

### **Airwell Remote Telemetry and Monitoring Capabilities**

The Airwell Group have designed, manufacture and operate a range of equipment with remote monitoring and control capabilities. Using SCADA remote telemetry Airwell can provide a range of solutions for remote monitoring, control and operation of your pumping infrastructure.

#### **What is SCADA?**

Supervisory Control and Data Acquisition or SCADA for short.

SCADA telemetry is a vital multi-site management technology that allows the user to monitor their equipment in real-time giving the user remote control, measurement, monitoring and data transfer capabilities. This gives the user the tools necessary to remotely monitor and control multiple pumps and/or equipment on multiple sites spread over large distances from a central point.

SCADA is the next generation of data acquisition and analysis software used with combinations of wireless and wired equipment. The software shows the user, at a glance, how the well, pumps & equipment are operating.

The results are presented on the laptop screen in a 'dashboard' and graphical format as shown below. Simultaneous recording of data allows visualisation and control of the equipment remotely based onsite.

#### **Features and Benefits**

- Ability to integrate existing systems and infrastructure
- Industry leading technology
- User friendly operation and monitoring
- Ability to perform pump and equipment diagnostics
- Experienced Airwell staff in programming, monitoring and reporting as required
- Adaptable and flexible system
- Allows for 24/7 access and monitoring without having to be on site

#### **What can you monitor/view?**

- Pump Flow Rates
- Pumping Volumes
- Tank Levels
- Equipment Status On/Off
- Standing Fluid Level
- Pressure Levels
- Monitoring Equipment Status
- Pump status for remote diagnostics (Airwell Oil & Gas pumping equipment only)

#### **Why Airwell**

- Nearly 30 years of experience in pumps, monitoring and control allow Airwell to build practical systems for operators.
- Ability to incorporate a range of pumping and monitoring technologies into the SCADA system
- Experienced staff in system design, implementation and monitoring
- Produce accurate reports with real time data.
- The software, data and information is owned and controlled by the client for them to use and view.

## **Standard Equipment with State of the Art Communication**

Airwell SCADA controlled equipment has the ability to communicate via a number of different methods which means it can be used in a large range of environments including:

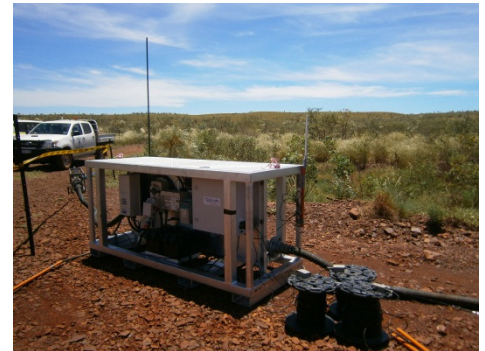
- Radio communication where the office or control hub is in close proximity to bores for effective radio communication.
- GSM (Cellular Modem) for bore sites within an area that has cellular coverage.
- Internet or VPN for bore sites within an area that has internet coverage.
- Satellite communication for remote areas.

## **Airwell Designed Equipment with SCADA Capabilities**

Airwell Group has the capabilities to incorporate SCADA Telemetry into a range of equipment and monitoring devices depending on the application and requirements of the client. Some of the equipment Airwell has already incorporated this technology into is highlighted below.

### *Flow Testing Unit*

Airwell have designed and built its own skid mounted pump/flow testing unit which houses electronic mag flow meters, variable speed drive, pressure transducers and SCADA control unit. This unit provides a highly accurate electronic recording of flow test results. With the incorporation of SCADA our test results can be viewed “in real time” by the client and controlled by site staff or remotely. The ability for the unit to be operated remotely means that staff are not required to be at the bore site 24 hours per day during tests.



### *CSG Pumps and Control Skids*

Airwell have designed and built a number of CSG control skid units to house all of the electronic equipment to control and monitor the Airwell pumping system. This includes the incorporation of bubbler tubes and pressure transducers to measure well and fluid levels, data logger for the recording and logging of data, modem for external communication and SCADA unit for the control of the equipment.



Airwell have also made these control skid units for electric submersibles by incorporating a VSD drive to allow for flow control of electrical submersibles.

### *Compressor Sheds and Containers*

Along with pump control skids Airwell has also incorporated its remote monitoring and telemetry equipment to its compressors and compressor sheds which include the control and monitoring of the compressors, VSD drives and bubbler tubes. These sheds or containers are often designed by Airwell as the base unit to hold the main control hub for the telemetry control.



## Control, Logging and Reporting

### Dashboard

The 'Dashboard' (see pictures below) is designed and operated in Clear SCADA a Windows based program used to give the operator full remote control and monitoring of the equipment which is linked into the SCADA system. Information is fed back from the remote site and recorded onto your computer. The dashboard can be customized to suit whatever needs the customer requires in terms of monitoring and control of their equipment, this can include graphical representation of pumps and equipment.

### Logging and Reporting

The ability for the Airwell SCADA and monitoring equipment to log data at frequencies set by the client is another major advantage. The dashboard allows logging frequencies to be altered without the need to stop or reset equipment. Live logging of data means that Clear SCADA can produce live graphs for the reporting and monitoring of data.

Data can also be exported to Microsoft Excel in CSV format for the use in reports and /or modelling software.

