



RECAPITULATIVE TABLE OF RESULTS OF LABORATORY TESTS - ROCK MECHANICS

| BOREHOLE | SAMPLE | DEPTH       | DESCRIPTION | POROSITY | DENSITY           | BULK DENSITY      | MOISTURE CONTENT | UNCONFINED COMPRESSION TEST |        |                    | POISSON'S RATIO $\nu$ | POINT LOAD TEST   |   |            | SHEAR TEST                                |                             |                                      | BRASILIAN TEST | TRIAXIAL TEST         |              | WATER ABSORPTION | SLAKE TEST |        | L.A.   | ROCK HEALTH      | FINE MATERIAL | SAND EQUIVALENT |                  |
|----------|--------|-------------|-------------|----------|-------------------|-------------------|------------------|-----------------------------|--------|--------------------|-----------------------|---|---|------------|---|-----------------------------|--------------------------------------|----------------|-----------------------|--------------|------------------|------------|--------|--------|------------------|---------------|-----------------|------------------|
|          |        |             |             |          |                   |                   |                  | STRESS                      | STRAIN | ELASTICITY MODULUS |                       |  |  | $\sigma_a$ | DISCONTINUITY FRICTION ANGLE $\phi_{lim}$ | APPARENT COHESION $c_{app}$ | RESIDUAL FRICTION ANGLE $\phi_{res}$ |                | FRICTION ANGLE $\phi$ | COHESION $c$ |                  | $W_d$      | $ID_1$ | $ID_2$ | LOS ANGELES LOSS |               |                 | ROCK HEALTH LOSS |
|          |        |             |             |          |                   |                   |                  |                             |        |                    |                       |   |   |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
|          |        | m           |             | %        | g/cm <sup>3</sup> | kN/m <sup>3</sup> | %                | Mpa                         | %      | Mpa                |                       | Mpa   | Mpa   |            | °   | Mpa                         | °                                    | Mpa            | °                     | Mpa          | %                | %          | %      | %      | %                | %             |                 |                  |
| M8       |        | 49.7-49.8   | Gneiss      | 4.04     |                   | 25.9              |                  |                             |        |                    |                       | 0.32  | 0.29  | 0.89       |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| M8       |        | 52.4-52.6   | Gneiss      |          |                   |                   |                  |                             |        |                    |                       | 0.67  | 0.29  | 0.43       |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| A2       | Δ10    | 27.90       | Marble      |          |                   |                   |                  |                             |        |                    |                       | 1.02  | 1.39  | 0.74       |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| A2       | Δ11    | 32.50       | Gneiss      |          |                   |                   |                  |                             |        |                    |                       |   | 0.29  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| G48      | Δ8     | 26.20-26.70 | Marble      | 1.42     |                   | 26.70             |                  | 34.68                       | 0.53   | 5090               | 0.48                  |   |   |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| G48      | Δ9     | 34.50-35.00 | Gneiss      | 12.18    |                   | 23.60             |                  |                             |        |                    |                       | 0.39  | 0.15  |            |   |                             |                                      |                |                       |              |                  |            | 65.61  |        |                  |               |                 |                  |
| G48      | Δ10    | 39.00-40.20 | Gneiss      |          |                   |                   |                  | 29.80                       | 0.60   | 4060               | 0.18                  |   |   |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| G48      | Δ11    | 44.90-45.50 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       | 3.59  | 4.20  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN2      |        | 19.20-19.30 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       | 2.03  | 3.43  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN2      |        | 20.90-21.10 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       | 2.19  | 2.55  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN2      |        | 22.60-22.80 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       | 0.73  | 1.55  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN2      |        | 24.80-25.00 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       |   | 0.25  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN2      |        | 27.70-27.90 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       |   | 0.37  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN2      |        | 29.40-29.80 | Gneiss      |          |                   |                   |                  | 14.28                       | 2.82   |                    |                       |   |   |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN3      |        | 19.00-19.20 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       | 1.34  | 1.59  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN4      |        | 18.00-18.20 | Gneiss      |          |                   |                   |                  | 16.78                       | 2.64   |                    |                       |   |   |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN4      |        | 20.60-20.80 | Gneiss      |          |                   |                   |                  | 44.53                       | 1.47   |                    |                       |   |   |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN4      |        | 20.90-21.10 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       | 6.35  | 7.97  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |
| GN4      |        | 22.40-22.60 | Gneiss      |          |                   |                   |                  |                             |        |                    |                       | 0.42  | 0.72  |            |   |                             |                                      |                |                       |              |                  |            |        |        |                  |               |                 |                  |