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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
| 1 | 83C11 | PBH-01 | 0 | 4 | 4 | 27 | Silty clay residual soil, brownish grey in colour, present as sludge |
| 2 | 83C11 | PBH-01 | 4 | 12 | 8 | 99 | Grey to dark grey, fine to medium grained hard fossiliferous limestone with abundance of Nummulite sp., Discocyclina sp., Assilina sp.  Stylolites are prominent.  Vertical fractures  and mud partings are present. |
| 3 | 83C11 | PBH-01 | 12 | 33 | 21 | 98.29 | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of fossils Assilina sp., Alveolina sp., and Discocyclina sp., Asterocyclina sp. |
| 4 | 83C11 | PBH-01 | 33 | 66 | 33 | 99 | Grey, fine to medium grained hard fossiliferous limestone with fossils of mainly Nummulite sp., Assilina sp., Discocyclina sp.  Vertical fractures present at several depths. |

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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
| 5 | 83C11 | PBH-01 | 66 | 82.7  6 | 16.76 | 99.33 | Grey to dark grey, fine to medium grained hard & compact fossiliferous limestone with presence of Discocyclinasp., Nummulite sp., and Assilina sp., mixed up with unfossiliferous and calcareous shale. Secondary infilling of  calcite is observed. |
| 6 | 83C11 | PBH-01 | 82.76 | 84 | 1.24 | 93.33 | Medium to coarse grained sandstone, greyish in colour,  Carb. Streak present. |
| 7 | 83C11 | PBH-01 | 84 | 85.2  5 | 1.25 | 97.67 | Fine grained sandstonemixed up with grey unfossiliferous shale. |
| 8 | 83C11 | PBH-01 | 85.25 | 85.7  8 | 0.53 | 100 | Grey fossiliferous limestone containing fossil of Nummulite sp.  In minor quantity. |
| 9 | 83C11 | PBH-01 | 85.78 | 89.7  5 | 3.97 | 97.5 | Grey to dark grey shale, mixed with SSFG at middle |
| 10 | 83C11 | PBH-01 | 89.75 | 90.5  3 | 0.78 | 98.71 | Medium grained sandstone,  reddishgrey-grey |

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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
|  |  |  |  |  |  |  | in colour, slightly ferruginous |
| 11 | 83C11 | PBH-01 | 90.53 | 92.8  6 | 2.33 | 98.71 | Greyshalemixed up with fine to medium grained,  greyish sandstone. |
| 12 | 83C11 | PBH-01 | 92.86 | 95.1  6 | 2.3 | 97.39 | Fine to medium grained sandstone, reddish grey in colour |
| 13 | 83C11 | PBH-01 | 95.16 | 97.5 | 2.34 | 95.72 | Greyish shale mixedwith fine grained sandstone. |
| 14 | 83C11 | PBH-01 | 97.5 | 100 | 2.5 | 99.2 | Medium to coarse grained sandstone, greyish in colour, shale and coal patches are  observed. |
| 15 | 83C11 | PBH-02 | 0 | 2 | 2 | 40 | Silty clay residual soil, brownish in colour, loose and broken |
| 16 | 83C11 | PBH-02 | 2 | 4.4 | 2.4 | 65 | Grey calcareous shale mixed up with fossiliferous limestone |
| 17 | 83C11 | PBH-02 | 4.4 | 18 | 13.6 | 88.2 | Grey to dark grey, medium grained, hard & compact limestone with dominant fossils of Nummulite sp., Discocyclina sp., along with minor abundance |

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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
|  |  |  |  |  |  |  | of Alveolina sp. fossils. Mud partingpresent at places. |
| 18 | 83C11 | PBH-02 | 18 | 31.6  2 | 13.62 | 96.73 | Grey to dark grey, fine to mediumgrained, hard & compact, fossiliferous limestone with abundance of Nummulite sp., Discocyclina sp.  Stylolites are observed at places. |
| 19 | 83C11 | PBH-02 | 31.62 | 34.7 | 3.08 | 90.58 | Dark grey, unfossiliferous, calcareous shale.  Loose at bottom parts. |
| 20 | 83C11 | PBH-02 | 34.7 | 54 | 19.3 | 96.48 | Grey-dark grey, fine to medium grained, hard & compact fossiliferous limestone with high abundance of Nummulite sp., Discocyclina sp., Asterocyclinasp. fossils. |
| 21 | 83C11 | PBH-02 | 54 | 96 | 42 | 98.74 | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Nummulites sp., Assilina sp., Asterocyclina sp. |

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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
|  |  |  |  |  |  |  | and Discocyclina sp. fossils.  Stylolites & fractures are prominent. |
| 22 | 83C11 | PBH-02 | 96 | 100 | 4 | 97.17 | Grey-dark grey, fine-medium grained, hard & compact fossiliferous limestone mixed with unfossiliferous greyish shale at top. Fossils present in fossiliferous limestone are  Alveolina sp. and Discocyclina sp. |
| 23 | 83C11 | PBH-03 | 0 | 5.5 | 5.5 | 45.56 | Silty clay residual soil, brownish-greyish in colour |
| 24 | 83C11 | PBH-03 | 5.5 | 15.7  8 | 10.28 | 90.33 | Unfossiliferous shale, grey-dark grey in colour,  calcareous |
| 25 | 83C11 | PBH-03 | 15.78 | 42.2  6 | 26.48 | 95.93 | Grey, medium grained, compact fossiliferous limestone with abundance of Nummulite sp., along with minor Assilina sp. And Alveolina sp., fractures present.  Cavityfilling of calcite is observed. |

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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
| 26 | 83C11 | PBH-03 | 42.26 | 45.5 | 3.24 | 95.37 | Dark grey,  unfossiliferous, calcareous shale |
| 27 | 83C11 | PBH-03 | 45.5 | 100 | 54.5 | 97.44 | Grey, fine- medium grained, hard & compact, fossiliferous limestone with abundance of Nummulite sp., Discocyclinasp., Asterocyclina sp., and less abundance of Assilina sp.  Stylolites & fractures are  prominent at parts. |
| 28 | 83C11 | PBH-04 | 0 | 3 | 3 | 30 | Silty clay residual soil, brownishyellow- greyish in colour |
| 29 | 83C11 | PBH-04 | 3 | 15.8 | 12.8 | 93.67 | Calcareousshale, unfossiliferous mixed up with fossiliferous limestone.  Greyish to brownish in  colour. Fractures present. |
| 30 | 83C11 | PBH-04 | 15.8 | 24 | 8.2 | 96.11 | Greyish-Reddish white, fine to mediumgrained, hard & compact fossiliferous limestone along with major fossils Nummulite sp.,  Assilina sp. |

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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
|  |  |  |  |  |  |  | Slightly ferruginous. |
| 31 | 83C11 | PBH-04 | 24 | 42 | 18 | 97.22 | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Asterocyclina sp., Discocyclina sp., Nummulite sp., Assilina sp.  Mixed up with shale. Stylolites & fractures are present. |
| 32 | 83C11 | PBH-04 | 42 | 45 | 3 | 94 | Grey to dark grey, calcareous shale, unfossiliferous |
| 33 | 83C11 | PBH-04 | 45 | 100 | 55 | 98.25 | Grey, fine to medium grained, hard & compact fossiliferous limestone with major fossils of Nummulite sp., Asterocyclina sp., Discocyclina sp., Assilina sp. mainly. Shale partings &  stylolites are present at places. |
| 34 | 83C11 | PBH-05 | 0 | 3 | 3 | 44 | Silty clay residual soil, brownish-dark grey in colour |

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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
| 35 | 83C11 | PBH-05 | 3 | 16.1  4 | 13.14 | 95.8 | Grey fossiliferous limestone with abundance of Asterocyclina sp., Discocyclina sp. fossils mixed up with grey Calcareousshale.  Fracturedand broken. |
| 36 | 83C11 | PBH-05 | 16.14 | 42 | 25.86 | 99.29 | Whitish Grey- Grey, fine to mediumgrained, hard & compact fossiliferous limestone with abundance of Nummulite sp., Assilina sp. fossils. Vertical fractures are observed.  Secondary growth of calcite is seen within fractures. Mud  partings present. |
| 37 | 83C11 | PBH-05 | 42 | 45 | 3 | 98.33 | Dark grey shale, unfossiliferous and calcareous |
| 38 | 83C11 | PBH-05 | 45 | 87 | 42 | 99.67 | Whitish grey- grey, fine to mediumgrained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Assilina sp., Alveolina sp.  Fractures and |

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| **ANNEXURE-I: SUMMARIZED LITHOLOGS OF BOREHOLES DRILLED IN NORTHWEST OF BORO LAKHINDONG** | | | | | | | |
| **Sr No** | **Toposheet no** | **Borehole No** | **Depth (m)** | | **Thickness (m)** | **Recovery (%)** | **Description of lithology** |
|  |  |  | From | To |  |  |  |
|  |  |  |  |  |  |  | stylolites are present. |
| 39 | 83C11 | PBH-05 | 87 | 100 | 13 | 99.4 | Whitish grey- grey, fine to medium grained, hard & compact fossiliferous limestone with lowabundance of fossil content. |

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| **ANNEXURE-I (B): Co-ordinate and RL of drilled boreholes in Northwest of Boro Lakhindong Block** | | | | | | | | | | | | |
| **Toposheet No** | **Borehole No** | **Latitude** | **D** | **M** | **S** | **Lat** | **Longitude** | **D1** | **M1** | **S1** | **Long** | **RL of the Collar** |
| 83C11 | PBH-01 | 25°28'34.72"N | 25 | 28 | 34.72 | 25.48 | 92°36'6.56"E | 92 | 36 | 6.56 | 92.60 | 731.00m |
| 83C11 | PBH-02 | 25°28'33.56"N | 25 | 28 | 33.56 | 25.48 | 92°36'35.44"E | 92 | 36 | 35.44 | 92.61 | 736.00m |
| 83C11 | PBH-03 | 25°28'32.41"N | 25 | 28 | 32.41 | 25.48 | 92°37'4.06"E | 92 | 37 | 4.06 | 92.62 | 736.00m |
| 83C11 | PBH-04 | 25°28'7.79"N | 25 | 28 | 7.79 | 25.47 | 92°36'19.95"E | 92 | 36 | 19.95 | 92.6 | 741.00m |
| 83C11 | PBH-05 | 25°28'05.2"N | 25 | 28 | 5.2 | 25.47 | 92°36'48.3"E | 92 | 36 | 48.3 | 92.61 | 732.00m |

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| **ANNEXURE II** | | | | | | | | | |
| **LITHOLOGS OF BOREHOLES DRILLED IN NW OF BORO LAKHINDONG BLOCK, DIMA HASAO DISTRICT, ASSAM** | | | | | | | | | |
| **BH No.- PBH01** | | | | | | | **Date of Commencement: 09/12/2024** | | |
| **Latitude - N 25°28'34.7"** | | | | | | | **Date of Closing: 11/12/2024** | | |
| **Longitude - E 92°36'06.6"** | | | | | | | **Final Depth: 100m** | | |
| **Azimuth- Vertical** | | | | | | | **R.L.: 731m** | | |
|  | | | | | | |  | | |
| **Depth(m)** | | **Run** | **DEPTH & THICKNESS AFTER ADJUSTMENT**  **(m)** | | **Recovery(m)** | **Recovery (%)** | **RQD%** | **Rock type** | **Description of Lithology** |
| **From** | **Thickness** |
| **From(m)** | **To(m)** |  |  |  |  |  |  |  |  |
| 0.00 | 0.50 | 0.50 | 0.00 | 0.50 | 0.15 | 30.00 |  | Regolith | Regolith, yellowish brown in colour |
| 0.50 | 1.00 | 0.50 | 0.50 | 0.50 | 0.18 | 36.00 |  | Regolith | Regolith, yellowish brown in colour |
| 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 0.25 | 25.00 |  | Regolith | Regolith, yellowish brown in colour |
| 2.00 | 3.00 | 1.00 | 2.00 | 1.00 | 0.20 | 20.00 |  | Regolith | Regolith, yellowish brown in colour |
| 3.00 | 4.00 | 1.00 | 3.00 | 1.00 | 0.24 | 24.00 |  | Residual soil | Silty clay residual soil, brownish grey in colour, present as sludge |

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| 4.00 | 6.00 | 2.00 | 4.00 | 2.00 | 1.96 | 98.00 | 87.50 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Nummulite sp., Assilina sp., and minor abundance of Discocyclina sp.  Clay is present at top. |
| 6.00 | 9.00 | 3.00 | 6.00 | 3.00 | 2.99 | 99.67 | 88.00 | Fossiliferous Limestone | Grey, medium grained, hard & compact fossiliferous limestone with abundance of fossils Nummulite sp., Assilina sp., and Alveolina sp.  Stylolite is present at depth of 8.12m. |
| 9.00 | 12.00 | 3.00 | 9.00 | 3.00 | 2.98 | 99.33 | 86.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard fossiliferous limestone with abundance of Nummulite sp., Discocyclina sp., Assilina sp. Stylolites are prominent.  Vertical fractures and  mud partings are present. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12.00 | 15.00 | 3.00 | 12.00 | 3.00 | 2.97 | 99.00 | 90.00 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of fossils Asterocyclina sp., Assilina sp., and Discocyclina sp. |
| 15.00 | 18.00 | 3.00 | 15.00 | 3.00 | 2.92 | 97.33 | 88.66 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of fossils Asterocyclina sp., Assilina sp., and Discocyclina sp. |
| 18.00 | 21.00 | 3.00 | 18.00 | 3.00 | 2.95 | 98.33 | 91.00 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of mainly Discocyclina sp., Asterocyclina sp., Assilina sp., along with minor amount of Nummulite sp. fossils. |

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| 21.00 | 24.00 | 3.00 | 21.00 | 3.00 | 2.95 | 98.33 | 86.66 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with major fossils of Discocyclina sp., Asterocyclina sp., Alveolina sp. Shale parting present at top and middle. |
| 24.00 | 27.00 | 3.00 | 24.00 | 3.00 | 2.93 | 97.67 | 90.66 | Fossiliferous Limestone | Grey, medium grained, hard & compact fossiliferous limestone with abundance of fossils Nummulite sp., Assilina sp., and Discocyclina sp. |
| 27.00 | 30.00 | 3.00 | 27.00 | 3.00 | 2.95 | 98.33 | 93.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of fossils Nummulite sp., Alveolina sp., and Discocyclina sp. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30.00 | 33.00 | 3.00 | 30.00 | 3.00 | 2.97 | 99.00 | 96.00 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of fossils Assilina sp., Alveolina sp., and Discocyclina sp. |
| 33.00 | 36.00 | 3.00 | 33.00 | 3.00 | 2.93 | 97.67 | 79.00 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp. fossils. Fractures present at 34.05m depth. |
| 36.00 | 39.00 | 3.00 | 36.00 | 3.00 | 2.95 | 98.33 | 86.33 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone containing less amount of fossils Nummulite sp., Alveolina sp.  Vertical fractures present at top and middle. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 39.00 | 42.00 | 3.00 | 39.00 | 3.00 | 2.96 | 98.67 | 90.66 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard fossiliferous limestone with abundance of mainly Nummulite sp., Discocyclina sp. |
| 42.00 | 45.00 | 3.00 | 42.00 | 3.00 | 2.99 | 99.67 | 97.00 | Fossiliferous Limestone | Grey, medium grained, hard & compact fossiliferous limestone with abundance of fossils Nummulite sp., Assilina sp., and Discocyclina sp. |
| 45.00 | 48.00 | 3.00 | 45.00 | 3.00 | 2.95 | 98.33 | 97.00 | Fossiliferous Limestone | Grey, medium grained, hard & compact fossiliferous limestone with abundance of fossils Nummulite sp., and Discocyclina sp.  Stylolites are prominent at places. |
| 48.00 | 51.00 | 3.00 | 48.00 | 3.00 | 2.97 | 99.00 | 96.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard fossiliferous limestone with abundance of mainly Nummulite sp., |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  | Discocyclinasp., Alveolina sp. |
| 51.00 | 54.00 | 3.00 | 51.00 | 3.00 | 2.98 | 99.33 | 90.66 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard fossiliferous limestone with high abundance of mainly Nummulite sp., Assilina sp., Discocyclina sp. |
| 54.00 | 57.00 | 3.00 | 54.00 | 3.00 | 2.97 | 99.00 | 93.67 | Fossiliferous Limestone | Grey, fine to medium grained hard fossiliferous limestone with fossils of mainly Nummulite sp., Assilina sp., Discocyclina sp.  Vertical fractures present. |
| 57.00 | 60.00 | 3.00 | 57.00 | 3.00 | 2.98 | 99.33 | 95.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained compact fossiliferous limestone with fossil abundance of Nummulite sp., Assilina sp., Discocyclina sp. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 60.00 | 63.00 | 3.00 | 60.00 | 3.00 | 3.00 | 100.00 | 88.00 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard fossiliferous limestone with presence of Nummulite sp.  Stylolites are prominent at some places. Secondary infilling of calcite is present. |
| 63.00 | 66.00 | 3.00 | 63.00 | 3.00 | 2.99 | 99.67 | 68.00 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard & compact fossiliferous limestone with presence of Discocyclina sp., and Assilina sp. Shale parting present at middle. |
| 66.00 | 69.00 | 3.00 | 66.00 | 3.00 | 2.96 | 98.67 | 75.67 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard & compact fossiliferous limestone with presence of Discocyclina sp., and Assilina sp., mixed up with unfossiliferous and |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  | calcareous shale. Secondary infilling of calcite is observed. |
| 69.00 | 72.00 | 3.00 | 69.00 | 3.00 | 2.97 | 99.00 | 92.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard & compact fossiliferous limestone containing fossils of Discocyclina sp., and Alveolina sp., and mixed up with unfossiliferous and calcareous shale. |
| 72.00 | 75.00 | 3.00 | 72.00 | 3.00 | 2.98 | 99.33 | 94.67 | Fossiliferous Limestone | Dark grey fossiliferous limestone mixed up with dark grey calcareous, unfossiliferous shale, streaks of coal are observed. |
| 75.00 | 78.00 | 3.00 | 75.00 | 3.00 | 3.00 | 100.00 | 97.13 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained hard & compact fossiliferous limestone containing fossils of Discocyclina sp., and Assilina sp., and mixed up with |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  | unfossiliferous and calcareous shale. |
| 78.00 | 81.00 | 3.00 | 78.00 | 3.00 | 2.99 | 99.67 | 93.33 | Fossiliferous Limestone | Grey, fine to medium grained hard fossiliferous limestone with fossils of mainly Nummulite sp., Assilina sp., Discocyclina sp.  Shale parting is present at somepart. |
| 81.00 | 84.00 | 3.00 | 81.00 | 1.76 | 1.72 | 93.33 | 85.22 | Fossiliferous Limestone | Grey, fine to medium grained hard and compact fossiliferous limestone with fossils of mainly Assilina sp., Discocyclina sp.  Shaleparting present at 81.30m depth. |
|  |  |  | 82.76 | 1.24 | 1.08 | 43.54 | SSMGTCG | Medium to coarse grained sandstone, greyish in colour, Carb. Streak present. |
| 84.00 | 87.00 | 3.00 | 84.00 | 1.25 | 1.20 | 97.67 | 39.20 | SSFG | Fine grained sandstone mixed up with grey unfossiliferous shale |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 85.25 | 0.53 | 0.53 |  | 100.00 | Fossiliferous Limestone | Grey fossiliferous limestone containing  fossil of Nummulite sp. In minor quantity. |
|  |  |  | 85.78 | 1.22 | 1.20 | 56.67 | Shale | Darkgrey calcareous shale |
| 87.00 | 90.00 | 3.00 | 87.00 | 2.75 | 2.68 | 97.33 | 48.56 | Shale | Grey to dark grey shale, mixed with SSFG at middle |
|  |  |  | 89.75 | 0.25 | 0.24 | 76.00 | SSMG | Medium grained sandstone, reddish grey in colour |
| 90.00 | 93.00 | 3.00 | 90.00 | 0.53 | 0.53 | 99.00 | 64.15 | SSMG | Medium grained sandstone, reddish  grey-grey in colour, slightly ferruginous |
|  |  |  | 90.53 | 2.33 | 2.30 | 48.56 | Shale | Greyshalemixedup with fine to medium grained, greyish  sandstone |
|  |  |  | 92.86 | 0.14 | 0.14 |  | SSFGTMG | Fine to medium grainedsandstone,  reddish grey in colour |
| 93.00 | 96.00 | 3.00 | 93.00 | 2.16 | 2.10 | 96.67 | 53.70 | SSMG | Medium grained  sandstone, Greyish white in colour |

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|  |  |  | 95.16 | 0.84 | 0.80 |  | 86.25 | Shale | Greyishshalemixed with fine grained sandstone. Some plants fossils are present. |
| 96.00 | 99.00 | 3.00 | 96.00 | 1.50 | 1.44 | 98.00 | 52.00 | Shale | Grey to dark grey shale, Plant fossil present |
|  |  |  | 97.50 | 1.50 | 1.50 | 98.67 | SSMG | Medium grained sandstone, greyish in colour, shale patch and coal streak present. |
| 99.00 | 100.00 | 1.00 | 99.00 | 1.00 | 0.98 | 98.00 | 96.63 | SSMGTCG | Medium to coarse grainedsandstone, greyish in colour, shale and coal  patches are observed. |
|  |  |  | 100.00 |  |  |  |  |  |  |
| **Borehole closed at the depth of 100.00 meters** | | | | | | | | | |

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| **ANNEXURE II** | | | | | | | | | |
| **LITHOLOGS OF BOREHOLES DRILLED IN NW OF BORO LAKHINDONG BLOCK, DIMA HASAO**  **DISTRICT, ASSAM** | | | | | | | | | |
| **BH No.- PBH02** | | | | | | | **Date of Commencement: 04/12/2024** | | |
| **Latitude - N 25°28'33.6"** | | | | | | | **Date of Closing: 07/12/2024** | | |
| **Longitude - E 92°36'35.4"** | | | | | | | **Final Depth: 100m** | | |
| **Azimuth- Vertical** | | | | | | | **R.L.: 736m** | | |
|  | | | | | | |  | | |
| **Depth(m)** | | **Run** | **DEPTH & THICKNESS AFTER ADJUSTMENT**  **(m)** | | **Recovery (m)** | **Recovery (%)** | **RQD%** | **Rock type** | **Description of Lithology** |
| **From** | **Thickness** |
| **From (m)** | **To (m)** |  |  |  |  |  |  |  |  |
| 0.00 | 0.50 | 0.50 | 0.00 | 0.50 | 0.20 | 40.00 |  | Regolith | Regolith, Brownish in colour |
| 0.50 | 2.00 | 1.50 | 0.50 | 1.50 | 0.60 | 40.00 |  | Soil | Silty clay residual soil, brownish in colour, loose and broken |
| 2.00 | 3.00 | 1.00 | 2.00 | 1.00 | 0.40 | 40.00 |  | Shale | Grey calcareous shale, unfossiliferous, broken at bootom |

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| 3.00 | 6.00 | 3.00 | 3.00 | 1.40 | 0.90 | 70.00 |  | Shale | Grey calcareous shale mixed up with  fossiliferous limestone |
|  |  |  | 4.40 | 1.60 | 1.20 |  | Fossiliferous Limestone | Grey, fine to medium grained fossiliferous limestone, broken |
| 6.00 | 9.00 | 3.00 | 6.00 | 3.00 | 2.60 | 86.67 | 59.33 | Fossiliferous Limestone | Grey, fine to medium grained, compact fossiliferous limestone with abundance of Nummulite sp., and Discocyclina sp. |
| 9.00 | 12.0  0 | 3.00 | 9.00 | 3.00 | 2.87 | 95.67 | 88.34 | Fossiliferous Limestone | Grey to dark grey, medium grained, hard & compact limestone with dominant fossils of Nummulite sp., Discocyclina sp., along with minor abundance of Alveolina sp. fossils. Mud parting present at middle. |
| 12.00 | 15.0  0 | 3.00 | 12.00 | 3.00 | 2.84 | 94.67 | 79.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact limestone with mostly fossils of Nummulite sp., and Discocyclina sp. Stylolites are prominent at places.  Fractures and mud partings are observed. |
| 15.00 | 18.0  0 | 3.00 | 15.00 | 3.00 | 2.82 | 94.00 | 77.32 | Fossiliferous Limestone | Grey, medium grained, hard & compact, fossiliferous limestone along with presence  of Nummulite sp., Discocyclina sp. fossils. Mud partings present and broken at places. |
| 18.00 | 21.0  0 | 3.00 | 18.00 | 3.00 | 2.95 | 98.33 | 90.67 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact limestone with mostly fossils of Nummulite sp.,Discocyclina sp., and Assilina sp. . Stylolites are prominent at places. |
| 21.00 | 24.0  0 | 3.00 | 21.00 | 3.00 | 2.90 | 96.67 | 87.34 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact, fossiliferous limestone with abundance of Nummulite sp., Discocyclina sp. Stylolites are observed at places. |

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| 24.00 | 27.0  0 | 3.00 | 24.00 | 3.00 | 2.91 | 97.00 | 92.35 | Fossiliferous Limestone | Grey-dark grey, fine to medium grained, fossiliferous limestone with abundance of  Nummulite sp. Fossils. Stylolites are present. |
| 27.00 | 30.0  0 | 3.00 | 27.00 | 3.00 | 2.96 | 98.67 | 90.00 | Fossiliferous Limestone | Grey-dark grey, fine to medium grained, hard & compact fossiliferous limestone  with abundance of Nummulite sp. fossils mostly. |
| 30.00 | 33.0  0 | 3.00 | 30.00 | 1.62 | 1.54 | 93.00 | 87.04 | Fossiliferous Limestone | Grey-dark grey, medium grained, hard & compact, fossiliferous limestone containing high fossil abundance of Nummulite sp., Assilina sp., along with minor amount of  Asterocyclina sp. |
|  |  |  | 31.62 | 1.38 | 1.25 | 18.32 | shale | Dark grey, unfossiliferous, calcareous shale |
| 33.00 | 36.0  0 | 3.00 | 33.00 | 1.70 | 1.54 | 88.67 | 16.30 | shale | Dark grey, unfossiliferous, calcareous shale. Loose at bottom parts. |
|  |  |  | 34.70 | 1.30 | 1.12 | 72.30 | Fossiliferous Limestone | Grey-dark grey, fine to medium grained, hard fossiliferous limestone containing fossils of Nummulite sp., Assilina sp.  Mixed with shale at middle. Broken at bottom part. |
| 36.00 | 39.0  0 | 3.00 | 36.00 | 3.00 | 2.89 | 96.33 | 77.67 | Fossiliferous Limestone | Grey-dark grey, fine to medium grained, hard & compact fossiliferous limestone with dominant fossils of Nummulite sp., assilina sp., Discocyclina sp., mixed up with dark grey shale at top. |

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| 39.00 | 42.0  0 | 3.00 | 39.00 | 3.00 | 2.91 | 97.00 | 91.67 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with presence of Nummulite sp., Alveolina sp., Assilina sp. fossils. |
| 42.00 | 45.0  0 | 3.00 | 42.00 | 3.00 | 2.89 | 96.33 | 87.67 | Fossiliferous Limestone | Grey, medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp., Discocyclina sp., Alveolina sp. Stylolites are observed at some parts. |
| 45.00 | 48.0  0 | 3.00 | 45.00 | 3.00 | 2.97 | 99.00 | 96.34 | Fossiliferous Limestone | Grey-dark grey, fine to medium grained, hard & compact fossiliferous limestone  with high abundance of Nummulite sp., Discocyclina sp., Asterocyclina sp. fossils. |
| 48.00 | 51.0  0 | 3.00 | 48.00 | 3.00 | 2.95 | 98.33 | 91.67 | Fossiliferous Limestone | Dark Grey, fine to medium grained, hard & compact fossiliferous limestone containing high abundance of Discocyclina sp., Assilina sp., Asterocyclina sp. fossils. |
| 51.00 | 54.0  0 | 3.00 | 51.00 | 3.00 | 2.99 | 99.67 | 97.67 | Fossiliferous Limestone | Grey-dark grey, fine to medium grained, hard & compact fossiliferous limestone containing high abundance of Asterocyclina sp., Assilina sp., Discocyclina sp. |
| 54.00 | 57.0  0 | 3.00 | 54.00 | 3.00 | 2.99 | 99.67 | 92.67 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact limestone with fossils of Nummulite sp., Assilina sp. |
| 57.00 | 60.0  0 | 3.00 | 57.00 | 3.00 | 2.97 | 99.00 | 96.67 | Fossiliferous Limestone | Grey, medium grained, hard & compact limestone with dominant fossils of  Nummulite sp., Assilina sp., Discocyclina sp. Fractures present. |
| 60.00 | 63.0  0 | 3.00 | 60.00 | 3.00 | 2.96 | 98.67 | 94.67 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  | containing fossil abundance of Nummulite sp., Discocyclina sp., Alveolina sp. |
| 63.00 | 66.0  0 | 3.00 | 63.00 | 3.00 | 2.94 | 98.00 | 90.34 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Nummulites sp., Assilina sp., and Discocyclina sp. fossils.  Stylolites are prominent. |
| 66.00 | 69.0  0 | 3.00 | 66.00 | 3.00 | 2.93 | 97.67 | 86.67 | Fossiliferous Limestone | Grey, fine-medium grained, hard & compact fossiliferous limestone with less abundance of Nummulite sp., Assilina sp., fossils. Fractures present. |
| 69.00 | 72.0  0 | 3.00 | 69.00 | 3.00 | 2.97 | 99.00 | 99.67 | Fossiliferous Limestone | Grey-dark grey, fine-medium grained, hard & compact, fossiliferous limestone with abundance of Alveolina sp., Assilina sp. fossils. |
| 72.00 | 75.0  0 | 3.00 | 72.00 | 3.00 | 2.91 | 97.00 | 95.67 | Fossiliferous Limestone | Grey-dark grey, medium grained, hard & compact fossiliferous limestone with less  abundant fossils of Nummulite sp., Alveolina sp. |
| 75.00 | 78.0  0 | 3.00 | 75.00 | 3.00 | 2.95 | 98.33 | 98.00 | Fossiliferous Limestone | Grey-dark grey, fine-medium grained, hard & compact fossiliferous limestone containing fossils of mainly Nummulite sp., Assilina sp. |
| 78.00 | 81.0  0 | 3.00 | 78.00 | 3.00 | 2.96 | 98.67 | 92.00 | Fossiliferous Limestone | Dark grey, fine to medium grained, fossiliferous limestone with less amount of fossil content as such Nummulite sp.,  Assilina sp. mainly. |

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| 81.00 | 84.0  0 | 3.00 | 81.00 | 3.00 | 2.97 | 99.00 | 97.00 | Fossiliferous Limestone | Dark Grey, medium grained, hard & compact fossiliferous limestone with  abundance of Nummulite sp., Assilina sp. fossils. |
| 84.00 | 87.0  0 | 3.00 | 84.00 | 3.00 | 2.99 | 99.67 | 94.00 | Fossiliferous Limestone | Dark grey, fine to medium grained, hard and compact fossiliferous limestone with  fossil content of Discocyclina sp., Alveolina sp. |
| 87.00 | 90.0  0 | 3.00 | 87.00 | 3.00 | 2.98 | 99.33 | 96.67 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone  with fossils of Nummulite sp., Discocyclina sp., Asterocyclina sp., Assilina sp. |
| 90.00 | 93.0  0 | 3.00 | 90.00 | 3.00 | 2.99 | 99.67 | 95.33 | Fossiliferous Limestone | Grey-dark grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Asterocyclina sp.,  Nummulite sp., Assilina sp., Discocyclina sp. |
| 93.00 | 96.0  0 | 3.00 | 93.00 | 3.00 | 2.96 | 98.67 | 94.33 | Fossiliferous Limestone | Grey-dark grey, fine to medium grained, hard fossiliferous limestone with abundance of Nummulite sp., Asterocyclina sp., Discocyclina sp., fossils. |
| 96.00 | 99.0  0 | 3.00 | 96.00 | 3.00 | 2.95 | 98.33 | 83.00 | Fossiliferous Limestone | Dark grey, hard and compact, fine to medium grained fossiliferous limestone with presence of Alveolina sp., Discocyclina sp. fossils in less abundance.  Mixed up with greyish shale at middle and bottom. |
| 99.00 | 100.  00 | 1.00 | 99.00 | 1.00 | 0.96 | 96.00 | 76.00 | Fossiliferous Limestone | Grey-dark grey, fine-medium grained, hard & compact fossiliferous limestone mixed with unfossiliferous greyish shale at top. |

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|  |  |  |  |  |  |  |  |  | Fossils present in fossiliferous limestone are Alveolina sp. and Discocyclina sp. |
|  |  |  | 100.0  0 |  |  |  |  |  |  |
| **Borehole closed at the depth of 100.00 meters** | | | | | | | | | |

