SMS SMART Software

System Overview

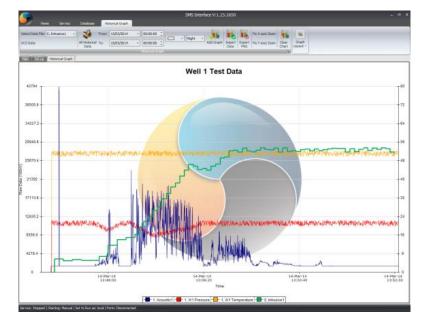
SMS Sand Monitoring Acquisition Real Time (SMART) system allows data to correlate from multiple sources including acoustic sand monitors, intrusive erosion probes as well as, particle analysers, inspection data etc.

Technical Benefits

- Allows real time correlation, trending and visualization of multiple data sources / hardware sensors.
- Real time erosion calculations based on API RP 14E and industry best practice.
- Erosion calculations allows risk to be assessed in real-time
- Real-time data streaming from Sand Monitoring package offshore to SMS / Client office.
- Encrypted data link utilizes standard internet connection

Operational Benefits

- Remote monitoring, meaning no engineer is required offshore, saving on bed space.
- Flexible system can be tailored to the client's individual requirements.
- Removes the requirement for proprietary software on individual systems.
- Remote operation allows data to be viewed and interpreted from any location worldwide.



Service Applications

- Well Testing
- Frac Operations
- UBD Operations
- Process Systems
- Integrity Management





Sense Understand

Perform

Aberdeen / Abu Dhabi / Kuala Lumpur www.smsintegrity.com info@smsintegrity.com The flexibility of the system ensures monitoring can be tailored to the client's individual requirements. Depending on client requirements and the equipment to be utilised, there are several ways SMS will offer the service and which will be appropriate dependent on the operational constraints and the client's preference.

Implementation Options

Manned Monitoring (12hr Coverage)

Engineer will arrive onsite, setup the equipment and remain onsite monitoring the installed equipment for the duration of the test. The engineer will de-rig equipment and demobilise.

Partial Remote Monitoring (24hr Coverage)

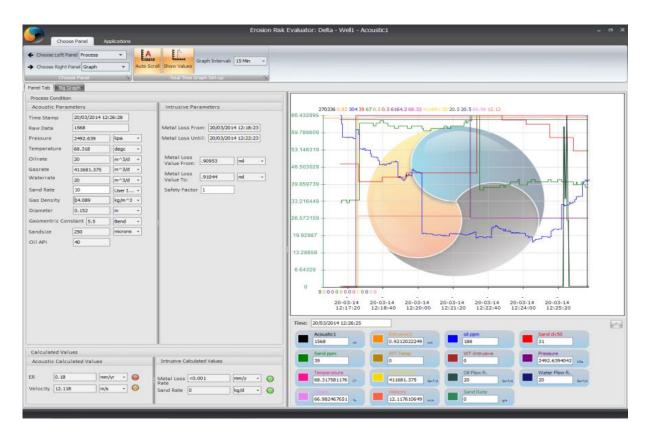
Engineer will arrive onsite, setup / test the equipment and SMART interface system, he will remain onsite monitoring the installed equipment, for the duration of the test, day shift 12 hr. Night shift (12hr cover) will be provided via the remote SMART software and SMS personnel located onshore at SMS' offices. The engineer will de-rig equipment and demobilise.

Fully Remote Monitoring (12 or 24hr Coverage)

Engineer will arrive onsite, setup / test the equipment and SMART interface system, he will then demobilise. Monitoring of the equipment will be done remotely via our SMART software and SMS personnel located onshore in one of our regional offices.

SMS remote engineer will be in the SMS office headquarters so that the data will be held securely using our data management system. However, if required the data could be remotely monitored in the client's office, Clients are welcome to visit the SMS' office to monitor the data, with our engineers.

Interconnection is established through the client's internet connection at the offshore location.



UK Head Office

Energy Development Centre Aberdeen Science & Energy Park Claymore Drive, Bridge of Don Aberdeen, Scotland AB23 8GD

Tel: +44 (0) 1224 853 525 Fax: +44 (0) 1224 707 999 Email: info@smsintegrity.com Malaysia Office SMS Sand Management SDN BHD 26th Floor, Menara Maxis Kuala Lumpur City Centre 50088 Kuala Lumpur, Malaysia Tel: +60 (0) 3 2615 2606 Fax: +60 (0) 3 2615 2699 Email: info@smsintegrity.com