

GOVERNMENT OF ASSAM
ENVIRONMENT AND FOREST DEPARTMENT
DISPUR, GUWAHATI-6

ECF No.233926/273

Dated Dispur, the 17th June, 2023

From : Smti Neera Daulagupu,ACS
Secretary to the Govt. of Assam
Environment and Forest Department

To : The Regional Officer,
Government of India,
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office, 4th Floor, Housefed Building,
G.S Road, Rukminigaon, Guwahati-781022

Sub : **Forest diversion proposal of 5.42 Ha of forest land for operation of Lankaijuri Stone Mahal in Doboka Reserved Forest under Nagaon Division in favour of Imdad Ali.**

Ref : Govt. of India's letter F.No.3-AS C/100/2022/GHY/3330-31 dated 29.11.2022

Sir,

With reference to the subject cited above, I am directed to submit herewith the additional information/documents as sought vide letter under reference as stated below :

Govt. of India's letter F.No 3 AS C/100/2022/GHY/3330-31 dated 29.11.2022	Information provided
Condition No(1)	The Safety zone area 0.63 ha is included in the proposed area 5.42 Ha.
Condition No(2)	The Principal Chief Conservator of Forests & Chief Wildlife Warden, Assam has submitted the comment of the proposed area is within the Kziranga Karbi Anglong Elephant Reserve vide letter No.WL/FG.35/MCA/Lankaijuri Stone Mahal/Nagaon Divn. Dated 01.06.2023 (copy enclosed)
Condition No(3)	The User Agency stated that the process of mutation and notification to PRF/RF of Compensatory Afforestation area will be completed in due course after the approval State-I(IPA) and before accordance of Final Approval.
Condition No(4)	A cluster of three MCAs viz Bheleuguri, Lankaijuri and Beldanga had already been indentified concluding the present one. A Google map of showing the cluster of three MCA is enclosed herewith.
Condition No (5)	The DFO, Nagaon Division has stated that on scrutiny of record it is seen that mahal was in operation since 1992-93. As the report of the Range Kathiyatoli the approach road which was found broken is with regard to the earlier mahal which is no more in operation. The area of 0.42 ha proposed as approach road is for the new mahal, which is included in the total mahal area of 5.42 ha.
Condition No (6)	The DFO, Nagaon Division stated that there was no violation observed in the proposed mining area.
Condition No (7)	MMDRR and DMFT funds realised and will be utilized for the stated purpose.
Condition No (8)	The DFO, Nagaon Division stated that there are no Court Case is involved in the proposed mining area.

GOVERNMENT OF ASSAM
OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS AND
HEAD OF FOREST FORCE, ASSAM
ARANYA BHAWAN, PANJABARI, GUWAHATI-37

Email: adlpcfc.nodal@gmail.com

No. FG.27/FCA/MCA/Lankaijuri Stone Mahal/ Nagaon Divn.

Dated 12.6.2023

To,

The Additional Chief Secretary to the Government of Assam
Environment and Forest Department, Dispur, Guwahati-6.

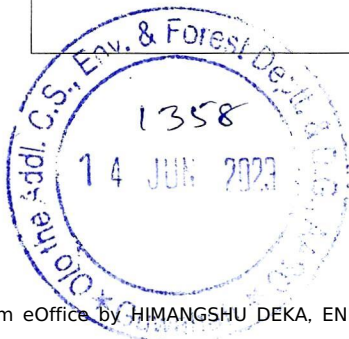
Sub: Forest diversion proposal of 5.42 Ha. of forest land for operation Lankaijuri Stone Mahal in Doboka Reserved Forest under Nagaon Division in favour of Imdad Ali.

Ref: Government of India letter No. 3-AS C/100/2022/GHY/3330-31 dated 29.11.2022.

