	0.20	0.09	10.04	<0.05	<0.05	38.49
5	GK-05	1.40	<0.05	47.10	<0.05	0.36	0.51	0.59	1.45	<0.05	<0.08	<0.05	0.14	0.11	10.44	<0.05	<0.05	38.10
6	GK-06	3.30	<0.05	33.69	<0.05	0.96	1.38	1.49	6.95	<0.05	<0.08	<0.05	0.13	0.22	18.26	<0.05	<0.05	34.43
7	GK-07	4.87	<0.05	25.18	<0.05	1.69	2.42	1.91	9.63	<0.05	<0.08	0.06	0.13	0.29	25.56	<0.05	<0.05	29.83
8	GK-08	1.87	<0.05	46.15	<0.05	0.48	0.69	0.77	2.03	<0.05	<0.08	<0.05	0.22	0.10	9.78	<0.05	<0.05	38.26
9	GK-09	1.70	<0.05	26.92	<0.05	0.87	1.25	0.60	17.90	<0.05	<0.08	<0.05	<0.05	0.09	10.29	<0.05	<0.05	41.09
10	GK-10	2.57	<0.05	23.95	<0.05	0.94	1.34	0.98	16.16	<0.05	<0.08	<0.05	<0.05	0.16	17.93	<0.05	<0.05	36.73
11	GK-11	1.87	<0.05	40.33	<0.05	0.61	0.87	0.81	6.45	<0.05	<0.08	<0.05	0.16	0.13	10.65	<0.05	<0.05	38.59
12	GK-12	1.69	<0.05	27.17	<0.05	0.86	1.23	0.78	14.79	<0.05	<0.08	<0.05	0.13	0.10	15.85	<0.05	<0.05	38.15
13	GK-13	2.42	<0.05	32.58	<0.05	1.06	1.51	0.90	10.09	<0.05	<0.08	0.05	0.28	0.15	15.31	<0.05	<0.05	36.59
14	GK-14	4.28	<0.05	32.37	<0.05	1.03	1.47	2.17	3.73	<0.05	<0.08	<0.05	0.09	0.27	25.73	<0.05	<0.05	29.73
15	GK-15	2.63	<0.05	39.35	<0.05	0.77	1.10	1.16	4.56	<0.05	<0.08	<0.05	0.11	0.17	14.66	<0.05	<0.05	36.12

All figures are in (%)

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ANNEXURE I: DETAILS OF ANALYTICAL RESULTS OF BED ROCK SAMPLES

Sl. No.	Sample ID	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe (T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
16	GK-16	2.15	<0.05	25.97	<0.05	0.96	1.38	0.85	16.77	<0.05	<0.08	<0.05	0.09	0.14	13.35	<0.05	<0.05	39.17
17	GK-17	1.70	<0.05	43.58	<0.05	0.54	0.77	0.66	2.86	<0.05	<0.08	<0.05	0.13	0.12	12.92	<0.05	<0.05	37.15
18	GK-18	3.38	<0.05	38.08	<0.05	0.87	1.24	1.74	3.48	<0.05	<0.08	<0.05	0.16	0.21	17.59	<0.05	<0.05	33.95
19	GK-19	1.58	<0.05	28.55	<0.05	0.61	0.87	0.27	18.66	<0.05	<0.08	0.07	<0.05	0.08	7.34	<0.05	<0.05	42.44
20	GK-20	1.56	<0.05	25.42	<0.05	0.88	1.26	0.54	16.73	<0.05	<0.08	<0.05	<0.05	0.08	15.87	<0.05	<0.05	38.39
21	GK-21	2.55	<0.05	23.92	<0.05	0.94	1.34	0.89	16.15	<0.05	<0.08	<0.05	<0.05	0.17	18.22	<0.05	<0.05	36.57
22	GK-22	1.29	<0.05	27.78	<0.05	0.73	1.05	0.24	18.83	<0.05	<0.08	<0.05	<0.05	0.07	8.22	<0.05	<0.05	42.36
23	GK-23	1.80	<0.05	27.06	<0.05	0.78	1.12	0.59	18.39	<0.05	<0.08	<0.05	<0.05	0.11	9.68	<0.05	<0.05	41.09
24	GK-24	3.07	<0.05	25.43	<0.05	0.96	1.37	0.94	17.24	<0.05	<0.08	<0.05	<0.05	0.17	12.84	<0.05	<0.05	38.76
25	GK-25	1.41	<0.05	28.60		0.70	1.01	0.58	19.33	<0.05	<0.08	<0.05	<0.05	0.08	6.29	<0.05	<0.05	42.57
26	GK-26	1.77	<0.05	27.34	<0.05	0.70	1.01	0.44	16.90	<0.05	<0.08	0.05	<0.05	0.11	12.61	<0.05	<0.05	39.64
27	GK-27	0.85	<0.05	30.76	<0.05	0.28	0.40	0.05	19.36	<0.05	<0.08	<0.05	<0.05	<0.05	5.39	<0.05	<0.05	43.01
28	GK-28	0.51	<0.05	31.70	<0.05	0.32	0.46	<0.05	18.68	<0.05	<0.08	<0.05	0.06	<0.05	4.58	<0.05	<0.05	43.85
29	GK-29	0.73	<0.05	50.52	<0.05	0.25	0.36	0.06	1.63	<0.05	<0.08	<0.05	0.09	<0.05	5.44	<0.05	<0.05	41.03
30	GK-30	0.54	0.45	40.54	<0.05	0.40	0.57	<0.05	11.11	<0.05	<0.08	<0.05	0.27	<0.05	2.97	<0.05	<0.05	43.34

All figures are in (%)

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Sl. No.	Sample ID	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe (T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
31	GK-31	0.70	<0.05	30.26	<0.05	0.24	0.35	<0.05	20.25	<0.05	<0.08	0.05	<0.05	<0.05	5.37	<0.05	<0.05	42.81
32	GK-32	3.45	<0.05	22.75	<0.05	1.08	1.55	1.47	15.61	<0.05	0.46	<0.05	<0.05	0.21	19.22	<0.05	<0.05	35.15
33	GK-33	1.56	<0.05	26.03	<0.05	0.87	1.24	0.66	17.50	<0.05	<0.08	<0.05	<0.05	0.10	13.16	<0.05	<0.05	39.58
34	GK-34	1.69	<0.05	26.02	<0.05	0.87	1.25	0.66	17.52	<0.05	<0.08	0.07	<0.05	0.11	12.49	<0.05	<0.05	40.07
35	GK-35	1.55	0.28	25.70	<0.05	0.84	1.20	0.60	17.15	<0.05	<0.08	<0.05	0.17	0.09	13.51	<0.05	<0.05	39.62
36	GK-36	1.19	<0.05	35.94	<0.05	0.72	1.03	0.12	12.84	<0.05	<0.08	<0.05	<0.05	0.06	6.30	<0.05	<0.05	42.39
37	GK-37	0.99	0.54	28.29	<0.05	0.40	0.58	0.09	17.61	<0.05	<0.08	<0.05	0.34	<0.05	9.63	<0.05	<0.05	41.76
38	GK-38	0.84	<0.05	38.18	<0.05	0.43	0.61	0.06	12.91	<0.05	<0.08	<0.05	0.05	<0.05	3.16	<0.05	<0.05	44.05
39	GK-39	1.24	0.17	44.15	<0.05	0.42	0.60	0.55	2.19	<0.05	<0.08	<0.05	0.30	0.09	13.58	<0.05	<0.05	37.02
40	GK-40	3.23	<0.05	33.84	<0.05	1.03	1.47	1.36	5.02	<0.05	<0.08	<0.05	0.09	0.21	22.52	<0.05	<0.05	32.10
41	GK-41	1.30	<0.05	48.13	<0.05	0.33	0.47	0.17	1.09	<0.05	<0.08	0.05	0.06	0.07	9.66	<0.05	<0.05	38.97
42	GK-42	1.38	<0.05	47.94	<0.05	0.34	0.49	0.62	1.52	<0.05	<0.08	0.06	0.26	0.08	7.94	<0.05	<0.05	39.66
43	GK-43	1.21	<0.05	47.01	<0.05	0.29	0.41	0.45	1.23	<0.05	<0.08	<0.05	0.22	0.07	10.83	<0.05	<0.05	38.49
44	GK-44	2.47	<0.05	30.46	0.08	0.97	1.39	0.69	13.07	0.06	0.12	0.09	0.05	0.17	9.56	<0.05	<0.05	41.75
45	GK-45	1.69	<0.05	45.55	<0.05	0.50	0.71	0.19	2.48	<0.05	<0.08	0.06	0.07	0.08	9.56	<0.05	<0.05	39.57
46	GK-46	2.05	<0.05	30.87	<0.05	0.66	0.95	0.31	13.20	<0.05	0.13	0.09	0.06	0.14	9.92	<0.05	<0.05	42.19

All figures are in (%)

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ANNEXURE I: DETAILS OF ANALYTICAL RESULTS OF BED ROCK SAMPLES

Sl. No.	Sample ID	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe (T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
47	GK-47	2.39	<0.05	29.83	<0.05	0.77	1.10	0.57	13.62	0.05	0.14	0.10	0.05	0.13	10.31	<0.05	<0.05	41.66
48	GK-48	2.52	<0.05	42.69	<0.05	0.49	0.69	0.66	2.58	<0.05	<0.08	<0.05	0.11	0.13	12.77	<0.05	<0.05	37.74
49	GK-49	1.19	<0.05	47.38	<0.05	0.36	0.52	0.44	1.12	<0.05	<0.08	<0.05	0.17	0.06	10.15	<0.05	<0.05	38.91
50	GK-50	1.37	<0.05	47.89	<0.05	0.37	0.53	0.13	0.60	<0.05	<0.08	<0.05	<0.05	0.07	11.13	<0.05	<0.05	38.16
51	GK-51	1.20	<0.05	36.93	<0.05	0.45	0.64	0.08	10.12	0.05	0.10	<0.05	0.08	0.06	7.79	<0.05	<0.05	42.89
52	GK-52	1.16	<0.05	34.74	<0.05	0.65	0.93	0.10	11.12	0.05	0.11	<0.05	0.08	0.07	9.14	<0.05	<0.05	42.40
53	GK-53	0.81	<0.05	37.48	<0.05	0.34	0.49	<0.05	11.11	<0.05	0.12	0.05	0.07	<0.05	5.48	<0.05	<0.05	44.24
54	GK-54	1.06	<0.05	32.71	<0.05	0.52	0.74	<0.05	13.07	<0.05	0.15	<0.05	0.07	0.05	8.69	<0.05	<0.05	43.30
55	GK-55	2.34	<0.05	31.51	0.06	0.59	0.85	0.23	10.28	<0.05	0.11	<0.05	0.06	0.12	14.86	<0.05	<0.05	39.50
56	GK-56	0.64	<0.05	36.43	<0.05	0.28	0.40	<0.05	13.58	0.06	0.17	0.06	0.22	0.05	2.62	<0.05	<0.05	45.70
57	GK-57	2.10	<0.05	30.85	<0.05	0.62	0.89	0.15	10.88	0.05	0.09	<0.05	0.06	0.12	15.02	<0.05	<0.05	39.71
58	GK-58	0.98	<0.05	36.18	<0.05	0.54	0.77	<0.05	11.44	0.07	0.12	<0.05	0.06	0.06	6.42	<0.05	<0.05	43.79
59	GK-59	1.23	<0.05	38.61	<0.05	0.75	1.07	0.08	8.99	<0.05	<0.08	<0.05	0.05	0.08	6.80	<0.05	<0.05	42.90
60	GK-60	1.26	<0.05	33.19	<0.05	0.49	0.70	0.07	12.91	0.05	0.14	<0.05	0.11	0.07	8.00	<0.05	<0.05	43.44
61	GK-61	1.60	<0.05	36.58	<0.05	0.73	1.05	0.13	10.74	<0.05	0.10	<0.05	0.07	0.08	6.09	<0.05	<0.05	43.46
62	GK-62	0.85	<0.05	41.04	<0.05	0.49	0.70	<0.05	9.38	<0.05	0.09	0.06	0.06	<0.05	2.81	<0.05	<0.05	44.84
63	GK-63	1.07	<0.05	36.64	0.07	0.60	0.86	0.08	11.21	0.06	0.12	<0.05	0.07	0.07	5.79	<0.05	<0.05	43.94

All figures are in (%)

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ANNEXURE I: DETAILS OF ANALYTICAL RESULTS OF BED ROCK SAMPLES

Sl. No.	Sample ID	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe (T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
64	GK-64	0.99	<0.05	49.69	<0.05	0.24	0.34	0.09	0.46	<0.05	<0.08	<0.05	0.08	<0.05	8.17	<0.05	<0.05	40.07
65	GK-65	2.55	<0.05	43.77	<0.05	0.68	0.97	1.17	1.04	<0.05	<0.08	<0.05	0.31	0.15	14.00	<0.05	<0.05	35.99
66	GK-66	3.21	<0.05	38.63	<0.05	0.87	1.24	1.38	2.17	<0.05	<0.08	0.06	0.11	0.19	19.54	<0.05	<0.05	33.43
67	GK-67	2.04	<0.05	33.78	<0.05	0.59	0.84	0.45	11.77	<0.05	0.09	0.13	0.05	0.14	8.32	<0.05	<0.05	42.29
68	GK-68	1.73	<0.05	45.00	<0.05	0.48	0.69	0.67	2.56	<0.05	<0.08	0.07	0.30	0.10	10.18	<0.05	<0.05	38.65
69	GK-69	1.08	<0.05	49.46	<0.05	0.28	0.40	0.43	1.10	<0.05	<0.08	<0.05	0.23	0.05	6.82	<0.05	<0.05	40.37
70	GK-70	1.17	<0.05	42.29	<0.05	0.36	0.52	0.55	1.63	<0.05	<0.08	<0.05	0.30	0.07	17.10	<0.05	<0.05	36.30
71	GK-71	1.51	<0.05	46.48	<0.05	0.36	0.52	0.65	1.11	<0.05	<0.08	0.11	0.10	0.10	11.53	<0.05	<0.05	37.85
72	GK-72	1.80	<0.05	36.67	<0.05	0.80	1.15	0.79	6.63	<0.05	<0.08	0.05	0.48	0.17	14.31	<0.05	<0.05	37.87
73	GK-73	1.48	<0.05	42.96	<0.05	0.48	0.68	0.54	3.50	<0.05	<0.08	0.09	0.13	0.13	11.88	<0.05	<0.05	38.56
74	GK-74	1.35	<0.05	47.31	<0.05	0.34	0.48	0.48	1.28	<0.05	<0.08	0.05	0.20	0.08	9.75	<0.05	<0.05	38.98
75	GK-75	1.53	<0.05	45.30	<0.05	0.42	0.59	0.74	2.02	<0.05	<0.08	0.06	0.40	0.12	10.74	<0.05	<0.05	38.42
76	GK-76	1.20	<0.05	43.68	<0.05	0.31	0.44	0.42	1.03	<0.05	<0.08	<0.05	0.22	0.07	16.88	<0.05	<0.05	36.01
77	GK-77	0.64	<0.05	38.07	<0.05	0.32	0.45	<0.05	10.73	<0.05	<0.08	<0.05	0.06	0.06	5.73	<0.05	<0.05	44.03
78	GK-78	1.15	<0.05	42.34	<0.05	0.39	0.56	0.14	5.75	<0.05	<0.08	<0.05	0.10	0.06	8.35	<0.05	<0.05	41.43
79	GK-79	1.39	<0.05	32.98	<0.05	0.65	0.93	0.17	13.23	0.05	0.11	0.08	0.05	0.08	7.46	<0.05	<0.05	43.43
80	GK-80	1.70	<0.05	31.75	0.08	0.84	1.21	0.21	12.24	0.05	0.10	0.06	0.05	0.13	10.49	<0.05	<0.05	41.90

All figures are in (%)

NABET/AEA/25/009

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-01/S-01	0.66	2.00	0.86	<0.05	33.40	<0.05	0.97	1.39	0.06	14.87	0.15	0.10	0.07	0.05	0.08	5.12	<0.05	<0.05	43.80
GKBH-01/S-02	2.00	3.00	0.72	<0.05	32.23	<0.05	0.65	0.93	0.07	16.95	0.09	0.14	0.08	0.07	0.07	3.82	<0.05	<0.05	44.79
GKBH-01/S-03	3.00	4.00	1.32	<0.05	31.58	<0.05	0.59	0.85	0.08	16.91	0.07	0.17	0.07	0.07	0.08	4.17	<0.05	<0.05	44.60
GKBH-01/S-04	4.00	5.00	0.27	<0.05	32.31	<0.05	0.50	0.72	0.06	16.88	0.05	0.11	0.07	0.06	0.07	4.71	<0.05	<0.05	44.66
GKBH-01/S-05	5.00	6.00	0.63	<0.05	30.85	<0.05	0.75	1.08	0.08	16.19	0.05	0.12	0.06	0.07	0.08	7.80	<0.05	<0.05	42.96
GKBH-01/S-06	6.00	7.00	1.50	<0.05	28.54	<0.05	0.82	1.18	0.16	16.80	0.07	0.12	0.06	0.06	0.12	9.56	<0.05	<0.05	41.79
GKBH-01/S-07	7.00	8.00	1.38	<0.05	27.65	<0.05	0.82	1.17	0.18	17.35	0.07	0.13	0.08	0.07	0.12	9.82	<0.05	<0.05	41.94

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-01/S-08	8.00	9.00	2.07	<0.05	25.89	0.14	1.26	1.80	0.35	16.40	0.08	0.10	0.06	0.05	0.16	13.63	<0.05	<0.05	39.27
GKBH-01/S-09	9.00	10.00	2.53	<0.05	24.51	0.11	1.18	1.69	0.41	15.29	0.06	0.09	<0.05	<0.05	0.21	17.50	<0.05	<0.05	37.52
GKBH-01/S-10	10.00	11.00	1.46	<0.05	26.26	0.05	0.84	1.20	0.18	16.59	0.07	0.13	0.06	0.06	0.14	14.12	<0.05	<0.05	39.69
GKBH-01/S-11	11.00	12.00	2.14	<0.05	24.99	<0.05	0.93	1.33	0.32	15.39	0.05	0.11	0.11	0.05	0.18	18.00	<0.05	<0.05	37.29
GKBH-01/S-12	12.00	13.00	5.26	<0.05	19.54	<0.05	1.49	2.13	0.84	11.28	0.06	<0.08	0.06	<0.05	0.31	30.93	<0.05	<0.05	29.50
GKBH-01/S-13	13.00	14.00	2.59	<0.05	23.07	<0.05	1.40	2.00	0.44	13.38	0.08	<0.08	<0.05	<0.05	0.22	23.98	<0.05	<0.05	34.06
GKBH-01/S-14	14.00	15.00	5.47	<0.05	18.72	<0.05	1.75	2.50	0.99	11.83	0.06	<0.08	0.06	<0.05	0.39	30.27	<0.05	<0.05	29.58
GKBH-01/S-15	15.00	16.00	4.72	<0.05	20.77	<0.05	1.56	2.23	0.79	12.26	0.06	<0.08	0.09	<0.05	0.32	27.06	<0.05	<0.05	31.57

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-01/S-16	16.00	17.00	3.91	<0.05	22.53	0.06	1.56	2.24	0.56	13.28	0.07	0.09	0.06	<0.05	0.26	23.33	<0.05	<0.05	33.57
GKBH-01/S-17	17.00	18.00	4.47	<0.05	21.73	<0.05	1.21	1.73	0.78	13.63	0.05	0.09	0.07	<0.05	0.30	23.40	<0.05	<0.05	33.68
GKBH-01/S-18	18.00	19.00	4.94	<0.05	21.07	<0.05	1.36	1.94	0.91	13.14	<0.05	<0.08	0.07	<0.05	0.34	24.37	<0.05	<0.05	33.05
GKBH-01/S-19	19.00	20.00	5.15	<0.05	21.38	<0.05	1.43	2.04	0.87	13.27	0.05	0.09	0.10	<0.05	0.31	23.18	<0.05	<0.05	33.50
GKBH-01/S-20	20.00	21.00	1.74	<0.05	27.49	0.09	1.06	1.51	0.35	16.66	0.07	0.10	0.14	0.05	0.14	10.91	<0.05	<0.05	40.76
GKBH-01/S-21	21.00	22.00	2.86	<0.05	26.16	<0.05	0.95	1.36	0.50	15.34	<0.05	0.10	0.12	<0.05	0.21	15.17	<0.05	<0.05	38.06
GKBH-01/S-22	22.00	23.00	2.53	<0.05	26.95	<0.05	1.14	1.63	0.45	16.38	<0.05	0.11	0.15	<0.05	0.18	11.70	<0.05	<0.05	39.80
GKBH-01/S-23	23.00	24.00	2.75	<0.05	26.04	<0.05	1.27	1.81	0.50	14.89	0.05	<0.08	0.13	<0.05	0.20	15.67	<0.05	<0.05	37.81

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-01/S-24	24.00	25.00	3.24	<0.05	24.45	<0.05	1.18	1.68	0.59	13.98	<0.05	0.09	0.07	<0.05	0.23	19.59	<0.05	<0.05	35.96
GKBH-01/S-25	25.00	26.00	4.04	<0.05	23.31	<0.05	1.27	1.82	0.70	13.39	<0.05	<0.08	0.10	<0.05	0.27	21.62	<0.05	<0.05	34.56
GKBH-01/S-26	26.00	27.00	3.84	<0.05	22.93	<0.05	1.44	2.06	0.74	13.85	<0.05	0.08	0.08	<0.05	0.26	21.37	<0.05	<0.05	34.67
GKBH-01/S-27	27.00	28.00	3.13	<0.05	24.60	<0.05	1.21	1.73	0.63	15.06	<0.05	0.09	0.11	<0.05	0.23	17.61	<0.05	<0.05	36.68
GKBH-01/S-28	28.00	29.00	3.31	<0.05	24.11	<0.05	1.23	1.75	0.64	13.98	<0.05	0.11	0.08	<0.05	0.24	20.10	<0.05	<0.05	35.56
GKBH-01/S-29	29.00	30.00	3.22	<0.05	24.77	<0.05	1.32	1.89	0.58	13.77	<0.05	<0.08	0.10	<0.05	0.22	19.71	<0.05	<0.05	35.56
GKBH-01/S-30	30.00	31.00	1.46	<0.05	28.70	<0.05	0.81	1.15	0.26	16.30	<0.05	0.09	0.13	<0.05	0.13	10.66	<0.05	<0.05	40.99
GKBH-01/S-31	31.00	32.00	2.11	<0.05	26.35	0.06	0.98	1.39	0.42	15.92	<0.05	0.13	0.07	0.05	0.17	14.12	<0.05	<0.05	39.18

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-01/S-32	32.00	33.00	1.88	<0.05	26.82	0.18	1.16	1.65	0.40	15.48	0.05	0.08	0.07	0.05	0.16	14.16	<0.05	<0.05	39.01
GKBH-01/S-33	33.00	34.00	3.94	<0.05	22.48	<0.05	1.32	1.88	0.72	13.46	<0.05	<0.08	0.07	<0.05	0.26	22.79	<0.05	<0.05	34.19
GKBH-01/S-34	34.00	35.00	3.52	<0.05	23.08	0.06	1.22	1.75	0.71	13.90	<0.05	<0.08	0.08	0.21	0.24	20.97	<0.05	<0.05	35.39
GKBH-01/S-35	35.00	36.00	3.65	<0.05	22.88	<0.05	1.26	1.81	0.75	14.51	<0.05	<0.08	0.09	0.51	0.25	20.33	<0.05	<0.05	35.08
GKBH-01/S-36	36.00	37.00	2.63	<0.05	24.84	<0.05	1.03	1.48	0.70	15.43	<0.05	0.09	0.09	0.27	0.22	16.72	<0.05	<0.05	37.47
GKBH-01/S-37	37.00	38.00	2.81	<0.05	25.10	<0.05	1.01	1.44	0.72	16.09	<0.05	0.10	0.09	0.20	0.22	15.06	<0.05	<0.05	38.12
GKBH-01/S-38	38.00	39.00	2.82	<0.05	24.72	<0.05	1.01	1.45	0.74	15.87	<0.05	<0.08	0.08	0.32	0.21	15.61	<0.05	<0.05	38.02
GKBH-01/S-39	39.00	40.00	3.10	<0.05	23.14	<0.05	1.35	1.93	0.99	14.86	0.06	<0.08	0.08	0.48	0.25	19.72	<0.05	<0.05	35.28

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-01/S-40	40.00	41.00	2.90	<0.05	24.85	0.06	1.01	1.44	0.65	15.81	<0.05	0.10	0.09	0.35	0.19	15.40	<0.05	<0.05	38.13
GKBH-01/S-41	41.00	42.00	3.27	<0.05	23.42	<0.05	1.13	1.62	1.14	15.24	<0.05	<0.08	0.08	0.52	0.25	18.46	<0.05	<0.05	35.87
GKBH-01/S-42	42.00	43.00	3.11	<0.05	23.82	<0.05	1.04	1.49	1.03	15.84	<0.05	0.08	0.07	0.34	0.23	17.11	<0.05	<0.05	36.80
GKBH-01/S-43	43.00	44.00	4.64	<0.05	19.95	<0.05	1.49	2.13	1.73	13.50	<0.05	<0.08	0.06	0.99	0.30	24.83	<0.05	<0.05	31.73
GKBH-01/S-44	44.00	45.00	5.90	<0.05	16.75	<0.05	1.81	2.59	2.25	12.06	<0.05	<0.08	0.07	1.38	0.36	30.12	<0.05	<0.05	28.42
GKBH-01/S-45	45.00	46.00	5.00	<0.05	19.15	<0.05	1.63	2.34	1.96	13.16	<0.05	<0.08	0.07	1.03	0.32	26.06	<0.05	<0.05	30.80
GKBH-01/S-46	46.00	47.00	4.62	<0.05	20.43	0.06	1.48	2.12	1.78	13.65	<0.05	<0.08	0.08	0.36	0.31	24.36	<0.05	<0.05	32.16
GKBH-01/S-47	47.00	48.00	2.54	<0.05	25.78	<0.05	0.97	1.39	0.67	16.22	0.05	0.10	0.08	0.05	0.19	14.19	<0.05	<0.05	38.70

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-01/S-48	48.00	49.00	3.12	<0.05	23.86	<0.05	1.12	1.60	1.16	15.47	<0.05	<0.08	0.08	0.16	0.24	17.44	<0.05	<0.05	36.71
GKBH-01/S-49	49.00	50.00	3.69	<0.05	22.91	0.05	1.13	1.61	1.19	14.81	<0.05	<0.08	0.07	0.20	0.27	20.10	<0.05	<0.05	34.99
GKBH-02/S1	0.40	1.00	3.03	<0.05	23.79	<0.05	1.56	2.22	1.17	15.05	0.09	<0.08	0.06	<0.05	0.25	18.08	<0.05	<0.05	36.11
GKBH-02/S2	1.00	2.00	5.05	<0.05	19.72	<0.05	1.64	2.34	2.14	13.82	0.05	<0.08	0.08	<0.05	0.32	24.80	<0.05	<0.05	31.56
GKBH-02/S3	2.00	3.00	5.17	<0.05	19.57	<0.05	1.72	2.46	2.16	13.92	0.06	<0.08	0.09	<0.05	0.33	24.70	<0.05	<0.05	31.41
GKBH-02/S4	3.00	4.00	4.35	<0.05	20.34	<0.05	1.69	2.42	2.02	14.66	0.06	<0.08	0.08	0.20	0.30	23.22	<0.05	<0.05	32.30
GKBH-02/S5	4.00	5.00	4.41	<0.05	20.58	<0.05	1.59	2.28	1.92	14.78	<0.05	<0.08	0.07	0.21	0.30	22.90	<0.05	<0.05	32.41

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-02/S6	5.00	6.00	4.47	<0.05	20.58	<0.05	1.57	2.25	2.00	14.91	<0.05	<0.08	0.07	0.28	0.30	22.71	<0.05	<0.05	32.31
GKBH-02/S7	6.00	7.00	3.51	<0.05	22.21	<0.05	1.56	2.23	1.74	15.07	0.06	<0.08	0.07	0.67	0.26	20.37	<0.05	<0.05	33.72
GKBH-02/S8	7.00	8.00	4.85	<0.05	19.37	<0.05	1.68	2.41	2.15	14.57	<0.05	<0.08	0.08	0.38	0.34	24.89	<0.05	<0.05	30.84
GKBH-02/S9	8.00	9.00	2.79	<0.05	23.86	<0.05	1.35	1.93	1.49	15.44	0.06	<0.08	0.05	0.46	0.22	17.88	<0.05	<0.05	35.73
GKBH-02/S10	9.00	10.00	4.45	<0.05	20.71	<0.05	1.50	2.15	1.91	14.88	<0.05	<0.08	0.08	0.28	0.31	22.45	<0.05	<0.05	32.65
GKBH-02/S11	10.00	11.00	4.75	<0.05	19.97	<0.05	1.61	2.30	2.06	14.80	<0.05	<0.08	0.08	0.29	0.33	23.67	<0.05	<0.05	31.66
GKBH-02/S12	11.00	12.00	4.58	<0.05	20.32	<0.05	1.61	2.30	2.06	14.69	<0.05	<0.08	0.07	0.24	0.31	23.51	<0.05	<0.05	31.79
GKBH-02/S13	12.00	13.00	5.07	<0.05	19.20	0.07	1.86	2.67	2.15	14.55	0.07	<0.08	0.08	0.22	0.33	24.53	<0.05	<0.05	31.03

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-02/S14	13.00	14.00	5.40	<0.05	19.12	<0.05	1.86	2.66	2.22	13.86	<0.05	<0.08	0.08	0.46	0.35	25.63	<0.05	<0.05	30.10
GKBH-02/S15	14.00	15.00	4.88	<0.05	19.59	<0.05	1.73	2.48	2.28	13.87	<0.05	<0.08	0.08	0.20	0.36	25.86	<0.05	<0.05	30.32
GKBH-02/S16	15.00	16.00	5.63	<0.05	19.04	<0.05	1.88	2.69	2.29	13.61	0.06	<0.08	0.08	0.44	0.36	26.48	<0.05	<0.05	29.22
GKBH-02/S17	16.00	17.00	5.75	<0.05	19.37	<0.05	1.89	2.70	2.42	13.73	<0.05	<0.08	0.08	0.29	0.35	25.14	<0.05	<0.05	30.05
GKBH-02/S18	17.00	18.00	5.83	<0.05	18.66	<0.05	1.92	2.75	2.65	13.29	<0.05	<0.08	0.09	0.28	0.39	26.77	<0.05	<0.05	29.18
GKBH-02/S19	18.00	19.00	6.83	<0.05	17.21	<0.05	2.38	3.41	2.90	12.66	0.06	<0.08	0.08	0.63	0.42	28.68	<0.05	<0.05	27.06
GKBH-02/S20	19.00	20.00	5.81	<0.05	18.04	<0.05	2.09	2.98	2.76	13.16	<0.05	<0.08	0.08	0.25	0.40	28.14	<0.05	<0.05	28.30
GKBH-02/S21	20.00	21.00	6.00	<0.05	18.73	<0.05	1.97	2.82	2.60	13.57	<0.05	<0.08	0.08	0.47	0.37	25.84	<0.05	<0.05	29.41

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-02/S22	21.00	22.00	4.85	<0.05	20.66	<0.05	1.64	2.34	2.28	13.98	<0.05	<0.08	0.09	0.21	0.33	23.65	<0.05	<0.05	31.51
GKBH-02/S23	22.00	23.00	5.24	<0.05	19.33	0.08	1.86	2.65	2.37	13.75	<0.05	<0.08	0.08	0.43	0.35	25.88	<0.05	<0.05	29.76
GKBH-02/S24	23.00	24.00	5.15	<0.05	19.74	<0.05	1.76	2.51	2.37	13.84	<0.05	<0.08	0.08	0.48	0.33	25.10	<0.05	<0.05	30.30
GKBH-02/S25	24.00	25.00	5.78	<0.05	18.34	<0.05	1.83	2.62	2.63	13.25	<0.05	<0.08	0.07	0.47	0.39	27.73	<0.05	<0.05	28.61
GKBH-02/S26	25.00	26.00	4.52	<0.05	20.82	<0.05	1.64	2.35	2.19	14.70	0.05	<0.08	0.08	0.35	0.32	22.72	<0.05	<0.05	31.84
GKBH-02/S27	26.00	27.00	5.69	<0.05	18.59	<0.05	1.95	2.78	2.59	13.49	<0.05	<0.08	0.08	0.50	0.37	27.12	<0.05	<0.05	28.66
GKBH-02/S28	27.00	28.00	3.43	<0.05	23.71	<0.05	1.35	1.93	1.86	15.26	0.06	<0.08	0.08	0.23	0.25	17.59	<0.05	<0.05	35.52
GKBH-02/S29	28.00	29.00	6.03	<0.05	17.45	<0.05	2.08	2.97	2.96	12.58	<0.05	<0.08	0.08	0.32	0.41	30.15	<0.05	<0.05	26.99

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-02/S30	29.00	30.00	6.15	<0.05	17.32	<0.05	2.00	2.85	2.78	13.05	<0.05	<0.08	0.08	0.28	0.39	29.23	<0.05	<0.05	27.80
GKBH-02/S31	30.00	31.00	6.11	<0.05	17.89	<0.05	1.95	2.79	2.72	13.20	<0.05	<0.08	0.08	0.44	0.38	27.92	<0.05	<0.05	28.36
GKBH-02/S32	31.00	32.00	6.03	<0.05	18.27	<0.05	1.90	2.71	2.63	13.43	0.05	<0.08	0.08	0.28	0.38	27.23	<0.05	<0.05	28.81
GKBH-02/S33	32.00	33.00	4.09	<0.05	22.00	<0.05	1.55	2.22	1.97	14.86	0.06	<0.08	0.10	0.23	0.29	20.36	<0.05	<0.05	33.72
GKBH-02/S34	33.00	34.00	5.16	<0.05	19.75	<0.05	1.85	2.65	2.37	13.73	0.06	<0.08	0.08	0.25	0.35	24.83	<0.05	<0.05	30.70
GKBH-02/S35	34.00	35.00	5.61	<0.05	18.68	<0.05	1.94	2.77	2.52	13.44	<0.05	<0.08	0.09	0.23	0.37	26.70	<0.05	<0.05	29.50
GKBH-02/S36	35.00	36.00	4.64	<0.05	20.87	<0.05	1.71	2.45	2.30	13.78	<0.05	<0.08	0.09	0.31	0.33	23.52	<0.05	<0.05	31.63
GKBH-02/S37	36.00	37.00	4.95	<0.05	20.04	<0.05	1.85	2.64	2.30	13.78	<0.05	<0.08	0.08	0.71	0.32	24.45	<0.05	<0.05	30.63

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-02/S38	37.00	38.00	5.09	<0.05	19.76	<0.05	1.68	2.40	2.52	13.58	<0.05	<0.08	0.08	0.26	0.35	25.35	<0.05	<0.05	30.52
GKBH-02/S39	38.00	39.00	3.32	<0.05	23.32	<0.05	1.44	2.06	1.77	15.22	0.06	<0.08	0.07	0.53	0.26	18.70	<0.05	<0.05	34.60
GKBH-02/S40	39.00	40.00	4.61	<0.05	21.00	<0.05	1.50	2.15	2.10	14.87	<0.05	<0.08	0.07	0.31	0.31	22.01	<0.05	<0.05	32.44
GKBH-02/S41	40.00	41.00	3.85	<0.05	22.26	<0.05	1.46	2.09	1.84	15.17	<0.05	<0.08	0.08	0.33	0.28	20.15	<0.05	<0.05	33.79
GKBH-02/S42	41.00	42.00	5.33	<0.05	19.36	<0.05	1.74	2.48	2.52	13.61	<0.05	<0.08	0.07	0.34	0.37	25.96	<0.05	<0.05	29.86
GKBH-02/S43	42.00	43.00	4.73	<0.05	20.68	<0.05	1.61	2.30	2.28	13.80	<0.05	<0.08	0.08	0.30	0.34	24.14	<0.05	<0.05	31.24
GKBH-02/S44	43.00	44.00	5.52	<0.05	19.85	<0.05	1.95	2.79	2.36	13.73	0.06	<0.08	0.08	0.58	0.35	24.35	<0.05	<0.05	30.25
GKBH-02/S45	44.00	45.00	5.49	<0.05	19.54	0.05	1.82	2.60	2.32	13.83	<0.05	<0.08	0.08	0.32	0.36	25.10	<0.05	<0.05	30.20

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-02/S46	45.00	46.00	5.04	<0.05	19.98	<0.05	1.85	2.65	2.40	13.66	<0.05	<0.08	0.08	0.29	0.36	25.20	<0.05	<0.05	30.27
GKBH-02/S47	46.00	47.00	5.50	<0.05	19.33	<0.05	1.78	2.54	2.49	13.38	<0.05	<0.08	0.08	0.19	0.36	26.13	<0.05	<0.05	29.88
GKBH-02/S48	47.00	48.00	5.19	<0.05	21.35	<0.05	1.89	2.71	2.36	11.97	<0.05	<0.08	0.08	0.26	0.37	27.06	<0.05	<0.05	28.58
GKBH-02/S49	48.00	49.00	5.93	<0.05	20.57	<0.05	1.94	2.77	2.50	11.46	<0.05	<0.08	0.08	0.28	0.39	28.22	<0.05	<0.05	27.71
GKBH-02/S50	49.00	50.00	5.54	<0.05	21.17	<0.05	1.96	2.81	2.44	11.21	<0.05	<0.08	0.08	0.34	0.39	28.62	<0.05	<0.05	27.34
GKBH-03/S1	0.60	2.00	4.36	<0.05	22.66	<0.05	1.61	2.30	1.84	13.46	<0.05	<0.08	0.08	0.09	0.28	21.68	<0.05	<0.05	33.15
GKBH-03/S2	2.00	3.00	4.42	<0.05	26.58	<0.05	1.37	1.96	1.98	10.47	<0.05	<0.08	0.08	0.26	0.28	21.60	<0.05	<0.05	32.30

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-03/S3	3.00	4.00	5.07	<0.05	22.07	<0.05	2.14	3.05	2.00	12.83	<0.05	<0.08	0.08	0.09	0.34	22.30	<0.05	<0.05	32.05
GKBH-03/S4	4.00	5.00	4.91	<0.05	23.62	<0.05	1.54	2.20	2.45	11.34	<0.05	<0.08	0.08	0.23	0.34	24.01	<0.05	<0.05	30.74
GKBH-03/S5	5.00	6.00	5.97	<0.05	18.04	<0.05	2.15	3.08	2.85	11.81	<0.05	<0.08	0.08	0.11	0.39	30.04	<0.05	<0.05	27.56
GKBH-03/S6	6.00	7.00	5.01	<0.05	22.88	<0.05	1.78	2.54	2.34	11.47	<0.05	<0.08	0.08	0.32	0.34	24.46	<0.05	<0.05	30.48
GKBH-03/S7	7.00	8.00	5.56	<0.05	24.90	0.05	1.76	2.51	2.58	8.19	<0.05	<0.08	0.08	0.41	0.37	27.13	<0.05	<0.05	28.19
GKBH-03/S8	8.00	9.00	4.57	<0.05	25.61	<0.05	1.61	2.30	2.37	9.70	<0.05	<0.08	0.08	0.48	0.33	24.26	<0.05	<0.05	30.24
GKBH-03/S9	9.00	10.00	5.33	<0.05	22.87	<0.05	1.72	2.47	2.38	11.51	<0.05	<0.08	0.08	0.24	0.34	24.50	<0.05	<0.05	30.19
GKBH-03/S10	10.00	11.00	5.21	<0.05	25.31	<0.05	1.55	2.22	2.24	10.24	<0.05	<0.08	0.08	0.21	0.32	22.82	<0.05	<0.05	31.24

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-03/S11	11.00	12.00	4.52	<0.05	25.28	<0.05	1.76	2.52	2.22	10.35	<0.05	<0.08	0.09	0.25	0.34	23.50	<0.05	<0.05	30.85
GKBH-03/S12	12.00	13.00	4.55	<0.05	28.17	<0.05	1.45	2.07	2.28	8.15	<0.05	<0.08	0.08	0.20	0.32	23.31	<0.05	<0.05	30.82
GKBH-03/S13	13.00	14.00	4.57	<0.05	24.96	<0.05	1.56	2.23	2.30	11.05	<0.05	<0.08	0.10	0.22	0.31	23.04	<0.05	<0.05	31.15
GKBH-03/S14	14.00	15.00	5.03	<0.05	30.51	<0.05	1.42	2.03	2.19	5.68	<0.05	<0.08	0.08	0.45	0.31	23.76	<0.05	<0.05	29.90
GKBH-03/S15	15.00	16.00	2.21	<0.05	37.59	<0.05	0.82	1.18	1.29	6.82	<0.05	<0.08	0.06	0.63	0.17	13.77	<0.05	<0.05	36.22
GKBH-03/S16	16.00	17.00	2.06	<0.05	39.60	<0.05	0.83	1.19	1.27	4.94	<0.05	<0.08	0.06	0.29	0.18	14.40	<0.05	<0.05	35.98
GKBH-03/S17	17.00	18.00	4.07	<0.05	34.06	<0.05	1.25	1.79	1.88	4.87	<0.05	<0.08	0.08	0.27	0.28	21.10	<0.05	<0.05	31.57
GKBH-03/S18	18.00	19.00	5.15	<0.05	30.31	<0.05	1.43	2.04	2.19	5.60	<0.05	<0.08	0.07	0.29	0.31	24.00	<0.05	<0.05	29.98

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-03/S19	19.00	20.00	4.66	<0.05	28.25	<0.05	1.53	2.19	2.05	7.76	<0.05	<0.08	0.08	0.22	0.31	24.10	<0.05	<0.05	30.34
GKBH-03/S20	20.00	21.00	4.95	<0.05	25.89	<0.05	1.76	2.52	2.23	8.61	<0.05	<0.08	0.07	0.23	0.36	25.25	<0.05	<0.05	29.83
GKBH-03/S21	21.00	22.00	5.02	<0.05	23.87	<0.05	1.93	2.76	2.19	10.48	<0.05	<0.08	0.08	0.25	0.35	24.76	<0.05	<0.05	30.17
GKBH-03/S22	22.00	23.00	5.64	<0.05	22.68	0.06	1.89	2.71	2.46	10.42	<0.05	<0.08	0.07	0.26	0.37	26.37	<0.05	<0.05	28.92
GKBH-03/S23	23.00	24.00	5.76	<0.05	24.45	<0.05	1.89	2.71	2.36	8.12	<0.05	<0.08	0.08	0.27	0.37	28.09	<0.05	<0.05	27.73
GKBH-03/S24	24.00	25.00	5.55	<0.05	26.86	<0.05	1.81	2.58	2.39	6.99	<0.05	<0.08	0.07	0.22	0.37	27.07	<0.05	<0.05	27.84
GKBH-03/S25	25.00	26.00	5.35	<0.05	25.64	<0.05	1.89	2.71	2.22	7.74	<0.05	<0.08	0.08	0.59	0.35	27.60	<0.05	<0.05	27.67
GKBH-03/S26	26.00	27.00	6.23	<0.05	27.21	<0.05	1.95	2.79	2.37	5.79	<0.05	<0.08	0.08	0.66	0.36	27.43	<0.05	<0.05	27.02

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-03/S27	27.00	28.00	4.02	<0.05	30.55	<0.05	1.42	2.03	1.72	7.18	<0.05	<0.08	0.07	0.34	0.28	23.08	<0.05	<0.05	30.68
GKBH-03/S28	28.00	29.00	5.51	<0.05	25.21	<0.05	1.83	2.62	2.22	8.07	<0.05	<0.08	0.06	0.45	0.36	27.95	<0.05	<0.05	27.49
GKBH-03/S29	29.00	30.00	4.99	<0.05	30.47	<0.05	1.51	2.16	2.00	4.36	<0.05	<0.08	0.07	0.29	0.31	27.24	<0.05	<0.05	28.07
GKBH-03/S30	30.00	31.00	5.24	<0.05	30.18	<0.05	1.65	2.36	2.02	4.89	<0.05	<0.08	0.07	0.25	0.33	26.29	<0.05	<0.05	28.32
GKBH-03/S31	31.00	32.00	4.04	<0.05	32.64	<0.05	1.38	1.97	1.97	5.15	<0.05	<0.08	0.07	0.38	0.29	23.20	<0.05	<0.05	30.25
GKBH-03/S32	32.00	33.00	5.74	<0.05	23.12	<0.05	1.98	2.83	2.28	9.87	<0.05	<0.08	0.07	0.25	0.37	27.53	<0.05	<0.05	27.86
GKBH-03/S33	33.00	34.00	4.73	<0.05	30.68	<0.05	1.53	2.19	2.05	5.71	<0.05	<0.08	0.07	0.35	0.31	24.43	<0.05	<0.05	29.42
GKBH-03/S34	34.00	35.00	5.75	<0.05	24.86	<0.05	1.89	2.70	2.49	7.76	<0.05	<0.08	0.08	0.36	0.39	28.37	<0.05	<0.05	27.18

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-03/S35	35.00	36.00	4.43	<0.05	30.44	<0.05	1.46	2.09	2.01	6.89	<0.05	<0.08	0.07	0.53	0.30	23.17	<0.05	<0.05	30.01
GKBH-03/S36	36.00	37.00	4.62	<0.05	32.95	<0.05	1.38	1.98	1.97	3.91	<0.05	<0.08	0.07	0.44	0.29	24.35	<0.05	<0.05	29.38
GKBH-03/S37	37.00	38.00	4.48	<0.05	30.95	<0.05	1.53	2.19	2.15	5.58	<0.05	<0.08	0.07	0.32	0.31	24.13	<0.05	<0.05	29.75
GKBH-03/S38	38.00	39.00	5.85	<0.05	25.04	<0.05	1.91	2.74	2.49	7.12	<0.05	<0.08	0.07	0.57	0.37	28.46	<0.05	<0.05	27.21
GKBH-03/S39	39.00	40.00	5.18	<0.05	28.00	<0.05	1.52	2.17	2.15	7.08	<0.05	<0.08	0.07	0.33	0.33	24.90	<0.05	<0.05	29.73
GKBH-03/S40	40.00	41.00	5.31	<0.05	27.96	<0.05	1.59	2.28	2.26	7.00	<0.05	<0.08	0.07	0.43	0.35	25.26	<0.05	<0.05	29.03
GKBH-03/S41	41.00	42.00	2.96	<0.05	40.39	<0.05	0.89	1.27	1.63	2.72	<0.05	<0.08	0.06	0.69	0.20	16.15	<0.05	<0.05	33.89
GKBH-03/S42	42.00	43.00	2.94	<0.05	39.86	<0.05	0.93	1.33	1.65	2.82	<0.05	<0.08	0.06	0.57	0.20	17.06	<0.05	<0.05	33.48

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-03/S43	43.00	44.00	5.62	<0.05	24.45	<0.05	1.91	2.73	2.36	8.13	<0.05	<0.08	0.06	0.88	0.34	26.71	<0.05	<0.05	28.67
GKBH-03/S44	44.00	45.00	2.65	<0.05	39.83	<0.05	0.91	1.31	1.38	3.35	<0.05	<0.08	0.06	0.54	0.17	16.18	<0.05	<0.05	34.45
GKBH-03/S45	45.00	46.00	3.21	<0.05	37.99	<0.05	1.09	1.56	1.67	3.58	<0.05	<0.08	0.06	0.73	0.22	17.93	<0.05	<0.05	32.99
GKBH-03/S46	46.00	47.00	2.11	<0.05	43.60	<0.05	0.78	1.11	1.15	2.83	<0.05	<0.08	<0.05	0.63	0.15	11.78	<0.05	<0.05	36.55
GKBH-03/S47	47.00	48.00	2.46	<0.05	43.13	<0.05	0.85	1.22	1.32	2.97	<0.05	<0.08	0.08	0.66	0.16	11.83	<0.05	<0.05	36.12
GKBH-03/S48	48.00	49.00	3.15	<0.05	38.62	<0.05	1.03	1.48	1.57	3.82	<0.05	<0.08	0.08	0.58	0.23	16.85	<0.05	<0.05	33.59
GKBH-03/S49	49.00	50.00	3.42	<0.05	36.46	<0.05	1.04	1.49	1.63	4.27	<0.05	<0.08	0.07	0.36	0.24	18.89	<0.05	<0.05	33.13

