**Technical Data for proposed Solar upgrade at ND Zamzam Camp Shakir borehole**

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| **Parameters** |  **Site 1** |
| State  | North Darfur  |
| Locality  | Al Fasher  |
| Village/Camp  | Zamzam Camp |
| Type of water source  | Borehole  |
| Borehole Site name  | Shakir Borehole  |
| GPS Location | Lat, (DD) | 13.495853 |
| Long, (DD)  | 25.287163 |
| Altitude (m) | 717 |
| Water Temperature  | 40°C |
| Borehole Maximum Yield (m3/h) |  7 m3/h |
| Daily Water Demand to be supplied with Solar (m3/day) | 60 m3/day |
| Estimated Maximum Cable Length from pump to inverter (m) | 100m |
| Dirt allowance factor | 10% |
| Surface available for panel mounting (m2) | 200 |
| Length of pipe from borehole head to water tank inlet (m) | 15m |
| Size and type of delivery pipe to tank |  32mm (1.25”) GI |
| Pump intake depth (m) | 60m |
| Size and type of drop pipe (inside the borehole) |  32mm (1.25”) GI |
| Depth of well/borehole (m) | 65m |
| Static Water level (m) | 43 |
| Dynamic Water Level (m) | 50 |
| Vertical Height from borehole head to water tank inlet (m) | 3m |
| Total Dynamic Pressure Head estimated(m)  | 76m  |
| Internal Borehole diameter (inches) | 5.5’’ (138mm) |
| Capacity of water tank (m3) | 31m3  |