Shri Shiavji Science College, Amravati

Department of **Geology** and Geoinformatics

Report of **Geological** Field Excursion to Wadgaon Mahore, Amravati

Dated: 20/03/2025.

Department of Geology and Geoinformatics had organized Geological Field Excursion to Wadgaon Mahore, Amravati, for B.Sc. Geology I, II and III year students as a part of fulfilment of B.Sc. Geology I, II and III syllabus. 92 students from B.Sc. Geology I, II and III attended the Field Excursion and they were guided by 4 staff members Dr. M.M. Deshmukh, Mr. S.K. Paunikar, Mr. K.P. Tiwari, Mr. G.V. Kadu and accompanied by 1 Non-teaching staff Mr. S.M. Salbarde.

Journey for above said field was completed using Self-Vehicles and Local Autos. Contact Number for Local auto used was (Mr. Rushi 9370827694)

Journey was Executed as follows

Date	Time	Schedule
20/03/2025	3:40 PM	Reporting at College Gate Number 1
20/03/2025	3:50 PM	Departure to Basalt Rock Quarry at Wadgaon Mahore
20/03/2025	4:20 PM	Arrival at Basalt Rock Quarry at Wadgaon Mahore
20/03/2025	4:20 to 6:00 PM	Field Work & Geological Study
20/03/2025	6:30 PM	Reporting Back to College Premises

Field Excursion was carried out as per following details:

Spot 1: Soil Profile

Area of Interest: Basalt Rock Quarry, Wadgaon Mahore

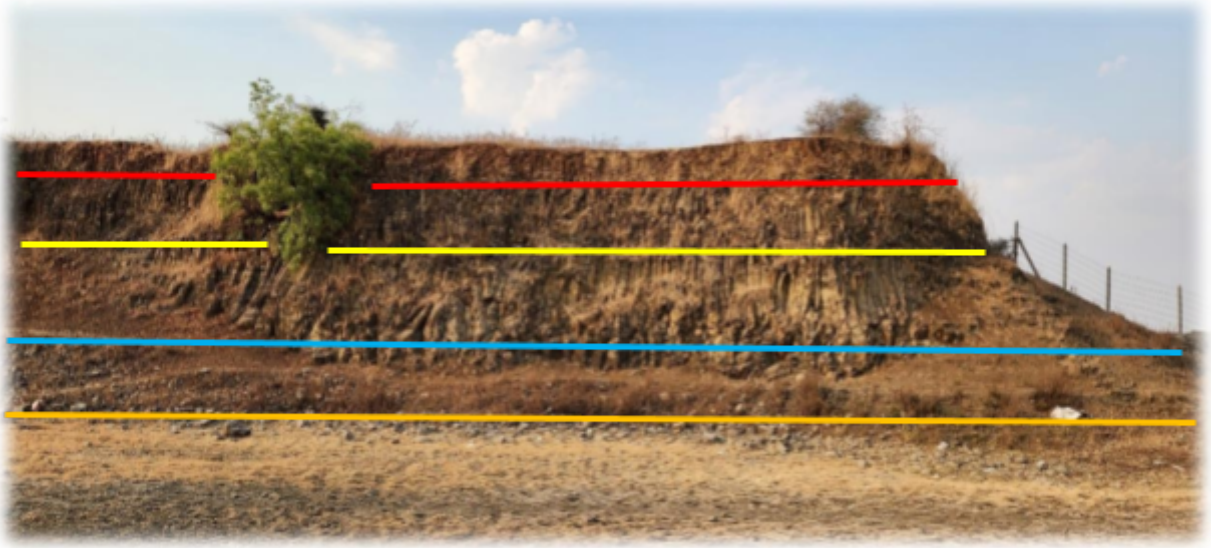
District: Amravati

Co-ordinates:

Latitude: 20° 58’ 06.66”

Longitude: 77° 48 ’51.29''
Elevation: 393m

At wadgaon mahore stude visited basalt rock quarry. Mr. S.K. Paunikar Explained about soil profile with reference to a type of soil structure where soil aggregates form tall, vertical columns separated by distinct vertical cracks.



Soil Profile

Spot 2: Columnar Joints

Area of Interest: Basalt Rock Quarry, Wadgaon Mahore

District: Amravati

Co-ordinates:

Latitude: 20° 58’ 05.76”

Longitude: 77° 48’ 54.86”
Elevation: 383m

At this spot Dr. M.M. Deshmukh explained and gave understanding to students about about the lava flows and dramatic curvatures of columnar joints.