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-04/S1	1.50	3.00	5.22	<0.05	28.26	<0.05	1.62	2.32	1.92	6.55	<0.05	<0.08	0.08	0.11	0.31	26.27	<0.05	<0.05	28.91
GKBH-04/S2	3.00	4.00	5.11	<0.05	29.84	<0.05	1.57	2.24	2.10	6.19	<0.05	<0.08	0.08	0.26	0.32	24.80	<0.05	<0.05	29.02
GKBH-04/S3	4.00	5.00	5.07	<0.05	27.38	<0.05	1.67	2.38	1.89	7.42	<0.05	<0.08	0.08	0.14	0.32	26.40	<0.05	<0.05	28.84
GKBH-04/S4	5.00	6.00	5.16	<0.05	24.93	<0.05	1.77	2.53	1.99	9.01	<0.05	<0.08	0.07	0.52	0.33	26.57	<0.05	<0.05	28.81
GKBH-04/S5	6.00	7.00	4.15	<0.05	34.76	<0.05	1.19	1.70	1.60	4.51	<0.05	<0.08	0.07	0.35	0.25	21.36	<0.05	<0.05	31.19
GKBH-04/S6	7.00	8.00	4.85	<0.05	30.91	<0.05	1.48	2.12	1.95	5.09	<0.05	<0.08	0.07	0.24	0.31	25.55	<0.05	<0.05	28.84
GKBH-04/S7	8.00	9.00	4.49	<0.05	32.47	<0.05	1.29	1.85	2.00	4.26	<0.05	<0.08	0.07	0.29	0.30	25.35	<0.05	<0.05	28.87
GKBH-04/S8	9.00	10.00	5.41	<0.05	24.96	0.05	1.79	2.56	2.10	8.96	<0.05	<0.08	0.08	0.24	0.35	26.68	<0.05	<0.05	28.59

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-04/S9	10.00	11.00	5.00	<0.05	28.11	<0.05	1.55	2.21	1.97	7.34	<0.05	<0.08	0.07	0.35	0.31	25.26	<0.05	<0.05	29.30
GKBH-04/S10	11.00	12.00	5.76	<0.05	25.08	<0.05	1.83	2.62	2.45	7.51	<0.05	<0.08	0.08	0.45	0.39	28.87	<0.05	<0.05	26.74
GKBH-04/S11	12.00	13.00	2.88	<0.05	38.95	<0.05	0.79	1.13	1.34	4.58	<0.05	<0.08	0.07	0.43	0.19	15.81	<0.05	<0.05	34.56
GKBH-04/S12	13.00	14.00	4.45	<0.05	31.43	<0.05	1.28	1.83	1.90	6.39	<0.05	<0.08	0.07	0.32	0.29	22.58	<0.05	<0.05	30.70
GKBH-04/S13	14.00	15.00	4.97	<0.05	29.63	<0.05	1.46	2.08	2.15	6.11	<0.05	<0.08	0.07	0.37	0.32	25.51	<0.05	<0.05	28.74
GKBH-04/S14	15.00	16.00	5.09	<0.05	28.83	<0.05	1.57	2.24	2.03	6.77	<0.05	<0.08	0.06	0.39	0.32	24.85	<0.05	<0.05	29.36
GKBH-04/S15	16.00	17.00	5.44	<0.05	29.43	<0.05	1.57	2.25	2.12	6.40	<0.05	<0.08	0.08	0.25	0.34	24.70	<0.05	<0.05	28.94
GKBH-04/S16	17.00	18.00	3.12	<0.05	38.65	<0.05	0.82	1.17	1.65	3.43	<0.05	<0.08	0.06	0.42	0.22	18.35	<0.05	<0.05	32.87

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-04/S17	18.00	19.00	4.87	<0.05	31.38	<0.05	1.29	1.84	2.09	4.78	<0.05	<0.08	0.06	0.68	0.29	25.08	<0.05	<0.05	28.88
GKBH-04/S18	19.00	20.00	5.89	<0.05	24.70	<0.05	1.87	2.68	2.50	7.87	<0.05	<0.08	0.06	0.67	0.35	27.99	<0.05	<0.05	27.22
GKBH-04/S19	20.00	21.00	2.43	<0.05	41.38	0.07	0.73	1.05	1.10	1.74	<0.05	<0.08	<0.05	0.20	0.15	17.44	<0.05	<0.05	34.37
GKBH-04/S20	21.00	22.00	3.65	<0.05	36.81	<0.05	0.92	1.32	1.58	4.52	<0.05	<0.08	0.07	0.33	0.22	17.10	<0.05	<0.05	34.34
GKBH-04/S21	22.00	23.00	2.04	<0.05	41.41	<0.05	0.64	0.92	1.12	5.00	<0.05	<0.08	0.06	0.28	0.14	14.45	<0.05	<0.05	35.65
GKBH-04/S22	23.00	24.00	2.31	<0.05	42.14	<0.05	0.59	0.84	1.14	3.80	<0.05	<0.08	0.07	0.31	0.15	13.06	<0.05	<0.05	36.13
GKBH-04/S23	24.00	25.00	3.25	<0.05	37.92	<0.05	0.91	1.30	1.55	4.37	<0.05	<0.08	0.09	0.40	0.22	17.31	<0.05	<0.05	33.54
GKBH-04/S24	25.00	26.00	2.37	<0.05	41.70	<0.05	0.72	1.03	1.19	3.61	<0.05	<0.08	0.07	0.35	0.18	14.25	<0.05	<0.05	35.20

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-04/S25	26.00	27.00	2.82	<0.05	37.35	<0.05	0.86	1.23	1.26	5.25	<0.05	<0.08	0.06	0.33	0.20	16.78	<0.05	<0.05	34.66
GKBH-04/S26	27.00	28.00	3.26	<0.05	37.25	<0.05	0.93	1.33	1.37	4.47	<0.05	<0.08	0.07	0.38	0.21	18.19	<0.05	<0.05	33.43
GKBH-04/S27	28.00	29.00	4.11	<0.05	34.47	<0.05	1.21	1.73	1.79	4.70	<0.05	<0.08	0.07	0.51	0.27	20.94	<0.05	<0.05	31.35
GKBH-04/S28	29.00	30.00	4.77	<0.05	28.85	<0.05	1.57	2.25	2.01	7.22	<0.05	<0.08	0.07	0.88	0.30	24.28	<0.05	<0.05	29.32
GKBH-04/S29	30.00	31.00	5.38	<0.05	19.82	<0.05	2.29	3.27	2.36	10.94	<0.05	<0.08	0.07	1.02	0.37	29.88	<0.05	<0.05	26.83
GKBH-04/S30	31.00	32.00	4.85	<0.05	25.73	<0.05	1.70	2.42	2.02	9.01	<0.05	<0.08	0.07	0.70	0.32	25.69	<0.05	<0.05	29.12
GKBH-04/S31	32.00	33.00	4.84	<0.05	31.58	<0.05	1.28	1.83	1.96	4.83	<0.05	<0.08	0.07	0.41	0.30	24.80	<0.05	<0.05	29.31
GKBH-04/S32	33.00	34.00	4.09	<0.05	32.78	<0.05	1.37	1.96	1.84	5.11	<0.05	<0.08	0.07	0.57	0.28	22.99	<0.05	<0.05	30.26

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-04/S33	34.00	35.00	4.01	<0.05	34.63	<0.05	1.16	1.67	1.82	4.43	<0.05	<0.08	0.08	0.49	0.27	21.41	<0.05	<0.05	31.15
GKBH-04/S34	35.00	36.00	5.08	<0.05	27.55	<0.05	1.66	2.38	2.18	7.70	<0.05	<0.08	0.08	0.40	0.34	24.86	<0.05	<0.05	29.37
GKBH-04/S35	36.00	37.00	3.47	<0.05	36.61	<0.05	1.08	1.55	1.71	4.01	<0.05	<0.08	0.07	0.57	0.24	19.36	<0.05	<0.05	32.38
GKBH-04/S36	37.00	38.00	5.34	<0.05	27.36	<0.05	1.67	2.39	2.18	7.57	<0.05	<0.08	0.07	0.39	0.34	25.50	<0.05	<0.05	28.80
GKBH-04/S37	38.00	39.00	5.11	<0.05	28.80	<0.05	1.68	2.40	2.06	7.25	<0.05	<0.08	0.07	0.44	0.33	24.14	<0.05	<0.05	29.35
GKBH-04/S38	39.00	40.00	3.69	<0.05	37.08	<0.05	1.03	1.47	1.64	4.06	<0.05	<0.08	0.07	0.47	0.24	18.55	<0.05	<0.05	32.67
GKBH-04/S39	40.00	41.00	5.09	<0.05	30.08	<0.05	1.54	2.21	2.24	5.17	<0.05	<0.08	0.07	0.52	0.34	25.71	<0.05	<0.05	28.54
GKBH-04/S40	41.00	42.00	5.16	<0.05	29.41	<0.05	1.63	2.33	2.26	5.15	<0.05	<0.08	0.07	0.34	0.34	26.83	<0.05	<0.05	28.06

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-04/S41	42.00	43.00	4.99	<0.05	31.68	<0.05	1.46	2.09	2.19	4.40	<0.05	<0.08	0.07	0.10	0.32	24.83	<0.05	<0.05	29.29
GKBH-04/S42	43.00	44.00	4.75	<0.05	31.00	0.08	1.49	2.13	1.88	6.47	<0.05	<0.08	0.07	0.18	0.30	22.46	<0.05	<0.05	30.64
GKBH-04/S43	44.00	45.00	4.77	<0.05	32.63	<0.05	1.33	1.91	2.01	4.01	<0.05	<0.08	0.06	0.08	0.30	24.71	<0.05	<0.05	29.48
GKBH-04/S44	45.00	46.00	4.01	<0.05	34.85	<0.05	1.25	1.79	1.81	4.18	<0.05	<0.08	0.07	0.42	0.27	21.42	<0.05	<0.05	31.11
GKBH-04/S45	46.00	47.00	5.39	<0.05	29.95	<0.05	1.64	2.34	2.31	5.01	<0.05	<0.08	0.07	0.51	0.35	25.74	<0.05	<0.05	28.27
GKBH-04/S46	47.00	48.00	4.09	<0.05	34.83	<0.05	1.19	1.71	1.96	3.84	<0.05	<0.08	0.06	0.90	0.27	21.85	<0.05	<0.05	30.44
GKBH-04/S47	48.00	49.00	6.36	<0.05	24.30	<0.05	1.91	2.73	2.82	5.88	<0.05	<0.08	0.08	1.21	0.39	31.20	<0.05	<0.05	24.97
GKBH-04/S48	49.00	50.00	5.66	<0.05	26.89	<0.05	1.62	2.32	2.63	6.02	<0.05	<0.08	0.06	0.93	0.34	27.82	<0.05	<0.05	27.27

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-05/S1	1.82	3.00	3.80	<0.05	22.97	<0.05	1.20	1.72	1.37	15.55	<0.05	<0.08	<0.05	<0.05	0.23	17.83	<0.05	<0.05	36.34
GKBH-05/S2	3.00	4.00	3.55	<0.05	23.57	<0.05	1.20	1.71	1.21	16.32	<0.05	<0.08	<0.05	<0.05	0.20	16.16	<0.05	<0.05	37.11
GKBH-05/S3	4.00	5.00	3.95	<0.05	23.04	<0.05	1.46	2.08	1.33	15.95	<0.05	<0.08	<0.05	<0.05	0.23	17.12	<0.05	<0.05	36.11
GKBH-05/S4	5.00	6.00	3.05	<0.05	25.23	<0.05	1.20	1.71	0.83	17.32	<0.05	<0.08	<0.05	<0.05	0.17	11.99	<0.05	<0.05	39.52
GKBH-05/S5	6.00	7.00	2.28	<0.05	26.05	<0.05	0.93	1.33	0.59	17.60	<0.05	<0.08	<0.05	<0.05	0.13	9.08	<0.05	<0.05	42.76
GKBH-05/S6	7.00	8.00	3.31	<0.05	24.45	<0.05	1.02	1.46	1.17	16.66	<0.05	<0.08	<0.05	0.05	0.18	13.83	<0.05	<0.05	38.72
GKBH-05/S7	8.00	9.00	4.54	<0.05	21.20	<0.05	1.31	1.87	1.96	14.59	<0.05	<0.08	0.06	0.07	0.28	22.03	<0.05	<0.05	33.28

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-05/S8	9.00	10.00	4.21	<0.05	21.28	<0.05	1.21	1.73	1.85	14.96	<0.05	<0.08	0.05	0.11	0.26	21.64	<0.05	<0.05	33.77
GKBH-05/S9	10.00	11.00	4.30	<0.05	21.43	<0.05	1.56	2.24	1.79	14.79	<0.05	<0.08	0.05	0.56	0.25	20.99	<0.05	<0.05	33.47
GKBH-05/S10	11.00	12.00	4.87	<0.05	20.12	<0.05	1.40	2.00	2.06	14.49	<0.05	<0.08	<0.05	0.37	0.29	23.65	<0.05	<0.05	31.92
GKBH-05/S11	12.00	13.00	4.02	<0.05	21.73	<0.05	1.26	1.80	1.75	15.30	<0.05	<0.08	<0.05	0.48	0.24	20.50	<0.05	<0.05	34.01
GKBH-05/S12	13.00	14.00	4.06	<0.05	22.12	<0.05	1.18	1.68	1.80	15.48	<0.05	<0.08	0.05	0.33	0.24	19.52	<0.05	<0.05	34.59
GKBH-05/S13	14.00	15.00	4.34	<0.05	21.12	<0.05	1.37	1.96	1.92	14.80	<0.05	<0.08	<0.05	0.49	0.28	21.74	<0.05	<0.05	33.18
GKBH-05/S14	15.00	16.00	4.19	<0.05	21.78	<0.05	1.27	1.81	1.85	15.15	<0.05	<0.08	0.05	0.33	0.26	20.23	<0.05	<0.05	34.18
GKBH-05/S15	16.00	17.00	4.54	<0.05	20.85	<0.05	1.30	1.86	2.08	14.77	<0.05	<0.08	0.05	0.28	0.30	22.50	<0.05	<0.05	32.64

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-05/S16	17.00	18.00	4.30	<0.05	21.59	<0.05	1.27	1.82	1.86	15.33	<0.05	<0.08	0.05	0.22	0.25	20.41	<0.05	<0.05	34.04
GKBH-05/S17	18.00	19.00	4.78	0.05	20.14	<0.05	1.42	2.03	2.25	14.37	<0.05	<0.08	<0.05	0.54	0.30	23.79	<0.05	<0.05	31.57
GKBH-05/S18	19.00	20.00	3.86	<0.05	22.43	<0.05	1.30	1.86	1.72	15.82	<0.05	<0.08	0.06	0.39	0.24	18.58	<0.05	<0.05	34.93
GKBH-05/S19	20.00	21.00	4.25	0.26	21.67	<0.05	1.33	1.90	2.09	14.96	<0.05	<0.08	<0.05	0.58	0.26	20.33	<0.05	<0.05	33.53
GKBH-05/S20	21.00	22.00	3.82	<0.05	21.55	<0.05	1.78	2.55	1.80	15.04	<0.05	<0.08	<0.05	1.62	0.25	19.81	<0.05	<0.05	33.37
GKBH-05/S21	22.00	23.00	4.45	<0.05	21.15	<0.05	1.35	1.93	2.08	14.84	<0.05	<0.08	<0.05	0.32	0.27	21.76	<0.05	<0.05	33.00
GKBH-05/S22	23.00	24.00	4.26	<0.05	22.16	<0.05	1.39	1.98	1.86	15.54	<0.05	<0.08	0.05	0.46	0.25	18.76	<0.05	<0.05	34.56
GKBH-05/S23	24.00	25.00	4.28	<0.05	21.93	<0.05	1.32	1.89	1.95	15.48	<0.05	<0.08	0.05	0.20	0.25	19.56	<0.05	<0.05	34.29

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-05/S24	25.00	26.00	4.76	<0.05	21.04	<0.05	1.41	2.02	2.08	14.93	<0.05	<0.08	0.06	0.21	0.29	21.17	<0.05	<0.05	33.28
GKBH-05/S25	26.00	27.00	4.73	<0.05	21.06	<0.05	1.39	1.98	2.08	14.93	<0.05	<0.08	0.07	0.15	0.29	21.18	<0.05	<0.05	33.38
GKBH-05/S26	27.00	28.00	5.10	<0.05	20.26	<0.05	1.47	2.11	2.26	14.45	<0.05	<0.08	0.06	0.20	0.31	23.27	<0.05	<0.05	31.83
GKBH-05/S27	28.00	29.00	4.24	<0.05	21.57	<0.05	1.37	1.96	1.72	14.99	<0.05	<0.08	0.05	0.30	0.26	20.85	<0.05	<0.05	33.90
GKBH-05/S28	29.00	30.00	4.89	<0.05	20.24	<0.05	1.43	2.05	2.06	14.60	<0.05	<0.08	<0.05	0.39	0.28	23.39	<0.05	<0.05	31.92
GKBH-05/S29	30.00	31.00	3.98	<0.05	22.14	<0.05	1.32	1.88	1.63	15.55	<0.05	<0.08	<0.05	0.11	0.24	19.44	<0.05	<0.05	34.88
GKBH-05/S30	31.00	32.00	4.77	<0.05	19.98	<0.05	1.42	2.04	2.01	14.51	<0.05	<0.08	<0.05	0.51	0.29	24.39	<0.05	<0.05	31.34
GKBH-05/S31	32.00	33.00	3.38	<0.05	22.49	<0.05	1.32	1.88	1.46	15.59	<0.05	<0.08	0.05	0.57	0.22	19.22	<0.05	<0.05	35.00

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-05/S32	33.00	34.00	2.29	<0.05	24.83	<0.05	1.07	1.53	0.93	16.75	<0.05	<0.08	<0.05	0.08	0.13	14.69	<0.05	<0.05	38.62
GKBH-05/S33	34.00	35.00	4.18	<0.05	21.02	<0.05	1.33	1.91	1.83	15.05	<0.05	<0.08	<0.05	0.56	0.24	21.95	<0.05	<0.05	33.10
GKBH-05/S34	35.00	36.00	4.59	<0.05	20.04	<0.05	1.48	2.12	1.89	14.40	<0.05	<0.08	0.05	0.57	0.27	24.48	<0.05	<0.05	31.48
GKBH-05/S35	36.00	37.00	3.81	<0.05	22.38	<0.05	1.32	1.88	1.60	15.73	<0.05	<0.08	<0.05	0.26	0.22	18.71	<0.05	<0.05	35.24
GKBH-05/S36	37.00	38.00	6.19	<0.05	17.62	<0.05	1.74	2.49	2.58	13.43	<0.05	<0.08	0.06	0.79	0.35	28.00	<0.05	<0.05	28.35
GKBH-05/S37	38.00	39.00	4.59	<0.05	21.04	<0.05	1.37	1.96	1.89	15.22	<0.05	<0.08	0.06	0.27	0.27	21.23	<0.05	<0.05	33.37
GKBH-05/S38	39.00	40.00	4.48	<0.05	21.08	<0.05	1.36	1.94	1.81	15.43	<0.05	<0.08	0.05	0.23	0.26	21.21	<0.05	<0.05	33.38
GKBH-05/S39	40.00	41.00	4.08	<0.05	21.75	<0.05	1.33	1.90	1.74	15.68	<0.05	<0.08	<0.05	0.18	0.24	20.07	<0.05	<0.05	34.21

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-05/S40	41.00	42.00	5.73	<0.05	18.60	<0.05	1.61	2.30	2.32	14.29	<0.05	<0.08	0.06	0.52	0.31	26.03	<0.05	<0.05	29.72
GKBH-05/S41	42.00	43.00	4.91	<0.05	20.02	<0.05	1.49	2.14	1.98	14.92	<0.05	<0.08	0.05	0.52	0.27	23.13	<0.05	<0.05	31.95
GKBH-05/S42	43.00	44.00	4.69	<0.05	20.15	<0.05	1.40	2.01	1.93	14.84	<0.05	<0.08	0.05	0.39	0.28	23.46	<0.05	<0.05	32.08
GKBH-05/S43	44.00	45.00	3.37	<0.05	23.05	<0.05	1.20	1.72	1.31	16.12	<0.05	<0.08	<0.05	0.49	0.20	17.53	<0.05	<0.05	36.02
GKBH-05/S44	45.00	46.00	4.80	<0.05	19.92	<0.05	1.43	2.05	1.98	14.59	<0.05	<0.08	0.05	0.48	0.30	24.15	<0.05	<0.05	31.52
GKBH-05/S45	46.00	47.00	3.55	<0.05	22.35	<0.05	1.39	1.98	1.55	15.80	<0.05	<0.08	<0.05	0.45	0.23	19.26	<0.05	<0.05	34.66
GKBH-05/S46	47.00	48.00	4.74	<0.05	19.96	<0.05	1.55	2.22	2.02	14.78	<0.05	<0.08	0.05	0.29	0.28	23.98	<0.05	<0.05	31.56
GKBH-05/S47	48.00	49.00	5.05	<0.05	19.91	<0.05	1.64	2.35	2.03	14.88	<0.05	<0.08	0.06	0.39	0.30	23.28	<0.05	<0.05	31.62

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-05/S48	49.00	50.00	4.43	<0.05	21.38	<0.05	1.38	1.98	1.79	15.59	<0.05	<0.08	0.06	0.26	0.25	20.17	<0.05	<0.05	33.96
GKBH-06/S1	1.50	3.00	4.91	<0.05	19.37	<0.05	1.63	2.33	2.10	13.99	<0.05	<0.08	0.06	<0.05	0.32	26.03	<0.05	<0.05	30.74
GKBH-06/S2	3.00	4.00	4.58	<0.05	20.51	<0.05	1.52	2.17	1.94	14.87	<0.05	<0.08	0.07	<0.05	0.29	22.85	<0.05	<0.05	32.58
GKBH-06/S3	4.00	5.00	3.71	<0.05	22.87	<0.05	1.37	1.97	1.48	15.82	<0.05	<0.08	0.06	<0.05	0.23	17.79	<0.05	<0.05	35.91
GKBH-06/S4	5.00	6.00	4.97	<0.05	20.79	<0.05	1.64	2.34	1.84	14.69	<0.05	<0.08	0.06	<0.05	0.28	21.53	<0.05	<0.05	33.30
GKBH-06/S5	6.00	7.00	4.33	<0.05	21.37	<0.05	1.44	2.06	1.88	14.79	<0.05	<0.08	0.06	<0.05	0.27	21.58	<0.05	<0.05	33.51
GKBH-06/S6	7.00	8.00	6.19	<0.05	18.52	<0.05	1.80	2.57	2.42	13.69	<0.05	<0.08	0.07	<0.05	0.35	25.87	<0.05	<0.05	30.15

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-06/S7	8.00	9.00	6.87	<0.05	16.35	<0.05	1.89	2.71	2.87	12.60	<0.05	<0.08	0.07	<0.05	0.41	30.84	<0.05	<0.05	27.13
GKBH-06/S8	9.00	10.00	5.35	<0.05	19.49	<0.05	1.78	2.55	2.24	14.09	<0.05	<0.08	0.06	<0.05	0.31	24.49	<0.05	<0.05	31.27
GKBH-06/S9	10.00	11.00	5.24	<0.05	19.67	<0.05	1.68	2.40	2.17	14.09	<0.05	<0.08	0.07	0.06	0.31	24.28	<0.05	<0.05	31.58
GKBH-06/S10	11.00	12.00	4.78	<0.05	20.25	<0.05	1.66	2.37	2.08	14.40	<0.05	<0.08	0.06	<0.05	0.30	23.45	<0.05	<0.05	32.13
GKBH-06/S11	12.00	13.00	5.05	<0.05	20.41	<0.05	1.61	2.30	2.08	14.59	<0.05	<0.08	0.06	0.06	0.28	22.62	<0.05	<0.05	32.43
GKBH-06/S12	13.00	14.00	3.40	<0.05	23.14	<0.05	1.28	1.84	1.49	15.70	<0.05	<0.08	0.06	0.09	0.23	17.91	<0.05	<0.05	36.04
GKBH-06/S13	14.00	15.00	5.62	<0.05	18.91	<0.05	1.54	2.20	2.48	13.69	<0.05	<0.08	0.07	0.06	0.35	26.10	<0.05	<0.05	30.40
GKBH-06/S14	15.00	16.00	4.91	<0.05	20.31	<0.05	1.64	2.34	2.01	14.60	<0.05	<0.08	0.06	0.44	0.30	22.82	<0.05	<0.05	32.10

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-06/S15	16.00	17.00	6.47	<0.05	17.55	<0.05	1.61	2.30	3.05	13.11	<0.05	<0.08	0.07	0.15	0.37	28.64	<0.05	<0.05	28.16
GKBH-06/S16	17.00	18.00	5.75	<0.05	18.60	<0.05	1.80	2.58	2.46	13.34	<0.05	<0.08	0.07	0.08	0.36	27.41	<0.05	<0.05	29.19
GKBH-06/S17	18.00	19.00	6.51	0.08	17.83	<0.05	1.75	2.50	2.80	13.08	<0.05	<0.08	0.08	0.22	0.39	28.20	<0.05	<0.05	28.20
GKBH-06/S18	19.00	20.00	2.24	<0.05	25.13	<0.05	1.30	1.85	1.23	16.12	<0.05	<0.08	0.05	0.12	0.19	14.59	<0.05	<0.05	38.31
GKBH-06/S19	20.00	21.00	3.06	<0.05	24.28	<0.05	1.24	1.77	1.32	16.29	<0.05	<0.08	0.06	0.22	0.19	15.13	<0.05	<0.05	37.56
GKBH-06/S20	21.00	22.00	4.17	<0.05	21.90	<0.05	1.55	2.22	1.98	14.84	<0.05	<0.08	0.07	0.18	0.27	20.55	<0.05	<0.05	33.70
GKBH-06/S21	22.00	23.00	4.72	<0.05	20.13	<0.05	1.73	2.48	2.28	13.93	<0.05	<0.08	0.06	0.29	0.32	24.32	<0.05	<0.05	31.33
GKBH-06/S21	23.00	24.00	4.72	<0.05	20.13	<0.05	1.73	2.48	2.28	13.93	<0.05	<0.08	0.06	0.29	0.32	24.32	<0.05	<0.05	31.33

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-06/S23	24.00	25.00	5.30	<0.05	19.42	<0.05	1.54	2.20	2.38	14.04	<0.05	<0.08	0.06	0.23	0.32	25.08	<0.05	<0.05	30.82
GKBH-06/S24	25.00	26.00	4.94	0.07	20.19	<0.05	1.46	2.08	2.14	14.31	<0.05	<0.08	0.06	0.20	0.30	24.08	<0.05	<0.05	31.51
GKBH-06/S25	26.00	27.00	4.10	<0.05	21.38	<0.05	1.49	2.13	1.90	14.74	<0.05	<0.08	0.06	0.07	0.26	21.97	<0.05	<0.05	33.27
GKBH-06/S26	27.00	28.00	3.07	<0.05	24.53	<0.05	1.31	1.88	1.52	14.69	<0.05	<0.08	<0.05	0.08	0.20	17.76	<0.05	<0.05	36.11
GKBH-06/S27	28.00	29.00	4.02	<0.05	22.43	<0.05	1.42	2.03	1.82	14.84	<0.05	<0.08	0.05	<0.05	0.26	20.21	<0.05	<0.05	34.18
GKBH-06/S28	29.00	30.00	4.47	<0.05	21.40	<0.05	1.64	2.35	2.06	13.71	<0.05	<0.08	0.05	<0.05	0.30	23.59	<0.05	<0.05	31.91
GKBH-06/S29	30.00	31.00	4.80	<0.05	20.48	<0.05	1.74	2.49	2.09	14.12	<0.05	<0.08	0.07	0.06	0.31	24.12	<0.05	<0.05	31.35
GKBH-06/S30	31.00	32.00	5.21	<0.05	19.99	<0.05	1.61	2.31	2.07	14.38	<0.05	<0.08	0.06	0.17	0.31	23.88	<0.05	<0.05	31.49

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-06/S31	32.00	33.00	5.35	<0.05	19.16	<0.05	1.79	2.56	2.18	14.01	<0.05	<0.08	0.07	0.34	0.34	25.40	<0.05	<0.05	30.47
GKBH-06/S32	33.00	34.00	5.09	<0.05	20.52	<0.05	1.68	2.41	1.98	14.31	<0.05	<0.08	0.06	0.16	0.31	23.15	<0.05	<0.05	31.89
GKBH-06/S33	34.00	35.00	4.93	<0.05	19.57	<0.05	1.86	2.66	2.13	14.33	<0.05	<0.08	0.06	0.34	0.32	24.67	<0.05	<0.05	30.82
GKBH-06/S34	35.00	36.00	4.82	<0.05	20.21	<0.05	1.70	2.43	2.16	14.39	<0.05	<0.08	0.06	0.28	0.32	23.70	<0.05	<0.05	31.48
GKBH-06/S35	36.00	37.00	5.55	<0.05	18.77	<0.05	1.93	2.76	2.30	13.79	<0.05	<0.08	0.06	0.23	0.35	26.62	<0.05	<0.05	29.41
GKBH-06/S36	37.00	38.00	5.20	<0.05	19.22	<0.05	1.84	2.64	2.20	13.96	<0.05	<0.08	0.06	0.39	0.32	25.42	<0.05	<0.05	30.45
GKBH-06/S37	38.00	39.00	4.89	<0.05	19.59	<0.05	1.59	2.27	1.86	14.69	<0.05	<0.08	0.06	0.31	0.30	24.48	<0.05	<0.05	31.42
GKBH-06/S38	39.00	40.00	5.45	<0.05	18.75	<0.05	1.91	2.73	2.07	13.49	<0.05	<0.08	0.06	0.89	0.33	27.00	<0.05	<0.05	29.11

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-06/S39	40.00	41.00	3.70	<0.05	24.05	<0.05	1.47	2.11	1.45	15.14	<0.05	<0.08	0.06	0.75	0.23	17.31	<0.05	<0.05	35.07
GKBH-06/S40	41.00	42.00	2.09	0.50	27.43	<0.05	1.10	1.57	1.07	15.43	<0.05	<0.08	<0.05	0.58	0.15	12.66	<0.05	<0.05	38.34
GKBH-06/S41	42.00	43.00	4.10	<0.05	31.54	<0.05	1.24	1.78	1.78	8.23	<0.05	<0.08	0.05	0.68	0.24	17.66	<0.05	<0.05	33.81
GKBH-06/S42	43.00	44.00	4.33	<0.05	22.91	<0.05	1.51	2.16	1.80	14.19	<0.05	<0.08	0.06	0.35	0.28	20.93	<0.05	<0.05	32.87
GKBH-06/S43	44.00	45.00	4.31	<0.05	21.63	<0.05	1.30	1.86	2.08	14.28	<0.05	<0.08	<0.05	0.30	0.28	22.76	<0.05	<0.05	32.32
GKBH-06/S44	45.00	46.00	4.13	<0.05	23.20	<0.05	1.36	1.95	1.90	13.50	<0.05	<0.08	<0.05	0.33	0.28	21.84	<0.05	<0.05	32.71
GKBH-06/S45	46.00	47.00	5.30	<0.05	21.91	<0.05	1.58	2.27	2.24	12.56	<0.05	<0.08	0.05	0.50	0.33	24.74	<0.05	<0.05	29.94
GKBH-06/S46	47.00	48.00	2.37	<0.05	40.92	<0.05	0.69	0.99	1.09	4.52	<0.05	<0.08	<0.05	0.44	0.15	12.47	<0.05	<0.05	36.87

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-06/S47	48.00	49.00	2.67	<0.05	40.93	<0.05	0.75	1.08	1.21	3.51	<0.05	<0.08	<0.05	0.61	0.16	13.93	0.08	<0.05	35.70
GKBH-06/S48	49.00	50.00	3.47	<0.05	37.43	<0.05	0.88	1.27	1.71	3.32	<0.05	<0.08	<0.05	0.69	0.20	19.27	0.07	<0.05	32.43
GKBH-07/S1	0.50	2.00	4.82	<0.05	28.98	<0.05	1.69	2.42	1.92	5.93	<0.05	<0.08	0.05	0.13	0.30	25.90	<0.05	<0.05	29.41
GKBH-07/S2	2.00	3.00	3.87	<0.05	33.09	<0.05	1.30	1.86	1.63	5.39	<0.05	<0.08	<0.05	0.16	0.25	22.01	<0.05	<0.05	31.57
GKBH-07/S3	3.00	4.00	3.86	<0.05	33.56	<0.05	1.28	1.83	1.51	4.46	<0.05	<0.08	<0.05	0.15	0.25	22.15	<0.05	<0.05	32.08
GKBH-07/S4	4.00	5.00	5.03	<0.05	29.78	<0.05	1.58	2.26	2.03	4.89	<0.05	<0.08	<0.05	0.16	0.32	26.90	<0.05	<0.05	28.46
GKBH-07/S5	5.00	6.00	4.16	<0.05	30.05	<0.05	1.44	2.05	1.71	7.32	<0.05	<0.08	<0.05	0.16	0.28	22.96	<0.05	<0.05	31.14

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-07/S6	6.00	7.00	5.63	<0.05	24.67	<0.05	1.79	2.56	2.29	8.82	<0.05	<0.08	0.06	0.20	0.36	26.85	<0.05	<0.05	28.43
GKBH-07/S7	7.00	8.00	5.71	<0.05	22.62	<0.05	1.85	2.64	2.29	9.69	<0.05	<0.08	0.06	0.23	0.35	28.19	<0.05	<0.05	28.08
GKBH-07/S8	8.00	9.00	4.97	<0.05	27.93	<0.05	1.50	2.14	2.23	7.15	<0.05	<0.08	0.05	0.20	0.33	25.52	<0.05	<0.05	29.34
GKBH-07/S9	9.00	10.00	4.56	<0.05	28.86	<0.05	1.41	2.02	2.03	7.63	<0.05	<0.08	0.05	0.23	0.29	23.55	<0.05	<0.05	30.66
GKBH-07/S10	10.00	11.00	4.26	<0.05	29.95	<0.05	1.39	1.99	1.93	7.51	<0.05	<0.08	<0.05	0.35	0.28	22.20	<0.05	<0.05	31.35
GKBH-07/S11	11.00	12.00	4.81	<0.05	28.66	<0.05	1.52	2.18	2.05	7.05	<0.05	<0.08	<0.05	0.28	0.30	24.74	<0.05	<0.05	29.75
GKBH-07/S12	12.00	13.00	5.39	<0.05	27.24	<0.05	1.68	2.40	2.30	6.83	<0.05	<0.08	0.05	0.21	0.35	26.76	<0.05	<0.05	28.32
GKBH-07/S13	13.00	14.00	4.11	<0.05	33.38	<0.05	1.23	1.76	1.88	5.06	<0.05	<0.08	<0.05	0.39	0.27	21.66	<0.05	<0.05	31.32

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-07/S14	14.00	15.00	4.41	<0.05	32.55	<0.05	1.21	1.73	2.05	4.90	<0.05	<0.08	<0.05	0.58	0.27	22.69	<0.05	<0.05	30.64
GKBH-07/S15	15.00	16.00	4.15	<0.05	35.84	<0.05	1.01	1.45	2.08	2.74	<0.05	<0.08	<0.05	0.65	0.26	21.66	<0.05	<0.05	30.99
GKBH-07/S16	16.00	17.00	4.74	<0.05	29.47	<0.05	1.39	1.98	1.94	6.82	<0.05	<0.08	<0.05	0.53	0.28	23.75	<0.05	<0.05	30.31
GKBH-07/S17	17.00	18.00	3.99	<0.05	30.58	<0.05	1.25	1.78	1.80	7.62	<0.05	<0.08	<0.05	0.52	0.26	21.09	<0.05	<0.05	32.18
GKBH-07/S18	18.00	19.00	3.61	<0.05	30.80	<0.05	1.21	1.74	1.63	7.86	<0.05	<0.08	<0.05	0.54	0.23	20.79	<0.05	<0.05	32.63
GKBH-07/S19	19.00	20.00	2.77	<0.05	41.24	<0.05	0.76	1.09	1.26	3.16	<0.05	<0.08	<0.05	0.50	0.17	13.97	<0.05	<0.05	35.66
GKBH-07/S20	20.00	21.00	2.03	<0.05	42.64	<0.05	0.70	1.00	1.09	3.49	<0.05	<0.08	<0.05	0.58	0.14	12.07	0.06	<0.05	36.76
GKBH-07/S21	21.00	22.00	2.85	<0.05	39.91	<0.05	0.93	1.32	1.32	4.17	<0.05	<0.08	<0.05	0.74	0.18	14.00	<0.05	<0.05	35.29

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-07/S22	22.00	23.00	3.23	<0.05	37.05	<0.05	1.02	1.46	1.58	4.53	<0.05	<0.08	<0.05	0.62	0.22	17.40	<0.05	<0.05	33.73
GKBH-07/S23	23.00	24.00	3.02	<0.05	34.89	<0.05	1.01	1.45	1.42	6.80	<0.05	<0.08	<0.05	0.49	0.20	16.77	<0.05	<0.05	34.81
GKBH-07/S24	24.00	25.00	3.51	<0.05	34.69	<0.05	1.12	1.60	1.60	5.59	<0.05	<0.08	<0.05	0.47	0.23	19.08	<0.05	<0.05	33.07
GKBH-07/S25	25.00	26.00	3.05	<0.05	35.49	<0.05	1.08	1.55	1.51	5.30	<0.05	<0.08	<0.05	0.60	0.23	18.48	<0.05	<0.05	33.64
GKBH-07/S26	26.00	27.00	5.46	<0.05	23.14	<0.05	1.89	2.70	2.25	10.42	<0.05	<0.08	0.06	0.80	0.33	25.30	<0.05	<0.05	29.42
GKBH-07/S27	27.00	28.00	4.67	<0.05	22.88	<0.05	1.77	2.53	2.02	11.34	<0.05	<0.08	0.06	0.61	0.30	25.03	<0.05	<0.05	30.44
GKBH-07/S28	28.00	29.00	5.04	<0.05	27.88	<0.05	1.60	2.29	2.37	5.85	<0.05	<0.08	0.05	0.72	0.33	26.63	<0.05	<0.05	28.70
GKBH-07/S29	29.00	30.00	3.51	<0.05	32.58	<0.05	1.32	1.89	1.62	6.66	<0.05	<0.08	<0.05	0.51	0.25	20.60	<0.05	<0.05	32.22

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-07/S30	30.00	31.00	4.81	<0.05	30.01	<0.05	1.42	2.03	2.24	5.73	<0.05	<0.08	<0.05	0.46	0.32	25.08	<0.05	<0.05	29.11
GKBH-07/S31	31.00	32.00	4.15	0.12	28.33	<0.05	1.72	2.46	1.93	8.28	<0.05	<0.08	<0.05	1.04	0.28	22.59	<0.05	<0.05	30.63
GKBH-07/S32	32.00	33.00	4.01	<0.05	35.00	<0.05	1.22	1.75	1.90	4.35	<0.05	<0.08	<0.05	0.54	0.26	20.40	<0.05	<0.05	31.60
GKBH-07/S33	33.00	34.00	4.15	<0.05	26.52	<0.05	1.48	2.11	1.95	7.73	<0.05	<0.08	<0.05	0.45	0.29	23.31	<0.05	<0.05	33.32
GKBH-07/S34	34.00	35.00	5.62	<0.05	24.78	<0.05	1.85	2.65	2.35	8.61	<0.05	<0.08	0.06	0.56	0.35	26.91	<0.05	<0.05	27.98
GKBH-07/S35	35.00	36.00	4.98	<0.05	31.76	<0.05	1.45	2.08	2.14	5.01	<0.05	<0.08	<0.05	0.44	0.30	22.97	<0.05	<0.05	30.15
GKBH-07/S36	36.00	37.00	4.41	<0.05	32.36	<0.05	1.39	1.99	1.98	5.21	<0.05	<0.08	<0.05	0.30	0.30	22.72	<0.05	<0.05	30.55
GKBH-07/S37	37.00	38.00	5.33	<0.05	27.42	<0.05	1.74	2.49	2.36	6.28	<0.05	<0.08	0.05	0.48	0.35	27.13	<0.05	<0.05	27.97

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-07/S38	38.00	39.00	4.04	<0.05	33.92	<0.05	1.38	1.97	1.89	4.54	<0.05	<0.08	<0.05	0.69	0.26	19.52	<0.05	<0.05	32.98
GKBH-07/S39	39.00	40.00	4.27	<0.05	32.01	<0.05	1.41	2.01	1.74	6.96	<0.05	<0.08	<0.05	0.33	0.27	19.72	<0.05	<0.05	32.50
GKBH-07/S40	40.00	41.00	3.42	<0.05	37.96	<0.05	1.05	1.51	1.66	3.00	<0.05	<0.08	<0.05	0.35	0.23	18.57	<0.05	<0.05	33.14
GKBH-07/S41	41.00	42.00	4.34	<0.05	33.62	<0.05	1.37	1.95	1.96	4.71	<0.05	<0.08	<0.05	0.34	0.29	21.61	<0.05	<0.05	30.99
GKBH-07/S42	42.00	43.00	5.44	<0.05	29.49	<0.05	1.67	2.39	2.32	5.15	<0.05	<0.08	0.05	0.47	0.34	25.79	<0.05	<0.05	28.41
GKBH-07/S43	43.00	44.00	4.54	<0.05	34.36	<0.05	1.38	1.98	2.05	3.41	<0.05	<0.08	<0.05	0.79	0.29	21.85	<0.05	<0.05	30.55
GKBH-07/S44	44.00	45.00	4.80	<0.05	29.43	<0.05	1.58	2.26	2.53	4.09	<0.05	<0.08	0.05	1.08	0.34	28.23	<0.05	<0.05	27.06
GKBH-07/S45	45.00	46.00	5.47	<0.05	23.44	<0.05	1.88	2.68	2.49	8.83	<0.05	<0.08	0.06	0.89	0.34	27.58	<0.05	<0.05	28.10

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-07/S46	46.00	47.00	5.69	<0.05	24.38	<0.05	1.83	2.62	2.62	7.36	<0.05	<0.08	0.05	0.73	0.37	28.82	<0.05	<0.05	27.22
GKBH-07/S47	47.00	48.00	4.57	<0.05	32.63	<0.05	1.56	2.23	2.19	4.06	<0.05	<0.08	<0.05	1.19	0.29	23.02	<0.05	<0.05	29.66
GKBH-07/S48	48.00	49.00	3.73	<0.05	36.79	<0.05	1.20	1.71	1.90	1.70	<0.05	<0.08	<0.05	1.26	0.24	20.81	<0.05	<0.05	31.70
GKBH-07/S49	49.00	50.00	3.23	<0.05	38.23	<0.05	1.15	1.64	1.66	1.80	<0.05	<0.08	<0.05	1.18	0.21	20.32	<0.05	<0.05	31.54
GKBH-08/S1	1.17	2.00	4.63	<0.05	31.25	<0.05	1.57	2.25	2.01	4.74	<0.05	<0.08	0.07	0.12	0.31	24.96	<0.05	<0.05	29.60
GKBH-08/S2	2.00	3.00	4.20	<0.05	35.71	<0.05	1.21	1.73	1.80	4.25	<0.05	<0.08	0.07	0.26	0.26	20.28	<0.05	<0.05	31.39
GKBH-08/S3	3.00	4.00	4.34	<0.05	33.90	<0.05	1.25	1.79	1.82	4.55	<0.05	<0.08	0.06	0.49	0.27	21.47	<0.05	<0.05	31.25

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-08/S4	4.00	5.00	5.14	<0.05	30.09	<0.05	1.53	2.18	2.25	4.78	<0.05	<0.08	0.06	0.44	0.32	26.09	<0.05	<0.05	28.61
GKBH-08/S5	5.00	6.00	4.83	<0.05	31.20	<0.05	1.41	2.01	2.29	4.54	<0.05	<0.08	0.07	0.57	0.31	25.13	<0.05	<0.05	29.00
GKBH-08/S6	6.00	7.00	3.92	<0.05	33.40	0.05	1.30	1.86	1.78	5.87	<0.05	<0.08	0.07	0.38	0.26	20.42	<0.05	<0.05	31.97
GKBH-08/S7	7.00	8.00	4.78	<0.05	30.84	0.06	1.43	2.04	2.17	5.25	<0.05	<0.08	0.06	0.25	0.31	24.25	<0.05	<0.05	29.96
GKBH-08/S8	8.00	9.00	4.09	<0.05	33.63	<0.05	1.26	1.80	1.92	4.56	<0.05	<0.08	0.07	0.40	0.28	22.03	<0.05	<0.05	31.19
GKBH-08/S9	9.00	10.00	5.23	<0.05	30.92	<0.05	1.51	2.16	2.28	4.62	<0.05	<0.08	0.07	0.49	0.33	25.18	<0.05	<0.05	28.67
GKBH-08/S10	10.00	11.00	4.23	<0.05	33.61	<0.05	1.30	1.86	2.16	4.05	<0.05	<0.08	0.07	0.82	0.29	22.92	<0.05	<0.05	29.96
GKBH-08/S11	11.00	12.00	6.04	<0.05	24.06	<0.05	1.91	2.72	2.85	6.26	<0.05	<0.08	0.07	1.03	0.39	30.99	<0.05	<0.05	25.53

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-08/S12	12.00	13.00	5.12	<0.05	30.12	<0.05	1.47	2.10	2.32	5.87	<0.05	<0.08	0.06	0.76	0.31	23.90	<0.05	<0.05	29.37
GKBH-08/S13	13.00	14.00	5.67	<0.05	27.70	<0.05	1.65	2.36	2.34	6.54	<0.05	<0.08	0.07	0.74	0.33	25.52	<0.05	<0.05	28.65
GKBH-08/S14	14.00	15.00	5.53	<0.05	27.34	<0.05	1.78	2.55	2.46	6.50	<0.05	<0.08	0.06	0.85	0.35	26.01	<0.05	<0.05	28.30
GKBH-08/S15	15.00	16.00	3.96	<0.05	34.24	<0.05	1.26	1.80	2.16	3.55	<0.05	<0.08	<0.05	1.13	0.27	23.15	<0.05	<0.05	29.64
GKBH-08/S16	16.00	17.00	3.77	<0.05	36.56	0.05	1.09	1.56	1.86	1.59	<0.05	<0.08	<0.05	1.16	0.24	22.80	<0.05	<0.05	30.35
GKBH-08/S17	17.00	18.00	3.08	<0.05	38.84	<0.05	0.95	1.36	1.59	1.47	<0.05	<0.08	<0.05	1.10	0.20	20.27	<0.05	<0.05	32.02
GKBH-08/S18	18.00	19.00	3.44	<0.05	37.44	<0.05	1.10	1.57	1.75	1.73	<0.05	<0.08	<0.05	1.24	0.21	21.20	<0.05	<0.05	31.36
GKBH-08/S19	19.00	20.00	3.51	<0.05	35.70	<0.05	1.11	1.59	1.88	3.30	<0.05	<0.08	0.05	1.17	0.23	21.64	<0.05	<0.05	30.90

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-08/S20	20.00	21.00	4.69	<0.05	29.17	<0.05	1.61	2.30	2.18	7.24	<0.05	<0.08	0.07	0.99	0.30	22.47	<0.05	<0.05	30.53
GKBH-08/S21	21.00	22.00	4.58	<0.05	31.64	<0.05	1.27	1.82	2.14	6.20	<0.05	<0.08	0.07	0.71	0.28	21.23	<0.05	<0.05	31.28
GKBH-08/S22	22.00	23.00	4.05	<0.05	34.42	<0.05	1.24	1.77	1.95	4.68	<0.05	<0.08	0.07	0.97	0.27	19.90	<0.05	<0.05	31.88
GKBH-08/S23	23.00	24.00	4.11	<0.05	33.22	<0.05	1.38	1.97	1.92	6.28	<0.05	<0.08	0.07	0.64	0.28	19.15	<0.05	<0.05	32.30
GKBH-08/S24	24.00	25.00	3.70	<0.05	37.00	<0.05	1.09	1.55	1.83	3.98	<0.05	<0.08	0.07	0.69	0.25	18.45	<0.05	<0.05	32.43
GKBH-08/S25	25.00	26.00	3.43	<0.05	34.85	0.05	1.17	1.67	1.79	4.40	<0.05	<0.08	0.05	0.97	0.25	21.22	<0.05	<0.05	31.29
GKBH-08/S26	26.00	27.00	4.64	<0.05	29.83	<0.05	1.57	2.25	2.02	6.70	<0.05	<0.08	0.06	1.01	0.30	22.71	<0.05	<0.05	30.40
GKBH-08/S27	27.00	28.00	5.77	<0.05	25.66	<0.05	1.97	2.82	2.52	7.19	<0.05	<0.08	0.06	1.16	0.36	26.82	<0.05	<0.05	27.57

