



OTT Application Notes / Success Stories

Monitoring Louisiana's Levees

OTT Orpheus Mini & OTT ITC

Compact water level measurement system with remote data transfer via GSM / SMS



Background

- The natural disaster in New Orleans was exacerbated by the fact that the city's levees broke
- Two towns SE of New Orleans, Braithwaite and Scarsdale, depend on levees which were also damaged by Hurricane Katrina



- Levees have been repaired to meet minimum protection requirements, and additional strengthening work continues
- Redirect water from behind the levees at a rate of 7,500 cfs for up to 20 days during certain portions of the year

Task

- Near real-time monitoring of water levels at the repaired breaches is required to assess the quality of the repairs
- Information needed when water levels exceed triggers, then water can be discharged to safer areas
- ENCOS, a long time OTT / HACH Environmental customer, was contracted by CSRS engineers to provide monitoring systems
- ENCOS was faced with strict deadlines to have the monitoring platforms installed

Monitoring Solution

- OTT / HACH Environmental provide ENCOS with the OTT Orpheus Mini & ITC solution
- Orpheus Mini is a pressure/temperature sensor with integrated logging capabilities designed to be placed in a well
- ITC is a GSM-based remote communications device that allows Orpheus Mini data to be accessed from the users' office

The Advantages

- The compact design of the OTT solution allows ENCOS tremendous flexibility for deploying the level sensor and communications system
- Key advantage is that all data retrieval and maintenance can be performed at the top of the well without removing the sensor
- Key advantage is compactness and simplicity of the system
- Remote data transfer with alarming features

Summary

- Because of the service provided, the site was operational in time, and could result in additional opportunities around the city
- Monitoring stations have been operational since April 26, 2006, and data transfer has been operational since May 19, 2006
- The compact OTT solution allows tremendous flexibility for deploying the level sensor and communications system

More Information on solutions and products on www.ott-hydrometry.com



Technology

GW Data Logger **OTT Orpheus Mini**
Lithium or Alkaline battery supply
Ceramic-capacitive measuring cell,
Use in measuring sites from 1"

Communication Unit **OTT ITC**
GSM / SMS
Active data transmission (SMS sending) /
passive (data polling from the central station)
Use in measuring sites from 2"