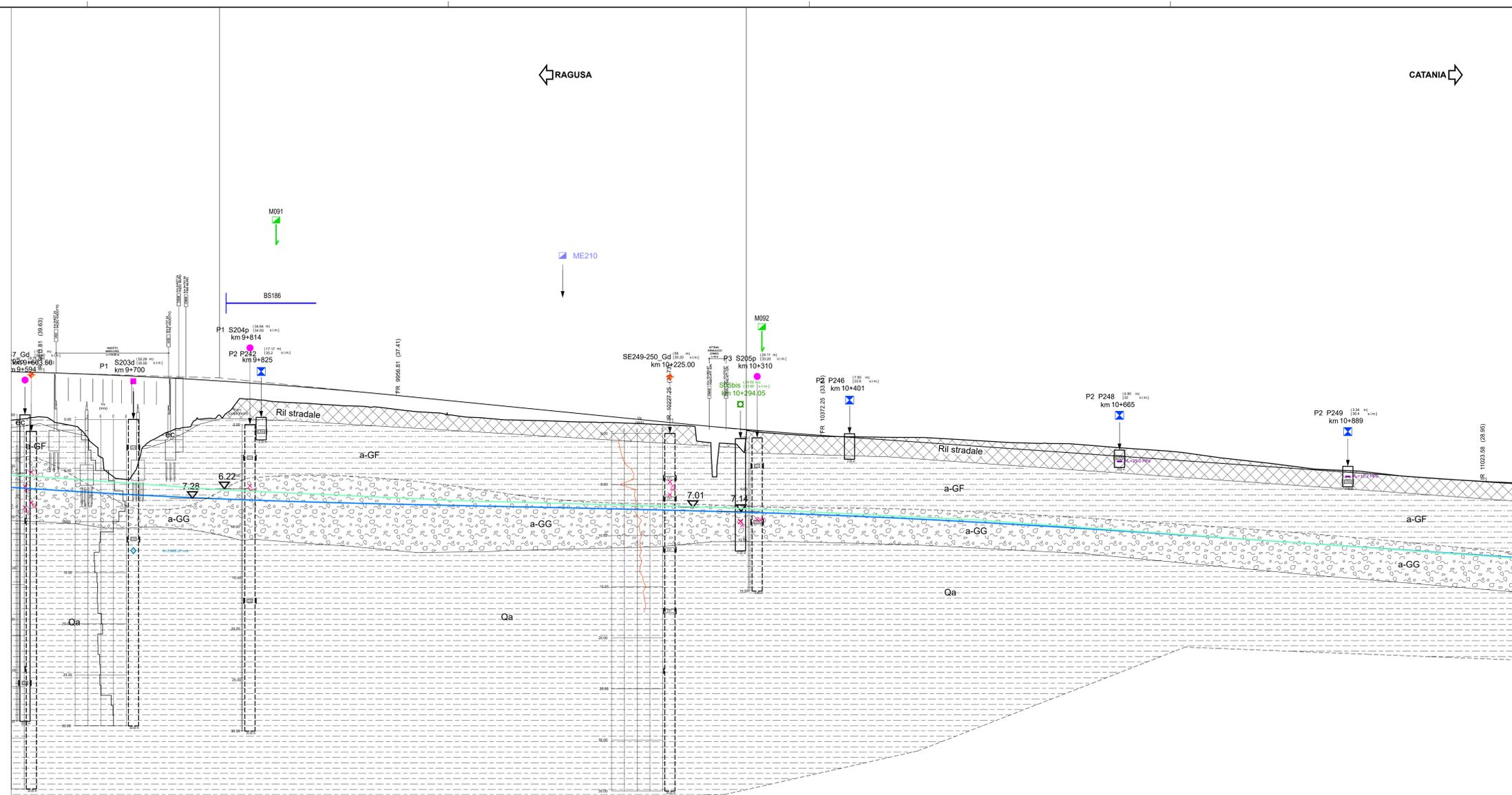


| Unità geotecnica | litolo                  | T (kNm3)  | α (MPa) | ROD (-) | GS (-) | ε' (kPa) | φ' (°)  | c <sub>v</sub> (kPa) | E (MPa)   | OCR    |
|------------------|-------------------------|-----------|---------|---------|--------|----------|---------|----------------------|-----------|--------|
| R                | rilievato esistente     | 17 - 18   | -       | -       | -      | 0        | 33 + 35 | -                    | 20        | -      |
| TR               | terreno di riporio      | 16        | -       | -       | -      | 0        | 29      | -                    | 10        | -      |
| ec               | terreni a grana grossa  | 16        | -       | -       | -      | 0        | 22      | -                    | 5         | -      |
| a-GF             | terreni a grana fine    | 17-19     | -       | -       | -      | 5 + 15   | 23 + 28 | 100                  | 10 + 20   | 5 + 10 |
| a-GG             | terreni a grana grossa  | 19-21     | -       | -       | -      | 0        | 38 + 44 | -                    | 40        | -      |
| ar               | terreni a grana grossa  | 18        | -       | -       | -      | 0        | 40 + 45 | -                    | 25 + 50   | -      |
| Qca              | terreni a grana grossa  | 19-21     | -       | -       | -      | 0        | 38 + 42 | -                    | 50 + 150  | -      |
| Qa               | terreni a grana fine    | 17,5-18,5 | -       | -       | -      | 10-50    | 15 + 32 | 150 + 200            | 10 + 100  | 2 + 20 |
| Qca(i)           | terreni a grana grossa  | 18 - 19   | -       | -       | -      | 0        | 38 + 42 | -                    | 50 + 300  | -      |
| Pvs-GG           | depositi a grana grossa | 18 - 19   | -       | -       | -      | 0        | 39 + 41 | -                    | 70 + 150  | -      |
| Pv-GG            | terreni a grana grossa  | 17 - 19   | -       | -       | -      | 0        | 40 + 42 | -                    | 40 + 100  | -      |
| Pvs-GG           | terreni a grana grossa  | 15,5 - 20 | -       | -       | -      | 0        | 44      | -                    | 75 + 150  | -      |
| Pvs-RZ           | roccia vulcanica        | 21 + 28   | 30 - 80 | 40      | 50     | -        | -       | -                    | 150 + 700 | -      |

| LEGENDA UNITÀ GEOTECNICHE |   |
|---------------------------|---|
| R                         | Rilievato esistente: terreno a grana grossa |
| ec                        | Depositi eluvio-colluviali                  |
| a-GF                      | Alluvioni fluviol-colluviali                |
| a-GG                      | Alluvioni fluviol a grana grossa            |
| ar                        | Sabbie                                      |
| Qca                       | Sabbie limose                               |
| Qa(i)                     | Sabbie/ciottoloni                           |
| Qa                        | Argille                                     |
| Pvs-RZ                    | Rocce vulcaniche                            |
| Pv-GG                     | Vulcaniti a grana grossa                    |
| Pvs-GG                    | Vulcaniti a grana grossa                    |
| Pv-GG                     | Vulcaniti a grana grossa                    |
| Pvs-GG                    | Vulcaniti a grana grossa                    |

| LEGENDA INDAGINI  |   |
|---|---|
| <b>CAMPAGNA INDAGINI PROGETTO DEFINITIVO</b>                    | <b>CAMPAGNA INDAGINI PROGETTO ESECUTIVO</b>   |
| S <sup>n</sup> Sonda  | SE <sub>n</sub> /A/G Sondaggio ambientale/geotecnico a carotaggio continuo  |
| S <sup>n</sup> Sonda con piezometro a tubo aperto               | SE <sub>n</sub> /A/Gp Sondaggio ambientale/geotecnico a carotaggio continuo con tubazione piezometrica              |