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-08/S28	28.00	29.00	5.62	<0.05	24.61	<0.05	1.98	2.83	2.48	8.67	<0.05	<0.08	0.07	1.05	0.36	26.27	<0.05	<0.05	27.97
GKBH-08/S29	29.00	30.00	5.11	<0.05	26.43	<0.05	1.95	2.79	2.44	7.19	<0.05	<0.08	0.07	1.34	0.35	26.29	<0.05	<0.05	27.91
GKBH-08/S30	30.00	31.00	3.32	<0.05	36.00	<0.05	1.09	1.56	1.72	4.12	<0.05	<0.08	0.06	0.88	0.24	19.85	<0.05	<0.05	32.21
GKBH-08/S31	31.00	32.00	4.48	<0.05	31.44	<0.05	1.43	2.05	2.25	5.08	<0.05	<0.08	0.07	0.65	0.32	23.91	<0.05	<0.05	29.68
GKBH-08/S32	32.00	33.00	5.50	<0.05	25.83	0.06	1.97	2.82	2.49	7.49	0.06	<0.08	0.08	0.46	0.38	26.99	<0.05	<0.05	27.85
GKBH-08/S33	33.00	34.00	8.12	<0.05	13.92	<0.05	2.81	4.02	3.56	10.15	0.07	<0.08	0.09	0.51	0.55	36.46	<0.05	<0.05	22.49
GKBH-08/S34	34.00	35.00	8.03	<0.05	14.20	0.06	2.83	4.05	3.57	10.49	0.07	<0.08	0.09	0.38	0.54	35.61	<0.05	<0.05	22.92
GKBH-08/S35	35.00	36.00	7.07	<0.05	16.08	<0.05	2.59	3.70	3.12	10.94	0.06	<0.08	0.09	0.46	0.48	32.87	<0.05	<0.05	25.09

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-08/S36	36.00	37.00	6.45	<0.05	18.16	<0.05	2.50	3.58	2.63	11.20	0.05	<0.08	0.09	0.90	0.42	29.70	<0.05	<0.05	26.76
GKBH-08/S37	37.00	38.00	4.44	<0.05	23.91	<0.05	2.01	2.87	2.21	10.56	<0.05	<0.08	0.07	0.69	0.33	25.07	<0.05	<0.05	29.78
GKBH-08/S38	38.00	39.00	2.75	<0.05	37.64	<0.05	0.93	1.33	1.37	4.66	<0.05	<0.08	0.05	0.54	0.18	17.72	<0.05	<0.05	33.71
GKBH-08/S39	39.00	40.00	5.45	<0.05	23.11	<0.05	1.89	2.71	2.63	9.85	<0.05	<0.08	0.07	0.96	0.36	26.40	<0.05	<0.05	28.41
GKBH-08/S40	40.00	41.00	3.86	<0.05	34.71	<0.05	1.09	1.56	1.71	5.08	<0.05	<0.08	0.06	0.66	0.23	19.90	<0.05	<0.05	32.15
GKBH-08/S41	41.00	42.00	4.07	<0.05	26.12	<0.05	1.62	2.31	2.23	10.27	<0.05	<0.08	0.07	0.88	0.30	22.65	<0.05	<0.05	31.02
GKBH-08/S42	42.00	43.00	3.91	<0.05	26.83	<0.05	1.60	2.28	1.99	10.41	<0.05	<0.08	0.07	0.74	0.27	21.44	<0.05	<0.05	31.98
GKBH-08/S43	43.00	44.00	3.39	<0.05	37.74	<0.05	0.92	1.32	1.55	3.95	<0.05	<0.08	<0.05	0.80	0.21	17.82	<0.05	<0.05	33.12

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-08/S44	44.00	45.00	3.92	<0.05	32.22	<0.05	1.30	1.86	1.91	6.36	<0.05	<0.08	0.05	0.93	0.26	20.84	<0.05	<0.05	31.59
GKBH-08/S45	45.00	46.00	3.56	<0.05	35.98	<0.05	1.12	1.60	1.72	4.47	<0.05	<0.08	0.05	0.77	0.24	19.26	<0.05	<0.05	32.30
GKBH-08/S46	46.00	47.00	3.43	<0.05	36.31	<0.05	1.12	1.60	1.69	4.30	<0.05	<0.08	0.06	0.94	0.22	18.98	<0.05	<0.05	32.42
GKBH-08/S47	47.00	48.00	3.85	<0.05	34.35	<0.05	1.24	1.77	1.80	5.01	0.05	<0.08	0.06	0.60	0.25	20.16	<0.05	<0.05	32.06
GKBH-08/S48	48.00	49.00	5.11	<0.05	28.14	<0.05	1.73	2.48	2.29	6.65	0.05	<0.08	0.07	0.74	0.33	25.19	<0.05	<0.05	28.92
GKBH-08/S49	49.00	50.00	3.92	<0.05	31.29	<0.05	1.38	1.98	1.91	6.30	<0.05	<0.08	0.05	0.75	0.28	22.70	<0.05	<0.05	30.77
GKBH-09/S1	0.50	2.00	1.36	<0.05	31.01	0.06	0.99	1.41	0.29	12.99	0.05	<0.08	<0.05	0.09	0.11	13.31	<0.05	<0.05	39.23

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-09/S2	2.00	3.00	1.73	<0.05	29.06	<0.05	0.82	1.17	0.37	15.14	<0.05	0.09	0.05	0.09	0.14	11.55	<0.05	<0.05	40.52
GKBH-09/S3	3.00	4.00	2.96	<0.05	25.43	<0.05	1.08	1.55	0.99	12.32	<0.05	<0.08	<0.05	0.12	0.23	21.86	<0.05	<0.05	34.42
GKBH-09/S4	4.00	5.00	2.06	<0.05	24.63	<0.05	1.27	1.82	0.61	14.12	0.09	<0.08	<0.05	0.17	0.18	20.22	<0.05	<0.05	35.99
GKBH-09/S5	5.00	6.00	3.86	<0.05	23.76	<0.05	1.07	1.53	0.93	13.66	<0.05	<0.08	<0.05	0.12	0.23	20.48	<0.05	<0.05	35.26
GKBH-09/S6	6.00	7.00	3.96	<0.05	22.47	0.05	1.05	1.51	0.98	14.18	<0.05	<0.08	0.05	0.08	0.26	21.31	<0.05	<0.05	35.05
GKBH-09/S7	7.00	8.00	1.28	<0.05	30.14	0.08	0.70	1.00	0.33	15.28	<0.05	0.08	<0.05	0.13	0.12	10.18	<0.05	<0.05	41.29
GKBH-09/S8	8.00	9.00	0.82	<0.05	33.91	<0.05	0.67	0.96	0.30	12.50	0.05	<0.08	<0.05	0.12	0.09	10.81	<0.05	<0.05	40.31
GKBH-09/S9	9.00	10.00	2.93	<0.05	26.79	<0.05	0.78	1.11	0.66	14.19	<0.05	0.08	0.05	0.09	0.19	16.07	<0.05	<0.05	37.76

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-09/S10	10.00	11.00	1.92	<0.05	28.86	0.06	0.77	1.10	0.42	15.26	0.05	0.09	0.05	0.08	0.14	11.44	<0.05	<0.05	40.53
GKBH-09/S11	11.00	12.00	3.24	<0.05	26.58	<0.05	0.87	1.24	0.89	13.63	<0.05	<0.08	<0.05	0.08	0.23	16.84	<0.05	<0.05	37.10
GKBH-09/S12	12.00	13.00	3.19	<0.05	26.11	<0.05	1.04	1.49	1.03	12.48	<0.05	<0.08	<0.05	0.07	0.24	20.07	<0.05	<0.05	35.16
GKBH-09/S13	13.00	14.00	2.46	<0.05	29.02	<0.05	0.73	1.05	0.65	13.81	<0.05	<0.08	<0.05	0.11	0.18	13.67	<0.05	<0.05	38.85
GKBH-09/S14	14.00	15.00	3.76	<0.05	26.26	<0.05	1.04	1.49	1.08	12.22	<0.05	<0.08	<0.05	0.15	0.25	19.78	<0.05	<0.05	34.85
GKBH-09/S15	15.00	16.00	2.58	<0.05	28.91	<0.05	0.81	1.16	0.76	13.70	<0.05	<0.08	<0.05	0.12	0.19	13.81	<0.05	<0.05	38.59
GKBH-09/S16	16.00	17.00	2.71	<0.05	29.13	<0.05	0.80	1.14	0.79	13.33	<0.05	<0.08	0.06	0.11	0.19	14.05	<0.05	<0.05	38.38
GKBH-09/S17	17.00	18.00	2.50	<0.05	30.00	<0.05	0.73	1.04	0.64	13.49	<0.05	<0.08	0.06	0.21	0.17	12.71	<0.05	<0.05	39.04

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-09/S18	18.00	19.00	3.02	<0.05	28.14	<0.05	0.93	1.33	0.88	13.45	<0.05	<0.08	<0.05	0.22	0.19	14.91	<0.05	<0.05	37.68
GKBH-09/S19	19.00	20.00	1.35	<0.05	30.14	<0.05	0.60	0.86	0.31	15.93	<0.05	0.11	0.05	0.11	0.11	8.64	<0.05	<0.05	42.31
GKBH-09/S20	20.00	21.00	3.12	<0.05	25.60	0.06	0.89	1.27	0.77	15.22	<0.05	0.10	0.06	0.09	0.20	15.45	<0.05	<0.05	38.03
GKBH-09/S21	21.00	22.00	2.37	<0.05	30.18	<0.05	0.78	1.11	0.65	13.44	<0.05	<0.08	<0.05	0.21	0.16	12.90	<0.05	<0.05	38.79
GKBH-09/S22	22.00	23.00	1.35	<0.05	34.82	<0.05	0.70	1.00	0.32	11.67	<0.05	<0.08	<0.05	0.15	0.11	10.04	<0.05	<0.05	40.36
GKBH-09/S23	23.00	24.00	0.91	<0.05	41.24	0.07	0.53	0.76	0.30	7.95	<0.05	<0.08	<0.05	0.14	0.09	7.79	<0.05	<0.05	40.68
GKBH-09/S24	24.00	25.00	0.70	<0.05	35.90	<0.05	0.60	0.86	0.27	12.15	<0.05	<0.08	<0.05	0.15	0.09	8.49	<0.05	<0.05	41.26
GKBH-09/S25	25.00	26.00	2.81	<0.05	29.96	<0.05	0.79	1.13	0.84	12.00	<0.05	<0.08	<0.05	0.27	0.17	15.66	<0.05	<0.05	36.99

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-09/S26	26.00	27.00	2.90	<0.05	28.37	0.06	0.90	1.28	0.79	13.53	<0.05	0.09	<0.05	0.46	0.18	14.21	<0.05	<0.05	38.04
GKBH-09/S27	27.00	28.00	3.26	<0.05	25.79	<0.05	0.85	1.22	0.93	13.73	<0.05	<0.08	<0.05	0.34	0.21	17.83	<0.05	<0.05	36.50
GKBH-09/S28	28.00	29.00	1.93	<0.05	30.64	<0.05	0.74	1.06	0.53	14.84	<0.05	0.09	<0.05	0.31	0.13	9.31	<0.05	<0.05	41.03
GKBH-09/S29	29.00	30.00	2.48	<0.05	30.21	<0.05	0.73	1.04	0.60	13.90	0.06	0.10	<0.05	0.39	0.14	11.92	<0.05	<0.05	39.09
GKBH-09/S30	30.00	31.00	2.55	<0.05	30.53	<0.05	0.67	0.96	0.58	14.10	0.05	0.11	<0.05	0.21	0.13	10.26	<0.05	<0.05	40.45
GKBH-09/S31	31.00	32.00	1.74	<0.05	32.88	<0.05	0.63	0.90	0.52	13.51	<0.05	<0.08	<0.05	0.21	0.13	9.71	<0.05	<0.05	40.23
GKBH-09/S32	32.00	33.00	3.45	<0.05	25.91	<0.05	0.86	1.23	1.09	13.97	<0.05	0.08	<0.05	0.16	0.20	17.38	<0.05	<0.05	36.41
GKBH-09/S33	33.00	34.00	2.94	<0.05	24.67	<0.05	0.88	1.26	0.95	15.64	<0.05	0.09	<0.05	0.09	0.20	16.96	<0.05	<0.05	37.08

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-09/S34	34.00	35.00	4.54	<0.05	23.24	<0.05	1.11	1.59	1.43	13.67	<0.05	0.08	<0.05	0.09	0.26	21.20	<0.05	<0.05	33.78
GKBH-09/S35	35.00	36.00	1.82	<0.05	27.89	<0.05	0.68	0.97	0.52	16.33	0.06	0.11	<0.05	0.17	0.13	11.98	<0.05	<0.05	39.94
GKBH-09/S36	36.00	37.00	2.48	<0.05	27.05	<0.05	0.60	0.86	0.55	17.21	0.05	0.14	0.06	0.16	0.14	10.79	<0.05	<0.05	40.46
GKBH-09/S37	37.00	38.00	2.58	<0.05	25.19	0.07	0.78	1.12	0.73	17.57	0.05	0.11	<0.05	0.20	0.18	12.98	<0.05	<0.05	39.16
GKBH-09/S38	38.00	39.00	2.40	<0.05	25.35	<0.05	0.82	1.18	0.58	17.85	<0.05	0.13	<0.05	0.14	0.16	12.58	<0.05	<0.05	39.52
GKBH-09/S39	39.00	40.00	2.27	<0.05	25.99	<0.05	0.75	1.07	0.48	18.07	0.05	0.13	0.06	0.18	0.16	11.43	<0.05	<0.05	40.08
GKBH-09/S40	40.00	41.00	1.63	<0.05	27.22	<0.05	0.67	0.96	0.42	18.19	<0.05	0.11	0.06	0.17	0.13	9.95	<0.05	<0.05	41.08
GKBH-09/S41	41.00	42.00	2.13	<0.05	25.75	<0.05	0.75	1.07	0.57	17.75	<0.05	0.10	<0.05	0.07	0.16	12.43	<0.05	<0.05	39.85

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-09/S42	42.00	43.00	2.06	<0.05	29.50	<0.05	0.62	0.88	0.42	15.89	0.05	0.12	0.06	0.26	0.14	9.89	<0.05	<0.05	40.68
GKBH-09/S43	43.00	44.00	2.90	<0.05	25.45	0.05	0.89	1.27	0.81	16.06	<0.05	0.10	<0.05	0.14	0.19	14.52	<0.05	<0.05	38.41
GKBH-09/S44	44.00	45.00	2.30	<0.05	27.38	<0.05	0.69	0.98	0.56	15.89	0.05	0.11	<0.05	0.23	0.15	12.69	<0.05	<0.05	39.57
GKBH-09/S45	45.00	46.00	2.83	<0.05	25.10	<0.05	0.93	1.33	0.96	14.89	<0.05	<0.08	<0.05	0.18	0.22	17.45	<0.05	<0.05	36.88
GKBH-09/S46	46.00	47.00	3.12	<0.05	26.33	<0.05	0.79	1.13	0.78	15.43	<0.05	0.12	<0.05	0.15	0.19	14.46	<0.05	<0.05	38.14
GKBH-09/S47	47.00	48.00	3.30	<0.05	24.87	<0.05	1.07	1.53	1.21	14.12	<0.05	<0.08	0.06	0.19	0.25	19.08	<0.05	<0.05	35.29
GKBH-09/S48	48.00	49.00	2.49	<0.05	27.06	0.09	1.06	1.52	0.76	14.07	0.08	<0.08	<0.05	0.22	0.18	16.49	<0.05	<0.05	36.93
GKBH-09/S49	49.00	50.00	2.82	<0.05	26.94	0.08	0.82	1.17	0.63	15.74	0.05	0.11	<0.05	0.16	0.16	12.81	<0.05	<0.05	39.27

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-10/S1	0.50	2.00	2.06	<0.05	36.44	<0.05	0.64	0.92	0.27	8.11	<0.05	<0.08	<0.05	0.08	0.14	14.20	<0.05	<0.05	37.64
GKBH-10/S2	2.00	3.00	2.61	<0.05	29.47	0.06	0.67	0.96	0.30	14.03	0.06	0.09	<0.05	<0.05	0.17	13.31	<0.05	<0.05	38.85
GKBH-10/S3	3.00	4.00	2.30	<0.05	31.83	<0.05	0.74	1.06	0.32	12.89	<0.05	<0.08	0.06	<0.05	0.17	12.14	<0.05	<0.05	39.04
GKBH-10/S4	4.00	5.00	2.40	<0.05	30.97	<0.05	0.64	0.92	0.35	12.83	<0.05	<0.08	0.06	<0.05	0.18	14.02	<0.05	<0.05	38.09
GKBH-10/S5	5.00	6.00	1.96	<0.05	31.26	<0.05	0.69	0.99	0.27	12.33	0.07	<0.08	0.05	<0.05	0.15	15.06	<0.05	<0.05	37.73
GKBH-10/S6	6.00	7.00	2.40	<0.05	28.42	<0.05	0.71	1.01	0.33	14.15	<0.05	<0.08	0.05	<0.05	0.17	15.31	<0.05	<0.05	37.97
GKBH-10/S7	7.00	8.00	1.21	<0.05	30.81	<0.05	0.52	0.74	0.14	15.20	0.08	0.09	0.05	<0.05	0.10	10.89	<0.05	<0.05	40.61

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-10/S8	8.00	9.00	1.92	<0.05	29.19	0.05	0.55	0.79	0.22	14.75	0.06	0.08	0.05	<0.05	0.14	13.52	<0.05	<0.05	39.19
GKBH-10/S9	9.00	10.00	2.27	<0.05	31.80	<0.05	0.58	0.83	0.26	13.46	<0.05	<0.08	0.06	<0.05	0.16	11.71	<0.05	<0.05	39.29
GKBH-10/S10	10.00	11.00	2.09	<0.05	30.11	0.05	0.74	1.06	0.28	14.78	<0.05	<0.08	<0.05	<0.05	0.15	11.50	<0.05	<0.05	39.78
GKBH-10/S11	11.00	12.00	2.91	<0.05	26.55	0.07	0.99	1.42	0.35	14.81	0.06	0.11	<0.05	0.06	0.17	15.48	<0.05	<0.05	37.98
GKBH-10/S12	12.00	13.00	1.72	<0.05	30.59	<0.05	0.56	0.80	0.20	15.12	<0.05	0.10	<0.05	0.06	0.12	9.35	<0.05	<0.05	41.82
GKBH-10/S13	13.00	14.00	3.39	<0.05	26.73	<0.05	0.80	1.14	0.53	14.81	<0.05	0.08	<0.05	<0.05	0.18	14.76	<0.05	<0.05	38.19
GKBH-10/S14	14.00	15.00	1.85	<0.05	25.03	<0.05	1.20	1.72	0.32	12.60	0.11	<0.08	<0.05	<0.05	0.15	24.73	<0.05	<0.05	33.34
GKBH-10/S15	15.00	16.00	2.91	<0.05	26.42	<0.05	0.90	1.28	0.40	16.01	<0.05	0.10	0.05	<0.05	0.18	13.72	<0.05	<0.05	38.79

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-10/S16	16.00	17.00	2.55	<0.05	27.88	0.06	0.74	1.05	0.34	15.95	<0.05	0.09	<0.05	<0.05	0.16	12.04	<0.05	<0.05	39.75
GKBH-10/S17	17.00	18.00	2.05	<0.05	28.28	<0.05	0.72	1.03	0.32	15.25	<0.05	<0.08	<0.05	<0.05	0.14	13.06	<0.05	<0.05	39.65
GKBH-10/S18	18.00	19.00	2.51	<0.05	25.11	<0.05	0.76	1.09	0.39	15.72	<0.05	0.10	<0.05	<0.05	0.16	17.00	<0.05	<0.05	37.76
GKBH-10/S19	19.00	20.00	2.31	<0.05	26.82	<0.05	0.70	1.00	0.30	14.83	<0.05	<0.08	<0.05	<0.05	0.14	16.74	<0.05	<0.05	37.62
GKBH-10/S20	20.00	21.00	1.84	<0.05	27.68	<0.05	0.71	1.01	0.27	15.65	<0.05	<0.08	<0.05	<0.05	0.12	13.91	<0.05	<0.05	39.31
GKBH-10/S21	21.00	22.00	2.30	<0.05	27.50	<0.05	0.75	1.07	0.33	16.26	0.05	0.10	<0.05	<0.05	0.15	12.67	<0.05	<0.05	39.47
GKBH-10/S22	22.00	23.00	3.08	<0.05	24.19	<0.05	1.12	1.60	0.48	15.27	0.05	0.09	<0.05	0.05	0.17	18.17	<0.05	<0.05	36.75
GKBH-10/S23	23.00	24.00	2.17	<0.05	25.67	<0.05	0.86	1.23	0.32	17.20	0.05	0.10	<0.05	<0.05	0.15	13.68	<0.05	<0.05	39.31

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-10/S24	24.00	25.00	3.32	<0.05	22.69	<0.05	1.19	1.71	0.52	15.31	<0.05	0.09	<0.05	<0.05	0.20	20.41	<0.05	<0.05	35.61
GKBH-10/S25	25.00	26.00	3.44	<0.05	24.35	<0.05	1.14	1.63	0.57	13.91	<0.05	<0.08	0.07	<0.05	0.23	20.54	<0.05	<0.05	35.11
GKBH-10/S26	26.00	27.00	1.97	<0.05	29.64	<0.05	0.61	0.87	0.22	16.36	0.06	0.12	0.06	<0.05	0.13	9.70	<0.05	<0.05	40.78
GKBH-10/S27	27.00	28.00	2.17	<0.05	28.10	<0.05	0.63	0.89	0.28	17.25	0.06	0.10	<0.05	<0.05	0.14	10.22	<0.05	<0.05	40.65
GKBH-10/S28	28.00	29.00	2.46	<0.05	26.57	<0.05	0.67	0.96	0.32	17.73	0.06	0.13	<0.05	<0.05	0.17	10.92	<0.05	<0.05	40.56
GKBH-10/S29	29.00	30.00	2.53	<0.05	26.83	<0.05	0.68	0.98	0.31	17.40	0.06	0.11	<0.05	<0.05	0.15	11.21	<0.05	<0.05	40.31
GKBH-10/S30	30.00	31.00	2.90	<0.05	25.97	<0.05	0.76	1.08	0.37	17.33	0.06	0.11	<0.05	<0.05	0.19	12.54	<0.05	<0.05	39.32
GKBH-10/S31	31.00	32.00	3.08	<0.05	25.12	<0.05	0.87	1.24	0.40	17.27	0.06	0.12	<0.05	<0.05	0.18	13.32	<0.05	<0.05	39.09

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-10/S32	32.00	33.00	2.42	<0.05	27.03	<0.05	0.63	0.91	0.29	18.11	0.06	0.15	<0.05	<0.05	0.16	9.96	<0.05	<0.05	40.78
GKBH-10/S33	33.00	34.00	2.42	<0.05	26.11	<0.05	0.83	1.19	0.25	17.26	0.07	0.14	<0.05	<0.05	0.15	12.75	<0.05	<0.05	39.54
GKBH-10/S34	34.00	35.00	2.08	<0.05	28.02	<0.05	0.94	1.35	0.27	16.38	0.05	0.09	0.06	<0.05	0.15	10.37	<0.05	<0.05	41.12
GKBH-10/S35	35.00	36.00	2.46	<0.05	26.55	<0.05	0.84	1.20	0.39	16.62	0.05	0.10	<0.05	<0.05	0.17	11.89	<0.05	<0.05	40.45
GKBH-10/S36	36.00	37.00	3.08	<0.05	24.21	<0.05	1.10	1.57	0.52	15.61	<0.05	<0.08	<0.05	<0.05	0.22	16.78	<0.05	<0.05	37.78
GKBH-10/S37	37.00	38.00	3.39	<0.05	23.92	<0.05	1.10	1.58	0.52	15.58	0.05	0.09	<0.05	<0.05	0.22	16.59	<0.05	<0.05	37.94
GKBH-10/S38	38.00	39.00	3.12	<0.05	24.43	<0.05	1.05	1.51	0.53	15.47	<0.05	0.10	0.05	<0.05	0.20	16.63	<0.05	<0.05	37.86
GKBH-10/S39	39.00	40.00	2.57	<0.05	25.63	<0.05	1.01	1.44	0.50	15.84	<0.05	0.10	0.06	<0.05	0.19	14.87	<0.05	<0.05	38.68

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-10/S40	40.00	41.00	3.26	<0.05	23.80	0.07	1.12	1.60	0.59	15.45	<0.05	0.10	0.07	<0.05	0.21	17.39	<0.05	<0.05	37.39
GKBH-10/S41	41.00	42.00	2.61	<0.05	25.10	<0.05	0.90	1.29	0.49	16.05	0.06	0.10	<0.05	<0.05	0.16	14.87	<0.05	<0.05	39.15
GKBH-10/S42	42.00	43.00	2.75	<0.05	24.69	<0.05	1.08	1.54	0.61	15.56	0.07	0.09	<0.05	<0.05	0.18	16.11	<0.05	<0.05	38.26
GKBH-10/S43	43.00	44.00	2.58	<0.05	25.81	<0.05	1.08	1.55	0.64	16.18	<0.05	<0.08	<0.05	<0.05	0.17	13.38	<0.05	<0.05	39.45
GKBH-10/S44	44.00	45.00	2.51	<0.05	27.26	<0.05	0.89	1.27	0.41	16.61	0.06	0.11	<0.05	<0.05	0.17	10.84	<0.05	<0.05	40.64
GKBH-10/S45	45.00	46.00	1.83	<0.05	27.38	<0.05	0.62	0.89	0.44	18.06	0.05	0.10	<0.05	<0.05	0.14	9.08	<0.05	<0.05	41.91
GKBH-10/S46	46.00	47.00	2.78	<0.05	24.66	<0.05	0.84	1.21	0.76	17.26	0.05	0.10	<0.05	0.06	0.19	13.06	<0.05	<0.05	39.81
GKBH-10/S47	47.00	48.00	2.53	<0.05	25.53	<0.05	0.83	1.19	0.63	17.51	<0.05	0.09	<0.05	<0.05	0.16	11.94	<0.05	<0.05	40.26

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-10/S48	48.00	49.00	2.29	<0.05	25.47	<0.05	0.75	1.08	0.59	17.28	0.05	0.10	<0.05	0.17	0.16	12.52	<0.05	<0.05	40.21
GKBH-10/S49	49.00	50.00	3.40	<0.05	22.25	<0.05	1.36	1.95	1.07	15.04	<0.05	<0.08	<0.05	0.47	0.24	20.27	<0.05	<0.05	35.16
GKBH-11/S1	1.76	3.00	1.05	<0.05	31.35	0.05	0.33	0.47	0.11	18.99	0.08	0.16	<0.05	0.08	0.07	2.12	<0.05	<0.05	45.45
GKBH-11/S2	3.00	4.00	1.33	<0.05	27.43	<0.05	0.51	0.73	0.26	16.20	0.14	0.10	0.07	0.05	0.08	13.36	<0.05	<0.05	40.20
GKBH-11/S3	4.00	5.00	1.56	<0.05	26.68	0.09	0.49	0.71	0.29	16.69	0.12	0.12	0.06	<0.05	0.09	13.26	<0.05	<0.05	40.29
GKBH-11/S4	5.00	6.00	3.12	<0.05	22.85	<0.05	0.75	1.07	0.66	15.19	0.07	0.13	0.06	0.06	0.17	20.25	<0.05	<0.05	36.33
GKBH-11/S5	6.00	7.00	1.47	<0.05	25.68	0.06	0.66	0.94	0.38	15.99	0.06	<0.08	0.09	0.05	0.11	16.46	<0.05	<0.05	38.64

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-11/S6	7.00	8.00	2.86	<0.05	22.73	<0.05	0.75	1.08	0.59	15.27	0.06	0.13	0.08	<0.05	0.16	20.45	<0.05	<0.05	36.51
GKBH-11/S7	8.00	9.00	1.62	<0.05	24.94	<0.05	0.68	0.97	0.32	15.92	0.09	0.10	0.12	0.05	0.10	17.37	<0.05	<0.05	38.38
GKBH-11/S8	9.00	10.00	1.63	<0.05	25.42	<0.05	0.57	0.82	0.36	16.01	0.07	0.09	0.17	0.06	0.10	16.49	<0.05	<0.05	38.76
GKBH-11/S9	10.00	11.00	1.88	<0.05	25.99	<0.05	0.54	0.77	0.39	16.51	0.07	0.11	0.14	<0.05	0.11	14.22	<0.05	<0.05	39.71
GKBH-11/S10	11.00	12.00	1.52	<0.05	25.83	<0.05	0.58	0.84	0.39	16.12	0.06	<0.08	0.12	<0.05	0.11	15.91	<0.05	<0.05	38.94
GKBH-11/S11	12.00	13.00	1.88	<0.05	25.30	<0.05	0.62	0.89	0.39	16.26	0.05	0.10	0.10	0.05	0.12	16.18	<0.05	<0.05	38.65
GKBH-11/S12	14.00	15.00	2.28	<0.05	23.82	<0.05	0.62	0.89	0.41	15.82	0.06	0.13	0.09	<0.05	0.12	18.87	<0.05	<0.05	37.44
GKBH-11/S13	16.50	17.00	2.75	<0.05	22.45	<0.05	0.68	0.97	0.57	15.18	<0.05	0.09	0.11	<0.05	0.16	21.61	<0.05	<0.05	35.97

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-11/S14	18.00	19.00	2.10	<0.05	24.31	<0.05	0.58	0.83	0.50	15.83	0.05	0.10	0.11	<0.05	0.13	18.52	<0.05	<0.05	37.43
GKBH-11/S15	19.00	20.00	1.69	<0.05	25.92	<0.05	0.48	0.68	0.32	16.65	0.06	0.11	0.14	<0.05	0.09	14.09	<0.05	<0.05	40.14
GKBH-11/S16	20.00	21.00	1.68	<0.05	25.41	<0.05	0.47	0.67	0.33	16.29	0.06	0.12	0.12	<0.05	0.10	15.96	<0.05	<0.05	39.20
GKBH-11/S17	21.00	22.00	1.46	<0.05	25.69	<0.05	0.50	0.71	0.35	16.29	0.06	0.11	0.09	<0.05	0.11	16.37	<0.05	<0.05	38.69
GKBH-11/S18	22.00	23.00	2.24	<0.05	24.50	0.06	0.61	0.87	0.45	16.07	0.06	0.12	0.09	<0.05	0.13	17.17	<0.05	<0.05	38.21
GKBH-11/S19	23.00	24.00	1.92	<0.05	23.44	0.06	0.61	0.88	0.45	15.50	<0.05	0.08	<0.05	<0.05	0.11	16.85	<0.05	<0.05	40.61
GKBH-11/S20	24.00	25.00	2.21	<0.05	24.74	<0.05	0.54	0.78	0.41	16.27	0.06	0.14	<0.05	<0.05	0.11	15.80	<0.05	<0.05	39.35
GKBH-11/S21	25.00	26.00	2.20	<0.05	22.86	<0.05	0.74	1.06	0.54	15.09	0.05	0.09	0.07	0.06	0.15	21.90	<0.05	<0.05	35.88

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-11/S22	26.00	27.00	1.80	<0.05	25.26	<0.05	0.64	0.92	0.42	16.30	0.05	0.10	0.08	<0.05	0.11	16.62	<0.05	<0.05	38.27
GKBH-11/S23	27.00	28.00	2.36	<0.05	23.64	<0.05	0.71	1.02	0.59	15.67	<0.05	0.10	0.06	0.06	0.16	19.58	<0.05	<0.05	36.62
GKBH-11/S24	28.00	29.00	2.16	<0.05	24.93	<0.05	0.56	0.80	0.51	16.16	0.05	0.09	0.08	<0.05	0.15	17.09	<0.05	<0.05	37.90
GKBH-11/S25	29.00	30.00	2.51	<0.05	25.13	<0.05	0.63	0.90	0.53	16.51	0.05	0.11	0.08	<0.05	0.15	15.29	<0.05	<0.05	38.65
GKBH-11/S26	30.00	31.00	2.78	<0.05	23.40	<0.05	0.75	1.07	0.55	15.70	<0.05	0.09	0.07	<0.05	0.16	19.13	<0.05	<0.05	36.92
GKBH-11/S27	31.00	32.00	1.84	<0.05	25.44	<0.05	0.61	0.88	0.50	16.21	<0.05	<0.08	0.07	<0.05	0.12	16.14	<0.05	<0.05	38.62
GKBH-11/S28	39.00	40.00	1.27	<0.05	28.68	0.05	0.45	0.64	0.16	18.80	0.07	0.18	0.09	0.06	0.07	6.61	<0.05	<0.05	43.32
GKBH-11/S29	40.00	41.00	1.69	<0.05	25.48	0.09	1.10	1.58	0.31	17.39	0.14	0.13	0.07	0.06	0.09	13.22	<0.05	<0.05	39.76

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-11/S30	42.00	43.00	1.46	<0.05	26.09	<0.05	0.53	0.75	0.30	17.34	0.06	0.11	0.09	0.06	0.09	13.90	<0.05	<0.05	39.71
GKBH-11/S31	43.00	44.00	1.39	<0.05	25.47	<0.05	0.79	1.14	0.32	16.33	0.09	0.10	0.10	0.06	0.11	16.32	<0.05	<0.05	38.52
GKBH-11/S32	44.00	45.00	1.70	<0.05	25.02	<0.05	0.68	0.98	0.31	17.20	0.08	0.13	<0.05	0.05	0.10	14.86	<0.05	<0.05	39.49
GKBH-11/S33	45.00	46.00	2.33	<0.05	25.23	<0.05	0.78	1.11	0.47	17.41	0.06	0.12	0.06	0.05	0.16	13.16	<0.05	<0.05	39.81
GKBH-11/S34	46.00	47.00	1.67	<0.05	25.74	<0.05	0.82	1.18	0.34	16.59	0.08	0.10	<0.05	<0.05	0.11	14.96	<0.05	<0.05	39.12
GKBH-11/S35	47.00	48.00	1.55	<0.05	26.53	<0.05	0.55	0.79	0.28	17.79	0.05	0.13	0.07	0.05	0.09	12.06	<0.05	<0.05	40.58
GKBH-11/S36	48.00	49.00	1.49	<0.05	27.56	<0.05	0.54	0.78	0.22	18.42	0.06	0.14	0.06	0.06	0.08	9.04	<0.05	<0.05	42.05
GKBH-11/S37	49.00	50.00	1.16	<0.05	28.22	<0.05	0.50	0.72	0.21	18.44	0.06	0.13	0.05	0.06	0.08	8.24	<0.05	<0.05	42.59

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-12/S1	4.17	5.00	3.00	<0.05	23.40	<0.05	1.08	1.55	1.16	16.24	<0.05	0.08	0.09	0.05	0.22	17.41	<0.05	<0.05	36.72
GKBH-12/S2	5.00	6.00	2.09	<0.05	25.74	<0.05	0.98	1.40	0.88	17.13	<0.05	<0.08	0.08	0.06	0.19	13.87	<0.05	<0.05	38.90
GKBH-12/S3	6.00	7.00	2.85	<0.05	23.68	0.05	1.11	1.58	1.24	16.45	<0.05	<0.08	0.08	0.05	0.23	16.79	<0.05	<0.05	36.88
GKBH-12/S4	7.00	8.00	3.20	<0.05	22.24	<0.05	1.23	1.75	1.51	15.31	<0.05	<0.08	0.05	<0.05	0.26	20.90	<0.05	<0.05	34.60
GKBH-12/S5	8.00	9.00	4.67	<0.05	18.79	<0.05	1.62	2.32	2.23	13.67	<0.05	<0.08	0.05	0.65	0.33	27.30	<0.05	<0.05	29.90
GKBH-12/S6	9.00	10.00	4.06	<0.05	21.61	<0.05	1.51	2.16	1.90	13.23	<0.05	<0.08	0.06	0.72	0.29	24.48	<0.05	<0.05	31.41
GKBH-12/S7	10.00	11.00	3.82	<0.05	20.83	0.13	1.55	2.21	1.79	14.92	<0.05	<0.08	0.07	0.59	0.29	22.76	<0.05	<0.05	32.52

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-12/S8	11.00	12.00	3.40	<0.05	21.92	<0.05	1.33	1.90	1.63	15.31	<0.05	<0.08	0.07	0.41	0.27	20.99	<0.05	<0.05	33.98
GKBH-12/S9	12.00	13.00	3.61	<0.05	21.82	0.06	1.37	1.96	1.66	15.41	<0.05	<0.08	0.07	0.37	0.28	20.76	<0.05	<0.05	33.92
GKBH-12/S10	13.00	14.00	4.59	<0.05	19.87	<0.05	1.65	2.36	2.18	13.95	<0.05	<0.08	0.07	0.67	0.33	25.00	<0.05	<0.05	30.88
GKBH-12/S11	14.00	15.00	4.38	<0.05	20.77	<0.05	1.48	2.12	1.88	15.21	<0.05	<0.08	0.08	0.62	0.29	21.63	<0.05	<0.05	32.88
GKBH-12/S12	15.00	16.00	3.96	<0.05	21.75	<0.05	1.23	1.75	1.60	15.98	<0.05	<0.08	0.08	0.21	0.26	19.37	<0.05	<0.05	34.90
GKBH-12/S13	16.00	17.00	4.04	<0.05	21.60	0.05	1.36	1.94	1.67	15.83	0.06	<0.08	0.08	0.43	0.26	19.68	<0.05	<0.05	34.29
GKBH-12/S14	17.00	18.00	2.73	<0.05	24.79	<0.05	1.16	1.65	1.15	16.85	<0.05	<0.08	0.09	0.23	0.21	14.23	<0.05	<0.05	37.89
GKBH-12/S15	18.00	19.00	3.86	<0.05	21.97	<0.05	1.38	1.97	1.60	15.98	0.06	<0.08	0.08	0.29	0.26	18.97	<0.05	<0.05	34.86

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-12/S16	19.00	20.00	4.11	<0.05	21.45	<0.05	1.54	2.21	1.66	15.42	0.07	<0.08	0.08	0.45	0.29	20.24	<0.05	<0.05	33.90
GKBH-12/S17	20.00	21.00	3.67	<0.05	21.70	<0.05	1.48	2.12	1.61	15.38	0.06	<0.08	0.07	0.30	0.27	20.61	<0.05	<0.05	34.13
GKBH-12/S18	21.00	22.00	4.66	<0.05	19.63	<0.05	1.74	2.48	1.97	14.80	0.07	<0.08	0.07	0.58	0.32	23.61	<0.05	<0.05	31.72
GKBH-12/S19	22.00	23.00	4.07	<0.05	21.38	<0.05	1.41	2.02	1.51	15.94	0.08	0.10	0.07	0.21	0.27	19.88	<0.05	<0.05	34.45
GKBH-12/S20	23.00	24.00	4.08	<0.05	21.22	<0.05	1.37	1.96	1.68	15.46	<0.05	<0.08	0.07	0.29	0.28	21.20	<0.05	<0.05	33.60
GKBH-12/S21	24.00	25.00	4.13	<0.05	20.72	<0.05	1.48	2.12	1.67	15.27	0.06	<0.08	0.06	0.42	0.28	22.18	<0.05	<0.05	32.98
GKBH-12/S22	25.00	26.00	3.65	<0.05	21.53	<0.05	1.46	2.09	1.58	15.30	0.07	<0.08	0.06	0.39	0.26	21.13	<0.05	<0.05	33.85
GKBH-12/S23	26.00	27.00	3.47	<0.05	21.85	<0.05	1.30	1.86	1.60	15.37	<0.05	<0.08	0.06	0.45	0.26	21.05	<0.05	<0.05	33.90

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-12/S24	27.00	28.00	3.82	<0.05	21.33	0.08	1.45	2.08	1.67	15.34	<0.05	<0.08	0.07	0.58	0.26	21.17	<0.05	<0.05	33.52
GKBH-12/S25	28.00	29.00	3.17	<0.05	23.74	<0.05	1.13	1.61	1.21	16.68	<0.05	0.09	0.08	0.24	0.21	15.77	<0.05	<0.05	37.12
GKBH-12/S26	29.00	30.00	4.12	<0.05	21.52	<0.05	1.47	2.10	1.54	15.97	0.06	<0.08	0.07	0.39	0.26	19.26	<0.05	<0.05	34.58
GKBH-12/S27	30.00	31.00	4.35	<0.05	21.12	<0.05	1.44	2.07	1.77	15.29	<0.05	<0.08	0.09	0.29	0.28	21.10	<0.05	<0.05	33.50
GKBH-12/S28	31.00	32.00	4.76	<0.05	19.69	<0.05	1.56	2.23	1.91	14.88	0.06	<0.08	0.07	0.23	0.30	23.55	<0.05	<0.05	32.20
GKBH-12/S29	32.00	33.00	4.81	<0.05	19.82	<0.05	1.61	2.31	2.07	14.78	0.07	<0.08	0.08	0.18	0.31	23.22	<0.05	<0.05	32.27
GKBH-12/S30	33.00	34.00	2.63	<0.05	25.54	<0.05	1.28	1.83	1.22	16.80	<0.05	<0.08	0.07	0.13	0.19	12.83	<0.05	<0.05	39.11
GKBH-12/S31	34.00	35.00	4.27	<0.05	20.54	<0.05	1.55	2.21	1.85	15.07	0.05	<0.08	0.07	0.06	0.29	22.55	<0.05	<0.05	32.94

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-12/S32	35.00	36.00	3.78	<0.05	21.96	<0.05	1.39	1.99	1.71	15.34	0.06	<0.08	0.07	0.05	0.27	20.17	<0.05	<0.05	34.52
GKBH-12/S33	36.00	37.00	4.75	<0.05	20.20	<0.05	1.55	2.22	1.95	14.93	<0.05	<0.08	0.07	<0.05	0.31	22.81	<0.05	<0.05	32.59
GKBH-12/S34	37.00	38.00	3.49	<0.05	23.40	<0.05	1.26	1.81	1.40	16.15	<0.05	<0.08	0.07	0.16	0.23	16.54	<0.05	<0.05	36.59
GKBH-12/S35	38.00	39.00	3.05	<0.05	25.05	<0.05	1.12	1.60	1.25	16.69	0.05	0.08	0.08	0.06	0.20	13.35	<0.05	<0.05	38.52
GKBH-12/S36	39.00	40.00	3.84	<0.05	21.88	0.05	1.41	2.02	1.65	15.39	0.06	<0.08	0.08	0.06	0.27	20.15	<0.05	<0.05	34.49
GKBH-12/S37	40.00	41.00	1.59	<0.05	28.64	<0.05	0.80	1.14	0.80	17.34	0.06	0.09	0.09	0.12	0.13	7.77	<0.05	<0.05	42.19
GKBH-12/S38	41.00	42.00	3.28	<0.05	24.23	<0.05	1.13	1.62	1.55	16.39	0.05	<0.08	0.07	0.15	0.22	14.78	<0.05	<0.05	37.55
GKBH-12/S39	42.00	43.00	4.64	<0.05	20.54	<0.05	1.52	2.18	2.11	14.72	0.06	<0.08	0.08	0.42	0.31	22.15	<0.05	<0.05	32.71

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-12/S40	43.00	44.00	4.52	<0.05	20.79	<0.05	1.44	2.05	1.98	14.91	0.05	<0.08	0.07	0.48	0.29	21.40	<0.05	<0.05	33.35
GKBH-12/S41	44.00	45.00	4.83	<0.05	19.85	<0.05	1.48	2.11	2.09	14.61	<0.05	<0.08	0.07	0.39	0.31	23.40	<0.05	<0.05	32.20
GKBH-12/S42	45.00	46.00	4.51	<0.05	20.76	0.06	1.60	2.28	1.99	14.96	0.07	<0.08	0.07	0.52	0.28	21.22	<0.05	<0.05	33.24
GKBH-12/S43	46.00	47.00	5.00	<0.05	19.90	<0.05	1.62	2.31	2.29	13.92	<0.05	<0.08	0.07	0.51	0.33	24.10	<0.05	<0.05	31.45
GKBH-12/S44	47.00	48.00	4.98	<0.05	19.94	<0.05	1.53	2.19	2.29	13.88	<0.05	<0.08	0.07	0.31	0.34	24.12	<0.05	<0.05	31.78
GKBH-12/S45	48.00	49.00	3.81	<0.05	22.22	<0.05	1.41	2.02	1.88	15.23	<0.05	<0.08	0.08	0.35	0.28	19.62	<0.05	<0.05	34.38
GKBH-12/S46	49.00	50.00	3.97	<0.05	21.68	<0.05	1.42	2.04	1.99	14.95	<0.05	<0.08	0.08	0.37	0.29	20.68	<0.05	<0.05	33.83

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-13/S1	0.92	2.00	4.81	<0.05	27.74	<0.05	1.57	2.25	1.79	8.14	<0.05	<0.08	0.05	0.14	0.29	24.20	<0.05	<0.05	30.47
GKBH-13/S2	2.00	3.00	4.38	<0.05	29.87	<0.05	1.43	2.04	1.65	7.60	<0.05	<0.08	<0.05	0.18	0.27	22.25	<0.05	<0.05	31.54
GKBH-13/S3	3.00	4.00	5.16	<0.05	21.57	<0.05	1.83	2.62	1.92	10.80	<0.05	<0.08	0.06	0.15	0.31	28.94	<0.05	<0.05	28.32
GKBH-13/S4	4.00	5.00	5.13	<0.05	28.87	<0.05	1.52	2.17	1.96	6.03	<0.05	<0.08	0.05	0.23	0.31	26.49	<0.05	<0.05	28.61
GKBH-13/S5	5.00	6.00	4.74	<0.05	27.82	<0.05	1.50	2.15	1.87	7.47	<0.05	<0.08	0.05	0.21	0.31	25.64	<0.05	<0.05	29.61
GKBH-13/S6	6.00	7.00	4.06	<0.05	33.57	<0.05	1.15	1.65	1.55	5.83	<0.05	<0.08	0.07	0.20	0.24	19.70	<0.05	<0.05	33.05
GKBH-13/S7	7.00	8.00	4.78	<0.05	19.86	<0.05	1.80	2.58	1.91	12.57	<0.05	<0.08	0.07	0.18	0.33	27.13	<0.05	<0.05	30.54
GKBH-13/S8	8.00	9.00	6.35	<0.05	19.79	<0.05	1.78	2.55	2.11	11.65	<0.05	<0.08	0.08	0.29	0.36	27.26	<0.05	<0.05	29.43

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-13/S9	9.00	10.00	5.63	<0.05	23.11	<0.05	1.60	2.28	2.21	9.48	<0.05	<0.08	0.07	0.48	0.36	26.87	<0.05	<0.05	29.45
GKBH-13/S10	10.00	11.00	5.62	<0.05	21.40	<0.05	1.54	2.20	2.22	10.89	<0.05	<0.08	0.07	0.26	0.35	26.93	<0.05	<0.05	29.98
GKBH-13/S11	11.00	12.00	4.74	<0.05	25.51	0.10	1.57	2.24	1.87	10.16	0.06	<0.08	0.07	0.31	0.29	23.27	<0.05	<0.05	31.38
GKBH-13/S12	12.00	13.00	6.09	<0.05	20.32	<0.05	1.71	2.45	2.20	11.29	<0.05	<0.08	0.08	0.21	0.37	27.31	<0.05	<0.05	29.59
GKBH-13/S13	13.00	14.00	4.88	<0.05	25.57	<0.05	1.50	2.14	1.76	9.49	<0.05	<0.08	0.07	0.25	0.33	24.08	<0.05	<0.05	31.37
GKBH-13/S14	14.00	15.00	4.66	<0.05	32.16	<0.05	1.16	1.66	1.77	5.64	<0.05	<0.08	0.06	0.41	0.27	21.82	<0.05	<0.05	31.47
GKBH-13/S15	15.00	16.00	3.68	<0.05	36.01	<0.05	0.95	1.35	1.78	2.76	<0.05	<0.08	<0.05	0.58	0.26	21.86	<0.05	<0.05	31.62
GKBH-13/S16	16.00	17.00	3.66	<0.05	36.55	<0.05	0.90	1.28	1.59	2.70	<0.05	<0.08	<0.05	0.53	0.23	21.15	<0.05	<0.05	32.22