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| **ANNEXURE II** | | | | | | | | | |
| **LITHOLOGS OF BOREHOLES DRILLED IN NW OF BORO LAKHINDONG BLOCK, DIMA HASAO**  **DISTRICT, ASSAM** | | | | | | | | | |
| **BH No.- PBH03** | | | | | | | **Date of Commencement: 04/12/2024** | | |
| **Latitude - N 25°28'32.4"** | | | | | | | **Date of Closing: 06/12/2024** | | |
| **Longitude - E 92°37'04.1"** | | | | | | | **Final Depth: 100m** | | |
| **Azimuth- Vertical** | | | | | | | **R.L.: 736m** | | |
|  | | | | | | |  | | |
| **Depth(m)** | | **Run** | **DEPTH & THICKNESS AFTER ADJUSTME NT (m)** | | **Recovery (m)** | **Recovery (%)** | **RQD**  **%** | **ROCK TYPE** | **Description of Lithology** |
| **From** | **Thick ness** |
| **From (m)** | **To (m)** |  |  |  |  |  |  |  |  |
| 0.00 | 0.50 | 0.50 | 0.00 | 0.50 | 0.20 | 40.00 |  | Regolith | Regolith |
| 0.50 | 2.50 | 2.00 | 0.50 | 2.00 | 0.60 | 30.00 |  | Soil | Silty clay residual soil, brownish in colour |
| 2.50 | 5.50 | 3.00 | 2.50 | 3.00 | 2.00 | 66.67 |  | Soil | Silty clay residual soil, brownish-greyish in colour |
| 5.50 | 8.50 | 3.00 | 5.50 | 3.00 | 2.76 | 92.00 | 16.62 | Shale | Unfossiliferous shale, grey in colour, calcareous |
| 8.50 | 11.50 | 3.00 | 8.50 | 3.00 | 2.72 | 90.67 | 24.26 | Shale | Unfossiliferous shale, grey-dark grey in colour |
| 11.50 | 14.50 | 3.00 | 11.50 | 3.00 | 2.65 | 88.33 | 30.00 | Shale | Unfossiliferous shale, grey-dark grey in colour, calcareous |
| 14.50 | 17.50 | 3.00 | 14.50 | 1.28 | 1.06 | 90.33 | 23.67 | Shale | Unfossiliferous shale, grey-dark grey in colour |
|  |  |  | 15.78 | 1.20 | 1.16 | 89.16 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact, fossiliferous limestone containing fossil abundance of Nummulite sp. |

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|  |  |  | 16.98 | 0.20 | 0.18 |  |  | Shale | Calcareous shale, unfossiliferous, dark grey in  colour |
|  |  |  | 17.18 | 0.32 | 0.31 | 93.75 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact,  fossiliferous limestone containing fossil abundance of Nummulite sp. |
| 17.50 | 20.50 | 3.00 | 17.50 | 3.00 | 2.87 | 95.67 | 84.33 | Fossiliferous limestone | Grey-reddish, fine to medium grained, fossiliferous limestone with abundance of Nummulite sp., Alveolina sp. Fossils, broken at parts, slightly ferruginous |
| 20.50 | 23.50 | 3.00 | 20.50 | 3.00 | 2.89 | 96.33 | 80.33 | Fossiliferous limestone | Grey, medium grained, compact fossiliferous limestone with abundance of Nummulite sp.  Fossils, fractures present. Cavity filling of calcite is observed. |
| 23.50 | 26.50 | 3.00 | 23.50 | 3.00 | 2.86 | 95.33 | 90.00 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact, fossiliferous limestone containing fossil abundance of Nummulite sp. along with mud intercalation. Fractures present. |
| 26.50 | 29.50 | 3.00 | 26.50 | 3.00 | 2.89 | 96.33 | 88.67 | Fossiliferous limestone | Grey, medium grained, hard & compact fossiliferous limestone with fossil content of Nummulite sp., fractured at top |
| 29.50 | 32.50 | 3.00 | 29.50 | 3.00 | 2.94 | 98.00 | 91.33 | Fossiliferous limestone | Grey, medium grained, hard fossiliferous limestone with dominant fossils of Nummulites sp., assilina sp. along with minor Alveolina sp.  Fossils. |
| 32.50 | 35.50 | 3.00 | 32.50 | 3.00 | 2.91 | 97.00 | 82.67 | Fossiliferous limestone | Grey-dark grey, medium grained, hard & compact fossiliferous limestone with dominance of Nummulites sp. along with minor Assilina sp. And Alveolina sp. fossils |
| 35.50 | 38.50 | 3.00 | 35.50 | 3.00 | 2.93 | 97.67 | 88.67 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with high abundance of Nummulites sp. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 38.50 | 41.50 | 3.00 | 38.50 | 3.00 | 2.90 | 96.67 | 92.33 | Fossiliferous limestone | Grey-dark grey, fine to medium grained, hard & compact fossiliferous limestone with high  abundance of Discocyclina sp., Assilina sp., and Alveolina sp. Fossils. |
| 41.50 | 44.50 | 3.00 | 41.50 | 0.76 | 0.74 | 96.00 | 97.36 | Fossiliferous limestone | Grey, medium grained, hard & compact fossiliferous limestone with abundance of  Discocyclina sp., Alveolina sp., Asterocyclina sp. Fossils |
|  |  |  | 42.26 | 2.24 | 2.14 | 21.60 | Shale | Dark grey, unfossiliferous, calcareous shale |
| 44.50 | 47.50 | 3.00 | 44.50 | 1.00 | 0.95 | 96.33 | 19.56 | Shale | Dark grey, unfossiliferous, calcareous shale |
|  |  |  | 45.50 | 2.00 | 1.94 | 94.00 | Fossiliferous limestone | Grey-dark grey, fine to medium grained, compact fossiliferous limestone is present with shale intercalation. Fossils of Alveolina sp. and Discocyclina sp. are present. |
| 47.50 | 50.50 | 3.00 | 47.50 | 3.00 | 2.89 | 96.33 | 90.00 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact limestone with dominant fossils of Nummulite  sp., Assilina sp., along with minor abundance of Alveolina sp. |
| 50.50 | 53.50 | 3.00 | 50.50 | 3.00 | 2.93 | 97.67 | 91.67 | Fossiliferous limestone | Grey, medium grained, hard & compact limestone with dominant fossils of Nummulite sp., Assilina sp., along with minor abundance of  Alveolina sp. Fractures present. Prominent stylolites are observed. |
| 53.50 | 56.50 | 3.00 | 53.50 | 3.00 | 2.86 | 95.33 | 86.67 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact limestone with more abundance of Nummulite sp. fossils. |
| 56.50 | 59.50 | 3.00 | 56.50 | 3.00 | 2.90 | 96.67 | 89.00 | Fossiliferous limestone | Grey, medium grained, hard & compact fossiliferous limestone with abundance of Nummulites sp., Assilina sp., and Alveolina sp. fossils. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 59.50 | 62.50 | 3.00 | 59.50 | 3.00 | 2.93 | 97.67 | 93.00 | Fossiliferous limestone | Grey, medium grained, hard & compact fossiliferous limestone with abundance of  Discocyclina sp., Alveolina sp., Asterocyclina sp. Fossils |
| 62.50 | 65.50 | 3.00 | 62.50 | 3.00 | 2.92 | 97.33 | 87.67 | Fossiliferous limestone | Grey, fine-medium grained, hard & compact, fossiliferous limestone with abundance of Nummulite sp., Discocyclina sp., Asterocyclina sp., and less abundance of Assilina sp. |
| 65.50 | 68.50 | 3.00 | 65.50 | 3.00 | 2.96 | 98.67 | 97.00 | Fossiliferous limestone | Grey-dark grey, fine-medium grained, hard & compact limestone with abundant fossils of Discocylina sp., Asterocyclina sp. |
| 68.50 | 71.50 | 3.00 | 68.50 | 3.00 | 2.95 | 98.33 | 95.67 | Fossiliferous limestone | Grey-dark grey, fine-medium grained, hard & compact fossiliferous limestone containing  fossils of Nummulite sp., Assilina sp., Alveolina sp. |
| 71.50 | 74.50 | 3.00 | 71.50 | 3.00 | 2.93 | 97.67 | 94.00 | Fossiliferous limestone | Grey-dark grey, fine to medium grained, hard fossiliferous limestone with abundance of Assilina sp., Discocyclina sp., Nummulite sp. fossils. |
| 74.50 | 77.50 | 3.00 | 74.50 | 3.00 | 2.96 | 98.67 | 94.00 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone containing less amount of fossils- Discocyclina sp., Alveolina sp.,  Calcite cavity present. |
| 77.50 | 80.50 | 3.00 | 77.50 | 3.00 | 2.96 | 98.67 | 89.67 | Fossiliferous limestone | Grey, fine to medium grained, hard and compact fossiliferous limestone with fossil content of Discocyclina sp., Alveolina sp., fractures present. |
| 80.50 | 83.50 | 3.00 | 80.50 | 3.00 | 2.94 | 98.00 | 88.00 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with less amount of  Nummulite sp., Alveolina sp. Fossils. Stylolites are prominent at parts. |

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| 83.50 | 86.50 | 3.00 | 83.50 | 3.00 | 2.95 | 98.33 | 90.67 | Fossiliferous limestone | Grey-dark grey, medium grained, hard & compact fossiliferous limestone containing  fossils of Nummulite sp., Assilina sp., Discocyclina sp. |
| 86.50 | 89.50 | 3.00 | 86.50 | 3.00 | 2.93 | 97.67 | 88.33 | Fossiliferous limestone | Grey-dark grey, fine to medium grained, hard fossiliferous limestone with abundance of Nummulite sp., Alveolina sp., Discocyclina sp., fossils. Stylolites are present at places. |
| 89.50 | 92.50 | 3.00 | 89.50 | 3.00 | 2.97 | 99.00 | 89.00 | Fossiliferous limestone | Grey-dark grey, fine to medium grained, compact fossiliferous limestone with fossils of Nummulite sp., Assilina sp. and Discocyclina sp. are present. |
| 92.50 | 95.50 | 3.00 | 92.50 | 3.00 | 2.90 | 96.67 | 79.67 | Fossiliferous limestone | Grey-dark grey, medium grained, hard & compact fossiliferous limestone with fossils of  Nummulite sp., Assilina sp. and Discocyclina sp. |
| 95.50 | 98.50 | 3.00 | 95.50 | 3.00 | 2.87 | 95.67 | 87.67 | Fossiliferous limestone | Grey-dark grey, fine to medium grained, hard & compact fossiliferous limestone with fossils of  Nummulite sp., Alveolina sp. and Discocyclina sp. |
| 98.50 | 100.0  0 | 1.50 | 98.50 | 1.50 | 1.45 | 96.67 | 88.00 | Fossiliferous limestone | Grey-dark grey, medium grained, hard & compact fossiliferous limestone with fossils of Nummulite sp., Assilina sp. |
|  |  |  | 100.0  0 |  |  |  |  |  |  |
| **Borehole closed at the depth of 100.00 meters** | | | | | | | | | |

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| **ANNEXURE II** | | | | | | | | | |
| **LITHOLOGS OF BOREHOLES DRILLED IN NW OF BORO LAKHINDONG BLOCK, DIMA HASAO DISTRICT, ASSAM** | | | | | | | | | |
| **BH No.- PBH04** | | | | | | | **Date of Commencement: 09/12/2024** | | |
| **Latitude - N 25°28'07.8"** | | | | | | | **Date of Closing: 12/12/2024** | | |
| **Longitude - E 92°36'20.0"** | | | | | | | **Final Depth: 100m** | | |
| **Azimuth- Vertical** | | | | | | | **R.L.: 741m** | | |
|  | | | | | | | | | |
| **Depth(m)** | | **Run** | **DEPTH & THICKNESS AFTER ADJUSTMENT**  **(m)** | | **Recovery (m)** | **Recovery (%)** | **RQD**  **%** | **Rock type** | **Description of Lithology** |
| **From** | **Thickness** |
| **From (m)** | **To (m)** |  |  |  |  |  |  |  |  |
| 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.30 | 30.00 |  | Soil | Silty clay residual soil, Brownish in colour |
| 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 0.35 | 35.00 |  | Soil | Silty clay residual soil, Brownish-yellowish in colour |
| 2.00 | 3.00 | 1.00 | 2.00 | 1.00 | 0.25 | 25.00 |  | Soil | Silty clay residual soil, brownish yellow- greyish in colour |
| 3.00 | 6.00 | 3.00 | 3.00 | 3.00 | 2.56 | 85.33 | 13.33 | Shale | Grey, Calcareous shale, unfossiliferous, broken in parts |
| 6.00 | 9.00 | 3.00 | 6.00 | 3.00 | 2.88 | 96.00 | 15.92 | Shale | Calcareous shale, unfossiliferous mixed up with fossiliferous limestone at bottom. Greyish to brownish in colour. Fractures present at bottom. |
| 9.00 | 12.00 | 3.00 | 9.00 | 0.22 | 0.20 | 92.00 |  | Shale | Unfossiliferous shale, calcareous, brownish yellow in colour |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 9.22 | 1.78 | 1.72 |  | 87.64 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Discocyclina sp., Asterocyclina sp. Cavity of calcite is present. |
|  |  |  | 11.00 | 1.00 | 0.84 | 15.00 | Shale | Grey, unfossiliferous shale, calcareous.  Loose at top. |
| 12.00 | 15.00 | 3.00 | 12.00 | 2.00 | 1.95 | 97.67 | 16.57 | Shale | Grey to dark grey, calcareous shale mixed up with fossiliferous limestone at bottom, loose at some parts. |
|  |  |  | 14.00 | 0.28 | 0.28 | 100.0  0 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Discocyclina sp.,  Asterocyclina sp. |
|  |  |  | 14.28 | 0.72 | 0.70 | 20.83 | Shale | Grey to dark grey, calcareous shale, unfossiliferous |
| 15.00 | 18.00 | 3.00 | 15.00 | 0.80 | 0.72 | 97.33 | 22.50 | Shale | Grey to dark grey, calcareous shale, unfossiliferous |
|  |  |  | 15.80 | 2.20 | 2.20 | 90.45 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Nummulite sp., Alveolina sp.  Parting of shale is present at depth of 16.72m. |
| 18.00 | 21.00 | 3.00 | 18.00 | 3.00 | 2.95 | 98.33 | 88.33 | Fossiliferous Limestone | Greyish-Reddish white, fine to medium grained, hard & compact fossiliferous limestone along with major fossils Nummulite sp., Assilina sp. Slightly ferruginous. |
| 21.00 | 24.00 | 3.00 | 21.00 | 1.03 | 0.90 | 92.67 | 55.33 | Fossiliferous Limestone | Reddish-Greyish, fine to medium grained hard fossiliferous limestone along with major fossil Nummulite sp. Slightly ferruginous. |

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|  |  |  | 22.03 | 0.34 | 0.30 |  |  | Shale | Dark grey, calcareous shale |
|  |  |  | 22.37 | 1.63 | 1.58 | 56.44 | Fossiliferous Limestone | Grey, medium grained, hard fossiliferous limestone containing fossils of Nummulite sp., Discocyclina sp. Broken at some places. |
| 24.00 | 27.00 | 3.00 | 24.00 | 3.00 | 2.90 | 96.67 | 68.00 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with minor  amount of Nummulite sp. fossils. Fractures present at middle, mud parting observed. |
| 27.00 | 30.00 | 3.00 | 27.00 | 3.00 | 2.89 | 96.33 | 92.67 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Nummulite sp., Assilina sp.  Stylolites present. |
| 30.00 | 33.00 | 3.00 | 30.00 | 3.00 | 2.92 | 97.33 | 94.33 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone containing major fossils Nummulite sp., Discocyclina sp. |
| 33.00 | 36.00 | 3.00 | 33.00 | 3.00 | 2.90 | 96.67 | 88.33 | Fossiliferous Limestone | Grey to dark grey, medium grained, hard & compact fossiliferous limestone with fossils of mainly Nummulite sp. |
| 36.00 | 39.00 | 3.00 | 36.00 | 3.00 | 2.94 | 98.00 | 82.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Nummulite sp., Assilina sp. |
| 39.00 | 42.00 | 3.00 | 39.00 | 3.00 | 2.95 | 98.33 | 93.00 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Nummulite sp. mainly. |
| 42.00 | 45.00 | 3.00 | 42.00 | 3.00 | 2.82 | 94.00 | 37.33 | Shale | Grey to dark grey, calcareous shale, unfossiliferous |

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| 45.00 | 48.00 | 3.00 | 45.00 | 3.00 | 2.94 | 98.00 | 77.67 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Asterocyclina sp., Discocyclina sp., Nummulite sp., Assilina sp. Mixed up with shale at middle portion. |
| 48.00 | 51.00 | 3.00 | 48.00 | 3.00 | 2.93 | 97.67 | 89.33 | Fossiliferous Limestone | Grey, fine to medium grained, hard &  compact fossiliferous limestone with abundance of Nummulite sp., Assilina sp. |
| 51.00 | 54.00 | 3.00 | 51.00 | 3.00 | 2.98 | 99.33 | 94.00 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Nummulite sp., with minor amount of Discocyclina sp., Alveolina sp.  Stylolites prominent at places. |
| 54.00 | 57.00 | 3.00 | 54.00 | 3.00 | 2.99 | 99.67 | 89.67 | Fossiliferous Limestone | Grey, medium grained, hard & compact fossiliferous limestone with fossils of Nummulite sp., Discocyclina sp. mainly.  Stylolites present at 55.20m depth. |
| 57.00 | 60.00 | 3.00 | 57.00 | 3.00 | 3.00 | 100.00 | 90.67 | Fossiliferous Limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with major fossils of Nummulite sp., Asterocyclina sp., Discocyclina sp., Assilina sp. mainly. |
| 60.00 | 63.00 | 3.00 | 60.00 | 3.00 | 2.87 | 95.67 | 89.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard and compact fossiliferous limestone containing fossils of Discocyclina sp.,  Asterocyclina sp., Alveolina sp., with minor amount of Nummulite sp. Fossils. |
| 63.00 | 66.00 | 3.00 | 63.00 | 3.00 | 2.94 | 98.00 | 84.67 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone containing fossils of Discocyclina sp., Nummulite sp., Alveolina sp. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 66.00 | 69.00 | 3.00 | 66.00 | 3.00 | 2.93 | 97.67 | 95.33 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone  containing fossils of Discocyclina sp., Nummulite sp., Assilina sp. |
| 69.00 | 72.00 | 3.00 | 69.00 | 3.00 | 2.96 | 98.67 | 91.00 | Fossiliferous Limestone | Grey to dark grey, medium grained, hard & compact fossiliferous limestone containing Nummulite sp., Asterocyclina sp, Assilina  sp. Fossils. Stylolites are observed at some parts. |
| 72.00 | 75.00 | 3.00 | 72.00 | 3.00 | 2.89 | 96.33 | 91.33 | Fossiliferous Limestone | Grey, medium grained, hard & compact fossiliferous limestone with mostly  Discocyclina sp., Nummulite sp., Asterocyclina sp, Assilina sp. fossils. |
| 75.00 | 78.00 | 3.00 | 75.00 | 3.00 | 2.99 | 99.67 | 88.67 | Fossiliferous Limestone | Grey, fine to medium grained, hard fossiliferous limestone containing less amount of Nummulite sp., and Assilina sp.  Fossils. Stylolites are present. Fractures are present. |
| 78.00 | 81.00 | 3.00 | 78.00 | 3.00 | 2.90 | 96.67 | 92.67 | Fossiliferous Limestone | Grey, fine to medium grained, hard fossiliferous limestone containing less amount of Nummulite sp., and Alveolina sp. Fossils. |
| 81.00 | 84.00 | 3.00 | 81.00 | 3.00 | 2.90 | 96.67 | 95.00 | Fossiliferous Limestone | Grey, fine to medium grained, hard and compact fossiliferous limestone with  abundance of Nummulite sp., Assilina sp., Discocyclina sp. fossils. |
| 84.00 | 87.00 | 3.00 | 84.00 | 3.00 | 2.91 | 97.00 | 92.67 | Fossiliferous Limestone | Grey, fine to medium grained, hard fossiliferous limestone with fossil content of Assilina sp., Nummulite sp., and Alveolina sp. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 87.00 | 90.00 | 3.00 | 87.00 | 3.00 | 2.99 | 99.67 | 97.33 | Fossiliferous Limestone | Grey, fine to medium grained, compact fossiliferous limestone containing fossils of  Nummulite sp., Assilina sp. Calcite vein present at 89.30m depth. |
| 90.00 | 93.00 | 3.00 | 90.00 | 3.00 | 3.00 | 100.00 | 95.00 | Fossiliferous Limestone | Grey, medium grained, hard & compact fossiliferous limestone containing less amount of Nummulite sp., Assilina sp.,  fossils. Stylolites are prominent. Less amount of Discocyclina sp. fossils. |
| 93.00 | 96.00 | 3.00 | 93.00 | 3.00 | 2.96 | 98.67 | 89.00 | Fossiliferous Limestone | Grey, fine to medium grained, compact fossiliferous limestone containing fossils of  Nummulite sp., Assilina sp., and Discocyclina sp. Veins of calcite present. |
| 96.00 | 99.00 | 3.00 | 96.00 | 3.00 | 2.95 | 98.33 | 86.00 | Fossiliferous Limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp., and Alveolina sp. fossils mainly. Fractures present. |
| 99.00 | 100.0  0 | 1.00 | 99.00 | 1.00 | 0.99 | 99.00 | 87.00 | Fossiliferous Limestone | Grey to dark grey, medium grained, hard and compact fossiliferous limestone containing fossils of mainly Nummulite sp., Discocyclina sp. |
|  |  |  | 100.0  0 |  |  |  |  |  |  |
| **Borehole closed at the depth of 100.00 meters** | | | | | | | | | |

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| **ANNEXURE II** | | | | | | | | | |
| **LITHOLOGS OF BOREHOLES DRILLED IN NW OF BORO LAKHINDONG BLOCK, DIMA HASAO DISTRICT, ASSAM** | | | | | | | | | |
| **BH No.- PBH05** | | | | | | | **Date of Commencement:14/12/2024** | | |
| **Latitude - N 25°28'05.2"** | | | | | | | **Date of Closing: 16/12/2024** | | |
| **Longitude - E 92°36'48.3"** | | | | | | | **Final Depth: 100m** | | |
| **Azimuth- Vertical** | | | | | | | **R.L.: 732m** | | |
|  | | | | | | |  | | |
| **Depth(m)** | | **Run** | **DEPTH & THICKNESS AFTER ADJUSTMENT**  **(m)** | | **Recovery (m)** | **Recovery (%)** | **RQD**  **%** | **Rock type** | **Description of Lithology** |
| **From** | **Thickness** |
| **From (m)** | **To (m)** |  |  |  |  |  |  |  |  |
| 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.25 | 25.00 |  | Soil | Soil, Brownish yellow in colour |
| 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.30 | 15.00 |  | Soil | Soil, Brownish yellow-yellow in colour |
| 2.00 | 3.00 | 1.00 | 2.00 | 0.40 | 0.38 | 92.00 |  | Soil | Silty clay residual soil, brownish-dark grey in colour |
|  |  |  | 2.40 | 0.60 | 0.54 |  | Shale | Grey-dark grey, unfossiliferous and calcareous shale |
| 3.00 | 6.00 | 3.00 | 3.00 | 3.00 | 2.80 | 93.33 | 13.56 | Shale | Grey, calcareous and unfossiliferous shale.  Loose at middle and bottom. |
| 6.00 | 9.00 | 3.00 | 6.00 | 0.57 | 0.56 | 98.33 | 12.67 | Shale | Grey-dark grey, unfossiliferous and calcareous shale |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 6.57 | 1.51 | 1.50 |  | 46.29 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with  abundance of Asterocyclina sp., Discocyclina sp. fossils. |
|  |  |  | 8.08 | 0.92 | 0.89 | 19.73 | Shale | Grey-dark grey, unfossiliferous and calcareous shale |
| 9.00 | 12.00 | 3.00 | 9.00 | 0.46 | 0.42 | 91.67 | 15.13 | Shale | Grey-dark grey, unfossiliferous and calcareous shale |
|  |  |  | 9.46 | 1.47 | 1.37 | 39.45 | Fossiliferous limestone | Grey fossiliferous limestone mixed up with grey shale at middle. Fractured and broken. |
|  |  |  | 10.93 | 1.07 | 0.96 | 14.95 | Shale | Grey, calcareous and unfossiliferous shale. |
| 12.00 | 15.00 | 3.00 | 12.00 | 1.88 | 1.85 | 97.67 | 16.72 | Shale | Grey to dark grey calcareous shale, mixed up with fossiliferous limestone at bottom. |
|  |  |  | 13.88 | 0.70 | 0.68 | 22.70 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp., Discocyclina sp. fossils. |
|  |  |  | 14.58 | 0.42 | 0.40 |  | Shale | Grey-dark grey, unfossiliferous and calcareous shale |
| 15.00 | 18.00 | 3.00 | 15.00 | 1.14 | 1.10 | 98.00 | 15.40 | Shale | Grey-dark grey, unfossiliferous and calcareous shale |
|  |  |  | 16.14 | 1.86 | 1.84 | 56.45 | Fossiliferous limestone | Dark grey, fine to medium grained, hard & compact fossiliferous limestone with  abundance of Nummulite sp., Discocyclina sp. fossils. Cavity of calcite present. |
| 18.00 | 21.00 | 3.00 | 18.00 | 3.00 | 2.96 | 98.67 | 75.67 | Fossiliferous limestone | Whitish Grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp., Assilina sp. fossils. Vertical fractures are observed at top and bottom. Secondary growth of calcite is seen within fractures. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21.00 | 24.00 | 3.00 | 21.00 | 3.00 | 2.99 | 99.67 | 84.00 | Fossiliferous limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp., Asterocyclina sp. fossils. Mixed up with shale at middle. Cavity of calcite is present. |
| 24.00 | 27.00 | 3.00 | 24.00 | 3.00 | 2.98 | 99.33 | 87.67 | Fossiliferous limestone | Grey to dark grey, medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp., Asterocyclina sp. fossils. Shale is present at top portion.  Stylolite is also present. |
| 27.00 | 30.00 | 3.00 | 27.00 | 3.00 | 3.00 | 100.00 | 89.00 | Fossiliferous limestone | Whitish Grey, fine to medium grained, hard & compact fossiliferous limestone with  fossil abundance of Nummulite sp. Mud parting is present. |
| 30.00 | 33.00 | 3.00 | 30.00 | 3.00 | 2.93 | 97.67 | 90.67 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp., Assilina sp. fossils. |
| 33.00 | 36.00 | 3.00 | 33.00 | 3.00 | 2.98 | 99.33 | 98.33 | Fossiliferous limestone | Grey to dark grey,medium grained, hard & compact fossiliferous limestone with abundance of Nummulite sp., Assilina sp. fossils. |
| 36.00 | 39.00 | 3.00 | 36.00 | 3.00 | 2.99 | 99.67 | 79.33 | Fossiliferous limestone | Whitish grey-grey, fine to medium grained, hard & compact fossiliferous limestone  with presence of Nummulite sp., Assilina sp. Fossils mostly. |
| 39.00 | 42.00 | 3.00 | 39.00 | 3.00 | 3.00 | 100.00 | 88.00 | Fossiliferous limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Discocyclina sp. Sub-vertical fractures are present at bottom. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 42.00 | 45.00 | 3.00 | 42.00 | 3.00 | 2.95 | 98.33 | 41.67 | Shale | Dark grey shale, unfossiliferous and  calcareous |
| 45.00 | 48.00 | 3.00 | 45.00 | 3.00 | 3.00 | 100.00 | 94.67 | Fossiliferous limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Discocyclina sp., Asterocyclina sp., Assilina sp. Shale patch is present at middle. |
| 48.00 | 51.00 | 3.00 | 48.00 | 3.00 | 3.00 | 100.00 | 98.22 | Fossiliferous limestone | Grey, medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Discocyclina sp.,  Assilina sp. Fractures present. |
| 51.00 | 54.00 | 3.00 | 51.00 | 3.00 | 3.00 | 100.00 | 91.67 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with fossils of Nummulite sp., Discocyclina sp., Assilina sp. |
| 54.00 | 57.00 | 3.00 | 54.00 | 3.00 | 2.96 | 98.67 | 93.33 | Fossiliferous limestone | Grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Discocyclina sp., Assilina sp. |
| 57.00 | 60.00 | 3.00 | 57.00 | 3.00 | 2.97 | 99.00 | 92.00 | Fossiliferous limestone | Grey to dark grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp.,  Discocyclina sp., Asterocyclina sp., Assilina sp. |
| 60.00 | 63.00 | 3.00 | 60.00 | 3.00 | 3.00 | 100.00 | 90.33 | Fossiliferous limestone | Grey to dark grey, medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp.,  Discocyclina sp., Asterocyclina sp. |
| 63.00 | 66.00 | 3.00 | 63.00 | 3.00 | 3.00 | 100.00 | 86.00 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with the |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  | presence of fossils Nummulite sp., Discocyclina sp., Alveolina sp. |
| 66.00 | 69.00 | 3.00 | 66.00 | 3.00 | 2.99 | 99.67 | 74.67 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with the  presence of fossils Nummulite sp., Assilina sp. |
| 69.00 | 72.00 | 3.00 | 69.00 | 3.00 | 3.00 | 100.00 | 92.67 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Assilina sp. |
| 72.00 | 75.00 | 3.00 | 72.00 | 3.00 | 3.00 | 100.00 | 84.33 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Discocyclina sp., Alveolina sp. |
| 75.00 | 78.00 | 3.00 | 75.00 | 3.00 | 2.99 | 99.67 | 87.33 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Discocyclina sp. Fractures present at  bottom part. |
| 78.00 | 81.00 | 3.00 | 78.00 | 3.00 | 3.00 | 100.00 | 81.67 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp., Assilina sp. |
| 81.00 | 84.00 | 3.00 | 81.00 | 3.00 | 3.00 | 100.00 | 93.67 | Fossiliferous limestone | Whitish grey-grey, fine to medium grained, hard & compact fossiliferous limestone with the presence of fossils Nummulite sp.,  Assilina sp., Alveolina sp. |
| 84.00 | 87.00 | 3.00 | 84.00 | 3.00 | 2.95 | 98.33 | 90.67 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with the  presence of fossils Nummulite sp., Alveolina sp., Assilina sp. |

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| 87.00 | 90.00 | 3.00 | 87.00 | 3.00 | 2.96 | 98.67 | 93.67 | Fossiliferous limestone | Whitish grey-grey, fine to medium grained, hard & compact fossiliferous limestone  with the presence of fossils Nummulite sp., Assilina sp. |
| 90.00 | 93.00 | 3.00 | 90.00 | 3.00 | 3.00 | 100.00 | 95.67 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard  & compact fossiliferous limestone with low abundance of fossil content |
| 93.00 | 96.00 | 3.00 | 93.00 | 3.00 | 2.99 | 99.67 | 88.00 | Fossiliferous limestone | Whitish grey-grey, fine to medium grained, hard & compact fossiliferous limestone with low abundance of fossil content |
| 96.00 | 99.00 | 3.00 | 96.00 | 3.00 | 2.99 | 99.67 | 74.33 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with low abundance of fossil content |
| 99.00 | 100.0  0 | 1.00 | 99.00 | 1.00 | 0.99 | 99.00 | 73.00 | Fossiliferous limestone | Whitish grey, fine to medium grained, hard & compact fossiliferous limestone with low abundance of fossil content |
|  |  |  | 100.0  0 |  |  |  |  |  |  |
| Borehole closed at the depth of 100.00 meters | | | | | | | | | |