Sir,

With reference to the above, I am submitting herewith the additional information/documents as sought by the Government of India, MoEF &CC, New Delhi vide their letter No. 3-AS C/100/2022/GHY/3330-31 dated 29.11.2022 as under-

Govt. of India letter No 3-AS C/100/2022/ GHY/3330-31 dated 29.11.2022	Information Provided
Condition No. (1)	The Safety zone area 0.63 Ha. is included in the proposed area 5.42 Ha.
Condition No. (2)	The Principal Chief Conservator of Forests & Chief Wildlife Warden, Assam has submitted the comment of the proposed area is within the Kaziranga Karbi Anglong Elephant Reserve vide letter No WL/FG.35/MCA/Lankaijuri Stone Mahal/Nagaon Divn. dated 1.6.2023 (Copy enclosed).
Condition No. (3)	The User Agency stated that the process of mutation and notification to PRF/RF of Compensatory Afforestation area will be completed in due course of time after the approval Stage-I (IPA) and before accordance of Final Approval.
Condition No. (4)	A cluster of three MCAs viz Bheleugri, Lankaijuri and Beldanga had already been identified including the present one. A Google map of showing the cluster of three MCA is enclosed herewith.
Condition No. (5)	The DFO, Nagaon Division has stated that on scrutiny of record it is seen that mahal was in operation since 1992-93. As the report of the Range Kathiatoli the approach road which was found broken is with regard to the earlier mahal which is no more in operation. The area of 0.42 Ha. proposed as approach road is for the new mahal, which is included in the total mahal area of 5.42 Ha.
Condition No. (6)	The Divisional Forest Officer, Nagaon Division stated that there was no violation observed in the proposed mining area.
Condition No. (7)	MMDRR and DMFT funds realised and will be utilized for the stated purpose.



Condition No. (8)	The Divisional Forest Officer, Nagaon Division stated that there are no Court Case is involved in the proposed mining area.
Condition No. (9)	The Divisional Forest Officer, Nagaon Division has submitted the Hydro Geological report for mining purpose below ground water table. (Copy enclosed) .
Condition No. (10)	The restoration plan will be implemented as per the approved mining plan and as per the condition of "Final Approval".
Condition No. (11)	The User Agency (Imdad Ali) has stated the FRA-2006 certificate is under process.
Condition No. (12)	A total estimate for plantation in the Safety Zone area is Rs. 27.22.027/-
Condition No. (13)	The Chief Conservator of Forests, Dima Hasao District, Assam has submitted the Site Inspection report of the Compensatory Afforestation area. (Copy enclosed) .

The above-mentioned information may kindly be sent to the Government of India, MoEF&CC, Integrated Regional Office, Guwahati accordingly.

Encl: As stated above.

Yours faithfully,



(Dr. C Muthukumaravel, IFS)

Chief Conservator of Forests &
Nodal Officer (FC Act), Assam

O/o the Principal Chief Conservator of Forests and
Head of Forest Force, Assam

Copy to:-

1. The Inspector General of Forest (Central), Government of India, Ministry of Environment, Forest & Climate Change, Integrated Regional Office, 4th Floor, Housefed Building, G.S Road, Rukminigaon, Guwahati-781022 for kind information.
2. The Principal Chief Conservator of Forests and Chief Wildlife Warden Assam, Panjabari, Guwahati-37 for kind information.
3. The Chief Conservator of Forests, Dima Hasao District, Assam for kind information.
4. The Divisional Forest Officer, Nagaon Division, Nagaon for information.
5. Sri Imdad Ali, House No.11, Purbanchal Path Mathura Nagar, Dispur, Guwahati-781005.


Chief Conservator of Forests &
Nodal Officer (FC Act), Assam

O/o the Principal Chief Conservator of Forests and
Head of Forest Force, Assam

GOVERNMENT OF ASSAM

OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS (WILDLIFE)
AND CHIEF WILDLIFE WARDEN, ASSAM::PANJABARI::GUWAHATI-37

Email ID: pccf.wl.assam@gmail.com

No. WL/FG.35/MCA/Lankaijuri Stone Mahal/Nagaon Divn.,

Dated 01.06.2023

To,

✓ The Principal Chief Conservator of Forests
& Head of Forest Force, Assam,
Panjabari, Guwahati-37.