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-13/S17	17.00	18.00	4.69	<0.05	26.49	0.06	1.33	1.90	2.06	9.03	<0.05	<0.08	0.06	0.60	0.29	23.38	<0.05	<0.05	31.42
GKBH-13/S18	18.00	19.00	3.06	<0.05	36.22	<0.05	0.82	1.18	1.50	5.65	<0.05	<0.08	<0.05	0.52	0.20	16.85	<0.05	<0.05	34.73
GKBH-13/S19	19.00	20.00	3.49	<0.05	30.43	<0.05	1.11	1.59	1.62	7.30	<0.05	<0.08	0.05	0.11	0.25	22.56	<0.05	<0.05	32.56
GKBH-13/S20	20.00	21.00	4.26	<0.05	26.34	<0.05	1.35	1.92	2.03	8.88	<0.05	<0.08	0.06	0.21	0.31	24.61	<0.05	<0.05	31.32
GKBH-13/S21	21.00	22.00	4.37	<0.05	24.23	<0.05	1.35	1.93	1.89	10.48	<0.05	<0.08	0.06	0.70	0.28	24.56	<0.05	<0.05	31.42
GKBH-13/S22	22.00	23.00	3.41	<0.05	31.35	<0.05	1.16	1.67	1.80	7.16	<0.05	<0.08	0.05	0.82	0.24	20.71	<0.05	<0.05	32.74
GKBH-13/S23	23.00	24.00	2.01	<0.05	42.75	<0.05	0.64	0.91	1.17	2.58	<0.05	<0.08	<0.05	0.67	0.15	13.09	<0.05	<0.05	36.59
GKBH-13/S24	24.00	25.00	3.23	<0.05	34.16	<0.05	0.87	1.25	1.58	7.37	<0.05	<0.08	0.06	0.70	0.20	16.38	<0.05	<0.05	35.03

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-13/S25	25.00	26.00	3.56	<0.05	38.04	<0.05	0.83	1.19	1.41	3.99	<0.05	<0.08	0.08	0.63	0.20	15.94	<0.05	<0.05	34.92
GKBH-13/S26	26.00	27.00	4.08	<0.05	32.58	<0.05	1.19	1.70	1.70	7.04	<0.05	<0.08	0.08	0.56	0.26	18.68	<0.05	<0.05	33.28
GKBH-13/S27	27.00	28.00	4.40	<0.05	29.06	<0.05	1.34	1.91	1.69	8.78	0.06	<0.08	0.07	0.50	0.26	20.59	<0.05	<0.05	32.61
GKBH-13/S28	28.00	29.00	3.81	<0.05	32.41	<0.05	1.12	1.60	1.68	6.49	<0.05	<0.08	0.07	0.46	0.26	20.64	<0.05	<0.05	32.52
GKBH-13/S29	29.00	30.00	5.15	<0.05	23.68	<0.05	1.70	2.43	1.80	11.04	0.06	<0.08	0.07	0.67	0.28	23.57	<0.05	<0.05	31.18
GKBH-13/S30	30.00	31.00	4.67	<0.05	29.72	<0.05	1.46	2.09	1.93	6.33	<0.05	<0.08	0.06	0.71	0.30	23.95	<0.05	<0.05	30.17
GKBH-13/S31	31.00	32.00	4.51	<0.05	32.67	<0.05	1.35	1.94	1.84	3.84	<0.05	<0.08	0.06	0.75	0.29	23.77	<0.05	<0.05	30.31
GKBH-13/S32	32.00	33.00	4.49	<0.05	30.58	<0.05	1.26	1.80	1.74	6.31	<0.05	<0.08	0.06	0.36	0.28	23.14	<0.05	<0.05	31.17

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-13/S33	33.00	34.00	5.41	<0.05	24.97	<0.05	1.60	2.29	2.24	8.52	<0.05	<0.08	0.07	0.54	0.35	26.44	<0.05	<0.05	29.12
GKBH-13/S34	34.00	35.00	3.94	<0.05	32.23	<0.05	1.25	1.79	1.66	6.27	<0.05	<0.08	0.05	0.49	0.25	21.07	<0.05	<0.05	32.18
GKBH-13/S35	35.00	36.00	4.32	<0.05	34.11	<0.05	1.29	1.84	1.77	3.78	<0.05	<0.08	0.06	0.40	0.26	22.09	<0.05	<0.05	31.30
GKBH-13/S36	36.00	37.00	5.02	<0.05	25.26	<0.05	1.77	2.53	2.09	8.89	<0.05	<0.08	0.06	0.71	0.34	25.26	<0.05	<0.05	29.80
GKBH-13/S37	37.00	38.00	5.53	<0.05	24.37	0.09	1.67	2.39	2.20	8.65	<0.05	<0.08	0.07	0.25	0.34	27.06	<0.05	<0.05	29.03
GKBH-13/S38	38.00	39.00	5.21	<0.05	29.46	<0.05	1.46	2.09	2.18	5.97	<0.05	<0.08	0.07	0.34	0.33	24.63	<0.05	<0.05	29.66
GKBH-13/S39	39.00	40.00	4.99	<0.05	30.76	<0.05	1.35	1.93	1.97	5.81	<0.05	<0.08	0.07	0.24	0.30	23.39	<0.05	<0.05	30.49
GKBH-13/S40	40.00	41.00	5.51	<0.05	30.49	<0.05	1.41	2.02	2.11	3.90	<0.05	<0.08	0.06	0.42	0.32	26.12	<0.05	<0.05	28.99

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-13/S41	41.00	42.00	5.73	<0.05	29.95	<0.05	1.48	2.11	2.30	3.85	<0.05	<0.08	0.06	0.46	0.33	26.41	<0.05	<0.05	28.73
GKBH-13/S42	42.00	43.00	4.74	<0.05	27.23	<0.05	1.54	2.20	1.80	8.82	<0.05	<0.08	0.06	0.28	0.30	22.88	<0.05	<0.05	31.61
GKBH-13/S43	43.00	44.00	4.87	<0.05	31.04	<0.05	1.43	2.05	1.90	5.51	<0.05	<0.08	0.06	0.66	0.30	22.93	<0.05	<0.05	30.63
GKBH-13/S44	44.00	45.00	4.84	<0.05	32.97	<0.05	1.32	1.89	1.98	3.52	<0.05	<0.08	0.06	0.50	0.30	23.53	<0.05	<0.05	30.37
GKBH-13/S45	45.00	46.00	5.70	<0.05	29.47	<0.05	1.61	2.30	2.29	3.82	<0.05	<0.08	0.06	0.63	0.35	27.00	<0.05	<0.05	28.32
GKBH-13/S46	46.00	47.00	5.58	<0.05	29.01	<0.05	1.61	2.30	2.33	3.66	<0.05	<0.08	0.07	0.52	0.35	27.19	<0.05	<0.05	28.94
GKBH-13/S47	47.00	48.00	4.53	<0.05	34.13	<0.05	1.33	1.91	2.01	2.36	<0.05	<0.08	0.06	1.12	0.29	23.75	<0.05	<0.05	29.80
GKBH-13/S48	48.00	49.00	5.27	<0.05	28.61	<0.05	1.56	2.23	2.37	3.76	<0.05	<0.08	0.05	1.06	0.33	28.64	<0.05	<0.05	27.60

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-13/S49	49.00	50.00	6.49	<0.05	21.50	<0.05	2.11	3.02	2.70	7.95	<0.05	<0.08	0.06	0.74	0.40	29.97	<0.05	<0.05	27.09
GKBH-14/S1	0.5	2.00	5.33	<0.05	28.35	<0.05	1.65	2.37	2.20	5.66	<0.05	<0.08	0.07	0.28	0.33	26.32	<0.05	<0.05	29.03
GKBH-14/S2	2.00	3.00	4.98	<0.05	31.09	<0.05	1.46	2.09	2.19	3.52	<0.05	<0.08	0.06	0.29	0.32	26.04	<0.05	<0.05	29.38
GKBH-14/S3	3.00	4.00	4.23	<0.05	33.82	0.06	1.25	1.79	1.82	2.89	<0.05	<0.08	0.05	0.27	0.26	22.90	<0.05	<0.05	31.88
GKBH-14/S4	4.00	5.00	4.45	<0.05	32.10	<0.05	1.45	2.08	1.77	5.90	<0.05	<0.08	0.07	0.69	0.27	20.96	<0.05	<0.05	31.66
GKBH-14/S5	5.00	6.00	4.24	<0.05	34.88	<0.05	1.20	1.71	1.93	2.95	<0.05	<0.08	0.06	0.33	0.27	22.28	<0.05	<0.05	31.31
GKBH-14/S6	6.00	7.00	4.19	<0.05	34.64	<0.05	1.24	1.77	1.94	3.22	<0.05	<0.08	0.06	0.32	0.28	22.11	<0.05	<0.05	31.42

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-14/S7	7.00	8.00	5.58	<0.05	30.22	<0.05	1.53	2.18	2.32	3.73	<0.05	<0.08	0.07	0.38	0.33	26.41	<0.05	<0.05	28.71
GKBH-14/S8	8.00	9.00	4.44	<0.05	34.73	<0.05	1.21	1.73	2.10	2.36	<0.05	<0.08	0.06	0.58	0.28	23.27	<0.05	<0.05	30.41
GKBH-14/S9	9.00	10.00	4.98	<0.05	29.80	0.12	1.47	2.10	2.12	5.62	<0.05	<0.08	0.06	0.65	0.28	24.15	<0.05	<0.05	30.07
GKBH-14/S10	10.00	11.00	6.39	<0.05	21.79	<0.05	1.95	2.79	2.55	8.90	<0.05	<0.08	0.07	0.66	0.37	28.22	<0.05	<0.05	28.21
GKBH-14/S11	11.00	12.00	5.56	<0.05	28.20	0.14	1.71	2.45	2.57	3.52	<0.05	<0.08	<0.05	0.87	0.34	28.95	<0.05	<0.05	27.31
GKBH-14/S12	12.00	13.00	4.08	<0.05	36.07	<0.05	1.23	1.76	2.01	2.50	<0.05	<0.08	0.05	1.04	0.26	20.83	<0.05	<0.05	31.36
GKBH-14/S13	13.00	14.00	3.85	<0.05	37.22	<0.05	1.06	1.51	1.83	1.57	<0.05	<0.08	<0.05	1.14	0.23	21.33	<0.05	<0.05	31.26
GKBH-14/S14	14.00	15.00	3.65	<0.05	37.41	<0.05	1.06	1.51	1.79	1.56	<0.05	<0.08	<0.05	1.11	0.22	21.23	<0.05	<0.05	31.43

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-14/S15	15.00	16.00	3.12	<0.05	39.56	<0.05	0.87	1.24	1.56	1.30	<0.05	<0.08	<0.05	0.67	0.20	19.48	<0.05	<0.05	32.81
GKBH-14/S16	16.00	17.00	3.26	<0.05	39.66	<0.05	0.90	1.28	1.57	1.58	<0.05	<0.08	<0.05	0.78	0.20	18.32	<0.05	<0.05	33.27
GKBH-14/S17	17.00	18.00	2.56	<0.05	40.22	<0.05	1.11	1.58	1.38	1.67	<0.05	<0.08	0.05	1.59	0.17	17.14	<0.05	<0.05	33.62
GKBH-14/S18	18.00	19.00	5.29	<0.05	25.58	<0.05	1.68	2.41	2.42	7.60	<0.05	<0.08	0.07	0.82	0.32	26.09	<0.05	<0.05	29.37
GKBH-14/S19	19.00	20.00	4.24	<0.05	31.94	<0.05	1.28	1.82	1.92	5.84	<0.05	<0.08	0.06	0.76	0.25	21.07	<0.05	<0.05	32.04
GKBH-14/S20	20.00	21.00	3.66	<0.05	37.84	<0.05	0.96	1.37	1.55	2.88	<0.05	<0.08	0.05	0.83	0.21	17.75	<0.05	<0.05	33.80
GKBH-14/S21	21.00	22.00	3.52	<0.05	36.55	<0.05	1.06	1.52	1.80	2.68	<0.05	<0.08	<0.05	0.96	0.25	20.19	<0.05	<0.05	32.43
GKBH-14/S22	22.00	23.00	4.47	<0.05	34.50	<0.05	1.28	1.83	1.92	3.00	<0.05	<0.08	0.05	1.01	0.28	21.71	<0.05	<0.05	31.18

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-14/S23	23.00	24.00	3.82	<0.05	34.30	<0.05	1.30	1.87	1.79	3.43	<0.05	<0.08	<0.05	1.05	0.26	21.45	<0.05	<0.05	31.92
GKBH-14/S24	24.00	25.00	4.53	<0.05	29.22	0.13	1.53	2.18	2.05	6.26	<0.05	<0.08	0.05	0.84	0.29	23.69	<0.05	<0.05	30.72
GKBH-14/S25	25.00	26.00	6.50	<0.05	25.60	<0.05	1.98	2.84	2.50	6.17	<0.05	<0.08	0.06	1.14	0.37	27.27	<0.05	<0.05	27.48
GKBH-14/S26	26.00	27.00	4.14	<0.05	34.52	<0.05	1.37	1.96	1.67	3.71	<0.05	<0.08	0.06	0.74	0.25	20.84	<0.05	<0.05	32.04
GKBH-14/S27	27.00	28.00	4.08	<0.05	33.29	<0.05	1.22	1.74	1.69	5.71	<0.05	<0.08	0.06	0.68	0.25	19.63	<0.05	<0.05	32.81
GKBH-14/S28	28.00	29.00	4.68	<0.05	33.27	<0.05	1.36	1.94	2.10	3.30	<0.05	<0.08	0.06	0.79	0.29	22.71	<0.05	<0.05	30.80
GKBH-14/S29	29.00	30.00	4.84	<0.05	32.03	<0.05	1.49	2.14	2.27	3.62	<0.05	<0.08	0.07	0.52	0.33	24.03	<0.05	<0.05	30.10
GKBH-14/S30	30.00	31.00	5.78	<0.05	24.06	<0.05	1.84	2.63	2.53	7.21	<0.05	<0.08	0.07	0.49	0.38	29.38	<0.05	<0.05	27.42

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-14/S31	31.00	32.00	8.44	<0.05	12.49	<0.05	2.73	3.90	3.40	10.63	<0.05	<0.08	0.09	0.73	0.52	35.78	<0.05	<0.05	23.94
GKBH-14/S32	32.00	33.00	8.29	<0.05	12.80	<0.05	2.72	3.89	3.35	10.88	<0.05	<0.08	0.08	0.72	0.52	35.06	<0.05	<0.05	24.33
GKBH-14/S33	33.00	34.00	6.40	<0.05	18.96	<0.05	2.26	3.24	2.61	10.02	<0.05	<0.08	0.07	0.77	0.40	29.68	<0.05	<0.05	27.79
GKBH-14/S34	34.00	35.00	6.05	<0.05	17.35	<0.05	2.47	3.53	2.68	10.78	0.06	<0.08	0.06	1.09	0.39	30.55	<0.05	<0.05	27.42
GKBH-14/S35	35.00	36.00	6.19	<0.05	17.54	<0.05	2.38	3.41	2.60	11.42	0.05	<0.08	0.07	0.78	0.39	29.14	<0.05	<0.05	28.38
GKBH-14/S36	36.00	37.00	4.01	<0.05	32.57	<0.05	1.23	1.77	1.75	5.60	<0.05	<0.08	0.05	0.85	0.24	21.10	<0.05	<0.05	31.97
GKBH-14/S37	37.00	38.00	6.03	<0.05	20.15	<0.05	2.04	2.92	2.58	10.74	<0.05	<0.08	0.06	0.74	0.35	27.05	<0.05	<0.05	29.30
GKBH-14/S38	38.00	39.00	4.71	<0.05	28.97	<0.05	1.55	2.22	2.16	6.25	<0.05	<0.08	0.07	0.80	0.31	24.30	<0.05	<0.05	30.18

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-14/S39	39.00	40.00	4.34	<0.05	30.57	<0.05	1.44	2.06	1.99	6.40	<0.05	<0.08	0.06	0.73	0.29	22.37	<0.05	<0.05	31.14
GKBH-14/S40	40.00	41.00	3.63	<0.05	37.37	<0.05	1.09	1.55	1.76	2.36	<0.05	<0.08	0.05	0.80	0.25	19.87	<0.05	<0.05	32.32
GKBH-14/S41	41.00	42.00	4.42	<0.05	35.23	<0.05	1.13	1.61	1.86	2.10	<0.05	<0.08	<0.05	0.73	0.27	23.21	<0.05	<0.05	30.48
GKBH-14/S42	42.00	43.00	4.27	<0.05	33.26	<0.05	1.33	1.90	1.99	2.67	<0.05	<0.08	0.05	1.08	0.29	24.69	<0.05	<0.05	29.77
GKBH-14/S43	43.00	44.00	4.11	<0.05	34.48	<0.05	1.23	1.77	1.93	2.65	<0.05	<0.08	0.05	0.75	0.27	23.29	<0.05	<0.05	30.67
GKBH-14/S44	44.00	45.00	4.00	<0.05	35.25	<0.05	1.16	1.66	1.82	2.98	<0.05	<0.08	0.05	0.92	0.26	21.27	<0.05	<0.05	31.74
GKBH-14/S45	45.00	46.00	6.48	<0.05	23.25	<0.05	1.92	2.75	2.70	7.10	<0.05	<0.08	0.07	0.53	0.39	29.90	<0.05	<0.05	26.77
GKBH-14/S46	46.00	47.00	5.21	<0.05	30.77	<0.05	1.50	2.15	2.27	3.04	<0.05	<0.08	0.05	0.81	0.30	27.12	<0.05	<0.05	28.21

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-14/S47	47.00	48.00	3.56	<0.05	38.17	<0.05	0.96	1.38	1.71	1.89	<0.05	<0.08	<0.05	0.70	0.23	19.74	<0.05	<0.05	32.55
GKBH-14/S48	48.00	49.00	3.26	<0.05	39.13	<0.05	0.97	1.38	1.57	1.98	<0.05	<0.08	<0.05	0.87	0.22	18.20	<0.05	<0.05	33.29
GKBH-14/S49	49.00	50.00	4.89	<0.05	31.68	<0.05	1.46	2.08	2.28	2.80	<0.05	<0.08	0.06	0.88	0.33	26.24	<0.05	<0.05	28.70
GKBH-15/S1	2.2	3.00	1.47	<0.05	31.25	<0.05	0.86	1.23	0.16	14.17	0.11	0.11	<0.05	0.06	0.09	11.25	<0.05	<0.05	40.01
GKBH-15/S2	3.00	4.00	1.88	<0.05	28.26	<0.05	0.56	0.81	0.23	16.10	<0.05	0.13	0.06	0.06	0.14	11.86	<0.05	<0.05	40.40
GKBH-15/S3	4.00	5.00	1.82	<0.05	29.92	<0.05	0.62	0.88	0.27	15.05	<0.05	0.08	<0.05	0.05	0.13	11.39	<0.05	<0.05	40.29
GKBH-15/S4	5.00	6.00	1.74	<0.05	30.91	0.08	0.87	1.24	0.28	14.19	<0.05	0.08	<0.05	0.05	0.13	11.38	<0.05	<0.05	39.83

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-15/S5	6.00	7.00	1.70	<0.05	27.36	<0.05	1.00	1.43	0.27	15.81	<0.05	0.10	<0.05	0.06	0.13	12.99	<0.05	<0.05	40.02
GKBH-15/S6	7.00	8.00	2.96	<0.05	26.24	<0.05	0.89	1.27	0.40	13.55	0.05	0.09	<0.05	0.07	0.16	18.17	<0.05	<0.05	36.95
GKBH-15/S7	8.00	9.00	1.90	<0.05	28.86	<0.05	1.04	1.48	0.29	13.75	0.08	<0.08	<0.05	0.08	0.13	14.99	<0.05	<0.05	38.30
GKBH-15/S8	9.00	10.00	2.53	<0.05	28.19	<0.05	1.01	1.44	0.46	12.66	0.06	0.09	<0.05	0.15	0.17	17.52	<0.05	<0.05	36.67
GKBH-15/S9	10.00	11.00	2.92	<0.05	30.09	<0.05	0.81	1.16	0.57	12.43	<0.05	<0.08	<0.05	0.24	0.19	14.63	<0.05	<0.05	37.59
GKBH-15/S10	11.00	12.00	2.07	<0.05	33.54	<0.05	0.74	1.06	0.57	11.20	<0.05	<0.08	<0.05	0.36	0.16	12.81	<0.05	<0.05	38.09
GKBH-15/S11	12.00	13.00	2.92	<0.05	27.49	<0.05	0.85	1.21	0.82	13.63	<0.05	<0.08	<0.05	0.39	0.20	16.07	<0.05	<0.05	37.09
GKBH-15/S12	13.00	14.00	2.15	<0.05	29.78	<0.05	0.76	1.09	0.65	13.65	<0.05	<0.08	<0.05	0.31	0.16	13.62	<0.05	<0.05	38.43

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-15/S13	14.00	15.00	2.51	<0.05	25.67	<0.05	0.81	1.16	0.74	15.02	<0.05	<0.08	<0.05	0.27	0.18	16.87	<0.05	<0.05	37.39
GKBH-15/S14	15.00	16.00	2.97	<0.05	24.80	<0.05	0.82	1.17	0.92	15.52	<0.05	<0.08	<0.05	0.24	0.19	16.63	<0.05	<0.05	37.35
GKBH-15/S15	16.00	17.00	2.25	<0.05	26.01	<0.05	0.73	1.04	0.61	16.49	<0.05	0.10	<0.05	0.12	0.15	14.06	<0.05	<0.05	39.07
GKBH-15/S16	17.00	18.00	3.41	<0.05	22.66	<0.05	1.04	1.49	1.26	15.25	<0.05	<0.08	<0.05	0.18	0.23	20.11	<0.05	<0.05	35.25
GKBH-15/S17	18.00	19.00	3.28	<0.05	24.90	0.05	0.88	1.26	0.90	15.62	0.06	0.10	0.05	0.24	0.19	15.78	<0.05	<0.05	37.57
GKBH-15/S18	19.00	20.00	1.81	<0.05	27.53	<0.05	0.54	0.77	0.47	17.49	<0.05	0.11	<0.05	0.26	0.13	9.93	<0.05	<0.05	41.37
GKBH-15/S19	20.00	21.00	1.11	<0.05	29.08	<0.05	0.43	0.61	0.28	18.47	0.05	0.12	<0.05	0.08	0.10	6.98	<0.05	<0.05	43.04
GKBH-15/S20	21.00	22.00	1.87	<0.05	26.77	<0.05	0.59	0.85	0.51	18.25	<0.05	0.10	0.05	0.09	0.15	9.87	<0.05	<0.05	41.38

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-15/S21	22.00	23.00	1.92	<0.05	26.01	<0.05	0.70	1.00	0.59	18.14	<0.05	0.09	<0.05	0.06	0.15	11.23	<0.05	<0.05	40.70
GKBH-15/S22	23.00	24.00	2.22	<0.05	26.29	0.09	0.75	1.07	0.53	17.96	0.06	0.12	<0.05	0.16	0.15	10.59	<0.05	<0.05	40.73
GKBH-15/S23	24.00	25.00	2.20	<0.05	27.03	<0.05	0.74	1.06	0.62	17.27	0.05	0.10	<0.05	0.12	0.16	11.18	<0.05	<0.05	40.13
GKBH-15/S24	25.00	26.00	1.34	<0.05	29.19	<0.05	0.44	0.63	0.28	18.59	0.06	0.13	<0.05	0.09	0.10	6.72	<0.05	<0.05	42.79
GKBH-15/S25	26.00	27.00	2.02	<0.05	27.26	<0.05	0.64	0.92	0.46	18.13	0.07	0.13	0.05	0.17	0.14	8.80	<0.05	<0.05	41.79
GKBH-15/S26	27.00	28.00	2.04	<0.05	27.82	0.07	0.66	0.94	0.41	17.92	0.06	0.10	<0.05	0.13	0.15	8.58	<0.05	<0.05	41.73
GKBH-15/S27	28.00	29.00	2.09	<0.05	26.07	0.11	0.83	1.19	0.59	17.81	0.05	0.10	<0.05	0.11	0.16	11.47	<0.05	<0.05	40.22
GKBH-15/S28	29.00	30.00	1.42	<0.05	28.65	0.08	0.52	0.74	0.27	18.12	0.06	0.13	<0.05	0.27	0.11	8.11	<0.05	<0.05	41.99

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-15/S29	30.00	31.00	2.78	<0.05	26.06	<0.05	0.85	1.22	0.66	15.74	0.06	0.10	<0.05	0.13	0.18	14.41	<0.05	<0.05	38.59
GKBH-15/S30	31.00	32.00	2.71	<0.05	26.71	<0.05	0.85	1.22	0.48	15.21	<0.05	0.10	<0.05	0.10	0.17	14.76	<0.05	<0.05	38.41
GKBH-15/S31	32.00	33.00	3.18	<0.05	27.24	<0.05	1.04	1.49	0.59	14.02	<0.05	<0.08	<0.05	0.09	0.21	15.19	<0.05	<0.05	37.79
GKBH-15/S32	33.00	34.00	2.20	<0.05	28.66	<0.05	0.73	1.04	0.36	15.28	<0.05	0.12	0.05	0.23	0.16	11.97	<0.05	<0.05	39.85
GKBH-15/S33	34.00	35.00	2.96	<0.05	25.70	0.06	1.04	1.49	0.52	14.76	<0.05	<0.08	<0.05	0.05	0.21	16.30	<0.05	<0.05	37.78
GKBH-15/S34	35.00	36.00	3.66	<0.05	25.68	<0.05	1.08	1.54	0.62	13.68	<0.05	<0.08	<0.05	<0.05	0.24	17.94	<0.05	<0.05	36.40
GKBH-15/S35	36.00	37.00	2.66	<0.05	26.89	<0.05	1.02	1.46	0.49	15.52	<0.05	0.09	<0.05	0.19	0.17	13.09	<0.05	<0.05	39.33
GKBH-15/S36	37.00	38.00	2.35	<0.05	27.63	<0.05	1.13	1.61	0.51	14.73	<0.05	0.09	<0.05	0.10	0.14	13.54	<0.05	<0.05	39.16

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-15/S37	38.00	39.00	3.08	<0.05	25.28	<0.05	1.49	2.13	0.70	12.63	<0.05	<0.08	<0.05	0.06	0.22	20.98	<0.05	<0.05	34.78
GKBH-15/S38	39.00	40.00	2.53	<0.05	23.87	<0.05	1.55	2.22	0.50	12.03	0.09	<0.08	<0.05	0.06	0.19	25.49	<0.05	<0.05	32.90
GKBH-15/S39	40.00	41.00	2.07	<0.05	28.93	0.05	1.01	1.44	0.31	14.02	<0.05	0.09	<0.05	0.06	0.14	13.80	<0.05	<0.05	39.01
GKBH-15/S40	41.00	42.00	2.48	<0.05	24.58	<0.05	1.07	1.53	0.33	15.91	0.07	0.10	0.05	0.05	0.17	16.44	<0.05	<0.05	38.24
GKBH-15/S41	42.00	43.00	2.97	<0.05	23.21	0.05	0.72	1.03	0.42	15.29	0.07	0.09	0.06	0.05	0.21	20.00	<0.05	<0.05	36.55
GKBH-15/S42	43.00	44.00	2.05	<0.05	26.40	<0.05	0.59	0.84	0.25	16.48	0.06	0.12	<0.05	0.06	0.14	13.45	<0.05	<0.05	40.05
GKBH-15/S43	44.00	45.00	2.73	<0.05	23.63	<0.05	0.76	1.08	0.32	15.56	0.06	0.12	0.05	0.05	0.20	18.87	<0.05	<0.05	37.28
GKBH-15/S44	45.00	46.00	3.32	<0.05	22.70	<0.05	0.82	1.17	0.41	15.23	0.06	0.11	0.05	0.05	0.21	20.29	<0.05	<0.05	36.36

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-15/S45	46.00	47.00	2.13	<0.05	25.21	<0.05	0.73	1.04	0.26	16.22	0.06	0.13	0.07	0.06	0.17	15.56	<0.05	<0.05	39.05
GKBH-15/S46	47.00	48.00	2.37	<0.05	25.36	<0.05	0.77	1.10	0.31	17.29	<0.05	0.11	0.06	<0.05	0.17	13.08	<0.05	<0.05	40.02
GKBH-15/S47	48.00	49.00	0.93	<0.05	27.76	<0.05	0.63	0.90	0.13	18.21	0.07	0.11	0.05	<0.05	0.09	9.81	<0.05	<0.05	41.86
GKBH-15/S48	49.00	50.00	1.09	<0.05	28.85	<0.05	0.46	0.66	0.13	18.69	0.06	0.12	0.08	0.05	0.09	6.75	<0.05	<0.05	43.39
GKBH-16/S1	0	1.00	2.00	<0.05	38.71	<0.05	0.92	1.31	0.27	3.34	0.06	<0.08	<0.05	0.07	0.14	19.96	<0.05	<0.05	34.05
GKBH-16/S2	1.00	2.00	2.40	<0.05	35.29	<0.05	0.78	1.12	0.34	7.80	<0.05	<0.08	0.06	0.07	0.16	15.74	<0.05	<0.05	36.95
GKBH-16/S3	2.00	3.00	1.63	<0.05	34.14	<0.05	0.80	1.14	0.25	12.24	<0.05	<0.08	0.05	0.06	0.12	9.98	<0.05	<0.05	40.23

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-16/S4	3.00	4.00	2.79	<0.05	26.56	<0.05	0.88	1.26	0.39	14.97	<0.05	0.11	0.05	0.05	0.18	14.91	<0.05	<0.05	38.65
GKBH-16/S5	4.00	5.00	2.23	<0.05	26.96	0.05	0.70	1.00	0.27	15.22	<0.05	0.11	<0.05	0.05	0.15	14.56	<0.05	<0.05	39.30
GKBH-16/S6	5.00	6.00	2.04	<0.05	27.25	<0.05	0.80	1.14	0.31	14.85	0.06	<0.08	<0.05	0.05	0.15	15.16	<0.05	<0.05	38.83
GKBH-16/S7	6.00	7.00	0.87	<0.05	33.01	<0.05	0.49	0.70	0.11	16.09	<0.05	0.10	<0.05	0.05	0.09	5.62	<0.05	<0.05	43.23
GKBH-16/S8	7.00	8.00	1.12	<0.05	32.25	<0.05	0.48	0.69	0.15	15.55	0.05	0.09	<0.05	0.06	0.10	7.74	<0.05	<0.05	42.13
GKBH-16/S9	8.00	9.00	2.83	<0.05	25.69	<0.05	1.07	1.53	0.47	14.93	<0.05	0.09	<0.05	<0.05	0.19	16.35	<0.05	<0.05	37.77
GKBH-16/S10	9.00	10.00	2.22	<0.05	27.63	<0.05	0.71	1.01	0.32	15.11	<0.05	0.12	<0.05	0.05	0.14	13.73	<0.05	<0.05	39.56
GKBH-16/S11	10.00	11.00	2.34	<0.05	27.64	<0.05	0.78	1.11	0.28	14.73	<0.05	0.14	<0.05	0.06	0.13	14.18	<0.05	<0.05	39.25

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-16/S12	11.00	12.00	0.71	<0.05	33.74	0.11	0.86	1.22	0.12	12.41	0.07	<0.08	<0.05	0.06	0.07	11.46	<0.05	<0.05	39.93
GKBH-16/S13	12.00	13.00	1.69	<0.05	33.11	<0.05	0.66	0.95	0.23	11.68	<0.05	<0.08	<0.05	<0.05	0.11	13.25	<0.05	<0.05	38.76
GKBH-16/S14	13.00	14.00	2.93	<0.05	28.40	<0.05	0.88	1.26	0.43	12.64	0.06	0.09	<0.05	<0.05	0.16	17.15	<0.05	<0.05	36.77
GKBH-16/S15	14.00	15.00	2.34	<0.05	29.58	<0.05	0.69	0.99	0.37	13.57	<0.05	<0.08	<0.05	<0.05	0.15	14.01	<0.05	<0.05	38.77
GKBH-16/S16	15.00	16.00	3.03	<0.05	24.57	<0.05	1.07	1.53	0.55	15.02	<0.05	0.08	<0.05	<0.05	0.20	17.58	<0.05	<0.05	37.29
GKBH-16/S17	16.00	17.00	2.23	<0.05	26.31	0.07	0.84	1.21	0.42	15.49	<0.05	<0.08	<0.05	0.14	0.15	14.81	<0.05	<0.05	39.02
GKBH-16/S18	17.00	18.00	2.11	<0.05	26.17	0.05	0.92	1.32	0.39	13.89	0.07	0.09	<0.05	0.23	0.14	18.47	<0.05	<0.05	37.01
GKBH-16/S19	18.00	19.00	2.44	<0.05	26.32	<0.05	0.93	1.33	0.37	16.27	<0.05	0.11	<0.05	<0.05	0.13	12.62	<0.05	<0.05	40.25

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-16/S20	19.00	20.00	1.49	<0.05	26.99	<0.05	0.77	1.10	0.29	16.33	<0.05	<0.08	<0.05	<0.05	0.12	13.48	<0.05	<0.05	39.99
GKBH-16/S21	20.00	21.00	1.46	<0.05	28.05	<0.05	0.54	0.78	0.20	17.64	0.06	0.12	<0.05	<0.05	0.10	9.56	<0.05	<0.05	41.93
GKBH-16/S22	21.00	22.00	2.14	<0.05	26.52	<0.05	0.79	1.13	0.30	16.51	0.05	0.11	<0.05	<0.05	0.13	12.70	<0.05	<0.05	40.29
GKBH-16/S23	22.00	23.00	2.89	<0.05	24.29	<0.05	1.02	1.46	0.41	15.97	0.05	0.11	<0.05	<0.05	0.17	16.20	<0.05	<0.05	38.35
GKBH-16/S24	23.00	24.00	2.99	<0.05	21.90	0.08	1.20	1.72	0.50	15.05	0.06	0.09	<0.05	<0.05	0.20	21.85	<0.05	<0.05	35.49
GKBH-16/S25	24.00	25.00	0.97	<0.05	29.52	0.05	0.36	0.51	0.10	19.17	0.06	0.16	0.05	0.05	0.07	5.04	<0.05	<0.05	44.26
GKBH-16/S26	25.00	26.00	1.11	<0.05	29.04	<0.05	0.38	0.54	0.12	19.09	0.06	0.18	0.06	0.05	0.08	5.64	<0.05	<0.05	43.99
GKBH-16/S27	26.00	27.00	0.71	<0.05	28.64	<0.05	0.42	0.60	0.13	18.49	<0.05	0.12	<0.05	0.05	0.09	6.44	<0.05	<0.05	44.59

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-16/S28	27.00	28.00	1.14	<0.05	28.33	<0.05	0.48	0.69	0.16	18.56	0.08	0.13	<0.05	0.07	0.09	7.33	<0.05	<0.05	43.30
GKBH-16/S29	28.00	29.00	1.16	<0.05	27.89	0.05	0.55	0.79	0.18	18.26	0.07	0.12	0.05	0.05	0.10	8.81	<0.05	<0.05	42.48
GKBH-16/S30	29.00	30.00	0.83	<0.05	26.24	0.05	0.77	1.11	0.12	15.97	0.11	0.09	<0.05	<0.05	0.07	16.71	<0.05	<0.05	38.62
GKBH-16/S31	30.00	31.00	0.77	<0.05	25.67	<0.05	0.81	1.16	0.09	16.44	0.12	0.11	<0.05	<0.05	0.07	16.59	<0.05	<0.05	38.86
GKBH-16/S32	31.00	32.00	1.06	<0.05	27.41	0.09	0.54	0.77	0.13	18.17	0.07	0.13	0.05	<0.05	0.08	10.04	<0.05	<0.05	41.94
GKBH-16/S33	32.00	33.00	1.57	<0.05	29.48	<0.05	0.48	0.68	0.15	17.83	0.06	0.14	0.06	<0.05	0.09	6.48	<0.05	<0.05	43.37
GKBH-16/S34	33.00	34.00	1.40	<0.05	29.39	<0.05	0.44	0.62	0.15	18.37	0.06	0.13	0.06	<0.05	0.09	6.46	<0.05	<0.05	43.19
GKBH-16/S35	34.00	35.00	1.66	<0.05	29.27	0.05	0.41	0.59	0.15	18.50	0.06	0.15	0.07	0.05	0.09	5.85	<0.05	<0.05	43.51

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-16/S36	35.00	36.00	1.12	<0.05	30.23	<0.05	0.45	0.64	0.17	17.99	0.06	0.11	0.06	<0.05	0.09	5.94	<0.05	<0.05	43.49
GKBH-16/S37	36.00	37.00	1.26	<0.05	29.55	0.05	0.40	0.58	0.14	18.10	0.06	0.16	0.07	0.06	0.09	6.67	<0.05	<0.05	43.21
GKBH-16/S38	37.00	38.00	1.83	<0.05	28.11	0.08	0.63	0.90	0.27	17.48	0.06	0.11	<0.05	<0.05	0.14	9.00	<0.05	<0.05	41.93
GKBH-16/S39	38.00	39.00	1.35	<0.05	29.75	<0.05	0.54	0.77	0.19	18.66	0.06	0.12	<0.05	<0.05	0.10	5.49	<0.05	<0.05	43.38
GKBH-16/S40	39.00	40.00	2.32	<0.05	26.25	<0.05	0.87	1.24	0.32	17.67	0.05	0.13	0.06	<0.05	0.16	10.44	<0.05	<0.05	41.28
GKBH-16/S41	40.00	41.00	1.77	<0.05	29.13	<0.05	0.56	0.81	0.32	17.67	0.05	0.13	0.06	<0.05	0.16	10.44	<0.05	<0.05	41.28
GKBH-16/S42	41.00	42.00	1.36	<0.05	29.29	<0.05	0.52	0.74	0.18	18.04	0.06	0.12	<0.05	<0.05	0.11	7.33	<0.05	<0.05	42.64
GKBH-16/S43	42.00	43.00	2.19	<0.05	26.07	<0.05	0.78	1.11	0.27	17.20	0.07	0.13	<0.05	<0.05	0.14	12.42	<0.05	<0.05	40.27

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-16/S44	43.00	44.00	2.64	<0.05	25.51	<0.05	1.16	1.65	0.41	16.26	0.06	0.12	0.07	<0.05	0.18	13.56	<0.05	<0.05	39.46
GKBH-16/S45	44.00	45.00	2.10	<0.05	25.18	0.06	0.91	1.30	0.33	16.39	0.06	0.13	0.06	<0.05	0.17	14.43	<0.05	<0.05	39.75
GKBH-16/S46	45.00	46.00	1.88	<0.05	25.25	<0.05	0.80	1.14	0.27	17.23	0.05	0.11	<0.05	<0.05	0.14	13.49	<0.05	<0.05	40.31
GKBH-16/S47	46.00	47.00	1.90	<0.05	26.59	<0.05	0.72	1.03	0.26	17.68	0.05	0.11	<0.05	<0.05	0.13	10.82	<0.05	<0.05	41.30
GKBH-16/S48	47.00	48.00	2.37	<0.05	28.13	0.06	0.75	1.07	0.35	16.15	0.05	0.09	<0.05	<0.05	0.18	11.08	<0.05	<0.05	40.40
GKBH-16/S49	48.00	49.00	2.32	<0.05	27.78	<0.05	0.76	1.08	0.32	16.54	0.05	0.12	<0.05	<0.05	0.16	10.74	<0.05	<0.05	40.78
GKBH-16/S50	49.00	50.00	2.62	<0.05	26.98	<0.05	0.89	1.27	0.36	16.62	0.05	0.12	<0.05	<0.05	0.18	11.31	<0.05	<0.05	40.35

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-17/S1	2.82	3.44	4.06	<0.05	20.02	<0.05	1.48	2.11	1.86	15.52	<0.05	<0.08	0.18	0.06	0.29	22.01	<0.05	<0.05	33.76
GKBH-17/S2	3.44	4.00	3.48	<0.05	20.70	<0.05	1.23	1.76	1.55	16.10	0.05	<0.08	0.11	0.06	0.27	21.10	<0.05	<0.05	34.71
GKBH-17/S3	4.00	5.00	4.19	<0.05	18.95	<0.05	1.31	1.87	2.10	15.55	0.05	<0.08	0.07	<0.05	0.31	23.99	<0.05	<0.05	32.80
GKBH-17/S4	5.00	6.00	2.27	<0.05	23.15	<0.05	0.97	1.39	1.15	17.06	<0.05	0.09	0.12	0.13	0.19	16.80	<0.05	<0.05	37.56
GKBH-17/S5	6.00	7.00	4.88	<0.05	17.99	<0.05	1.07	1.54	2.53	15.56	0.06	<0.08	0.09	<0.05	0.22	25.20	<0.05	<0.05	31.85
GKBH-17/S6	7.00	8.00	4.35	<0.05	19.10	<0.05	1.23	1.76	1.94	14.46	0.06	<0.08	0.11	0.33	0.25	24.79	<0.05	<0.05	32.79
GKBH-17/S7	8.00	9.00	3.56	<0.05	21.03	<0.05	1.07	1.52	1.52	16.13	0.05	<0.08	0.10	0.25	0.25	20.46	<0.05	<0.05	35.03
GKBH-17/S8	9.00	10.00	3.68	<0.05	21.49	<0.05	1.06	1.51	1.49	16.31	0.05	<0.08	0.08	0.09	0.26	19.30	<0.05	<0.05	35.64

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-17/S9	10.00	11.00	4.68	<0.05	19.24	<0.05	1.40	2.00	1.77	15.67	0.05	<0.08	0.14	0.14	0.30	22.66	<0.05	<0.05	33.25
GKBH-17/S10	11.00	12.00	4.54	<0.05	21.10	<0.05	1.41	2.01	1.13	14.41	<0.05	<0.08	0.12	<0.05	0.29	21.35	<0.05	<0.05	34.85
GKBH-17/S11	12.00	13.00	3.63	<0.05	23.64	<0.05	1.26	1.81	0.70	16.57	<0.05	0.11	0.17	<0.05	0.24	14.99	<0.05	<0.05	38.02
GKBH-17/S12	13.00	14.00	2.26	<0.05	26.16	<0.05	1.13	1.61	0.56	17.55	<0.05	0.12	0.20	<0.05	0.19	10.86	<0.05	<0.05	40.35
GKBH-17/S13	14.00	15.00	3.01	<0.05	24.66	0.06	1.10	1.57	0.56	17.19	0.06	0.13	0.18	<0.05	0.21	12.93	<0.05	<0.05	39.40
GKBH-17/S14	15.00	16.00	0.88	<0.05	31.06	<0.05	0.52	0.74	0.21	18.51	0.07	0.12	0.54	0.06	0.11	4.11	<0.05	<0.05	43.54
GKBH-17/S15	16.00	17.00	1.22	<0.05	31.04	<0.05	0.48	0.69	0.18	17.90	0.07	0.14	<0.05	0.06	0.09	4.76	<0.05	<0.05	43.75
GKBH-17/S16	17.00	18.00	0.35	<0.05	30.73	<0.05	0.50	0.72	0.15	19.22	0.06	0.11	<0.05	0.06	0.09	3.53	<0.05	<0.05	44.90

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-17/S17	18.00	19.00	1.28	<0.05	27.95	<0.05	0.67	0.95	0.24	18.45	0.06	0.12	<0.05	0.06	0.13	7.98	<0.05	<0.05	42.72
GKBH-17/S18	19.00	20.00	1.11	<0.05	28.47	0.07	0.78	1.12	0.26	18.78	0.06	0.14	<0.05	0.05	0.11	6.62	<0.05	<0.05	43.17
GKBH-17/S19	20.00	21.00	1.17	<0.05	29.52	<0.05	0.52	0.75	0.20	18.83	0.07	0.15	<0.05	0.05	0.11	5.19	<0.05	<0.05	43.89
GKBH-17/S20	21.00	22.00	1.28	<0.05	28.56	<0.05	0.59	0.84	0.23	18.94	0.07	0.14	<0.05	0.06	0.10	6.25	<0.05	<0.05	43.45
GKBH-17/S21	22.00	23.00	0.79	<0.05	29.54	<0.05	0.56	0.80	0.14	19.21	0.07	0.14	0.07	0.06	0.08	4.52	<0.05	<0.05	44.53
GKBH-17/S22	23.00	24.00	0.70	<0.05	30.72	<0.05	0.50	0.71	0.11	19.66	0.07	0.14	0.10	0.06	0.09	2.47	<0.05	<0.05	45.13
GKBH-17/S23	24.00	25.00	0.38	<0.05	31.05	0.06	0.48	0.68	0.07	19.79	0.06	0.16	0.09	0.06	0.07	1.86	<0.05	<0.05	45.67
GKBH-17/S24	25.00	26.00	0.65	<0.05	31.23	0.07	0.51	0.73	0.06	19.99	0.07	0.19	0.13	0.07	0.07	0.79	<0.05	<0.05	45.96

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-17/S25	26.00	27.00	0.62	<0.05	31.03	<0.05	0.46	0.65	0.10	19.22	0.07	0.14	0.08	0.06	0.09	2.84	<0.05	<0.05	45.07
GKBH-17/S26	27.00	28.00	0.80	<0.05	32.20	<0.05	0.43	0.61	0.08	18.09	0.08	0.14	0.07	0.06	0.07	2.90	<0.05	<0.05	44.86
GKBH-17/S27	28.00	29.00	0.64	<0.05	28.34	<0.05	0.62	0.89	0.26	18.33	0.05	0.11	0.05	0.06	0.10	8.54	<0.05	<0.05	42.59
GKBH-17/S28	29.00	30.00	1.40	<0.05	26.28	<0.05	0.84	1.20	0.38	17.19	0.06	0.08	0.07	0.05	0.15	13.07	<0.05	<0.05	40.02
GKBH-17/S29	30.00	31.00	3.76	<0.05	21.98	<0.05	1.21	1.74	0.87	15.87	<0.05	0.08	0.17	<0.05	0.27	19.36	<0.05	<0.05	35.78
GKBH-17/S30	31.00	32.00	1.30	<0.05	26.42	<0.05	0.82	1.17	0.32	17.79	0.06	0.13	0.08	0.06	0.11	11.90	<0.05	<0.05	40.62
GKBH-17/S31	32.00	33.00	4.21	<0.05	20.45	<0.05	1.62	2.31	1.66	14.33	<0.05	<0.08	0.09	<0.05	0.27	21.91	<0.05	<0.05	34.62
GKBH-17/S32	33.00	34.00	3.28	<0.05	21.05	<0.05	1.18	1.69	1.39	16.18	0.07	<0.08	0.07	0.37	0.23	20.93	<0.05	<0.05	34.62

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-17/S33	34.00	35.00	4.12	<0.05	19.52	<0.05	1.35	1.93	1.88	15.72	<0.05	<0.08	0.08	0.78	0.29	22.50	<0.05	<0.05	33.06
GKBH-17/S34	35.00	36.00	3.09	<0.05	21.94	<0.05	1.11	1.59	1.42	16.41	0.05	<0.08	0.13	0.66	0.20	18.95	<0.05	<0.05	35.46
GKBH-17/S35	36.00	37.00	8.76	<0.05	9.91	0.06	1.65	2.36	4.00	12.71	0.05	<0.08	0.08	0.85	0.30	38.36	<0.05	<0.05	22.56
GKBH-17/S36	37.00	38.00	4.86	<0.05	18.22	<0.05	1.34	1.91	2.04	14.13	0.06	<0.08	0.13	0.62	0.24	26.37	<0.05	<0.05	31.34
GKBH-17/S37	38.00	39.00	4.34	<0.05	18.96	<0.05	1.35	1.93	1.88	14.23	<0.05	<0.08	0.05	0.73	0.31	25.37	<0.05	<0.05	32.06
GKBH-17/S38	39.00	40.00	4.88	<0.05	18.11	<0.05	1.49	2.13	2.14	14.01	0.05	<0.08	0.09	0.50	0.32	26.58	<0.05	<0.05	31.13
GKBH-17/S39	40.00	41.00	6.07	<0.05	16.24	<0.05	1.50	2.15	2.70	13.46	<0.05	<0.08	0.07	0.65	0.37	28.90	<0.05	<0.05	29.32
GKBH-17/S40	41.00	42.00	5.23	<0.05	17.48	<0.05	1.42	2.03	2.32	13.67	0.05	<0.08	0.07	0.45	0.35	28.01	<0.05	<0.05	30.29

