

MWD Standard Directional MWD Service

Service Benefits

Provides reliable Directional MWD measurements in hole sizes down to 5-7/8" diameter. (9-1/2" - 4-3/4" Collar Sizes).

Transmits: Hole Inclination, Azimuth, Tool Face & Circulating Temperature (tool also transmits a Quality Assurance status word with each transmission).

Tool modes can be programmed from surface.

Continuous tool faces in steering mode.

Survey transmission time: Average 90 seconds

Tool face update rate: Average 30 seconds.

Average 9 seconds in fast mode.

Power Source: High temperature lithium battery.

Operating Parameters Directional Sensor Specifications

Maximum Flow rates by Collar Size:

9-1/2" OD: 1200 GPM

8" OD: 900 GPM

6-3/4" OD: 700 GPM

4-3/4" OD: 350 GPM

No lower flow limit

Accuracy

Inclination: +/- 0.1°

Azimuth: +/-0.5° (inc > 5°)

Magnetic Tool Face +/- 1.0°

Gravity Tool Face : +/- 0.5°

Temperature: +/- 0.5°C

Nominal pressure drop*

(Dependent on mud weight & flow rate)

Repeatability

Inclination: +/- 0.05°

Azimuth: +/-0.5°

Maximum sand content: 1% by volume**

Maximum operating temperature: 302°F

Crossover to highside tool face at inclinations > 3.0°

Maximum operating pressure: 15000psi (20000psi available)

Maximum drill String RPM: No limit

LCM circulation limits: No limit ***

* Refer to Target's pressure drop charts

** No uphole filter required

*** LCM pills may inhibit tool operations