Sub: Forest diversion proposal of 5.42 Ha. Of Forest Land for operation of Lankaijuri Stone Mahal in Doboka Reserved Forest under Nagaon Division in favour of Imdad Ali.

Ref: CCF & Nodal Officer (FC Act), Assam letter No. FG.27/FCA/MCA/Lankaijuri Stone Mahal Nagaon Division, date: 01.10.2022 (copy enclosed).

Sir,

With reference to the subject and letter cited above, the comment of CWLW as required to be submitted to the MoEF & CC, Govt. of India, is furnished below for favour of kind information and necessary action.

"The area proposed for diversion falls within Doboka Reserved Forest under Nagaon Forest Division in Nagaon District. Doboka RF is a part of the notified Kaziranga Karbi Anglong Elephant Reserve. This Elephant Reserve is important for conservation of elephants in Kaziranga Karbi Anglong landscape and reducing Human Elephant Conflict in its fringe areas. The proposed mining activities may result in more conflict situation in the periphery of the Reserved Forest.

The proposed Lankaijuri Stone Mahal is a necessity to meet the demand of stone material required for developmental works as well as construction activities to be implemented under various Departments of Govt. of Assam as well as Central Govt. It is recommended subject to fulfillment of the following conditions.

1. No adverse impact shall be caused to the wild animals and their habitat during operation of stone mahal.
2. No operation shall be carried out between sun set and sun rise.
3. 2% of the estimated project cost should be deposited as CORPUS fund to the CWLW for Human Elephant Conflict Mitigation Measures.

Further, it is to inform you that the Restoration Plan of the proposed mining area and Human Elephant Conflict Mitigation & Conservation Plan shall be submitted within 3 (three) months from the date of receipt of the above mentioned 2% amount.

Encl: As stated above.

Yours faithfully,

(Sandeep Kumar, IFS)

Principal Chief Conservator of Forests, Wildlife
& Chief Wildlife Warden, Assam.

Copy to Chief Conservator of Forests & Nodal Officer (FC, Act) O/o the PCCF & HoFF, Assam, Panjabari, Guwahati-37 for information and necessary action.

Principal Chief Conservator of Forests, Wildlife
& Chief Wildlife Warden, Assam.

Annexure-2

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**HYDROGEOLOGICAL REPORT
OF
LANGKAIJURI STONE MAHAL
OF KATHIATOLI RANGE,**

**NAGAON FOREST DIVISION
NAGAON DISTRICT, ASSAM**




Prepared by: Moon Ch. Deka,
Senior Geologist
Directorate of Geology and Mining
Government of Assam

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08	Conclusion	



Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

18h

Enclosed

01. Google Map of Site
02. Geological Map
03. Contour Map
04. Base Map of the Contract Area
05. Site View with DGM and Other Officers
06. Typical Quartzite Rock
07. Petro graphic Report




Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

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01. INTRODUCTION

A	Name and address of the applicant	Imdad Ali House no.11,Purbanchal path,Mathura Nagar, Dispur, Guwahati - 06
B	Location site	Lankajuri Stone Mahal Kathiatoli Range
C	Area (Extent)	5.42 ha approx
D	Taluk	Nagaon Forest Division
E	District	Nagaon, Assam
F	DGM's Order No	GM/ET/902 Dated Guwahati 5 th January . 2023
G	Order No	FNGT/B/74(Pt-I) Lankajuri SQ/2022/9754- 55 Dated 31 st 12/202022
H	GPS coordinates (Reference point)	26°09'2.73"N 92°49'33.89"E
I	Order no. of approval of Mining Plan	GM/MM/86-B(40) /PtVIII/2676-80 Dated 11 th October,2021



Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

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02. SUMMARY

The Ministry of Environment, Forest & Climate Change requires detail information on Ground Water Occurrence at Proposed Project Mining Site. The Ministry advised to make a Hydrological Report for Mining Purposes below Ground water table and should be prepared for mining purpose below ground water table. The objective of the present study is to assess the availability of groundwater and its aspects of depth to potential aquifers or depth to water table, aquifer availability and type, yields and water quality, for this purpose, all the available. Quality hydro geological information of the areas has been noticed and a preliminary survey was done accordingly,

The investigations involve hydro geological, field investigations and a detailed study in which the available relevant geological and hydro geological common data were considered, analysed, collated and evaluated within the context of the Clients requirements. The aerial distance of proposed mining site is about 1.75 km away from Highway and about 1.20 km inside the hilly forest range.



Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

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03. SCOPE OF THE WORK

The scope of the work includes:-

- 3.0.1. The Site visits to familiarize with the study area and Project Identify any issues that might impact the ground water scenario due to proposed Mining activities
- 3.0.2. To obtain, study and synthesize background information including the geology, structural Geology, hydro-geology and existing data, for the purpose of improving quality of assessment and preparing comprehensive hydrogeological reports.
- 3.0.3. To carry out hydro geological evaluation and geophysical investigations in the collected sites in order to determine potential of for ground water at project site.
- 3.0.4. To prepare hydro geological survey reports in conformity with the provisions of the rules and procedures outlined by CGWB, by assessment of availability of groundwater and impact of proposed activity on aquifer.




Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

05. GEOMORPHOLOGY OF STUDY AREA

GEOMORPHOLOGY OF THE STUDY AREA

Geomorphology is the study of the physical features on the surface of the earth and their relation to its geological structure i.e. change in earth's surface due to physico-chemical actions on materials present on the earth. Geomorphology is the scientific study of the origin and evaluation of topographic features created by physical, chemical etc. processes.

The geomorphology unit of the study area is of denudational hills, mainly consists of quartzite rock which is highly fractured and jointed. Denudation is the geological processes in which moving water, ice, wind, and waves erode the Earth's surface, leading to a reduction in elevation and in relief of landforms and landscapes. The study area of the hills is the part of Karbi-Anglong Massif which is an extension of Shillong Plateau. The lineament trending is basically NE-SW trending rugged topographic highs standing out due to differentiated erosion. No plantation of deciduous trees has been founding in the proposed mining site due to highly denudation and steep slope. The 5 hectares area of the site is mainly a grass land and porosity with some trees. A dry basin area has seen having NE-SW direction passing nearby the proposed mining site.



Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

06. GENERAL GEOLOGICAL SET-UP


Geological structure includes meta sediments of Shillong group of Precambrian rocks, i.e. Amphibolites, Grey white hard Quartzite. Quartzite is thickly bedded, but the bedding nature is absent in the rock, which is deciphered by colour banding at places. Quartzite is highly fractured.

From Field investigation and Geological Map prepared for M. area portrays the presence of lithology. Quartzite as dominant part and a lithological report prepared by Directorate of Geology and Mining, Govt. of Assam has been attached herewith.

This mining site is basically a part of Denudation Hill featured with highly fractured, fissured & catalectic Quartzite Precambrian age. From the systematic field investigation, it is pertinent to say that geologically, the area is outcrop of quartzite hill which is surrounded by alluvial plains in the north western side.

Geologically the district is underlain by rocks of Precambrian age consisting of granites and gneisses, rocks belonging to Barail and Surma series of Tertiary age and Quaternary alluvium. Since the Archaean and Precambrian granites and gneisses form the basement or are found as inselbergs projecting out the plains alluvial stretch. They are not of much significance from groundwater point of view. The younger Tertiary formations are found confined to Lumding, Lanka and Hojai areas and in the east and north east. The rocks comprise massive and compact sandstones and shales. The district is occupied by Consolidated Formations belonging to Pre-Cambrian Groups of rocks, Semi-consolidated Formations of Tertiary age and overlain by Unconsolidated Alluvial sediments of Quaternary age. The Pre-Cambrian rocks occupy about 3 % and the semi-consolidated Tertiary Group is an about 5 % of the TGA of the district. The Unconsolidated Alluvial sediments occupy about 90% of the total area and dominant in the district.