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-17/S41	42.00	43.00	6.25	<0.05	14.06	<0.05	1.66	2.38	2.85	12.69	<0.05	<0.08	0.08	0.56	0.34	30.26	<0.05	<0.05	30.48
GKBH-17/S42	43.00	44.00	5.36	<0.05	18.68	<0.05	1.33	1.90	2.18	14.19	<0.05	<0.08	0.13	<0.05	0.32	25.03	<0.05	<0.05	32.04
GKBH-17/S43	44.00	45.00	5.17	<0.05	18.36	<0.05	1.44	2.06	2.60	13.73	<0.05	<0.08	0.12	<0.05	0.35	26.20	<0.05	<0.05	31.31
GKBH-17/S44	45.00	46.00	2.31	<0.05	24.87	<0.05	0.90	1.29	1.36	16.94	<0.05	<0.08	0.19	0.05	0.18	14.58	<0.05	<0.05	38.08
GKBH-17/S45	46.00	47.00	8.07	<0.05	12.28	<0.05	1.57	2.25	4.16	13.22	<0.05	<0.08	0.07	0.18	0.23	34.38	<0.05	<0.05	25.10
GKBH-17/S46	47.00	48.00	3.07	<0.05	23.02	<0.05	1.17	1.67	1.29	16.36	0.08	0.09	0.09	0.23	0.20	17.15	<0.05	<0.05	36.69
GKBH-17/S47	48.00	49.00	3.36	<0.05	22.01	<0.05	1.43	2.05	1.75	15.82	0.07	<0.08	0.12	0.75	0.26	18.91	<0.05	<0.05	34.86
GKBH-17/S48	49.00	50.00	4.69	<0.05	19.50	<0.05	1.49	2.12	2.18	14.42	0.06	<0.08	0.10	0.50	0.32	23.33	<0.05	<0.05	32.73

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-18/S1	3.44	4.00	3.46	<0.05	22.36	<0.05	1.13	1.62	1.36	15.82	<0.05	<0.08	0.08	0.48	0.25	18.74	<0.05	<0.05	35.70
GKBH-18/S2	4.00	5.00	1.13	<0.05	29.49	<0.05	0.65	0.93	0.09	18.67	0.06	0.14	0.07	0.06	0.09	5.09	<0.05	<0.05	44.15
GKBH-18/S3	5.00	6.00	1.09	<0.05	28.16	<0.05	0.69	0.99	0.17	17.97	0.06	0.13	<0.05	0.06	0.08	8.71	<0.05	<0.05	42.48
GKBH-18/S4	6.00	7.00	1.23	<0.05	27.39	0.09	0.75	1.08	0.20	18.03	0.07	0.16	<0.05	0.07	0.08	9.28	<0.05	<0.05	42.29
GKBH-18/S5	7.00	8.00	2.62	<0.05	25.19	<0.05	0.94	1.35	0.78	16.28	0.05	0.10	0.09	<0.05	0.18	14.37	<0.05	<0.05	38.90
GKBH-18/S6	8.00	9.00	3.15	<0.05	23.65	<0.05	1.07	1.53	1.07	15.96	<0.05	0.10	0.07	0.16	0.21	16.43	<0.05	<0.05	37.58
GKBH-18/S7	9.00	10.00	2.53	<0.05	24.99	<0.05	0.84	1.21	0.74	17.37	0.05	0.13	0.12	0.13	0.15	12.66	<0.05	<0.05	39.88

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-18/S8	10.00	11.00	3.68	<0.05	22.47	<0.05	1.14	1.62	1.44	15.55	<0.05	<0.08	0.09	0.47	0.23	18.77	<0.05	<0.05	35.52
GKBH-18/S9	11.00	12.00	3.41	<0.05	23.21	<0.05	1.16	1.66	1.22	16.06	0.08	0.09	0.09	0.43	0.20	16.47	<0.05	<0.05	37.05
GKBH-18/S10	12.00	13.00	5.36	<0.05	19.73	<0.05	1.46	2.09	1.90	14.07	0.07	<0.08	0.10	0.71	0.28	23.33	<0.05	<0.05	32.25
GKBH-18/S11	13.00	14.00	3.66	<0.05	22.18	0.05	1.42	2.03	1.19	15.52	0.11	0.10	0.07	0.40	0.21	18.62	<0.05	<0.05	35.87
GKBH-18/S12	14.00	15.00	5.28	<0.05	19.83	<0.05	1.33	1.90	2.00	13.86	<0.05	<0.08	0.09	0.51	0.32	23.65	<0.05	<0.05	32.42
GKBH-18/S13	15.00	16.00	4.13	<0.05	21.52	<0.05	1.22	1.74	1.58	15.29	0.05	<0.08	0.09	0.20	0.26	19.59	<0.05	<0.05	35.45
GKBH-18/S14	16.00	17.00	4.41	<0.05	21.91	<0.05	1.26	1.80	1.40	15.23	0.06	<0.08	0.11	0.14	0.28	18.60	<0.05	<0.05	35.96
GKBH-18/S15	17.00	18.00	3.50	<0.05	23.85	<0.05	1.07	1.53	0.65	15.75	<0.05	0.13	0.12	0.06	0.24	15.97	<0.05	<0.05	38.13

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-18/S16	18.00	19.00	2.90	<0.05	25.88	0.05	0.95	1.36	0.46	16.44	<0.05	0.12	0.13	<0.05	0.20	12.63	<0.05	<0.05	39.72
GKBH-18/S17	19.00	20.00	2.71	<0.05	26.51	<0.05	0.78	1.12	0.45	17.66	0.05	0.13	0.15	0.05	0.16	9.23	<0.05	<0.05	41.75
GKBH-18/S18	20.00	21.00	2.37	<0.05	26.67	0.12	0.90	1.29	0.39	17.53	0.05	0.11	0.14	<0.05	0.16	9.38	<0.05	<0.05	41.73
GKBH-18/S19	21.00	22.00	2.35	<0.05	28.43	<0.05	0.78	1.12	0.34	16.28	<0.05	0.10	0.13	<0.05	0.15	9.59	<0.05	<0.05	41.39
GKBH-18/S20	22.00	23.00	3.36	<0.05	24.60	0.05	0.96	1.37	0.74	16.15	0.05	0.12	0.12	0.06	0.21	14.33	<0.05	<0.05	38.85
GKBH-18/S21	23.00	24.00	3.15	<0.05	25.48	0.07	1.02	1.47	0.68	16.26	<0.05	0.10	0.09	0.05	0.20	12.76	<0.05	<0.05	39.66
GKBH-18/S22	24.00	25.00	2.64	<0.05	27.69	<0.05	0.93	1.33	0.32	16.21	0.05	0.15	0.16	0.08	0.16	9.99	<0.05	<0.05	41.19
GKBH-18/S23	25.00	26.00	3.99	<0.05	23.80	<0.05	1.09	1.56	0.82	15.89	<0.05	0.11	0.10	<0.05	0.23	15.17	<0.05	<0.05	38.20

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-18/S24	26.00	27.00	2.65	<0.05	25.81	<0.05	0.91	1.31	0.51	17.35	0.05	0.12	0.12	0.26	0.16	10.68	<0.05	<0.05	40.94
GKBH-18/S25	27.00	28.00	3.23	<0.05	24.76	<0.05	0.96	1.38	0.82	15.96	0.05	0.08	0.09	0.12	0.21	14.52	<0.05	<0.05	38.73
GKBH-18/S26	28.00	29.00	3.84	<0.05	23.46	<0.05	1.07	1.53	0.95	15.96	0.05	0.12	0.10	0.30	0.23	15.52	<0.05	<0.05	37.90
GKBH-18/S27	29.00	30.00	3.21	<0.05	25.57	0.05	0.92	1.31	0.65	16.57	0.05	0.13	0.12	0.17	0.20	12.47	<0.05	<0.05	39.51
GKBH-18/S28	30.00	31.00	3.04	<0.05	25.40	<0.05	0.97	1.39	0.66	16.35	<0.05	0.11	0.11	0.17	0.20	13.27	<0.05	<0.05	39.22
GKBH-18/S29	31.00	32.00	2.31	<0.05	26.84	<0.05	0.83	1.19	0.41	16.28	0.05	0.11	0.12	0.10	0.17	11.94	<0.05	<0.05	40.46
GKBH-18/S30	32.00	33.00	2.63	<0.05	27.63	<0.05	0.79	1.13	0.34	16.16	0.05	0.12	0.10	0.06	0.16	10.60	<0.05	<0.05	40.99
GKBH-18/S31	33.00	34.00	3.31	<0.05	24.12	0.06	1.27	1.81	0.54	15.61	<0.05	0.11	0.09	0.26	0.21	16.20	<0.05	<0.05	37.64

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-18/S32	34.00	35.00	3.22	<0.05	24.83	<0.05	1.12	1.60	0.54	15.68	<0.05	0.09	0.10	0.22	0.20	15.25	<0.05	<0.05	38.19
GKBH-18/S33	35.00	36.00	3.29	<0.05	25.80	<0.05	0.93	1.33	0.52	15.71	<0.05	0.10	0.09	0.11	0.20	13.50	<0.05	<0.05	39.29
GKBH-18/S34	36.00	37.00	2.57	<0.05	26.70	<0.05	0.90	1.28	0.42	16.49	<0.05	0.11	0.11	0.16	0.17	11.81	<0.05	<0.05	40.11
GKBH-18/S35	37.00	38.00	3.75	<0.05	23.90	<0.05	1.04	1.48	0.65	15.46	<0.05	0.09	0.08	0.09	0.22	16.75	<0.05	<0.05	37.45
GKBH-18/S36	38.00	39.00	3.42	<0.05	24.31	<0.05	1.29	1.84	0.72	15.86	<0.05	0.09	0.09	0.13	0.21	15.61	<0.05	<0.05	37.63
GKBH-18/S37	39.00	40.00	3.68	<0.05	23.71	<0.05	1.11	1.59	0.70	15.84	<0.05	0.13	0.09	0.09	0.21	16.32	<0.05	<0.05	37.55
GKBH-18/S38	40.00	41.00	3.28	<0.05	24.75	0.13	1.08	1.54	0.63	16.23	0.05	0.11	0.09	0.11	0.20	13.96	<0.05	<0.05	38.91
GKBH-18/S39	41.00	42.00	3.58	<0.05	24.21	<0.05	0.98	1.40	0.76	15.74	<0.05	0.10	0.09	0.13	0.22	15.73	<0.05	<0.05	37.98

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-18/S40	42.00	43.00	4.30	<0.05	22.10	<0.05	1.29	1.85	0.99	15.09	<0.05	0.09	0.09	0.23	0.24	19.38	<0.05	<0.05	35.56
GKBH-18/S41	43.00	44.00	3.27	<0.05	25.06	<0.05	0.94	1.34	0.71	16.25	<0.05	0.11	0.11	0.13	0.19	14.06	<0.05	<0.05	38.70
GKBH-18/S42	44.00	45.00	4.78	<0.05	21.21	<0.05	1.40	2.00	1.33	14.98	<0.05	<0.08	0.08	0.30	0.29	20.48	<0.05	<0.05	34.37
GKBH-18/S43	45.00	46.00	5.26	<0.05	19.94	<0.05	1.53	2.19	1.56	13.73	0.05	<0.08	0.08	0.71	0.32	23.59	<0.05	<0.05	32.46
GKBH-18/S44	46.00	47.00	5.35	<0.05	18.45	<0.05	1.70	2.43	1.86	13.20	<0.05	<0.08	0.06	0.67	0.34	27.24	<0.05	<0.05	30.27
GKBH-18/S45	47.00	48.00	4.73	<0.05	20.46	<0.05	1.56	2.23	1.48	14.08	0.05	<0.08	0.07	0.58	0.28	23.35	<0.05	<0.05	32.60
GKBH-18/S46	48.00	49.00	5.57	<0.05	17.77	<0.05	1.69	2.41	1.86	13.50	<0.05	<0.08	0.06	0.88	0.31	27.62	<0.05	<0.05	29.90
GKBH-18/S47	49.00	50.00	4.78	<0.05	19.64	<0.05	1.50	2.15	1.77	14.10	<0.05	<0.08	0.07	0.81	0.28	24.18	<0.05	<0.05	32.09

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-19/S1	4.00	5.00	5.21	<0.05	24.77	<0.05	1.51	2.16	1.88	10.68	<0.05	<0.08	0.08	0.08	0.31	23.13	<0.05	<0.05	31.63
GKBH-19/S2	5.00	6.00	4.70	<0.05	21.26	<0.05	1.50	2.15	1.88	12.98	<0.05	<0.08	0.08	0.11	0.29	24.58	<0.05	<0.05	31.88
GKBH-19/S3	6.00	7.00	3.76	<0.05	28.62	<0.05	1.20	1.72	1.56	10.33	<0.05	<0.08	0.08	0.09	0.24	19.44	<0.05	<0.05	34.10
GKBH-19/S4	7.00	8.00	3.36	<0.05	27.39	<0.05	1.19	1.70	1.38	11.53	<0.05	<0.08	0.06	0.09	0.22	19.32	<0.05	<0.05	34.88
GKBH-19/S5	8.00	9.00	4.24	<0.05	27.07	<0.05	1.19	1.71	1.52	10.70	<0.05	<0.08	0.06	0.14	0.24	20.54	<0.05	<0.05	33.68
GKBH-19/S6	9.00	10.00	5.21	<0.05	28.78	<0.05	1.33	1.91	1.74	8.56	<0.05	<0.08	0.09	0.13	0.29	21.15	<0.05	<0.05	32.07
GKBH-19/S7	10.00	11.00	5.31	<0.05	26.17	<0.05	1.41	2.01	2.03	8.85	<0.05	<0.08	0.08	0.27	0.33	24.45	<0.05	<0.05	30.43

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-19/S8	11.00	12.00	4.52	<0.05	26.87	<0.05	1.34	1.91	1.76	9.45	<0.05	<0.08	0.07	0.11	0.30	22.96	<0.05	<0.05	32.00
GKBH-19/S9	12.00	13.00	5.81	<0.05	20.06	<0.05	1.80	2.57	2.12	11.86	<0.05	<0.08	0.08	0.14	0.37	27.28	<0.05	<0.05	29.61
GKBH-19/S10	13.00	14.00	6.09	<0.05	19.61	<0.05	1.88	2.69	2.17	12.53	<0.05	<0.08	0.08	0.14	0.37	26.50	<0.05	<0.05	29.72
GKBH-19/S11	14.00	15.00	4.84	<0.05	25.22	<0.05	1.52	2.18	1.86	10.31	<0.05	<0.08	0.07	0.20	0.31	23.81	<0.05	<0.05	31.15
GKBH-19/S12	15.00	16.00	5.46	<0.05	20.90	<0.05	1.78	2.55	2.10	11.75	<0.05	<0.08	0.07	0.24	0.35	26.90	<0.05	<0.05	29.59
GKBH-19/S13	16.00	17.00	6.04	<0.05	21.64	<0.05	1.86	2.66	2.17	10.47	<0.05	<0.08	0.08	0.22	0.37	28.05	<0.05	<0.05	28.23
GKBH-19/S14	17.00	18.00	6.80	<0.05	20.94	<0.05	1.90	2.72	2.19	10.34	<0.05	<0.08	0.07	0.24	0.37	28.64	<0.05	<0.05	27.59
GKBH-19/S15	18.00	19.00	5.54	<0.05	24.72	<0.05	1.63	2.34	1.94	9.41	<0.05	<0.08	0.07	0.33	0.32	25.80	<0.05	<0.05	29.45

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-19/S16	19.00	20.00	5.89	<0.05	17.22	<0.05	2.15	3.08	2.07	12.82	<0.05	<0.08	0.07	0.56	0.36	29.98	<0.05	<0.05	27.87
GKBH-19/S17	20.00	21.00	5.73	<0.05	29.05	<0.05	1.40	2.00	1.98	6.12	<0.05	<0.08	0.07	0.22	0.31	25.49	<0.05	<0.05	28.97
GKBH-19/S18	21.00	22.00	4.99	<0.05	29.17	<0.05	1.41	2.01	1.65	7.22	<0.05	<0.08	0.07	0.27	0.29	23.74	<0.05	<0.05	30.53
GKBH-19/S19	22.00	23.00	5.73	<0.05	27.86	<0.05	1.41	2.01	2.01	7.52	<0.05	<0.08	0.08	0.30	0.31	24.25	<0.05	<0.05	29.87
GKBH-19/S20	23.00	24.00	5.73	<0.05	17.76	<0.05	1.93	2.76	2.10	13.15	<0.05	<0.08	0.07	0.20	0.36	28.98	<0.05	<0.05	28.77
GKBH-19/S21	24.00	25.00	5.78	<0.05	23.69	<0.05	1.74	2.49	2.13	9.32	<0.05	<0.08	0.07	0.23	0.35	27.37	<0.05	<0.05	28.51
GKBH-19/S22	25.00	26.00	5.82	<0.05	21.27	<0.05	1.70	2.44	2.29	11.05	<0.05	<0.08	0.07	0.30	0.36	26.90	<0.05	<0.05	29.44
GKBH-19/S23	26.00	27.00	5.05	<0.05	24.38	<0.05	1.46	2.09	1.93	10.81	<0.05	<0.08	0.08	0.25	0.31	23.72	<0.05	<0.05	31.33

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-19/S24	27.00	28.00	5.55	<0.05	23.20	<0.05	1.53	2.19	2.18	10.72	<0.05	<0.08	0.07	0.24	0.34	25.20	<0.05	<0.05	30.25
GKBH-19/S25	28.00	29.00	6.34	<0.05	19.87	<0.05	1.76	2.52	2.24	11.61	<0.05	<0.08	0.07	0.38	0.36	27.50	<0.05	<0.05	29.00
GKBH-19/S26	29.00	30.00	4.64	<0.05	30.86	<0.05	1.24	1.77	1.81	7.13	<0.05	<0.08	0.07	0.45	0.28	21.08	<0.05	<0.05	31.85
GKBH-19/S27	30.00	31.00	4.20	<0.05	34.72	<0.05	0.92	1.32	1.88	3.22	<0.05	<0.08	0.05	0.39	0.27	22.87	<0.05	<0.05	31.02
GKBH-19/S28	31.00	32.00	4.89	<0.05	29.51	<0.05	1.20	1.72	2.01	6.35	<0.05	<0.08	0.06	0.27	0.30	24.58	<0.05	<0.05	30.27
GKBH-19/S29	32.00	33.00	3.26	<0.05	35.98	<0.05	0.81	1.16	1.32	5.85	<0.05	<0.08	<0.05	0.60	0.19	16.88	<0.05	<0.05	34.67
GKBH-19/S30	33.00	34.00	3.57	<0.05	35.18	<0.05	0.84	1.20	1.40	5.99	<0.05	<0.08	<0.05	0.60	0.21	17.36	<0.05	<0.05	34.38
GKBH-19/S31	34.00	35.00	3.45	<0.05	27.05	<0.05	1.12	1.60	1.53	10.73	<0.05	<0.08	0.05	0.58	0.25	21.32	<0.05	<0.05	33.39

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-19/S32	35.00	36.00	4.63	<0.05	24.98	<0.05	1.25	1.79	1.76	11.05	<0.05	<0.08	0.06	0.46	0.31	22.28	<0.05	<0.05	32.60
GKBH-19/S33	36.00	37.00	4.56	<0.05	20.12	<0.05	1.44	2.06	1.75	13.19	<0.05	<0.08	0.06	0.62	0.28	25.73	<0.05	<0.05	31.50
GKBH-19/S34	37.00	38.00	3.85	<0.05	29.88	<0.05	1.04	1.49	1.45	9.24	<0.05	<0.08	0.05	0.68	0.22	19.01	<0.05	<0.05	34.03
GKBH-19/S35	38.00	39.00	3.10	<0.05	34.64	<0.05	0.87	1.24	1.30	7.31	<0.05	<0.08	0.06	0.65	0.20	16.21	<0.05	<0.05	35.24
GKBH-19/S36	39.00	40.00	4.38	<0.05	21.34	<0.05	1.29	1.84	1.80	13.26	<0.05	<0.08	0.05	0.54	0.28	23.80	<0.05	<0.05	32.58
GKBH-19/S37	40.00	41.00	3.45	<0.05	32.47	<0.05	0.94	1.34	1.62	7.73	<0.05	<0.08	0.06	0.64	0.23	18.26	<0.05	<0.05	34.15
GKBH-19/S38	41.00	42.00	3.65	<0.05	29.78	<0.05	1.15	1.64	1.73	9.31	<0.05	<0.08	0.08	0.71	0.26	19.25	<0.05	<0.05	33.54
GKBH-19/S39	42.00	43.00	3.45	<0.05	28.33	<0.05	1.09	1.56	1.49	11.06	<0.05	<0.08	0.07	0.54	0.23	18.80	<0.05	<0.05	34.38

All analytical figures are in (%)

ANNEXURE – II: Details of Analytical Results of core samples

Sample ID	Run From (m)	Run To (m)	Al ₂ O ₃	BaO	CaO	Cr ₂ O ₃	Fe(T)	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SO ₃	TiO ₂	SiO ₂	SrO	V ₂ O ₅	LOI
GKBH-19/S40	43.00	44.00	3.45	<0.05	32.98	<0.05	0.96	1.37	1.41	7.96	<0.05	<0.08	0.07	0.56	0.23	17.16	<0.05	<0.05	34.76
GKBH-19/S41	44.00	45.00	4.59	<0.05	25.36	<0.05	1.40	2.01	1.81	10.57	<0.05	<0.08	0.07	0.66	0.30	22.96	<0.05	<0.05	31.59
GKBH-19/S42	45.00	46.00	4.95	<0.05	19.50	<0.05	1.80	2.57	1.78	13.69	<0.05	<0.08	0.06	0.60	0.29	25.14	<0.05	<0.05	31.28
GKBH-19/S43	46.00	47.00	6.27	<0.05	19.56	<0.05	1.82	2.60	2.31	10.84	<0.05	<0.08	0.06	0.75	0.37	29.09	<0.05	<0.05	28.04
GKBH-19/S44	47.00	48.00	5.13	<0.05	24.81	<0.05	1.51	2.16	2.04	9.24	<0.05	<0.08	0.06	0.60	0.32	25.69	<0.05	<0.05	29.89
GKBH-19/S45	48.00	49.00	5.30	<0.05	23.90	<0.05	1.37	1.96	1.95	10.62	<0.05	<0.08	0.06	0.35	0.32	24.62	<0.05	<0.05	30.80
GKBH-19/S46	49.00	50.00	4.94	<0.05	22.50	<0.05	1.54	2.20	1.90	11.52	<0.05	<0.08	0.06	0.56	0.31	24.87	<0.05	<0.05	31.04

All analytical figures are in (%)

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHTRA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10, February 2025							
BOREHOLE ID.	GKBH-01	START DATE	17-07-2025	END DATE	19-07-2025	INCLINATION	VERTICAL
DGPS X	281477.86	TOP RL	211.2227	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2187804.7	BOTTOM RL	161.2227			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.									
S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY %	RQD>10cm pieces (cm)	RQD (%)		
1	0.00	0.50	0.50	0.49	98.00	0	0.00	Top soil / Loose soil.	Top soil / Loose soil.
2	0.50	1.50	1.00	0.99	99.00	52	52.00	Dolomitic Limestone.	Buff colour at some places because of silica content with

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY %	RQD>10c m pieces (cm)	RQD (%)		
									Fractured with Weathered and loose mud.
3	1.50	3.00	1.50	1.49	99.33	99	66.00	Dolomitic Limestone.	Buff colour at some places because of silica content with Fractured with Weathered and loose mud.
4	3.00	4.50	1.50	1.49	99.33	117	78.00	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with calcite veins and Fractured.
5	4.50	6.00	1.50	1.46	97.33	48	32.00	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with calcite veins and Fractured.
6	6.00	7.50	1.50	1.45	96.67	14	9.33	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with calcite veins and Highly Fractured with broken fragments.
7	7.50	9.00	1.50	1.47	98.00	24	16.00	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with calcite veins and Highly Fractured with broken fragments.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY %	RQD>10c m pieces (cm)	RQD (%)		
8	9.00	10.50	1.50	1.46	97.33	0	0.00	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with calcite veins and Highly Fractured with broken fragments.
9	10.50	12.00	1.50	1.42	94.67	25	16.67	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with calcite veins and Highly Fractured with broken fragments.
10	12.00	13.50	1.50	1.41	94.00	50	33.33	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone, Highly Fractured with broken fragments.
11	13.50	15.00	1.50	1.46	97.33	23	15.33	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone, Highly Fractured with broken fragments.
12	15.00	16.50	1.50	1.41	94.00	44	29.33	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone, Highly Fractured with broken fragments.
13	16.50	18.00	1.50	1.48	98.67	39	26.00	Weathered Dolomitic Limestone.	Weathered, Highly Fractured Dolomitic Limestone with calcite veins with broken fragments.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY %	RQD>10c m pieces (cm)	RQD (%)		
14	18.00	19.50	1.50	1.49	99.33	65	43.33	Dolomitic Limestone.	Weathered, Fractured Dolomitic Limestone with broken pieces
15	19.50	21.00	1.50	1.45	96.67	55	36.67	Dolomitic Limestone.	Weathered, Fractured Dolomitic Limestone with broken pieces with calcite veins.
16	21.00	22.50	1.50	1.48	98.67	61	40.67	Dolomitic Limestone.	Dolomitic Limestone with calcite veins.
17	22.50	24.00	1.50	1.43	95.33	71	47.33	Dolomitic Limestone.	Dolomitic Limestone with calcite veins.
18	24.00	25.50	1.50	1.48	98.67	109	72.67	Dolomitic Limestone.	Dolomitic Limestone with calcite veins.
19	25.50	27.00	1.50	1.49	99.33	50	33.33	Dolomitic Limestone.	Dolomitic Limestone with calcite veins.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY %	RQD>10c m pieces (cm)	RQD (%)		
20	27.00	28.50	1.50	1.49	99.33	83	55.33	Dolomitic Limestone.	Dolomitic Limestone with calcite veins.
21	28.50	30.00	1.50	1.49	99.33	54	36.00	Dolomitic Limestone.	Dolomitic Limestone with calcite veins.
22	30.00	31.50	1.50	1.49	99.33	54	36.00	Dolomitic Limestone.	Dolomitic Limestone with calcite veins.
23	31.50	33.00	1.50	1.46	97.33	102	68.00	Dolomitic Limestone.	Dolomitic Limestone with broken pieces.
24	33.00	34.50	1.50	1.49	99.33	88	58.67	Dolomitic Limestone.	Fractured Dolomitic Limestone with broken pieces.
25	34.50	36.00	1.50	1.48	98.67	68	45.33	Dolomitic Limestone.	Fractured Dolomitic Limestone with broken pieces.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY %	RQD>10c m pieces (cm)	RQD (%)		
26	36.00	37.50	1.50	1.49	99.33	11	7.33	Dolomitic Limestone.	Fractured Dolomitic Limestone with broken pieces.
27	37.50	39.00	1.50	1.49	99.33	27	18.00	Dolomitic Limestone.	Fractured Dolomitic Limestone with broken pieces.
28	39.00	40.50	1.50	1.49	99.33	43	28.67	Dolomitic Limestone.	Fractured Dolomitic Limestone with broken pieces.
29	40.50	42.00	1.50	1.49	99.33	83	55.33	Dolomitic Limestone.	Dolomitic Limestone with calcite veins.
30	42.00	43.50	1.50	1.49	99.33	44	29.33	Dolomitic Limestone.	Fractured Dolomitic Limestone with calcite veins.
31	43.50	45.00	1.50	1.49	99.33	49	32.67	Dolomitic Limestone.	Little Weathered Dolomitic Limestone

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY %	RQD>10c m pieces (cm)	RQD (%)		
32	45.00	46.50	1.50	1.49	99.33	110	73.33	Dolomitic Limestone.	Little Weathered Dolomitic Limestone with calcite veins
33	46.50	48.00	1.50	1.48	98.67	27	18.00	Dolomitic Limestone.	Little Weathered Dolomitic Limestone with calcite veins
34	48.00	49.50	1.50	1.49	99.33	50	33.33	Dolomitic Limestone.	Little Weathered Dolomitic Limestone with calcite veins & alternating banding.
35	49.50	50.00	0.50	0.49	98.00	44	88.00	Dolomitic Limestone.	Dolomitic Limestone with calcite veins & alternating banding.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-02	START DATE	14-07-2025	END DATE	16-07-2025	INCLINATION	VERTICAL
DGPS X	282146.043	TOP RL	210.8736	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2187828.95	BOTTOM RL	160.8736			REVIEW ED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
1	0.00	1.50	1.50	1.49	99.33	0	0	Loose Soil	0.00 - 0.40 Loose Soil 0.40-1.50 Limestone

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOL OGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
2	1.50	3.00	1.50	1.43	95.33	24.00	16.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
3	3.00	4.50	1.50	1.49	99.33	114	76.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
4	4.50	6.00	1.50	1.47	98.00	105	70.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
5	6.00	7.50	1.50	1.47	98.00	140	93.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOL OGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
6	7.50	9.00	1.50	1.49	99.33	97	64.67	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
7	9.00	10.50	1.50	1.47	98.00	62	41.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
8	10.50	12.00	1.50	1.49	99.33	87	58.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
9	12.00	13.50	1.50	1.49	99.33	129	86.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOL OGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
10	13.50	15.00	1.50	1.49	99.33	80	53.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
11	15.00	16.50	1.50	1.49	99.33	87	58.00	Dolomitic Limestone	Limestone and calcite veins and 15.54m-15.65m Geode formation
12	16.50	18.00	1.50	1.49	99.33	131	87.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
13	18.00	19.50	1.50	1.49	99.33	76	50.67	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOL OGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
14	19.50	21.00	1.50	1.49	99.33	83	55.33	Dolomitic Limestone	Limestone and calcite veins and Geode formation at 19.90m
15	21.00	22.50	1.50	1.47	98.00	126	84.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
16	22.50	24.00	1.50	1.46	97.33	132	88.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
17	24.00	25.50	1.50	1.48	98.67	136	90.67	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOL OGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
18	25.50	27.00	1.50	1.49	99.33	104	69.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
19	27.00	28.50	1.50	1.49	99.33	118	78.67	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
20	28.50	30.00	1.50	1.49	99.33	119	79.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
21	30.00	31.50	1.50	1.48	98.67	118	78.67	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOL OGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
22	31.50	33.00	1.50	1.49	99.33	133	88.67	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
23	33.00	34.50	1.50	1.49	99.33	115	76.67	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
24	34.50	36.00	1.50	1.48	98.67	117	78.00	Dolomitic Limestone	Limestone and calcite veins with some calcite interclast and Geode formation
25	36.00	37.50	1.50	1.49	99.33	146	97.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOL OGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
26	37.50	39.00	1.50	1.48	98.67	140	93.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
27	39.00	40.50	1.50	1.47	98.00	117	78.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
28	40.50	42.00	1.50	1.49	99.33	146	97.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
29	42.00	43.50	1.50	1.4	93.33	89	59.33	Dolomitic Limestone	Limestone and calcite veins and some amount of fractured
30	43.50	45.00	1.50	1.49	99.33	137	91.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOL OGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
31	45.00	46.50	1.50	1.49	99.33	120	80.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
32	46.50	48.00	1.50	1.47	98.00	132	88.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
33	48.00	49.50	1.50	1.49	99.33	128	85.33	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins
34	49.50	50.00	0.50	0.48	96.00	48	96.00	Dolomitic Limestone	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, and calcite veins

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-03	START DATE	15-06-2025	END DATE	17-06-2025	INCLINATION	
DGPS X	282997.619	TOP RL	200.0727	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2187807.39	BOTTOM RL	150.0727			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
1	0.00	0.60	0.60	0.56	93.33	0	0.00	Top soil / Loose soil.	Top soil / Loose soil.
2	0.60	1.50	0.90	0.89	98.89	0	0.00	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
3	1.50	3.00	1.50	1.48	98.67	99	66.00	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
4	3.00	4.50	1.50	1.46	97.33	49	32.67	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding. 3.00-3.34 - Weathered Dolomitic Limestone. 3.34-4.50 - Dolomitic Limestone.
5	4.50	6.00	1.50	1.49	99.33	58	38.67	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
6	6.00	7.50	1.50	1.49	99.33	96	64.00	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
7	7.50	9.00	1.50	1.46	97.33	138	92.00	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
8	9.00	10.50	1.50	1.49	99.33	115	76.67	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
9	10.50	12.00	1.50	1.46	97.33	87	58.00	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
10	12.00	13.50	1.50	1.49	99.33	111	74.00	Limestone and calcite veins.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding with calcite veins.
11	13.50	15.00	1.50	1.49	99.33	111	74.00	Limestone and calcite veins.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding with calcite veins.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
12	15.00	16.50	1.50	1.49	99.33	125	83.33	Grey Limestone.	Grey Limestone with highly compacted, alternate grey and light grey colour banding.
13	16.50	18.00	1.50	1.42	94.67	106	70.67	Grey Limestone.	Grey Limestone with highly compacted, alternate grey and light grey colour banding.
14	18.00	19.50	1.50	1.49	99.33	109	72.67	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
15	19.50	21.00	1.50	1.43	95.33	40	26.67	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding, fractured and little weathered.
16	21.00	22.50	1.50	1.49	99.33	131	87.33	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
17	22.50	24.00	1.50	1.49	99.33	97	64.67	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
18	24.00	25.50	1.50	1.48	98.67	114	76.00	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
19	25.50	27.00	1.50	1.49	99.33	108	72.00	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
20	27.00	28.50	1.50	1.48	98.67	95	63.33	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
21	28.50	30.00	1.50	1.49	99.33	113	75.33	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
22	30.00	31.50	1.50	1.46	97.33	106	70.67	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
23	31.50	33.00	1.50	1.49	99.33	117	78.00	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
24	33.00	34.50	1.50	1.49	99.33	119	79.33	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
25	34.50	36.00	1.50	1.49	99.33	119	79.33	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
26	36.00	37.50	1.50	1.48	98.67	135	90.00	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
27	37.50	39.00	1.50	1.49	99.33	79	52.67	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
28	39.00	40.50	1.50	1.49	99.33	129	86.00	Dolomitic Limestone.	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
29	40.50	42.00	1.50	1.48	98.67	126	84.00	Grey limestone	Grey Limestone with highly compacted, alternate grey and light grey colour banding. 40.56-40.60 - Limestone with quartz grains.
30	42.00	43.50	1.50	1.49	99.33	134	89.33	Grey limestone	Grey Limestone with highly compacted, alternate grey and light grey colour banding.
31	43.50	45.00	1.50	1.49	99.33	133	88.67	Grey limestone	Grey Limestone with highly compacted, alternate grey and light grey colour banding.
32	45.00	46.50	1.50	1.48	98.67	135	90.00	Grey limestone	Grey Limestone with highly compacted, alternate grey and light grey colour banding.
33	46.50	48.00	1.50	1.49	99.33	142	94.67	Grey limestone	Grey Limestone with highly compacted, alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
34	48.00	49.50	1.50	1.48	98.67	143	95.33	Grey limestone	Grey Limestone with highly compacted, alternate grey and light grey colour banding.
35	49.50	50.00	0.50	0.48	96.00	42	84.00	Grey limestone	Grey Limestone with highly compacted, alternate grey and light grey colour banding.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, MANGRUR, ADILABAD DIST, TELANGANA STATE

AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED

F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.

BOREHOLE ID.	GKBH-04	START DATE	27-06-2025	END DATE	05-07-2025	INCLINATION		Vertical
DGPS X	283673.2581	TOP RL	183.9656	CORE SIZE	63.5 mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH	
DGPS Y	2187706.009	BOTTOM RL	133.9656			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA	

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
1	0.00	1.50	1.50	1.35	90.00	0	0	Dolomitic Limestone	Top soil / Loose soil
2	1.50	3.00	1.50	1.48	98.67	45	30.00	Dolomitic Limestone	Dolomitic Limestone with calcareous mud
3	3.00	4.50	1.50	1.45	96.67	100	66.67	Dolomitic Limestone	Dolomitic Limestone with calcareous mud and calcite veins.
4	4.50	6.00	1.50	1.4	93.33	42	28.00	Dolomitic Limestone	Dolomitic Limestone with calcareous mud and calcite vein
5	6.00	9.00	3.00	2.9	96.67	216	72.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding
6	9.00	12.00	3.00	2.98	99.33	245	81.67	Dolomitic Limestone	Dolomitic Limestone > Grey Limestone with clast with calcite veins are presents

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
7	12.00	15.00	3.00	2.99	99.67	271	90.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding and calcite veins
8	15.00	18.00	3.00	2.99	99.67	213	71.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding and calcite veins with intra clasts
9	18.00	21.00	3.00	2.95	98.33	152	50.67	Grey Limestone	Grey Limestone with calcite veins and calcite infilling present at 20.60 to 20.63
10	21.00	24.00	3.00	2.98	99.33	250	83.33	Grey Limestone	Grey Limestone with calcite veins with minor amounts of fracture and calcareous mud and calcite infilling is present
11	24.00	27.00	3.00	2.98	99.33	139	46.33	Grey Limestone	Grey Limestone with calcite veins and fractures

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
12	27.00	30.00	3.00	2.97	99.00	150	50.00	Grey Limestone	Grey Limestone with calcite veins and fractures
13	30.00	33.00	3.00	2.98	99.33	227	75.67	Dolomitic Limestone	Dolomitic Limestone with calcite veins
14	33.00	36.00	3.00	2.97	99.00	165	55.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, Highly compacted and alternating light grey and dark grey banding and calcite veins
15	36.00	39.00	3.00	2.98	99.33	218	72.67	Dolomitic Limestone	Dolomitic Limestone & Grey limestone with calcite veins
16	39.00	42.00	3.00	2.98	99.33	149	49.67	Dolomitic Limestone	Dolomitic Limestone & Grey Limestone with calcite veins
17	42.00	45.00	3.00	2.97	99.00	133	44.33	Dolomitic Limestone	Dolomitic Limestone with calcite veins and some fracture is present
18	45.00	48.00	3.00	2.9	96.67	182	60.67	Dolomitic Limestone	Dolomitic Limestone & Grey Limestone with

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
									calcite veins and some fracture is present
19	48.00	50.00	2.00	1.95	97.50	179	89.50	Dolomitic Limestone	Dolomitic Limestone with calcite veins

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.								
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.								
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED								
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.								
BOREHOLE ID.	GKBH-05	START DATE	21-07-2025	END DATE	24-07-2025	INCLINATION		VERTICAL
DGPS X	281397.333	TOP RL	198.4395	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH	
DGPS Y	2187030.35	BOTTOM RL	148.4395			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA	

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
1	0.00	1.50	1.50	1.45	96.67	0	0.00	Top soil / Loose soil	Top soil / Loose soil
2	1.50	3.00	1.50	1.46	97.33	35	23.33	Top soil / Loose Soil// & Weathered Limestone	1.50 - 1.82 Top soil / Loose Soil 1.82-3.00 Weathered Limestone
3	3.00	4.50	1.50	1.49	99.33	21	14.00	Dolomitic limestone	Buff colour at some places because of silica content & fractured
4	4.50	6.00	1.50	1.48	98.67	36	24.00	Dolomitic limestone	Buff colour at some places because of silica content & highly fractured
5	6.00	7.50	1.50	1.47	98.00	0	0.00	Dolomitic limestone	Buff colour at some places because of silica content, highly fractured & weathered at some places.
6	7.50	9.00	1.50	1.48	98.67	88	58.67	Dolomitic limestone	Fractured & weathered at some places.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
7	9.00	10.50	1.50	1.49	99.33	68	45.33	Dolomitic limestone	Very less fractured, medium hard & alternate layers of dark grey and light grey colour.
8	10.50	12.00	1.50	1.49	99.33	86	57.33	Dolomitic limestone	Limestone with little calcareous veins
9	12.00	13.50	1.50	1.49	99.33	99	66.00	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
10	13.50	15.00	1.50	1.49	99.33	70	46.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
11	15.00	16.50	1.50	1.49	99.33	70	46.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
12	16.50	18.00	1.50	1.49	99.33	98	65.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
13	18.00	19.50	1.50	1.49	99.33	122	81.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
14	19.50	21.00	1.50	1.49	99.33	103	68.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & fractured.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
15	21.00	22.50	1.50	1.48	98.67	100	66.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
16	22.50	24.00	1.50	1.49	99.33	125	83.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
17	24.00	25.50	1.50	1.49	99.33	116	77.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
18	25.50	27.00	1.50	1.49	99.33	78	52.00	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
19	27.00	28.50	1.50	1.49	99.33	59	39.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & fractured zone.
20	28.50	30.00	1.50	1.49	99.33	44	29.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & fractured zone.
21	30.00	31.50	1.50	1.49	99.33	57	38.00	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & fractured zone.
22	31.50	33.00	1.50	1.49	99.33	101	67.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & fractured zone.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
23	33.00	34.50	1.50	1.49	99.33	113	75.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.
24	34.50	36.00	1.50	1.48	98.67	81	54.00	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.
25	36.00	37.50	1.50	1.49	99.33	86	57.33	Dolomitic limestone	Dolomitic limestone with, alternate grey and light grey colour banding & very little fractured zone.
26	37.50	39.00	1.50	1.46	97.33	90	60.00	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
27	39.00	40.50	1.50	1.49	99.33	70	46.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.
28	40.50	42.00	1.50	1.49	99.33	97	64.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.
29	42.00	43.50	1.50	1.47	98.00	112	74.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.
30	43.50	45.00	1.50	1.49	99.33	97	64.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
31	45.00	46.50	1.50	1.49	99.33	104	69.33	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding & very little fractured zone.
32	46.50	48.00	1.50	1.49	99.33	114	76.00	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
33	48.00	49.50	1.50	1.49	99.33	79	52.67	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.
34	49.50	50.00	0.50	0.49	98.00	44	88.00	Dolomitic limestone	Dolomitic limestone with alternate grey and light grey colour banding.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

**PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST,
MAHARASHRTA STATE.**

AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED

F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-06	START DATE	07-07-2025	END DATE	12-07-2025	INCLINATION	
DGPS X	282198.887	TOP RL	204.2704	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2187023.46	BOTTO M RL	154.2704			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %	LITHOLOGY	DESCRIPTION
1	0.00	1.50	1.50	1.44	96.00	0	0.00	Top soil / Loose soil with weathered Dolomitic Limestone of broken fragments	Top soil / Loose soil with weathered Dolomitic Limestone of broken fragments
2	1.50	3.00	1.50	1.47	98.00	13	8.67	Dolomitic Limestone	Dolomitic Limestone with highly fractured and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
3	3.00	4.50	1.50	1.47	98.00	31	20.67	Dolomitic Limestone	Dolomitic Limestone with highly fractured and alternating light grey and dark grey banding.
4	4.50	6.00	1.50	1.45	96.67	18	12.00	Dolomitic Limestone	Dolomitic Limestone with highly fractured and alternating light grey and dark grey banding.
5	6.00	7.50	1.50	1.49	99.33	10	6.67	Dolomitic Limestone	Very less fractured and alternating light grey and dark grey banding.
6	7.50	9.00	1.50	1.49	99.33	21	14.00	Dolomitic Limestone	Less fractured, Dolomitic Limestone with Dolomitic Limestone with Fine grained and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
7	9.00	10.50	1.50	1.49	99.33	55	36.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
8	10.50	12.00	1.50	1.49	99.33	65	43.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
9	12.00	13.50	1.50	1.47	98.00	96	64.00	Dolomitic Limestone	Very less fractured, Dolomitic Limestone with fine grained, moderately compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
10	13.50	15.00	1.50	1.49	99.33	43	28.67	Dolomitic Limestone	Moderately fractured, Dolomitic Limestone with fine grained, moderately compacted and alternating light grey and dark grey banding.
11	15.00	16.50	1.50	1.49	99.33	55	36.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
12	16.50	18.00	1.50	1.49	99.33	78	52.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
13	18.00	19.50	1.50	1.49	99.33	50	33.33	Dolomitic Limestone	Moderately fractured, Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
14	19.50	21.00	1.50	1.45	96.67	92	61.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding. and calcite veins
15	21.00	22.50	1.50	1.49	99.33	75	50.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding. and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
16	22.50	24.00	1.50	1.46	97.33	78	52.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
17	24.00	25.50	1.50	1.49	99.33	68	45.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding. and calcite veins
18	25.50	27.00	1.50	1.49	99.33	64	42.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
19	27.00	28.50	1.50	1.49	99.33	98	65.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding. and calcite veins
20	28.50	30.00	1.50	1.49	99.33	81	54.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
21	30.00	31.50	1.50	1.49	99.33	104	69.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
22	31.50	33.00	1.50	1.49	99.33	114	76.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
23	33.00	34.50	1.50	1.49	99.33	77	51.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
24	34.50	36.00	1.50	1.49	99.33	85	56.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
25	36.00	37.50	1.50	1.49	99.33	71	47.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
26	37.50	39.00	1.50	1.44	96.00	110	73.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
27	39.00	40.50	1.50	1.48	98.67	60	40.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, fractured (slicken slide) moderately compacted and alternating light grey and dark grey banding. (oblique) Dolomitic Limestone with calcite vein.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
28	40.50	42.00	1.50	1.48	98.67	112	74.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
29	42.00	43.50	1.50	1.47	98.00	62	41.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
30	43.50	45.00	1.50	1.49	99.33	90	60.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.
31	45.00	46.50	1.50	1.48	98.67	79	52.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
32	46.50	48.00	1.50	1.49	99.33	116	77.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating white and grey banding.
33	48.00	49.50	1.50	1.49	99.33	138	92.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating white and grey banding.
34	49.50	50.00	0.50	0.48	96.00	38	76.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted and alternating white and grey banding.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHTRA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-07	START DATE	10-07-2025	END DATE	19-07-2025	INCLINATION	
DGPS X	283034.081	TOP RL	197.1479	CORE SIZE	63.5 mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH & BIJAYA KUMAR MAJHI
DGPS Y	2186983.86	BOTTOM RL	147.1479			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
1	0.00	3.00	3.00	2.99	99.67	73	24.33	Loose Soil	0.00 - 0.50 Loose Soil 0.50-3.00 Weathered Limestone
2	3.00	6.00	3.00	2.99	99.67	211	70.33	Dolomitic Limestone	Weathered Dolomitic Limestone with fine grained, moderately compacted, alternating light grey and dark grey banding
3	6.00	9.00	3.00	2.99	99.67	263	87.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins & intra clasts.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
4	9.00	12.00	3.00	2.98	99.33	243	81.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
5	12.00	15.00	3.00	2.98	99.33	288	96.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding with intra clasts.
6	15.00	18.00	3.00	2.92	97.33	287	95.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding with intra clasts.
7	18.00	21.00	3.00	2.98	99.33	284	94.67	Dolomitic Limestone	Dolomitic Limestone > Grey Limestone with fine grained, highly compacted, alternating light grey and

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
									dark grey banding and calcite veins
8	21.00	24.00	3.00	2.97	99.00	295	98.33	Grey Limestone	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
9	24.00	27.00	3.00	2.98	99.33	271	90.33	Grey Limestone	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
10	27.00	30.00	3.00	2.89	96.33	219	73.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
11	30.00	33.00	3.00	2.98	99.33	255	85.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
12	33.00	36.00	3.00	2.98	99.33	274	91.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
13	36.00	39.00	3.00	2.98	99.33	264	88.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
14	39.00	42.00	3.00	2.96	98.67	266	88.67	Dolomitic Limestone	Dolomitic Limestone < Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
15	42.00	45.00	3.00	2.98	99.33	266	88.67	Dolomitic Limestone	Dolomitic Limestone < Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
16	45.00	48.00	3.00	2.99	99.67	248	82.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding with intra clasts.
17	48.00	50.00	2.00	1.99	99.50	178	89.00	Grey Limestone	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-08	START DATE	19-06-2025	END DATE	22-06-2025	INCLINATION	VERTICAL
DGPS X	283809.449	TOP RL	192.6595	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA, BISANI SRIKANTH & BIJAYA KUMAR MAJHI
DGPS Y	2186970.86	BOTTOM RL	142.6595			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
1	0.00	1.12	1.12	1.11	99.11	0	0.00	Top soil / Loose soil.	Top soil / Loose soil.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
2	1.12	1.50	0.38	0.33	86.84	0	0.00	Weathered Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
3	1.50	3.00	1.50	1.48	98.67	75	50.00	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
4	3.00	4.50	1.50	1.49	99.33	135	90.00	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
5	4.50	6.00	1.50	1.48	98.67	116	77.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
6	6.00	7.50	1.50	1.49	99.33	123	82.00	Weathered Dolomitic Limestone.	Very less Weathered Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
7	7.50	9.00	1.50	1.47	98.00	139	92.67	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
8	9.00	10.50	1.50	1.49	99.33	120	80.00	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
9	10.50	12.00	1.50	1.48	98.67	125	83.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
10	12.00	13.50	1.50	1.49	99.33	123	82.00	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
11	13.50	15.00	1.50	1.47	98.00	113	75.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
12	15.00	16.50	1.50	1.49	99.33	135	90.00	Grey Limestone.	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
13	16.50	18.00	1.50	1.49	99.33	140	93.33	Grey Limestone.	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
14	18.00	19.50	1.50	1.48	98.67	136	90.67	Grey Limestone.	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
15	19.50	21.00	1.50	1.48	98.67	122	81.33	Grey Limestone.	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
16	21.00	22.50	1.50	1.49	99.33	134	89.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
17	22.50	24.00	1.50	1.48	98.67	133	88.67	Grey Limestone.	Grey limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
18	24.00	25.50	1.50	1.48	98.67	141	94.00	Grey Limestone.	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
19	25.50	27.00	1.50	1.49	99.33	149	99.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
20	27.00	28.50	1.50	1.48	98.67	144	96.00	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
21	28.50	30.00	1.50	1.46	97.33	146	97.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
22	30.00	31.50	1.50	1.48	98.67	144	96.00	Grey Limestone.	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
23	31.50	33.00	1.50	1.47	98.00	107	71.33	Dolomitic limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
24	33.00	34.50	1.50	1.47	98.00	114	76.00	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
25	34.50	36.00	1.50	1.49	99.33	100	66.67	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
26	36.00	37.50	1.50	1.47	98.00	107	71.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, Fractured, moderately compacted, alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
27	37.50	39.00	1.50	1.49	99.33	149	99.33	Grey Limestone.	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
28	39.00	40.50	1.50	1.49	99.33	137	91.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
29	40.50	42.00	1.50	1.49	99.33	68	45.33	Grey Limestone.	Grey Limestone with fine grained, Fractured, moderately compacted, alternating light grey and dark grey banding and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
30	42.00	43.50	1.50	1.47	98.00	53	35.33	Dolomitic Limestone.	Dolomitic Limestone with Little weathered, fractured, fine grained, moderately compacted, alternating light grey and dark grey banding and calcite veins
31	43.50	45.00	1.50	1.45	96.67	133	88.67	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
32	45.00	46.50	1.50	1.49	99.33	142	94.67	Grey Limestone.	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
33	46.50	48.00	1.50	1.48	98.67	149	99.33	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
34	48.00	49.50	1.50	1.48	98.67	127	84.67	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
35	49.50	50.00	0.50	0.49	98.00	49	98.00	Dolomitic Limestone.	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-09	START DATE	03-08-2025	END DATE	05-08-2025	INCLINATION	VERTICAL
DGPS X	279720.444	TOP RL	208.9611	CORESIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2186216.81	BOTTOM RL	158.9611			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
1	0.00	1.50	1.50	1.46	97.33	0	0.00	Top soil / Loose soil	Top soil / Loose soil
2	1.50	3.00	1.50	1.40	93.33	37	24.67	Dolomitic Limestone	Dolomitic Limestone & buff colour at someplace because of silica content
3	3.00	6.00	3.00	2.80	93.33	138	46.00	Weathered Dolomitic Limestone	Highly weathered Dolomitic Limestone with calcareous mud

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
4	6.00	9.00	3.00	2.86	95.33	168	56.00	Weathered Dolomitic Limestone	Weathered Dolomitic Limestone with alternating light grey and dark grey banding
5	9.00	12.00	3.00	2.85	95.00	168	56.00	Weathered Dolomitic Limestone	Weathered Dolomitic Limestone with alternating light grey and dark grey banding
6	12.00	15.00	3.00	2.90	96.67	149	49.67	Dolomitic Limestone	Dolomitic Limestone with alternating light grey and dark grey banding & buff colour at someplace because of silica content
7	15.00	18.00	3.00	2.97	99.00	222	74.00	Dolomitic Limestone	Dolomitic Limestone with infraclass.
8	18.00	21.00	3.00	2.96	98.67	214	71.33	Dolomitic Limestone	Dolomitic Limestone, fine grained, because of silica content red colour, at some places crimson red colour (may be shale)
9	21.00	24.00	3.00	2.97	99.00	212	70.67	Grey Limestone	Grey Limestone with little fractured, because of silica content red colour, at some places crimson red colour (may be shale)

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10c m pieces (cm)	RQD %		
10	24.00	27.00	3.00	2.99	99.67	122	40.67	Grey Limestone	Highly weathered Grey Limestone with broken pieces, alternating banding and highly fracture
11	27.00	30.00	3.00	2.90	96.67	191	63.67	Dolomitic Limestone	Dolomitic Limestone with alternate grey and dark grey banding
12	30.00	33.00	3.00	2.98	99.33	134	44.67	Dolomitic Limestone	Dolomitic Limestone, slicken slides at some places, yellow colour efflorescence is observed
13	33.00	36.00	3.00	2.98	99.33	162	54.00	Dolomitic Limestone	Dolomitic Limestone with alternating grey and dark grey banding
14	36.00	39.00	3.00	2.99	99.67	172	57.33	Dolomitic Limestone	Grey to buff colour limestone
15	39.00	42.00	3.00	2.90	96.67	194	64.67	Dolomitic Limestone	Dolomitic Limestone, because of silica content crimson red colour also observed (may be red shale patches)
16	42.00	45.00	3.00	2.99	99.67	259	86.33	Dolomitic Limestone	Dolomitic Limestone, because of silica content crimson red colour also observed (may be red shale patches)

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
17	45.00	48.00	3.00	2.99	99.67	246	82.00	Dolomitic Limestone	Dolomitic Limestone, because of silica content crimson red colour also observed (may be red shale patches)
18	48.00	50.00	2.00	1.99	99.50	179	89.50	Dolomitic Limestone & Bella shale.	Dolomitic Limestone, because of silica content crimson red colour also observed (may be red shale patches) (at bottom 49.5 to 50.0m Bella shale (crimson red colour).

