|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PROJECT - SIVOK RANGPO NEW BG RAILWAY LINE PROJECT** | | | | | | | | | **CO-ORDINATES - E640877.662,N2983500.263** | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **LOCATION - LOHAPOOL** | | | | | | | | | **ANGLE WITH HORIZONTAL - 90** | | | | | | | | | | |
| **SRUCTURE - BRIDGE NO. - 05/P1(2nd)** | | | | | | | | | **BEARING OF HOLE - VERTICAL** | | | | | | | | | | |
| **CLIENT - IRCON INTERNATIONAL LIMITED** | | | | | | | | | **DEPTH OF HOLE – 41.10m** | | | | | | | | | | |
| **DRILLING AGENCY - OM GEO CONSTRUCTION PVT. LTD.** | | | | | | | | | **PERIOD OF EXCUTION - 15/02/2022 - 07/04/2022** | | | | | | | | | | |
| **GROUND ELEVATION 269.167** | | | | | | | | | **TYPE OF CORE BARREL - TRIPPLE TUBE** | | | | | | | | | | |
|  | | | | | | | | | **LOGGED BY-Manoj kumar saw** | | | | | | | | | | |
|  | **DEPTH** | | | **LITHOLOGY** | | | **SIZE OF CORE PIECES** | | | | | | | | | **STRUCTURAL CONDITION** | | **PERCENTAGE OF RECOVERY** | | | | | | | | | | | |  | |  | |  |  | |  | |  | | **DRILLED WATER LOSS** | | | | | | **PENETRATION RATE** | | **PERMIABILITY** | | | | **SPECIAL OBSERVATION** | |
| **elevation** | from | To | | **Description** | **Log** | | **<10mm** | | **10 to 25mm** | **25 to 75mm** | | **75 to 150mm** | | **>150mm** | | **Description** | | **0-20** | | **20-40** | | **40-60** | | **60-80** | | **80-100** | | **Infig** | | **RQD** | | **Fracture index** | | **Size of casing** | **Size of hole** | | **Size of bit** | | **Depth of GWT** | | **Nil** | | **partial** | | **complete** | |  | | **Test section** | | **Lugeon value** | |  | |
| **269.167** | 0 | 1 | | **BROKEN PIECE OF PHYLLITE AND DUST GREYISH COLOR** |  | |  | |  |  | |  | |  | | **OVERBERDEN** | |  | |  | |  | |  | |  | | **60** | |  | | **>15** | | **HX (1.5m)** | **NX** | | **NQ3**  **75mm** | |  | |  | |  | |  | | **2.2** | |  | |  | | Moderately weathered broken piece | |
| **268.167** | 1 | 2 | | **FRACTURED GNEISS ULTERNATE BAND OF DARK AND LIGHT COLOR** |  | |  | |  | **10** | |  | |  | |  | |  | |  | |  | |  | |  | | **62** | |  | |  | | **NX (18m)** |  | |  | |  | |  | | **1.25** | |  | |  | | Moderately weathered fracture piece | |
| **267.167** | 2 | 3.50 | | **FRESH GNEISS UNWETHERED ULTERNATE BAND OF DARK AND LIGHT COLOR** |  | |  | |  | **1** | | **1** | | **2** | | **70-75° Joint** | |  | |  | |  | |  | |  | | **63** | | **17** | |  | |  | |  | |  | |  | | **2.5** | |  | |  | | Moderately weathered to fresh | |
| **265.667** | 3.50 | 4.50 | |  | |  | | **15** | **4** | |  | | **2** | |  | |  | |  | |  | |  | | **98** | | **66** | | **8-5** | |  | |  | |  | |  | | **2.4** | |  | |  | | Fresh to slightly weathered fracture | |
| **264.667** | 4.50 | 6 | | **GREYISH TO GREENISH COLOR SHEARED DECOMPOSED PHYLLITE** |  | |  | |  |  | |  | |  | |  | |  | |  | |  | |  | |  | | **68** | |  | | **>15** | |  | |  | |  | |  | | **3.2** | |  | |  | | Moderately to highly weathered | |
| **263.167** | 6 | 7 | | **FRACTURED GREENISH COLOR PHYLLITE** |  | |  | | **10** | **4** | |  | |  | | **60-75° joint** | |  | |  | |  | |  | |  | | **64** | |  | |  | |  | |  | |  | |  | | **3.3** | |  | |  | | Slightly weathered fracture | |
| **262.167** | 7 | 8 | |  | |  | | **3** |  | |  | |  | |  | |  | |  | |  | |  | | **48** | |  | |  | |  | |  | |  | |  | | **3.45** | |  | |  | |
| **261.167** | 8 | 9 | | **QUARTZITIC PHYLLITE HIGHLY FRACTURED GREENISH COLOR ROCK** |  | |  | |  | **2** | |  | | **1** | | **40-55°joint** | |  | |  | |  | |  | |  | | **52** | | **15** | | **>15** | |  | |  | |  | |  | | **1.35** | |  | |  | |