The present mining area is part of a denudational hill and the dominant rock type is quartzite. The area is highly fractured and jointed which is suitable for construction of road and building materials.



Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

09. HYDROGEOLOGY OF SYUDY AREA

Rock type of the study area is basically quartzite with abundance of impurities which is hard due to metamorphism and an impervious in nature. The overburden is mostly residual soil due to erosion of the country rocks. The few sets of joints and fractured has also seen in the exposure which is structurally controlled by fold mechanism. A dry nala has been passing through the boundary of site where it is seasonal for run off from the nearby watersheds. From the thematic options of Lithology, Geological Structure and Geomorphology it do not allow water to percolate through it for which no primary porosity has been developed. As a result there is no ground water movement in the site except the movements of within the fractured zones below. Even though fractures and joints provide secondary porosity, due to steep slope mostly surface run-off takes place. The rock types, structure and the geomorphologic condition of the site indicates that no aquifer is present in the site hence availability of ground water is practically very poor.

Hydro- geologically the district is proved to be potential in general, even though in the rocky surface of denudation hills does not provide good ground water reservoir. The nearest flat area of the region has good availability of ground water with shallow ground water table.

The proposed mining site of about 5.42 hectares will not affect the ground water table of the nearby region at all. The damaging run odd may occurred which is to be which can be prevent with proper measures in the nearby sites. As soon as mining operation starts it will have to measured accordingly to prevent damaging run off from the mining site.

In Nagaon district, hydrogeological survey aided by exploratory drilling carried out by CGWB revealed the existence of potential aquifer zones down to the depth of 200m. Hydrogeologically, the district is proved to be potential. Groundwater in Nāgaon district occurs in secondary porosity like fractures, fissures of Precambrian rocks and in the semi-consolidated and unconsolidated formations of Tertiary and Quaternary age respectively.

But the proposed mining area is a part of the denudational hill and no such major streams are noticed in the proposed mining area.



Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

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10. Conclusion

- 8.1. From the field visit and data collected from the site and its around it is assumed that there are no potential of Ground water in and beneath. The availability of Ground water is very poor due to nature of rock type, geomorphology and its structural behaviour. It has been based on available information's and geophysical Investigation, it is found that No water body exists in the study area and no waste water will be discharged outside the mining area. Therefore no adverse impact on water quality is envisaged due to proposed mining project.
- 8.2. The proposed Mining site will not affect the ground water table nearby in the plains due to quartzite rock type and small quantity of allotted area of mining site. But monitoring and checking of proposed Mining time to time soon after it starts mining to verify the surface run off details so that damaging run off cannot be happened and arrest after necessary measures
- 8.3. Programme to create awareness among people for the conservation of ground water resource to be carried out.



Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

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PETROGRAPHIC ANALYSIS REPORT

Sample No.