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-10	START DATE	28-07-2025	END DATE	01-08-2025	INCLINATION	
DGPS X	280748.047	TOP RL	197.1776	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH & BIJAYA KUMAR MAJHI
DGPS Y	2186167.24	BOTTOM RL	147.1776			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
1	0.00	0.50	0.50	0.49	98.00	0.00	0.00	Loose Soil	Loose Soil

2	0.50	1.50	1.00	0.99	99.00	30.00	30.00	Dolomitic Limestone	Fractured Dolomitic Limestone with buff colour because of silica content.
3	1.50	3.00	1.50	1.49	99.33	89.00	59.33	Dolomitic Limestone	Fractured Dolomitic Limestone with buff colour because of silica content.
4	3.00	6.00	3.00	2.99	99.67	178.00	59.33	Dolomitic Limestone	Fractured Dolomitic Limestone with buff colour because of silica content.
5	6.00	9.00	3.00	2.93	97.67	140.00	59.33	Dolomitic Limestone	Fractured Dolomitic Limestone with buff colour because of silica content.
6	9.00	12.00	3.00	2.95	98.33	177.00	59.00	Dolomitic Limestone	Fractured Dolomitic Limestone with buff colour because of silica content.
7	12.00	15.00	3.00	2.98	99.33	109.00	36.33	Dolomitic Limestone	Fractured Dolomitic Limestone with buff colour because of silica content.
8	15.00	18.00	3.00	2.89	96.33	87.00	29.00	Dolomitic Limestone	Fractured Dolomitic Limestone with buff colour because of silica content.

9	18.00	21.00	3.00	2.99	99.67	135.00	45.00	Dolomitic Limestone	Dolomitic Limestone with buff colored because of silica content.
10	21.00	24.00	3.00	2.99	99.67	56.00	18.67	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content with small to moderate amount of weathered and fractured.
11	24.00	27.00	3.00	2.99	99.67	35.00	11.67	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content.
12	27.00	30.00	3.00	2.99	99.67	122.00	40.67	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content.
13	30.00	33.00	3.00	2.99	99.67	111.00	37.00	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content.
14	33.00	36.00	3.00	2.99	99.67	63.00	21.00	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content with highly weathered, fractured.

15	36.00	39.00	3.00	2.99	99.67	27.00	9.00	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content with highly weathered , fractured & shale bands are present
16	39.00	42.00	3.00	2.99	99.67	129.00	43.00	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content
17	42.00	45.00	3.00	2.99	99.67	110.00	36.67	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content with highly weathered, fractured.
18	45.00	48.00	3.00	2.99	99.67	223.00	74.33	Dolomitic Limestone	Dolomitic Limestone with Very little buff colour because of silica content
19	48.00	50.00	2.00	1.99	99.50	95.00	47.50	Dolomitic Limestone	Dolomitic Limestone with buff colour at some places because of silica content.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHTRA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-11	START DATE	27-07-2025	END DATE	02-08-2025	INCLINATION	
DGPS X	281456.12	TOP RL	192.5118	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2186190.49	BOTTOM RL	142.5118			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
1	0.00	0.50	0.50	0.40	80.00	0	0.00	Top soil / Loose soil	Top soil / Loose soil
2	0.50	1.00	0.50	0.36	72.00	0	0.00	Dolomitic Limestone	Powdered Dolomitic Limestone
3	1.00	1.50	0.50	0.43	86.00	0	0.00	Dolomitic Limestone & loose soil	1.00 - 1.39m - Powdered Dolomitic Limestone 1.39 - 1.50m - Loose soil

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
4	1.50	2.00	0.50	0.42	84.00	0	0.00	Loose soil & Dolomitic Limestone	1.50 - 1.75m - Loose soil 1.75 - 2.00m - Highly fractured, Powdered Dolomitic Limestone with broken pieces.
5	2.00	2.50	0.50	0.49	98.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
6	2.50	3.00	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
7	3.00	3.50	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
8	3.50	4.00	0.50	0.49	98.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
9	4.00	4.50	0.50	0.46	92.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
10	4.50	5.00	0.50	0.39	78.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
11	5.00	5.50	0.50	0.49	98.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
12	5.50	6.00	0.50	0.44	88.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
13	6.00	6.50	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
14	6.50	7.00	0.50	0.49	98.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
15	7.00	7.50	0.50	0.47	94.00	0	0.00	Dolomitic Limestone	Dolomitic Highly fractured, Powdered Dolomitic Limestone with broken pieces.
16	7.50	8.00	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
17	8.00	8.50	0.50	0.43	86.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
18	8.50	9.00	0.50	0.43	86.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces. solid core pieces but less than 10cm
19	9.00	9.50	0.50	0.46	92.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
20	9.50	10.00	0.50	0.46	92.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
21	10.00	10.50	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
22	10.50	11.00	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
23	11.00	11.50	0.50	0.47	94.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
24	11.50	12.00	0.50	0.45	90.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
25	12.00	12.50	0.50	0.44	88.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
26	12.50	13.00	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
27	13.00	13.50	0.50	0.42	84.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces, calcareous mud
28	13.50	14.00	0.50	0.44	88.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces, calcareous mud

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
29	14.00	14.50	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces, calcareous mud
30	14.50	15.00	0.50	0.46	92.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
31	15.00	15.50	0.50	0.43	86.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
32	15.50	16.00	0.50	0.50	100.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
33	16.00	16.50	0.50	0.41	82.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
34	16.50	17.00	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
35	17.00	17.50	0.50	0.44	88.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
36	17.50	18.00	0.50	0.42	84.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
37	18.00	18.50	0.50	0.43	86.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
38	18.50	19.00	0.50	0.48	96.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
39	19.00	19.50	0.50	0.38	76.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
40	19.50	20.00	0.50	0.34	68.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
41	20.00	20.50	0.50	0.45	90.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
42	20.50	21.00	0.50	0.43	86.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
43	21.00	21.50	0.50	0.43	86.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
44	21.50	22.00	0.50	0.49	98.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
45	22.00	22.50	0.50	0.48	96.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
46	22.50	23.00	0.50	0.44	88.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
47	23.00	23.50	0.50	0.42	84.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm.
48	23.50	24.00	0.50	0.44	88.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm.
49	24.00	24.50	0.50	0.39	78.00	0	0.00	Weathered Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
50	24.50	25.00	0.50	0.47	94.00	0	0.00	Weathered Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
51	25.00	25.50	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
52	25.50	26.00	0.50	0.38	76.00	0	0.00	Weathered Dolomitic Limestone	Weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
53	26.00	26.50	0.50	0.49	98.00	0	0.00	Weathered Dolomitic Limestone	Weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm
54	26.50	27.00	0.50	0.48	96.00	0	0.00	Weathered Dolomitic Limestone	Weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm
55	27.00	27.50	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
56	27.50	28.00	0.50	0.46	92.00	0	0.00	Weathered Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
57	28.00	28.50	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone and broken pieces with calcareous mud.
58	28.50	29.00	0.50	0.43	86.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces. with calcareous mud

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
59	29.00	29.50	0.50	0.45	90.00	0	0.00	Weathered Dolomitic Limestone	Little weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
60	29.50	30.00	0.50	0.49	98.00	0	0.00	Weathered Dolomitic Limestone	Little weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces.
61	30.00	30.50	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Little weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
62	30.50	31.00	0.50	0.42	84.00	0	0.00	Weathered Dolomitic Limestone	Little weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
63	31.00	31.50	0.50	0.35	70.00	0	0.00	Weathered Dolomitic Limestone	Little weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
64	31.50	32.00	0.50	0.43	86.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
65	32.00	32.50	0.50	0.44	88.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
66	32.50	33.00	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
67	33.00	33.50	0.50	0.38	76.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
68	33.50	34.00	0.50	0.42	84.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
69	34.00	34.50	0.50	0.35	70.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
70	34.50	35.00	0.50	0.29	58.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
71	35.00	35.50	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
72	35.50	36.00	0.50	0.40	80.00	0	0.00	Dolomitic Limestone	Weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces.
73	36.00	36.50	0.50	0.38	76.00	0	0.00	Dolomitic Limestone	Weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces.
74	36.50	37.00	0.50	0.46	92.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to gray colour)
75	37.00	37.50	0.50	0.44	88.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
76	37.50	38.00	0.50	0.38	76.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
77	38.00	38.50	0.50	0.49	98.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
78	38.50	39.00	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
79	39.00	39.50	0.50	0.39	78.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
80	39.50	40.00	0.50	0.49	98.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
81	40.00	40.50	0.50	0.48	96.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.
82	40.50	41.00	0.50	0.41	82.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, Highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
83	41.00	41.50	0.50	0.49	98.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
84	41.50	42.00	0.50	0.49	98.00	0	0.00	Weathered Dolomitic Limestone	Highly weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & calcareous mud (Brown colour to grey colour)
85	42.00	42.50	0.50	0.44	88.00	0	0.00	Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
86	42.50	43.00	0.50	0.46	92.00	0	0.00	Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
87	43.00	43.50	0.50	0.46	92.00	0	0.00	Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
88	43.50	44.00	0.50	0.48	96.00	0	0.00	Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
89	44.00	44.50	0.50	0.44	88.00	0	0.00	Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces.
90	44.50	45.00	0.50	0.42	84.00	0	0.00	Dolomitic Limestone	Highly fractured, Powdered Dolomitic Limestone with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
91	45.00	45.50	0.50	0.45	90.00	0	0.00	Weathered Dolomitic Limestone	Highly Weathered, highly fractured, Powdered Dolomitic Limestone & broken pieces with calcareous mud & broken pieces (Brown colour to grey colour)
92	45.50	46.00	0.50	0.49	98.00	0	0.00	Weathered Dolomitic Limestone	Highly Weathered, highly fractured, Powdered Dolomitic Limestone & broken pieces with calcareous mud & broken pieces (Brown colour to grey colour)
93	46.00	46.50	0.50	0.48	96.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm
94	46.50	47.00	0.50	0.38	76.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm
95	47.00	47.50	0.50	0.44	88.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
96	47.50	48.00	0.50	0.47	94.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm
97	48.00	48.50	0.50	0.40	80.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm
98	48.50	49.00	0.50	0.47	94.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm
99	49.00	49.50	0.50	0.49	98.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces(cm)	RQD %		
100	49.50	50.00	0.50	0.48	96.00	0	0.00	Weathered Dolomitic Limestone	Weathered, highly fractured, Powdered Dolomitic Limestone with broken pieces & solid core pieces but less than 10cm

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.

PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.

AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED

F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.

BOREHOLE ID.	GKBH-12	START DATE	01-07-2025	END DATE	04-07-2025	INCLINATION	
DGPS X	282166.048	TOP RL	195.9156	CORE SIZE	63.5mm	LOGGE D BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2186183.98	BOTTOM RL	145.9156			REVIE WED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGT H (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
1	0.00	1.50	1.50	1.49	99.33	0	0.00	Top soil / Loose soil	Top soil / Loose soil
2	1.50	3.00	1.50	1.38	92.00	0	0.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, Fractured, alternating light grey and dark grey banding.
3	3.00	4.50	1.50	1.36	90.67	11	7.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, Fractured, alternating light grey and dark grey banding.
4	4.50	6.00	1.50	1.35	90.00	0	0.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, Fractured, alternating light grey and dark grey banding.

S. No	RUN		TOTAL RUN LENGTH H (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
5	6.00	7.50	1.50	1.37	91.33	10	6.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, Fractured, alternating light grey and dark grey banding.
6	7.50	9.00	1.50	1.45	96.67	13	8.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, Fractured, alternating light grey and dark grey banding.
7	9.00	10.50	1.50	1.47	98.00	66	44.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, Fractured, alternating light grey and dark grey banding.
8	10.50	12.00	1.50	1.43	95.33	58	38.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
9	12.00	13.50	1.50	1.48	98.67	111	74.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.

S. No	RUN		TOTAL RUN LENGTH H (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
10	13.50	15.00	1.50	1.49	99.33	83	55.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
11	15.00	16.50	1.50	1.49	99.33	94	62.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
12	16.50	18.00	1.50	1.49	99.33	68	45.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
13	18.00	19.50	1.50	1.49	99.33	120	80.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
14	19.50	21.00	1.50	1.46	97.33	70	46.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
15	21.00	22.50	1.50	1.49	99.33	56	37.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.

S. No	RUN		TOTAL RUN LENGTH H (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
16	22.50	24.00	1.50	1.49	99.33	88	58.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
17	24.00	25.50	1.50	1.49	99.33	57	38.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
18	25.50	27.00	1.50	1.49	99.33	94	62.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
19	27.00	28.50	1.50	1.38	92.00	90	60.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.
20	28.50	30.00	1.50	1.49	99.33	91	60.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating light grey and dark grey banding.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
21	30.00	31.50	1.50	1.49	99.33	108	72.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
22	31.50	33.00	1.50	1.48	98.67	82	54.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
23	33.00	34.50	1.50	1.49	99.33	104	69.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
24	34.50	36.00	1.50	1.49	99.33	126	84.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
25	36.00	37.50	1.50	1.48	98.67	89	59.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.

S. No	RUN		TOTAL RUN LENGTH H (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
26	37.50	39.00	1.50	1.49	99.33	80	53.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
27	39.00	40.50	1.50	1.49	99.33	75	50.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
28	40.50	42.00	1.50	1.48	98.67	59	39.33	Dolomitic Limestone	Dolomitic Limestone with fine grained, moderately fractured, alternating white to light grey and dark grey banding.
29	42.00	43.50	1.50	1.48	98.67	66	44.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
30	43.50	45.00	1.50	1.49	99.33	52	34.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
31	45.00	46.50	1.50	1.48	98.67	73	48.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.

S. No	RUN		TOTAL RUN LENGTH H (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
32	46.50	48.00	1.50	1.49	99.33	25	16.67	Dolomitic Limestone	Dolomitic Limestone with fine grained, moderately fractured, alternating white to light grey and dark grey banding.
33	48.00	49.50	1.50	1.49	99.33	54	36.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.
34	49.50	50.00	0.50	0.47	94.00	12	24.00	Dolomitic Limestone	Dolomitic Limestone with fine grained, alternating white to light grey and dark grey banding.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHTRA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-13	START DATE	27-06-2025	END DATE	29-06-2025	INCLINATION	VERTICAL
DGPS X	282999.334	TOP RL	197.3668	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2186158.7	BOTTOM RL	147.3668			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
1	0.00	0.90	0.90	0.83	92.22	0	0.00	Top soil / Loose soil.	Top soil / Loose soil.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
2	0.90	1.50	0.60	0.59	98.33	12	20.00	Dolomitic limestone	Weathered Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
3	1.50	3.00	1.50	1.43	95.33	80	53.33	Dolomitic limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
4	3.00	4.50	1.50	1.46	97.33	45	30.00	Dolomitic limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
5	4.50	6.00	1.50	1.49	99.33	111	74.00	Dolomitic limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
6	6.00	7.50	1.50	1.45	96.67	83	55.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
7	7.50	9.00	1.50	1.47	98.00	74	49.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
8	9.00	10.50	1.50	1.46	97.33	97	64.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
9	10.50	12.00	1.50	1.45	96.67	103	68.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
10	12.00	13.50	1.50	1.47	98.00	111	74.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
11	13.50	15.00	1.50	1.49	99.33	134	89.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
12	15.00	16.50	1.50	1.49	99.33	144	96.00	Grey Limestone	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
13	16.50	18.00	1.50	1.49	99.33	109	72.67	Grey Limestone	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
14	18.00	19.50	1.50	1.48	98.67	105	70.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins & intra clasts
15	19.50	21.00	1.50	1.46	97.33	65	43.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
16	21.00	22.50	1.50	1.49	99.33	123	82.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
17	22.50	24.00	1.50	1.49	99.33	106	70.67	Grey Limestone	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins & intra clasts

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
18	24.00	25.50	1.50	1.49	99.33	136	90.67	Grey Limestone	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins & intra clasts
19	25.50	27.00	1.50	1.48	98.67	106	70.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
20	27.00	28.50	1.50	1.45	96.67	130	86.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
21	28.50	30.00	1.50	1.48	98.67	109	72.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
22	30.00	31.50	1.50	1.49	99.33	121	80.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
23	31.50	33.00	1.50	1.47	98.00	128	85.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
24	33.00	34.50	1.50	1.49	99.33	120	80.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
25	34.50	36.00	1.50	1.48	98.67	123	82.00	Grey Limestone	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
26	36.00	37.50	1.50	1.49	99.33	131	87.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
27	37.50	39.00	1.50	1.48	98.67	129	86.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
28	39.00	40.50	1.50	1.48	98.67	141	94.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
29	40.50	42.00	1.50	1.49	99.33	129	86.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
30	42.00	43.50	1.50	1.47	98.00	113	75.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
31	43.50	45.00	1.50	1.47	98.00	107	71.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
32	45.00	46.50	1.50	1.45	96.67	129	86.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
33	46.50	48.00	1.50	1.49	99.33	105	70.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
34	48.00	49.50	1.50	1.49	99.33	114	76.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins & intra clasts
35	49.50	50.00	0.50	0.49	98.00	24	48.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins & intra clasts

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-14	START DATE	23-06-2025	END DATE	25-06-2025	INCLINATION	VERTICAL
DGPS X	283815.498	TOP RL	198.6669	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH
DGPS Y	2186168.31	BOTTOM RL	148.6669			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
1	0.00	0.70	0.70	0.5	71.43	0	0.00	Top soil / Loose soil.	Top soil / Loose soil.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %	LITHOLOGY	DESCRIPTION
2	0.70	1.50	0.80	0.79	98.75	10	12.50	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
3	1.50	3.00	1.50	1.49	99.33	81	54.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
4	3.00	4.50	1.50	1.48	98.67	102	68.00	Weathered Dolomitic Limestone.	Weathered Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
5	4.50	6.00	1.50	1.49	99.33	135	90.00	Weathered Grey Limestone.	Weathered Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
6	6.00	7.50	1.50	1.46	97.33	132	88.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
7	7.50	9.00	1.50	1.47	98.00	117	78.00	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
8	9.00	10.50	1.50	1.46	97.33	126	84.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
9	10.50	12.00	1.50	1.48	98.67	141	94.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %	LITHOLOGY	DESCRIPTION
10	12.00	13.50	1.50	1.48	98.67	139	92.67	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with intra clasts
11	13.50	15.00	1.50	1.49	99.33	123	82.00	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
12	15.00	16.50	1.50	1.49	99.33	124	82.67	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
13	16.50	18.00	1.50	1.48	98.67	149	99.33	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %	LITHOLOGY	DESCRIPTION
14	18.00	19.50	1.50	1.49	99.33	123	82.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
15	19.50	21.00	1.50	1.49	99.33	149	99.33	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins with intra clasts.
16	21.00	22.50	1.50	1.48	98.67	143	95.33	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins with intra clasts.
17	22.50	24.00	1.50	1.49	99.33	147	98.00	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %	LITHOLOGY	DESCRIPTION
18	24.00	25.50	1.50	1.49	99.33	143	95.33	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
19	25.50	27.00	1.50	1.47	98.00	135	90.00	Grey Limestone.	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
20	27.00	28.50	1.50	1.49	99.33	147	98.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
21	28.50	30.00	1.50	1.49	99.33	142	94.67	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %		
22	30.00	31.50	1.50	1.48	98.67	89	59.33	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
23	31.50	33.00	1.50	1.47	98.00	84	56.00	Dolomitic limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with intra clasts
24	33.00	34.50	1.50	1.49	99.33	88	58.67	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
25	34.50	36.00	1.50	1.49	99.33	85	56.67	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces (cm)	RQD %	LITHOLOGY	DESCRIPTION
26	36.00	37.50	1.50	1.49	99.33	115	76.67	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
27	37.50	39.00	1.50	1.48	98.67	125	83.33	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
28	39.00	40.50	1.50	1.49	99.33	147	98.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
29	40.50	42.00	1.50	1.48	98.67	133	88.67	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces (cm)	RQD %	LITHOLOGY	DESCRIPTION
30	42.00	43.50	1.50	1.49	99.33	142	94.67	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
31	43.50	45.00	1.50	1.49	99.33	130	86.67	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
32	45.00	46.50	1.50	1.49	99.33	143	95.33	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
33	46.50	48.00	1.50	1.49	99.33	149	99.33	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10cm pieces (cm)	RQD %	LITHOLOGY	DESCRIPTION
34	48.00	49.50	1.50	1.49	99.33	135	90.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
35	49.50	50.00	0.50	0.49	98.00	49	98.00	Dolomitic Limestone.	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHTRA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-15	START DATE	06-08-2025	END DATE	08-08-2025	INCLINATION	VERTICAL
DGPS X	279719.214	TOP RL	206.6428	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH & BIJAYA KUMAR MAJHI
DGPS Y	2185391.45	BOTTOM RL	156.6428			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
1	0.00	1.50	1.50	1.39	92.67	0	0.00	Top soil / Loose soil	Top soil / Loose soil
2	1.50	2.20	0.70	0.69	98.57	0	0.00	Top soil / Loose soil	Top soil / Loose soil

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
3	2.20	3.00	0.80	0.76	95.00	0	0.00	Dolomitic Limestone	Dolomitic Limestone, buff colour/red colour because of high silica content
4	3.00	6.00	3.00	2.96	98.67	105	35.00	Dolomitic Limestone	Dolomitic Limestone, buff colour/red colour because of high silica content
5	6.00	9.00	3.00	2.95	98.33	187	62.33	Dolomitic Limestone	Dolomitic Limestone, buff colour/red colour because of high silica content
6	9.00	12.00	3.00	2.80	93.33	172	57.33	Dolomitic Limestone	Dolomitic Limestone with buff colour some places
7	12.00	15.00	3.00	2.98	99.33	171	57.00	Dolomitic Limestone	Dolomitic Limestone with buff colour some places with alternating grey and dark grey colour

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
8	15.00	18.00	3.00	2.99	99.67	175	58.33	Dolomitic Limestone	Dolomitic Limestone with buff colour some places with alternating grey and dark grey colour. From 17.33-17.36m & 18.87-18.90m calcite and geode formation observed respectively.
9	18.00	21.00	3.00	2.95	98.33	156	52.00	Dolomitic Limestone	Dolomitic Limestone with buff colour some places with alternating grey and dark grey colour.
10	21.00	24.00	3.00	2.99	99.67	141	47.00	Dolomitic Limestone	Dolomitic Limestone with buff colour some places with alternating grey and dark grey colour.
11	24.00	27.00	3.00	2.90	96.67	98	32.67	Dolomitic Limestone	Dolomitic Limestone with buff colour, some places crimson red colour shale layers (patches or 2to 3 cm)

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
12	27.00	30.00	3.00	2.99	99.67	214	71.33	Dolomitic Limestone	Dolomitic Limestone with buff colour, some places crimson red colour shale layers (patches or 2to 3 cm)
13	30.00	33.00	3.00	2.99	99.67	162	54.00	Dolomitic Limestone	Buff colour to grey colour limestone some places with alternating grey and dark grey colour.
14	33.00	36.00	3.00	2.99	99.67	220	73.33	Dolomitic Limestone	Dolomitic Limestone some places red colour is observed (may be red colour because of silica content)
15	36.00	39.00	3.00	2.99	99.67	176	58.67	Dolomitic Limestone	Dolomitic Limestone some places red colour is observed (may be red colour because of silica content)
16	39.00	42.00	3.00	2.99	99.67	152	50.67	Dolomitic Limestone	Dolomitic Limestone some places red colour is observed (may be red colour because of silica content)

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
17	42.00	45.00	3.00	2.97	99.00	160	53.33	Dolomitic Limestone	Weathered Dolomitic Limestone (may be red colour because of silica content) (because of weathering some places yellow colour observed) some places shale is observed (patches)
18	45.00	48.00	3.00	2.99	99.67	103	34.33	Dolomitic Limestone	Fractured Dolomitic Limestone & buff colour is observed at some places.
19	48.00	50.00	2.00	1.90	95.00	46	23.00	Dolomitic Limestone	Fractured Dolomitic Limestone & buff colour is observed at some places.

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-16	START DATE	07-08-2025	END DATE	13-08-2025	INCLINATION	VERTICAL
DGPS X	280537.249	TOP RL	200.166	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH & BIJAYA KUMAR MAJHI
DGPS Y	2185384.44	BOTTOM RL	150.166			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
1	0.00	0.50	0.50	0.23	46.00	16	32.00	Grey Limestone	Grey Limestone with Fine grained & highly compacted.
2	0.50	1.50	1.50	1.35	90.00	51	34.00	Grey Limestone	Grey Limestone with Fine grained & highly compacted.
3	1.50	3.00	1.50	1.46	97.33	91	60.67	Dolomitic Limestone	Dolomitic Limestone with shale patches

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
4	3.00	6.00	3.00	2.83	94.33	110	36.67	Dolomitic Limestone with Shale layers	Dolomitic Limestone with Shale layers (5.62m -5.83m & 5.95m - 6.00m).
5	6.00	9.00	3.00	2.90	96.67	97	32.33	Dolomitic Limestone with Shale layers	Dolomitic Limestone and shale alternate layers are observed at some places (6.43m - 6.84m & 7.50m - 9.00m).
6	9.00	12.00	3.00	2.96	98.67	91	30.33	Fractured Dolomitic Limestone with Shale layers	Fractured Dolomitic Limestone less than shale (10.24m - 10.48m, 10.90m - 10.95m, 11.06m - 11.10m & 11.18m - 11.44m).
7	12.00	15.00	3.00	2.90	96.67	128	42.67	Fractured Dolomitic Limestone with Shale layers	Fractured Dolomitic Limestone greater than shale (13.62m - 13.65m).
8	15.00	18.00	3.00	2.93	97.67	137	45.67	Dolomitic Limestone with Shale layers	Dolomitic Limestone with shale patches (Very thin layers)

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
9	18.00	21.00	3.00	2.83	94.33	149	49.67	Dolomitic Limestone with Shale layers	Dolomitic limestone greater than shale (18.47m - 18.51m & 20.05m - 20.54m).
10	21.00	24.00	3.00	2.86	95.33	109	36.33	Fractured Dolomitic limestone with Shale layers	Highly fractured Dolomitic limestone with broken pieces & Shale layers (21.12m -21.15m, 22.16m - 22.42m &22.63m - 22.73m)
11	24.00	27.00	3.00	2.90	96.67	10	3.33	Fractured Dolomitic limestone	Highly Fractured Dolomitic Limestone with broken pieces
12	27.00	30.00	3.00	2.86	95.33	33	11.00	Fractured Dolomitic limestone	Highly Fractured Dolomitic Limestone with broken pieces
13	30.00	33.00	3.00	2.90	96.67	62	20.67	Fractured Dolomitic limestone	Highly Fractured Dolomitic Limestone with broken pieces
14	33.00	36.00	3.00	2.93	97.67	181	60.33	Dolomitic Limestone	Dolomitic Limestone with buff colour because of silica content.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
15	36.00	39.00	3.00	2.99	99.67	180	60.00	Dolomitic Limestone with shale layer	Dolomitic Limestone with buff colour because of silica content & shale layer (38.14m - 38.18m).
16	39.00	42.00	3.00	2.98	99.33	35	11.67	Fractured Dolomitic limestone with Shale layers	Highly Fractured Dolomitic Limestone with Shale layers (39.17m - 39.27m & 39.64m - 39.78m)
17	42.00	45.00	3.00	2.80	93.33	16	5.33	Fractured Dolomitic limestone with shale layer	Highly Fractured Dolomitic Limestone with Shale layers (43.58m - 44.14m)
18	45.00	48.00	3.00	2.80	93.33	0	0.00	Fractured Dolomitic limestone	Highly Fractured Dolomitic Limestone with Shale layers.
19	48.00	50.00	2.00	1.95	97.50	0	0.00	Fractured Dolomitic limestone with shale layer	Highly Fractured Dolomitic Limestone with Shale layers (49.55m - 50.00m)

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHTRA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-17	START DATE	20-07-2025	END DATE	24-07-2025	INCLINATION	VERTICAL
DGPS X	281357.218	TOP RL	195.9657	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH & BIJAYA KUMAR MAJHI
DGPS Y	2185393.6	BOTTOM RL	145.9657			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
1	0.00	0.90	0.90	0.89	98.89	0	0.00	Top soil / Loose soil	Top soil / Loose soil

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
2	0.90	2.30	1.40	1.38	98.57	11	7.86	Weathered Dolomitic limestone & top soil	Weathered Dolomitic limestone & top soil
3	2.30	3.00	0.70	0.63	90.00	10	14.29	Weathered Dolomitic limestone & top soil	Weathered Dolomitic limestone & top soil
4	3.00	6.00	3.00	2.85	95.00	78	26.00	Dolomitic limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding
5	6.00	9.00	3.00	2.84	94.67	121	40.33	Dolomitic limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
6	9.00	12.00	3.00	2.80	93.33	194	64.67	Dolomitic limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding
7	12.00	15.00	3.00	2.80	93.33	167	55.67	Dolomitic limestone	Dolomitic Limestone with Fine grained, moderately compacted and alternating light white and crimson red banding with calcite veins (buff colour mostly may be high silica content)
8	15.00	18.00	3.00	2.75	91.67	201	67.00	Dolomitic limestone	Dolomitic Limestone with Fine grained, moderately compacted and alternating light white and crimson red banding with calcite veins

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
9	18.00	21.00	3.00	2.80	93.33	101	33.67	Dolomitic limestone	Dolomitic Limestone with calcite veins with fracture zone
10	21.00	24.00	3.00	2.84	94.67	47	15.67	Dolomitic limestone	Dolomitic Limestone with red colour & fracture zone
11	24.00	27.00	3.00	2.80	93.33	27	9.00	Dolomitic limestone	Highly fractured Dolomitic Limestone pieces with broken fragments
12	27.00	30.00	3.00	2.75	91.67	189	63.00	Dolomitic limestone	Highly fractured Dolomitic Limestone pieces with broken fragments

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
13	30.00	33.00	3.00	2.83	94.33	194	64.67	Dolomitic limestone	Dolomitic Limestone with calcite veins
14	33.00	36.00	3.00	2.99	99.67	162	54.00	Weathered dolomitic limestone	Dolomitic limestone with broken fragments.
15	36.00	39.00	3.00	2.98	99.33	262	87.33	Dolomitic limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding
16	39.00	42.00	3.00	2.99	99.67	262	87.33	Dolomitic limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO (m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %		
17	42.00	45.00	3.00	2.99	99.67	166	55.33	Dolomitic limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding
18	45.00	48.00	3.00	2.98	99.33	129	43.00	Dolomitic limestone	Dolomitic Limestone with Fine grained, moderately compacted and alternating light white and crimson red banding with calcite veins
19	48.00	50.00	2.00	1.98	99.00	115	57.50	Dolomitic limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.							
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHTRA STATE.							
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED							
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.							
BOREHOLE ID.	GKBH-18	START DATE	15-07-2025	END DATE	17-07-2025	INCLINATION	VERTICAL
DGPS X	282145.071	TOP RL	191.53	CORE SIZE	63.5mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH & BIJAYA KUMAR MAJHI
DGPS Y	2185363.47	BOTTOM RL	141.53			REVIEW ED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
1	0.00	1.50	1.50	1.48	98.67	0	0.00	Top soil / Loose soil	Top soil / Loose soil

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10c m pieces(cm)	RQD %		
2	1.50	3.00	1.50	1.48	98.67	0	0.00	Top soil / Loose soil	Top soil / Loose soil
3	3.00	4.00	1.00	0.94	94.00	0	0.00	Top soil / Loose soil & Dolomitic limestone	3.00 - 3.34m Top soil / Loose soil 3.34 - 4.00m Dolomitic limestone
4	4.00	7.00	3.00	2.9	96.67	30	10.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10c m pieces(cm)	RQD %		
5	7.00	10.00	3.00	2.91	97.00	30	10.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding with broken pieces.
6	10.00	13.00	3.00	2.95	98.33	104	34.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
7	13.00	16.00	3.00	2.99	99.67	190	63.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10c m pieces(cm)	RQD %		
8	16.00	19.00	3.00	2.95	98.33	151	50.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
9	19.00	22.00	3.00	2.99	99.67	219	73.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, moderately compacted and alternating light white and crimson red banding with calcite veins
10	22.00	25.00	3.00	2.98	99.33	226	75.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10c m pieces(cm)	RQD %		
11	25.00	28.00	3.00	2.99	99.67	224	74.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
12	28.00	31.00	3.00	2.98	99.33	222	74.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
13	31.00	34.00	3.00	2.95	98.33	82	27.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, Fractured, Moderately compacted and alternating light grey and dark grey banding with broken pieces.

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10c m pieces(cm)	RQD %		
14	34.00	37.00	3.00	2.99	99.67	149	49.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding with broken pieces.
15	37.00	40.00	3.00	2.99	99.67	34	11.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding with broken pieces.
16	40.00	43.00	3.00	2.96	98.67	142	47.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, moderately compacted and alternating light grey and grey banding with calcite veins

S. No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD		LITHOLOGY	DESCRIPTION
	DEPTH FROM (m)	DEPTH TO(m)		TOTAL CORE RECOVERY (m)	RECOVERY PERCENTA GE	RQD>10c m pieces(cm)	RQD %		
17	43.00	46.00	3.00	2.98	99.33	232	77.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with intraclasts
18	46.00	49.00	3.00	2.98	99.33	62	20.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, Fractured, moderately compacted and alternating light grey and dark grey banding with intraclasts.
19	49.00	50.00	1.00	0.99	99.00	28	28.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

ANNEXURE III: LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT-KHATERA BLOCK, YAVATMAL DISTRICT, MAHARASHTRA.								
PROJECT NAME -NMET PRELIMINARY EXPLORATION (G3 STAGE) OF LIMESTONE, GADEGHAT-KHATERA, YAVATMAL DIST, MAHARASHRTA STATE.								
AGENCY NAME: MAHESHWARI MINING PRIVATE LIMITED								
F.NO: 23/554/2025-NMET/840 ISSUED BY NATIONAL MINERAL EXPLORATION TRUST DATED ON 10TH FEBRUARY, 2025.								
BOREHOLE ID.	GKBH-19	START DATE	11-07-2025	END DATE	14-07-2025	INCLINATION		VERTICAL
DGPS X	282975.94	TOP RL	193.1704	CORE SIZE	63.5 mm	LOGGED BY	YUDHISTHIR MOHANTA & BISANI SRIKANTH & BIJAYA KUMAR MAJHI	
DGPS Y	2185326.7	BOTTOM RL	143.1704			REVIEWED BY	PRADIPTA TARAFDAR & BALKRISHAN VISHAWAKARMA	

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
1	0.00	3.00	3.00	2.83	94.33	0	0	Loose Soil	Loose Soil
2	3.00	4.00	1.00	0.97	97.00	0	0	Loose Soil	Loose Soil

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
3	4.00	6.00	2.00	1.99	99.50	100	50.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
4	6.00	9.00	3.00	2.95	98.33	127	42.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
5	9.00	12.00	3.00	2.99	99.67	299	99.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
6	12.00	15.00	3.00	2.99	99.67	182	60.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
7	15.00	18.00	3.00	2.99	99.67	227	75.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
8	18.00	21.00	3.00	2.95	98.33	225	75.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
9	21.00	24.00	3.00	2.99	99.67	261	87.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
10	24.00	27.00	3.00	2.99	99.67	273	91.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
11	27.00	30.00	3.00	2.99	99.67	254	84.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
12	30.00	33.00	3.00	2.99	99.67	275	91.67	Grey Limestone	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
13	33.00	36.00	3.00	2.99	99.67	214	71.33	Dolomitic Limestone	33.00-34.00 Grey Limestone. 3400 -36.00 - Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
14	36.00	39.00	3.00	2.99	99.67	178	59.33	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and

S.No	RUN		TOTAL RUN LENGTH (m)	CORE		RQD			
	DEPTH FROM(m)	DEPTH TO(m)		TOTAL CORE RECOVERY(m)	RECOVERY PERCENTAGE	RQD>10cm pieces(cm)	RQD %	LITHOLOGY	DESCRIPTION
									alternating light grey and dark grey banding with calcite veins
15	39.00	42.00	3.00	2.99	99.67	156	52.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
16	42.00	45.00	3.00	2.99	99.67	270	90.00	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
17	45.00	48.00	3.00	2.99	99.67	221	73.67	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
18	48.00	50.00	2.00	1.99	99.50	139	69.50	Dolomitic Limestone	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.

ANNEXURE-IV: Summarized Lithologs of Boreholes of Gadeghat-Khatera Block						
Sl. No.	Toposheet No.	Bore Hole ID	Depth (m)		Recovery (%)	Description of lithology
			From	To		
1	56I/13	GKBH-01	0.00	1.50	98.50	Top soil / Loose soil & buff colour at some places because of silica content with Fractured with weathered and loose mud.
2	56I/13	GKBH-01	1.50	50.00	98.16	Weathered, highly fractured dolomitic Limestone with calcite veins with broken fragments.
3	56I/13	GKBH-02	0.00	1.50	99.33	Loose soil & Limestone
4	56I/13	GKBH-02	1.50	50.00	98.55	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
5	56I/13	GKBH-03	0.00	0.60	93.33	Top soil / Loose soil.
6	56I/13	GKBH-03	0.60	15.00	98.62	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
7	56I/13	GKBH-03	15.00	18.00	97.00	Grey Limestone with highly compacted, alternate grey and light grey colour banding.
8	56I/13	GKBH-03	18.00	40.50	98.80	Dolomitic Limestone with highly compacted, alternate grey and light grey colour banding.
9	56I/13	GKBH-03	40.50	50.00	98.57	Grey Limestone with highly compacted, alternate grey and light grey colour banding.
10	56I/13	GKBH-04	00.00	1.50	90.00	Top soil / loose soil & dolomitic Limestone with calcareous mud
11	56I/13	GKBH-04	1.50	18.00	97.71	Dolomitic Limestone with fine grained, highly compacted and alternating light grey and dark grey banding and calcite veins.
12	56I/13	GKBH-04	18.00	30.00	99.00	Gritty Limestone with calcite veins and fractures
13	56I/13	GKBH-04	30.00	50.00	98.60	Dolomitic Limestone & Grey limestone with calcite veins
14	56I/13	GKBH-05	0.00	3.00	97.00	Top soil / loose soil with weathered Limestone
15	56I/13	GKBH-05	3.00	50.00	99.06	Dolomitic limestone with alternate grey and light grey colour banding.
16	56I/13	GKBH-06	0.00	1.50	96.00	Top soil / loose soil with weathered dolomitic Limestone of broken fragments
17	56I/13	GKBH-06	1.50	50.00	98.69	Dolomitic Limestone with fine grained, highly compacted and

ANNEXURE-IV: Summarized Lithologs of Boreholes of Gadeghat-Khatera Block						
Sl. No.	Toposheet No.	Bore Hole ID	Depth (m)		Recovery (%)	Description of lithology
			From	To		
						alternating light grey and dark grey banding.
18	56I/13	GKBH-07	0.00	3.00	99.67	Loose soil & weathered Limestone
19	56I/13	GKBH-07	3.00	21.00	99.11	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins & intra clasts.
20	56I/13	GKBH-07	21	27	99.17	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
21	56I/13	GKBH-07	27	48	98.86	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
22	56I/13	GKBH-07	48	50	99.50	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
23	56I/13	GKBH-08	0	1.50	92.97	Top soil / loose soil & dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
24	56I/13	GKBH-08	1.50	15	98.81	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
25	56I/13	GKBH-08	15	25.50	98.95	Grey Limestone with fine grained, highly compacted, alternating light grey and dark grey banding and calcite veins
26	56I/13	GKBH-08	25.50	42	98.67	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
27	56I/13	GKBH-08	42	48	98.17	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
28	56I/13	GKBH-08	48	50	98.33	Dolomitic Limestone with fine grained, highly compacted, alternating light grey and dark grey banding.
29	56I/13	GKBH-09	0	1.5	97.33	Loose soil & buff colour dolomitic Limestone
30	56I/13	GKBH-09	1.5	50	97.68	Weathered dolomitic Limestone with alternating light grey and dark grey banding
31	56I/13	GKBH-10	0	0.5	98.00	Loose soil

ANNEXURE-IV: Summarized Lithologs of Boreholes of Gadeghat-Khatera Block						
Sl. No.	Toposheet No.	Bore Hole ID	Depth (m)		Recovery (%)	Description of lithology
			From	To		
32	56I/13	GKBH-10	0.5	50	99.21	Fractured dolomitic Limestone with buff colour because of silica content & buff colour dolomitic Limestone
33	56I/13	GKBH-11	0	2.00	80.50	Loose soil & dolomitic Limestone
34	56I/13	GKBH-11	2.00	50	86.79	Highly fractured & powdered dolomitic Limestone and broken pieces with calcareous mud.
35	56I/13	GKBH-12	0	4.50	94.00	Top soil / loose soil & dolomitic Limestone with fine grained, fractured, alternating light grey and dark grey banding.
36	56I/13	GKBH-12	4.50	50	97.91	Dolomitic Limestone with fine grained, Fractured, alternating light grey and dark grey banding.
37	56I/13	GKBH-13	0	1.50	95.28	Top soil / Loose soil & weathered Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
38	56I/13	GKBH-13	1.50	15	97.56	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
39	56I/13	GKBH-13	15	18	99.33	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
40	56I/13	GKBH-13	18	22.50	98.44	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
41	56I/13	GKBH-13	22.50	25.50	99.33	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins & intra clasts
42	56I/13	GKBH-13	25.50	50	98.51	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
43	56I/13	GKBH-14	0	1.50	85.09	Top soil / Loose soil & dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding

ANNEXURE-IV: Summarized Lithologs of Boreholes of Gadeghat-Khatera Block						
Sl. No.	Toposheet No.	Bore Hole ID	Depth (m)		Recovery (%)	Description of lithology
			From	To		
44	56I/13	GKBH-14	1.50	6	99.11	Weathered Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
45	56I/13	GKBH-14	6	9	97.67	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding & dolomitic limestone
46	56I/13	GKBH-14	9	12	98.00	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding
47	56I/13	GKBH-14	12	24	99.08	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding & dolomitic limestone
48	56I/13	GKBH-14	24	50	99.00	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins
49	56I/13	GKBH-15	0	2.2	95.62	Top soil / Loose soil
50	56I/13	GKBH-15	2.2	50	98.29	Buff colour to grey colour limestone some places with alternating grey and dark grey colour.
51	56I/13	GKBH-16	0	1.50	68.00	Grey Limestone with fine grained & highly compacted.
52	56I/13	GKBH-16	1.50	50	96.50	Dolomitic Limestone with shale patches (very thin layers)
53	56I/13	GKBH-17	0	3.00	95.82	Top soil / Loose soil & weathered Dolomitic limestone & top soil
54	56I/13	GKBH-17	3.00	50	95.75	Dolomitic Limestone with fine grained, fractured, moderately compacted and alternating light grey and dark grey banding.
55	56I/13	GKBH-18	0	4.00	97.11	Top soil & dolomitic limestone
56	56I/13	GKBH-18	4.00	50.00	98.88	Dolomitic Limestone with Fine grained, fractured, moderately compacted and alternating light grey and dark grey banding with broken pieces.
57	56I/13	GKBH-19	0	4	95.67	Loose Top Soil
58	56I/13	GKBH-19	4	30	99.35	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.