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| **ANNEXURE III** | | | | | | | | | | | | | | | | | | | | | |
| **DETAILS OF ANALYTICAL RESULTS OF BED ROCK SAMPLES** | | | | | | | | | | | | | | | | | | | | | |
| **S. No.** | **SAMPLE ID** | **LITHOLOGY** | **CaO %** | **MgO %** | **SiO2 %** | **INFERRED GRADE** | **Al2O3 %** | **BaO %** | **Cr2O3 %** | **TotalIronas Fe %** | **TotalIronas Fe2O3** | **K2O %** | **MgO %** | **MnO %** | **Na2O %** | **P2O5 %** | **SO3 %** | **TiO2 %** | **SiO2 %** | **V2O5 %** | **LOI %** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | BLD-01 | Limestone | 46.86 | 1.16 | 4.49 | Cement (Portland) | 2.59 | <0.0  5 | <0.0  5 | 3.05 | 4.36 | 0.23 | 1.16 | <0.0  5 | <0.0  8 | 0.05 | 0.20 | 0.12 | 4.49 | <0.0  5 | 39.7  2 |
| 2 | BLD-02 | Limestone | 49.34 | 0.88 | 1.42 | SMS (OH) | 1.15 | <0.0  5 | <0.0  5 | 3.22 | 4.61 | 0.10 | 0.88 | 1.10 | <0.0  8 | 0.12 | 0.10 | <0.0  5 | 1.42 | <0.0  5 | 40.9  2 |
| 3 | BLD-05 | Limestone | 46.01 | 1.15 | 5.93 | Cement  (Portland) | 2.64 | <0.0  5 | <0.0  5 | 2.83 | 4.05 | 0.29 | 1.15 | 0.07 | <0.0  8 | 0.22 | 0.10 | 0.12 | 5.93 | <0.0  5 | 39.2  3 |
| 4 | BLD-06 | Limestone | 49.68 | 1.30 | 3.54 | SMS (OH) | 1.99 | <0.0  5 | <0.0  5 | 0.92 | 1.31 | 0.15 | 1.30 | <0.0  5 | <0.0  8 | <0.0  5 | 0.48 | 0.08 | 3.54 | <0.0  5 | 41.2  9 |
| 5 | BLD-07 | Limestone | 49.60 | 1.31 | 3.41 | SMS (OH) | 1.85 | <0.0  5 | <0.0  5 | 1.21 | 1.73 | 0.14 | 1.31 | <0.0  5 | <0.0  8 | <0.0  5 | 0.66 | 0.07 | 3.41 | <0.0  5 | 41.0  7 |
| 6 | BLD-08 | Limestone | 44.43 | 1.37 | 2.79 | Cement  (Portland) | 1.97 | <0.0  5 | <0.0  5 | 6.17 | 8.82 | 0.11 | 1.37 | 1.31 | <0.0  8 | 0.28 | 0.11 | 0.07 | 2.79 | <0.0  5 | 38.5  3 |
| 7 | BLD-09 | Limestone | 48.43 | 1.23 | 2.72 | SMS (OH) | 1.64 | <0.0  5 | <0.0  5 | 2.93 | 4.18 | 0.10 | 1.23 | 0.18 | <0.0  8 | 0.05 | 1.00 | 0.07 | 2.72 | <0.0  5 | 40.1  9 |
| 8 | BLD-10 | Limestone | 49.23 | 1.37 | 3.51 | SMS (OH) | 1.91 | <0.0  5 | <0.0  5 | 1.36 | 1.95 | 0.16 | 1.37 | <0.0  5 | <0.0  8 | <0.0  5 | 0.75 | 0.07 | 3.51 | <0.0  5 | 40.8  4 |
| 9 | BLD-11 | Limestone | 47.72 | 1.20 | 3.44 | Cement (Portland) | 2.08 | <0.0  5 | <0.0  5 | 3.08 | 4.41 | 0.17 | 1.20 | <0.0  5 | <0.0  8 | <0.0  5 | 0.18 | 0.09 | 3.44 | <0.0  5 | 40.4  4 |
| 10 | BLD-12 | Limestone | 52.25 | 0.96 | 1.43 | SMS (L.D.) | 1.08 | <0.0  5 | <0.0  5 | 0.61 | 0.87 | 0.06 | 0.96 | <0.0  5 | <0.0  8 | <0.0  5 | 0.09 | <0.0  5 | 1.43 | <0.0  5 | 43.0  7 |
| 11 | BLD-13 | Limestone | 50.43 | 1.09 | 2.72 | SMS (OH) | 1.70 | <0.0  5 | <0.0  5 | 1.02 | 1.45 | 0.12 | 1.09 | <0.0  5 | <0.0  8 | <0.0  5 | 0.22 | 0.06 | 2.72 | <0.0  5 | 42.0  6 |
| 12 | BLD-14 | Limestone | 45.82 | 1.42 | 3.27 | Cement (Portland) | 1.95 | <0.0  5 | <0.0  5 | 4.71 | 6.73 | 0.07 | 1.42 | 0.41 | <0.0  8 | 0.06 | 1.14 | 0.06 | 3.27 | <0.0  5 | 38.8  9 |
| 13 | BLD-16 | Limestone | 33.47 | 1.37 | 9.88 | - | 4.90 | <0.0  5 | <0.0  5 | 12.0  6 | 17.2  4 | 0.45 | 1.37 | 0.48 | <0.0  8 | 0.57 | 0.19 | 0.24 | 9.88 | <0.0  5 | 31.0  0 |
| 14 | BLD-17 | Limestone | 42.64 | 1.29 | 8.45 | Cement (Blendable  ) | 2.23 | <0.0  5 | <0.0  5 | 4.95 | 7.07 | 0.23 | 1.29 | 0.79 | <0.0  8 | 0.31 | 0.10 | 0.10 | 8.45 | <0.0  5 | 36.5  8 |

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| 15 | BLD-18 | Limestone | 40.24 | 1.60 | 4.22 | Cement (Blendable  ) | 2.55 | <0.0  5 | <0.0  5 | 9.84 | 14.0  6 | 0.15 | 1.60 | 0.31 | <0.0  8 | 0.38 | 0.09 | 0.10 | 4.22 | <0.0  5 | 36.0  8 |
| 16 | BLD-19 | Limestone | 47.16 | 1.28 | 4.39 | Cement (Portland) | 2.42 | <0.0  5 | <0.0  5 | 2.48 | 3.55 | 0.21 | 1.28 | 0.17 | <0.0  8 | 0.06 | 1.01 | 0.11 | 4.39 | <0.0  5 | 39.4  7 |
| 17 | BLD-20 | Limestone | 50.46 | 1.10 | 2.60 | SMS (OH) | 1.75 | <0.0  5 | <0.0  5 | 1.08 | 1.55 | 0.11 | 1.10 | <0.0  5 | <0.0  8 | <0.0  5 | 0.62 | 0.05 | 2.60 | <0.0  5 | 41.6  0 |
| 18 | BLD-21 | Limestone | 46.71 | 1.23 | 3.19 | Cement (Portland) | 1.78 | <0.0  5 | <0.0  5 | 4.53 | 6.47 | 0.10 | 1.23 | 0.39 | <0.0  8 | 0.07 | 0.07 | 0.06 | 3.19 | <0.0  5 | 39.7  7 |
| 19 | BLD-22 | Limestone | 41.44 | 1.40 | 4.19 | Cement (Blendable  ) | 2.57 | <0.0  5 | <0.0  5 | 8.54 | 12.2  1 | 0.16 | 1.40 | 0.24 | <0.0  8 | 0.29 | 0.08 | 0.10 | 4.19 | <0.0  5 | 37.1  4 |
| 20 | BLD-23 | Limestone | 49.51 | 1.12 | 2.59 | SMS (OH) | 1.51 | <0.0  5 | <0.0  5 | 1.90 | 2.72 | 0.10 | 1.12 | 0.26 | <0.0  8 | <0.0  5 | 0.29 | 0.06 | 2.59 | <0.0  5 | 41.6  5 |
| 21 | BLD-24 | Limestone | 47.79 | 1.38 | 3.48 | Cement (Portland) | 1.94 | <0.0  5 | <0.0  5 | 2.85 | 4.07 | 0.16 | 1.38 | 0.17 | <0.0  8 | <0.0  5 | 0.09 | 0.09 | 3.48 | <0.0  5 | 40.6  0 |
| 22 | BLD-25 | Limestone | 47.98 | 1.10 | 3.53 | Cement (Portland) | 1.87 | <0.0  5 | <0.0  5 | 2.76 | 3.95 | 0.17 | 1.10 | 0.13 | <0.0  8 | 0.05 | 0.09 | 0.09 | 3.53 | <0.0  5 | 40.9  0 |
| 23 | BLD-26 | Limestone | 48.64 | 1.07 | 2.36 | SMS (OH) | 1.26 | <0.0  5 | <0.0  5 | 3.62 | 5.17 | 0.08 | 1.07 | 0.20 | <0.0  8 | <0.0  5 | 0.08 | 0.06 | 2.36 | <0.0  5 | 40.8  7 |
| 24 | BLD-27 | Limestone | 44.51 | 1.47 | 4.09 | Cement (Portland) | 2.21 | <0.0  5 | <0.0  5 | 5.69 | 8.13 | 0.16 | 1.47 | 0.77 | <0.0  8 | 0.05 | 0.09 | 0.08 | 4.09 | <0.0  5 | 38.2  4 |
| 25 | BLD-28 | Limestone | 41.99 | 1.37 | 4.16 | Cement (Blendable  ) | 2.45 | <0.0  5 | <0.0  5 | 8.35 | 11.9  3 | 0.20 | 1.37 | 0.23 | <0.0  8 | 0.16 | 0.08 | 0.10 | 4.16 | <0.0  5 | 37.1  3 |
| 26 | BLD-29 | Limestone | 46.21 | 1.39 | 4.46 | Cement (Portland) | 2.27 | <0.0  5 | <0.0  5 | 3.61 | 5.16 | 0.21 | 1.39 | 0.17 | <0.0  8 | <0.0  5 | 0.09 | 0.10 | 4.46 | <0.0  5 | 39.6  8 |
| 27 | BLD-30 | Limestone | 44.38 | 1.22 | 4.17 | Cement (Portland) | 2.05 | <0.0  5 | <0.0  5 | 6.41 | 9.16 | 0.13 | 1.22 | 0.39 | <0.0  8 | 0.10 | 0.06 | 0.08 | 4.17 | <0.0  5 | 38.0  7 |
| 28 | BLD-31 | Limestone | 44.30 | 1.13 | 3.75 | Cement (Portland) | 1.91 | <0.0  5 | <0.0  5 | 6.66 | 9.52 | 0.10 | 1.13 | 0.27 | <0.0  8 | 0.11 | 0.07 | 0.07 | 3.75 | <0.0  5 | 38.5  7 |
| 29 | BLD-32 | Limestone | 48.28 | 1.02 | 3.48 | SMS (OH) | 1.81 | <0.0  5 | <0.0  5 | 2.81 | 4.02 | 0.18 | 1.02 | 0.15 | <0.0  8 | <0.0  5 | 0.08 | 0.10 | 3.48 | <0.0  5 | 40.6  8 |
| 30 | BLD-33 | Limestone | 48.28 | 1.09 | 3.53 | SMS (OH) | 1.82 | <0.0  5 | <0.0  5 | 2.73 | 3.90 | 0.16 | 1.09 | 0.12 | <0.0  8 | <0.0  5 | 0.09 | 0.09 | 3.53 | <0.0  5 | 40.7  2 |
| 31 | BLD-34 | Limestone | 44.24 | 1.78 | 4.01 | Cement (Portland) | 1.91 | <0.0  5 | <0.0  5 | 5.94 | 8.49 | 0.09 | 1.78 | 0.46 | <0.0  8 | 0.06 | 1.35 | 0.07 | 4.01 | <0.0  5 | 37.3  6 |
| 32 | BLD-35 | Limestone | 49.68 | 1.01 | 2.67 | SMS (OH) | 1.63 | <0.0  5 | <0.0  5 | 1.91 | 2.72 | 0.11 | 1.01 | 0.41 | <0.0  8 | <0.0  5 | 0.09 | 0.06 | 2.67 | <0.0  5 | 41.4  4 |
| 33 | BLD-36 | Limestone | 41.43 | 1.39 | 5.81 | Cement (Blendable  ) | 3.32 | <0.0  5 | <0.0  5 | 7.05 | 10.0  9 | 0.28 | 1.39 | 0.17 | <0.0  8 | 0.13 | 0.07 | 0.16 | 5.81 | <0.0  5 | 36.9  7 |

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| 34 | BLD-37 | Limestone | 41.39 | 1.33 | 5.74 | Cement (Blendable  ) | 2.94 | <0.0  5 | <0.0  5 | 7.44 | 10.6  4 | 0.27 | 1.33 | 0.16 | <0.0  8 | 0.14 | 0.07 | 0.16 | 5.74 | <0.0  5 | 36.9  6 |
| 35 | BLD-38 | Limestone | 47.33 | 1.15 | 3.17 | Cement (Portland) | 1.99 | <0.0  5 | <0.0  5 | 3.52 | 5.04 | 0.15 | 1.15 | 0.46 | <0.0  8 | 0.08 | 0.08 | 0.08 | 3.17 | <0.0  5 | 40.2  9 |
| 36 | BLD-39 | Limestone | 45.38 | 1.07 | 1.73 | Cement (Portland) | 1.36 | <0.0  5 | <0.0  5 | 6.65 | 9.51 | <0.0  5 | 1.07 | 1.35 | <0.0  8 | 0.22 | <0.0  5 | <0.0  5 | 1.73 | <0.0  5 | 39.0  3 |
| 37 | BLD-40 | Limestone | 44.42 | 1.54 | 4.23 | Cement (Portland) | 2.01 | <0.0  5 | <0.0  5 | 5.64 | 8.07 | 0.12 | 1.54 | 0.81 | <0.0  8 | <0.0  5 | 0.07 | 0.07 | 4.23 | <0.0  5 | 38.3  9 |
| 38 | BLD-44 | Limestone | 48.79 | 1.01 | 3.31 | SMS (OH) | 1.74 | <0.0  5 | <0.0  5 | 2.43 | 3.47 | 0.17 | 1.01 | 0.15 | <0.0  8 | <0.0  5 | 0.08 | 0.09 | 3.31 | <0.0  5 | 40.9  9 |
| 39 | BLD-45 | Limestone | 48.86 | 1.07 | 2.33 | SMS (OH) | 1.55 | <0.0  5 | <0.0  5 | 2.90 | 4.15 | 0.12 | 1.07 | 0.47 | <0.0  8 | <0.0  5 | 0.10 | 0.06 | 2.33 | <0.0  5 | 41.1  0 |
| 40 | BLD-46 | Limestone | 48.16 | 1.12 | 2.96 | SMS (OH) | 1.76 | <0.0  5 | <0.0  5 | 3.00 | 4.28 | 0.12 | 1.12 | 0.48 | <0.0  8 | <0.0  5 | 0.14 | 0.07 | 2.96 | <0.0  5 | 40.7  2 |
| 41 | BLD-47 | Limestone | 44.59 | 1.35 | 3.80 | Cement  (Portland) | 2.46 | <0.0  5 | 0.05 | 5.29 | 7.56 | 0.27 | 1.35 | 0.55 | <0.0  8 | 0.49 | 0.09 | 0.10 | 3.80 | <0.0  5 | 38.5  0 |
| 42 | BLD-48 | Limestone | 44.20 | 1.32 | 4.85 | Cement  (Portland) | 2.14 | <0.0  5 | <0.0  5 | 5.35 | 7.66 | 0.15 | 1.32 | 0.75 | <0.0  8 | 0.15 | 0.07 | 0.08 | 4.85 | <0.0  5 | 38.4  2 |
| 43 | BLD-49 | Limestone | 49.00 | 1.01 | 2.94 | SMS (OH) | 1.75 | <0.0  5 | <0.0  5 | 2.19 | 3.12 | 0.13 | 1.01 | 0.42 | <0.0  8 | <0.0  5 | 0.10 | 0.06 | 2.94 | <0.0  5 | 41.2  8 |
| 44 | BLD-50 | Limestone | 44.82 | 1.32 | 3.34 | Cement (Portland) | 1.96 | <0.0  5 | <0.0  5 | 5.22 | 7.47 | 0.13 | 1.32 | 1.47 | <0.0  8 | 0.11 | 0.11 | 0.08 | 3.34 | <0.0  5 | 38.9  8 |
| 45 | BLD-51 | Limestone | 45.60 | 1.29 | 3.56 | Cement (Portland) | 2.04 | <0.0  5 | <0.0  5 | 4.87 | 6.97 | 0.22 | 1.29 | 0.68 | <0.0  8 | 0.22 | 0.09 | 0.10 | 3.56 | <0.0  5 | 39.0  4 |
| 46 | BLD-52 | Limestone | 44.93 | 1.34 | 3.06 | Cement (Portland) | 1.91 | <0.0  5 | <0.0  5 | 5.31 | 7.60 | 0.14 | 1.34 | 1.38 | <0.0  8 | 0.07 | 0.11 | 0.08 | 3.06 | <0.0  5 | 39.1  7 |
| 47 | BLD-53 | Limestone | 49.47 | 1.10 | 2.87 | SMS (OH) | 1.48 | <0.0  5 | <0.0  5 | 1.92 | 2.74 | 0.11 | 1.10 | 0.28 | <0.0  8 | <0.0  5 | 0.17 | 0.06 | 2.87 | <0.0  5 | 41.5  3 |
| 1 | BLD-03 | Sandstone | 0.13 | <0.0  5 | 87.9  0 | - | 1.96 | <0.0  5 | <0.0  5 | 4.96 | 7.10 | 0.13 | <0.0  5 | <0.0  5 | 0.08 | 0.07 | <0.0  5 | 0.18 | 87.9  0 | <0.0  5 | 2.35 |
| 2 | BLD-04 | Sandstone | 0.06 | <0.0  5 | 94.4  6 | - | 1.99 | <0.0  5 | <0.0  5 | 1.02 | 1.46 | 0.20 | <0.0  5 | <0.0  5 | 0.08 | <0.0  5 | <0.0  5 | 0.18 | 94.4  6 | <0.0  5 | 1.48 |
| 3 | BLD-41 | Sandstone | 0.14 | <0.0  5 | 91.5  7 | - | 1.92 | <0.0  5 | <0.0  5 | 2.40 | 3.43 | 0.39 | <0.0  5 | 0.37 | 0.08 | <0.0  5 | <0.0  5 | 0.30 | 91.5  7 | <0.0  5 | 1.60 |
| 4 | BLD-42 | Sandstone | 0.24 | <0.0  5 | 92.3  3 | - | 2.09 | <0.0  5 | <0.0  5 | 2.05 | 2.94 | 0.19 | <0.0  5 | <0.0  5 | 0.08 | <0.0  5 | <0.0  5 | 0.20 | 92.3  3 | <0.0  5 | 1.80 |
| 5 | BLD-43 | Sandstone | 0.25 | <0.0  5 | 89.6  8 | - | 1.95 | <0.0  5 | <0.0  5 | 3.91 | 5.58 | 0.14 | <0.0  5 | <0.0  5 | 0.08 | 0.07 | <0.0  5 | 0.18 | 89.6  8 | <0.0  5 | 1.97 |
| 6 | BLD-15 | Sandstone | 0.40 | <0.0  5 | 92.0  3 | - | 1.33 | <0.0  5 | <0.0  5 | 2.80 | 4.01 | 0.10 | <0.0  5 | <0.0  5 | 0.08 | <0.0  5 | <0.0  5 | 0.15 | 92.0  3 | <0.0  5 | 1.78 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-01** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 1 | BLD/PBH01/01 | 4.00 | 5.00 | 1.00 | 3.58 | <0.05 | 42.25 | <0.05 | 2.85 | 4.07 | 0.35 | 2.59 | <0.05 | <0.08 | <0.05 | 1.30 | 0.15 | 8.74 | 0.11 | <0.05 | 36.72 |
| 2 | BLD/PBH01/02 | 5.00 | 6.00 | 1.00 | 2.51 | <0.05 | 45.90 | <0.05 | 2.14 | 3.06 | 0.23 | 2.22 | 0.06 | <0.08 | <0.05 | 1.02 | 0.10 | 5.60 | 0.10 | <0.05 | 39.09 |
| 3 | BLD/PBH01/03 | 6.00 | 7.00 | 1.00 | 2.44 | <0.05 | 45.36 | <0.05 | 2.59 | 3.71 | 0.22 | 2.57 | 0.11 | <0.08 | <0.05 | 1.29 | 0.10 | 5.08 | 0.09 | <0.05 | 38.89 |
| 4 | BLD/PBH01/04 | 7.00 | 8.00 | 1.00 | 2.18 | <0.05 | 46.62 | <0.05 | 2.76 | 3.95 | 0.19 | 2.09 | 0.20 | <0.08 | <0.05 | 1.29 | 0.08 | 4.08 | 0.11 | <0.05 | 39.08 |
| 5 | BLD/PBH01/05 | 8.00 | 9.00 | 1.00 | 1.84 | <0.05 | 47.59 | <0.05 | 2.19 | 3.14 | 0.14 | 1.90 | 0.32 | <0.08 | <0.05 | 1.62 | 0.07 | 3.45 | 0.09 | <0.05 | 39.73 |
| 6 | BLD/PBH01/06 | 9.00 | 10.00 | 1.00 | 2.66 | <0.05 | 44.43 | <0.05 | 3.81 | 5.45 | 0.21 | 2.27 | 0.31 | <0.08 | <0.05 | 2.14 | 0.10 | 4.94 | 0.08 | <0.05 | 37.26 |
| 7 | BLD/PBH01/07 | 10.00 | 11.00 | 1.00 | 2.23 | <0.05 | 47.29 | <0.05 | 2.32 | 3.31 | 0.20 | 1.62 | 0.24 | <0.08 | <0.05 | 1.72 | 0.09 | 4.08 | 0.08 | <0.05 | 39.02 |
| 8 | BLD/PBH01/08 | 11.00 | 12.00 | 1.00 | 1.72 | <0.05 | 48.98 | <0.05 | 2.10 | 3.01 | 0.11 | 1.50 | 0.31 | <0.08 | <0.05 | 1.27 | 0.06 | 3.05 | 0.08 | <0.05 | 39.79 |
| 9 | BLD/PBH01/09 | 12.00 | 13.00 | 1.00 | 2.11 | <0.05 | 47.50 | <0.05 | 2.11 | 3.02 | 0.15 | 1.70 | 0.19 | <0.08 | <0.05 | 1.69 | 0.08 | 3.58 | 0.08 | <0.05 | 39.78 |
| 10 | BLD/PBH01/10 | 13.00 | 14.00 | 1.00 | 3.03 | <0.05 | 43.30 | <0.05 | 3.60 | 5.15 | 0.29 | 2.81 | 0.13 | <0.08 | 0.09 | 0.86 | 0.15 | 5.88 | 0.08 | <0.05 | 38.13 |
| 11 | BLD/PBH01/11 | 14.00 | 15.00 | 1.00 | 3.35 | <0.05 | 42.19 | <0.05 | 4.64 | 6.64 | 0.32 | 3.14 | 0.13 | <0.08 | 0.06 | 0.68 | 0.16 | 6.17 | 0.10 | <0.05 | 36.94 |
| 12 | BLD/PBH01/12 | 15.00 | 16.00 | 1.00 | 3.32 | <0.05 | 42.23 | <0.05 | 4.35 | 6.22 | 0.32 | 2.94 | <0.05 | <0.08 | 0.07 | 0.70 | 0.16 | 5.97 | 0.10 | <0.05 | 37.82 |
| 13 | BLD/PBH01/13 | 16.00 | 17.00 | 1.00 | 3.43 | <0.05 | 42.73 | <0.05 | 4.17 | 5.96 | 0.33 | 2.61 | <0.05 | <0.08 | 0.09 | 0.78 | 0.17 | 6.29 | 0.11 | <0.05 | 37.37 |
| 14 | BLD/PBH01/14 | 17.00 | 18.00 | 1.00 | 4.65 | <0.05 | 39.62 | <0.05 | 3.15 | 4.50 | 0.54 | 3.52 | <0.05 | <0.08 | 0.11 | 0.70 | 0.24 | 9.63 | 0.11 | <0.05 | 36.29 |
| 15 | BLD/PBH01/15 | 18.00 | 19.00 | 1.00 | 5.66 | <0.05 | 35.55 | <0.05 | 4.68 | 6.69 | 0.65 | 4.08 | <0.05 | <0.08 | 0.10 | 0.64 | 0.28 | 11.78 | 0.10 | <0.05 | 34.35 |
| 16 | BLD/PBH01/16 | 19.00 | 20.00 | 1.00 | 5.03 | <0.05 | 37.48 | <0.05 | 6.31 | 9.02 | 0.52 | 2.71 | <0.05 | <0.08 | 0.15 | 0.64 | 0.25 | 9.79 | 0.11 | <0.05 | 34.19 |
| 17 | BLD/PBH01/17 | 20.00 | 21.00 | 1.00 | 2.96 | <0.05 | 44.59 | <0.05 | 1.96 | 2.80 | 0.30 | 2.61 | <0.05 | <0.08 | <0.05 | 0.74 | 0.15 | 6.43 | 0.10 | <0.05 | 39.19 |
| 18 | BLD/PBH01/18 | 21.00 | 22.00 | 1.00 | 4.50 | <0.05 | 40.47 | <0.05 | 3.83 | 5.48 | 0.45 | 2.57 | <0.05 | <0.08 | 0.09 | 1.03 | 0.23 | 8.97 | 0.10 | <0.05 | 36.00 |
| 19 | BLD/PBH01/19 | 22.00 | 23.00 | 1.00 | 3.51 | <0.05 | 42.59 | <0.05 | 4.27 | 6.10 | 0.33 | 2.30 | <0.05 | <0.08 | 0.12 | 1.29 | 0.17 | 6.63 | 0.10 | <0.05 | 36.75 |
| 20 | BLD/PBH01/20 | 23.00 | 24.00 | 1.00 | 2.81 | <0.05 | 45.49 | <0.05 | 2.90 | 4.14 | 0.25 | 1.70 | <0.05 | <0.08 | 0.06 | 1.59 | 0.13 | 5.13 | 0.08 | <0.05 | 38.51 |
| 21 | BLD/PBH01/21 | 24.00 | 25.00 | 1.00 | 2.73 | <0.05 | 47.22 | <0.05 | 2.48 | 3.54 | 0.18 | 1.66 | <0.05 | <0.08 | <0.05 | 1.60 | 0.10 | 4.72 | 0.07 | <0.05 | 38.04 |
| 22 | BLD/PBH01/22 | 25.00 | 26.00 | 1.00 | 2.72 | <0.05 | 45.78 | <0.05 | 2.40 | 3.43 | 0.19 | 1.63 | <0.05 | <0.08 | 0.06 | 1.92 | 0.11 | 4.84 | 0.07 | <0.05 | 39.13 |
| 23 | BLD/PBH01/23 | 26.00 | 27.00 | 1.00 | 2.48 | <0.05 | 50.05 | <0.05 | 1.22 | 1.74 | 0.19 | 1.33 | <0.05 | <0.08 | <0.05 | 0.95 | 0.11 | 4.13 | 0.07 | <0.05 | 38.84 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-01** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 24 | BLD/PBH01/24 | 27.00 | 28.00 | 1.00 | 2.32 | <0.05 | 48.82 | <0.05 | 1.19 | 1.70 | 0.18 | 1.28 | <0.05 | <0.08 | <0.05 | 0.92 | 0.11 | 3.96 | 0.07 | <0.05 | 40.53 |
| 25 | BLD/PBH01/25 | 28.00 | 29.00 | 1.00 | 2.42 | <0.05 | 48.05 | <0.05 | 1.46 | 2.08 | 0.21 | 1.40 | <0.05 | <0.08 | <0.05 | 0.98 | 0.12 | 4.45 | 0.09 | <0.05 | 40.09 |
| 26 | BLD/PBH01/26 | 29.00 | 30.00 | 1.00 | 2.48 | <0.05 | 47.30 | <0.05 | 1.69 | 2.42 | 0.22 | 1.35 | <0.05 | <0.08 | <0.05 | 1.82 | 0.12 | 4.59 | 0.09 | <0.05 | 39.50 |
| 27 | BLD/PBH01/27 | 30.00 | 31.00 | 1.00 | 2.50 | <0.05 | 48.35 | <0.05 | 1.29 | 1.85 | 0.20 | 1.41 | <0.05 | <0.08 | <0.05 | 0.80 | 0.11 | 4.49 | 0.07 | <0.05 | 40.13 |
| 28 | BLD/PBH01/28 | 31.00 | 32.00 | 1.00 | 3.16 | <0.05 | 45.90 | <0.05 | 2.00 | 2.86 | 0.25 | 1.71 | <0.05 | <0.08 | <0.05 | 1.21 | 0.12 | 6.01 | 0.09 | <0.05 | 38.57 |
| 29 | BLD/PBH01/29 | 32.00 | 33.00 | 1.00 | 1.45 | <0.05 | 50.88 | <0.05 | 1.00 | 1.43 | 0.07 | 1.11 | <0.05 | <0.08 | <0.05 | 0.59 | <0.05 | 2.35 | 0.06 | <0.05 | 41.92 |
| 30 | BLD/PBH01/30 | 33.00 | 34.00 | 1.00 | 1.28 | <0.05 | 50.83 | <0.05 | 1.05 | 1.50 | 0.07 | 1.11 | <0.05 | <0.08 | <0.05 | 0.89 | <0.05 | 2.08 | 0.06 | <0.05 | 41.81 |
| 31 | BLD/PBH01/31 | 34.00 | 35.00 | 1.00 | 1.84 | <0.05 | 49.95 | <0.05 | 1.18 | 1.68 | 0.09 | 1.20 | <0.05 | <0.08 | <0.05 | 1.00 | 0.05 | 2.77 | <0.05 | <0.05 | 41.27 |
| 32 | BLD/PBH01/32 | 35.00 | 36.00 | 1.00 | 1.56 | <0.05 | 50.55 | <0.05 | 1.01 | 1.44 | 0.11 | 1.15 | <0.05 | <0.08 | <0.05 | 0.78 | 0.06 | 2.79 | 0.05 | <0.05 | 41.41 |
| 33 | BLD/PBH01/33 | 36.00 | 37.00 | 1.00 | 1.48 | <0.05 | 51.34 | <0.05 | 0.79 | 1.12 | 0.09 | 1.01 | <0.05 | <0.08 | <0.05 | 0.70 | <0.05 | 2.09 | <0.05 | <0.05 | 41.97 |
| 34 | BLD/PBH01/34 | 37.00 | 38.00 | 1.00 | 1.68 | <0.05 | 50.83 | <0.05 | 0.83 | 1.19 | 0.12 | 1.05 | <0.05 | <0.08 | <0.05 | 0.69 | 0.06 | 2.47 | <0.05 | <0.05 | 41.75 |
| 35 | BLD/PBH01/35 | 38.00 | 39.00 | 1.00 | 1.87 | <0.05 | 50.47 | <0.05 | 0.81 | 1.16 | 0.13 | 1.11 | <0.05 | <0.08 | <0.05 | 0.67 | 0.06 | 2.65 | <0.05 | <0.05 | 41.73 |
| 36 | BLD/PBH01/36 | 39.00 | 40.00 | 1.00 | 1.84 | <0.05 | 50.28 | <0.05 | 0.92 | 1.32 | 0.16 | 1.09 | <0.05 | <0.08 | <0.05 | 0.84 | 0.07 | 2.98 | 0.05 | <0.05 | 41.26 |
| 37 | BLD/PBH01/37 | 40.00 | 41.00 | 1.00 | 2.30 | <0.05 | 48.76 | <0.05 | 1.36 | 1.94 | 0.20 | 1.29 | <0.05 | <0.08 | <0.05 | 1.26 | 0.08 | 3.82 | 0.05 | <0.05 | 40.17 |
| 38 | BLD/PBH01/38 | 41.00 | 42.00 | 1.00 | 1.63 | <0.05 | 50.82 | <0.05 | 0.87 | 1.24 | 0.13 | 1.07 | <0.05 | <0.08 | <0.05 | 0.84 | 0.06 | 2.34 | 0.05 | <0.05 | 41.72 |
| 39 | BLD/PBH01/39 | 42.00 | 43.00 | 1.00 | 1.69 | <0.05 | 50.39 | <0.05 | 0.90 | 1.28 | 0.17 | 1.11 | <0.05 | <0.08 | <0.05 | 0.67 | 0.07 | 2.93 | 0.06 | <0.05 | 41.53 |
| 41 | BLD/PBH01/40 | 43.00 | 44.00 | 1.00 | 2.01 | <0.05 | 49.78 | <0.05 | 1.08 | 1.55 | 0.17 | 1.23 | <0.05 | <0.08 | <0.05 | 0.88 | 0.07 | 3.09 | 0.05 | <0.05 | 41.06 |
| 42 | BLD/PBH01/41 | 44.00 | 45.00 | 1.00 | 1.40 | <0.05 | 50.53 | <0.05 | 1.30 | 1.86 | 0.11 | 1.11 | <0.05 | <0.08 | <0.05 | 1.08 | <0.05 | 2.46 | 0.05 | <0.05 | 41.23 |
| 43 | BLD/PBH01/42 | 45.00 | 46.00 | 1.00 | 1.84 | <0.05 | 50.02 | <0.05 | 1.01 | 1.44 | 0.17 | 1.17 | <0.05 | <0.08 | <0.05 | 0.81 | 0.07 | 3.20 | 0.06 | <0.05 | 41.11 |
| 44 | BLD/PBH01/43 | 46.00 | 47.00 | 1.00 | 1.51 | <0.05 | 51.32 | <0.05 | 0.68 | 0.97 | 0.09 | 1.05 | <0.05 | <0.08 | <0.05 | 0.46 | <0.05 | 1.92 | <0.05 | <0.05 | 42.49 |
| 45 | BLD/PBH01/44 | 47.00 | 48.00 | 1.00 | 1.38 | <0.05 | 50.97 | <0.05 | 0.86 | 1.23 | 0.11 | 1.11 | <0.05 | <0.08 | <0.05 | 0.57 | 0.05 | 2.40 | 0.06 | <0.05 | 42.01 |
| 46 | BLD/PBH01/45 | 48.00 | 49.00 | 1.00 | 1.49 | <0.05 | 50.70 | <0.05 | 1.06 | 1.51 | 0.10 | 1.16 | <0.05 | <0.08 | <0.05 | 0.70 | <0.05 | 2.41 | 0.05 | <0.05 | 41.72 |
| 47 | BLD/PBH01/46 | 49.00 | 50.00 | 1.00 | 1.39 | <0.05 | 51.32 | <0.05 | 0.80 | 1.15 | 0.09 | 1.09 | <0.05 | <0.08 | <0.05 | 0.59 | <0.05 | 2.10 | 0.06 | <0.05 | 42.04 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-01** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 48 | BLD/PBH01/47 | 50.00 | 51.00 | 1.00 | 2.03 | <0.05 | 49.89 | <0.05 | 0.86 | 1.23 | 0.17 | 1.18 | <0.05 | <0.08 | <0.05 | 0.59 | 0.08 | 3.56 | 0.06 | <0.05 | 41.09 |
| 49 | BLD/PBH01/48 | 51.00 | 52.00 | 1.00 | 2.43 | <0.05 | 48.44 | <0.05 | 1.39 | 1.99 | 0.18 | 1.39 | <0.05 | <0.08 | <0.05 | 0.78 | 0.09 | 4.26 | 0.06 | <0.05 | 40.29 |
| 50 | BLD/PBH01/49 | 52.00 | 53.00 | 1.00 | 1.99 | <0.05 | 49.53 | <0.05 | 1.30 | 1.85 | 0.14 | 1.29 | <0.05 | <0.08 | <0.05 | 0.66 | 0.06 | 3.29 | <0.05 | <0.05 | 41.01 |
| 51 | BLD/PBH01/50 | 53.00 | 54.00 | 1.00 | 2.11 | <0.05 | 48.71 | <0.05 | 1.49 | 2.14 | 0.19 | 1.37 | <0.05 | <0.08 | <0.05 | 0.72 | 0.07 | 3.97 | 0.06 | <0.05 | 40.54 |
| 52 | BLD/PBH01/51 | 54.00 | 55.00 | 1.00 | 2.94 | <0.05 | 46.61 | <0.05 | 1.94 | 2.77 | 0.30 | 1.54 | <0.05 | <0.08 | <0.05 | 0.93 | 0.11 | 5.70 | 0.06 | <0.05 | 38.92 |
| 53 | BLD/PBH01/52 | 55.00 | 56.00 | 1.00 | 2.82 | <0.05 | 47.07 | <0.05 | 1.80 | 2.57 | 0.24 | 1.51 | <0.05 | <0.08 | <0.05 | 0.95 | 0.09 | 5.01 | 0.07 | <0.05 | 39.55 |
| 54 | BLD/PBH01/53 | 56.00 | 57.00 | 1.00 | 2.88 | <0.05 | 46.13 | <0.05 | 2.44 | 3.48 | 0.26 | 1.65 | <0.05 | <0.08 | <0.05 | 1.25 | 0.11 | 5.86 | 0.07 | <0.05 | 38.18 |
| 55 | BLD/PBH01/54 | 57.00 | 58.00 | 1.00 | 3.13 | <0.05 | 44.96 | <0.05 | 2.59 | 3.70 | 0.31 | 1.60 | <0.05 | <0.08 | <0.05 | 1.66 | 0.13 | 6.61 | 0.07 | <0.05 | 37.69 |
| 56 | BLD/PBH01/55 | 58.00 | 59.00 | 1.00 | 3.13 | <0.05 | 46.23 | <0.05 | 2.00 | 2.86 | 0.29 | 1.46 | <0.05 | <0.08 | <0.05 | 1.15 | 0.14 | 5.94 | 0.08 | <0.05 | 38.61 |
| 57 | BLD/PBH01/56 | 59.00 | 60.00 | 1.00 | 3.62 | <0.05 | 45.05 | <0.05 | 2.48 | 3.54 | 0.33 | 1.49 | <0.05 | <0.08 | <0.05 | 1.52 | 0.16 | 6.60 | 0.07 | <0.05 | 37.45 |
| 58 | BLD/PBH01/57 | 60.00 | 61.00 | 1.00 | 4.12 | <0.05 | 43.48 | <0.05 | 3.31 | 4.73 | 0.44 | 1.44 | <0.05 | <0.08 | <0.05 | 1.70 | 0.21 | 7.41 | 0.06 | <0.05 | 36.27 |
| 59 | BLD/PBH01/58 | 61.00 | 62.00 | 1.00 | 2.88 | <0.05 | 46.88 | <0.05 | 2.31 | 3.30 | 0.26 | 1.18 | <0.05 | <0.08 | <0.05 | 1.47 | 0.14 | 4.94 | 0.07 | <0.05 | 38.75 |
| 60 | BLD/PBH01/59 | 62.00 | 63.00 | 1.00 | 3.62 | <0.05 | 44.96 | <0.05 | 2.37 | 3.38 | 0.30 | 1.33 | <0.05 | <0.08 | <0.05 | 1.53 | 0.17 | 6.66 | 0.07 | <0.05 | 37.84 |
| 61 | BLD/PBH01/60 | 63.00 | 64.00 | 1.00 | 3.46 | <0.05 | 44.38 | <0.05 | 2.72 | 3.89 | 0.28 | 1.48 | <0.05 | <0.08 | <0.05 | 1.46 | 0.17 | 6.99 | 0.08 | <0.05 | 37.54 |
| 62 | BLD/PBH01/61 | 64.00 | 65.00 | 1.00 | 4.75 | <0.05 | 40.86 | <0.05 | 3.23 | 4.62 | 0.42 | 1.55 | <0.05 | <0.08 | <0.05 | 2.11 | 0.31 | 10.59 | <0.05 | <0.05 | 34.58 |
| 63 | BLD/PBH01/62 | 65.00 | 66.00 | 1.00 | 11.02 | <0.05 | 24.59 | <0.05 | 3.80 | 5.44 | 1.26 | 1.49 | <0.05 | <0.08 | 0.06 | 3.06 | 1.02 | 27.90 | <0.05 | <0.05 | 23.94 |
| 64 | BLD/PBH01/63 | 66.00 | 67.00 | 1.00 | 7.72 | <0.05 | 30.57 | <0.05 | 3.34 | 4.77 | 0.94 | 1.13 | <0.05 | <0.08 | <0.05 | 2.66 | 0.92 | 24.16 | <0.05 | <0.05 | 26.92 |
| 65 | BLD/PBH01/64 | 67.00 | 68.00 | 1.00 | 10.52 | <0.05 | 30.51 | <0.05 | 3.31 | 4.73 | 1.03 | 1.31 | <0.05 | <0.08 | <0.05 | 2.54 | 0.75 | 20.44 | <0.05 | <0.05 | 27.99 |
| 66 | BLD/PBH01/65 | 68.00 | 69.00 | 1.00 | 5.72 | <0.05 | 33.27 | <0.05 | 3.46 | 4.94 | 0.74 | 1.19 | <0.05 | <0.08 | <0.05 | 2.12 | 0.67 | 22.25 | <0.05 | <0.05 | 28.82 |
| 67 | BLD/PBH01/66 | 69.00 | 70.00 | 1.00 | 6.14 | <0.05 | 13.99 | <0.05 | 4.09 | 5.84 | 1.16 | 0.92 | <0.05 | <0.08 | <0.05 | 2.57 | 1.10 | 54.00 | <0.05 | <0.05 | 13.91 |
| 68 | BLD/PBH01/67 | 70.00 | 71.00 | 1.00 | 10.10 | <0.05 | 16.03 | <0.05 | 4.43 | 6.34 | 1.53 | 1.16 | <0.05 | <0.08 | <0.05 | 2.73 | 1.08 | 43.62 | <0.05 | <0.05 | 17.15 |
| 69 | BLD/PBH01/68 | 71.00 | 72.00 | 1.00 | 15.01 | <0.05 | 7.96 | <0.05 | 5.12 | 7.31 | 1.74 | 1.35 | <0.05 | <0.08 | 0.05 | 2.99 | 1.39 | 48.89 | <0.05 | <0.05 | 13.02 |
| 70 | BLD/PBH01/69 | 72.00 | 73.00 | 1.00 | 11.96 | <0.05 | 14.12 | <0.05 | 5.45 | 7.80 | 1.65 | 1.32 | <0.05 | <0.08 | 0.11 | 2.99 | 1.20 | 42.02 | <0.05 | <0.05 | 16.59 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-01** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 71 | BLD/PBH01/70 | 73.00 | 74.00 | 1.00 | 11.59 | <0.05 | 16.01 | <0.05 | 4.92 | 7.04 | 1.53 | 1.19 | <0.05 | <0.08 | 0.07 | 3.33 | 1.15 | 40.24 | <0.05 | <0.05 | 17.61 |
| 72 | BLD/PBH01/71 | 74.00 | 75.00 | 1.00 | 4.36 | <0.05 | 5.21 | <0.05 | 1.84 | 2.63 | 0.63 | 0.34 | <0.05 | <0.08 | <0.05 | 1.55 | 0.70 | 78.26 | <0.05 | <0.05 | 6.07 |
| 73 | BLD/PBH01/72 | 75.00 | 76.00 | 1.00 | 4.83 | <0.05 | 17.90 | <0.05 | 2.33 | 3.34 | 0.64 | 0.57 | <0.05 | <0.08 | <0.05 | 1.63 | 0.97 | 53.76 | <0.05 | <0.05 | 15.99 |
| 74 | BLD/PBH01/73 | 76.00 | 77.00 | 1.00 | 9.32 | <0.05 | 15.32 | <0.05 | 4.13 | 5.91 | 1.31 | 0.91 | <0.05 | <0.08 | 0.06 | 3.36 | 1.08 | 46.77 | <0.05 | <0.05 | 15.70 |
| 75 | BLD/PBH01/74 | 77.00 | 78.00 | 1.00 | 9.83 | <0.05 | 16.07 | <0.05 | 3.73 | 5.33 | 1.29 | 0.88 | <0.05 | <0.08 | <0.05 | 2.57 | 1.02 | 46.20 | <0.05 | <0.05 | 16.53 |
| 76 | BLD/PBH01/75 | 78.00 | 79.00 | 1.00 | 11.48 | <0.05 | 4.12 | <0.05 | 4.14 | 5.92 | 2.06 | 1.00 | <0.05 | <0.08 | <0.05 | 2.53 | 1.72 | 62.84 | <0.05 | <0.05 | 7.94 |
| 77 | BLD/PBH01/76 | 79.00 | 80.00 | 1.00 | 9.16 | <0.05 | 4.73 | <0.05 | 3.36 | 4.81 | 1.66 | 0.73 | <0.05 | <0.08 | <0.05 | 3.06 | 1.58 | 66.31 | <0.05 | <0.05 | 7.58 |
| 78 | BLD/PBH01/77 | 80.00 | 81.00 | 1.00 | 5.69 | <0.05 | 35.77 | <0.05 | 4.39 | 6.28 | 0.69 | 1.29 | 0.09 | <0.08 | 0.09 | 2.50 | 0.49 | 15.83 | <0.05 | <0.05 | 31.10 |
| 79 | BLD/PBH01/78 | 81.00 | 82.00 | 1.00 | 6.02 | <0.05 | 39.56 | <0.05 | 2.50 | 3.57 | 0.56 | 0.83 | 0.11 | <0.08 | 0.07 | 3.14 | 0.36 | 11.70 | <0.05 | <0.05 | 33.92 |
| 80 | BLD/PBH01/79 | 82.00 | 82.76 | 0.76 | 4.68 | <0.05 | 37.88 | <0.05 | 5.66 | 8.09 | 0.40 | 0.68 | 0.12 | <0.08 | <0.05 | 8.30 | 0.26 | 12.96 | <0.05 | <0.05 | 26.47 |
| 81 | BLD/PBH01/80 | 82.76 | 84.00 | 1.24 | 0.66 | <0.05 | 0.34 | <0.05 | 3.77 | 5.39 | 0.10 | <0.05 | <0.05 | <0.08 | <0.05 | 7.63 | 0.17 | 82.82 | <0.05 | <0.05 | 2.63 |
| 82 | BLD/PBH01/81 | 84.00 | 85.25 | 1.25 | 15.32 | <0.05 | 0.57 | <0.05 | 5.44 | 7.78 | 1.28 | 0.49 | <0.05 | <0.08 | <0.05 | 2.84 | 0.98 | 56.73 | <0.05 | <0.05 | 13.77 |
| 83 | BLD/PBH01/82 | 85.25 | 85.78 | 0.53 | 8.89 | <0.05 | 7.51 | <0.05 | 2.59 | 3.70 | 0.87 | 0.42 | <0.05 | <0.08 | <0.05 | 4.88 | 0.78 | 62.65 | <0.05 | <0.05 | 9.91 |
| 84 | BLD/PBH01/83 | 85.78 | 87.00 | 1.22 | 20.20 | <0.05 | 2.22 | <0.05 | 4.79 | 6.85 | 2.21 | 0.99 | <0.05 | <0.08 | <0.05 | 6.39 | 1.21 | 47.28 | <0.05 | <0.05 | 12.40 |
| 85 | BLD/PBH01/84 | 87.00 | 88.00 | 1.00 | 19.74 | <0.05 | 1.17 | <0.05 | 5.01 | 7.16 | 2.09 | 0.96 | <0.05 | <0.08 | 0.05 | 5.55 | 1.30 | 48.28 | <0.05 | <0.05 | 13.50 |