| S <sup>n</sup> Sonda con inclinometro                           | SE <sub>n</sub> /A/Gd Sondaggio ambientale/geotecnico a carotaggio continuo attrezzato con tubazione inclinometrica |
| S <sup>n</sup> Sonda con down-hole                              | SE <sub>n</sub> /A/Gd Sondaggio ambientale/geotecnico a carotaggio continuo attrezzato con tubazione inclinometrica |
| P <sup>n</sup> Pozzetti   | PE <sub>n</sub> /A/G Progetto esplorativo ambientale/geotecnico   |
| BS <sup>n</sup> Stazioni di sismica a rifrazione                | BSE <sub>n</sub> Stazioni di sismica a rifrazione   |
| M <sup>n</sup> Proprietà MASW                                   | SGL3- n <sup>o</sup> Stazioni geomecniche (campagna indagini Marzo 2021)  |
| SG n <sup>o</sup> Stazioni geomecniche (campagna indagini 2013) |   |
| SG n <sup>o</sup> Stazioni geomecniche (campagna indagini 2016) |   |
| <b>CAMPAGNA INDAGINI PROGETTO PRELIMINARE</b>                   |   |
| S <sup>n</sup> Sonda  |   |
| S <sup>n</sup> Sonda con piezometro a tubo aperto               |   |
| S <sup>n</sup> Sonda con down-hole                              |   |
| T <sup>1</sup> Stazioni di sismica a rifrazione                 |   |



| NUMERO SEZIONI |       | Distanze Progressive |      | Distanze Parziali |       | Quote Progetto |       | Quote Terreno |       | Differenza Quota P/T |      | Ettometriche |  |
|----------------|-------|----------------------|------|-------------------|-------|----------------|-------|---------------|-------|----------------------|------|--------------|--|
| 1              | 4.44  | 0.00                 | 0.00 | 20.00             | 20.00 | 38.67          | 38.67 | 4.44          | 38.23 | 38.67                | 0.43 | 96           |  |
| 2              | 4.62  | 0.00                 | 0.00 | 20.00             | 20.00 | 39.81          | 39.81 | 4.62          | 38.49 | 39.81                | 1.12 | 97           |  |
| 3              | 5.09  | 0.00                 | 0.00 | 20.00             | 20.00 | 39.54          | 39.54 | 5.09          | 38.45 | 39.54                | 1.09 | 98           |  |
| 4              | 5.77  | 0.00                 | 0.00 | 20.00             | 20.00 | 39.47          | 39.47 | 5.77          | 38.69 | 39.47                | 0.78 | 99           |  |
| 5              | 6.91  | 0.00                 | 0.00 | 20.00             | 20.00 | 39.38          | 39.38 | 6.91          | 38.97 | 39.38                | 0.41 | 100          |  |
| 6              | 8.02  | 0.00                 | 0.00 | 20.00             | 20.00 | 39.29          | 39.29 | 8.02          | 39.17 | 39.29                | 0.12 | 101          |  |
| 7              | 8.68  | 0.00                 | 0.00 | 20.00             | 20.00 | 39.19          | 39.19 | 8.68          | 39.11 | 39.19                | 0.08 | 102          |  |
| 8              | 9.07  | 0.00                 | 0.00 | 20.00             | 20.00 | 39.09          | 39.09 | 9.07          | 39.09 | 39.09                | 0.00 | 103          |  |
| 9              | 9.63  | 0.00                 | 0.00 | 20.00             | 20.00 | 38.98          | 38.98 | 9.63          | 38.98 | 38.98                | 0.00 | 104          |  |
| 10             | 10.00 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.87          | 38.87 | 10.00         | 38.87 | 38.87                | 0.00 | 105          |  |
| 11             | 10.30 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.76          | 38.76 | 10.30         | 38.76 | 38.76                | 0.00 | 106          |  |
| 12             | 10.54 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.65          | 38.65 | 10.54         | 38.65 | 38.65                | 0.00 | 107          |  |