ANNEXURE-IV: Summarized Lithologs of Boreholes of Gadeghat-Khatera Block						
Sl. No.	Toposheet No.	Bore Hole ID	Depth (m)		Recovery (%)	Description of lithology
			From	To		
59	56I/13	GKBH-19	30	33	99.67	Grey Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding.
60	56I/13	GKBH-19	33	50	99.64	Dolomitic Limestone with Fine grained, highly compacted and alternating light grey and dark grey banding with calcite veins

ANNEXURE-V: ANALYTICAL RESULT OF CHECKSAMPLE (BEDROCK DUPLICATE SAMPLES)

Sample No.	Fe₂O₃%	SiO₂%	Al₂O₃%	SO₃%	P₂O₅%	CaO%	MgO %	MnO%	TiO₂ %	K₂O%	Na₂O%	V₂O₅%	Cr₂O₃ %	LOI%
GK-04	0.5	10.68	1	0.16	0.03	45.99	1.9	0.02	0.05	0.52	BDL	BDL	BDL	38.8
GK-08	0.55	10.36	1.42	0.17	0.04	45.86	1.94	0.04	0.07	0.78	BDL	BDL	BDL	38.5
GK-21	1.15	18.54	2.47	0.01	0.05	22.94	16.57	0.03	0.17	0.86	BDL	BDL	BDL	36.9
GK-38	0.5	3.21	0.44	<0.01	0.02	37.54	13.15	0.02	0.05	0.06	BDL	BDL	BDL	44.6
GK-51	0.53	7.39	0.5	0.02	0.03	33.74	14.72	0.03	0.06	0.08	BDL	BDL	BDL	42.6
GK-60	0.63	7.39	0.69	0.05	0.01	29.24	18.3	0.04	0.07	0.07	BDL	BDL	BDL	43.2
GK-64	0.36	8.3	0.67	0.03	0.03	50.06	0.22	0.03	0.03	0.1	BDL	BDL	BDL	39.8
GK-73	0.64	11.79	1.29	0.07	0.07	41.54	5.05	0.01	0.07	0.54	BDL	BDL	BDL	38.7

ANNEXURE-VI: ANALYTICAL RESULT OF CHECKSAMPLE (DRILLED CORE DUPLICATE SAMPLES)

Sl. No.	SAMPLE_ID	Fe ₂ O ₃ (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	SO ₃ (%)	P ₂ O ₅ (%)	CaO (%)	MgO (%)	MnO (%)	TiO ₂ (%)	K ₂ O (%)	Na ₂ O (%)	V ₂ O ₅ (%)	Cr ₂ O ₃ (%)	LOI (%)
1	GKBH-01/ S-11	1.10	18.10	2.19	0.01	0.08	24.03	16.74	0.06	0.15	0.32	0.09	<0.01	0.02	36.86
2	GKBH-01/ S-21	1.12	15.67	2.76	<0.01	0.08	25.13	16.60	0.04	0.18	0.47	0.04	<0.01	0.01	37.59
3	GKBH-01/ S-31	1.14	14.51	2.10	<0.01	0.06	25.62	16.87	0.05	0.15	0.40	0.01	<0.01	0.02	38.69
4	GKBH-01/ S-41	1.33	18.51	3.26	0.43	0.07	22.40	16.34	0.03	0.20	1.05	0.01	0.02	0.02	35.78
5	GKBH-02/ S-11	1.93	23.44	4.57	0.20	0.06	19.49	15.73	0.04	0.27	1.91	0.08	0.02	0.02	32.01
6	GKBH-02/ S-21	2.46	26.11	5.44	0.36	0.06	18.27	14.68	0.01	0.31	2.46	0.04	<0.01	<0.01	29.42
7	GKBH-02/ S-31	2.38	27.70	5.51	0.33	0.07	17.54	14.13	0.04	0.31	2.55	0.07	<0.01	0.02	29.12
8	GKBH-02/ S-41	1.77	20.17	3.66	0.24	0.06	21.64	16.19	0.04	0.22	1.71	0.05	0.02	0.02	34.04
9	GKBH-03/ S-11	2.21	23.59	4.71	0.16	0.07	24.05	11.16	0.04	0.27	2.08	0.07	<0.01	0.02	31.21
10	GKBH-03/ S-21	2.44	25.06	4.85	0.14	0.07	22.98	11.24	0.06	0.27	2.05	0.04	0.01	0.02	30.52
11	GKBH-03/ S-31	1.75	23.30	4.07	0.29	0.06	31.29	6.09	0.04	0.22	1.90	0.06	<0.01	0.02	30.70
12	GKBH-03/ S-41	1.04	16.82	2.80	0.64	0.05	40.04	2.65	0.04	0.14	1.62	<0.01	<0.01	0.02	33.95
13	GKBH-04/ S-11	1.06	16.24	2.58	0.39	0.05	38.81	4.29	0.04	0.13	1.32	0.04	<0.01	0.02	34.92
14	GKBH-04/ S-21	0.88	14.70	1.95	0.24	0.05	41.52	3.32	0.04	0.10	1.12	0.01	<0.01	0.01	35.90
15	GKBH-04/ S-31	1.71	25.08	4.31	0.35	0.06	31.65	4.57	0.04	0.23	1.96	0.02	0.01	0.02	29.55
16	GKBH-04/ S-41	2.00	25.09	4.64	0.02	0.07	31.83	4.02	0.03	0.24	2.16	0.02	0.01	0.02	29.45
17	GKBH-04/ S-45	2.24	25.99	5.09	0.43	0.06	30.07	4.94	0.04	0.27	2.29	0.03	0.01	0.02	28.37
18	GKBH-05/ S-11	1.59	20.95	3.82	0.38	0.06	21.19	16.06	0.04	0.23	1.72	0.06	0.01	0.02	33.61
19	GKBH-05/ S-21	1.73	22.20	4.16	0.23	0.06	20.53	15.43	0.05	0.25	2.04	0.03	0.01	0.02	32.84
20	GKBH-05/ S-31	1.68	19.70	3.21	0.50	0.06	22.04	16.30	0.04	0.20	1.44	0.02	<0.01	0.02	34.63
21	GKBH-05/ S-41	1.92	23.57	4.37	0.42	0.06	19.49	15.42	0.04	0.26	1.94	<0.01	0.01	0.02	32.10
22	GKBH-05/ S-45	1.74	19.49	3.43	0.36	0.04	21.64	16.35	0.06	0.21	1.52	<0.01	0.01	0.02	34.68
23	GKBH-06/ S-11	2.08	23.28	4.61	<0.01	0.07	19.93	15.28	0.04	0.27	2.06	0.02	0.01	0.02	32.00
24	GKBH-06/ S-21	2.23	24.80	4.73	0.19	0.06	19.41	14.63	0.05	0.28	2.22	0.02	0.02	0.02	31.01
25	GKBH-06/ S-31	2.38	25.94	5.16	0.24	0.07	18.63	14.64	0.04	0.30	2.15	<0.01	0.01	0.02	30.01

ANNEXURE-VI: ANALYTICAL RESULT OF CHECKSAMPLE (DRILLED CORE DUPLICATE SAMPLES)

Sl. No.	SAMPLE_ID	Fe ₂ O ₃ (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	SO ₃ (%)	P ₂ O ₅ (%)	CaO (%)	MgO (%)	MnO (%)	TiO ₂ (%)	K ₂ O (%)	Na ₂ O (%)	V ₂ O ₅ (%)	Cr ₂ O ₃ (%)	LOI (%)
26	GKBH-06/ S-41	1.55	18.33	3.66	0.62	0.07	31.87	8.59	0.04	0.20	1.80	0.01	<0.01	0.02	33.07
27	GKBH-06/ S-45	2.03	25.29	5.02	0.42	0.06	21.37	13.03	0.04	0.28	2.21	0.03	0.01	0.02	29.80
28	GKBH-07/ S-11	1.98	25.49	4.67	0.20	0.06	28.51	7.36	0.04	0.25	2.02	0.02	0.02	0.02	29.10
29	GKBH-07/ S-21	1.12	14.36	2.58	0.67	0.06	39.70	4.28	0.03	0.13	1.30	<0.01	0.01	0.01	35.37
30	GKBH-07/ S-31	2.21	23.14	4.18	0.94	0.06	27.89	8.64	0.03	0.23	1.89	<0.01	0.02	0.02	30.33
31	GKBH-07/ S-41	1.71	22.01	4.15	0.26	0.06	33.44	5.00	0.04	0.22	1.92	0.02	0.01	0.02	30.62
32	GKBH-07/ S-45	2.46	28.37	5.19	0.78	0.06	23.10	9.22	0.04	0.29	2.46	0.02	<0.01	0.02	27.52
33	GKBH-08/ S-11	2.55	31.47	5.81	0.95	0.07	24.13	6.09	0.05	0.31	2.80	0.04	0.01	0.02	25.23
34	GKBH-08/ S-21	1.76	22.26	4.06	0.65	0.06	32.10	6.03	0.04	0.22	2.15	<0.01	0.01	0.02	30.47
35	GKBH-08/ S-31	1.95	24.25	4.38	0.58	0.06	31.54	5.14	0.04	0.23	2.22	<0.01	<0.01	0.01	29.37
36	GKBH-08/ S-41	2.09	23.33	4.02	0.79	0.05	25.50	10.76	0.05	0.23	2.16	0.03	0.02	0.02	30.70
37	GKBH-08/ S-45	1.53	19.69	3.38	0.70	0.05	35.95	4.25	0.06	0.18	1.69	<0.01	<0.01	0.02	32.21
38	GKBH-09/ S-11	1.05	17.39	3.01	0.02	0.04	25.97	15.01	0.04	0.18	0.84	<0.01	0.01	0.02	36.10
39	GKBH-09/ S-21	0.93	13.69	2.21	0.15	0.03	29.25	14.64	0.04	0.13	0.62	<0.01	<0.01	0.02	38.10
40	GKBH-09/ S-31	0.68	10.57	1.54	0.16	0.03	31.37	14.68	0.07	0.10	0.49	<0.01	<0.01	0.02	40.01
41	GKBH-09/ S-41	0.82	12.18	1.91	0.01	0.02	25.44	18.77	0.06	0.14	0.52	<0.01	<0.01	<0.01	39.74
42	GKBH-09/ S-45	1.10	17.29	2.95	0.11	0.03	24.75	15.94	0.05	0.18	0.88	<0.01	<0.01	0.02	36.40
43	GKBH-10/ S-11	1.16	15.75	2.38	0.03	0.03	26.68	15.54	0.07	0.15	0.34	0.03	<0.01	0.03	37.62
44	GKBH-10/ S-21	0.86	12.76	1.91	<0.01	0.03	26.67	17.52	0.06	0.14	0.30	0.02	0.01	0.03	39.50
45	GKBH-10/ S-31	0.97	13.03	2.33	<0.01	0.03	25.22	18.11	0.06	0.16	0.38	<0.01	0.01	0.02	39.52
46	GKBH-10/ S-41	1.05	15.01	2.06	<0.01	0.03	25.17	17.48	0.06	0.14	0.46	0.02	0.01	0.03	38.35
47	GKBH-10/ S-45	0.68	9.32	1.60	0.01	0.03	27.10	19.37	0.06	0.12	0.41	0.01	0.02	0.03	41.12
48	GKBH-11/ S-11	0.69	16.19	1.61	<0.01	0.06	24.83	17.57	0.07	0.12	0.37	0.02	<0.01	0.02	38.09
49	GKBH-11/ S-21	0.82	21.54	2.09	<0.01	0.05	22.66	16.26	0.10	0.15	0.51	0.02	<0.01	0.03	35.43
50	GKBH-11/ S-31	0.90	16.04	1.26	0.02	0.06	24.84	17.68	0.10	0.11	0.30	0.01	<0.01	0.03	38.50

ANNEXURE-VI: ANALYTICAL RESULT OF CHECKSAMPLE (DRILLED CORE DUPLICATE SAMPLES)

Sl. No.	SAMPLE_ID	Fe ₂ O ₃ (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	SO ₃ (%)	P ₂ O ₅ (%)	CaO (%)	MgO (%)	MnO (%)	TiO ₂ (%)	K ₂ O (%)	Na ₂ O (%)	V ₂ O ₅ (%)	Cr ₂ O ₃ (%)	LOI (%)
51	GKBH-12/ S-11	1.77	22.08	4.11	0.52	0.06	20.24	16.51	0.06	0.25	1.75	0.06	<0.01	0.03	32.44
52	GKBH-12/ S-21	1.78	22.33	3.86	0.33	0.05	20.26	16.53	0.06	0.24	1.57	0.03	0.01	0.02	32.79
53	GKBH-12/ S-31	1.84	22.67	4.20	<0.01	0.06	19.90	16.19	0.08	0.25	1.71	0.07	0.02	0.03	32.80
54	GKBH-12/ S-41	1.79	23.77	4.36	0.29	0.05	19.59	15.54	0.07	0.26	1.97	0.06	0.02	0.03	31.96
55	GKBH-12/ S-45	1.68	19.85	3.73	0.27	0.05	21.36	16.47	0.06	0.23	1.72	0.02	0.02	0.03	34.34
56	GKBH-13/ S-11	2.03	23.08	4.24	0.22	0.06	26.57	10.14	0.09	0.24	1.80	0.06	0.02	0.04	31.19
57	GKBH-13/ S-21	1.72	24.34	3.86	0.59	0.06	25.33	10.58	0.07	0.22	1.81	0.03	0.01	0.03	31.10
58	GKBH-13/ S-31	1.84	23.65	4.20	0.65	0.06	31.97	5.39	0.06	0.22	1.81	0.04	0.02	0.03	29.89
59	GKBH-13/ S-41	2.04	26.42	5.12	0.36	0.06	29.66	5.19	0.05	0.27	2.30	0.04	0.02	0.02	28.22
60	GKBH-13/ S-45	2.20	27.04	5.10	0.55	0.06	29.13	5.21	0.06	0.27	2.28	0.02	0.01	0.03	27.79
61	GKBH-14/ S-11	2.17	29.09	5.24	0.78	0.06	28.09	4.70	0.08	0.28	2.55	0.04	0.02	0.04	26.57
62	GKBH-14/ S-21	1.49	20.26	3.49	0.89	0.04	36.02	3.67	0.06	0.18	1.77	0.02	0.01	0.03	31.91
63	GKBH-14/ S-31	3.48	35.63	7.58	0.59	0.08	14.39	10.70	0.09	0.41	3.27	0.07	<0.01	0.03	23.21
64	GKBH-14/ S-41	1.58	23.63	3.93	0.66	0.05	35.62	2.50	0.05	0.20	1.88	0.04	0.01	0.03	29.71
65	GKBH-14/ S-45	2.55	30.38	5.85	0.42	0.06	24.07	7.09	0.06	0.31	2.63	0.06	0.02	0.03	26.24
66	GKBH-15/ S-11	0.98	16.62	2.70	0.32	0.03	26.34	14.80	0.07	0.16	0.77	0.03	<0.01	0.03	36.80
67	GKBH-15/ S-21	0.77	11.02	1.82	<0.01	0.02	25.41	19.31	0.04	0.13	0.53	<0.01	<0.01	<0.01	40.53
68	GKBH-15/ S-31	1.23	15.96	2.86	0.04	0.04	26.33	15.54	0.06	0.18	0.56	<0.01	<0.01	0.03	37.06
69	GKBH-15/ S-41	0.78	19.85	2.68	<0.01	0.04	23.19	16.50	0.09	0.18	0.41	0.02	0.01	0.03	35.87
70	GKBH-15/ S-45	0.83	15.48	1.94	<0.01	0.04	25.04	17.83	0.08	0.14	0.25	0.02	0.01	0.03	38.13
71	GKBH-16/ S-11	0.92	14.43	1.70	0.03	0.03	27.95	15.56	0.06	0.12	0.27	0.08	0.01	0.03	38.44
72	GKBH-16/ S-21	0.59	9.56	1.11	<0.01	0.02	27.60	18.59	0.05	0.10	0.19	<0.01	<0.01	<0.01	41.74
73	GKBH-16/ S-31	0.92	16.12	0.56	<0.01	0.02	24.84	17.89	0.13	0.07	0.08	<0.01	<0.01	0.04	38.84
74	GKBH-16/ S-41	0.62	7.72	1.31	0.01	0.03	27.56	19.72	0.08	0.11	0.19	0.01	<0.01	0.03	42.31
75	GKBH-16/ S-45	1.05	14.65	1.90	<0.01	0.05	25.01	18.15	0.06	0.14	0.32	0.03	0.02	0.02	38.42

ANNEXURE-VI: ANALYTICAL RESULT OF CHECKSAMPLE (DRILLED CORE DUPLICATE SAMPLES)

Sl. No.	SAMPLE_ID	Fe ₂ O ₃ (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	SO ₃ (%)	P ₂ O ₅ (%)	CaO (%)	MgO (%)	MnO (%)	TiO ₂ (%)	K ₂ O (%)	Na ₂ O (%)	V ₂ O ₅ (%)	Cr ₂ O ₃ (%)	LOI (%)
76	GKBH-17/ S-11	1.51	15.36	3.30	<0.01	0.11	24.15	16.97	0.07	0.21	0.66	0.07	0.01	0.03	37.32
77	GKBH-17/ S-21	0.60	5.18	0.86	<0.01	0.04	28.25	20.15	0.05	0.09	0.14	<0.01	<0.01	0.01	44.21
78	GKBH-17/ S-31	2.01	21.51	3.84	<0.01	0.07	21.50	15.49	0.06	0.23	1.56	0.05	0.02	0.03	33.42
79	GKBH-17/ S-41	2.13	30.66	5.87	0.47	0.06	16.66	13.66	0.06	0.33	2.79	0.09	0.02	0.03	26.95
80	GKBH-17/ S-45	1.88	32.98	7.14	0.09	0.07	14.10	13.58	0.06	0.40	3.84	0.04	0.01	0.03	25.35
81	GKBH-18/ S-11	1.70	18.80	2.77	0.31	0.05	22.67	16.61	0.12	0.18	1.11	0.11	0.01	0.04	35.30
82	GKBH-18/ S-21	1.16	13.09	2.77	0.01	0.06	25.09	17.66	0.06	0.18	0.64	0.04	<0.01	0.03	39.01
83	GKBH-18/ S-31	1.52	16.54	2.70	0.18	0.06	24.18	16.74	0.06	0.17	0.51	0.06	0.01	0.03	37.03
84	GKBH-18/ S-41	1.10	14.27	2.65	0.06	0.06	24.95	17.70	0.06	0.17	0.66	0.03	0.01	0.03	38.06
85	GKBH-18/ S-45	1.92	23.95	4.00	0.46	0.05	20.31	15.35	0.07	0.24	1.40	0.05	0.01	0.03	32.01
86	GKBH-19/ S-11	1.96	23.51	4.36	0.11	0.06	26.13	10.34	0.07	0.24	1.77	0.14	0.01	0.03	30.95
87	GKBH-19/ S-21	2.27	27.14	5.25	0.14	0.06	24.41	9.63	0.07	0.29	2.03	0.14	0.02	0.03	28.30
88	GKBH-19/ S-31	1.48	20.91	3.25	0.46	0.05	27.70	11.06	0.05	0.19	1.46	0.15	0.02	0.02	32.97
89	GKBH-19/ S-41	1.80	23.15	4.06	0.50	0.05	26.35	10.69	0.05	0.23	1.73	0.08	0.02	0.02	31.08
90	GKBH-19/ S-45	1.77	24.77	4.36	0.27	0.06	25.30	10.70	0.06	0.25	1.89	0.07	0.01	0.03	30.25

ANEEXURE – VII: Co-ordinate and RL of drilled boreholes in Gadeghat-Khatera Block					
BOREHOLE ID	EASTING	NORTHING	LONGITUDE	LATITUDE	RL (m)
GKBH-1	281477.858	2187804.689	78° 55' 15.3634" E	19° 46' 09.3339" N	211.222
GKBH-2	282146.042	2187828.953	78° 55' 38.3007" E	19° 46' 10.3891" N	210.873
GKBH-3	282997.619	2187807.394	78° 56' 07.5557" E	19° 46' 10.0265" N	200.072
GKBH-4	283673.258	2187706.009	78° 56' 30.8018" E	19° 46' 06.9978" N	183.965
GKBH-5	281397.332	2187030.349	78° 55' 12.9246" E	19° 45' 44.1270" N	198.439
GKBH-6	282198.886	2187023.461	78° 55' 40.4541" E	19° 45' 44.2225" N	204.270
GKBH-7	283034.081	2186983.859	78° 56' 09.1528" E	19° 45' 43.2666" N	197.147
GKBH-8	283809.448	2186970.864	78° 56' 35.7857" E	19° 45' 43.1508" N	192.659
GKBH-9	279720.443	2186216.811	78° 54' 15.6837" E	19° 45' 17.0060" N	208.961
GKBH-10	280748.046	2186167.241	78° 54' 50.9922" E	19° 45' 15.8068" N	197.177
GKBH-11	281456.120	2186190.494	78° 55' 15.2975" E	19° 45' 16.8457" N	192.511
GKBH-12	282166.048	2186183.981	78° 55' 39.6791" E	19° 45' 16.9168" N	195.915
GKBH-13	282999.334	2186158.697	78° 56' 08.3049" E	19° 45' 16.4256" N	197.366
GKBH-14	283815.498	2186168.306	78° 56' 36.3282" E	19° 45' 17.0607" N	198.666
GKBH-15	279719.214	2185391.454	78° 54' 15.9920" E	19° 44' 50.1724" N	206.642
GKBH-16	280537.248	2185384.435	78° 54' 44.0847" E	19° 44' 50.2725" N	200.166
GKBH-17	281357.217	2185393.600	78° 55' 12.2371" E	19° 44' 50.8982" N	195.965
GKBH-18	282145.071	2185363.470	78° 55' 39.3034" E	19° 44' 50.2325" N	191.530
GKBH-19	282975.939	2185326.699	78° 56' 07.8496" E	19° 44' 49.3667" N	193.170

Note: For Methodology adopted in establishing borehole co-ordinates given in (Annexure - X)

Annexure-VIII: Co-ordinates of all cardinal points of the investigated block					
POINT ID	DMS		UTM (ZONE 44)		RL(m)
	Latitude	Longitude	Easting (X)	Northing (Y)	
P-1	19° 46' 46.1780" N	78° 54' 38.1513" E	281097.195	2188431.503	215.879
P-2	19° 46' 45.9487" N	78° 56' 21.9187" E	284117.991	2188387.412	183.834
P-3	19° 45' 02.2649" N	78° 56' 21.9971" E	284081.478	2185198.742	194.336
P-4	19° 45' 02.0531" N	78° 53' 26.1960" E	278962.515	2185255.205	189.858
P-5	19° 45' 37.7872" N	78° 53' 26.1081" E	278973.636	2186354.211	210.251
P-6	19° 45' 38.1346" N	78° 54' 38.1225" E	281070.531	2186338.910	198.513

Note: For Methodology adopted in establishing borehole co-ordinates given in (Annexure - X)

ANNEXURE – IX: Average bulk density of limestone drilled core samples			
Sl. No.	Toposheet No.	Sample No.	Bulk Density (gm/cc)
01	56I/13	GKBH-03/S-16	2.72
02	56I/13	GKBH-08/S-45	2.70
03	56I/13	GKBH-13/S-25	2.68
04	56I/13	GKBH-14/S-48	2.74
05	56I/13	GKBH-19/S-30	2.71
		Average	2.71

ANNEXURE-X

D.G.P.S. SURVEY REPORT

For

Reconnaissance Survey (G-3 Stage) of Limestone, Gadeghat-Khatera Block, Yavatmal District, Maharashtra

VILLAGES - GADEGHAT
DISTRICT - YAVATMAL
STATE - MAHARASHTRA
DGPS SURVEY AREA - 11.96 Sq. K.m



SURVEYED BY



Maheshwari

MMPL Private Limited

Shilpangan, C.F Building, 4th Floor, FR-07, Plot- LB-1, Sector 3, Bidhannagar, Kolkata, West Bengal
700098

INDEX

SL.NO.	PARTICULAR
1	INTRODUCTION OF SURVEY SITE
2	METHODOLOGY OF TOPOGRAPHY SURVEY
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4	SPECIFICATION OF USING INSTRUMENTS FOR ACQUISITION
5	COORDINATES SYSTEM
6	SCOPE OF WORK
7	BASE STATION DETAILS
8	CARDINAL WITH LEASE BOUNDARY COORDINATES
9	BORE-HOLE COLLAR DATA
10	TOPOGRAPHY SURFACE MAP WITH CONTOURING

1. INTRODUCTION OF SURVEY SITE

The **Gadeghat- Khatera Block**, located in the **Yavatmal District, Maharashtra**, is a prospective area (11.96 Sq. K.m) for limestone exploration and has been selected for reconnaissance-level (G-3 Stage) investigation under the funding support of the **National Mineral Exploration Trust (NMET)**. As part of the standard exploration workflow at G-3 level, a **Topographical Survey** forms an integral component, providing essential ground control and terrain data for geological mapping and mineral potential assessment.

The topography of the block, which consists of a combination of flat to moderately undulating terrain, needs to be captured accurately through **DGPS** surveys. This survey will aid in the creation of base maps at a 1:4,000 scale and support geological mapping, sample location referencing, and further exploration planning.

The Gadeghat Block is Bounded with cardinal point P-1,P-2,P-3,P-4, P-5 & P-6 Coordinate are given below:

CARDINAL POINTS			
SL	EASTING	NORTHING	RL
P-1	281097.195	2188431.503	215.879
P-2	284117.991	2188387.412	183.834
P-3	284081.478	2185198.742	194.336
P-4	278962.515	2185255.205	189.858
P-5	278973.636	2186354.211	210.251
P-6	281070.531	2186338.910	198.513

2. METHODOLOGY OF TOPOGRAPHY SURVEY

2.1 Objective

To prepare an accurate topographical map of the Gadeghat- Khatera Limestone Block using DGPS technology, capturing natural and man-made features, elevation contours, and ground control points.

2.2 Pre-Survey Planning

- **Survey Area Reconnaissance:** Visual inspection of the site to understand terrain, accessibility, obstructions, and landmarks.
- **Boundary Identification:** Collect and verify lease boundary coordinates and maps from client authorities.
- **Instrument Calibration:** Ensure all DGPS instruments are calibrated and batteries fully charged.

2.3 Establishment of Ground Control Points (GCPs)

- **Selection of GCP Locations:** Choose permanent, stable locations across the survey area for GCPs.
- **DGPS Base Station Setup:** Install the base station at a known coordinate or establish it through long static observation tied to a national reference.
- **DGPS Rover Deployment:** Move the rover unit to each GCP location.
- **Observation Time:** Record minimum 15-30 minutes of static data depending on baseline length and site conditions.
- **Post-Processing:** Use GNSS processing software to compute precise coordinates of GCPs.

2.4 Topographic Data Collection

- **Instrument Used:** DGPS in RTK (Real-Time Kinematic) mode for close-feature detail.
- **Data Capturing:**
 - Traverse the site systematically with the rover.
 - Record points at all significant features like:
 - Terrain changes (ridges, valleys, slopes)
 - Water bodies (streams, ponds)
 - Infrastructure (roads, buildings, fences)
 - Vegetation and other relevant land-use features.

- Ensure elevation (Z value) is recorded for contour mapping.

2.5 Borehole & Cardinal Point Marking

- **Fix PBH (Proposed Borehole) Locations:** Based on geological plan, fix borehole positions using RTK DGPS.
- **Cardinal Points:** Mark cardinal boundary points of the block using precise DGPS data for later demarcation.

2.6 Data Processing and Map Preparation

- **Download Data:** Transfer raw data from DGPS instruments.
- **Post-Process Data:** Use software Satlab-Geobiz GNSS Solutions.
- **AutoCAD/Civil 3D Mapping:**
 - Plot all topographical points.
 - Generate contour lines.
 - Digitize and label physical features.
 - Draw boundary, GCPs, and boreholes.

2.7 Report & Submission

- **Outputs:**
 - Topographical Map (PDF, AutoCAD)
 - DGPS Report (Base Station details, GCPs data, RTK data)
 - Coordinate Table of key features and PBHs.

Date of the Survey: 23-03-2025 to 15-04-2025

Name of the Surveyor: 1) Anuj Kumar Matho (Surveyor)
(Diploma in Mining Engineer with 8yrs experience.)

2) Saibalendu Maodal (Assistant Surveyor)

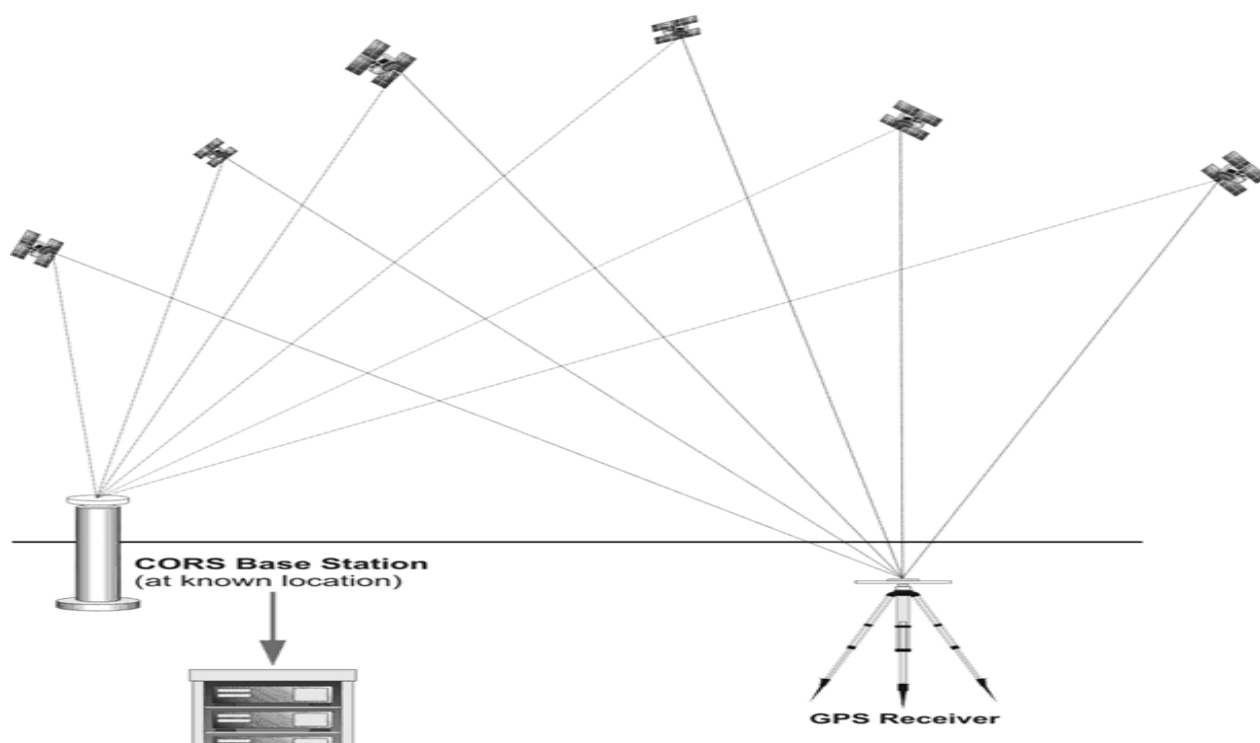
3. INTRODUCTION OF DGPS

3.1 Objective:

The objective of using **Differential Global Positioning System (DGPS)** in topographic surveys is to achieve **high-precision spatial data collection** for accurate mapping and elevation profiling. DGPS enhances standard GPS accuracy by applying real-time correction signals from a known base station, thereby reducing positional errors. This allows for precise determination of coordinates, elevation (RL), and boundary demarcation over large and varied terrains, ensuring the creation of reliable topographic maps that meet the standards of regulatory authorities such as IBM and DGMS.

3.2 DGPS Static Survey:

DGPS Static Survey is a high-precision surveying technique using **Differential Global Positioning System (DGPS)** receivers. In this method, two or more receivers are set up at fixed (static) positions for a long period (typically 30 minutes to several hours), and they record satellite signals simultaneously. One receiver is placed at a known control point (called the **Base Station**), and the other



at an unknown point (called the **Rover**). The data from both are post-processed to calculate very accurate coordinates (up to sub-centimetre level).

Schematic Diagram of DGPS Static mode survey

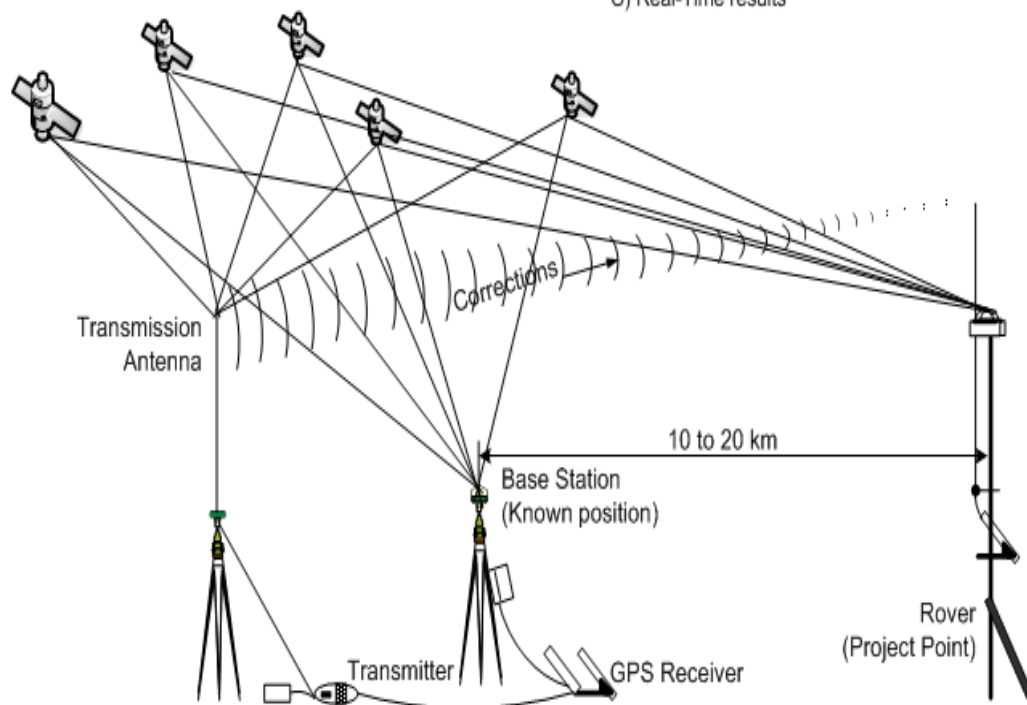
3.3 DGPS RTK Survey

Real-Time Kinematic (RTK) positioning is positioning that is based on at least two GPS receivers—a base receiver and one or more rover receivers. The base receiver takes measurements from satellites in view and then broadcasts them, together with its location, to the rover receiver(s). The rover receiver collects measurements to the satellites in view and processes them with the base station data. The rover then estimates its location relative to the base.

Real-Time-Kinematic

Positional Accuracy ± 2 cm or so

- Same Satellite Constellation (Base station – Rover/or Rovers)
- Carrier Phase (Track 5 satellites Minimum)
- Radio Link
 - A) More information
 - B) Fast information
 - C) Real-Time results



Schematic Diagram of DGPS RTK mode survey

The key to achieving centimeter-level positioning accuracy with RTK is the use of the GPS carrier phase signals. Carrier phase measurements are like precise tape measures from the base and rover antennas to the satellites. In the receiver, carrier phase measurements are made with millimeter-precision. Although carrier phase measurements are highly precise, they contain an unknown bias, termed the integer cycle ambiguity, or carrier phase ambiguity. The rover has to resolve, or initialize, the carrier phase ambiguities at power-up and every time that the satellite signals are interrupted.

3. SPECIFICATION OF USING INSTRUMENTS FOR ACQUISITION

Technical Parameters of Used GNSS System: SL900

GNSS Signal Tracking

- Supported Constellations: GPS (L1C/A, L1C, L2C, L2P, L5), GLONASS (L1C/A, L2C/A, L2P, L3CDMA), BeiDou (B1I, B1C, B2I, B2a, B3), Galileo (E1, E5AltBOC, E5a, E5b, E6), QZSS (L1C/A, L1C, L2C, L5, L6), SBAS (L1, L5), IRNSS/NavIC (L5)
- Channels: 555

Measurement Performance

- RTK Accuracy: Horizontal: 8 mm + 1 ppm RMS, Vertical: 15 mm + 1 ppm RMS
- Network RTK: Horizontal: 8 mm + 0.5 ppm RMS, Vertical: 15 mm + 0.5 ppm RMS
- PPK: Horizontal: 8 mm + 1 ppm RMS, Vertical: 15 mm + 1 ppm RMS
- Static: Horizontal: 2.5 mm + 0.1 ppm RMS, Vertical: 3.5 mm + 0.4 ppm RMS
- DGPS Accuracy: Horizontal: 25 cm RMS, Vertical: 50 cm RMS
- SBAS Accuracy: Horizontal: 50 cm RMS, Vertical: 85 cm RMS
- Initialization Time: 2–10 seconds
- Initialization Reliability: >99.9%

Communication Interfaces

- Cellular: Internal 4G modem (TDD-LTE, FDD-LTE, WCDMA, GPRS, GSM)
- Bluetooth: V2.1 + EDR, NFC
- Wi-Fi: 2.4 GHz, 802.11b/g/n
- Internal Radio: 403–473 MHz, 1–4 W, multiple protocol compatibility

Data Management

- Storage: 8 GB internal memory, 32 GB SD card support
- Data Formats: CMR, CMR+, RTCM2.X, RTCM3.0, RTCM3.2, GNS, RINEX
- Update Rate: 1–20 Hz
- Data Transmission: FTP/HTTP download, USB plug-and-play

System & Environmental Specs

- Operating System: Linux
- Startup Time: 3 seconds
- Battery: 5,000 mAh Li-ion, up to 10 hours RTK
- Durability: IP67, shock-resistant (2 m), -25°C to +65°C operation, -40°C to +80°C storage
- Dimensions: 170 mm × 95 mm
- Weight: 1.2 kg (with battery)

Additional Features

- IMU Tilt Compensation: 0° to 60° , accuracy $<10\text{ mm} + 0.7\text{ mm}/^{\circ}$ tilt
- Sensors: Built-in electronic bubble, thermometer

Application Domains

- Land surveying
- Geospatial mapping
- Topography and as-built surveys
- Hydrographic surveying
- Agriculture
- UAV base station operations



5. Coordinates System:

A coordinate system is a method used to define positions on Earth or in space using numbers. It uses reference points (like the Earth's centre or a specific datum) and measurements (latitude, longitude, or other values) to pinpoint a location.

For example:

- **Geographic Coordinate System:** Uses latitude and longitude to specify locations on Earth's surface (e.g., WGS 1984).
- **Projected Coordinate System:** Projects Earth's curved surface onto a flat map (e.g., UTM). These are often used for detailed mapping and spatial analysis.

5.1 Coordinate Parameter

Datum Name: UTM-WGS84_44N

Ellipsoid: WGS 1984

Major Axis:6378137.0

Inverse Flattenning:298.257

Projection Method:

Transverse Mercator

Central Meridian:

75:00:00.000000E

Central

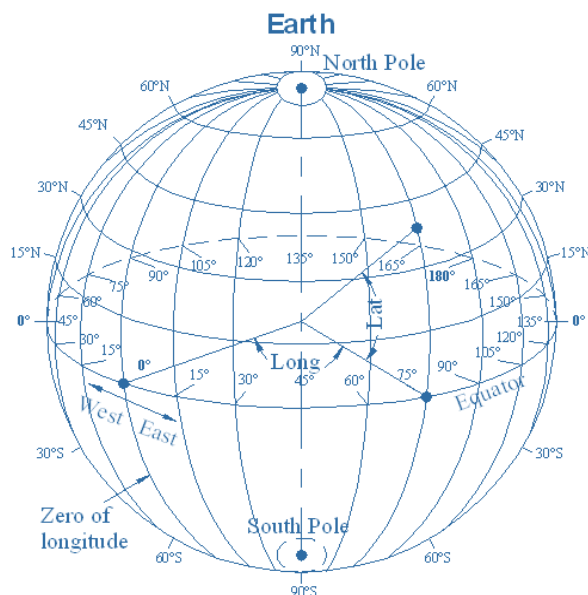
Latitude:00:00:00.00

000N Scale:0.9996L

Projection Height(m):0

False North(m):0

Fase East(m):500000



6. SCOPE OF WORK:

- **Topographic Survey:**

Conduct a detailed Topographic survey of the entire leasehold area with 2m interval contouring. The survey shall be carried out using DGPS equipment, and a surface plan shall be prepared in accordance with the requirements of NMET.

- **Block Boundary Survey with Lease cardinal marking**

Survey and demarcate the block boundaries accurately using DGPS to ensure compliance with the approved lease and regulatory guidelines.

- **Bore Hole Collar Survey**

Fix the positions of all proposed and existing boreholes. Determine and record the geographic coordinates and reduced levels (RL) of each borehole using DGPS technology.

- **Geological outcrops Demarcation & Classification**

Geological outcrops are natural exposures of bedrock or consolidated geological formations visible at the Earth's surface. Identifying and studying outcrops is a fundamental part of geological fieldwork and resource evaluation. The process of demarcation and classification of geological outcrops provides critical information for understanding the lithological, structural, and stratigraphic characteristics of a study area. The objective of this activity is to accurately identify, demarcate, and classify all visible geological outcrops within the project boundary to support geological mapping, resource estimation, and mine planning activities.

7. DGPS Base Station Establishment for Topographical Survey:

Establishing a DGPS (Differential Global Positioning System) base station is a fundamental requirement for conducting accurate and reliable topographical surveys. The base station serves as a fixed reference point that transmits correction data to the mobile (rover) unit in real time or during post-processing, thereby significantly improving the positional accuracy of the survey data.

To establish a DGPS base station at a strategically selected location to provide accurate positional corrections for topographical survey work in the designated area.

A properly established DGPS base station ensures high-precision coordinate determination across the entire survey area. It forms the backbone of any topographical survey by enabling real-time or post-processed correction of GNSS data, thus improving positional accuracy from several meters to sub-meter or centimetre level, depending on the method used.

Final Base Station Data:

NAME	ESTING	NORTHING	RL
G 1	288423.508	2183065.123	199.361
G 2	283709.110	2186808.036	193.971
G 3	283148.971	2187689.977	196.690
G 4	280813.678	2186115.315	197.489
G 5	286304.434	2183708.970	199.075



8.CARDINAL WITH LEASE BOUNDARY COORDINATES

Objective:

To establish and accurately mark the cardinal extremities (North, South, East, and West) of the designated survey block using Differential Global Positioning System (DGPS) technology, in order to define the spatial boundaries of the leasehold area and ensure high-precision data acquisition for topographical mapping, surface planning, and further geological or mining assessments.