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| **ANNEXURE IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-02** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 1 | BLD/PBH02/01 | 3.00 | 4.40 | 1.40 | 13.07 | <0.05 | 19.67 | <0.05 | 7.22 | 10.32 | 1.75 | 2.50 | 0.27 | <0.08 | 0.20 | 1.06 | 0.73 | 30.28 | <0.05 | <0.05 | 20.13 |
| 2 | BLD/PBH02/02 | 4.40 | 5.00 | 0.60 | 4.92 | <0.05 | 35.33 | <0.05 | 8.54 | 12.20 | 0.47 | 2.78 | 0.63 | <0.08 | 0.19 | 0.32 | 0.23 | 11.10 | <0.05 | <0.05 | 31.81 |
| 3 | BLD/PBH02/03 | 5.00 | 6.00 | 1.00 | 4.72 | <0.05 | 34.43 | <0.05 | 10.99 | 15.71 | 0.42 | 3.08 | 0.61 | <0.08 | 0.55 | 0.53 | 0.22 | 8.77 | <0.05 | <0.05 | 30.94 |
| 4 | BLD/PBH02/04 | 6.00 | 7.00 | 1.00 | 3.81 | <0.05 | 37.99 | <0.05 | 8.79 | 12.56 | 0.28 | 2.75 | 1.22 | <0.08 | 0.26 | 2.09 | 0.16 | 6.66 | <0.05 | <0.05 | 32.20 |
| 5 | BLD/PBH02/05 | 7.00 | 8.00 | 1.00 | 2.69 | <0.05 | 41.05 | <0.05 | 7.58 | 10.84 | 0.16 | 2.68 | 1.24 | <0.08 | 0.21 | 1.63 | 0.11 | 4.75 | <0.05 | <0.05 | 34.62 |
| 6 | BLD/PBH02/06 | 8.00 | 9.00 | 1.00 | 2.91 | <0.05 | 40.76 | <0.05 | 7.47 | 10.68 | 0.14 | 3.01 | 1.31 | <0.08 | 0.24 | 0.58 | 0.10 | 4.04 | <0.05 | <0.05 | 36.21 |
| 7 | BLD/PBH02/07 | 9.00 | 10.00 | 1.00 | 3.26 | <0.05 | 38.47 | <0.05 | 9.95 | 14.23 | 0.13 | 2.96 | 1.18 | <0.08 | 0.34 | 1.20 | 0.12 | 4.44 | <0.05 | <0.05 | 33.63 |
| 8 | BLD/PBH02/08 | 10.00 | 11.00 | 1.00 | 4.54 | <0.05 | 36.04 | <0.05 | 9.32 | 13.33 | 0.32 | 3.50 | 1.21 | <0.08 | 0.35 | 0.68 | 0.19 | 7.10 | <0.05 | <0.05 | 32.72 |
| 9 | BLD/PBH02/09 | 11.00 | 12.00 | 1.00 | 3.03 | <0.05 | 40.43 | <0.05 | 6.99 | 10.00 | 0.21 | 2.85 | 0.90 | <0.08 | 0.17 | 1.47 | 0.12 | 6.47 | <0.05 | <0.05 | 34.33 |
| 10 | BLD/PBH02/10 | 12.00 | 13.00 | 1.00 | 4.24 | <0.05 | 38.36 | <0.05 | 7.96 | 11.38 | 0.24 | 2.75 | 0.59 | <0.08 | 0.24 | 3.55 | 0.14 | 6.39 | <0.05 | <0.05 | 32.08 |
| 11 | BLD/PBH02/11 | 13.00 | 14.00 | 1.00 | 2.73 | <0.05 | 45.18 | <0.05 | 4.18 | 5.98 | 0.17 | 1.91 | 0.47 | <0.08 | 0.13 | 2.14 | 0.10 | 4.20 | <0.05 | <0.05 | 36.96 |
| 12 | BLD/PBH02/12 | 14.00 | 15.00 | 1.00 | 2.98 | <0.05 | 44.92 | <0.05 | 3.35 | 4.79 | 0.19 | 1.78 | 0.38 | <0.08 | 0.08 | 2.63 | 0.11 | 4.83 | <0.05 | <0.05 | 37.30 |
| 13 | BLD/PBH02/13 | 15.00 | 16.00 | 1.00 | 2.12 | <0.05 | 47.08 | <0.05 | 2.49 | 3.56 | 0.17 | 1.49 | 0.33 | <0.08 | 0.09 | 3.06 | 0.09 | 3.90 | <0.05 | <0.05 | 38.08 |
| 14 | BLD/PBH02/14 | 16.00 | 17.00 | 1.00 | 2.27 | <0.05 | 47.78 | <0.05 | 2.24 | 3.21 | 0.12 | 1.56 | 0.31 | <0.08 | 0.07 | 2.57 | 0.08 | 3.53 | <0.05 | <0.05 | 38.49 |
| 15 | BLD/PBH02/15 | 17.00 | 18.00 | 1.00 | 3.30 | <0.05 | 43.86 | <0.05 | 3.69 | 5.28 | 0.19 | 2.16 | 0.31 | <0.08 | 0.09 | 3.13 | 0.11 | 5.66 | <0.05 | <0.05 | 35.89 |
| 16 | BLD/PBH02/16 | 18.00 | 19.00 | 1.00 | 2.96 | <0.05 | 44.90 | <0.05 | 3.56 | 5.10 | 0.13 | 2.06 | 0.32 | <0.08 | 0.11 | 2.37 | 0.10 | 4.85 | <0.05 | <0.05 | 37.08 |
| 17 | BLD/PBH02/17 | 19.00 | 20.00 | 1.00 | 2.78 | <0.05 | 43.92 | <0.05 | 4.29 | 6.13 | 0.15 | 2.18 | 0.35 | <0.08 | 0.13 | 2.32 | 0.09 | 5.43 | <0.05 | <0.05 | 36.47 |
| 18 | BLD/PBH02/18 | 20.00 | 21.00 | 1.00 | 2.03 | <0.05 | 46.45 | <0.05 | 4.51 | 6.45 | 0.09 | 1.79 | 0.40 | <0.08 | 0.17 | 1.32 | 0.06 | 3.35 | <0.05 | <0.05 | 37.86 |
| 19 | BLD/PBH02/19 | 21.00 | 22.00 | 1.00 | 2.70 | <0.05 | 44.04 | <0.05 | 5.68 | 8.13 | 0.16 | 1.92 | 0.27 | <0.08 | 0.20 | 1.86 | 0.10 | 4.70 | <0.05 | <0.05 | 35.90 |
| 20 | BLD/PBH02/20 | 22.00 | 23.00 | 1.00 | 3.16 | <0.05 | 39.69 | <0.05 | 10.36 | 14.81 | 0.18 | 2.14 | 0.18 | <0.08 | 0.35 | 1.66 | 0.14 | 4.96 | <0.05 | <0.05 | 32.71 |
| 21 | BLD/PBH02/21 | 23.00 | 24.00 | 1.00 | 4.76 | <0.05 | 34.67 | 0.08 | 12.98 | 18.56 | 0.28 | 2.64 | 0.16 | <0.08 | 0.37 | 1.26 | 0.18 | 6.98 | <0.05 | <0.05 | 30.06 |
| 22 | BLD/PBH02/22 | 24.00 | 25.00 | 1.00 | 4.18 | <0.05 | 37.64 | <0.05 | 10.67 | 15.25 | 0.26 | 2.35 | 0.15 | <0.08 | 0.34 | 1.68 | 0.16 | 6.15 | <0.05 | <0.05 | 31.81 |
| 23 | BLD/PBH02/23 | 25.00 | 26.00 | 1.00 | 2.99 | <0.05 | 42.37 | <0.05 | 8.09 | 11.57 | 0.18 | 1.90 | 0.11 | <0.08 | 0.32 | 1.29 | 0.11 | 4.18 | <0.05 | <0.05 | 34.95 |
| 24 | BLD/PBH02/24 | 26.00 | 27.00 | 1.00 | 2.28 | <0.05 | 48.38 | <0.05 | 2.00 | 2.86 | 0.18 | 1.41 | 0.12 | <0.08 | 0.08 | 1.29 | 0.11 | 3.96 | <0.05 | <0.05 | 39.32 |
| 25 | BLD/PBH02/25 | 27.00 | 28.00 | 1.00 | 3.72 | <0.05 | 43.29 | <0.05 | 4.30 | 6.15 | 0.36 | 1.85 | 0.10 | <0.08 | 0.16 | 1.64 | 0.18 | 6.63 | <0.05 | <0.05 | 35.91 |
| 26 | BLD/PBH02/26 | 28.00 | 29.00 | 1.00 | 4.65 | <0.05 | 40.48 | <0.05 | 5.60 | 8.01 | 0.44 | 2.26 | 0.10 | <0.08 | 0.25 | 1.21 | 0.22 | 7.87 | <0.05 | <0.05 | 34.50 |
| 27 | BLD/PBH02/27 | 29.00 | 30.40 | 1.40 | 6.11 | <0.05 | 34.81 | <0.05 | 6.73 | 9.62 | 0.63 | 3.43 | 0.06 | <0.08 | 0.35 | 1.02 | 0.30 | 11.78 | <0.05 | <0.05 | 31.86 |
| 28 | BLD/PBH02/28 | 30.40 | 31.62 | 1.22 | 5.40 | <0.05 | 37.72 | <0.05 | 6.20 | 8.86 | 0.53 | 2.53 | 0.06 | <0.08 | 0.31 | 0.83 | 0.25 | 10.76 | <0.05 | <0.05 | 32.73 |
| 29 | BLD/PBH02/29 | 31.62 | 33.00 | 1.38 | 22.28 | <0.05 | 0.63 | <0.05 | 8.42 | 12.05 | 3.03 | 3.35 | <0.05 | 0.46 | 0.58 | 0.94 | 1.03 | 47.45 | <0.05 | <0.05 | 8.17 |
| 30 | BLD/PBH02/30 | 33.00 | 34.00 | 1.00 | 22.24 | <0.05 | 0.98 | <0.05 | 8.46 | 12.09 | 2.95 | 3.37 | <0.05 | 0.37 | 0.43 | 1.28 | 1.04 | 47.10 | <0.05 | <0.05 | 8.12 |
| 31 | BLD/PBH02/31 | 34.00 | 34.70 | 0.70 | 21.68 | <0.05 | 0.51 | <0.05 | 9.02 | 12.90 | 2.81 | 3.45 | <0.05 | 0.30 | 0.12 | 1.74 | 1.02 | 46.92 | <0.05 | <0.05 | 8.54 |
| 32 | BLD/PBH02/32 | 34.70 | 36.00 | 1.30 | 11.19 | <0.05 | 24.50 | <0.05 | 7.22 | 10.32 | 1.36 | 2.87 | <0.05 | <0.08 | 0.19 | 0.91 | 0.52 | 24.33 | <0.05 | <0.05 | 23.71 |

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| **ANNEXURE IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-02** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 33 | BLD/PBH02/33 | 36.00 | 37.00 | 1.00 | 4.66 | <0.05 | 40.59 | <0.05 | 3.98 | 5.68 | 0.49 | 2.35 | 0.06 | <0.08 | 0.14 | 1.00 | 0.21 | 10.15 | <0.05 | <0.05 | 34.64 |
| 34 | BLD/PBH02/34 | 37.00 | 38.00 | 1.00 | 4.86 | <0.05 | 41.15 | <0.05 | 2.79 | 4.00 | 0.53 | 2.53 | <0.05 | <0.08 | 0.09 | 0.81 | 0.21 | 10.69 | <0.05 | <0.05 | 35.06 |
| 35 | BLD/PBH02/35 | 38.00 | 39.00 | 1.00 | 3.98 | <0.05 | 42.67 | <0.05 | 2.29 | 3.28 | 0.37 | 2.95 | <0.05 | <0.08 | 0.07 | 1.13 | 0.15 | 8.95 | <0.05 | <0.05 | 36.40 |
| 36 | BLD/PBH02/36 | 39.00 | 40.00 | 1.00 | 2.59 | <0.05 | 46.87 | <0.05 | 1.76 | 2.52 | 0.23 | 2.50 | <0.05 | <0.08 | 0.05 | 0.81 | 0.10 | 5.65 | <0.05 | <0.05 | 38.61 |
| 37 | BLD/PBH02/37 | 40.00 | 41.00 | 1.00 | 2.61 | <0.05 | 45.26 | <0.05 | 2.12 | 3.04 | 0.21 | 3.08 | 0.11 | <0.08 | 0.07 | 1.32 | 0.09 | 5.20 | <0.05 | <0.05 | 38.99 |
| 38 | BLD/PBH02/38 | 41.00 | 42.00 | 1.00 | 2.99 | <0.05 | 45.14 | <0.05 | 2.52 | 3.60 | 0.25 | 2.39 | 0.20 | <0.08 | 0.07 | 1.78 | 0.10 | 5.71 | <0.05 | <0.05 | 37.73 |
| 39 | BLD/PBH02/39 | 42.00 | 43.00 | 1.00 | 2.26 | <0.05 | 46.60 | <0.05 | 2.49 | 3.56 | 0.16 | 2.21 | 0.30 | <0.08 | 0.08 | 2.02 | 0.08 | 4.26 | <0.05 | <0.05 | 38.45 |
| 40 | BLD/PBH02/40 | 43.00 | 44.00 | 1.00 | 2.76 | <0.05 | 45.19 | <0.05 | 3.02 | 4.32 | 0.20 | 2.76 | 0.29 | <0.08 | 0.10 | 1.68 | 0.09 | 4.61 | <0.05 | <0.05 | 37.99 |
| 41 | BLD/PBH02/41 | 44.00 | 45.00 | 1.00 | 1.76 | <0.05 | 49.38 | <0.05 | 1.52 | 2.17 | 0.13 | 1.57 | 0.22 | <0.08 | 0.06 | 1.31 | 0.07 | 3.19 | <0.05 | <0.05 | 40.12 |
| 42 | BLD/PBH02/42 | 45.00 | 46.00 | 1.00 | 1.81 | <0.05 | 48.63 | <0.05 | 1.71 | 2.44 | 0.15 | 1.67 | 0.20 | <0.08 | 0.06 | 1.59 | 0.08 | 3.67 | <0.05 | <0.05 | 39.69 |
| 43 | BLD/PBH02/43 | 46.00 | 47.00 | 1.00 | 2.12 | <0.05 | 48.19 | <0.05 | 1.73 | 2.48 | 0.14 | 1.80 | 0.15 | <0.08 | 0.06 | 1.66 | 0.08 | 3.63 | <0.05 | <0.05 | 39.68 |
| 44 | BLD/PBH02/44 | 47.00 | 48.00 | 1.00 | 3.22 | <0.05 | 43.62 | <0.05 | 3.24 | 4.63 | 0.31 | 2.99 | 0.12 | <0.08 | 0.15 | 0.74 | 0.16 | 6.24 | <0.05 | <0.05 | 37.78 |
| 45 | BLD/PBH02/45 | 48.00 | 49.00 | 1.00 | 3.71 | <0.05 | 42.36 | <0.05 | 4.21 | 6.03 | 0.35 | 2.91 | 0.17 | <0.08 | 0.14 | 0.75 | 0.17 | 7.05 | <0.05 | <0.05 | 36.36 |
| 46 | BLD/PBH02/46 | 49.00 | 50.00 | 1.00 | 3.42 | <0.05 | 42.46 | <0.05 | 4.23 | 6.05 | 0.32 | 3.43 | 0.06 | <0.08 | 0.30 | 0.67 | 0.15 | 5.98 | <0.05 | <0.05 | 37.14 |
| 47 | BLD/PBH02/47 | 50.00 | 51.00 | 1.00 | 3.89 | <0.05 | 42.30 | <0.05 | 4.00 | 5.71 | 0.36 | 2.85 | <0.05 | <0.08 | 0.24 | 0.70 | 0.18 | 7.03 | <0.05 | <0.05 | 36.72 |
| 48 | BLD/PBH02/48 | 51.00 | 52.00 | 1.00 | 4.60 | <0.05 | 40.07 | <0.05 | 2.35 | 3.35 | 0.50 | 4.00 | <0.05 | <0.08 | 0.08 | 0.50 | 0.22 | 9.74 | <0.05 | <0.05 | 36.90 |
| 49 | BLD/PBH02/49 | 52.00 | 53.00 | 1.00 | 5.01 | <0.05 | 38.36 | <0.05 | 3.97 | 5.68 | 0.53 | 3.83 | <0.05 | <0.08 | 0.16 | 0.61 | 0.24 | 10.27 | <0.05 | <0.05 | 35.28 |
| 50 | BLD/PBH02/50 | 53.00 | 54.00 | 1.00 | 4.73 | <0.05 | 40.36 | <0.05 | 4.59 | 6.56 | 0.44 | 2.82 | <0.05 | <0.08 | 0.20 | 0.60 | 0.22 | 8.90 | <0.05 | <0.05 | 35.16 |
| 51 | BLD/PBH02/51 | 54.00 | 55.00 | 1.00 | 3.14 | <0.05 | 44.85 | <0.05 | 1.71 | 2.45 | 0.29 | 2.89 | <0.05 | <0.08 | 0.09 | 0.82 | 0.14 | 6.45 | <0.05 | <0.05 | 38.85 |
| 52 | BLD/PBH02/52 | 55.00 | 56.00 | 1.00 | 5.56 | <0.05 | 38.92 | <0.05 | 3.63 | 5.19 | 0.52 | 3.32 | <0.05 | <0.08 | 0.15 | 0.87 | 0.26 | 10.45 | <0.05 | <0.05 | 34.76 |
| 53 | BLD/PBH02/53 | 56.00 | 57.00 | 1.00 | 3.06 | <0.05 | 45.68 | <0.05 | 1.91 | 2.73 | 0.27 | 2.29 | <0.05 | <0.08 | 0.12 | 1.09 | 0.13 | 5.52 | <0.05 | <0.05 | 39.09 |
| 54 | BLD/PBH02/54 | 57.00 | 58.00 | 1.00 | 3.50 | <0.05 | 44.60 | <0.05 | 3.15 | 4.50 | 0.26 | 2.15 | <0.05 | <0.08 | 0.15 | 1.41 | 0.13 | 5.72 | <0.05 | <0.05 | 37.56 |
| 55 | BLD/PBH02/55 | 58.00 | 59.00 | 1.00 | 2.60 | <0.05 | 47.01 | <0.05 | 2.10 | 3.00 | 0.19 | 1.96 | <0.05 | <0.08 | 0.10 | 1.43 | 0.09 | 4.85 | <0.05 | <0.05 | 38.76 |
| 56 | BLD/PBH02/56 | 59.00 | 60.00 | 1.00 | 3.28 | <0.05 | 45.74 | <0.05 | 2.18 | 3.11 | 0.22 | 1.89 | <0.05 | <0.08 | 0.10 | 1.81 | 0.11 | 5.64 | <0.05 | <0.05 | 38.07 |
| 57 | BLD/PBH02/57 | 60.00 | 61.00 | 1.00 | 2.47 | <0.05 | 47.89 | <0.05 | 1.72 | 2.47 | 0.17 | 1.68 | <0.05 | <0.08 | 0.12 | 1.72 | 0.09 | 4.37 | <0.05 | <0.05 | 38.99 |
| 58 | BLD/PBH02/58 | 61.00 | 62.00 | 1.00 | 2.78 | <0.05 | 48.00 | <0.05 | 1.03 | 1.47 | 0.23 | 1.53 | <0.05 | <0.08 | <0.05 | 0.93 | 0.12 | 5.00 | <0.05 | <0.05 | 39.87 |
| 59 | BLD/PBH02/59 | 62.00 | 63.00 | 1.00 | 3.16 | <0.05 | 46.89 | <0.05 | 1.49 | 2.13 | 0.24 | 1.72 | <0.05 | <0.08 | 0.06 | 1.22 | 0.13 | 5.46 | <0.05 | <0.05 | 38.96 |
| 60 | BLD/PBH02/60 | 63.00 | 64.00 | 1.00 | 3.44 | <0.05 | 46.40 | <0.05 | 1.36 | 1.95 | 0.29 | 1.67 | <0.05 | <0.08 | <0.05 | 1.32 | 0.15 | 6.07 | <0.05 | <0.05 | 38.65 |
| 61 | BLD/PBH02/61 | 64.00 | 65.00 | 1.00 | 2.94 | <0.05 | 48.09 | <0.05 | 1.16 | 1.66 | 0.19 | 1.62 | <0.05 | <0.08 | <0.05 | 1.01 | 0.11 | 4.84 | <0.05 | <0.05 | 39.48 |
| 62 | BLD/PBH02/62 | 65.00 | 66.00 | 1.00 | 1.72 | <0.05 | 50.26 | <0.05 | 1.09 | 1.55 | 0.10 | 1.57 | <0.05 | <0.08 | 0.06 | 0.79 | 0.06 | 3.13 | <0.05 | <0.05 | 40.72 |
| 63 | BLD/PBH02/63 | 66.00 | 67.00 | 1.00 | 1.17 | <0.05 | 52.02 | <0.05 | 0.78 | 1.12 | <0.05 | 1.23 | <0.05 | <0.08 | <0.05 | 0.50 | <0.05 | 1.84 | <0.05 | <0.05 | 41.96 |
| 64 | BLD/PBH02/64 | 67.00 | 68.00 | 1.00 | 0.93 | <0.05 | 52.60 | <0.05 | 0.65 | 0.93 | <0.05 | 1.14 | <0.05 | <0.08 | 0.05 | 0.73 | <0.05 | 1.49 | <0.05 | <0.05 | 42.02 |