Name

Date

Place of collection

Microscopic Description

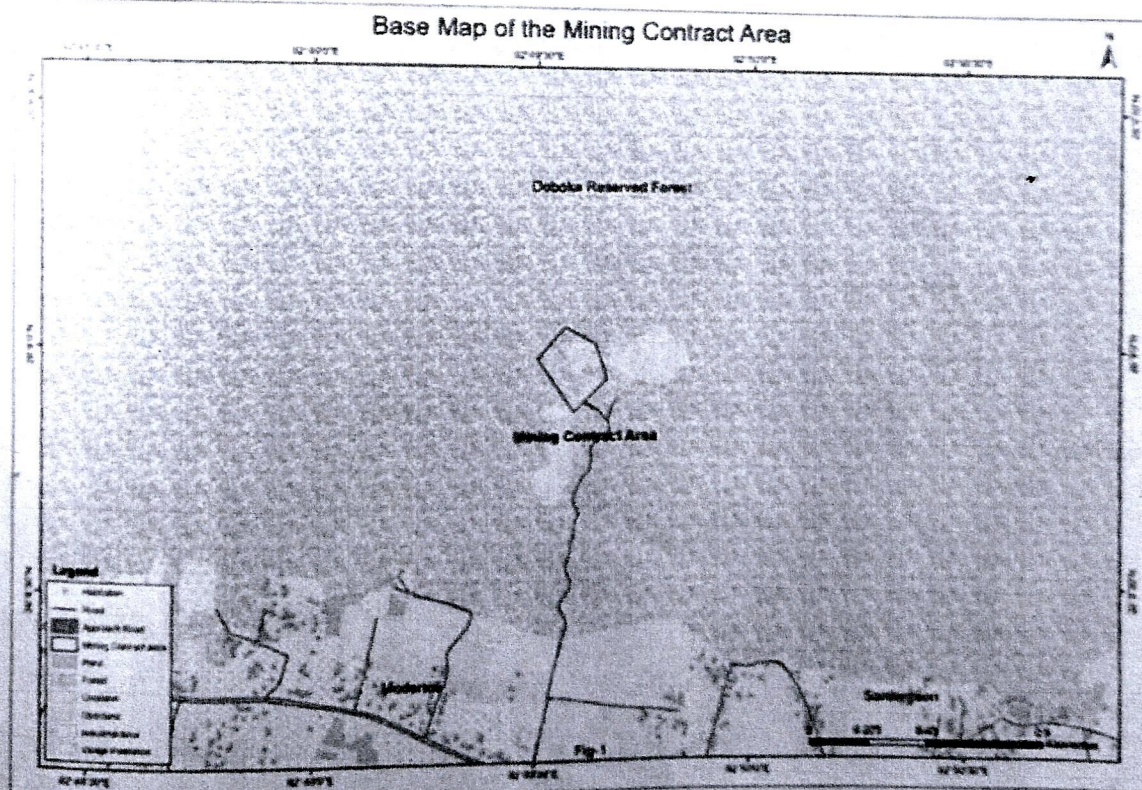
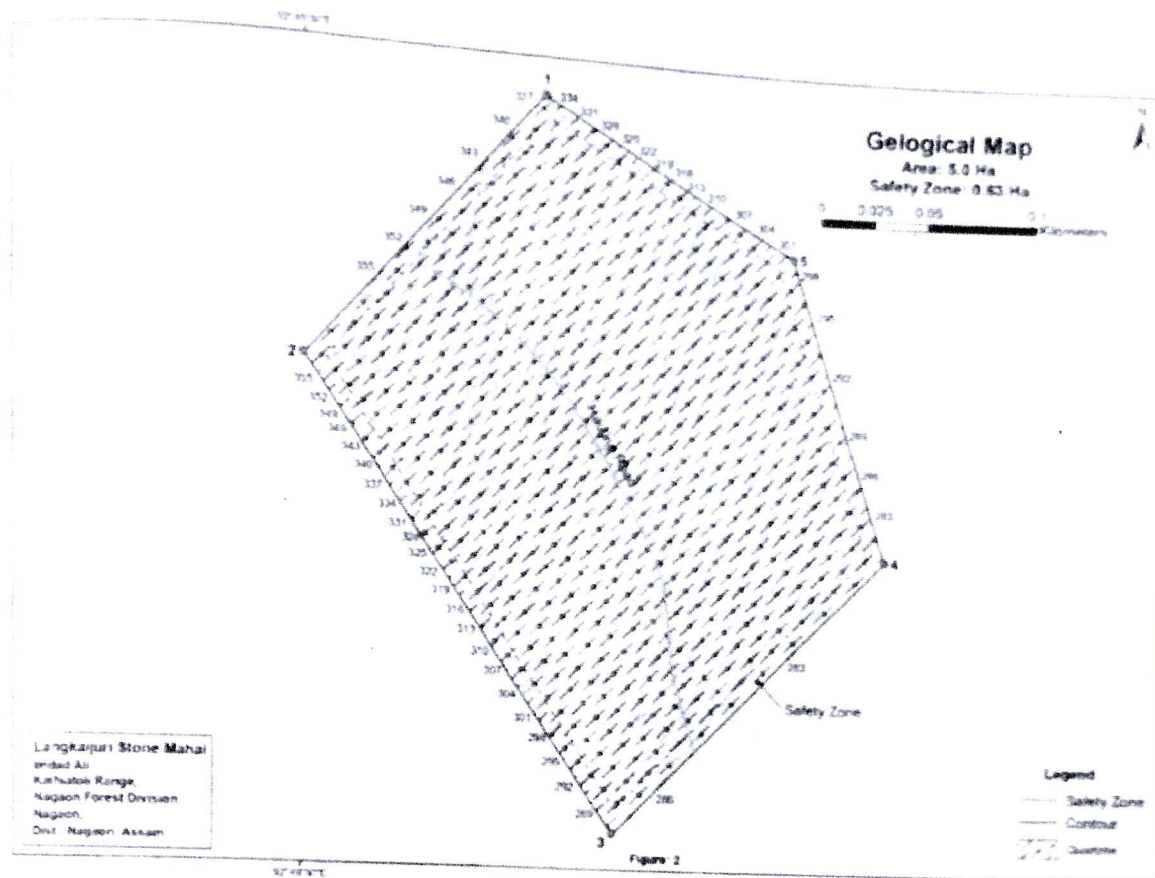
1. Grain size	Grain size is medium.
2. Grain shape	Anhedral
3. Abundance of minerals	Abundance of quartz and opaque minerals.
4. Primary minerals	Quartz
5. Secondary minerals	No secondary mineral is seen.
6. Accessory minerals	Opaque minerals as accessory minerals.
7. Texture	Grains are showing equigranular texture.
8. Structural features (if any)	No structural feature could be seen.
9. Mutual relationship	Grains are showing interlocking mutual relationship.
10. Study of inclusions	No inclusion is seen.
11. Name of rock	The sample is a composition of quartz and opaque minerals. From the mineralization it can be ascertained it is a metamorphic rock and the rock is quartzite with impurities.
12. Uses	Fractures and joints could not be seen. The rock contains mostly quartz and opaque minerals. As the deposit is a small one, and quartzite with impurities, therefore, it has less industrial value. So, the rock can be used as ordinary stone.