Final Coordinates for Lease Block Cardinal:

Google Satellite Image of Cardinal:

CARDINAL POINTS

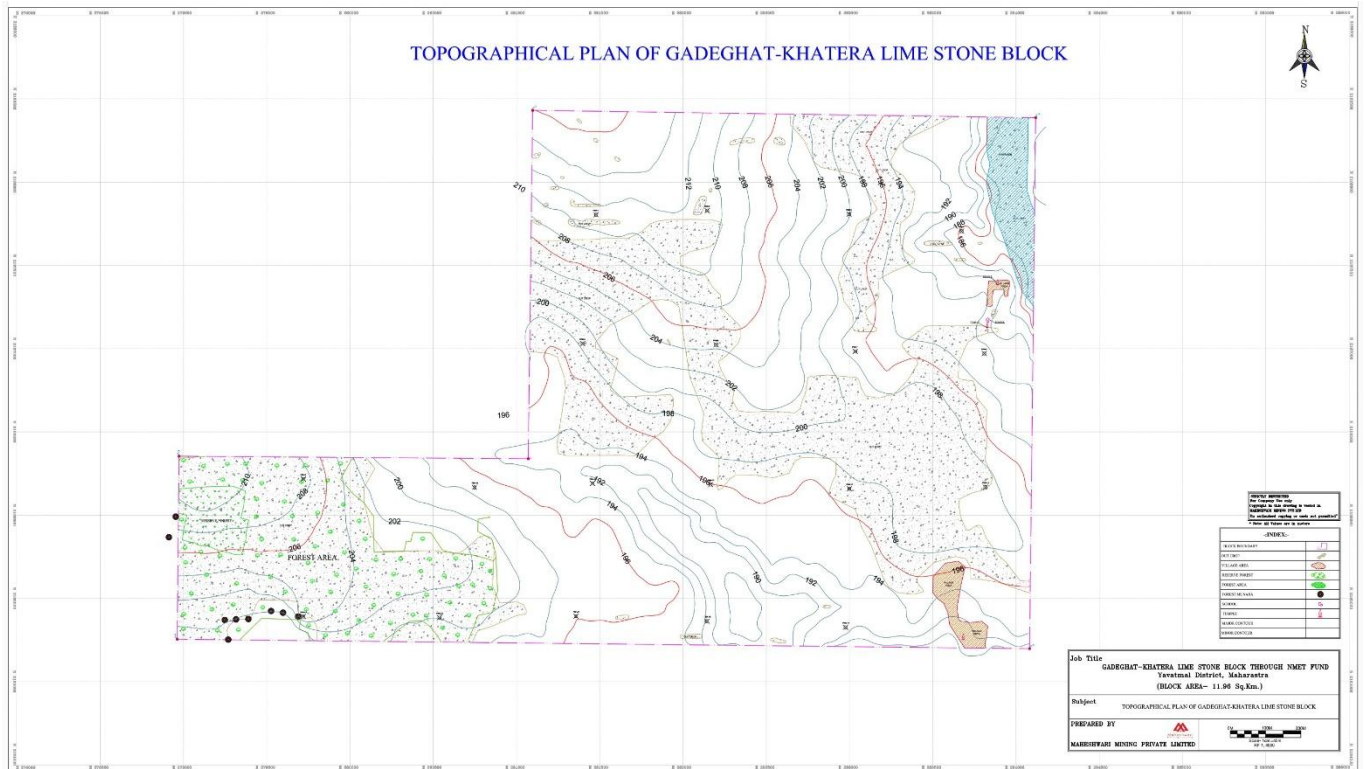
SL	EASTING	NORTHING	RL
P-1	281097.195	2188431.503	215.879
P-2	284117.991	2188387.412	183.834
P-3	284081.478	2185198.742	194.336
P-4	278962.515	2185255.205	189.858
P-5	278973.636	2186354.211	210.251
P-6	281070.531	2186338.910	198.513



9. BORE-HOLE COLLAR DATA

GADEGHAT BORE HOLE COLLAR DATA					
BORE-HOLE ID	EASTING	NORTHING	LONGITUDE	LATITUDE	RL
GKBH-1	281477.858	2187804.689	78° 55' 15.3634" E	19° 46' 09.3339" N	211.222
GKBH-2	282146.042	2187828.953	78° 55' 38.3007" E	19° 46' 10.3891" N	210.873
GKBH-3	282997.619	2187807.394	78° 56' 07.5557" E	19° 46' 10.0265" N	200.072
GKBH -4	283673.258	2187706.009	78° 56' 30.8018" E	19° 46' 06.9978" N	183.965
GKBH -5	281397.332	2187030.349	78° 55' 12.9246" E	19° 45' 44.1270" N	198.439
GKBH -6	282198.886	2187023.461	78° 55' 40.4541" E	19° 45' 44.2225" N	204.270
GKBH -7	283034.081	2186983.859	78° 56' 09.1528" E	19° 45' 43.2666" N	197.147
GKBH -8	283809.448	2186970.864	78° 56' 35.7857" E	19° 45' 43.1508" N	192.659
GKBH -9	279720.443	2186216.811	78° 54' 15.6837" E	19° 45' 17.0060" N	208.961
GKBH -10	280748.046	2186167.241	78° 54' 50.9922" E	19° 45' 15.8068" N	197.177
GKBH -11	281456.120	2186190.494	78° 55' 15.2975" E	19° 45' 16.8457" N	192.511
GKBH -12	282166.048	2186183.981	78° 55' 39.6791" E	19° 45' 16.9168" N	195.915
GKBH -13	282999.334	2186158.697	78° 56' 08.3049" E	19° 45' 16.4256" N	197.366
GKBH -14	283815.498	2186168.306	78° 56' 36.3282" E	19° 45' 17.0607" N	198.666
GKBH -15	279719.214	2185391.454	78° 54' 15.9920" E	19° 44' 50.1724" N	206.642
GKBH -16	280537.248	2185384.435	78° 54' 44.0847" E	19° 44' 50.2725" N	200.166
GKBH -17	281357.217	2185393.600	78° 55' 12.2371" E	19° 44' 50.8982" N	195.965
GKBH -18	282145.071	2185363.470	78° 55' 39.3034" E	19° 44' 50.2325" N	191.530
GKBH -19	282975.939	2185326.699	78° 56' 07.8496" E	19° 44' 49.3667" N	193.170

10. TOPOGRAPHY SURFACE MAP WITH CONTOURING



ANNEXURE-XI: Comments & Compliances of Peer Reviewer

Sl. No	Comments	Compliances
	Executive Summary	
	1) The word 'with a grid spacing of 800m,' mentioned at 3rd line of 2nd paragraph at page 2 may be replaced by 'with 800m x 800m grid spacing'.	Correction made and complied with in page no 2
	2) General Strike and dip with direction and amount (attitudes of beds) recorded, if any, in nala cuttings, nearby mines, rock exposures etc., during the geological mapping in and around the block, may also be incorporated at the Executive Summary of block under report.	Incorporated in the executive summary in page no 2
	3) A very precise note on methodology adopted in establishing Co-ordinates (Latitude & Longitude)/ Easting & Northing of Boundary Pillars (6 no) of Gadeghat-Khatera Block may be provided at the Executive Summary of block under report.	Incorporated in the executive summary in page no 2
	a) Chapter-1 Introduction	
	1.2 Present Work 1) The word 'at space of 800m,' mentioned at 3rd line of 1st paragraph at page 3 may be replaced by '800m x 800m grid spacing'	Correction made and complied with in page no 3

	<p>2) The word ‘Geological Survey detailed mapping on 1:4000 scale (sq. km)’, and ‘Technological Survey subsurface exploration i.e. drilling (m)’, mentioned respectively at 1st and 2nd sr. nos of nature of work column of Table 1.1 at page 4 may also be represented as ‘Geological Survey detailed mapping on 1:4000 scale (sq. km) / Reconnaissance study (G4 stage)’ and ‘Technological Survey Subsurface exploration i.e. drilling (m)/ ‘Prospecting/preliminary exploration (G3 stage)’ respectively.</p>	<p>Correction made and complied with in page no 4</p>
	<p style="text-align: center;">b) Chapter-2 Property Description</p>	
	<p>2.1.2 Survey of India Toposheet No 1) At 1st line of 1st paragraph at page no 6, under the sub section 2.1.2, the line ‘Survey of India Toposheet No: 561/ 13’, may be replaced with ‘Survey of India Toposheet No: 561/ 13’ on RF: 1:50000/ Representative Scale with division of 1000m-500m-0m-500m-1000m/ or on RF: 100000/ Representative Scale with division of 2000m-1000m-0-1000m-2000m on cm grid, whichever is applicable.</p>	<p>Correction made and complied with in page no 6</p>
	<p>2.1.3 Co-Ordinates of all Cardinal Points of the Investigated Block 1) A very precise note on methodology adopted in establishing Co-ordinates (Latitude & Longitude in degree, minute & second) on DMS (WGS 84) platform and corresponding Latitude/ Northing (m) & Departure/ Easting (m) and its RLs determination of Boundary Pillars of Gadeghat- Khatera Block, may be provided at the bottom of the Table 2.1 of sub section 2.1.3 of page no 6.</p>	<p>Incorporated and provided in the bottom of the Table 2.11 of sub section 2.1.3 of page no 6. & details on methodology given in DGPS report (Annexure X)</p>

	2.1.4 Cadastral Details of the area with Land Use/ Cover 1) A rough estimate of the area covered by Reserve Forest/ Protected Forest/ wild animals corridor/ cultivated land/ no of villages, their demographic pattern / population/ important infrastructures/ road/ nala/ NH/ State Highways / culvert/ railway stations / airport /important towns/ cities / present within and around the block/ or their respective distances from the block etc may be narrated precisely towards the bottom most part of the page no 7 under 2.1.4 sub section of Cadastral Details of the area with Land Use/ Cover.	Incorporated and provided under 2.1.4 sub section of Cadastral Details of the area with Land Use/ Cover in page no. 7
	2.1.5 Freehold / Leasehold, If Leasehold, Give the Status 1) The lease hold premises belonging to the administrative district of Yavatmal of state Maharashtra, falling within/ adjoining the block under report, if available, may be obtained and provided in the GR.	Not available
	c) Chapter-8	
	1) At 4th line under Exploration by Drilling, the line in the bracket, ‘in a grid spacing of 800m interval’ may be replaced by ‘in a grid spacing of 800m x 800m interval’ at page 31 of chapter 8.	Correction made and complied with in page no 31
	2) A very precise note on methodology adopted in establishing RLs and Co-ordinates (Latitude & Longitude in degree, minute & second) and corresponding Latitude/ Northing (m) & Departure/ Easting (m) of drilled boreholes in Gadeghat-Khatera Block may be provided at the bottom of the Table 8.1 of 8.3 sub section at page no 32. 8.4 Borehole Planning	A note on methodology adopted in establishing RLs and Co-ordinates (Latitude & Longitude in degree, minute & second) & provided at the bottom of the Table 8.1 of 8.3 sub section in page 32
	Borehole planning 1) In the first line under sub section of Borehole Planning, the word ‘19 boreholes were planned at a grid spacing on 800m’ may be replaced by ‘19 boreholes were planned at a grid spacing on 800m x 800m with a borehole density of 1.59 bhs/ sq km’ at page no 33 of Borehole Planning.	Correction made and complied with at page no 33
	d) Chapter-10	

	10.1 Introduction 1) In the 3rd line under the sub section 10.1 of introduction, the word ‘Nineteen vertical boreholes were drilled with 800-meter grid’ may be replaced by ‘Nineteen vertical boreholes were drilled at a grid spacing on 800m x 800m with a borehole density of 1.59 bhs/ sq km’ at page no 43 of Resource Estimation.	Correction made and complied with at page no 43
	Table 10.4 a: 1) Heading column of ‘Thickness’ may be expressed as ‘Thickness (m)’, that of ‘CaO’ as ‘CaO (%)’, that of ‘MgO’ as ‘MgO (%)’, that of ‘SiO₂’, as ‘SiO₂ (%)’, that of ‘Area’ as ‘Area (sq.m)’, that of ‘Volume’ as ‘Volume (Cub. m/m³)’, that of ‘Bulk Density’ as ‘Bulk Density (gm/cc)’ and that of ‘Tonnage’ as ‘Resource (tonnes)’, respectively.	Correction made and complied with in table no 10.4a in page no. 49
	Table 10.4 b: 1) Similarly, in table 10.4 b: Heading column of ‘CaO’ may be expressed as, ‘CaO (%)’, that of ‘MgO’ as ‘MgO (%)’, that of ‘SiO₂’, as ‘SiO₂ (%)’, that of ‘Area’ as ‘Area (sq.m)’, that of ‘Volume’ as ‘Volume (Cub. m/m³)’, that of ‘Bulk Density’ as ‘Bulk Density (gm/cc)’ and that of ‘Tonnage’ as ‘Resource (tonnes)’, respectively.	Correction made and complied with in table no 10.4b in page no. 51
	Table 10.5 1) In table 10.5, Heading column of ‘CaO’, may be expressed as ‘CaO (%)’, that of ‘MgO’ as ‘MgO (%)’ and that of ‘Bulk Density’ as ‘Bulk Density (gm/cc)’, respectively.	Correction made and complied with in table no 10.5 in page no. 55
	Table 10.6 1) Similarly, in table 10.6, Heading column of ‘CaO’, may be expressed as ‘CaO (%)’, that of ‘MgO’ as ‘MgO (%)’ and that of ‘Bulk Density’ as ‘Bulk Density (gm/cc)’, respectively.	Correction made and complied with in table no 10.6 in page no. 56
	10.8 Methodology of Resource Estimation 1) The word ‘800m spacing’, mentioned at sr no ‘b’ of methodology of resource estimation at page no 46 may be replaced by ‘800m x 800m spacing’.	Correction made and complied with at page no 46

	10.9 Resource/ 10.10 Resource Estimation by Block Model Validation.	
	1) A short note on selection of Limestone zones viz. L1, L2, L3, L4 etc., while estimating the Total Gross Resource of Cement Grade Limestone (Blendable and Beneficiable) may be provided at the bottom of Table 10.4 a and 10.5, at page no 50 and page no 55, respectively under section 10.9 of Resource and 10.10 of Resource Estimation by Block Model Validation.	Correction made and complied with in page no 50 & 55
	2) Similarly, a short note on selection of Unclassified Limestone Zones viz. UC1, UC2, UC3, UC4 etc., while estimating the Total Gross Resource of Unclassified Limestone may also be provided at the bottom of Table 10.4 b and 10.6, at page no 52 and page no 57, respectively under section 10.9 of Resource and 10.10 of Resource Estimation by Block Model Validation.	Correction made and complied with in page no 52 & 57
	e) Chapter-11 11.2 Recommendation	
	1) At page 59 of Chapter-11, under sub clause 11.2 of Recommendation, following may be provided at the 5th/ 6th line, in place of as provided, ‘In view of the established lithological continuity, contingent upon completion of the G2- stage investigations.’, towards the end of the last paragraph of sub clause 11.2 of Chapter-11.	“In view of the established lithological continuity and significant resource base, progression to the G1 stage of Detailed Exploration with reduced borehole spacing may be recommended for arriving at Measured Category of in-situ Limestone Resource and increasing level of confidence for onward studying the potential and economic viability for future opencast mining of different grades of Limestone (Cement (Portland)/ Blendable/ Beneficiable/ Threshold grades/ Unclassified etc.), occurring within the block under report for its various industrial use in different industries viz. cement/ fertilizers/ Iron and steel/ chemical/ glass/ foundry etc. and also feeding the raw materials, required for nearby major cement industries like, MP Birla Cement (RCCPL Pvt. Ltd.), Mukutban, Yavatmal District, Dalmia Cement (Bharat) Limited, Chandrapur Cement Woks, Ambuja Cements Ltd. (Maratha

		Cement Works), Chandrapur District, Maharashtra, UltraTech Cement Limited (Manikgarh Cement Works), Gadchandur, Chadrapur District, Maharashtra State etc. The favourable stripping ratio indicates technical feasibility for largescale opencast mining using mechanized mining technology, contingent upon completion of the G1-stage investigation.” in page no. 59
	ANNEXURES	
	Annexure-I Details of Analytical Results of Bed Rock Samples 1) A Note stating, ‘All figures are in (%)’, may be provided towards the bottom of all the pages of Annexure-I.	Complied with in annexure-I
	Annexure-II Details of Analytical Results of Core Samples 1) A Note stating, ‘All Analytical figures are in (%)’, may be provided towards the bottom of all the pages of Annexure-II. 2) The Title, Annexure no., Sample ID and Columns headings viz. Run From (m), Run To (m), Analytical parameters viz. Al₂O₃, BaO, CaO, Cr₂O₃ LOI etc., may be repeated at the top of all the pages of Annexure-II.	Complied with in annexure-II
	Annexure-III 1) The Title, Annexure no., Borehole ID and Columns headings viz. S. No./ RUN/ DEPTH FROM (m) /DEPTH TO(m) / TOTAL RUN LENGTH (m) / CORE/ TOTAL CORE RECOVERY (m) / RECOVERY PERCENTAGE/ RQD/ RQD>10cm pieces(cm) / RQD (%) / LITHOLOGY/ DESCRIPTION etc., may be repeated at the top of all the pages of Annexure-III.	Complied with in Annexure-III

	<p>2) Depth of Soil, WM, formational contacts, if any, encountered, may be indicated in Lithologs of Boreholes drilled in the block.</p> <p>3) Structural features viz. core dip, slickensides/ fractures, depth at which water loss occurred during drilling, where ever noticed, may also be incorporated in Geological logs of boreholes.</p> <p>4) Extrapolated depth of intersection of any structural disturbance/ fault/ fractures and thickness of strata missing if any, may also be indicated against the corresponding borehole.</p>	
	<p>Annexure-IV</p> <p>1) The Title, Annexure no. and Columns headings viz. Sl. No./ Toposheet No./ Bore Hole ID/ Depth (m)/ From/ To/ Recovery (%) / Description of Lithology etc., may be repeated at the top of all the pages of Annexure-IV.</p> <p>2) Depth of Soil, WM, formational contacts, if any, encountered, may be indicated in Lithologs of Boreholes drilled in the block.</p> <p>3) Structural features viz. core dip, slickensides/ fractures, depth at which water loss occurred during drilling, where ever noticed, may also be incorporated in Geological logs of boreholes.</p> <p>4) Extrapolated depth of intersection of any structural disturbance/ fault/ fractures and thickness of strata missing if any, may also be indicated against the corresponding borehole.</p>	Complied with in Annexure-IV
	<p>Annexure-VI</p> <p>1) The Title, Annexure no. and Columns headings viz. Sl. No. / SAMPLE_ID / Fe2O3 (%) /SiO2 (%) /Al2O3 (%) // LOI etc., may be repeated at the top of all the pages of Annexure-VI.</p>	Complied with in Annexure-VI
	<p>Annexure-VII</p> <p>1) A very precise note on methodology adopted in establishing Co-ordinates (Latitude & Longitude in degree, minute & second) and corresponding Latitude/ Northing (m) & Departure/ Easting (m) of Boreholes Drilled in Gadeghat- Khatera Block may be provided at the bottom of the Annexure VII.</p>	1) Complied with and for detail note on methodology adopted refer to Annexure-X

	<p>Annexure-VIII</p> <p>1) A separate annexure, viz. Annexure-VIII, showing Latitude/ Northing (m) & Departure/ Easting (m) on WGS 84 Platform, along with corresponding co-ordinates (Latitude & Longitude) in degree, minute & second for the Block Boundary of block, may also be annexed, for the better understanding of location of Gadeghat- Khatera Block on Arc GIS platform.</p> <p>2) A very precise note on methodology adopted in establishing Co-ordinates (Latitude & Longitude in degree, minute & second) and corresponding Latitude/ Northing (m) & Departure/ Easting (m) on WGS 84 Platform of Block Boundary of Gadeghat-Khatera Block may also be provided at the bottom of the Annexure VIII.</p>	<p>1) Complied with and separate Annexure – VIII created for block boundary & also shape file created on Arc GIS platform.</p> <p>2) Complied with and for detail note on methodology adopted refer to Annexure-X</p>
	<p>Annexure-IX</p> <p>1) Present Annexure-VIII, viz. ‘Average bulk density of limestone drilled core samples’ may be renamed as Annexure- IX and accordingly the list of Annexure, provided at text part of GR may be modified.</p>	<p>Annexure VII renamed as Annexure IX and complied with text in the GR</p>
	PLATES	
	<p>a) OUTCROP MAP</p> <p>1) An Auto Cad drawing of Outcrop Map with dwg. extn. file generated from Autodesk Auto CAD Map 3D 2014 or its higher version software on RF 1: 4000 and Representative Scale with division of 80m-40m-0m-40m-80m on cm grid scale may be provided at Plate –I, in a separate Volume of PLATES for proper identification/ visualization of Outcrop Map of Block, its block boundary cardinal points with coordinates, position of drilled boreholes with RLs/ expected borehole drill depth/ tentative surface exposures of rocks/ cement grade limestone/ unclassified limestone/ its outcrops/ soil cover/ location of bed rock samples collected/ nearby quarries/ mines, topography, major/ minor surface</p>	<p>All points are complied with in outcrop map (Plate-I), PDF, AutoCad file & shape file created.</p>

<p>contours, attitudes of beds viz. dip/ strike, alignment of any traces of fault/ structural disturbance, geological formational contacts, if any, village area, townships, forest area, reserve forest, forest munara, river, nala, school, temple etc., in and around the block, if any, as encountered during the geological mapping/ prospecting/ reconnaissance ground survey.</p> <p>2) Easting/ Longitude and Northing/ Latitude grid on meter on DMS (WGS-84) datum and corresponding UTM Zone Projection, derived combinely from part of Suvey of India Toposheet No. 56I/13 and departmental DGPS survey may be provided on Outcrop Map.</p> <p>3) Top box of monogram may be provided with the name of the Block, viz. 'GADEGHAT-KHATERA LIME STONE BLOCK THROUGH NMET FUND, Yavatmal District, Maharashtra (BLOCK AREA-11.96 Sq.Km.)</p> <p>4) 2nd box of monogram may be provided with the title of plan viz. 'OUTCROP MAP OF GADEGHAT- KHATERA LIMESTONE BLOCK'</p> <p>5) 3rd left half box of monogram may be provided with viz., 'Prepared by: Name of personnel prepared/associated, along with the name of Organization, viz. 'M/s MMPL Pvt. Ltd. (Formerly, Maheshwari Mining Pvt. Ltd.)', along with the Organization Emblem in the right most corner of the box.</p> <p>6) 3rd right half box of monogram may be provided with the departmental drawing no. at the left most corner, plate no, viz. 'PLATE NO. I' in the right most corner and the scale of map, viz. 'RF 1: 4000 and representative scale with division '80m-40m-0m-40m-80m' on cm grid scale at the center most part of the 3rd right half box of monogram.</p> <p>7) Boreholes with RLs drilled along with Survey Stations, Bench marks, surveyed if any, Block Boundary, boundary pillars etc., along with its coordinates of 'GADEGHAT- KHATERA LIMESTONE BLOCK' may be incorporated on Outcrop Map.</p> <p>8) Latitude/ Northing (m) & Longitude/ Easting (m) on WGS 84 Platform for boreholes drilled with RLs, Boundary Pillars of 'GADEGHAT- KHATERA LIMESTONE BLOCK', bench marks, survey stations if any, may also be provided along with</p>	
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<p>degree, minute, second with corresponding Easting & Northing in meter coordinates, towards the center of bottom most part of the Outcrop Map.</p> <p>9) Geological Cross Section profile lines may also be incorporated in Outcrop Map with inclusion of proper symbol in the index/ legend column of the plan.</p> <p>10) Index for boreholes drilled with details, Block area, Arrow mark showing North direction, block boundary, block boundary pillars and its cardinal points, bench marks, survey stations, surveyed, if any, dug well, pit area, road/ cart track, canal, culvert, 11kv electric line, high tension lines, structure/ buildings, fencing/ compound wall, water tank, water logged area, etc., tentative surface exposures of rocks/ cement grade limestone/ unclassified limestone/ its outcrops/ soil cover/ location of bed rock samples collected/ nearby quarries/ mines, topography, major/ minor surface contours, attitudes of beds viz. dip/ strike, alignment of any traces of fault/ structural disturbance, geological formational contacts, if any, village area, townships, forest area, reserve forest, forest munara, river, nala, school, temple etc., in and around the block, if any, as encountered during the geological mapping/ prospecting/ reconnaissance ground survey, may be provided at the extreme left side of bottom most part of the Outcrop Map.</p> <p>11) The corresponding PDF Plan output generated from aforesaid AutoCAD Drawing of modified Outcrop Map on RF 1:4000 may also be annexed with the Volume of Plates part of the Geological Report along with the Plate-I of modified AutoCAD generated Drawing Map of Outcrop Map on RF 1:4000.</p> <p>12) Corresponding AutoCAD generated Outcrop Map on RF 1:4000 with Easting/ Longitude and Northing/ Latitude grid on meter on DMS (WGS-84) datum and corresponding UTM Zone Projection, derived combinely from part of Suvey of India Toposheet No. 56I/13 and departmental DGPS survey may be positioned on Arc- GIS platform on WGS-84 datum and a shape file of Outcrop Map may be created. 8</p> <p>13) Both the soft copies of Auto Cad generated drawing file on RF: 1:4000 and shape file on Arc-GIS (WGS-84) platform, thus generated, may be</p>	
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	<p>made ready for final submission to NMET after incorporating necessary comments as deliberated on Peer Review report.</p> <p>14) Similarly, the hard copies of Auto Cad generated drawing file on RF: 1:4000 of Outcrop Map (Plate-I) and corresponding PDF file may also be annexed in Volume of Plates of Geological Report.</p>	
	<p>b) INTERPRETED GEOLOGICAL MAP</p> <p>1) An Auto Cad drawing of Interpreted Geological Map with dwg. extn. file generated from Autodesk Auto CAD Map 3D 2014 or its higher version software on RF 1: 4000 and Representative Scale with division of 80m-40m-0m-40m-80m on cm grid scale may be provided at Plate –II, in a separate Volume of PLATES for proper identification/ visualization of Interpreted Geological Map of Block, its block boundary cardinal points with coordinates, position of drilled boreholes with RLs/ expected borehole drill depth/ tentative surface exposures of rocks/ cement grade limestone/ unclassified limestone/ its outcrops/ soil cover/ location of bed rock samples collected/ nearby quarries/ mines, topography, major/ minor surface contours, attitudes of beds viz. dip/ strike, alignment of any traces of fault/ structural disturbance, geological formational contacts, if any, village area, townships, forest area, reserve forest, forest munara, river, nala, school, temple etc., in and around the block, if any, as encountered during the geological mapping/ prospecting/ reconnaissance ground survey.</p> <p>2) Easting/ Longitude and Northing/ Latitude grid on meter on DMS (WGS-84) datum and corresponding UTM Zone Projection, derived combinely from part of Suvey of India Toposheet No. 56I/13 and departmental DGPS survey may be provided on Interpreted Geological Map.</p>	<p>All points are complied with in interpreted geological map (Plate-II), PDF, AutoCAD file & shape file created.</p>

<p>3) Top box of monogram may be provided with the name of the Block, viz. ‘GADEGHAT-KHATERA LIME STONE BLOCK THROUGH NMET FUND, Yavatmal District, Maharashtra (BLOCK AREA-11.96 Sq.Km.)</p> <p>4) 2nd box of monogram may be provided with the title of plan viz. ‘INTERPRETED GEOLOGICAL MAP OF GADEGHAT- KHATERA LIMESTONE BLOCK’</p> <p>5) 3rd left half box of monogram may be provided with viz., ‘Prepared by: Name of personnel prepared/associated, along with the name of Organization, viz. ‘M/s MMPL Pvt. Ltd. (Formerly, Maheshwari Mining Pvt. Ltd.)’, along with the Organization Emblem in the right most corner of the box.</p> <p>6) 3rd right half box of monogram may be provided with the departmental drawing no. at the left most corner, plate no, viz. ‘PLATE NO. II’ in the right most corner and the scale of map, viz. ‘RF 1: 4000 and representative scale with division ‘80m-40m-0m-40m-80m’ on cm grid scale at the center most part of the 3rd right half box of monogram.</p> <p>7) Boreholes with RLs drilled along with Survey Stations, Bench marks, surveyed if any, Block Boundary, boundary pillars etc., along with its coordinates of ‘GADEGHAT- KHATERA LIMESTONE BLOCK’ may be incorporated on INTERPRETED GEOLOGICAL MAP.</p> <p>8) Latitude/ Northing (m) & Longitude/ Easting (m) on WGS 84 Platform for boreholes drilled with RLs, Boundary Pillars of ‘GADEGHAT- KHATERA LIMESTONE BLOCK’, bench marks, survey stations if any, may also be provided along with degree, minute, second with corresponding Easting & Northing in meter coordinates, towards the center of bottom most part of the Interpreted Geological Map.</p> <p>9) Geological Cross Section profile lines may also be incorporated in Interpreted Geological Map, with inclusion of proper symbol in the index/ legend column of the plan.</p> <p>10) Index for boreholes drilled with details, Block area, Arrow mark showing North direction, block boundary, block boundary pillars and its cardinal points, bench marks, survey stations, surveyed, if any, dug well, pit area, road/ cart track, canal,</p>	
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	<p>culvert, 11kv electric line, high tension lines, structure/ buildings, fencing/ compound wall, water tank, water logged area, etc., tentative surface exposures of rocks/ cement grade limestone/ unclassified limestone/ its outcrops/ soil cover/ location of bed rock samples collected/ nearby quarries/ mines, topography, major/ minor surface contours, attitudes of beds viz. dip/ strike, alignment of any traces of fault/ structural disturbance, geological formational contacts, if any, village area, townships, forest area, reserve forest, forest munara, river, nala, school, temple etc., in and around the block, if any, as encountered during the geological mapping/ prospecting/ reconnaissance ground survey, may be provided at the extreme left side of bottom most part of the Interpreted Geological Map.</p> <p>11) The corresponding PDF Plan output generated from aforesaid AutoCAD Drawing of modified Interpreted Geological Map on RF 1:4000 may also be annexed with the Volume of Plates of the Geological Report along with the Plate-II of modified AutoCAD generated Drawing Map of Interpreted Geological Map on RF 1:4000.</p> <p>12) Corresponding AutoCAD generated Interpreted Geological Map on RF 1:4000 with Easting/ Longitude and Northing/ Latitude grid on meter on DMS (WGS-84) datum and corresponding UTM Zone Projection, derived combinedly from part of Suvey of India Toposheet No. 56I/13 and departmental DGPS survey may be positioned on Arc- GIS platform on WGS-84 datum and a shape file of Interpreted Geological Map may be generated.</p> <p>13) Both the soft copies of Auto Cad generated drawing file on RF: 1:4000 and shape file on Arc-GIS (WGS-84) platform, thus generated, may be made ready for final submission to NMET after incorporating necessary comments as deliberated in Peer Review report.</p> <p>14) Similarly, the hard copies of Auto Cad generated drawing file on RF: 1:4000 of Interpreted Geological Map (Plate-II) and corresponding PDF file may also be annexed in Volume of Plates of Geological Report.</p>	
	<p>c) SECTION LINES ON INTERPRETED GEOLOGICAL MAP</p>	<p>All points are complied with in section lines on interpreted geological map (Plate-</p>

<p>1) An Auto Cad drawing of Section Lines on Interpreted Geological Map with dwg. extn. file generated from Autodesk Auto CAD Map 3D 2014 or its higher version software on RF 1: 4000 and Representative Scale with division of 80m-40m-0m-40m-80m on cm grid scale may be provided at Plate –III, in a separate Volume of PLATES for proper identification/ visualization of Section Lines on Interpreted Geological Map of Block, its block boundary cardinal points with coordinates, position of drilled boreholes with RLs/ expected borehole drill depth/ tentative surface exposures of rocks/ cement grade limestone/ unclassified limestone/ its outcrops/ soil cover/ location of bed rock samples collected/ nearby quarries/ mines, topography, major/ minor surface contours, attitudes of beds viz. dip/ strike, alignment of any traces of fault/ structural disturbance, geological formational contacts, if any, village area, townships, forest area, reserve forest, forest munara, river, nala, school, temple etc., in and around the block, if any, as encountered during the geological mapping/ prospecting/ reconnaissance ground survey.</p> <p>2) Easting/ Longitude and Northing/ Latitude grid on meter on DMS (WGS-84) datum and corresponding UTM Zone Projection, derived combinely from part of Suvey of India Toposheet No. 56I/13 and departmental DGPS survey may be provided on Section Lines on Interpreted Geological Map.</p> <p>3) Top box of monogram may be provided with the name of the Block, viz. ‘GADEGHAT-KHATERA LIME STONE BLOCK THROUGH NMET FUND, Yavatmal District, Maharashtra (BLOCK AREA-11.96 Sq.Km.)</p> <p>4) 2nd box of monogram may be provided with the title of plan viz. ‘SECTION LINES ON INTERPRETED GEOLOGICAL MAP OF GADEGHAT- KHATERA LIMESTONE BLOCK’</p> <p>5) 3rd left half box of monogram may be provided with viz., ‘Prepared by: Name of personnel prepared/associated, along with the name of Organization, viz. ‘M/s MMPL Pvt. Ltd. (Formerly, Maheshwari Mining Pvt. Ltd.)’, along with the Organization Emblem in the right most corner of the box.</p>	<p>III), PDF, AutoCAD file & shape file created.</p>
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<p>6) 3rd right half box of monogram may be provided with the departmental drawing no. at the left most corner, plate no, viz. 'PLATE NO. III' in the right most corner and the scale of map, viz. 'RF 1: 4000 and representative scale with division '80m-40m-0m-40m-80m' on cm grid scale at the center most part of the 3rd right half box of monogram.</p> <p>7) Boreholes with RLs drilled along with Survey Stations, Bench marks, surveyed if any, Block Boundary, boundary pillars etc., along with its coordinates of 'GADEGHAT- KHATERA LIMESTONE BLOCK' may be incorporated on SECTION LINES ON INTERPRETED GEOLOGICAL MAP.</p> <p>8) Latitude/ Northing (m) & Longitude/ Easting (m) on WGS 84 Platform for boreholes drilled with RLs, Boundary Pillars of 'GADEGHAT- KHATERA LIMESTONE BLOCK', bench marks, survey stations if any, may also be provided along with degree, minute, second with corresponding Easting & Northing in meter coordinates, towards the center of bottom most part of the Section Lines on Interpreted Geological Map.</p> <p>9) Index for boreholes drilled with details, Block area, Arrow mark showing North direction, block boundary, block boundary pillars and its cardinal points, bench marks, survey stations, surveyed, if any, dug well, pit area, road/ cart track, canal, culvert, 11kv electric line, high tension lines, structure/ buildings, fencing/ compound wall, water tank, water logged area, etc., tentative surface exposures of rocks/ cement grade limestone/ unclassified limestone/ its outcrops/ soil cover/ location of bed rock samples collected/ nearby quarries/ mines, topography, major/ minor surface contours, attitudes of beds viz. dip/ strike, alignment of any traces of fault/ structural disturbance, geological formational contacts, if any, village area, townships, forest area, reserve forest, forest munara, river, nala, school, temple etc., in and around the block, if any, as encountered during the geological mapping/ prospecting/ reconnaissance ground survey, Profiles of Section Lines may be provided at the extreme left side of bottom most part of the Section Lines on Interpreted Geological Map.</p> <p>10) The corresponding PDF Plan output generated from aforesaid AutoCAD Drawing of modified Section Lines on Interpreted Geological Map on RF</p>	
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	<p>1:4000 may also be annexed with the Volume of Plates of the Geological Report along with the Plate-III of modified AutoCAD generated Drawing Map of Section Lines on Interpreted Geological Map on RF 1:4000.</p> <p>11) Corresponding AutoCAD generated Section Lines on Interpreted Geological Map on RF 1:4000 with Easting/ Longitude and Northing/ Latitude grid on meter on DMS (WGS-84) datum and corresponding UTM Zone Projection, derived combinely from part of Suvey of India Toposheet No. 56I/13 and departmental DGPS survey may be positioned on Arc- GIS platform on WGS-84 datum and a shape file of Section Lines on Interpreted Geological Map may be generated.</p> <p>12) Both the soft copies of Auto Cad generated drawing file on RF: 1:4000 and shape file on Arc-GIS (WGS-84) platform, thus generated, may be made ready for final submission to NMET after incorporating necessary comments on basis of Peer Review report.</p> <p>13) Similarly, the hard copies of Auto Cad generated drawing file on RF: 1:4000 of Section Lines on Interpreted Geological Map (Plate-III) and corresponding PDF file may also be annexed in Volume of Plates of Geological Report.</p>	
	<p>d) GEOLOGICAL CROSS-SECTION</p> <p>1) An Auto Cad drawing of Geological Cross Sections along A-A', B-B', C-C', D-D', E-E', F-F', G-G', H-H', I-I' & J-J' of Gadeghat-Khatera Block with dwg. extn. file generated from Autodesk Auto CAD Map 3D 2014 or its higher version software on both vertical/ horizontal scale/ RF 1: 4000 and Representative Scale with both vertical/horizontal division of 80m-40m-0m-40m-80m on cm grid scale may be provided at Plate –IIIA in a separate Volume of PLATES for proper identification/ visualization of different litho units, Top Soil, Regolith, WM depth, Formational contacts, Clay, Limestone (Cement Grade Blendable/ Beneficiable), Un-</p>	<p>All points are complied with in geological cross section (Plate-IIIA), PDF & AutoCAD file created.</p>

<p>Classified Limestone, Sludge, behavior/ continuity of bedding plane/ mineralized zones, structural disturbances if any, etc. within Gadeghat-Khatera Block.</p> <p>2) From/ To Depth of Soil/ Regolith, WM, formational contacts, if any, limestone (Cement Grade Blendable/ Beneficial), Clay, Sludge etc. encountered, may be indicated in Geological Cross Section.</p> <p>3) Structural features viz. core dip, slickensides/ fractured zones, depth at which water loss occurred during drilling, where ever noticed, may also be incorporated in Geological Cross Section.</p> <p>4) Extrapolated depth of intersection of any structural disturbance/ fault/ fractures and thickness of strata including limestone horizon missing if any, may be indicated against the corresponding borehole of all the Geological Cross Section.</p> <p>5) Top box of monogram may be provided with the name of the Block, viz. 'GADEGHAT-KHATERA LIME STONE BLOCK THROUGH NMET FUND, Yavatmal District, Maharashtra (BLOCK AREA-11.96 Sq.Km.)</p> <p>6) 2nd box of monogram may be provided with the title of plan viz. 'GEOLOGICAL CROSS SECTIONS OF GADEGHAT- KHATERA LIMESTONE BLOCK'</p> <p>7) 3rd left half box of monogram may be provided with viz., 'Prepared by: Name of personnel prepared/associated, along with the name of Organization, viz. 'M/s MMPL Pvt. Ltd. (Formerly, Maheshwari Mining Pvt. Ltd.)', along with the Organization Emblem in the right most corner of the box.</p> <p>8) 3rd right half box of monogram may be provided with the departmental drawing no. at the left most corner, plate no, viz. 'PLATE NO. IIIA' in the right most corner and the scale of map, (both vertical/ horizontal), viz. 'RF 1: 4000 and representative scale with division '80m-40m-0m-40m-80m' on cm grid scale at the center most part of the 3rd right half box of monogram.</p> <p>9) Index for boreholes drilled, different litho units encountered, Top Soil, Regolith, WM depth, Formational contacts, Clay, Limestone out crops (Cement Grade Blendable/ Beneficial, etc), Sludge, Structural features viz. core dip,</p>	
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	<p>slickensides/ fractured zones, depth at which water loss occurred during drilling, Extrapolated depth of intersection of any structural disturbance/ fault/ fractures and thickness of strata including limestone horizon missing if any, may be provided at the left side of bottom most part of the ‘Geological Cross Sections Plan’</p> <p>10) Both the Auto Cad drawing of Geological Cross Sections along A-A’, B-B’, C-C’, D-D’, E-E’, F-F’, G-G’, H-H’, I-I’ & J-J’ of Gadeghat-Khatera Block with dwg. extn. file generated from Autodesk Auto CAD Map 3D 2014 or its higher version software on both vertical/ horizontal scale/ RF 1: 4000 and Representative Scale with both vertical/ horizontal division of 80m-40m-0m-40m-80m on cm grid scale and the corresponding PDF Plan output generated from aforesaid AutoCAD Drawing of ‘Geological Cross Sections Plan (Plate no-IIIA) on RF 1:4000 may be annexed with the Volume of Plates of the Geological Report.</p> <p>11) The soft copies of Auto Cad generated drawing file on RF: 1:4000 and corresponding PDF file, thus generated, may be made ready for final submission to NMET after incorporating necessary comments as deliberated at Peer Review report.</p>	
	<p>e) GRAPHIC LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT KHATERA BLOCK</p> <p>1) An Auto Cad drawing of Graphic Lithologs of Boreholes drilled in Gadeghat-Khatera Block (Plate no-IV) with dwg. extn. file generated from Autodesk Auto CAD Map 3D 2014 or its higher version software on vertical scale/ RF: 1: 500 and Representative Scale with vertical division of 20m-15m-10m-5m-0m-5m-10m-15m-20m on cm grid scale may be provided at Plate –IV, in a separate Volume of PLATES, for proper identification/ visualization of different litho units, chemical constituents of different lithological strata, Top Soil, Sludge, WM depth, Formational contacts, Clay, Limestone (Cement Grade) Blendable/ Beneficial, Un-classified Limestone etc.</p> <p>2) From/ To Depth of Soil, Regolith, WM, formational contacts, if any, limestone, Sludge etc. encountered, may be indicated in Graphic Lithologs.</p>	<p>All points are complied with in graphic lithologs of boreholes drilled in gadeghat khatera block (Plate-IV), PDF & AutoCAD file created.</p>

<p>3) Structural features viz. core dip, slickensides/ fractured zones, depth at which water loss occurred during drilling, where ever noticed, may also be incorporated in Graphic Lithologs.</p> <p>4 Extrapolated depth of intersection of any structural disturbance/ fault/ fractures and thickness of strata including limestone horizon missing if any, may be indicated against the corresponding borehole of Graphic Lithologs.</p> <p>5) Top box of monogram may be provided with the name of the Block, viz. 'GADEGHAT-KHATERA LIME STONE BLOCK THROUGH NMET FUND, Yavatmal District, Maharashtra (BLOCK AREA-11.96 Sq.Km.)</p> <p>6) 2nd box of monogram may be provided with the title of plan viz. 'GRAPHIC LITHOLOGS OF BOREHOLES DRILLED IN GADEGHAT KHATERA BLOCK'</p> <p>7) 3rd left half box of monogram may be provided with viz., 'Prepared by: Name of personnel prepared/associated, along with the name of Organization, viz. 'M/s MMPL Pvt. Ltd. (Formerly, Maheshwari Mining Pvt. Ltd.)', along with the Organization Emblem in the right most corner of the box.</p> <p>8) 3rd right half box of monogram may be provided with the departmental drawing no. at the left most corner, plate no, viz. 'PLATE NO. IV' in the right most corner and the scale of map, (vertical), viz. 'RF 1: 500 and representative scale with division '20m-15m-10m-5m-0m-5m-10m-15m-20m' on cm grid scale at the center most part of the 3rd right half box of monogram.</p> <p>9) Index for boreholes drilled in Gadeghat- Khatera Block, different litho units encountered, chemical constituents of different lithological strata, Top Soil, Regolith, WM depth, Formational contacts, Clay, Limestone (Cement Grade Blendable/ Beneficial, etc), Sludge, Structural features viz. core dip, slickensides/ fractured zones, depth at which water loss occurred during drilling, Extrapolated depth of intersection of any structural disturbance/ fault/ fractures and thickness of strata including limestone horizon missing if any, may be provided at the left side of bottom most part of the 'Graphic Lithologs of Boreholes drilled in Gadeghat- Khatera Block.</p>	
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	<p>10) The aforesaid AutoCAD Drawing output of Graphic Lithologs of Boreholes in Gadeghat-Khatera Block on RF 1:500, along with the corresponding PDF Plan output generated from aforesaid AutoCAD Drawing of Graphic Lithologs of Boreholes, may be annexed with the Volume of Plates of the Geological Report.</p> <p>11) Similarly, the soft copies of Auto Cad generated drawing file on RF: 1:500 and corresponding PDF file, thus generated, may be made ready for final submission to NMET after incorporating necessary comments as deliberated in Peer Review report.</p>	
	<p>f) FENCE DIAGRAM</p> <p>1) The soft copy of 3D Block model validation of fence diagram of resource estimation may be provided to NMET after incorporation of necessary modifications as per the comments elaborated on Peer Review report.</p> <p>2) A brief note on resource estimation by block model for validation and spatial distribution of grade wise and depth wise resource estimated at table 10.4a & 10.4b and Figures generated at Fig.10.2 & Fig.10.3 may be clearly elaborated at the bottom most part of fence diagram for better understanding of resource estimation by block model for validation.</p> <p>g) AREA OF INFLUENCE MAP FOR RESOURCE CALCULATION</p> <p>1) An Auto Cad drawing of Area of Influence Map for Resource Calculation with dwg. extn. file generated from Autodesk Auto CAD Map 3D 2014 or its higher version software on RF 1: 4000 and Representative Scale with division of 80m-40m-0m-40m-80m on cm grid scale may be provided at Plate –VI, in a separate Volume of PLATES for proper identification/ visualization of Area of Influence Map for Resource Calculation, its block boundary cardinal points with coordinates, position of drilled boreholes with details, RLs/ expected borehole drill depth/ Area of Influence for Resource Calculation, village area, townships, forest area, reserve forest, River/ nala/ Temple/ school etc., in and around the block, if any, as encountered during the geological mapping/ prospecting/ reconnaissance ground survey.</p>	<p>All points are complied with in fence diagram (Plate-V), PDF file created.</p> <p>A brief note on resource estimation by block model for validation and spatial distribution of grade wise and depth wise resource estimated was added in page no. 48 & below table 10.4a & 10.4b at page no. 50 & 53.</p> <p>All points are complied with area of influence map (Plate-VI), PDF file & AutoCAD file created.</p>

<p>2) Easting/ Longitude and Northing/ Latitude grid on meter on DMS (WGS-84) datum and corresponding UTM Zone Projection, derived combinely from part of Suvey of India Toposheet No. 56I/13 and departmental DGPS survey may be provided on Area of Influence Map for Resource Calculation.</p> <p>3) Top box of monogram may be provided with the name of the Block, viz. 'GADEGHAT-KHATERA LIME STONE BLOCK THROUGH NMET FUND, Yavatmal District, Maharashtra (BLOCK AREA-11.96 Sq.Km.)</p> <p>4) 2nd box of monogram may be provided with the title of plan viz. 'AREA OF INFLUENCE MAP FOR RESOURCE CALCULATION OF GADEGHAT- KHATERA LIMESTONE BLOCK'</p> <p>5) 3rd left half box of monogram may be provided with viz., 'Prepared by: Name of personnel prepared/associated, along with the name of Organization, viz. 'M/s MMPL Pvt. Ltd. (Formerly, Maheshwari Mining Pvt. Ltd.)', along with the Organization Emblem in the right most corner of the box.</p> <p>6) 3rd right half box of monogram may be provided with the departmental drawing no. at the left most corner, plate no, viz. 'PLATE NO. VI' in the right most corner and the scale of map, viz. 'RF 1: 4000 and representative scale with division '80m-40m-0m-40m-80m' on cm grid scale at the center most part of the 3rd right half box of monogram.</p> <p>7) Boreholes with RLs drilled along with Survey Stations, Bench marks, surveyed if any, Block Boundary, boundary pillars etc., along with its coordinates of 'GADEGHAT- KHATERA LIMESTONE BLOCK' may be incorporated on AREA OF INFLUENCE MAP FOR RESOURCE CALCULATION.</p> <p>8) Latitude/ Northing (m) & Longitude/ Easting (m) on WGS 84 Platform for boreholes drilled with RLs, Boundary Pillars of 'GADEGHAT- KHATERA LIMESTONE BLOCK', bench marks, survey stations if any, may also be provided along with degree, minute, second with corresponding Easting & Northing in meter coordinates, towards the center of bottom most part of the AREA OF INFLUENCE MAP FOR RESOURCE CALCULATION.</p> <p>9) Index for block boundary, position of drilled boreholes with coordinates, RLs/ expected borehole</p>	
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	<p>drill depth/ Area of Influence for Resource Calculation, village area, townships, forest area, reserve forest, River/ nala/ Temple/ school etc., in and around the block, if any as encountered during the geological mapping/ prospecting/ reconnaissance ground survey, Arrow mark showing North direction, block boundary pillars and its cardinal points, bench marks, survey stations, surveyed, if any, may be provided at the extreme left side of bottom most part of the Area of Influence Map for Resource Calculation.</p> <p>10) The corresponding PDF Plan output generated from aforesaid AutoCAD Drawing of modified Area of Influence Map for Resource Calculation on RF 1:4000 may also be annexed with the Volume of Plates of the Geological Report along with the Plate-VI of modified AutoCAD generated Drawing Map of Area of Influence Map for Resource Calculation on RF 1:4000.</p> <p>11) Corresponding AutoCAD generated Area of Influence Map for Resource Calculation on RF 1:4000 with Easting/ Longitude and Northing/ Latitude grid on meter on DMS (WGS-84) datum and corresponding UTM Zone Projection, derived combinely from part of Suvey of India Toposheet No. 56I/13 and departmental DGPS survey may be positioned on Arc- GIS platform on WGS-84 datum and a shape file of Area of Influence Map for Resource Calculation may be generated.</p> <p>12) Both the soft copies of Auto Cad generated drawing file on RF: 1:4000 and shape file on Arc-GIS (WGS-84) platform, thus generated, may be made ready for final submission to NMET after incorporating necessary comments as deliberated in Peer Review report.</p> <p>13) Similarly, the hard copies of Auto Cad generated drawing file on RF: 1:4000 of Area of Influence Map for Resource Calculation (Plate-VI) and corresponding PDF file may also be annexed in Volume of Plates of Geological Report.</p>	
	<p>In General</p> <p>1. Both the hard copies of AutoCAD generated drawing files with dwg. ext. with different Scale/ RF, and their corresponding PDF outputs of all the Plates/ Map, as detailed above, may be annexed in a separate additional volume viz. 'VOLUME OF</p>	<p>1. Both the hard copies of AutoCAD generated drawing files with dwg. ext. with different Scale/ RF, and their corresponding PDF outputs of all the Plates/ Map, as per guidelines are annexed in a separate</p>

<p>PLATES’, along with the Volume of Text & Annexure of the Geological Report, for better clarity/ understanding of all the Plans/ Map.</p> <p>2) Similarly, the soft copies of Auto Cad generated drawing file/ corresponding PDF files of all the Maps and some shape files on Arc-GIS (WGS-84) platform, as detailed above, may be made ready for final submission to NMET after incorporating necessary comments, as deliberated in Peer Review report.</p> <p>3) Most of the Figures as per the list, deliberated in the text part of the Geological Report are not legible/ readable. Hence legible/ readable Figures may be incorporated in the corresponding part of the GR, before final submission to NMET.</p>	<p>additional volume viz. ‘VOLUME OF PLATES’, along with the Volume of Text & Annexure of the Geological Report, for better clarity/ understanding of all the Plans/ Map.</p> <p>2. Similarly, the soft copies of Auto Cad generated drawing file/ corresponding PDF files of all the Maps and some shape files on Arc-GIS (WGS-84) platform, as per guidelines was made for final submission to NMET after incorporating necessary comments, as deliberated in Peer Review report.</p> <p>3. Most of the Figures as per the list, deliberated in the text part of the Geological Report are made legible/ readable & incorporated in the GR and for detail the hard copies of maps and softcopies in PDF, AutoCAD files & shape files may be followed.</p>
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