provide useful information, it is also an expensive and time consuming process.

In a completed well, permanent gauges linked by cables to the surface may be provided.

However all of the above systems may be effectively inoperable in an emergency or blow out situation as there may be no access to or control of the well, and cables and/or data logging equipment may be damaged or destroyed.

The inventors of the present invention have noted that an improved method for receiving and recording downhole well parameters can be provided, especially during or after an emergency/disaster situation.

An object of the present invention is to mitigate problems with the prior art, and preferably to improve the communication and safety of wells.

According to an embodiment~~a first aspect~~ of the present invention there is provided a well comprising a borehole and wellhead apparatus, and a communication box at or proximate to the wellhead apparatus,
the well comprising a plurality of sensors connected to wireless transmitters which are adapted to transmit information from the sensors to the communication box;
the communication box comprising a receiver adapted to receive signals from the transmitters, and at least one of a transmission device and memory device to transmit and/or store data received from the transmitters.

According to a firstseeond aspect the well comprises a borehole and wellhead apparatus, and a communication box at or proximate to the wellhead apparatus,

the well comprising a plurality of sensors coupled to wireless transmitters which are adapted to transmit information from the sensors to the communication box;

the sensors comprising at least one pressure sensor;

and the well comprising a first memory device spaced apart from the communication box, the first memory device configured to store information from the sensors,

wherein the communication box comprises a receiver adapted to receive signals from the transmitters, and at least one of a transmission device and a second memory device to transmit and/or store data received from the transmitters.

Normally the first memory device is spaced apart from the communication box by at least 5m normally more than 10m, optionally more than 20m or more than 50m.

Thus embodiments in accordance with the firstseeond aspect of the invention provide a well which has a redundancy in the data received from the sensors since the data is stored/recovered at two separate locations, the first memory device and the communication box. In the event of a failure, for example due to a blow-out, at one point, data can still be received from the other location. For example if the communication box was damaged and lost, a separate communication box, or other suitable means, may be coupled to the well in order to retrieve information from the first memory device.

picked up by the receiver, the information can be provided later when it is repeated as a historical data transmission.

A locator beacon device may be provided on the communication box.

More than one communication box may be provided and these may store redundant copies of data.

On land or platform based wells the communication box may incorporate satellite or other communication equipment to transfer data directly to a control centre.

In an embodiment, a method of monitoring a well described in the foregoing is provided. The method comprises sending signal between a surface faulty and the communication box.

The transmitter may be spaced apart from the sensor and connected by conventional device such as hydraulic line or electric cable. This allows the wireless signal to be transmitted over a smaller distance. For example the wireless signal can be transmitted from a transmitter up to 100m, sometimes less than 50m, or less than 20m below the top of the well to the communications box even though the sensor is deeper than the transmitter. Accordingly embodiments of the present invention can be combined with fluid and/or electric control systems and signals.

The sensors need not operate only in an emergency situation but can provide details on different parameters at any time. The sensors can be useful for cement tests, testing pressures on either side of packers, partial or complete obstructions, and wellhead pressure tests for example. Thus such useful data can help prevent or mitigate an emergency situation.