**Existing boreholes South and West Kordofan Boreholes Data**

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| **Borehole Name** | **Al Kalail, (Gebayish locality)** | **Bagarah (Babnosa locality)** | **Al Mahlaj (Abu Jubaiha locality)** |
| Location (Lat., Long.) | N: 11 95507 E: 27 54030 |  | N 11˚ 3116' E 031˚ 18' |
| Daily Water Demand (m3) | 70 | 76 | 75 |
| Ground water temperature (°C) | 30 | 32 |  |
| Pump cable Length (m) | 160 | 130 | 65 |
| Borehole Yield (m3/hr) | 9 | 12.7 | 5 |
| Depth of Borehole (m) | 264 | 250 | 44 |
| Depth to pump (m) | 150 | 125 | 41 (new submersible pump) required |
| Strainer depth - top and bottom (m) | 30 | 24 |  |
| Size of Casing (inches) | 8.625 | 6.5/8 | 4.5 |
| Static Water Level (m) | 105 | 95 | 20 |
| Dynamic Water Level (m) | 135 | 105 | 43.01 |
| Tank top water level (m) | 6 | 6 | 4 |
| BH ground Elevation (m) |  |  | 541 |
| Pipeline length to Tank (m) | 24 | 54 | 25 |
| Equivalent length for fitting losses (m) | 1 | 2 |  |
| Peak design flow (m3/h) | 9 | 12.7 |  |
| Total Dynamic Head at peak design flow (m) |  | 6m for pipeline at 20m3/h, the overall head is 100 m. |  |
| Existing Generator size (kVA) | 24 | 30 | Generator required -12KVA |
| Existing Tank Capacity (m3) | 45 | 45 | 10 (twin Tigga, capacity of 5000 liter) each |

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