



SURE-SHOT™ ACOUSTIC PRESSURE BUILDUP SURVEY (BU)

Pressure buildup is a reflection of permeability of the reservoir rock around a well and is a function of shut-in time. The lower the permeability, the longer the time required for the pressure in a well to equalize at the prevailing reservoir pressure. The shut-in time is critical in obtaining an accurate pressure.

Buildup can be conducted utilizing either surface acoustic systems or downhole pressure recorders. The benefits of acoustic systems are as follows.

- no service rigs/wireline required on pumping wells
- better flow data acquisitions
- shorter shut-in times (well back on production sooner)
- reliable data collection (surface acoustic systems can be monitored frequently. Downhole recorder monitoring is expensive and the recorder failures usually result in total loss of test data)
- better data accuracy (ensured through data comparison of tandem surface recorders and hand-held deadweights. Permanent downhole recorders are not easily calibrated)
- knowledge of liquid level depth at all times
- one system can be effectively used to test multiple wells

Survey results can be used to evaluate efficiency of well completions, local and average reservoir pressures, original hydrocarbon in place, requirements for well treatments, success of stimulation treatments, connectivity to other wells, and exploitation modes.

Through extensive research and comprehensive field testing, Nelgar Oilfield Services Ltd. has developed technologically advanced **Sure-Shot™ Acoustic Fluid Level Systems** and **N-Gauge™ Electronic Deadweights**. They are used in all pressure survey applications and tests.