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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PROJECT - SIVOK RANGPO NEW BG RAILWAY LINE PROJECT** | | | | | | | | | **CO-ORDINATES - E644155.989,N2978856.100** | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **LOCATION - KALIJHORA** | | | | | | | | | **ANGLE WITH HORIZONTAL - 90** | | | | | | | | | | | |
| **SRUCTURE - BRIDGE NO. - 03/P2** | | | | | | | | | **BEARING OF HOLE - VERTICAL** | | | | | | | | | | | |
| **CLIENT - IRCON INTERNATIONAL LIMITED** | | | | | | | | | **DEPTH OF HOLE - 52.50m** | | | | | | | | | | | |
| **DRILLING AGENCY - OM GEO CONSTRUCTION PVT. LTD.** | | | | | | | | | **PERIOD OF EXCUTION - 03/08/2021 - 22/08/2021** | | | | | | | | | | | |
| **GROUND ELEVATION 182.472** | | | | | | | | | **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** | | **L**  **O**  **G** | **<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** | |  | |
| **182.47** | 0 | 1 | | **BROWN SOIL MIXED WITH PEBBLES** | |  |  | |  |  | |  | | |  | | **Observation** | |  | |  | |  | |  | |  | | **14** | |  | |  | | **HX (1.5m)** | | **NX** | | **NQ3** | | **11m** | |  | |  | |  | | **10** | |  | |  | | **Slightly to moderately weathered moderately fractured** | |
| **181.47** | 1 | 2 | |  | |  |  | |  | | |  | |  | |  | |  | |  | |  | | **44** | |  | |  | |  | |  | | **5** | |  | |  | |
| **180.47** | 2 | 3 | |  | |  | **10** | | **2** | | |  | |  | |  | |  | |  | |  | | **53** | |  | | **NX (33.5m)** | |  | |  | |  | | **4** | |  | |  | |
| **179.47** | 3 | 4 | |  | |  | **6** | |  | | |  | |  | |  | |  | |  | |  | | **50** | |  | |  | |  | |  | | **3.3** | |  | |  | |
| **178.47** | 4 | 5 | |  | | **15** | **12** | |  | | |  | |  | |  | |  | |  | |  | | **57** | |  | |  | |  | |  | | **2.8** | |  | |  | |
| **177.47** | 5 | 6 | | **QUARTZITIC PHYLLITE HIGHLY FRACTURED LIGHT GREYISH IN COLOR** | |  |  | | **7** | **11** | | **1** | | |  | | **23-69° Smooth filling** | |  | |  | |  | |  | |  | | **52** | |  | |  | |  | |  | | **2.4** | |  | |  | |
| **176.47** | 6 | 7 | |  | | **15** | **17** | | **2** | | |  | |  | |  | |  | |  | |  | | **74** | |  | |  | |  | |  | | **2.2** | |  | |  | | **Slightly to moderately weathered slightly fractured** | |
| **175.47** | 7 | 8 | |  | | **12** | **10** | | **4** | | |  | |  | |  | |  | |  | |  | | **68** | | **10** | |  | |  | |  | | **2.08** | |  | |  | |
| **174.47** | 8 | 9 | |  | | **5** | **9** | | **1** | | |  | |  | |  | |  | |  | |  | | **57** | | **15** | |  | |  | |  | | **2.5** | |  | |  | |
| **173.47** | 9 | 10 | |  | | **10** | **14** | | **1** | | |  | |  | |  | |  | |  | |  | | **56** | |  | |  | |  | |  | | **2.6** | |  | |  | |
| **172.47** | 10 | 11 | |  | |  | **11** | | **2** | | |  | |  | |  | |  | |  | |  | | **58** | |  | |  | |  | |  | | **3.3** | |  | |  | | **Slightly weathered slightly fractured** | |
| **171.47** | 11 | 12 | |  | | **5** | **9** | | **6** | | |  | |  | |  | |  | |  | |  | | **70** | | **24** | |  | |  | |  | | **3** | |  | |  | |
| **170.47** | 12 | 13 | | **PHYLLITE, QUARTZITIC PHYLLITE HIGHLY FRACTURED GREYISH COLOR** | |  |  | |  | **13** | | **1** | | |  | | **67° J Rough Interface** | |  | |  | |  | |  | |  | | **48** | |  | |  | |  | |  | | **2.8** | |  | |  | |
| **169.47** | 13 | 14 | |  | | **5** | **6** | | **1** | | | **1** | |  | |  | |  | |  | |  | | **59** | | **16** | |  | |  | |  | | **2.6** | |  | |  | | **Slightly to moderately weathered moderately fractured** | |
| **168.47** | 14 | 15 | |  | | **10** | **15** | | **2** | | |  | |  | |  | |  | |  | |  | | **47** | |  | |  | |  | |  | | **3.3** | |  | |  | |