| **260.167** | 9 | 10.50 | |  | | **100** | | **7** | **6** | |  | |  | |  | |  | |  | |  | |  | | **83** | |  | |  | |  | |  | |  | |  | | **1.32** | |  | |  | | **Fresh** | |
| **258.667** | 10.50 | 12 | |  | |  | |  | **1** | | **1** | |  | |  | |  | |  | |  | |  | | **88** | |  | |  | |  | |  | |  | |  | | **1.1** | |  | |  | |
| **257.167** | 12 | 13 | |  | |  | |  | **6** | | **1** | |  | |  | |  | |  | |  | |  | | **91** | |  | | **>15** | |  | |  | |  | |  | | **0.98** | |  | |  | |
| **256.167** | 13 | 14.50 | |  | |  | |  | **4** | | **1** | |  | |  | |  | |  | |  | |  | | **80** | |  | |  | |  | |  | |  | |  | | **1.2** | |  | |  | |
| **254.667** | 14.50 | 16 | |  | |  | |  | **2** | |  | |  | |  | |  | |  | |  | |  | | **80** | |  | |  | |  | |  | |  | |  | | **1.22** | |  | |  | |
| **253.167** | 16 | 17 | |  | |  | |  | **2** | | **1** | | **1** | |  | |  | |  | |  | |  | | **76** | | **26** | | **15-8** | |  | |  | |  | |  | | **.98** | |  | |  | |
| **252.167** | 17 | 17.70 | | **QUARTZITE WHITE AND GREEN COLOR BAND** |  | |  | |  | **2** | | **2** | |  | | **70-75°joint** | |  | |  | |  | |  | |  | | **69** | | **15** | |  | |  | |  | |  | |  | | **0.67** | |  | |  | | Fresh to slightly weathered and slightly fracture | |
| **251.467** | 17.70 | 19 | |  | |  | |  |  | | **1** | | **1** | |  | |  | |  | |  | |  | | **51** | | **12** | |  | |  | |  | |  | |  | | **0.58** | |  | |  | |
| **250.167** | 19 | 19.50 | |  | |  | | **3** | **6** | | **3** | |  | |  | |  | |  | |  | |  | | **100** | |  | | **>15** | |  | |  | |  | |  | | **0.75** | |  | |  | |
| **249.667** | 19.50 | 20 | | **QUARTZITIC PHYLLITE AND PHYLLITE GREENISH COLOUR FINE GRAINE** |  | |  | | **1** | **4** | | **1** | |  | | **20-55°joint** | |  | |  | |  | |  | |  | | **98** | | **26** | | **15-8** | |  |  | |  | |  | |  | |  | |  | | **1.11** | |  | |  | | Slightly weathered and slightly to moderately fractured | |
| **249.167** | 20 | 21 | |  | |  | |  | **4** | | **1** | |  | |  | |  | |  | |  | |  | | **87** | | **12** | | **>15** | |  |  | |  | |  | |  | |  | | **0.77** | |  | |  | |
| **248.167** | 21 | 22 | |  | |  | | **2** |  | |  | |  | | **35-50°joint** | |  | |  | |  | |  | |  | | **88** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.0** | |  | |  | |
| **247.167** | 22 | 23 | | **QUARTZITIC PHYLLITE AND PHYLLITE GREENISH COLOUR FINE GRAINE** |  | |  | | **5** | **6** | |  | |  | | **40-45°joint** | |  | |  | |  | |  | |  | | **72** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.11** | |  | |  | | Slightly weathered and slightly to moderately fractured | |
| **246.167** | 23 | 24 | |  | |  | | **10** |  | | **7** | |  | | **30-35°joint** | |  | |  | |  | |  | |  | | **98** | | **12** | | **>15** | |  |  | |  | |  | |  | |  | | **0.95** | |  | |  | |
| **245.167** | 24 | 25 | |  | |  | | **5** | **2** | | **1** | |  | | **40-55°joint** | |  | |  | |  | |  | |  | | **99** | | **10** | | **>15** | |  |  | |  | |  | |  | |  | | **0.69** | |  | |  | |
| **244.167** | 25 | 26 | |  | |  | |  | **5** | | **1** | |  | |  | |  | |  | |  | |  | | **92** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.25** | |  | |  | |
| **243.167** | 26 | 27.50 | |  | |  | | **14** |  | |  | |  | | **15-20°joint** | |  | |  | |  | |  | |  | | **91** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.07** | |  | |  | |
| **241.667** | 27.50 | 28 | |  | |  | | **2** |  | |  | |  | |  | |  | |  | |  | |  | | **98** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.11** | |  | |  | |