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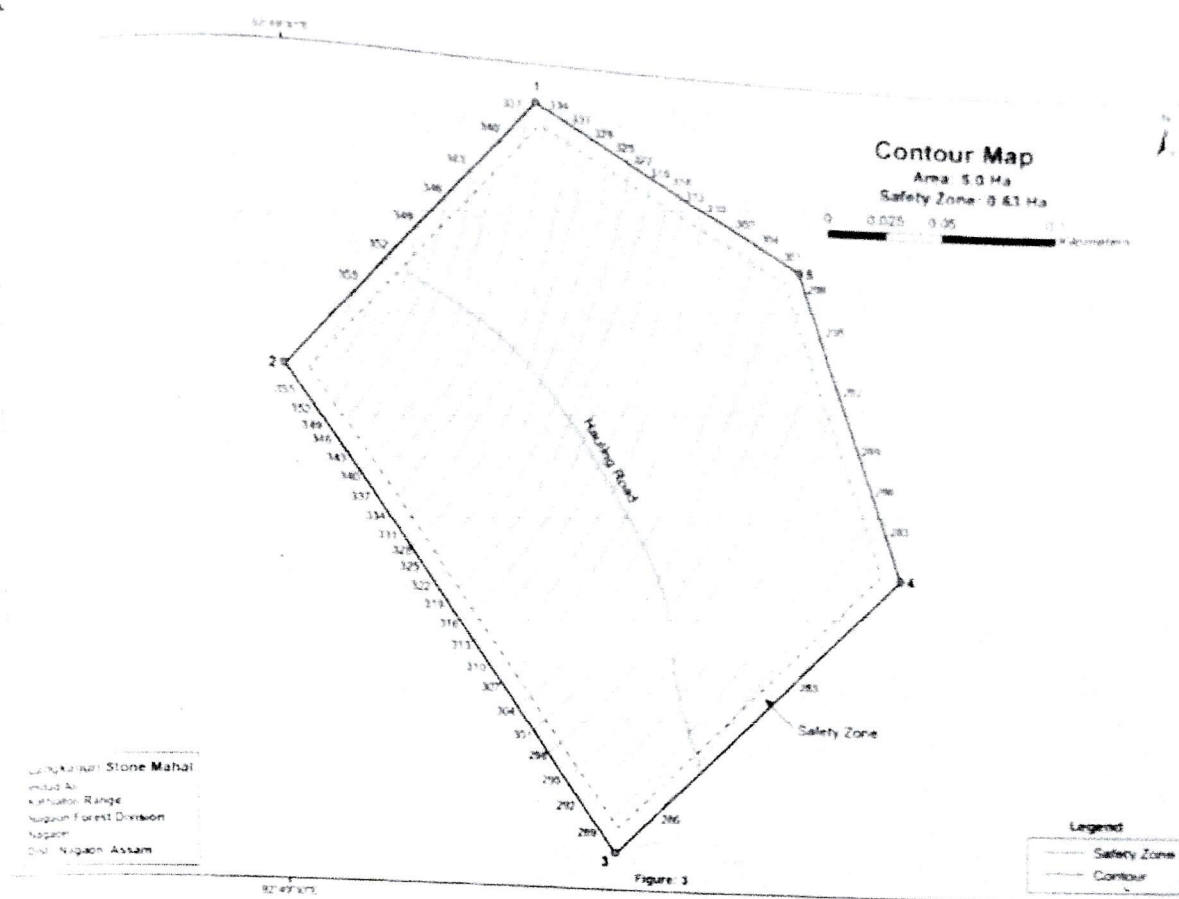
(Sri Barnabas Nath)
Joint Director,
In-Charge of Petrological Lab,
Directorate of Geology & Mining,
Govt. of Assam.