| **167.47** | 15 | 16 | |  | | **10** | **16** | |  | | |  | |  | |  | |  | |  | |  | | **44** | |  | |  | |  | |  | | **3.8** | |  | |  | |
| **166.47** | 16 | 17 | |  | | **14** | **16** | |  | | |  | |  | |  | |  | |  | |  | | **54** | |  | |  | |  | |  | | **3.4** | |  | |  | |
| **165.47** | 17 | 18 | |  | | **10** | **15** | |  | | |  | |  | |  | |  | |  | |  | | **53** | |  | |  | |  | |  | | **2.8** | |  | |  | |
| **164.47** | 18 | 19 | | **QUARTZITIC PHYLLITE WITH CARBONACEOUS SHALE** | |  |  | | **3** | **22** | |  | | |  | | **F/J 30-70° Rough Fracture** | |  | |  | |  | |  | |  | | **52** | |  | |  | |  | |  | | **3.8** | |  | |  | |
| **163.47** | 19 | 20 | |  | | **10** | **8** | |  | | |  | |  | |  | |  | |  | |  | | **42** | |  | |  | |  | |  | | **3.2** | |  | |  | |
| **162.47** | 20 | 21 | | **QUARTZITIC PHYLLITE GREYISH IN COLOR** | |  |  | | **3** | **7** | | **1** | | |  | |  | |  | |  | |  | |  | |  | | **62** | |  | |  | |  | |  | | **3.3** | |  | |  | | **Slightly to moderately weathered moderately fractured** | |
| **161.47** | 21 | 22 | |  | | **20** | **9** | | **1** | | |  | |  | |  | |  | |  | |  | | **55** | |  | |  | |  | |  | | **2.5** | |  | |  | |
| **160.47** | 22 | 23 | |  | | **10** | **6** | | **1** | | |  | |  | |  | |  | |  | |  | | **57** | | **11** | |  | |  | |  | | **2.6** | |  | |  | |
| **159.47** | 23 | 24 | |  | |  | **2** | | **3** | | |  | |  | |  | |  | |  | |  | | **49** | | **32** | |  | |  | |  | | **2.8** | |  | |  | |
| **158.47** | 24 | 25 | | **QUARTZITIC PHYLLITE LIGHT GREYISH COLOR** | |  |  | | **5** | **6** | |  | | |  | | **44-69° J Fracture Rough** | |  | |  | |  | |  | |  | | **40** | |  | |  | |  | |  | | **3.3** | |  | |  | |
| **157.47** | 25 | 26 | |  | | **30** | **7** | |  | | |  | |  | |  | |  | |  | |  | | **47** | |  | |  | |  | |  | | **3.3** | |  | |  | |
| **156.47** | 26 | 27 | |  | | **20** | **10** | |  | | |  | |  | |  | |  | |  | |  | | **38** | |  | |  | |  | |  | | **4.5** | |  | |  | |
| **155.47** | 27 | 28 | | **PHYLLITE INFILLING WITH CARBONACIEOUS SHALE FRACTURED** | |  |  | | **10** | **3** | | **0** | | |  | | **36-60° J smooth filling** | |  | |  | |  | |  | |  | | **35** | |  | |  | |  | |  | | **2.3** | |  | |  | |
| **154.47** | 28 | 29 | |  | | **10** | **5** | | **1** | | |  | |  | |  | |  | |  | |  | | **58** | |  | |  | |  | |  | | **3.4** | |  | |  | | **Slightly weathered slightly fractured** | |
| **153.47** | 29 | 30 | |  | |  | **5** | | **2** | | | **1** | |  | |  | |  | |  | |  | | **70** | | **26** | |  | |  | |  | | **4** | |  | |  | |
| **152.47** | 30 | 31 | |  | | **0** | **3** | | **0** | | | **2** | |  | |  | |  | |  | |  | | **78** | | **44** | |  | |  | |  | | **3.3** | |  | |  | |
| **151.47** | 31 | 32 | |  | | **20** | **6** | | **1** | | |  | |  | |  | |  | |  | |  | | **60** | |  | |  | |  | |  | | **3.4** | |  | |  | |
| **150.47** | 32 | 33 | |  | | **12** | **7** | |  | | |  | |  | |  | |  | |  | |  | | **58** | |  | |  | |  | |  | | **4** | |  | |  | |
| **149.47** | 33 | 34 | |  | |  | **1** | |  | | |  | |  | |  | |  | |  | |  | | **55** | |  | |  | |  | |  | | **3.3** | |  | |  | |
| **148.47** | 34 | 35 | |  | |  | **2** | | **1** | | |  | |  | |  | |  | |  | |  | | **38** | |  | |  | |  | |  | |  | | **3.7** | |  | |  | | **Slightly to moderately weathered moderately fractured** | |
| **147.47** | 35 | 36 | |  | | **12** | **1** | | **1** | | |  | |  | |  | |  | |  | |  | | **57** | |  | |  | |  | |  | |  | | **4** | |  | |  | |