Tilted or inclined Columnar Joints

Dramatic curvature of Columnar Joints

Spot 3: Vesicular Basalt

Area of Interest: Basalt Rock Quarry, Wadgaon Mahore

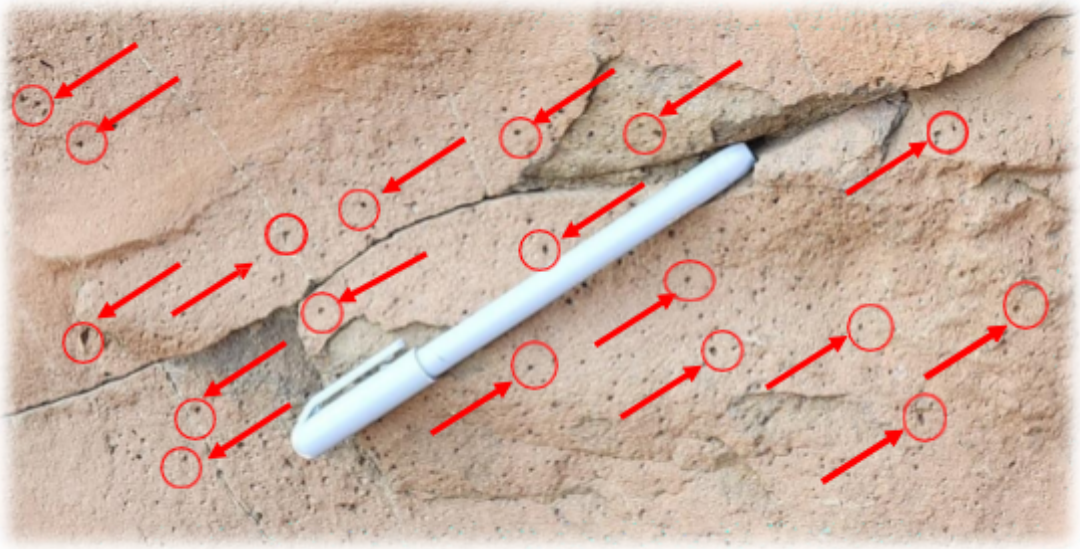
District: Amravati

Co-ordinates:

Latitude: 20° 58’ 02.49”

Longitude: 77°48'51.83''
Elevation: 355m

During the Field work at Wadgaon Mahore Mr. S.K. Paunikar Explained about Vesicular Basalt and the ‘Aa’ Type of Lava Flows in Basalt.



Vesicular Basalt

Spot 4: Basaltic flow

Area of Interest: Basalt Rock Quarry, Wadgaon Mahore

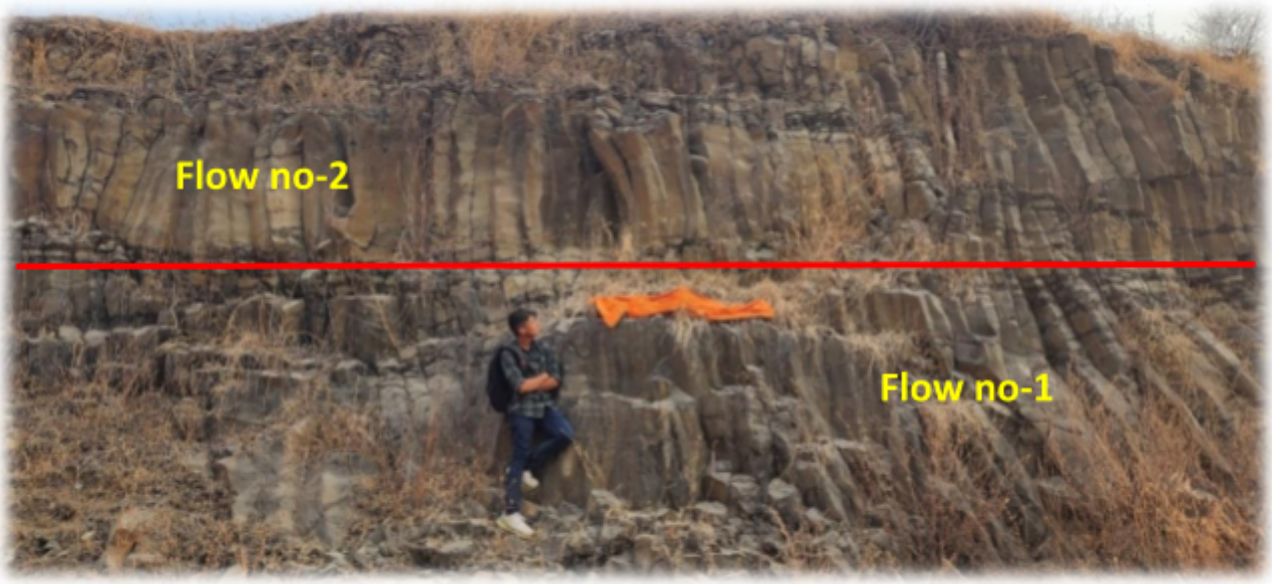
District: Amravati

Co-ordinates:

Latitude: 20°58'01.51 ''

Longitude: 77°48'52.51''
Elevation: 356m

During our field at basaltic rock quarry located at wadgaon mahore. Mr. K.P. Tiwari, explain the color difference in rocks underneath the orange cloth and above the cloth explaining younger and older lava flow.



Basaltic flow

The picture show that two basaltic flow form through weathering and erosion.
Flow no.1 show the blackish color. It is at lower rate of weathering and erosion thus less water present in it due to close joint.
Flow no.2 show the brownish color. It is because of higher rate of weathering and erosion thus more water is present in it due to presence of open joint.

Spot 5: Top View of Columnar Joints

Area of Interest: Basalt Rock Quarry, Wadgaon Mahore

District: Amravati

Co-ordinates:

Latitude: 20°58'00.38 ''

Longitude: 77°48'51.22''
Elevation: 356m

Both Dr.M.M. Deshmukh and Mr. S.K. Paunikar explained this spot that the upper part of columnar Joint is visible in Pentagonal, Hexagonal and Triagonal shape. The reason due to Which this Joint Structure is formed.

Top View of Pentagonal column.

Top View of Hexagonal Colum

Date: 28/03/2025

Place: Amravati

Head
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