

VIVID® Sand

Sand detection and quantification



Ultra-Sensitive Acoustic Listening Platform. A carefully chosen sensor is paired with specially designed electronics to separate fluid flow from solid particles in a flowing environment. Unrivalled sensitivity and selective energy filtering means that both axial flow and radial in-flow containing sand can be reliably detected.

Benefits

- Reliably separates flow-induced noise from sand particle impact
- Complex zonal evaluation of produced sand
- Sand ingress quantification, supporting production efficiency

Features

- Detailed analysis of downhole fluid movement
- High-speed sampling rate with 220 FFT/sec per sensor
- Shorter stations durations
- Memory and real-time acquisition
- Interactive spectrum and curve data
- Integrated accelerometer sensor, effectively eliminating noise during stations

Typical Applications

- Sand ingress localisation
- Sand control analysis
- 4 phase PLT analysis
- Maximum sand-free rate determination
- Produced versus transported sand analysis

Specifications

Sensors

| | |
|-----------------|--------------------|
| Type | Passive acoustic |
| Number | 1 |
| Frequency range | <1 kHz - > 656 kHz |

Data structure

| | |
|--|--|
| Energy histogram bins per threshold | 82 |
| Statistical parameters (Per frequency channel) | Time-filtered noise Mean noise Transient |
| Total channels | 366 |

Data acquisition

| | |
|---------------|------------------------------------|
| Logging modes | Dynamic/Stationary Realtime/Memory |
|---------------|------------------------------------|

Physical

| | |
|--------|-----------------|
| OD | 1-11/16" (43mm) |
| Length | 29.3" (745mm) |
| Weight | 10.8lb (2.9kg) |

Environmental

| | |
|-------------|------------------------|
| Temperature | 350°F [177°C] |
| Pressure | 15,000 psi [1 034 bar] |