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| **ANNEXURE IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-02** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 65 | BLD/PBH02/65 | 68.00 | 69.00 | 1.00 | 1.46 | <0.05 | 51.92 | <0.05 | 0.62 | 0.88 | 0.07 | 1.15 | <0.05 | <0.08 | <0.05 | 0.65 | <0.05 | 1.86 | <0.05 | <0.05 | 41.89 |
| 66 | BLD/PBH02/66 | 69.00 | 70.00 | 1.00 | 1.11 | <0.05 | 52.25 | <0.05 | 0.56 | 0.80 | 0.09 | 1.09 | <0.05 | <0.08 | 0.05 | 0.67 | <0.05 | 2.04 | <0.05 | <0.05 | 41.83 |
| 67 | BLD/PBH02/67 | 70.00 | 71.00 | 1.00 | 1.40 | <0.05 | 52.00 | <0.05 | 0.60 | 0.86 | 0.09 | 1.10 | <0.05 | <0.08 | 0.06 | 0.69 | <0.05 | 1.98 | <0.05 | <0.05 | 41.74 |
| 68 | BLD/PBH02/68 | 71.00 | 72.00 | 1.00 | 1.91 | <0.05 | 50.59 | <0.05 | 0.80 | 1.14 | 0.14 | 1.29 | <0.05 | <0.08 | <0.05 | 0.81 | 0.07 | 2.94 | <0.05 | <0.05 | 41.04 |
| 69 | BLD/PBH02/69 | 72.00 | 73.00 | 1.00 | 2.00 | <0.05 | 50.48 | 0.06 | 0.72 | 1.03 | 0.15 | 1.24 | <0.05 | <0.08 | <0.05 | 0.66 | 0.06 | 3.01 | <0.05 | <0.05 | 41.25 |
| 70 | BLD/PBH02/70 | 73.00 | 74.00 | 1.00 | 2.32 | <0.05 | 49.43 | <0.05 | 0.94 | 1.34 | 0.18 | 1.33 | <0.05 | <0.08 | 0.06 | 0.96 | 0.08 | 3.72 | <0.05 | <0.05 | 40.54 |
| 71 | BLD/PBH02/71 | 74.00 | 75.00 | 1.00 | 1.86 | <0.05 | 50.47 | <0.05 | 0.87 | 1.24 | 0.14 | 1.36 | <0.05 | <0.08 | 0.06 | 0.85 | 0.06 | 2.88 | <0.05 | <0.05 | 41.04 |
| 72 | BLD/PBH02/72 | 75.00 | 76.00 | 1.00 | 1.54 | <0.05 | 51.37 | <0.05 | 0.65 | 0.94 | 0.13 | 1.24 | <0.05 | <0.08 | <0.05 | 0.57 | 0.05 | 2.45 | <0.05 | <0.05 | 41.64 |
| 73 | BLD/PBH02/73 | 76.00 | 77.00 | 1.00 | 2.07 | <0.05 | 50.01 | <0.05 | 0.93 | 1.33 | 0.16 | 1.38 | <0.05 | <0.08 | <0.05 | 0.80 | 0.06 | 3.27 | <0.05 | <0.05 | 40.84 |
| 74 | BLD/PBH02/74 | 77.00 | 78.00 | 1.00 | 1.60 | <0.05 | 50.85 | <0.05 | 1.04 | 1.48 | 0.10 | 1.33 | <0.05 | <0.08 | 0.05 | 1.02 | <0.05 | 2.36 | <0.05 | <0.05 | 41.13 |
| 75 | BLD/PBH02/75 | 78.00 | 79.00 | 1.00 | 1.74 | <0.05 | 50.36 | <0.05 | 1.07 | 1.53 | 0.14 | 1.36 | <0.05 | <0.08 | 0.06 | 1.04 | 0.06 | 2.92 | <0.05 | <0.05 | 40.78 |
| 76 | BLD/PBH02/76 | 79.00 | 80.00 | 1.00 | 1.28 | <0.05 | 51.97 | <0.05 | 0.66 | 0.94 | 0.11 | 1.19 | <0.05 | <0.08 | <0.05 | 0.59 | <0.05 | 2.35 | <0.05 | <0.05 | 41.47 |
| 77 | BLD/PBH02/77 | 80.00 | 81.00 | 1.00 | 1.10 | <0.05 | 52.19 | <0.05 | 0.64 | 0.91 | 0.09 | 1.19 | <0.05 | <0.08 | <0.05 | 0.51 | <0.05 | 1.96 | <0.05 | <0.05 | 41.94 |
| 78 | BLD/PBH02/78 | 81.00 | 82.00 | 1.00 | 1.43 | <0.05 | 51.07 | <0.05 | 0.88 | 1.27 | 0.11 | 1.34 | <0.05 | <0.08 | <0.05 | 0.72 | 0.05 | 2.76 | <0.05 | <0.05 | 41.17 |
| 79 | BLD/PBH02/79 | 82.00 | 83.00 | 1.00 | 1.45 | <0.05 | 51.60 | <0.05 | 0.60 | 0.85 | 0.11 | 1.21 | <0.05 | <0.08 | <0.05 | 0.54 | <0.05 | 2.36 | <0.05 | <0.05 | 41.77 |
| 80 | BLD/PBH02/80 | 83.00 | 84.00 | 1.00 | 1.89 | <0.05 | 50.90 | <0.05 | 0.56 | 0.80 | 0.14 | 1.25 | <0.05 | <0.08 | <0.05 | 0.44 | 0.07 | 2.93 | <0.05 | <0.05 | 41.52 |
| 81 | BLD/PBH02/81 | 84.00 | 85.00 | 1.00 | 2.23 | <0.05 | 49.64 | <0.05 | 0.94 | 1.35 | 0.17 | 1.45 | <0.05 | <0.08 | <0.05 | 0.66 | 0.08 | 3.95 | <0.05 | <0.05 | 40.43 |
| 82 | BLD/PBH02/82 | 85.00 | 86.00 | 1.00 | 2.03 | <0.05 | 50.04 | <0.05 | 1.03 | 1.47 | 0.15 | 1.48 | <0.05 | <0.08 | <0.05 | 0.67 | 0.06 | 3.54 | <0.05 | <0.05 | 40.48 |
| 83 | BLD/PBH02/83 | 86.00 | 87.00 | 1.00 | 2.16 | <0.05 | 49.60 | <0.05 | 1.20 | 1.72 | 0.17 | 1.54 | <0.05 | <0.08 | <0.05 | 0.68 | 0.06 | 3.92 | <0.05 | <0.05 | 40.07 |
| 84 | BLD/PBH02/84 | 87.00 | 88.00 | 1.00 | 2.50 | <0.05 | 48.57 | <0.05 | 1.31 | 1.88 | 0.23 | 1.59 | <0.05 | <0.08 | <0.05 | 0.81 | 0.08 | 4.67 | <0.05 | <0.05 | 39.60 |
| 85 | BLD/PBH02/85 | 88.00 | 89.00 | 1.00 | 2.70 | <0.05 | 47.90 | <0.05 | 1.44 | 2.06 | 0.20 | 1.62 | <0.05 | <0.08 | <0.05 | 1.04 | 0.08 | 4.52 | <0.05 | <0.05 | 39.81 |
| 86 | BLD/PBH02/86 | 89.00 | 90.00 | 1.00 | 2.60 | <0.05 | 47.31 | <0.05 | 1.77 | 2.53 | 0.21 | 1.69 | <0.05 | <0.08 | 0.07 | 1.28 | 0.10 | 5.01 | <0.05 | <0.05 | 39.18 |
| 87 | BLD/PBH02/87 | 90.00 | 91.00 | 1.00 | 2.69 | <0.05 | 47.28 | <0.05 | 1.67 | 2.39 | 0.25 | 1.64 | <0.05 | <0.08 | 0.07 | 1.02 | 0.11 | 5.56 | <0.05 | <0.05 | 38.98 |
| 88 | BLD/PBH02/88 | 91.00 | 92.00 | 1.00 | 3.51 | <0.05 | 45.68 | <0.05 | 1.70 | 2.43 | 0.32 | 1.67 | <0.05 | <0.08 | 0.05 | 1.04 | 0.15 | 6.80 | <0.05 | <0.05 | 38.34 |
| 89 | BLD/PBH02/89 | 92.00 | 93.00 | 1.00 | 3.21 | <0.05 | 46.19 | <0.05 | 2.12 | 3.03 | 0.27 | 1.55 | <0.05 | <0.08 | 0.07 | 1.36 | 0.13 | 5.57 | <0.05 | <0.05 | 38.59 |
| 90 | BLD/PBH02/90 | 93.00 | 94.00 | 1.00 | 3.35 | <0.05 | 45.73 | <0.05 | 2.69 | 3.84 | 0.30 | 1.49 | <0.05 | <0.08 | 0.08 | 1.35 | 0.15 | 5.62 | <0.05 | <0.05 | 38.07 |
| 91 | BLD/PBH02/91 | 94.00 | 95.00 | 1.00 | 3.78 | <0.05 | 45.11 | <0.05 | 2.31 | 3.31 | 0.33 | 1.45 | <0.05 | <0.08 | 0.07 | 1.61 | 0.17 | 6.51 | <0.05 | <0.05 | 37.65 |
| 92 | BLD/PBH02/92 | 95.00 | 96.00 | 1.00 | 3.35 | <0.05 | 45.99 | <0.05 | 1.86 | 2.65 | 0.26 | 1.48 | <0.05 | <0.08 | <0.05 | 1.30 | 0.14 | 6.13 | <0.05 | <0.05 | 38.63 |
| 93 | BLD/PBH02/93 | 96.00 | 97.00 | 1.00 | 3.62 | <0.05 | 44.86 | <0.05 | 2.32 | 3.31 | 0.26 | 1.70 | <0.05 | <0.08 | 0.08 | 1.35 | 0.15 | 7.14 | <0.05 | <0.05 | 37.48 |
| 94 | BLD/PBH02/94 | 97.00 | 98.00 | 1.00 | 10.49 | <0.05 | 25.79 | <0.05 | 3.54 | 5.07 | 1.12 | 1.68 | <0.05 | <0.08 | 0.05 | 2.68 | 0.96 | 26.61 | <0.05 | <0.05 | 25.53 |
| 95 | BLD/PBH02/95 | 98.00 | 99.12 | 1.12 | 13.12 | <0.05 | 21.55 | <0.05 | 3.85 | 5.50 | 1.33 | 1.65 | <0.05 | <0.08 | <0.05 | 2.80 | 1.12 | 30.44 | <0.05 | <0.05 | 22.44 |
| 96 | BLD/PBH02/96 | 99.12 | 100.00 | 0.88 | 5.27 | <0.05 | 42.27 | <0.05 | 1.75 | 2.50 | 0.47 | 1.24 | <0.05 | <0.08 | 0.08 | 1.12 | 0.34 | 10.53 | <0.05 | <0.05 | 36.16 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-03** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 1 | BLD/PBH03/01 | 14.00 | 15.00 | 1.00 | 18.34 | <0.05 | 2.22 | <0.05 | 7.85 | 11.23 | 2.68 | 2.27 | 0.06 | <0.08 | 0.44 | 2.13 | 1.09 | 48.33 | <0.05 | <0.05 | 11.01 |
| 2 | BLD/PBH03/02 | 15.00 | 15.70 | 0.70 | 20.13 | <0.05 | 1.51 | <0.05 | 6.79 | 9.70 | 3.01 | 2.37 | <0.05 | <0.08 | 0.14 | 1.42 | 1.17 | 50.81 | <0.05 | <0.05 | 9.52 |
| 3 | BLD/PBH03/03 | 15.70 | 17.00 | 1.30 | 3.99 | <0.05 | 36.05 | <0.05 | 9.43 | 13.48 | 0.39 | 2.26 | 0.67 | <0.08 | 0.22 | 0.38 | 0.20 | 8.52 | 0.10 | <0.05 | 33.61 |
| 4 | BLD/PBH03/04 | 17.00 | 18.00 | 1.00 | 5.02 | <0.05 | 31.65 | <0.05 | 11.16 | 15.96 | 0.53 | 2.54 | 1.47 | <0.08 | 0.21 | 2.61 | 0.24 | 10.18 | 0.07 | <0.05 | 29.33 |
| 5 | BLD/PBH03/05 | 18.00 | 19.00 | 1.00 | 2.25 | <0.05 | 40.32 | <0.05 | 8.40 | 12.02 | 0.11 | 2.27 | 1.38 | <0.08 | 0.17 | 1.63 | 0.08 | 3.55 | 0.09 | <0.05 | 35.97 |
| 6 | BLD/PBH03/06 | 19.00 | 20.00 | 1.00 | 2.18 | <0.05 | 40.91 | <0.05 | 7.61 | 10.88 | 0.09 | 2.62 | 1.48 | <0.08 | 0.09 | 1.41 | 0.07 | 3.10 | 0.10 | <0.05 | 36.88 |
| 7 | BLD/PBH03/07 | 20.00 | 21.00 | 1.00 | 3.21 | <0.05 | 36.13 | <0.05 | 11.70 | 16.73 | 0.14 | 2.52 | 1.22 | <0.08 | 0.16 | 1.09 | 0.11 | 4.79 | 0.08 | <0.05 | 33.61 |
| 8 | BLD/PBH03/08 | 21.00 | 22.00 | 1.00 | 4.38 | <0.05 | 33.85 | <0.05 | 11.23 | 16.06 | 0.31 | 2.98 | 1.21 | <0.08 | 0.17 | 0.85 | 0.17 | 7.11 | 0.08 | 0.05 | 32.64 |
| 9 | BLD/PBH03/09 | 22.00 | 23.00 | 1.00 | 2.86 | <0.05 | 39.56 | <0.05 | 7.33 | 10.48 | 0.18 | 2.40 | 0.91 | <0.08 | 0.11 | 1.39 | 0.11 | 6.66 | 0.08 | <0.05 | 35.12 |
| 10 | BLD/PBH03/10 | 23.00 | 24.00 | 1.00 | 3.59 | <0.05 | 37.85 | <0.05 | 8.32 | 11.90 | 0.27 | 2.35 | 0.63 | <0.08 | 0.23 | 3.30 | 0.15 | 6.14 | 0.08 | <0.05 | 33.28 |
| 11 | BLD/PBH03/11 | 24.00 | 25.00 | 1.00 | 2.98 | <0.05 | 42.60 | <0.05 | 5.43 | 7.76 | 0.21 | 1.81 | 0.46 | <0.08 | 0.16 | 2.31 | 0.12 | 5.07 | 0.08 | <0.05 | 36.32 |
| 12 | BLD/PBH03/12 | 25.00 | 26.00 | 1.00 | 2.25 | <0.05 | 46.13 | <0.05 | 3.12 | 4.47 | 0.14 | 1.40 | 0.45 | <0.08 | <0.05 | 2.27 | 0.08 | 3.58 | 0.08 | <0.05 | 39.04 |
| 13 | BLD/PBH03/13 | 26.00 | 27.00 | 1.00 | 1.93 | <0.05 | 47.64 | <0.05 | 2.34 | 3.35 | 0.13 | 1.25 | 0.36 | <0.08 | <0.05 | 2.39 | 0.08 | 2.91 | 0.07 | <0.05 | 39.77 |
| 14 | BLD/PBH03/14 | 27.00 | 28.00 | 1.00 | 2.62 | <0.05 | 44.82 | <0.05 | 3.38 | 4.83 | 0.16 | 1.53 | 0.34 | <0.08 | <0.05 | 3.08 | 0.10 | 4.61 | 0.07 | <0.05 | 37.71 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-03** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 15 | BLD/PBH03/15 | 28.00 | 29.00 | 1.00 | 2.51 | <0.05 | 44.64 | <0.05 | 3.81 | 5.45 | 0.15 | 1.77 | 0.38 | <0.08 | <0.05 | 2.57 | 0.10 | 4.60 | 0.07 | <0.05 | 37.64 |
| 16 | BLD/PBH03/16 | 29.00 | 30.00 | 1.00 | 2.72 | <0.05 | 44.01 | <0.05 | 4.48 | 6.41 | 0.12 | 1.82 | 0.38 | <0.08 | <0.05 | 2.36 | 0.09 | 4.44 | 0.06 | <0.05 | 37.44 |
| 17 | BLD/PBH03/17 | 30.00 | 31.00 | 1.00 | 2.71 | <0.05 | 42.73 | <0.05 | 5.47 | 7.82 | 0.16 | 2.01 | 0.40 | <0.08 | 0.05 | 2.44 | 0.10 | 5.08 | 0.07 | <0.05 | 36.31 |
| 18 | BLD/PBH03/18 | 31.00 | 32.00 | 1.00 | 2.25 | <0.05 | 43.65 | <0.05 | 6.33 | 9.05 | 0.11 | 1.68 | 0.42 | <0.08 | 0.09 | 1.45 | 0.08 | 3.90 | 0.06 | <0.05 | 37.14 |
| 19 | BLD/PBH03/19 | 32.00 | 33.00 | 1.00 | 2.51 | <0.05 | 43.73 | <0.05 | 5.69 | 8.13 | 0.13 | 1.57 | 0.29 | <0.08 | 0.09 | 2.06 | 0.09 | 4.16 | 0.06 | <0.05 | 37.06 |
| 20 | BLD/PBH03/20 | 33.00 | 34.00 | 1.00 | 3.38 | <0.05 | 34.96 | <0.05 | 13.84 | 19.78 | 0.20 | 1.97 | 0.24 | <0.08 | 0.23 | 1.56 | 0.13 | 5.64 | 0.06 | 0.05 | 31.70 |
| 21 | BLD/PBH03/21 | 34.00 | 35.00 | 1.00 | 3.91 | <0.05 | 33.86 | <0.05 | 13.81 | 19.74 | 0.26 | 2.16 | 0.28 | <0.08 | 0.29 | 1.31 | 0.16 | 6.49 | 0.06 | 0.05 | 31.33 |
| 22 | BLD/PBH03/22 | 35.00 | 36.00 | 1.00 | 3.58 | <0.05 | 36.60 | <0.05 | 11.63 | 16.63 | 0.23 | 1.95 | 0.19 | <0.08 | 0.22 | 1.58 | 0.14 | 5.64 | 0.06 | <0.05 | 33.05 |
| 23 | BLD/PBH03/23 | 36.00 | 37.00 | 1.00 | 2.19 | <0.05 | 45.13 | <0.05 | 5.59 | 7.99 | 0.15 | 1.40 | 0.17 | <0.08 | 0.11 | 0.93 | 0.09 | 3.55 | 0.07 | <0.05 | 38.12 |
| 24 | BLD/PBH03/24 | 37.00 | 38.00 | 1.00 | 2.89 | <0.05 | 45.45 | <0.05 | 3.31 | 4.74 | 0.23 | 1.36 | 0.10 | <0.08 | <0.05 | 1.89 | 0.13 | 4.71 | 0.07 | <0.05 | 38.30 |
| 25 | BLD/PBH03/25 | 38.00 | 39.00 | 1.00 | 3.82 | <0.05 | 41.73 | <0.05 | 5.55 | 7.94 | 0.37 | 1.75 | 0.15 | <0.08 | 0.11 | 1.40 | 0.19 | 6.71 | 0.08 | <0.05 | 35.63 |
| 26 | BLD/PBH03/26 | 39.00 | 40.00 | 1.00 | 5.21 | <0.05 | 37.45 | <0.05 | 6.53 | 9.34 | 0.55 | 2.37 | 0.11 | <0.08 | 0.18 | 1.28 | 0.27 | 9.44 | 0.07 | <0.05 | 33.60 |
| 27 | BLD/PBH03/27 | 40.00 | 41.00 | 1.00 | 5.46 | <0.05 | 34.14 | <0.05 | 7.78 | 11.12 | 0.60 | 3.10 | 0.08 | <0.08 | 0.23 | 0.93 | 0.29 | 11.40 | 0.08 | <0.05 | 32.42 |
| 28 | BLD/PBH03/28 | 41.00 | 42.26 | 1.26 | 4.92 | <0.05 | 37.31 | <0.05 | 6.55 | 9.37 | 0.50 | 2.21 | 0.06 | <0.08 | 0.19 | 0.78 | 0.24 | 10.17 | 0.08 | <0.05 | 34.03 |
| 29 | BLD/PBH03/29 | 42.26 | 43.00 | 0.74 | 17.05 | <0.05 | 1.23 | <0.05 | 14.51 | 20.74 | 3.73 | 2.46 | <0.05 | 0.27 | 0.14 | 1.16 | 1.35 | 43.03 | 0.12 | <0.05 | 8.50 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-03** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 30 | BLD/PBH03/30 | 43.00 | 44.20 | 1.20 | 21.64 | <0.05 | 0.74 | <0.05 | 8.04 | 11.49 | 3.21 | 2.96 | <0.05 | 0.54 | 0.12 | 1.26 | 1.03 | 47.71 | <0.05 | <0.05 | 9.13 |
| 31 | BLD/PBH03/31 | 44.20 | 45.50 | 1.30 | 21.26 | <0.05 | 0.83 | <0.05 | 8.37 | 11.97 | 3.00 | 3.12 | <0.05 | 0.46 | 0.12 | 1.17 | 1.03 | 47.77 | <0.05 | <0.05 | 9.10 |
| 32 | BLD/PBH03/32 | 45.50 | 46.40 | 0.90 | 9.95 | <0.05 | 26.33 | <0.05 | 7.29 | 10.42 | 1.24 | 2.47 | 0.06 | 0.09 | 0.16 | 1.15 | 0.46 | 21.64 | 0.06 | <0.05 | 25.87 |
| 33 | BLD/PBH03/33 | 46.40 | 47.00 | 0.60 | 7.93 | <0.05 | 32.12 | <0.05 | 5.53 | 7.91 | 0.99 | 2.41 | <0.05 | 0.09 | 0.27 | 0.85 | 0.37 | 17.78 | 0.08 | <0.05 | 29.09 |
| 34 | BLD/PBH03/34 | 47.00 | 48.00 | 1.00 | 5.69 | <0.05 | 37.31 | <0.05 | 4.97 | 7.10 | 0.67 | 2.40 | <0.05 | <0.08 | 0.14 | 1.18 | 0.26 | 12.13 | 0.09 | <0.05 | 32.88 |
| 35 | BLD/PBH03/35 | 48.00 | 49.00 | 1.00 | 3.69 | <0.05 | 42.62 | <0.05 | 2.69 | 3.85 | 0.36 | 2.52 | <0.05 | <0.08 | <0.05 | 1.05 | 0.15 | 8.55 | 0.12 | <0.05 | 36.93 |
| 36 | BLD/PBH03/36 | 49.00 | 50.00 | 1.00 | 2.76 | <0.05 | 45.52 | <0.05 | 2.11 | 3.02 | 0.25 | 2.43 | <0.05 | <0.08 | <0.05 | 0.89 | 0.11 | 5.97 | 0.11 | <0.05 | 38.82 |
| 37 | BLD/PBH03/37 | 50.00 | 51.00 | 1.00 | 2.40 | <0.05 | 46.22 | <0.05 | 2.12 | 3.03 | 0.21 | 2.35 | 0.08 | <0.08 | <0.05 | 1.04 | 0.10 | 4.98 | 0.08 | <0.05 | 39.40 |
| 38 | BLD/PBH03/38 | 51.00 | 52.00 | 1.00 | 2.65 | <0.05 | 45.04 | <0.05 | 2.85 | 4.08 | 0.22 | 2.44 | 0.18 | <0.08 | <0.05 | 1.68 | 0.10 | 4.96 | 0.10 | <0.05 | 38.42 |
| 39 | BLD/PBH03/39 | 52.00 | 53.00 | 1.00 | 1.91 | <0.05 | 47.74 | <0.05 | 2.19 | 3.13 | 0.14 | 1.75 | 0.26 | <0.08 | <0.05 | 1.60 | 0.07 | 3.53 | 0.10 | <0.05 | 39.68 |
| 40 | BLD/PBH03/40 | 53.00 | 54.00 | 1.00 | 2.66 | <0.05 | 43.47 | <0.05 | 3.79 | 5.42 | 0.23 | 2.69 | 0.34 | <0.08 | 0.07 | 2.28 | 0.11 | 5.25 | 0.09 | <0.05 | 37.29 |
| 41 | BLD/PBH03/41 | 54.00 | 55.00 | 1.00 | 2.42 | <0.05 | 45.89 | <0.05 | 3.09 | 4.41 | 0.18 | 1.92 | 0.23 | <0.08 | <0.05 | 1.82 | 0.09 | 4.21 | 0.08 | <0.05 | 38.60 |
| 42 | BLD/PBH03/42 | 55.00 | 56.00 | 1.00 | 1.62 | <0.05 | 49.34 | <0.05 | 1.68 | 2.40 | 0.12 | 1.35 | 0.24 | <0.08 | <0.05 | 1.40 | 0.06 | 2.92 | 0.08 | <0.05 | 40.36 |
| 43 | BLD/PBH03/43 | 56.00 | 57.00 | 1.00 | 2.05 | <0.05 | 48.08 | <0.05 | 2.15 | 3.07 | 0.14 | 1.49 | 0.16 | <0.08 | <0.05 | 1.74 | 0.07 | 3.57 | 0.08 | <0.05 | 39.46 |
| 44 | BLD/PBH03/44 | 57.00 | 58.00 | 1.00 | 2.35 | <0.05 | 46.82 | <0.05 | 2.09 | 2.99 | 0.20 | 1.93 | 0.16 | <0.08 | <0.05 | 1.25 | 0.11 | 4.45 | 0.08 | <0.05 | 39.54 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-03** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 45 | BLD/PBH03/45 | 58.00 | 59.00 | 1.00 | 3.56 | <0.05 | 41.87 | <0.05 | 4.87 | 6.96 | 0.37 | 2.64 | 0.16 | <0.08 | 0.09 | 0.60 | 0.18 | 7.00 | 0.09 | <0.05 | 36.36 |
| 46 | BLD/PBH03/46 | 59.00 | 60.00 | 1.00 | 3.51 | <0.05 | 41.84 | <0.05 | 4.77 | 6.82 | 0.35 | 2.88 | 0.08 | <0.08 | 0.10 | 0.73 | 0.17 | 6.62 | 0.11 | <0.05 | 36.69 |
| 47 | BLD/PBH03/47 | 60.00 | 61.00 | 1.00 | 3.88 | <0.05 | 40.96 | <0.05 | 4.82 | 6.89 | 0.41 | 2.98 | 0.12 | <0.08 | 0.07 | 0.77 | 0.19 | 7.61 | 0.11 | <0.05 | 35.90 |
| 48 | BLD/PBH03/48 | 61.00 | 62.00 | 1.00 | 3.32 | <0.05 | 43.14 | <0.05 | 3.65 | 5.22 | 0.32 | 2.63 | <0.05 | <0.08 | <0.05 | 0.57 | 0.16 | 6.39 | 0.12 | <0.05 | 37.95 |
| 49 | BLD/PBH03/49 | 62.00 | 63.00 | 1.00 | 4.44 | <0.05 | 39.91 | <0.05 | 2.69 | 3.84 | 0.55 | 3.84 | <0.05 | <0.08 | <0.05 | 0.55 | 0.23 | 9.93 | 0.12 | <0.05 | 36.43 |
| 50 | BLD/PBH03/50 | 63.00 | 64.00 | 1.00 | 5.15 | <0.05 | 35.57 | <0.05 | 6.07 | 8.69 | 0.58 | 3.87 | <0.05 | <0.08 | 0.13 | 0.54 | 0.26 | 10.87 | 0.10 | <0.05 | 34.12 |
| 51 | BLD/PBH03/51 | 64.00 | 65.00 | 1.00 | 3.68 | <0.05 | 42.83 | <0.05 | 3.76 | 5.38 | 0.35 | 2.18 | <0.05 | <0.08 | 0.12 | 0.58 | 0.18 | 7.02 | 0.11 | <0.05 | 37.45 |
| 52 | BLD/PBH03/52 | 65.00 | 66.00 | 1.00 | 3.45 | <0.05 | 43.59 | <0.05 | 2.21 | 3.16 | 0.35 | 2.54 | <0.05 | <0.08 | <0.05 | 0.94 | 0.17 | 7.12 | 0.10 | <0.05 | 38.45 |
| 53 | BLD/PBH03/53 | 66.00 | 67.00 | 1.00 | 3.92 | <0.05 | 41.76 | <0.05 | 3.62 | 5.17 | 0.36 | 2.85 | <0.05 | <0.08 | 0.10 | 0.92 | 0.19 | 7.25 | 0.11 | <0.05 | 37.26 |
| 54 | BLD/PBH03/54 | 67.00 | 68.00 | 1.00 | 2.68 | <0.05 | 46.74 | <0.05 | 2.04 | 2.91 | 0.23 | 1.76 | <0.05 | <0.08 | <0.05 | 1.12 | 0.12 | 4.71 | 0.09 | <0.05 | 39.49 |
| 55 | BLD/PBH03/55 | 68.00 | 69.00 | 1.00 | 3.14 | <0.05 | 43.84 | <0.05 | 3.82 | 5.47 | 0.26 | 2.09 | <0.05 | <0.08 | 0.10 | 1.34 | 0.13 | 5.63 | 0.09 | <0.05 | 37.81 |
| 56 | BLD/PBH03/56 | 69.00 | 70.00 | 1.00 | 3.26 | <0.05 | 44.29 | <0.05 | 2.80 | 4.00 | 0.25 | 1.90 | <0.05 | <0.08 | <0.05 | 1.91 | 0.13 | 6.04 | 0.08 | <0.05 | 37.98 |
| 57 | BLD/PBH03/57 | 70.00 | 71.00 | 1.00 | 2.85 | <0.05 | 45.37 | <0.05 | 2.73 | 3.90 | 0.21 | 1.69 | <0.05 | <0.08 | <0.05 | 2.13 | 0.11 | 5.39 | 0.07 | <0.05 | 38.12 |
| 58 | BLD/PBH03/58 | 71.00 | 72.00 | 1.00 | 1.94 | <0.05 | 48.45 | <0.05 | 1.74 | 2.49 | 0.16 | 1.40 | <0.05 | <0.08 | <0.05 | 1.44 | 0.10 | 3.97 | 0.09 | <0.05 | 39.82 |
| 59 | BLD/PBH03/59 | 72.00 | 73.00 | 1.00 | 2.92 | <0.05 | 46.96 | <0.05 | 1.57 | 2.24 | 0.23 | 1.42 | <0.05 | <0.08 | <0.05 | 1.62 | 0.13 | 5.18 | 0.07 | <0.05 | 39.12 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-03** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 60 | BLD/PBH03/60 | 73.00 | 74.00 | 1.00 | 2.96 | <0.05 | 46.35 | <0.05 | 1.93 | 2.75 | 0.26 | 1.57 | <0.05 | <0.08 | <0.05 | 1.38 | 0.14 | 5.52 | 0.09 | <0.05 | 38.85 |
| 61 | BLD/PBH03/61 | 74.00 | 75.00 | 1.00 | 2.71 | <0.05 | 47.84 | <0.05 | 1.28 | 1.83 | 0.23 | 1.35 | <0.05 | <0.08 | <0.05 | 1.13 | 0.13 | 4.66 | 0.09 | <0.05 | 39.93 |
| 62 | BLD/PBH03/62 | 75.00 | 76.00 | 1.00 | 2.57 | <0.05 | 48.04 | <0.05 | 1.37 | 1.95 | 0.19 | 1.46 | <0.05 | <0.08 | <0.05 | 0.83 | 0.11 | 4.60 | 0.07 | <0.05 | 40.05 |
| 63 | BLD/PBH03/63 | 76.00 | 77.00 | 1.00 | 1.92 | <0.05 | 49.46 | <0.05 | 1.40 | 2.00 | 0.11 | 1.44 | <0.05 | <0.08 | <0.05 | 0.83 | 0.07 | 3.26 | 0.09 | <0.05 | 40.72 |
| 64 | BLD/PBH03/64 | 77.00 | 78.00 | 1.00 | 1.49 | <0.05 | 50.75 | <0.05 | 1.16 | 1.66 | 0.07 | 1.26 | <0.05 | <0.08 | <0.05 | 0.65 | <0.05 | 2.41 | 0.06 | <0.05 | 41.51 |
| 65 | BLD/PBH03/65 | 78.00 | 79.00 | 1.00 | 1.36 | <0.05 | 50.98 | <0.05 | 1.05 | 1.50 | 0.08 | 1.12 | <0.05 | <0.08 | <0.05 | 1.01 | <0.05 | 2.16 | 0.06 | <0.05 | 41.60 |
| 66 | BLD/PBH03/66 | 79.00 | 80.00 | 1.00 | 1.04 | <0.05 | 52.27 | <0.05 | 0.70 | 1.00 | 0.06 | 0.89 | <0.05 | <0.08 | <0.05 | 0.71 | <0.05 | 1.49 | <0.05 | <0.05 | 42.36 |
| 67 | BLD/PBH03/67 | 80.00 | 81.00 | 1.00 | 1.42 | <0.05 | 51.64 | <0.05 | 0.66 | 0.94 | 0.08 | 0.96 | <0.05 | <0.08 | <0.05 | 0.57 | <0.05 | 1.97 | <0.05 | <0.05 | 42.22 |
| 68 | BLD/PBH03/68 | 81.00 | 82.00 | 1.00 | 1.14 | <0.05 | 52.11 | <0.05 | 0.69 | 0.99 | 0.07 | 0.91 | <0.05 | <0.08 | <0.05 | 0.58 | <0.05 | 1.75 | 0.05 | <0.05 | 42.24 |
| 69 | BLD/PBH03/69 | 82.00 | 83.00 | 1.00 | 1.59 | <0.05 | 50.81 | <0.05 | 0.96 | 1.37 | 0.12 | 1.08 | <0.05 | <0.08 | <0.05 | 0.79 | 0.06 | 2.56 | 0.05 | <0.05 | 41.43 |
| 70 | BLD/PBH03/70 | 83.00 | 84.00 | 1.00 | 1.82 | <0.05 | 50.88 | <0.05 | 0.80 | 1.14 | 0.13 | 1.07 | <0.05 | <0.08 | <0.05 | 0.66 | 0.06 | 2.64 | <0.05 | <0.05 | 41.45 |
| 71 | BLD/PBH03/71 | 84.00 | 85.00 | 1.00 | 2.39 | <0.05 | 49.06 | <0.05 | 1.14 | 1.62 | 0.20 | 1.20 | <0.05 | <0.08 | <0.05 | 1.01 | 0.08 | 3.67 | <0.05 | <0.05 | 40.62 |
| 72 | BLD/PBH03/72 | 85.00 | 86.00 | 1.00 | 1.82 | <0.05 | 49.80 | <0.05 | 1.21 | 1.73 | 0.14 | 1.21 | <0.05 | <0.08 | <0.05 | 1.09 | 0.06 | 2.99 | 0.05 | <0.05 | 40.99 |
| 73 | BLD/PBH03/73 | 86.00 | 87.00 | 1.00 | 1.83 | <0.05 | 50.75 | <0.05 | 0.80 | 1.14 | 0.13 | 1.11 | <0.05 | <0.08 | <0.05 | 0.61 | 0.06 | 2.37 | <0.05 | <0.05 | 41.85 |
| 74 | BLD/PBH03/74 | 87.00 | 88.00 | 1.00 | 1.76 | <0.05 | 50.30 | <0.05 | 1.03 | 1.48 | 0.15 | 1.17 | <0.05 | <0.08 | <0.05 | 0.75 | 0.06 | 2.92 | 0.06 | <0.05 | 41.24 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-03** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 75 | BLD/PBH03/75 | 88.00 | 89.00 | 1.00 | 1.48 | <0.05 | 50.69 | <0.05 | 1.22 | 1.74 | 0.10 | 1.15 | <0.05 | <0.08 | <0.05 | 1.03 | <0.05 | 2.32 | 0.05 | <0.05 | 41.28 |
| 76 | BLD/PBH03/76 | 89.00 | 90.00 | 1.00 | 1.85 | <0.05 | 49.67 | <0.05 | 1.38 | 1.97 | 0.14 | 1.24 | <0.05 | <0.08 | <0.05 | 1.05 | 0.05 | 2.93 | 0.05 | <0.05 | 40.92 |
| 77 | BLD/PBH03/77 | 90.00 | 91.00 | 1.00 | 1.55 | <0.05 | 50.78 | <0.05 | 0.97 | 1.39 | 0.12 | 1.12 | <0.05 | <0.08 | <0.05 | 0.77 | 0.05 | 2.49 | 0.06 | <0.05 | 41.54 |
| 78 | BLD/PBH03/78 | 91.00 | 92.00 | 1.00 | 1.22 | <0.05 | 51.87 | <0.05 | 0.69 | 0.98 | 0.08 | 1.05 | <0.05 | <0.08 | <0.05 | 0.44 | <0.05 | 1.86 | 0.06 | <0.05 | 42.30 |
| 79 | BLD/PBH03/79 | 92.00 | 93.00 | 1.00 | 1.76 | <0.05 | 50.24 | <0.05 | 1.16 | 1.66 | 0.12 | 1.23 | <0.05 | <0.08 | <0.05 | 0.76 | 0.06 | 2.88 | 0.05 | <0.05 | 41.12 |
| 80 | BLD/PBH03/80 | 93.00 | 94.00 | 1.00 | 1.46 | <0.05 | 51.10 | <0.05 | 0.91 | 1.30 | 0.11 | 1.11 | <0.05 | <0.08 | <0.05 | 0.60 | <0.05 | 2.40 | 0.06 | <0.05 | 41.70 |
| 81 | BLD/PBH03/81 | 94.00 | 95.00 | 1.00 | 1.38 | 0.05 | 51.59 | <0.05 | 0.63 | 0.91 | 0.10 | 1.03 | <0.05 | <0.08 | <0.05 | 0.49 | <0.05 | 2.04 | 0.06 | <0.05 | 42.21 |
| 82 | BLD/PBH03/82 | 95.00 | 96.00 | 1.00 | 2.45 | <0.05 | 49.26 | <0.05 | 1.02 | 1.45 | 0.18 | 1.22 | <0.05 | <0.08 | <0.05 | 0.78 | 0.09 | 3.87 | 0.06 | <0.05 | 40.54 |
| 83 | BLD/PBH03/83 | 96.00 | 97.00 | 1.00 | 1.88 | <0.05 | 49.70 | <0.05 | 1.17 | 1.68 | 0.15 | 1.30 | <0.05 | <0.08 | <0.05 | 0.68 | 0.06 | 3.36 | 0.05 | <0.05 | 41.03 |
| 84 | BLD/PBH03/84 | 97.00 | 98.00 | 1.00 | 2.06 | <0.05 | 48.98 | <0.05 | 1.29 | 1.84 | 0.17 | 1.32 | <0.05 | <0.08 | <0.05 | 0.68 | 0.07 | 3.95 | 0.05 | <0.05 | 40.75 |
| 85 | BLD/PBH03/85 | 98.00 | 99.00 | 1.00 | 2.20 | <0.05 | 49.13 | <0.05 | 1.39 | 1.99 | 0.18 | 1.33 | <0.05 | <0.08 | <0.05 | 0.68 | 0.07 | 3.72 | 0.05 | <0.05 | 40.54 |
| 86 | BLD/PBH03/86 | 99.00 | 100.00 | 1.00 | 2.71 | <0.05 | 47.52 | <0.05 | 1.69 | 2.42 | 0.25 | 1.46 | <0.05 | <0.08 | <0.05 | 0.97 | 0.10 | 4.80 | 0.06 | <0.05 | 39.58 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-04** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 3 | BLD/PBH04/01 | 8.00 | 9.22 | 1.22 | 13.84 | <0.05 | 15.17 | <0.05 | 9.77 | 13.97 | 1.95 | 1.56 | 0.21 | <0.08 | 0.33 | 0.51 | 0.77 | 32.85 | <0.05 | <0.05 | 18.64 |
| 4 | BLD/PBH04/02 | 9.22 | 10.00 | 0.78 | 3.69 | <0.05 | 35.97 | <0.05 | 12.09 | 17.29 | 0.32 | 1.06 | 0.48 | <0.08 | 0.33 | 0.22 | 0.18 | 7.47 | 0.09 | <0.05 | 32.76 |
| 5 | BLD/PBH04/03 | 10.00 | 11.00 | 1.00 | 5.56 | <0.05 | 31.47 | <0.05 | 10.86 | 15.53 | 0.53 | 1.83 | 0.71 | <0.08 | 0.22 | 0.74 | 0.29 | 13.15 | 0.09 | <0.05 | 29.72 |
| 6 | BLD/PBH04/04 | 11.00 | 12.00 | 1.00 | 19.77 | <0.05 | 1.25 | <0.05 | 6.53 | 9.34 | 2.93 | 2.09 | <0.05 | <0.08 | 0.13 | 1.14 | 1.18 | 52.59 | <0.05 | <0.05 | 9.36 |
| 7 | BLD/PBH04/05 | 12.00 | 13.00 | 1.00 | 19.57 | <0.05 | 2.08 | <0.05 | 7.00 | 10.01 | 2.85 | 2.21 | <0.05 | <0.08 | 0.15 | 0.91 | 1.15 | 50.87 | <0.05 | <0.05 | 9.95 |
| 8 | BLD/PBH04/06 | 13.00 | 14.28 | 1.28 | 12.92 | <0.05 | 18.60 | <0.05 | 7.58 | 10.84 | 1.79 | 2.11 | 0.26 | <0.08 | 0.23 | 1.34 | 0.72 | 30.87 | <0.05 | <0.05 | 20.10 |
| 9 | BLD/PBH04/07 | 14.28 | 15.00 | 0.72 | 20.44 | <0.05 | 2.61 | <0.05 | 6.74 | 9.64 | 3.20 | 2.45 | <0.05 | <0.08 | 0.12 | 1.27 | 1.14 | 48.52 | <0.05 | <0.05 | 10.40 |
| 10 | BLD/PBH04/08 | 15.00 | 15.80 | 0.80 | 20.79 | <0.05 | 1.78 | <0.05 | 7.59 | 10.85 | 3.20 | 2.61 | <0.05 | <0.08 | 0.12 | 1.33 | 1.13 | 48.15 | <0.05 | <0.05 | 9.84 |
| 11 | BLD/PBH04/09 | 15.80 | 17.00 | 1.20 | 4.91 | <0.05 | 32.71 | <0.05 | 11.54 | 16.50 | 0.48 | 2.36 | 0.66 | <0.08 | 0.30 | 0.66 | 0.25 | 10.32 | 0.10 | <0.05 | 30.61 |
| 13 | BLD/PBH04/10 | 17.00 | 18.00 | 1.00 | 2.81 | <0.05 | 39.24 | <0.05 | 8.06 | 11.52 | 0.16 | 2.39 | 1.43 | <0.08 | 0.09 | 3.57 | 0.11 | 4.40 | 0.09 | <0.05 | 33.86 |
| 14 | BLD/PBH04/11 | 18.00 | 19.00 | 1.00 | 1.59 | <0.05 | 42.71 | <0.05 | 6.91 | 9.88 | 0.06 | 2.44 | 1.39 | <0.08 | 0.14 | 0.45 | 0.06 | 2.34 | 0.10 | <0.05 | 38.70 |
| 15 | BLD/PBH04/12 | 19.00 | 20.00 | 1.00 | 1.89 | <0.05 | 40.66 | <0.05 | 8.60 | 12.29 | 0.06 | 3.01 | 1.44 | <0.08 | 0.14 | 0.11 | 0.06 | 2.27 | 0.10 | <0.05 | 37.84 |
| 16 | BLD/PBH04/13 | 20.00 | 21.00 | 1.00 | 2.34 | <0.05 | 40.18 | <0.05 | 9.17 | 13.11 | 0.11 | 2.58 | 1.21 | <0.08 | 0.08 | 0.21 | 0.09 | 3.17 | 0.10 | <0.05 | 36.67 |
| 17 | BLD/PBH04/14 | 21.00 | 22.03 | 1.03 | 3.31 | <0.05 | 39.16 | <0.05 | 7.61 | 10.89 | 0.24 | 2.22 | 0.92 | <0.08 | 0.17 | 0.79 | 0.14 | 7.41 | 0.09 | <0.05 | 34.53 |
| 18 | BLD/PBH04/15 | 22.03 | 22.53 | 0.50 | 10.72 | <0.05 | 21.13 | <0.05 | 9.40 | 13.44 | 1.46 | 3.00 | 0.39 | <0.08 | 0.10 | 2.97 | 0.56 | 23.54 | <0.05 | <0.05 | 22.48 |
| 19 | BLD/PBH04/16 | 22.53 | 24.00 | 1.47 | 3.65 | <0.05 | 39.57 | <0.05 | 7.28 | 10.41 | 0.23 | 2.13 | 0.60 | <0.08 | 0.15 | 3.45 | 0.14 | 5.85 | 0.08 | <0.05 | 33.60 |
| 20 | BLD/PBH04/17 | 24.00 | 25.00 | 1.00 | 2.79 | <0.05 | 44.32 | <0.05 | 4.09 | 5.84 | 0.20 | 1.61 | 0.48 | <0.08 | 0.05 | 2.37 | 0.12 | 4.69 | 0.08 | <0.05 | 37.36 |
| 21 | BLD/PBH04/18 | 25.00 | 26.00 | 1.00 | 2.06 | <0.05 | 46.57 | <0.05 | 3.07 | 4.39 | 0.17 | 1.31 | 0.42 | <0.08 | 0.06 | 2.82 | 0.09 | 3.92 | 0.10 | <0.05 | 37.99 |
| 22 | BLD/PBH04/19 | 26.00 | 27.00 | 1.00 | 2.19 | <0.05 | 47.28 | <0.05 | 2.62 | 3.74 | 0.14 | 1.24 | 0.32 | <0.08 | <0.05 | 3.15 | 0.09 | 3.39 | 0.07 | <0.05 | 38.28 |
| 23 | BLD/PBH04/20 | 27.00 | 28.00 | 1.00 | 2.18 | <0.05 | 46.18 | <0.05 | 3.26 | 4.66 | 0.13 | 1.57 | 0.32 | <0.08 | <0.05 | 2.80 | 0.09 | 4.09 | 0.07 | <0.05 | 37.69 |
| 25 | BLD/PBH04/21 | 28.00 | 29.00 | 1.00 | 3.38 | <0.05 | 42.83 | <0.05 | 4.12 | 5.89 | 0.24 | 1.86 | 0.33 | <0.08 | <0.05 | 2.85 | 0.14 | 6.43 | 0.07 | <0.05 | 35.83 |
| 26 | BLD/PBH04/22 | 29.00 | 30.00 | 1.00 | 2.53 | <0.05 | 44.04 | <0.05 | 4.81 | 6.88 | 0.14 | 1.90 | 0.36 | <0.08 | <0.05 | 2.81 | 0.10 | 4.79 | 0.07 | <0.05 | 36.22 |
| 27 | BLD/PBH04/23 | 30.00 | 31.00 | 1.00 | 2.72 | <0.05 | 44.21 | <0.05 | 5.15 | 7.36 | 0.13 | 1.90 | 0.39 | <0.08 | 0.06 | 1.95 | 0.09 | 4.66 | 0.06 | <0.05 | 36.36 |
| 28 | BLD/PBH04/24 | 31.00 | 32.00 | 1.00 | 2.58 | <0.05 | 42.52 | <0.05 | 7.48 | 10.69 | 0.13 | 1.73 | 0.37 | <0.08 | 0.12 | 1.78 | 0.09 | 4.50 | 0.06 | <0.05 | 35.29 |
| 29 | BLD/PBH04/25 | 32.00 | 33.00 | 1.00 | 2.39 | <0.05 | 43.24 | <0.05 | 6.61 | 9.46 | 0.13 | 1.55 | 0.26 | <0.08 | 0.10 | 2.00 | 0.09 | 4.03 | 0.06 | <0.05 | 36.57 |
| 30 | BLD/PBH04/26 | 33.00 | 34.00 | 1.00 | 4.10 | <0.05 | 32.11 | <0.05 | 15.63 | 22.35 | 0.25 | 2.17 | 0.21 | <0.08 | 0.29 | 1.22 | 0.17 | 6.66 | 0.06 | 0.06 | 30.23 |
| 31 | BLD/PBH04/27 | 34.00 | 35.00 | 1.00 | 3.61 | <0.05 | 35.81 | <0.05 | 12.37 | 17.68 | 0.25 | 2.06 | 0.25 | <0.08 | 0.25 | 1.39 | 0.16 | 6.12 | 0.07 | 0.05 | 32.18 |
| 32 | BLD/PBH04/28 | 35.00 | 36.00 | 1.00 | 3.36 | <0.05 | 36.92 | <0.05 | 11.48 | 16.41 | 0.23 | 1.89 | 0.22 | <0.08 | 0.22 | 1.76 | 0.15 | 5.64 | 0.07 | <0.05 | 32.99 |
| 33 | BLD/PBH04/29 | 36.00 | 37.00 | 1.00 | 2.14 | <0.05 | 47.12 | <0.05 | 3.46 | 4.94 | 0.17 | 1.24 | 0.14 | <0.08 | 0.05 | 1.11 | 0.11 | 3.71 | 0.07 | <0.05 | 39.10 |
| 34 | BLD/PBH04/30 | 37.00 | 38.00 | 1.00 | 3.02 | <0.05 | 43.88 | <0.05 | 4.79 | 6.85 | 0.27 | 1.56 | 0.12 | <0.08 | 0.08 | 1.69 | 0.15 | 5.34 | 0.08 | <0.05 | 36.76 |
| 36 | BLD/PBH04/31 | 38.00 | 39.00 | 1.00 | 4.11 | <0.05 | 40.81 | <0.05 | 5.72 | 8.18 | 0.43 | 1.82 | 0.13 | <0.08 | 0.12 | 1.41 | 0.22 | 7.52 | 0.08 | <0.05 | 35.03 |
| 37 | BLD/PBH04/32 | 39.00 | 40.00 | 1.00 | 5.12 | <0.05 | 36.89 | <0.05 | 6.81 | 9.74 | 0.55 | 2.45 | 0.12 | <0.08 | 0.18 | 1.07 | 0.27 | 9.62 | 0.08 | <0.05 | 33.76 |
| 38 | BLD/PBH04/33 | 40.00 | 41.00 | 1.00 | 5.54 | <0.05 | 34.00 | <0.05 | 7.55 | 10.80 | 0.59 | 3.19 | 0.08 | <0.08 | 0.26 | 1.08 | 0.27 | 11.61 | 0.07 | <0.05 | 32.36 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-04** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 39 | BLD/PBH04/34 | 41.00 | 42.00 | 1.00 | 5.12 | <0.05 | 37.17 | <0.05 | 6.67 | 9.53 | 0.52 | 2.20 | 0.07 | <0.08 | 0.20 | 0.97 | 0.25 | 10.38 | 0.08 | <0.05 | 33.37 |
| 40 | BLD/PBH04/35 | 42.00 | 43.50 | 1.50 | 21.27 | <0.05 | 0.83 | <0.05 | 8.41 | 12.02 | 3.13 | 3.09 | <0.05 | 0.56 | 0.14 | 1.31 | 1.01 | 47.55 | <0.05 | <0.05 | 8.93 |
| 41 | BLD/PBH04/36 | 43.50 | 45.00 | 1.50 | 21.25 | <0.05 | 0.73 | <0.05 | 8.33 | 11.91 | 3.06 | 3.07 | <0.05 | 0.49 | 0.13 | 1.27 | 1.03 | 47.84 | <0.05 | <0.05 | 9.06 |
| 42 | BLD/PBH04/37 | 45.00 | 46.00 | 1.00 | 9.91 | <0.05 | 25.88 | <0.05 | 7.35 | 10.51 | 1.30 | 2.57 | <0.05 | 0.12 | 0.12 | 0.93 | 0.48 | 22.51 | 0.07 | <0.05 | 25.49 |
| 43 | BLD/PBH04/38 | 46.00 | 47.00 | 1.00 | 6.44 | <0.05 | 34.84 | <0.05 | 5.25 | 7.50 | 0.81 | 2.37 | 0.07 | 0.09 | 0.12 | 1.10 | 0.31 | 14.78 | 0.09 | <0.05 | 31.40 |
| 44 | BLD/PBH04/39 | 47.00 | 48.00 | 1.00 | 4.51 | <0.05 | 40.64 | <0.05 | 3.56 | 5.09 | 0.51 | 2.35 | <0.05 | <0.08 | 0.08 | 1.04 | 0.20 | 9.95 | 0.10 | <0.05 | 35.37 |
| 45 | BLD/PBH04/40 | 48.00 | 49.00 | 1.00 | 3.35 | <0.05 | 42.93 | <0.05 | 2.70 | 3.86 | 0.34 | 2.53 | <0.05 | <0.08 | <0.05 | 1.35 | 0.14 | 8.03 | 0.12 | <0.05 | 37.20 |
| 48 | BLD/PBH04/41 | 49.00 | 50.00 | 1.00 | 2.38 | <0.05 | 46.57 | <0.05 | 2.06 | 2.94 | 0.22 | 2.14 | <0.05 | <0.08 | <0.05 | 0.91 | 0.09 | 5.09 | 0.10 | <0.05 | 39.42 |
| 49 | BLD/PBH04/42 | 50.00 | 51.00 | 1.00 | 2.50 | <0.05 | 45.07 | <0.05 | 2.64 | 3.78 | 0.21 | 2.55 | 0.10 | <0.08 | <0.05 | 1.78 | 0.10 | 4.94 | 0.08 | <0.05 | 38.75 |
| 50 | BLD/PBH04/43 | 51.00 | 52.00 | 1.00 | 2.07 | <0.05 | 47.49 | <0.05 | 2.18 | 3.11 | 0.16 | 1.92 | 0.22 | <0.08 | <0.05 | 1.21 | 0.08 | 3.78 | 0.10 | <0.05 | 39.75 |
| 51 | BLD/PBH04/44 | 52.00 | 53.00 | 1.00 | 1.89 | <0.05 | 47.08 | <0.05 | 2.43 | 3.47 | 0.15 | 2.05 | 0.28 | <0.08 | <0.05 | 1.56 | 0.07 | 3.71 | 0.10 | <0.05 | 39.52 |
| 52 | BLD/PBH04/45 | 53.00 | 54.00 | 1.00 | 2.64 | <0.05 | 43.06 | <0.05 | 4.03 | 5.76 | 0.24 | 2.90 | 0.30 | <0.08 | <0.05 | 2.03 | 0.11 | 5.28 | 0.09 | <0.05 | 37.43 |
| 53 | BLD/PBH04/46 | 54.00 | 55.00 | 1.00 | 1.78 | <0.05 | 47.84 | <0.05 | 2.35 | 3.36 | 0.14 | 1.58 | 0.24 | <0.08 | <0.05 | 1.77 | 0.07 | 3.44 | 0.09 | <0.05 | 39.56 |
| 54 | BLD/PBH04/47 | 55.00 | 56.00 | 1.00 | 1.55 | <0.05 | 49.20 | <0.05 | 1.89 | 2.70 | 0.12 | 1.32 | 0.20 | <0.08 | <0.05 | 1.66 | 0.07 | 3.08 | 0.08 | <0.05 | 39.93 |
| 55 | BLD/PBH04/48 | 56.00 | 57.00 | 1.00 | 2.03 | <0.05 | 47.33 | <0.05 | 2.34 | 3.35 | 0.18 | 1.74 | 0.16 | <0.08 | <0.05 | 1.63 | 0.09 | 4.09 | 0.08 | <0.05 | 39.20 |
| 56 | BLD/PBH04/49 | 57.00 | 58.00 | 1.00 | 3.29 | <0.05 | 43.23 | <0.05 | 4.13 | 5.90 | 0.30 | 2.57 | 0.12 | <0.08 | 0.09 | 0.73 | 0.16 | 5.75 | 0.08 | <0.05 | 37.68 |
| 58 | BLD/PBH04/50 | 58.00 | 59.00 | 1.00 | 3.20 | <0.05 | 43.08 | <0.05 | 3.65 | 5.22 | 0.33 | 2.90 | 0.12 | <0.08 | 0.06 | 0.75 | 0.16 | 6.09 | 0.11 | <0.05 | 37.78 |
| 59 | BLD/PBH04/51 | 59.00 | 60.00 | 1.00 | 3.13 | <0.05 | 42.01 | <0.05 | 5.35 | 7.65 | 0.31 | 2.72 | 0.05 | <0.08 | 0.10 | 0.55 | 0.15 | 5.95 | 0.11 | <0.05 | 37.15 |
| 60 | BLD/PBH04/52 | 60.00 | 61.00 | 1.00 | 3.25 | <0.05 | 42.93 | <0.05 | 4.23 | 6.04 | 0.33 | 2.73 | <0.05 | <0.08 | 0.06 | 0.60 | 0.17 | 6.26 | 0.12 | <0.05 | 37.38 |
| 61 | BLD/PBH04/53 | 61.00 | 62.00 | 1.00 | 5.58 | <0.05 | 37.30 | <0.05 | 2.68 | 3.83 | 0.67 | 4.11 | <0.05 | <0.08 | <0.05 | 0.58 | 0.28 | 11.78 | 0.11 | <0.05 | 35.62 |
| 62 | BLD/PBH04/54 | 62.00 | 63.00 | 1.00 | 5.02 | <0.05 | 36.00 | <0.05 | 5.88 | 8.40 | 0.57 | 3.95 | <0.05 | <0.08 | 0.11 | 0.51 | 0.25 | 10.61 | 0.10 | <0.05 | 34.37 |
| 63 | BLD/PBH04/55 | 63.00 | 64.00 | 1.00 | 3.88 | <0.05 | 42.60 | <0.05 | 4.01 | 5.73 | 0.36 | 2.24 | <0.05 | <0.08 | 0.06 | 0.69 | 0.19 | 7.33 | 0.10 | <0.05 | 36.71 |
| 64 | BLD/PBH04/56 | 64.00 | 65.00 | 1.00 | 3.05 | <0.05 | 44.53 | <0.05 | 1.96 | 2.80 | 0.31 | 2.60 | <0.05 | <0.08 | <0.05 | 0.89 | 0.16 | 6.54 | 0.10 | <0.05 | 38.89 |
| 65 | BLD/PBH04/57 | 65.00 | 66.00 | 1.00 | 3.82 | <0.05 | 41.95 | <0.05 | 3.50 | 5.00 | 0.37 | 2.70 | <0.05 | <0.08 | 0.08 | 0.85 | 0.19 | 7.34 | 0.11 | <0.05 | 37.48 |
| 66 | BLD/PBH04/58 | 66.00 | 67.00 | 1.00 | 2.83 | <0.05 | 46.52 | <0.05 | 2.11 | 3.02 | 0.26 | 1.73 | <0.05 | <0.08 | <0.05 | 1.48 | 0.13 | 5.04 | 0.08 | <0.05 | 38.77 |
| 67 | BLD/PBH04/59 | 67.00 | 68.00 | 1.00 | 3.13 | <0.05 | 44.35 | <0.05 | 3.84 | 5.48 | 0.26 | 2.02 | <0.05 | <0.08 | 0.09 | 1.44 | 0.13 | 5.68 | 0.09 | <0.05 | 37.20 |
| 68 | BLD/PBH04/60 | 68.00 | 69.00 | 1.00 | 3.01 | <0.05 | 45.23 | <0.05 | 2.85 | 4.08 | 0.24 | 1.76 | <0.05 | <0.08 | <0.05 | 1.96 | 0.12 | 5.85 | 0.07 | <0.05 | 37.42 |
| 70 | BLD/PBH04/61 | 69.00 | 70.00 | 1.00 | 2.62 | <0.05 | 46.52 | <0.05 | 2.69 | 3.85 | 0.19 | 1.69 | <0.05 | <0.08 | 0.07 | 2.13 | 0.11 | 5.02 | 0.08 | <0.05 | 37.61 |
| 71 | BLD/PBH04/62 | 70.00 | 71.00 | 1.00 | 2.34 | <0.05 | 48.76 | <0.05 | 1.53 | 2.19 | 0.17 | 1.34 | <0.05 | <0.08 | <0.05 | 1.33 | 0.10 | 3.87 | 0.07 | <0.05 | 39.71 |
| 72 | BLD/PBH04/63 | 71.00 | 72.00 | 1.00 | 2.29 | <0.05 | 49.31 | <0.05 | 1.08 | 1.55 | 0.21 | 1.26 | <0.05 | <0.08 | <0.05 | 0.83 | 0.11 | 4.38 | 0.08 | <0.05 | 39.87 |
| 73 | BLD/PBH04/64 | 72.00 | 73.00 | 1.00 | 3.09 | <0.05 | 46.69 | <0.05 | 1.94 | 2.78 | 0.26 | 1.54 | <0.05 | <0.08 | <0.05 | 1.25 | 0.14 | 5.83 | 0.09 | <0.05 | 38.18 |
| 74 | BLD/PBH04/65 | 73.00 | 74.00 | 1.00 | 3.30 | <0.05 | 46.57 | <0.05 | 1.76 | 2.51 | 0.30 | 1.46 | <0.05 | <0.08 | <0.05 | 1.49 | 0.16 | 6.29 | 0.11 | <0.05 | 37.69 |
| 75 | BLD/PBH04/66 | 74.00 | 75.00 | 1.00 | 2.66 | <0.05 | 48.57 | <0.05 | 1.32 | 1.89 | 0.22 | 1.43 | <0.05 | <0.08 | <0.05 | 0.87 | 0.12 | 5.00 | 0.07 | <0.05 | 39.05 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-04** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 76 | BLD/PBH04/67 | 75.00 | 76.00 | 1.00 | 1.98 | <0.05 | 50.06 | <0.05 | 1.38 | 1.98 | 0.14 | 1.45 | <0.05 | <0.08 | <0.05 | 0.85 | 0.08 | 3.63 | 0.09 | <0.05 | 39.63 |
| 77 | BLD/PBH04/68 | 76.00 | 77.00 | 1.00 | 1.55 | <0.05 | 51.61 | <0.05 | 1.03 | 1.48 | 0.08 | 1.20 | <0.05 | <0.08 | <0.05 | 0.85 | <0.05 | 2.32 | 0.07 | <0.05 | 40.68 |
| 78 | BLD/PBH04/69 | 77.00 | 78.00 | 1.00 | 1.28 | <0.05 | 52.57 | <0.05 | 0.79 | 1.12 | 0.06 | 1.05 | <0.05 | <0.08 | <0.05 | 0.79 | <0.05 | 1.77 | 0.06 | <0.05 | 41.13 |
| 80 | BLD/PBH04/70 | 78.00 | 79.00 | 1.00 | 1.36 | <0.05 | 52.72 | <0.05 | 0.66 | 0.94 | 0.07 | 1.03 | <0.05 | <0.08 | <0.05 | 0.56 | <0.05 | 1.75 | <0.05 | <0.05 | 41.37 |
| 81 | BLD/PBH04/71 | 79.00 | 80.00 | 1.00 | 1.48 | <0.05 | 52.29 | <0.05 | 0.71 | 1.01 | 0.09 | 1.05 | <0.05 | <0.08 | <0.05 | 0.61 | <0.05 | 2.15 | 0.05 | <0.05 | 41.10 |
| 82 | BLD/PBH04/72 | 80.00 | 81.00 | 1.00 | 1.59 | <0.05 | 51.97 | <0.05 | 0.85 | 1.21 | 0.09 | 1.06 | <0.05 | <0.08 | <0.05 | 0.82 | 0.05 | 2.20 | 0.05 | <0.05 | 40.84 |
| 83 | BLD/PBH04/73 | 81.00 | 82.00 | 1.00 | 1.78 | <0.05 | 50.28 | <0.05 | 0.95 | 1.36 | 0.14 | 1.15 | <0.05 | <0.08 | <0.05 | 0.81 | 0.07 | 2.91 | 0.06 | <0.05 | 41.34 |
| 84 | BLD/PBH04/74 | 82.00 | 83.00 | 1.00 | 1.76 | <0.05 | 50.61 | <0.05 | 0.82 | 1.18 | 0.14 | 1.07 | <0.05 | <0.08 | <0.05 | 0.68 | 0.07 | 2.81 | 0.06 | <0.05 | 41.53 |
| 85 | BLD/PBH04/75 | 83.00 | 84.00 | 1.00 | 2.07 | <0.05 | 48.95 | <0.05 | 1.30 | 1.87 | 0.18 | 1.24 | <0.05 | <0.08 | <0.05 | 1.26 | 0.08 | 3.70 | 0.06 | <0.05 | 40.48 |
| 86 | BLD/PBH04/76 | 84.00 | 85.00 | 1.00 | 1.54 | <0.05 | 50.90 | <0.05 | 0.93 | 1.33 | 0.12 | 1.15 | <0.05 | <0.08 | <0.05 | 0.75 | 0.05 | 2.51 | 0.06 | <0.05 | 41.49 |
| 87 | BLD/PBH04/77 | 85.00 | 86.00 | 1.00 | 1.69 | <0.05 | 50.67 | <0.05 | 0.81 | 1.16 | 0.17 | 1.11 | <0.05 | <0.08 | <0.05 | 0.60 | 0.07 | 2.83 | 0.06 | <0.05 | 41.51 |
| 88 | BLD/PBH04/78 | 86.00 | 87.00 | 1.00 | 1.91 | <0.05 | 50.23 | <0.05 | 1.00 | 1.43 | 0.15 | 1.19 | <0.05 | <0.08 | <0.05 | 0.76 | 0.06 | 2.85 | 0.05 | <0.05 | 41.25 |
| 89 | BLD/PBH04/79 | 87.00 | 88.00 | 1.00 | 1.56 | <0.05 | 50.86 | <0.05 | 1.15 | 1.64 | 0.10 | 1.15 | <0.05 | <0.08 | <0.05 | 0.90 | <0.05 | 2.21 | 0.05 | <0.05 | 41.39 |
| 90 | BLD/PBH04/80 | 88.00 | 89.00 | 1.00 | 1.54 | <0.05 | 50.75 | <0.05 | 1.04 | 1.48 | 0.12 | 1.13 | <0.05 | <0.08 | <0.05 | 0.90 | 0.05 | 2.44 | 0.05 | <0.05 | 41.43 |
| 92 | BLD/PBH04/81 | 89.00 | 90.00 | 1.00 | 1.17 | <0.05 | 52.10 | <0.05 | 0.57 | 0.82 | 0.08 | 1.01 | <0.05 | <0.08 | <0.05 | 0.41 | <0.05 | 1.67 | 0.06 | <0.05 | 42.54 |
| 93 | BLD/PBH04/82 | 90.00 | 91.00 | 1.00 | 1.29 | <0.05 | 51.41 | <0.05 | 0.86 | 1.22 | 0.09 | 1.10 | <0.05 | <0.08 | <0.05 | 0.57 | <0.05 | 2.18 | 0.06 | <0.05 | 41.92 |
| 94 | BLD/PBH04/83 | 91.00 | 92.00 | 1.00 | 1.55 | <0.05 | 50.44 | <0.05 | 1.17 | 1.67 | 0.11 | 1.20 | <0.05 | <0.08 | <0.05 | 0.85 | 0.05 | 2.72 | 0.06 | <0.05 | 41.23 |
| 95 | BLD/PBH04/84 | 92.00 | 93.00 | 1.00 | 1.20 | <0.05 | 51.59 | <0.05 | 0.74 | 1.06 | 0.09 | 1.07 | <0.05 | <0.08 | <0.05 | 0.58 | <0.05 | 2.10 | 0.06 | <0.05 | 42.09 |
| 96 | BLD/PBH04/85 | 93.00 | 94.00 | 1.00 | 2.01 | <0.05 | 50.09 | <0.05 | 0.82 | 1.17 | 0.17 | 1.15 | <0.05 | <0.08 | <0.05 | 0.59 | 0.08 | 3.59 | 0.07 | <0.05 | 40.97 |
| 97 | BLD/PBH04/86 | 94.00 | 95.00 | 1.00 | 1.74 | <0.05 | 49.99 | <0.05 | 1.22 | 1.75 | 0.15 | 1.27 | <0.05 | <0.08 | <0.05 | 0.74 | 0.07 | 3.41 | 0.06 | <0.05 | 40.70 |
| 98 | BLD/PBH04/87 | 95.00 | 96.00 | 1.00 | 1.81 | <0.05 | 49.83 | <0.05 | 1.28 | 1.83 | 0.14 | 1.29 | <0.05 | <0.08 | <0.05 | 0.66 | 0.06 | 3.30 | 0.06 | <0.05 | 40.91 |
| 99 | BLD/PBH04/88 | 96.00 | 97.00 | 1.00 | 2.05 | <0.05 | 49.41 | <0.05 | 1.40 | 2.00 | 0.16 | 1.32 | <0.05 | <0.08 | <0.05 | 0.76 | 0.06 | 3.38 | 0.06 | <0.05 | 40.70 |
| 100 | BLD/PBH04/89 | 97.00 | 98.00 | 1.00 | 2.31 | <0.05 | 49.09 | <0.05 | 1.34 | 1.91 | 0.20 | 1.30 | <0.05 | <0.08 | <0.05 | 0.71 | 0.08 | 3.86 | 0.06 | <0.05 | 40.36 |
| 101 | BLD/PBH04/90 | 98.00 | 99.00 | 1.00 | 2.67 | <0.05 | 47.37 | <0.05 | 1.91 | 2.73 | 0.23 | 1.46 | <0.05 | <0.08 | <0.05 | 1.37 | 0.10 | 4.86 | 0.08 | <0.05 | 39.01 |
| 103 | BLD/PBH04/91 | 99.00 | 100.00 | 1.00 | 2.68 | <0.05 | 46.76 | <0.05 | 2.12 | 3.03 | 0.26 | 1.51 | <0.05 | <0.08 | <0.05 | 1.39 | 0.11 | 5.41 | 0.09 | <0.05 | 38.63 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-05** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 2 | BLD/PBH05/01 | 5.50 | 6.57 | 1.07 | 19.65 | <0.05 | 4.81 | <0.05 | 8.15 | 11.65 | 2.68 | 2.51 | <0.05 | <0.08 | 0.58 | 0.91 | 1.08 | 44.87 | <0.05 | <0.05 | 11.20 |
| 3 | BLD/PBH05/02 | 6.57 | 7.40 | 0.83 | 4.64 | <0.05 | 36.18 | <0.05 | 10.97 | 15.68 | 0.39 | 1.77 | 0.40 | <0.08 | 0.68 | 0.23 | 0.21 | 7.87 | <0.05 | <0.05 | 31.92 |
| 4 | BLD/PBH05/03 | 7.40 | 8.08 | 0.68 | 3.32 | <0.05 | 37.48 | <0.05 | 11.05 | 15.80 | 0.21 | 1.82 | 0.64 | <0.08 | 0.63 | 0.46 | 0.15 | 6.82 | <0.05 | <0.05 | 32.66 |
| 5 | BLD/PBH05/04 | 8.08 | 9.46 | 1.38 | 21.14 | <0.05 | 0.55 | <0.05 | 7.08 | 10.13 | 2.85 | 2.49 | <0.05 | <0.08 | 0.11 | 0.87 | 1.22 | 52.43 | <0.05 | <0.05 | 8.20 |
| 6 | BLD/PBH05/05 | 9.46 | 10.93 | 1.47 | 13.06 | <0.05 | 16.47 | <0.05 | 7.93 | 11.34 | 1.70 | 2.78 | 0.37 | <0.08 | 0.31 | 1.18 | 0.74 | 32.02 | <0.05 | <0.05 | 20.02 |
| 7 | BLD/PBH05/06 | 10.93 | 12.00 | 1.07 | 21.01 | <0.05 | 0.88 | <0.05 | 7.07 | 10.11 | 2.86 | 2.59 | 0.08 | <0.08 | 0.17 | 0.41 | 1.18 | 51.79 | <0.05 | <0.05 | 8.87 |
| 8 | BLD/PBH05/07 | 12.00 | 12.94 | 0.94 | 20.73 | <0.05 | 0.56 | <0.05 | 6.79 | 9.71 | 2.97 | 2.58 | <0.05 | <0.08 | 0.15 | 1.07 | 1.18 | 51.50 | <0.05 | <0.05 | 9.50 |
| 9 | BLD/PBH05/08 | 12.94 | 13.88 | 0.94 | 20.76 | <0.05 | 1.37 | <0.05 | 8.49 | 12.14 | 2.77 | 2.77 | <0.05 | <0.08 | 0.12 | 1.35 | 1.12 | 48.28 | <0.05 | <0.05 | 9.28 |
| 10 | BLD/PBH05/09 | 13.88 | 14.58 | 0.70 | 11.14 | <0.05 | 24.37 | <0.05 | 7.49 | 10.71 | 1.35 | 2.67 | 0.35 | <0.08 | 0.17 | 0.86 | 0.57 | 23.56 | <0.05 | <0.05 | 24.21 |
| 11 | BLD/PBH05/10 | 14.58 | 15.14 | 0.56 | 21.22 | <0.05 | 2.69 | <0.05 | 7.29 | 10.43 | 3.00 | 2.80 | <0.05 | <0.08 | 0.08 | 1.13 | 1.13 | 47.43 | <0.05 | <0.05 | 10.06 |
| 13 | BLD/PBH05/11 | 15.14 | 16.14 | 1.00 | 21.70 | <0.05 | 1.06 | <0.05 | 8.11 | 11.59 | 3.03 | 2.95 | <0.05 | <0.08 | 0.09 | 1.55 | 1.13 | 47.42 | <0.05 | <0.05 | 9.45 |
| 14 | BLD/PBH05/12 | 16.14 | 17.07 | 0.93 | 4.92 | <0.05 | 36.57 | <0.05 | 9.16 | 13.09 | 0.34 | 2.38 | 0.55 | <0.08 | 0.37 | 0.39 | 0.22 | 9.01 | <0.05 | <0.05 | 32.15 |
| 15 | BLD/PBH05/13 | 17.07 | 18.00 | 0.93 | 3.56 | <0.05 | 37.12 | <0.05 | 9.17 | 13.11 | 0.23 | 2.74 | 1.41 | <0.08 | 0.33 | 4.44 | 0.16 | 5.32 | <0.05 | <0.05 | 31.55 |
| 16 | BLD/PBH05/14 | 18.00 | 19.00 | 1.00 | 1.48 | <0.05 | 46.81 | <0.05 | 4.54 | 6.50 | <0.05 | 2.05 | 1.11 | <0.08 | 0.16 | 0.34 | 0.06 | 1.86 | <0.05 | <0.05 | 39.58 |
| 17 | BLD/PBH05/15 | 19.00 | 20.00 | 1.00 | 1.48 | <0.05 | 44.93 | <0.05 | 5.88 | 8.41 | <0.05 | 2.48 | 1.15 | <0.08 | 0.21 | 0.18 | 0.06 | 2.00 | <0.05 | <0.05 | 39.03 |
| 18 | BLD/PBH05/16 | 20.00 | 21.00 | 1.00 | 2.21 | <0.05 | 41.86 | <0.05 | 7.78 | 11.12 | 0.07 | 3.12 | 1.25 | <0.08 | 0.18 | 0.21 | 0.07 | 2.70 | <0.05 | <0.05 | 37.18 |
| 19 | BLD/PBH05/17 | 21.00 | 22.00 | 1.00 | 3.98 | <0.05 | 39.93 | <0.05 | 7.04 | 10.06 | 0.36 | 2.48 | 0.89 | <0.08 | 0.23 | 0.45 | 0.18 | 7.10 | <0.05 | <0.05 | 34.32 |
| 20 | BLD/PBH05/18 | 22.00 | 23.00 | 1.00 | 3.77 | <0.05 | 38.79 | <0.05 | 6.82 | 9.75 | 0.32 | 2.58 | 0.69 | <0.08 | 0.25 | 1.78 | 0.16 | 8.96 | <0.05 | <0.05 | 32.94 |
| 21 | BLD/PBH05/19 | 23.00 | 24.00 | 1.00 | 4.06 | <0.05 | 38.83 | <0.05 | 7.37 | 10.54 | 0.31 | 2.59 | 0.55 | <0.08 | 0.17 | 3.54 | 0.16 | 6.56 | <0.05 | <0.05 | 32.69 |
| 23 | BLD/PBH05/20 | 24.00 | 25.00 | 1.00 | 2.80 | <0.05 | 44.45 | <0.05 | 4.29 | 6.14 | 0.23 | 1.95 | 0.46 | <0.08 | 0.11 | 2.30 | 0.10 | 4.84 | <0.05 | <0.05 | 36.60 |
| 24 | BLD/PBH05/21 | 25.00 | 26.00 | 1.00 | 2.63 | <0.05 | 45.03 | <0.05 | 3.01 | 4.31 | 0.22 | 1.62 | 0.35 | <0.08 | 0.06 | 2.82 | 0.12 | 5.21 | <0.05 | <0.05 | 37.62 |
| 25 | BLD/PBH05/22 | 26.00 | 27.00 | 1.00 | 2.67 | <0.05 | 46.29 | <0.05 | 2.44 | 3.49 | 0.22 | 1.54 | 0.30 | <0.08 | 0.09 | 2.86 | 0.11 | 4.26 | <0.05 | <0.05 | 38.16 |
| 26 | BLD/PBH05/23 | 27.00 | 28.00 | 1.00 | 2.29 | <0.05 | 45.69 | <0.05 | 3.08 | 4.40 | 0.15 | 1.80 | 0.32 | <0.08 | 0.08 | 3.07 | 0.09 | 4.55 | <0.05 | <0.05 | 37.55 |
| 27 | BLD/PBH05/24 | 28.00 | 29.00 | 1.00 | 3.91 | <0.05 | 41.04 | <0.05 | 4.50 | 6.43 | 0.28 | 2.40 | 0.30 | <0.08 | 0.11 | 2.97 | 0.15 | 7.49 | <0.05 | <0.05 | 34.90 |
| 28 | BLD/PBH05/25 | 29.00 | 30.00 | 1.00 | 3.74 | <0.05 | 41.12 | <0.05 | 5.32 | 7.60 | 0.19 | 2.47 | 0.31 | <0.08 | 0.10 | 3.26 | 0.13 | 6.54 | <0.05 | <0.05 | 34.50 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-05** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 29 | BLD/PBH05/26 | 30.00 | 31.00 | 1.00 | 2.39 | <0.05 | 45.43 | <0.05 | 4.45 | 6.37 | 0.10 | 2.01 | 0.38 | <0.08 | 0.13 | 1.50 | 0.07 | 4.07 | <0.05 | <0.05 | 37.54 |
| 30 | BLD/PBH05/27 | 31.00 | 32.00 | 1.00 | 2.02 | <0.05 | 45.23 | <0.05 | 5.54 | 7.92 | 0.11 | 1.77 | 0.36 | <0.08 | 0.23 | 1.52 | 0.08 | 3.77 | <0.05 | <0.05 | 36.98 |
| 31 | BLD/PBH05/28 | 32.00 | 33.00 | 1.00 | 2.26 | <0.05 | 44.92 | <0.05 | 5.02 | 7.18 | 0.17 | 1.76 | 0.24 | <0.08 | 0.17 | 2.07 | 0.10 | 4.63 | <0.05 | <0.05 | 36.50 |
| 32 | BLD/PBH05/29 | 33.00 | 34.00 | 1.00 | 3.61 | <0.05 | 36.31 | <0.05 | 12.82 | 18.33 | 0.23 | 2.29 | 0.13 | <0.08 | 0.42 | 1.36 | 0.16 | 5.79 | <0.05 | <0.05 | 31.34 |
| 33 | BLD/PBH05/30 | 34.00 | 35.00 | 1.00 | 4.27 | <0.05 | 36.13 | <0.05 | 11.81 | 16.89 | 0.28 | 2.50 | 0.17 | <0.08 | 0.37 | 1.26 | 0.19 | 6.62 | <0.05 | <0.05 | 31.30 |
| 35 | BLD/PBH05/31 | 35.00 | 36.00 | 1.00 | 3.57 | <0.05 | 38.88 | 0.05 | 9.93 | 14.20 | 0.25 | 2.18 | 0.12 | <0.08 | 0.35 | 1.71 | 0.16 | 5.81 | <0.05 | <0.05 | 32.73 |
| 36 | BLD/PBH05/32 | 36.00 | 37.00 | 1.00 | 1.93 | <0.05 | 47.11 | <0.05 | 4.37 | 6.24 | 0.13 | 1.49 | 0.14 | <0.08 | 0.20 | 0.82 | 0.08 | 3.00 | <0.05 | <0.05 | 38.85 |
| 37 | BLD/PBH05/33 | 37.00 | 38.00 | 1.00 | 3.49 | <0.05 | 44.33 | <0.05 | 3.97 | 5.68 | 0.27 | 1.75 | 0.10 | <0.08 | 0.14 | 1.68 | 0.15 | 5.49 | <0.05 | <0.05 | 36.90 |
| 38 | BLD/PBH05/34 | 38.00 | 39.00 | 1.00 | 3.75 | <0.05 | 43.43 | <0.05 | 4.09 | 5.85 | 0.38 | 1.83 | 0.11 | <0.08 | 0.19 | 1.42 | 0.19 | 6.63 | <0.05 | <0.05 | 36.21 |
| 39 | BLD/PBH05/35 | 39.00 | 40.00 | 1.00 | 5.62 | <0.05 | 37.68 | <0.05 | 5.85 | 8.36 | 0.55 | 2.71 | 0.08 | <0.08 | 0.29 | 1.13 | 0.28 | 9.84 | <0.05 | <0.05 | 33.43 |
| 40 | BLD/PBH05/36 | 40.00 | 41.00 | 1.00 | 5.79 | <0.05 | 35.27 | <0.05 | 6.77 | 9.68 | 0.60 | 3.48 | <0.05 | <0.08 | 0.36 | 0.90 | 0.28 | 11.58 | <0.05 | <0.05 | 31.99 |
| 41 | BLD/PBH05/37 | 41.00 | 42.00 | 1.00 | 5.01 | <0.05 | 38.83 | <0.05 | 5.90 | 8.43 | 0.49 | 2.45 | 0.05 | <0.08 | 0.33 | 0.76 | 0.23 | 9.95 | <0.05 | <0.05 | 33.43 |
| 42 | BLD/PBH05/38 | 42.00 | 43.50 | 1.50 | 22.32 | <0.05 | 0.92 | <0.05 | 8.31 | 11.88 | 3.07 | 3.29 | <0.05 | 0.48 | 0.43 | 0.97 | 1.05 | 47.51 | <0.05 | <0.05 | 8.05 |
| 43 | BLD/PBH05/39 | 43.50 | 45.00 | 1.50 | 21.52 | <0.05 | 1.46 | <0.05 | 8.63 | 12.34 | 2.82 | 3.42 | <0.05 | 0.35 | 0.11 | 1.23 | 1.01 | 45.95 | <0.05 | <0.05 | 9.77 |
| 45 | BLD/PBH05/40 | 45.00 | 46.00 | 1.00 | 10.21 | <0.05 | 26.47 | <0.05 | 7.27 | 10.39 | 1.25 | 2.89 | <0.05 | 0.08 | 0.43 | 0.93 | 0.50 | 22.05 | <0.05 | <0.05 | 24.77 |
| 46 | BLD/PBH05/41 | 46.00 | 47.00 | 1.00 | 4.44 | <0.05 | 40.86 | <0.05 | 3.79 | 5.42 | 0.52 | 2.36 | <0.05 | <0.08 | 0.16 | 0.99 | 0.21 | 10.32 | <0.05 | <0.05 | 34.68 |
| 47 | BLD/PBH05/42 | 47.00 | 48.00 | 1.00 | 4.35 | <0.05 | 41.59 | <0.05 | 2.63 | 3.76 | 0.49 | 2.60 | <0.05 | <0.08 | 0.10 | 1.03 | 0.19 | 10.25 | <0.05 | <0.05 | 35.61 |
| 48 | BLD/PBH05/43 | 48.00 | 49.00 | 1.00 | 3.03 | <0.05 | 43.90 | <0.05 | 2.03 | 2.90 | 0.32 | 3.13 | <0.05 | <0.08 | 0.06 | 0.92 | 0.13 | 7.77 | <0.05 | <0.05 | 37.80 |
| 49 | BLD/PBH05/44 | 49.00 | 50.00 | 1.00 | 2.35 | <0.05 | 46.39 | <0.05 | 1.89 | 2.70 | 0.23 | 2.47 | <0.05 | <0.08 | 0.05 | 1.10 | 0.10 | 5.52 | <0.05 | <0.05 | 39.03 |
| 50 | BLD/PBH05/45 | 50.00 | 51.00 | 1.00 | 2.14 | <0.05 | 45.73 | <0.05 | 2.12 | 3.02 | 0.21 | 3.42 | 0.13 | <0.08 | 0.07 | 0.88 | 0.09 | 4.90 | <0.05 | <0.05 | 39.39 |
| 51 | BLD/PBH05/46 | 51.00 | 52.00 | 1.00 | 2.56 | <0.05 | 46.34 | <0.05 | 2.17 | 3.10 | 0.22 | 2.26 | 0.21 | <0.08 | 0.08 | 1.47 | 0.09 | 4.98 | <0.05 | <0.05 | 38.67 |
| 52 | BLD/PBH05/47 | 52.00 | 53.00 | 1.00 | 2.15 | <0.05 | 47.40 | <0.05 | 2.10 | 3.00 | 0.15 | 2.05 | 0.30 | <0.08 | 0.07 | 2.03 | 0.07 | 3.71 | <0.05 | <0.05 | 39.06 |
| 53 | BLD/PBH05/48 | 53.00 | 54.00 | 1.00 | 2.70 | <0.05 | 44.15 | <0.05 | 3.23 | 4.62 | 0.25 | 3.10 | 0.26 | <0.08 | 0.12 | 2.14 | 0.11 | 5.39 | <0.05 | <0.05 | 37.15 |
| 54 | BLD/PBH05/49 | 54.00 | 55.00 | 1.00 | 1.79 | <0.05 | 48.51 | <0.05 | 1.75 | 2.50 | 0.16 | 1.63 | 0.20 | <0.08 | 0.06 | 1.78 | 0.08 | 3.57 | <0.05 | <0.05 | 39.70 |
| 56 | BLD/PBH05/50 | 55.00 | 56.00 | 1.00 | 1.86 | <0.05 | 48.29 | <0.05 | 1.65 | 2.37 | 0.15 | 1.63 | 0.16 | <0.08 | 0.05 | 1.76 | 0.09 | 3.84 | <0.05 | <0.05 | 39.78 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-05** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 57 | BLD/PBH05/51 | 56.00 | 57.00 | 1.00 | 2.23 | <0.05 | 47.56 | <0.05 | 1.89 | 2.70 | 0.17 | 1.90 | 0.13 | <0.08 | 0.06 | 1.60 | 0.09 | 4.08 | <0.05 | <0.05 | 39.47 |
| 58 | BLD/PBH05/52 | 57.00 | 58.00 | 1.00 | 3.19 | <0.05 | 44.52 | <0.05 | 2.72 | 3.88 | 0.29 | 2.71 | 0.11 | <0.08 | 0.12 | 0.82 | 0.14 | 5.68 | <0.05 | <0.05 | 38.51 |
| 59 | BLD/PBH05/53 | 58.00 | 59.00 | 1.00 | 3.57 | <0.05 | 42.99 | <0.05 | 3.61 | 5.16 | 0.36 | 3.04 | 0.14 | <0.08 | 0.16 | 0.70 | 0.17 | 6.68 | <0.05 | <0.05 | 37.03 |
| 60 | BLD/PBH05/54 | 59.00 | 60.00 | 1.00 | 3.53 | <0.05 | 42.27 | <0.05 | 3.92 | 5.60 | 0.34 | 3.53 | <0.05 | <0.08 | 0.12 | 0.67 | 0.16 | 6.37 | <0.05 | <0.05 | 37.35 |
| 61 | BLD/PBH05/55 | 60.00 | 61.00 | 1.00 | 3.31 | <0.05 | 44.20 | <0.05 | 3.06 | 4.38 | 0.30 | 2.78 | <0.05 | <0.08 | 0.12 | 0.58 | 0.15 | 6.04 | <0.05 | <0.05 | 38.09 |
| 62 | BLD/PBH05/56 | 61.00 | 62.00 | 1.00 | 4.86 | <0.05 | 38.55 | <0.05 | 2.82 | 4.03 | 0.52 | 4.58 | <0.05 | <0.08 | 0.19 | 0.68 | 0.23 | 10.09 | <0.05 | <0.05 | 36.23 |
| 63 | BLD/PBH05/57 | 62.00 | 63.00 | 1.00 | 5.09 | <0.05 | 37.96 | <0.05 | 3.15 | 4.50 | 0.60 | 4.42 | <0.05 | <0.08 | 0.15 | 0.52 | 0.25 | 11.12 | <0.05 | <0.05 | 35.39 |
| 64 | BLD/PBH05/58 | 63.00 | 64.00 | 1.00 | 5.68 | <0.05 | 37.67 | <0.05 | 5.58 | 7.98 | 0.54 | 3.15 | <0.05 | <0.08 | 0.22 | 0.61 | 0.26 | 10.43 | <0.05 | <0.05 | 33.44 |
| 65 | BLD/PBH05/59 | 64.00 | 65.00 | 1.00 | 2.74 | <0.05 | 45.80 | <0.05 | 1.53 | 2.19 | 0.27 | 2.68 | <0.05 | <0.08 | 0.07 | 0.75 | 0.13 | 6.08 | <0.05 | <0.05 | 39.27 |
| 67 | BLD/PBH05/60 | 65.00 | 66.00 | 1.00 | 4.79 | <0.05 | 40.95 | <0.05 | 3.12 | 4.46 | 0.40 | 3.15 | <0.05 | <0.08 | 0.15 | 0.80 | 0.22 | 8.88 | <0.05 | <0.05 | 36.17 |
| 68 | BLD/PBH05/61 | 66.00 | 67.00 | 1.00 | 3.94 | <0.05 | 44.13 | <0.05 | 2.31 | 3.30 | 0.34 | 2.60 | <0.05 | <0.08 | 0.17 | 1.17 | 0.16 | 6.34 | <0.05 | <0.05 | 37.83 |
| 69 | BLD/PBH05/62 | 67.00 | 68.00 | 1.00 | 3.79 | <0.05 | 43.99 | <0.05 | 3.39 | 4.85 | 0.29 | 2.41 | <0.05 | <0.08 | 0.18 | 1.38 | 0.15 | 6.05 | <0.05 | <0.05 | 36.90 |
| 70 | BLD/PBH05/63 | 68.00 | 69.00 | 1.00 | 2.84 | <0.05 | 46.74 | <0.05 | 2.05 | 2.93 | 0.19 | 1.88 | <0.05 | <0.08 | 0.09 | 1.57 | 0.10 | 4.76 | <0.05 | <0.05 | 38.88 |
| 71 | BLD/PBH05/64 | 69.00 | 70.00 | 1.00 | 3.44 | <0.05 | 45.34 | <0.05 | 2.23 | 3.18 | 0.23 | 1.96 | <0.05 | <0.08 | 0.09 | 1.72 | 0.12 | 5.99 | <0.05 | <0.05 | 37.90 |
| 72 | BLD/PBH05/65 | 70.00 | 71.00 | 1.00 | 2.80 | <0.05 | 47.32 | <0.05 | 1.60 | 2.29 | 0.20 | 1.71 | <0.05 | <0.08 | 0.09 | 1.51 | 0.11 | 4.86 | <0.05 | <0.05 | 39.09 |
| 73 | BLD/PBH05/66 | 71.00 | 72.00 | 1.00 | 3.08 | <0.05 | 47.35 | <0.05 | 1.14 | 1.64 | 0.25 | 1.68 | <0.05 | <0.08 | <0.05 | 1.00 | 0.13 | 5.40 | <0.05 | <0.05 | 39.41 |
| 74 | BLD/PBH05/67 | 72.00 | 73.00 | 1.00 | 3.08 | <0.05 | 46.40 | <0.05 | 1.64 | 2.35 | 0.27 | 1.82 | <0.05 | <0.08 | <0.05 | 1.28 | 0.14 | 6.00 | <0.05 | <0.05 | 38.59 |
| 75 | BLD/PBH05/68 | 73.00 | 74.00 | 1.00 | 3.06 | <0.05 | 47.11 | <0.05 | 1.35 | 1.92 | 0.28 | 1.61 | <0.05 | <0.08 | 0.05 | 1.29 | 0.14 | 5.88 | <0.05 | <0.05 | 38.65 |
| 76 | BLD/PBH05/69 | 74.00 | 75.00 | 1.00 | 2.38 | <0.05 | 48.69 | <0.05 | 1.08 | 1.55 | 0.21 | 1.58 | <0.05 | <0.08 | <0.05 | 0.81 | 0.11 | 4.97 | <0.05 | <0.05 | 39.66 |
| 78 | BLD/PBH05/70 | 75.00 | 76.00 | 1.00 | 2.63 | <0.05 | 48.48 | <0.05 | 1.26 | 1.80 | 0.13 | 1.70 | <0.05 | <0.08 | 0.06 | 0.81 | 0.09 | 4.34 | <0.05 | <0.05 | 39.92 |
| 79 | BLD/PBH05/71 | 76.00 | 77.00 | 1.00 | 3.35 | <0.05 | 45.79 | <0.05 | 1.64 | 2.35 | 0.19 | 1.73 | <0.05 | <0.08 | 0.05 | 1.42 | 0.10 | 5.78 | <0.05 | <0.05 | 39.21 |
| 80 | BLD/PBH05/72 | 77.00 | 78.00 | 1.00 | 1.32 | <0.05 | 51.82 | <0.05 | 0.60 | 0.85 | 0.06 | 1.05 | <0.05 | <0.08 | <0.05 | 0.58 | <0.05 | 1.52 | <0.05 | <0.05 | 42.68 |
| 81 | BLD/PBH05/73 | 78.00 | 79.00 | 1.00 | 1.48 | <0.05 | 51.95 | <0.05 | 0.59 | 0.84 | 0.09 | 1.09 | <0.05 | <0.08 | <0.05 | 0.65 | <0.05 | 2.00 | <0.05 | <0.05 | 41.80 |
| 82 | BLD/PBH05/74 | 79.00 | 80.00 | 1.00 | 1.41 | <0.05 | 52.09 | <0.05 | 0.55 | 0.78 | 0.08 | 1.10 | <0.05 | <0.08 | 0.05 | 0.61 | <0.05 | 1.96 | <0.05 | <0.05 | 41.84 |
| 83 | BLD/PBH05/75 | 80.00 | 81.00 | 1.00 | 1.01 | <0.05 | 52.94 | <0.05 | 0.53 | 0.75 | 0.07 | 0.94 | <0.05 | <0.08 | 0.06 | 0.57 | <0.05 | 1.52 | <0.05 | <0.05 | 42.09 |

