



Teledyne RD Instruments' Products Ideally Suited to Support Gulf of Mexico Operations

As the world comes to grips with the ongoing consequences of the Deepwater Horizon spill, Teledyne RD Instruments (RDI) is doing all it can to help provide the instruments needed to support the measurements of currents, waves, salinity, temperature and many other variables of oceanographic interest.

Teledyne RDI is the foremost supplier of Acoustic Doppler Current Profilers (ADCP) for measuring current profiles and waves in the world. Our field-proven equipment is currently hard at work throughout the Gulf of Mexico. A comprehensive and continuous measurement of the current profiles throughout the affected water column along with the directional wave field is vital for the modeling efforts predicting the evolution of the oil through the environment. Knowledge of the wave field is needed to help predict the emulsification process as the oil mixes into the sea water, and knowledge of the wave direction and the currents throughout the water column is needed to help predict the rate and direction of travel of the resulting emulsion.

In addition to the ADCPs, Teledyne RDI also provides a full line of Conductivity, Temperature and Depth (CTD) products. CTD measurements are among the most fundamental in oceanography, and it is imperative that baseline measurements be made as expeditiously as possible. Unfortunately, all CTD sensor measurements will be affected by the presence of oil. However, our Citadel CTDs are based on a non-contacting measurement of conductivity that has been shown in independent evaluations¹ to retain its calibration after a straightforward cleaning that can be done in the field. In addition, the Citadel CTD sensors can be equipped with a variety of other measurement capabilities, but of particular relevance here are fluorimeters designed to measure CDOM (Colored Dissolved Organic Matter) which have been shown to be good indicator of the presence of crude oil².

We are committed to providing the best quality data as expeditiously as possible for the ongoing monitoring of the spill, and are working feverishly to put instruments on the shelf for rapid delivery to the affected area. We are standing by to help as best we can by providing instruments and expertise to those tasked with evaluating the ongoing consequences of the spill.

For more information on our Citadel CTDs, please visit: <http://www.rdinstruments.com/citadel.aspx>
For more information on our ADCPs, please visit: http://www.rdinstruments.com/mm_products.aspx.

For direct assistance, please contact any member of our Marine Measurements team at rdisales@teledyne.com or Tel. +1-858-842-2600. We are ready to support you!

1. Alliance for Coastal Technologies, "Performance Verification Statement for the FSI NXIC-CTD-BIO-AUTO Salinity Sensor". UMCES Technical Report Series, Ref. No. (UMCES)CBL 09-030. UMCES, Cambridge, MD.
2. Fuller, C., Bonner, J., Kelly, F., Page, C., and Ojo, T. (2005) Real Time Geo-Referenced Detection of Dispersed Oil Plumes. Proceedings of the 2005 International Oil Spill Conference, American Petroleum Institute. Washington, D.C.