| 13             | 10.73 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.54          | 38.54 | 10.73         | 38.54 | 38.54                | 0.00 | 108          |  |
| 14             | 10.88 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.43          | 38.43 | 10.88         | 38.43 | 38.43                | 0.00 | 109          |  |
| 15             | 11.00 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.32          | 38.32 | 11.00         | 38.32 | 38.32                | 0.00 | 110          |  |
| 16             | 11.10 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.21          | 38.21 | 11.10         | 38.21 | 38.21                | 0.00 | 111          |  |
| 17             | 11.18 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.10          | 38.10 | 11.18         | 38.10 | 38.10                | 0.00 | 112          |  |
| 18             | 11.25 | 0.00                 | 0.00 | 20.00             | 20.00 | 38.00          | 38.00 | 11.25         | 38.00 | 38.00                | 0.00 | 113          |  |
| 19             | 11.30 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.90          | 37.90 | 11.30         | 37.90 | 37.90                | 0.00 | 114          |  |
| 20             | 11.34 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.80          | 37.80 | 11.34         | 37.80 | 37.80                | 0.00 | 115          |  |
| 21             | 11.37 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.70          | 37.70 | 11.37         | 37.70 | 37.70                | 0.00 | 116          |  |
| 22             | 11.40 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.60          | 37.60 | 11.40         | 37.60 | 37.60                | 0.00 | 117          |  |
| 23             | 11.42 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.50          | 37.50 | 11.42         | 37.50 | 37.50                | 0.00 | 118          |  |
| 24             | 11.44 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.40          | 37.40 | 11.44         | 37.40 | 37.40                | 0.00 | 119          |  |
| 25             | 11.46 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.30          | 37.30 | 11.46         | 37.30 | 37.30                | 0.00 | 120          |  |
| 26             | 11.48 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.20          | 37.20 | 11.48         | 37.20 | 37.20                | 0.00 | 121          |  |
| 27             | 11.50 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.10          | 37.10 | 11.50         | 37.10 | 37.10                | 0.00 | 122          |  |
| 28             | 11.52 | 0.00                 | 0.00 | 20.00             | 20.00 | 37.00          | 37.00 | 11.52         | 37.00 | 37.00                | 0.00 | 123          |  |
| 29             | 11.54 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.90          | 36.90 | 11.54         | 36.90 | 36.90                | 0.00 | 124          |  |
| 30             | 11.56 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.80          | 36.80 | 11.56         | 36.80 | 36.80                | 0.00 | 125          |  |
| 31             | 11.58 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.70          | 36.70 | 11.58         | 36.70 | 36.70                | 0.00 | 126          |  |
| 32             | 11.60 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.60          | 36.60 | 11.60         | 36.60 | 36.60                | 0.00 | 127          |  |
| 33             | 11.62 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.50          | 36.50 | 11.62         | 36.50 | 36.50                | 0.00 | 128          |  |
| 34             | 11.64 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.40          | 36.40 | 11.64         | 36.40 | 36.40                | 0.00 | 129          |  |