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| **ANNEXURE-IV: ANALYTICAL RESULT OF CORE SAMPLES FOR BOREHOLE PBH-05** | | | | | | | | | | | | | | | | | | | | | |
| **S.No.** | **Sample No** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe (T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 84 | BLD/PBH05/76 | 81.00 | 82.00 | 1.00 | 1.71 | <0.05 | 50.78 | <0.05 | 0.82 | 1.17 | 0.15 | 1.26 | <0.05 | <0.08 | 0.05 | 0.85 | 0.07 | 3.11 | <0.05 | <0.05 | 40.84 |
| 85 | BLD/PBH05/77 | 82.00 | 83.00 | 1.00 | 1.54 | <0.05 | 50.25 | <0.05 | 0.89 | 1.28 | 0.11 | 1.32 | <0.05 | <0.08 | <0.05 | 0.76 | 0.05 | 2.82 | <0.05 | <0.05 | 41.81 |
| 86 | BLD/PBH05/78 | 83.00 | 84.00 | 1.00 | 2.09 | <0.05 | 49.05 | <0.05 | 1.10 | 1.57 | 0.19 | 1.41 | <0.05 | <0.08 | <0.05 | 1.04 | 0.08 | 4.06 | <0.05 | <0.05 | 40.44 |
| 87 | BLD/PBH05/79 | 84.00 | 85.00 | 1.00 | 1.19 | <0.05 | 51.84 | <0.05 | 0.71 | 1.01 | 0.12 | 1.22 | <0.05 | <0.08 | 0.05 | 0.63 | 0.05 | 2.48 | <0.05 | <0.05 | 41.37 |
| 89 | BLD/PBH05/80 | 85.00 | 86.00 | 1.00 | 1.76 | <0.05 | 51.00 | <0.05 | 0.72 | 1.02 | 0.15 | 1.34 | <0.05 | <0.08 | <0.05 | 0.68 | 0.08 | 3.03 | <0.05 | <0.05 | 40.87 |
| 90 | BLD/PBH05/81 | 86.00 | 87.00 | 1.00 | 1.61 | <0.05 | 51.06 | <0.05 | 0.85 | 1.22 | 0.14 | 1.31 | <0.05 | <0.08 | 0.09 | 0.81 | 0.05 | 2.68 | <0.05 | <0.05 | 41.00 |
| 91 | BLD/PBH05/82 | 87.00 | 88.00 | 1.00 | 1.29 | <0.05 | 51.65 | <0.05 | 1.04 | 1.48 | 0.08 | 1.27 | <0.05 | <0.08 | 0.06 | 0.94 | <0.05 | 2.16 | <0.05 | <0.05 | 41.00 |
| 92 | BLD/PBH05/83 | 88.00 | 89.00 | 1.00 | 1.87 | <0.05 | 50.76 | <0.05 | 0.83 | 1.18 | 0.14 | 1.32 | <0.05 | <0.08 | <0.05 | 0.81 | 0.06 | 2.89 | <0.05 | <0.05 | 40.90 |
| 93 | BLD/PBH05/84 | 89.00 | 90.00 | 1.00 | 1.51 | <0.05 | 51.92 | <0.05 | 0.55 | 0.79 | 0.11 | 1.16 | <0.05 | <0.08 | <0.05 | 0.49 | <0.05 | 2.26 | <0.05 | <0.05 | 41.64 |
| 94 | BLD/PBH05/85 | 90.00 | 91.00 | 1.00 | 1.38 | <0.05 | 51.92 | <0.05 | 0.62 | 0.89 | 0.10 | 1.21 | <0.05 | <0.08 | <0.05 | 0.51 | <0.05 | 2.16 | <0.05 | <0.05 | 41.73 |
| 95 | BLD/PBH05/86 | 91.00 | 92.00 | 1.00 | 1.90 | <0.05 | 50.62 | <0.05 | 0.76 | 1.09 | 0.16 | 1.23 | <0.05 | <0.08 | <0.05 | 0.73 | 0.07 | 3.19 | <0.05 | <0.05 | 40.95 |
| 96 | BLD/PBH05/87 | 92.00 | 93.00 | 1.00 | 1.17 | <0.05 | 51.99 | <0.05 | 0.69 | 0.99 | 0.09 | 1.20 | <0.05 | <0.08 | <0.05 | 0.73 | <0.05 | 2.15 | <0.05 | <0.05 | 41.59 |
| 97 | BLD/PBH05/88 | 93.00 | 94.00 | 1.00 | 1.86 | <0.05 | 51.21 | <0.05 | 0.54 | 0.77 | 0.13 | 1.23 | <0.05 | <0.08 | <0.05 | 0.50 | 0.06 | 2.77 | <0.05 | <0.05 | 41.42 |
| 98 | BLD/PBH05/89 | 94.00 | 95.00 | 1.00 | 2.38 | <0.05 | 49.19 | <0.05 | 1.08 | 1.55 | 0.16 | 1.52 | <0.05 | <0.08 | <0.05 | 0.76 | 0.08 | 3.97 | <0.05 | <0.05 | 40.34 |
| 100 | BLD/PBH05/90 | 95.00 | 96.00 | 1.00 | 1.88 | <0.05 | 50.17 | <0.05 | 0.98 | 1.40 | 0.11 | 1.45 | <0.05 | <0.08 | <0.05 | 0.65 | 0.09 | 3.34 | <0.05 | <0.05 | 40.84 |
| 101 | BLD/PBH05/91 | 96.00 | 97.00 | 1.00 | 2.05 | <0.05 | 49.63 | <0.05 | 1.08 | 1.55 | 0.18 | 1.48 | <0.05 | <0.08 | <0.05 | 0.67 | 0.07 | 3.89 | <0.05 | <0.05 | 40.42 |
| 102 | BLD/PBH05/92 | 97.00 | 98.00 | 1.00 | 1.64 | <0.05 | 50.62 | <0.05 | 0.96 | 1.37 | 0.15 | 1.34 | <0.05 | <0.08 | <0.05 | 0.63 | 0.06 | 3.16 | <0.05 | <0.05 | 40.96 |
| 103 | BLD/PBH05/93 | 98.00 | 99.00 | 1.00 | 2.22 | <0.05 | 48.39 | <0.05 | 1.56 | 2.24 | 0.20 | 1.57 | <0.05 | <0.08 | 0.05 | 1.32 | 0.09 | 4.56 | <0.05 | <0.05 | 39.35 |
| 104 | BLD/PBH05/94 | 99.00 | 100.00 | 1.00 | 2.40 | <0.05 | 48.02 | <0.05 | 1.50 | 2.15 | 0.23 | 1.56 | <0.05 | <0.08 | <0.05 | 1.18 | 0.10 | 4.94 | <0.05 | <0.05 | 39.36 |

