**Existing boreholes South Darfur Borehole Data**

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| **Borehole Name** | **El Radom** | **Maramosa** |
| **Location (Lat., Long.)** | 9.822951°, 24.851409° | 10.392861°, 24.064000° |
| **Daily Water Demand (m3)** | 90 | 100 |
| **Ground water temperature (°C)** | 20 | 30° |
| **Pump cable Length (m)** | 60 | 110 |
| **Borehole Yield (m3/hr)** | 7.5 | 14 |
| **Depth of Borehole (m)** | 30 | 180 |
| **Depth to pump (m)** | 20 | 90 |
| **Filter depth - top and bottom (m)** | 25-30 | 150-180 |
| **Diameter of Casing (inches)** | 4.5 | 8 |
| **Static Water Level (m)** | 11 | 78 |
| **Dynamic Water Level (m)** | 13 | 82 |
| **Tank top water level (m)** | 16 | 12 |
| **BH ground Elevation (m)** | 499 | 513 |
| **Pipeline length to Tank (m)** | 700 | 112 |
| **Equivalent length for fitting losses (m)** | 0.99 | 0.99 |
| **Highest design flow (m3/h)** | 10 | 20 |
| **Total Dynamic Head at peak design flow (m)** | 19 | 112 |
| **Pump / motor efficiency (%)** | 75% | 65% |
| **Reflectance loss (%)** |  |  |
| **Temperature de-rating (%)** | 6.40% | 8.40% |
| **Dirt loss (%)** | 5% | 5% |
| **Max allowable AC/DC cable losses (%)** | 5% | 5% |
| **Maximum ambient temp** | 30....50 C° | 30....50 C° |
| **Existing Generator size (kVA)** | 27 KVA | 27 KVA |
| **Existing Tank Capacity (m3)** | 45 | 48 |

**Design should consider prolonged cloud cover- worst-case scenario (July – August)**