| **146.47** | 36 | 37 | | **CARBONACIEOUS SHALE BLACK COLOR** | |  |  | | **17** | **6** | |  | | |  | |  | |  | |  | |  | |  | |  | | **70** | |  | |  | |  | |  | |  | | **2.8** | |  | |  | | **Slightly weathered slightly fractured** | |
| **145.92** | 37 | 37.55 | |  | |  |  | |  | | |  | |  | |  | |  | |  | |  | |  | | **78** | |  | |  | |  | |  | |  | | **3.7** | |  | |  | |
| **145.47** | 37.55 | 38 | |  | |  |  | |  | | |  | |  | |  | |  | |  | |  | |  | | **33** | |  | |  | |  | |  | |  | |  | |  | |  | | **SPT 30+40+25 BLOWS N=65** | |
| **144.47** | 38 | 39 | | **CARBONACIEOUS SHALE QUARTZITIC PHYLLITE GREYISH IN COLOR** | |  |  | | **6** | **2** | |  | | |  | | **42-46° J filling Joint** | |  | |  | |  | |  | |  | | **42** | |  | |  | |  | |  | |  | | **2.2** | |  | |  | | **Slightly to moderately weathered moderately fractured** | |
| **143.92** | 39 | 39.55 | |  | | **4** | **1** | |  | | |  | |  | |  | |  | |  | |  | | **89** | |  | |  | |  | |  | |  | | **2.5** | |  | |  | | **Slightly weathered** | |
| **143.47** | 39.55 | 40 | |  | |  |  | |  | | |  | |  | |  | |  | |  | |  | | **44** | |  | |  | |  | |  | |  | | **2.5** | |  | |  | |  | |
| **142.47** | 40 | 41 | |  | | **6** | **5** | | **1** | | |  | |  | |  | |  | |  | |  | | **60** | |  | |  | |  | |  | |  | | **2.4** | |  | |  | | **Slightly to moderately weathered moderately fractured** | |
| **141.47** | 41 | 42 | |  | | **4** | **2** | |  | | |  | |  | |  | |  | |  | |  | | **69** | |  | |  | |  | |  | |  | | **2.5** | |  | |  | |
| **140.47** | 42 | 43 | |  | | **5** | **3** | | **1** | | | **1** | |  | |  | |  | |  | |  | | **70** | |  | |  | |  | |  | |  | | **2.6** | |  | |  | |
| **139.47** | 43 | 44 | |  | | **8** | **4** | | **4** | | |  | |  | |  | |  | |  | |  | | **82** | |  | |  | |  | |  | |  | | **2.7** | |  | |  | | **Slightly weathered** | |
| **138.47** | 44 | 45 | | **QUARTZITIC PHYLLITE CARBONACEOUS SHALE GREYISH TO BLACK COLOR** | |  |  | | **2** | **7** | | **1** | | |  | |  | |  | |  | |  | |  | | **57** | | **10** | |  | |  | |  | |  | | **2.7** | |  | |  | |
| **137.47** | 45 | 46 | |  | |  | **1** | | **5** | | | **1** | | **27-50° J With smooth surface Fractured pretal** | |  | |  | |  | |  | |  | | **80** | | **30** | |  | |  | |  | |  | | **2.5** | |  | |  | |
| **136.47** | 46 | 47 | |  | |  | **7** | | **2** | | |  | |  | |  | |  | |  | |  | | **83** | | **12** | |  | |  | |  | |  | | **2.3** | |  | |  | |
| **135.47** | 47 | 48 | |  | | **10** | **10** | | **2** | | |  | |  | |  | |  | |  | |  | | **95** | | **31** | |  | |  | |  | |  | | **1.6** | |  | |  | |
| **133.92** | 48 | 49.5 | |  | | **8** | **12** | | **2** | | |  | |  | |  | |  | |  | |  | | **93** | | **15** | |  | |  | |  | |  | | **1.7** | |  | |  | |
| **132.42** | 49.5 | 51 | |  | | **10** | **9** | | **2** | | |  | |  | |  | |  | |  | |  | | **90** | | **15** | |  | |  | |  | |  | | **1.4** | |  | |  | |
| **130.92** | 51 | 52.5 | |  | | **8** | **5** | | **4** | | |  | |  | |  | |  | |  | |  | | **90** | | **15** | |  | |  | |  | |  | | **1.38** | |  | |  | |
| **NOTE TIME:** | | | |  | | --- | |  |   OVERBURDEN | | | | | | | | |  | | --- | |  |   **PHYLLITE** | | | | | | | | | **SHEAR ZONE** | | | | | | | | | | | | | | **GWT=GROUND WATER TABLE** | | | | | | | | | | | | **SPT=STANDARD PENETRATION TEST** | | | | | | | | | | |
| |  | | --- | |  |   **QUARTZATICPHYLLITE** | | | | | | | | |  | | --- | |  |   **QUARTZITE** | | | | | | | | | |  | | --- | |  |   **CARBONACEOUS SHALE** | | | | | | | | | | | | | | **SM=SMOOTH** | | | | | | **R=ROUGH** | | | | | |  | | | | | | | | | | |
|  | |  | | |  | | |  | |  |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  |