| 35             | 11.66 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.30          | 36.30 | 11.66         | 36.30 | 36.30                | 0.00 | 130          |  |
| 36             | 11.68 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.20          | 36.20 | 11.68         | 36.20 | 36.20                | 0.00 | 131          |  |
| 37             | 11.70 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.10          | 36.10 | 11.70         | 36.10 | 36.10                | 0.00 | 132          |  |
| 38             | 11.72 | 0.00                 | 0.00 | 20.00             | 20.00 | 36.00          | 36.00 | 11.72         | 36.00 | 36.00                | 0.00 | 133          |  |
| 39             | 11.74 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.90          | 35.90 | 11.74         | 35.90 | 35.90                | 0.00 | 134          |  |
| 40             | 11.76 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.80          | 35.80 | 11.76         | 35.80 | 35.80                | 0.00 | 135          |  |
| 41             | 11.78 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.70          | 35.70 | 11.78         | 35.70 | 35.70                | 0.00 | 136          |  |
| 42             | 11.80 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.60          | 35.60 | 11.80         | 35.60 | 35.60                | 0.00 | 137          |  |
| 43             | 11.82 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.50          | 35.50 | 11.82         | 35.50 | 35.50                | 0.00 | 138          |  |
| 44             | 11.84 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.40          | 35.40 | 11.84         | 35.40 | 35.40                | 0.00 | 139          |  |
| 45             | 11.86 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.30          | 35.30 | 11.86         | 35.30 | 35.30                | 0.00 | 140          |  |
| 46             | 11.88 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.20          | 35.20 | 11.88         | 35.20 | 35.20                | 0.00 | 141          |  |
| 47             | 11.90 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.10          | 35.10 | 11.90         | 35.10 | 35.10                | 0.00 | 142          |  |
| 48             | 11.92 | 0.00                 | 0.00 | 20.00             | 20.00 | 35.00          | 35.00 | 11.92         | 35.00 | 35.00                | 0.00 | 143          |  |
| 49             | 11.94 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.90          | 34.90 | 11.94         | 34.90 | 34.90                | 0.00 | 144          |  |
| 50             | 11.96 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.80          | 34.80 | 11.96         | 34.80 | 34.80                | 0.00 | 145          |  |
| 51             | 11.98 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.70          | 34.70 | 11.98         | 34.70 | 34.70                | 0.00 | 146          |  |
| 52             | 12.00 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.60          | 34.60 | 12.00         | 34.60 | 34.60                | 0.00 | 147          |  |
| 53             | 12.02 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.50          | 34.50 | 12.02         | 34.50 | 34.50                | 0.00 | 148          |  |
| 54             | 12.04 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.40          | 34.40 | 12.04         | 34.40 | 34.40                | 0.00 | 149          |  |
| 55             | 12.06 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.30          | 34.30 | 12.06         | 34.30 | 34.30                | 0.00 | 150          |  |
| 56             | 12.08 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.20          | 34.20 | 12.08         | 34.20 | 34.20                | 0.00 | 151          |  |