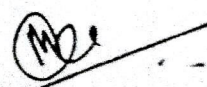
[Signature]
Senior Geologist
Directorate of Geology & Mining,
Govt. of Assam
Kahilashahi, Ghy-19

17h



(Signature)
Senior Geologist
Directorate of Geology & Mining
Govt. of Assam
Silchar, Ghy-19




Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

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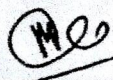


Google Earth
Image (Left)

Diagram
(Below) : Few snaps
at the Field



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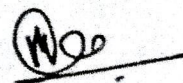

Senior Geologist
Directorate of Geology & Mining
Govt. of Assam
Kahilpara, Ghy-19

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Photograph (Left) - At site alongwith Lol Holder,



Site Photograph



Moon Ch. Deka
Senior Geologist
Directorate of Geology and Mining, Assam

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ANNEXURE A

SITE INSPECTION REPORT

The Site Inspection of the proposed Compensatory Afforestation site regarding forest diversion proposal of 5.42 Ha of forest land for operation of Langkaijuri Stone Mohal in Doboka R.F. under Nagaon Division was carried out by the undersigned on 23.01.2023. During the inspection, it was found that out of the 5.42 Ha of the area identified for Compensatory Afforestation, around 2.5 Ha comprises of moderately dense forest with vegetation comprising of pine (*Pinus khasiana*) forest along with Makri Sal and other associated species and the residual area comprises of open forest.



(M.TUNG NUNG IFS)
Chief Conservator of Forests,
Dima Hasao District, Assam

(1/16)

Site Inspection of the proposed Compensatory Afforestation site regarding forest diversion
proposal of 5.42 Ha of forest land for operation of Langkaijuri Stone Mohal in Doboka R.F.
under Nagaon Division on 23.01.2023



Chief Conservator of Forests
Dima Hasao District, Assam
Haflong