| **241.167** | 28 | 28.75 | | **QUARTZITIC PHYLLITE AND QUARTZITE GREENISH COLOUR FINE GRAINE** |  | |  | | **8** | **6** | | **1** | |  | | **40-50°joint** | |  | |  | |  | |  | |  | | **79** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **0.47** | |  | |  | | Slightly weathered and slightly fracture | |
| **240.417** | 28.75 | 29.50 | |  | |  | |  |  | | **6** | |  | |  | |  | |  | |  | |  | | **79** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **0.47** | |  | |  | |
| **239.667** | 29.50 | 30 | | **PHYLLITE AND QUARTZITIC PHYLLITE GREENISH COLOUR FINE GRAINE** |  | |  | |  | **8** | | **1** | |  | | **50-55°joint** | |  | |  | |  | |  | |  | | **80** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **0.64** | |  | |  | | Slightly weathered and slightly fracture | |
| **239.167** | 30 | 31.50 | |  | |  | |  | **4** | | **3** | |  | |  | |  | |  | |  | |  | | **89** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **0.88** | |  | |  | |
| **237.667** | 31.50 | 33 | |  | |  | | **8** | **5** | | **5** | |  | |  | |  | |  | |  | |  | | **79** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.5** | |  | |  | |
| **236.167** | 33 | 34.50 | |  | |  | |  | **18** | | **1** | |  | | **25-30°joint** | |  | |  | |  | |  | |  | | **59** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.58** | |  | |  | |
| **234.667** | 34.50 | 35.50 | |  | |  | |  | **10** | | **1** | |  | | **40-50°joint** | |  | |  | |  | |  | |  | | **78** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.25** | |  | |  | |
| **233.667** | 35.50 | 37 | |  | |  | |  | **13** | | **4** | |  | |  | |  | |  | |  | |  | | **76** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.15** | |  | |  | |
| **232.167** | 37 | 37.50 | |  | |  | |  | **3** | | **2** | |  | |  | |  | |  | |  | |  | | **76** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **1.11** | |  | |  | |
| **231.667** | 37.50 | 38.50 | | **BRONISH COLOR SAND AND PEBBLES** |  | |  | |  |  | |  | |  | |  | |  | |  | |  | |  | |  | | **60** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **5** | |  | |  | | Moderately to highly weathered | |
| **230.667** | 38.50 | 39.0 | | **WHITE COLOR STRONG FINE GRAINE QUARTZITE** |  | |  | |  | **4** | | **1** | |  | | **40-50°joint** | |  | |  | |  | |  | |  | | **100** | | **23** | | **>15** | |  |  | |  | |  | |  | |  | | **0.41** | |  | |  | | Slightly weathered and slightly to highly fracture | |
| **230.167** | 39.0 | 39.50 | |  | |  | |  | **2** | |  | |  | |  | |  | |  | |  | |  | | **96** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **0.40** | |  | |  | |
| **229.667** | 39.50 | 40.0 | |  | |  | |  | **2** | |  | |  | |  | |  | |  | |  | |  | | **72** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **0.35** | |  | |  | |
| **229.167** | 40.0 | 40.90 | |  | |  | |  | **8** | | **1** | |  | |  | |  | |  | |  | |  | | **46** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **0.64** | |  | |  | |
| **228.267** | 40.90 | 41.10 | |  | |  | |  | **2** | | **1** | |  | |  | |  | |  | |  | |  | | **100** | |  | | **>15** | |  |  | |  | |  | |  | |  | | **0.33** | |  | |  | |
| **NOTE TIME:** | | | |  | | --- | |  |   OVERBURDEN | | | | | | | | |  | | --- | |  |   **PHYLLITE** | | | | | | | | **SHEAR ZONE** | | | | | | | | | | | | | | **GWT=GROUND WATER TABLE** | | | | | | | | | | | **SPT=STANDARD PENETRATION TEST** | | | | | | | | | | |
| |  | | --- | |  |   **QUARTZATICPHYLLITE** | | | | | | | | |  | | --- | |  |   **QUARTZITE** | | | | | | | | |  | | --- | |  |   **GNEISS** | | | | | | | | | | | | | | **SM=SMOOTH** | | | | | **R=ROUGH** | | | | | |  | | | | | | | | | | |
|  | | |  | |  | | |  |  |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  |