

**ORIGIN™**  
WIRELESS DOWNHOLE SAMPLING

Capturing valid PVT samples can be challenging if the fluid flowing conditions are close to the bubble point pressure. The ORIGIN sampling system allows bottom hole samplers to be triggered individually and on demand in optimum conditions.

**DESCRIPTION**

The ORIGIN samplers are each equipped with a wireless trigger and can be run in a carrier as part of the DST string. The trigger command message is conveyed by the PARAGON telemetry system.

It is good practice to position OCULUS gauges above and below the samplers; this enables fluid gradient monitoring prior to sending the trigger command.

ORIGIN samplers can be set in hanging subs or a nipple, often allowing the samplers to be positioned below the packer and closer to the formation.

ORIGIN samplers can also be positioned in a wireline string and triggered individually once the liquid contact has been established using the OCULUS gauge.

**FEATURES & BENEFITS**

- > Multiple tools can be run at the same time, to allow samples to be taken during testing of each zone
- > Integrated with proven Metrol PARAGON Telemetry system
- > Long battery life with power save functionality, for extended well testing
- > Removes uncertainty of conventional 'blind' pressure activation with bi-directional real time communications
- > There is no loss of rig time due to rig-up and wireline runs. ORIGIN can be fired at any time during the test to suit well conditions and test objectives
- > Often it is not necessary to designate specific sample flow periods
- > Coded digital trigger sequence is an option for annulus pressure pulse fire. PARAGON annulus pressure pulses can be optimally configured where wireline accessibility is an issue, eg:
  - i) Dual zone test beneath a packer and TCP guns
  - ii) Deviated or horizontal sections
  - iii) Wells where heavy viscous oils are present
  - iv) Deepwater
  - v) Sampling below submersible pumps or jet pumps

**SPECIFICATIONS**

ORIGIN Sampler Trigger

**Temperature rating:** 175°C

**LOW PRESSURE ORIGIN CARRIER SYSTEM:**

**OD (MAX) (IN/MM):** 5.390/139.906  
**ID (MIN) (IN/MM):** 2.25/57.15  
**Length (FT/M):** 19/5.8  
**Burst (PSI):** 10140  
**Collapse (PSI):** 10490  
**Tensile (LBS):** 304000  
**Max Test Pressure** 10,000psi  
**Top Connection:** 3 1/2 Hydril PH-6 Box  
**Bottom Connection:** 3 1/2 Hydril PH-6 Pin

**HIGH PRESSURE ORIGIN CARRIER SYSTEM:**

**OD (MAX) (IN/MM):** 5.390/139.906  
**ID (MIN) (IN/MM):** 2.25/57.15  
**Length (FT/M):** 19/5.8  
**Burst (PSI):** 17740  
**Collapse (PSI):** 16080  
**Tensile (LBS):** 532000  
**Max Test Pressure** 15,000psi  
**Top Connection:** 3 1/2 Hydril PH-6 Box  
**Bottom Connection:** 3 1/2 Hydril PH-6 Pin

