



Capability Statement

Marine Sampling in support of Desalination Site Selection

Client: Advisian



Advisian

WorleyParsons Group

REQUIREMENTS

- To conduct a survey to inform site selection and process design of the proposed emergency desalination plants and barges in Cape Town Harbour.
- The month long companion survey included wave and current measurements as well as a moored water quality campaign

WORK DONE

- Seven sites were sampled every second day for a period of 14 days. At each site, a water column profile was obtained by using a CTD. Water samples were obtained at each site and were sent to laboratories for the required analyses. Extra water samples at the proposed abstraction points were taken for silt density index (SDI) analyses.
- Instruments measuring temperature, salinity, turbidity and dissolved oxygen (CT, temperature logger and CTD) were deployed in the harbor for the entire measurement campaign, as well as an ADCP measuring waves and currents.
- Data was quality controlled and processed.

OUTCOMES:

Lwandle produced a comprehensive report detailing and interpreting the water quality results from the laboratories as well as the processed metocean data from the moored instruments and CTD profiles. Lwandle used background information on the oceanographic conditions in the area to compare and characterise the data.



“A survey to inform site selection and process design of the proposed emergency desalination projects in Cape Town Harbour ”