

Sperry sensors used on the Horizon:

SDL

- Flow out sensor
 - Measures distance from top of fluid to sensor, which is converted to a flow out gallons per minute
 - Sonic sensor mounted on the return line just before the gumbo box
- Gas traps
 - Provides gas samples for determining total gas concentration in the returning mud
 - Transfers gas via air hose to gas analysis equipment located in mudlogger's unit
 - Two traps located in the possum bellies of two shakers

MWD

- Standpipe pressure transducers
 - Measures pressure of the plumbing
 - At least six transducers mounted for MWD tool pulse detection
 - One transducer mounted at each pump, two transducers on the gooseneck in the derrick
- Pump stroke counters
 - Senses pump strokes, which is used to calculate flow in gallons per minute
 - Four stroke counters, one at each pump
 - Used by MWD detection software for pump noise filtering

Transocean sensor data transmitted to Sperry:

- Drawworks depth encoder
- Heave compensator
- Hookload
- Mud temperature in/out
- Pits volume sensors (x20)
- Pump strokes counters (x4)
- Standpipe pressure (x2)
- Choke pressure (x2)
- Rotary speed (RPM)
- Torque