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| **ANNEXURE-V: ANALYTICAL RESULT OF CHECK SAMPLE (DUPLICATE SAMPLES)** | | | | | | | | | | | | | |
| **Sr No** | **Sample No** | **SiO2 (%)** | **TiO2 (%)** | **Al2O3 (%)** | **Fe2O3(T) (%)** | **MnO (%)** | **MgO (%)** | **CaO (%)** | **Na2O (%)** | **K2O (%)** | **P2O5 (%)** | **SO3 (%)** | **L.O.I. (%)** |
| 1 | BLD/PBH-01/11 | 6.641 | 0.157 | 3.136 | 5.947 | 0.103 | 3.26 | 42.163 | 0.016 | 0.334 | 0.082 | 0.508 | 37.401239 |
| 2 | BLD/PBH-01/22 | 5.217 | 0.108 | 2.331 | 3.062 | <0.01 | 1.582 | 47.368 | 0.074 | 0.185 | 0.058 | 1.461 | 38.32998 |
| 3 | BLD/PBH-01/33 | 2.43 | 0.047 | 1.182 | 0.92 | <0.01 | 0.969 | 52.384 | <0.01 | 0.102 | 0.026 | 0.668 | 41.198655 |
| 4 | BLD/PBH-01/44 | 2.757 | 0.052 | 1.283 | 1.028 | <0.01 | 1.066 | 51.659 | 0.029 | 0.118 | 0.019 | 0.534 | 41.296554 |
| 5 | BLD/PBH-01/55 | 6.543 | 0.132 | 2.822 | 2.533 | <0.01 | 1.453 | 47.057 | 0.014 | 0.303 | 0.038 | 1.163 | 37.801393 |
| 6 | BLD/PBH-01/66 | 55.719 | 0.341 | 6.278 | 5.817 | <0.01 | 0.969 | 14.538 | 0.022 | 1.161 | 0.046 | 2.37 | 12.498037 |
| 7 | BLD/PBH-01/75 | 66.643 | 0.609 | 11.54 | 5.454 | <0.01 | 1.001 | 3.665 | 0.073 | 1.935 | 0.054 | 1.939 | 6.492835 |
| 8 | BLD/PBH-01/84 | 51.439 | 1.057 | 20.868 | 7.249 | 0.018 | 1.028 | 0.81 | 0.026 | 2.119 | 0.051 | 1.637 | 13.421441 |
| 9 | BLD/PBH02/10 | 6.887 | 0.184 | 3.651 | 12.026 | 0.538 | 2.559 | 38.468 | 0.018 | 0.278 | 0.141 | 3.283 | 31.713985 |
| 10 | BLD/PBH02/20 | 5.514 | 0.145 | 2.862 | 15.717 | 0.119 | 1.873 | 39.105 | 0.025 | 0.191 | 0.243 | 1.312 | 32.556365 |
| 11 | BLD/PBH02/30 | 48.827 | 1.078 | 21.32 | 11.311 | <0.01 | 3.147 | 0.889 | 0.541 | 2.951 | 0.366 | 1.065 | 8.0785724 |
| 12 | BLD/PBH02/40 | 4.969 | 0.109 | 2.273 | 4.541 | 0.257 | 2.533 | 45.464 | <0.01 | 0.21 | 0.063 | 1.675 | 37.606838 |
| 13 | BLD/PBH02/50 | 9.333 | 0.221 | 4.473 | 6.931 | <0.01 | 2.644 | 40.487 | 0.028 | 0.454 | 0.141 | 0.435 | 34.730481 |
| 14 | BLD/PBH02/60 | 6.315 | 0.147 | 3.128 | 2.01 | <0.01 | 1.463 | 46.857 | 0.041 | 0.3 | 0.026 | 1.335 | 38.198639 |
| 15 | BLD/PBH02/70 | 3.88 | 0.082 | 1.875 | 1.359 | <0.01 | 1.16 | 50.042 | <0.01 | 0.2 | 0.029 | 1.014 | 40.170643 |
| 16 | BLD/PBH02/80 | 3.063 | 0.064 | 1.517 | 0.807 | <0.01 | 1.034 | 51.2 | 0.02 | 0.145 | 0.016 | 0.48 | 41.284404 |
| 17 | BLD/PBH02/90 | 5.939 | 0.144 | 3.052 | 4.041 | 0.011 | 1.307 | 46.391 | <0.01 | 0.308 | 0.055 | 1.285 | 37.248865 |
| 18 | BLD/PBH02/96 | 10.839 | 0.247 | 5.115 | 2.536 | <0.01 | 1.102 | 42.666 | 0.019 | 0.476 | 0.064 | 1.031 | 35.548007 |
| 19 | BLD/PBH03/10 | 6.697 | 0.18 | 3.587 | 11.101 | 0.506 | 2.473 | 39.488 | 0.012 | 0.278 | 0.244 | 2.692 | 32.551247 |
| 20 | BLD/PBH03/20 | 6.065 | 0.166 | 3.215 | 18.645 | 0.126 | 2.027 | 36.585 | 0.024 | 0.209 | 0.268 | 1.081 | 31.245849 |
| 21 | BLD/PBH03/30 | 49.088 | 1.105 | 21.8 | 11.178 | <0.01 | 3.089 | 0.224 | 0.763 | 3.159 | 0.122 | 0.884 | 7.8380483 |
| 22 | BLD/PBH03/40 | 5.547 | 0.122 | 2.516 | 4.851 | 0.284 | 2.805 | 44.303 | 0.028 | 0.234 | 0.098 | 1.928 | 36.976679 |
| 23 | BLD/PBH03/50 | 11.498 | 0.258 | 5.081 | 7.896 | <0.01 | 4.118 | 36.026 | 0.082 | 0.578 | 0.137 | 0.312 | 33.64235 |
| 24 | BLD/PBH03/60 | 5.881 | 0.132 | 2.82 | 2.386 | <0.01 | 1.621 | 47.061 | 0.011 | 0.271 | 0.043 | 1.247 | 38.360021 |