| 57             | 12.10 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.10          | 34.10 | 12.10         | 34.10 | 34.10                | 0.00 | 152          |  |
| 58             | 12.12 | 0.00                 | 0.00 | 20.00             | 20.00 | 34.00          | 34.00 | 12.12         | 34.00 | 34.00                | 0.00 | 153          |  |
| 59             | 12.14 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.90          | 33.90 | 12.14         | 33.90 | 33.90                | 0.00 | 154          |  |
| 60             | 12.16 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.80          | 33.80 | 12.16         | 33.80 | 33.80                | 0.00 | 155          |  |
| 61             | 12.18 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.70          | 33.70 | 12.18         | 33.70 | 33.70                | 0.00 | 156          |  |
| 62             | 12.20 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.60          | 33.60 | 12.20         | 33.60 | 33.60                | 0.00 | 157          |  |
| 63             | 12.22 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.50          | 33.50 | 12.22         | 33.50 | 33.50                | 0.00 | 158          |  |
| 64             | 12.24 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.40          | 33.40 | 12.24         | 33.40 | 33.40                | 0.00 | 159          |  |
| 65             | 12.26 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.30          | 33.30 | 12.26         | 33.30 | 33.30                | 0.00 | 160          |  |
| 66             | 12.28 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.20          | 33.20 | 12.28         | 33.20 | 33.20                | 0.00 | 161          |  |
| 67             | 12.30 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.10          | 33.10 | 12.30         | 33.10 | 33.10                | 0.00 | 162          |  |
| 68             | 12.32 | 0.00                 | 0.00 | 20.00             | 20.00 | 33.00          | 33.00 | 12.32         | 33.00 | 33.00                | 0.00 | 163          |  |
| 69             | 12.34 | 0.00                 | 0.00 | 20.00             | 20.00 | 32.90          | 32.90 | 12.34         | 32.90 | 32.90                | 0.00 | 164          |  |
| 70             | 12.36 | 0.00                 | 0.00 | 20.00             | 20.00 | 32.80          | 32.80 | 12.36         | 32.80 | 32.80                | 0.00 | 165          |  |
| 71             | 12.38 | 0.00                 | 0.00 | 20.00             | 20.00 | 32.70          | 32.70 | 12.38         | 32.70 | 32.70                | 0.00 | 166          |  |
| 72             | 12.40 | 0.00                 | 0.00 | 20.00             | 20.00 | 32.60          | 32.60 | 12.40         | 32.60 | 32.60                | 0.00 | 167          |  |
| 73             | 12.42 | 0.00                 | 0.00 | 20.00             | 20.00 | 32.50          | 32.50 | 12.42         | 32.50 | 32.50                | 0.00 | 168          |  |
| 74             | 12.44 | 0.00                 | 0.00 | 20.00             | 20.00 | 32.40          | 32.40 | 12.44         | 32.40 | 32.40                | 0.00 | 169          |  |
| 75             | 12.46 | 0.00                 | 0.00 | 20.00             | 20.00 | 32.30          | 32.30 | 12.46         | 32.30 | 32.30                | 0.00 | 170          |  |
| 76             | 12.48 | 0.00                 | 0.00 | 20.00             | 20.00 | 32.20          | 32.20 | 12.48         | 32.20 | 32.20                | 0.00 | 171          |  |
| 77             | 12.50 | 0.00                 |      |                   |       |                |       |               |       |                      |      |              |  |