



| Rockmass Quality  | Support type and amount |  |  |   | Remarks  |
|---|-------------------------|--|--|---|--|
|   | Type                    | Rockbolting<br>Dia=20-25mm   | Shotcrete thickness  | Concrete lining(mm)   |  |
| Q4<br>Extremely Poor to<br>Very Poor Quality<br>Q-Value 0.04 to 0.4 | S4                      | L=4m, 25 mm dia<br>Systematic bolting<br>@ 1.3 c/c crown<br>and @ 1.3 c/c wall | Steel Fibre Reinforced<br>shotcrete 120 mm<br>at crown and walls | 300mm thick reinforced<br>concrete lining with<br>Steel ribs ISMB 200 @<br>1.5m c/c | Heavily jointed/ fractured<br>rock with few thicker clay<br>gouge bands and one or<br>two minor shear zones. |