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| **ANNEXURE-V: ANALYTICAL RESULT OF CHECK SAMPLE (DUPLICATE SAMPLES)** | | | | | | | | | | | | | |
| **Sr No** | **Sample No** | **SiO2 (%)** | **TiO2 (%)** | **Al2O3 (%)** | **Fe2O3(T) (%)** | **MnO (%)** | **MgO (%)** | **CaO (%)** | **Na2O (%)** | **K2O (%)** | **P2O5 (%)** | **SO3 (%)** | **L.O.I. (%)** |
| 25 | BLD/PBH03/70 | 2.929 | 0.058 | 1.408 | 0.922 | <0.01 | 1.002 | 51.524 | <0.01 | 0.143 | 0.027 | 0.63 | 41.091756 |
| 26 | BLD/PBH03/80 | 2.733 | 0.05 | 1.238 | 1.049 | <0.01 | 1.055 | 51.833 | 0.03 | 0.112 | 0.016 | 0.579 | 41.108085 |
| 27 | BLD/PBH03/86 | 5.166 | 0.11 | 2.386 | 2.099 | <0.01 | 1.444 | 48.262 | 0.02 | 0.265 | 0.027 | 0.924 | 39.057617 |
| 28 | BLD/PBH-04/10 | 4.774 | 0.142 | 2.826 | 10.654 | 1.237 | 2.554 | 40.15 | <0.01 | 0.157 | 0.106 | 2.779 | 34.202567 |
| 29 | BLD/PBH-04/20 | 4.366 | 0.096 | 2.071 | 4.143 | 0.273 | 1.619 | 47.312 | <0.01 | 0.135 | 0.047 | 2.331 | 37.453184 |
| 30 | BLD/PBH-04/30 | 5.781 | 0.14 | 2.898 | 6.26 | 0.079 | 1.602 | 45.02 | 0.011 | 0.279 | 0.112 | 1.514 | 36.156226 |
| 31 | BLD/PBH-04/40 | 8.576 | 0.157 | 3.212 | 3.439 | 0.019 | 2.635 | 43.335 | 0.036 | 0.352 | 0.039 | 1.226 | 36.776719 |
| 32 | BLD/PBH-04/50 | 6.663 | 0.148 | 2.997 | 4.625 | 0.101 | 3.059 | 43.405 | 0.06 | 0.336 | 0.089 | 0.625 | 37.317694 |
| 33 | BLD/PBH-04/60 | 6.193 | 0.137 | 2.839 | 3.554 | <0.01 | 1.767 | 45.646 | 0.07 | 0.245 | 0.064 | 1.339 | 37.753883 |
| 34 | BLD/PBH-04/70 | 1.845 | 0.03 | 0.882 | 0.76 | <0.01 | 0.926 | 53.249 | 0.044 | 0.076 | 0.033 | 0.52 | 41.522207 |
| 35 | BLD/PBH-04/80 | 2.582 | 0.051 | 1.22 | 1.232 | <0.01 | 1.087 | 51.606 | 0.037 | 0.121 | 0.027 | 0.818 | 40.980075 |
| 36 | BLD/PBH-04/90 | 5.077 | 0.112 | 2.385 | 2.349 | <0.01 | 1.464 | 48.045 | 0.042 | 0.231 | 0.037 | 1.229 | 38.845554 |
| 37 | BLD/PBH05/10 | 48.403 | 1.024 | 20.163 | 9.689 | <0.01 | 2.595 | 2.627 | 0.174 | 3.037 | 0.106 | 0.886 | 10.981818 |
| 38 | BLD/PBH05/20 | 5.138 | 0.13 | 2.694 | 6.561 | 0.383 | 1.771 | 44.75 | 0.038 | 0.208 | 0.082 | 1.78 | 36.157507 |
| 39 | BLD/PBH05/30 | 7.253 | 0.2 | 3.89 | 18.104 | 0.108 | 2.259 | 35.81 | 0.019 | 0.286 | 0.257 | 0.764 | 30.780484 |
| 40 | BLD/PBH05/40 | 22.64 | 0.504 | 9.938 | 10.408 | <0.01 | 2.727 | 26.157 | 0.206 | 1.254 | 0.327 | 0.612 | 24.675962 |
| 41 | BLD/PBH05/50 | 4.028 | 0.084 | 1.831 | 2.484 | 0.135 | 1.453 | 48.589 | 0.049 | 0.179 | 0.027 | 1.602 | 39.272819 |
| 42 | BLD/PBH05/60 | 9.216 | 0.213 | 4.266 | 4.59 | <0.01 | 2.952 | 41.176 | 0.05 | 0.433 | 0.096 | 0.734 | 35.74061 |
| 43 | BLD/PBH05/70 | 4.476 | 0.097 | 2.108 | 1.799 | <0.01 | 1.467 | 49.003 | 0.031 | 0.173 | 0.032 | 0.797 | 39.803357 |
| 44 | BLD/PBH05/80 | 3.167 | 0.067 | 1.542 | 1.031 | <0.01 | 1.133 | 51.176 | 0.048 | 0.186 | 0.02 | 0.605 | 40.901633 |
| 45 | BLD/PBH05/90 | 3.496 | 0.07 | 1.599 | 1.416 | <0.01 | 1.239 | 50.625 | 0.017 | 0.147 | 0.025 | 0.546 | 40.66442 |
| 46 | BLD-06 | 3.873 | 0.077 | 1.78 | 1.121 | <0.01 | 1.266 | 50.53 | 0.09 | 0.16 | 0.01 | 0.415 | 40.527241 |
| 47 | BLD-12 | 1.552 | 0.027 | 0.78 | 0.676 | <0.01 | 0.89 | 53.74 | 0.12 | 0.07 | 0.02 | 0.041 | 42.0298 |
| 48 | BLD-21 | 3.496 | 0.069 | 1.51 | 5.883 | 0.32 | 1.191 | 48.38 | 0.06 | 0.11 | 0.10 | <0.01 | 38.909542 |

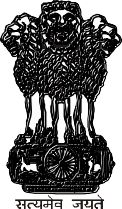
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| **ANNEXURE-V: ANALYTICAL RESULT OF CHECK SAMPLE (DUPLICATE SAMPLES)** | | | | | | | | | | | | | |
| **Sr No** | **Sample No** | **SiO2 (%)** | **TiO2 (%)** | **Al2O3 (%)** | **Fe2O3(T) (%)** | **MnO (%)** | **MgO (%)** | **CaO (%)** | **Na2O (%)** | **K2O (%)** | **P2O5 (%)** | **SO3 (%)** | **L.O.I. (%)** |
| 49 | BLD-26 | 2.637 | 0.046 | 1.09 | 4.591 | 0.15 | 1.028 | 49.84 | 0.06 | 0.09 | 0.08 | <0.01 | 40.18596 |
| 50 | BLD-35 | 2.92 | 0.062 | 1.44 | 2.345 | 0.37 | 0.96 | 50.84 | 0.02 | 0.12 | 0.04 | <0.01 | 40.81381 |

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| **ANNEXURE**-**VI: ANALYTICAL RESULT (MAJOR OXIDES) OF PETROCHEMICAL SAMPLES** | | | | | | | | | | | | | | | | | | | | | |
| **S.NO** | **Sample ID** | **From** | **To** | **Thickness** | **Al2O3** | **BaO** | **CaO** | **Cr2O3** | **Fe**  **(T)** | **Fe2O3** | **K2O** | **MgO** | **MnO** | **Na2O** | **P2O5** | **SO3** | **TiO2** | **SiO2** | **SrO** | **V2O5** | **LOI** |
| 1 | BLD/PBH01/15 | 18.00 | 19.00 | 1.00 | 5.66 | <0.05 | 35.55 | <0.05 | 4.68 | 6.69 | 0.65 | 4.08 | <0.05 | <0.08 | 0.10 | 0.64 | 0.28 | 11.78 | 0.10 | <0.05 | 34.35 |
| 2 | BLD/PBH01/70 | 73.00 | 74.00 | 1.00 | 11.59 | <0.05 | 16.01 | <0.05 | 4.92 | 7.04 | 1.53 | 1.19 | <0.05 | <0.08 | 0.07 | 3.33 | 1.15 | 40.24 | <0.05 | <0.05 | 17.61 |
| 3 | BLD/PBH02/24 | 26.00 | 27.00 | 1.00 | 2.28 | <0.05 | 48.38 | <0.05 | 2.00 | 2.86 | 0.18 | 1.41 | 0.12 | <0.08 | 0.08 | 1.29 | 0.11 | 3.96 | <0.05 | <0.05 | 39.32 |
| 4 | BLD/PBH02/94 | 97.00 | 98.00 | 1.00 | 10.49 | <0.05 | 25.79 | <0.05 | 3.54 | 5.07 | 1.12 | 1.68 | <0.05 | <0.08 | 0.05 | 2.68 | 0.96 | 26.61 | <0.05 | <0.05 | 25.53 |
| 5 | BLD/PBH03/25 | 38.00 | 39.00 | 1.00 | 3.82 | <0.05 | 41.73 | <0.05 | 5.55 | 7.94 | 0.37 | 1.75 | 0.15 | <0.08 | 0.11 | 1.40 | 0.19 | 6.71 | 0.08 | <0.05 | 35.63 |
| 6 | BLD/PBH03/64 | 77.00 | 78.00 | 1.00 | 1.49 | <0.05 | 50.75 | <0.05 | 1.16 | 1.66 | 0.07 | 1.26 | <0.05 | <0.08 | <0.05 | 0.65 | <0.05 | 2.41 | 0.06 | <0.05 | 41.51 |
| 7 | BLD/PBH04/13 | 20.00 | 21.00 | 1.00 | 2.34 | <0.05 | 40.18 | <0.05 | 9.17 | 13.11 | 0.11 | 2.58 | 1.21 | <0.08 | 0.08 | 0.21 | 0.09 | 3.17 | 0.10 | <0.05 | 36.67 |
| 8 | BLD/PBH04/54 | 62.00 | 63.00 | 1.00 | 5.02 | <0.05 | 36.00 | <0.05 | 5.88 | 8.40 | 0.57 | 3.95 | <0.05 | <0.08 | 0.11 | 0.51 | 0.25 | 10.61 | 0.10 | <0.05 | 34.37 |
| 9 | BLD/PBH05/37 | 41.00 | 42.00 | 1.00 | 5.01 | <0.05 | 38.83 | <0.05 | 5.90 | 8.43 | 0.49 | 2.45 | 0.05 | <0.08 | 0.33 | 0.76 | 0.23 | 9.95 | <0.05 | <0.05 | 33.43 |
| 10 | BLD/PBH05/71 | 76.00 | 77.00 | 1.00 | 3.35 | <0.05 | 45.79 | <0.05 | 1.64 | 2.35 | 0.19 | 1.73 | <0.05 | <0.08 | 0.05 | 1.42 | 0.10 | 5.78 | <0.05 | <0.05 | 39.21 |

**ANNEXURE**-**VII: BULK DENSITY OF CORE SAMPLES**

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| --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Customer Code** | **Customer Description** | **METHOD** | **SOP/OM/094** |
| **UNITS** | **gm/cm3** |
| **Lab ID** | **Bulk Density** |
|  |  |  |  |  |
| 1 | BLD/PBH02/93 | Powder | G621-1 | 2.48 |
| 2 | BLD/PBH01/15 | Powder | G621-2 | 2.61 |
| 3 | BLD/PBH04/54 | Powder | G621-3 | 2.49 |
|  |  |  |  |  |

**ANNEXURE-VIII: NPEA Certificate of Accreditation**

 **रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99**







**असाधारण**

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**EXTRAORDINARY**

**भाग II**—**खण्ड 3**—**उप-खण्ड (ii) PART II—Section 3—Sub-section (ii)**

**प्राजधकार से प्रकाजित**

**PUBLISHED BY AUTHORITY**

**सं. 3864] नई ददल्ली, सFमिार, अगस्ट्त 29, 2022/भा✐ 7, 1944**

**No. 3864] NEW DELHI, MONDAY, AUGUST 29, 2022/BHADRA 7, 1944**

# खान मंत्रालय अजधसूचना

नई ददल्ली, 29 अगस्ट्त, 2022

**का.आ. 4038(अ).—**कें ✐ीय सरकार, खान और खजनि (जिकास और जिजनयमन) अजधजनयम, 1957 (1957 का 67) की धारा 4 की उपधारा (1) के दूसरे परंतुक द्वारा प्रदत्त िजततयक का प्रयFग करते ए ए और भारतीय गुणित्ता पषर्द˛ के राष्‍टरीय जि ा और प्रजि ण प्रत्यायन बFड (तयूसीआई-एनएबीईटी) द्वारा उपबंजधत प्रत्यायन के पषरणामस्ट्िरूप, उतत अजधजनयम की धारा 4 की उपधारा (1) के उक्त दूसरे परंतुक के प्रयFिनक के जलए भारत सरकार के खान मंत्रालय के आदेि संखयांक एम.VI-16/15/2021-खान VI, तारीख 12 अगस्ट्त, 2021 (जिसे इसमें इसके पश्चात˛ प्रत्याजयत प्राइिेट खFि अजभकरणक की अजधसूचना के जलए उक्त माग दि क जसद्ांत कहा गया है) द्वारा िारी प्रत्याजयत प्राइिेट खFि अभकरणक की अजधसचूना के जलए माग दि क जसद्ांतक में यथा जिजनर्ददष्ट ‘‘प्रिग ‘क’ खFि अजभकरण’’ के अधीन मैसस महेश्वरी माईननग प्राईिेट जलजमटेड कF अजधसूजचत करती है।

1. अजभकरण, प्रत्याजयत प्राइिेट खFि अजभकरणक की अजधसूचनाओं के जलए माग दि क जसद्ांतक में जिजनर्ददष्‍टट

ितों की अनुपालना के साथ पूिे ण संदियाएं करेगा।

1. यह अजधसूचना रािपत्र में इसके प्रकािन की तारीख कF प्रिृत्त हFगी और अजधसूचना की तारीख से तीन ि् की अिजध के जलए या उसकी समाजTत तक या प्रदत्त प्रत्यायन की समाजTत तक, िF भी पहले हF जिजधमान्य हFगी।

[फा. सं. एम-VI-16/22/2022-खान VI] डॉ. िीणा कु मारी डरमल, संयुतत सजचि

5792 GI/2022 (1)

2 THE GAZETTE OF INDIA : EXTRAORDINARY [PART II—SEC. 3(ii)]

# MINISTRY OF MINES NOTIFICATION

New Delhi, the 29th August, 2022

**S.O. 4038(E).—**In exercise of the powers conferred under the second proviso 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 (QCI-NABET), the Central Government hereby notifies the M/s. Maheshwari Mining Private Limited under 'Category A Exploration Agencies' as specified in the guidelines for notification of accredited private exploration agencies issued by the Government of India in the Ministry of Mines vide order No. M.VI-16/15/2021-Mines VI, dated the 12th August, 2021 (hereafter referred to as the said guidelines for notification of accredited private exploration agencies) for the purposes of the said second proviso to sub-section (1) of section 4 of the said Act.

1. The agency shall carry out prospecting operations in compliance with the conditions specified in the said guidelines for notifications of accredited private exploration agencies.
2. This notification shall come into force on the date of its publication in the Official Gazette and shall remain valid for a period of three years from the date of notification or till expiry or termination of the accreditation granted, whichever is earlier.

[F. No. M.VI-16/22/2022-Mines VI] Dr. VEENA KUMARI DERMAL, Jt. Secy.

Uploaded by Dte. of Printing at Government of India Press, Ring Road, Mayapuri, New Delhi-110064 and Published by the Controller of Publications, Delhi-110054. MANOJ KUMAR Digitally signed by MANOJ

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**ANNEXURE-IX:** Comments of the Peer Reviewer on “**Preliminary Exploration (G3 stage) for Limestone in Northwest of Boro Lakhindong Block, Dima Hasao district, Assam”**

Examined the Geological Report on Preliminary Exploration (G3 Stage) for Limestone in Northwest of Boro Lakhindong, Dima Hasao District, Assam and observations are as follows:

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| **CONCLUSION AND RECOMMENDATION**  The Geological Report on Preliminary Exploration (G3 Stage) for Limestone in Northwest of Boro Lakhindong, Dima Hasao District, Assam covering an area of 4.82 sq.km and involving 500m of drilling is a nice work done by team of M/s MMPL with very good documentation of data and presentation through photographs.  The block with net resource of 498.97 MT (Class 333 as per UNFC) under different grades viz. Cement (Portland) 195.29 MT, Cement (Blendable) 144.40 MT and SMS (OH) 155.68 MT appears to be very potential.  Further assessment of resource of 300.79 MT (Class 334 as per UNFC) carried out beyond the area of BH influence and up to the block boundary is encouraging and attracts further investigation in the entire area under G2 Level of exploration with closer bore hole spacing.  The overburden ratio appears to be favorable and large scale open cast quarry may be envisaged after G2 Level of exploration.  I appreciate the restrictions put on M/s MMPL under the quantum of work already defined earlier due to which bore holes PBH-02 to 05 have been closed at 100m depth only while intersecting the limestone mineralized zone, otherwise it would have been prudent to deepen any one of the above four boreholes up to Upper Sylhet Sandstone to decipher the total limestone column. | |
| **Sl. No** | **Comments/Observations** |
| 1. | **Executive Summary** may not be assigned a Chapter.  Introduction should start with Chapter-1 and corrections may be made accordingly for the following chapters along with number of Tables and Figures therein for the respective chapters. **There should be a page for list of abbreviations** used in the report so as to clarify what is  SMS(OH) grade (at last line of page 4), XRF and SGS in table 2.3 at page 7, LGB International |

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|  | Airport at page 9, PPL & XPL(Optical properties) at page 32, NQT at page 44 and so on |
| 2. | **Chapter 2 Introduction 6th line of first para**  The study area is bounded by Kopili River from the Western and Southern side.  As per Plate I, II & IIA of the report, Kopili River appears to flow only in the south western corner of the block making a natural boundary. All sides of the Block boundary may be defined precisely.  **Para 2.1**  Notification in respect of M/s Maheshwari Mining Pvt. Ltd. as Notified Private Exploration Agency(NPEA) and further as ‘Category A Exploration Agencies’ may be annexed in the report |
| 3. | **Chapter 3 Property Description Para 3.1.3 Table 3.1**  Values in the table do not match with Header. May be corrected Longitudinal value of Point ID “C” at third row may be re-examined  **Para 3.1.7 Climate**  Source of data pertaining to rainfall and temperature may be indicated |
| 4. | **Chapter 6 Geoscience Investigation**  First line of page 24, (and also at the first line of last para of Executive Summary(page 3)) it is mentioned  ‘*In boreholes, the thickness of limestone varies from 4.00m to 100m with the average being 88.56m*’  The statement is not clear.  Thickness of limestone varies from 78.76m (PBH-01) to 95.60m (PBH-02) as is evident from Table 8.1 at page 46.  Occurrence of limestone has been intersected at 4.0m depth in borehole PBH-01 and continues up to 100m depth in boreholes PBH-02, 03, 04 & 05.  Documentation in respect of thickness/occurrence of limestone may be corrected accordingly. |

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| 5. | **Chapter 11 Resource Estimation Table 11.1(page 57)**  From(m) value for intersection of limestone in borehole PBH-04 & 05 may be rechecked, it  does not match with Table 8.1(page 46) or Table 9.2(page 49) |
| 6. | **Point 11.4 Cut-off Grade Considerations Table 11.2**  Please expand SMS (OH) and SMS (LD). It may be mentioned in the list of abbreviation also. Limestone is used in steel making industries also and as such  SMS(OH) may be Steel Melting Shop (Open Hearth) and  SMS(LD) may be Steel Melting Shop(Low Density/Low Dolomite) for Basic Oxygen Furnce |
| 7. | **Point 11.8 Methodology of Resource Estimation Sub para a)**  Please expand MEMC rule  It should be - The Minerals (Evidence of Mineral Contents) Rules 2015, (As amended up to 14th December, 2021) Ministry of Mines, Govt. of India issued by the Controller General, IBM, Nagpur(January, 2022)  Part-III of Schedule-I of the above rule allows 800m grid spacing of boreholes for G3 level of exploration in limestone.  Five or any number of boreholes is the choice of exploratory agency subject to the area of  exploration and approval by the approving authority (here it is NMET). |
| 8. | **Observation on plans Plate : I , II & IIA** Scale is missing  River name is missing Road is missing in legend  Important location within the block or surrounding the area may be indicated on plan Roads joining places with their names at both end may be given on map |

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|  | **Plate: III Geological cross section**  Monogram is missing  Vertical Exaggeration: 1x means that the vertical and horizontal scales on a map or profile are the same.  Plate- I, II, IIA & III are on same scale (1:4000). But distances between BH PBH-03 & 05 on X-sec. line U-U1 and PBH-04 & 05 on X-sec. line V-V1 does not exactly match with their distance on plans. Plotting of BH on X-sec. may be rechecked  **Plate IV Graphic Litholog**  Having a look at the graphic log has always been the first choice by a geologist or a mining engineer. I feel that M/s MMPL has maintained a very high degree of austerity here. Please  take care. At least it should be vivid and readable. |
| All comments and suggestions made by the Peer Reviewer have been duly complied with by  M/S. Maheshwari Mining Private Limited. | |