

## PARAGON EM<sup>™</sup>

WIRELESS COMMUNICATION FROM METROL

The Metrol PARAGON EM<sup>™</sup> system records and wirelessly transmits pressure and temperature measurements from multiple discrete locations in the well.

### DESCRIPTION

The PARAGON EM<sup>™</sup> system can be deployed as a stand-alone system or as part of a well test string. If deployed as part of a DST, the same gauges that monitor the initial flow test can also monitor the extended pressure response for the subsequent months and years following the departure of the drilling rig. Data can also be collected from multiple zones, capturing

vertical interference between zones in the same well bore. Pressure pulses can indicate horizontal interference between wells that can determine reservoir connectivity and help delineate the field. This in turn aids initial field development. The data collected can also be used to improve modelling, plan future infill wells and possible water / gas injectors etc.

### FEATURES & BENEFITS

- > High accuracy, high resolution data collected from OCULUS<sup>™</sup> gauges
- > Using KUBIC-FLUX<sup>™</sup> in conjunction with PARAGON-EM<sup>™</sup> ensures the pressure and temperature data recorded is truly representative
- > Has built in redundancy and no single point of failure
- > Truly two way communication to control power settings, adjust sample rates and increase life span
- > Modular equipment and simple interfacing, resulting in fewer runs to verify system functionality
- > Can be integrated with other Metrol telemetry, sensor and actuation systems
- > Safer well abandonment; the barrier envelope can be monitored for several years
- > Cost effective:
  - No requirement to bring a rig back to location while maintaining surface read out
  - Low volume of equipment required in hole
- > Advanced reservoir understanding- continuous survey and no loss of data between drilling, well test and abandonment phases
- > Comprehensive barrier qualification and monitoring data
- > All data recorded to gauge memory and never lost

### APPLICATIONS

- > Well testing
- > Extended well testing
- > Observation/appraisal wells (long term monitoring)
- > Permanent abandonment
- > Barrier monitoring
- > Barrier verification
- > Reservoir monitoring
- > Retrofit capability - existing completions
- > Multizone monitoring
- > Open-hole monitoring

### SPECIFICATIONS

<b>Pressure range:</b>	0 - 25,000 psi (30,000 psi available on request)
<b>Temperature accuracy:</b>	+/- 1°C
<b>Gauge battery life:</b>	Up to 10 years
<b>Transmission volume:</b>	Up to 150,000 data points
<b>Transmission life:</b>	Up to 10 years
<b>Adjustable sample rate:</b>	128 points per second to multiple long term options

