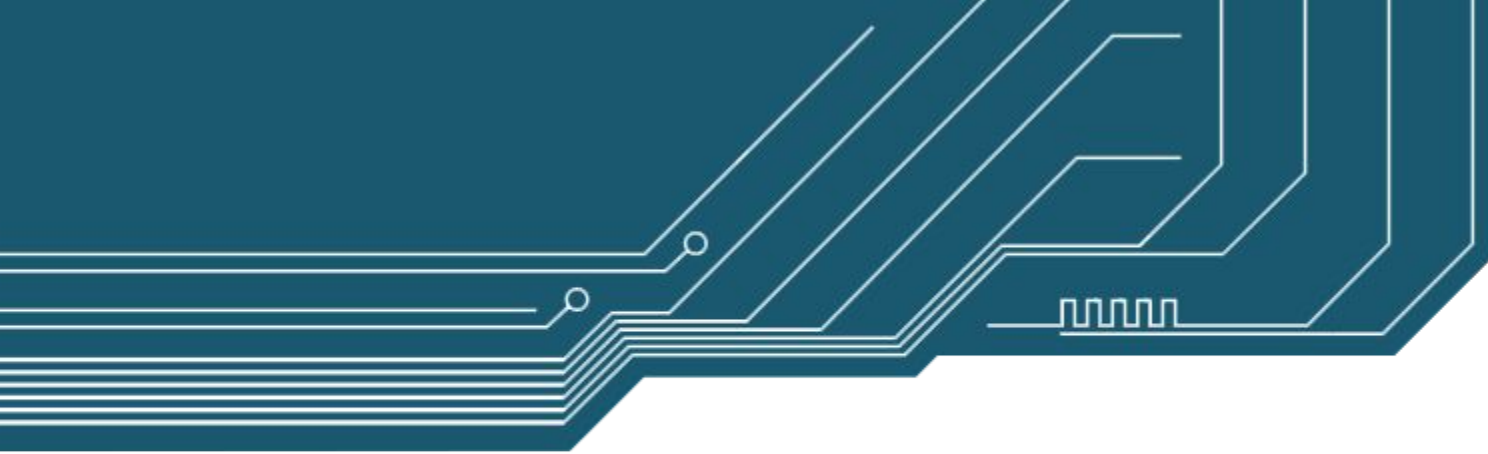


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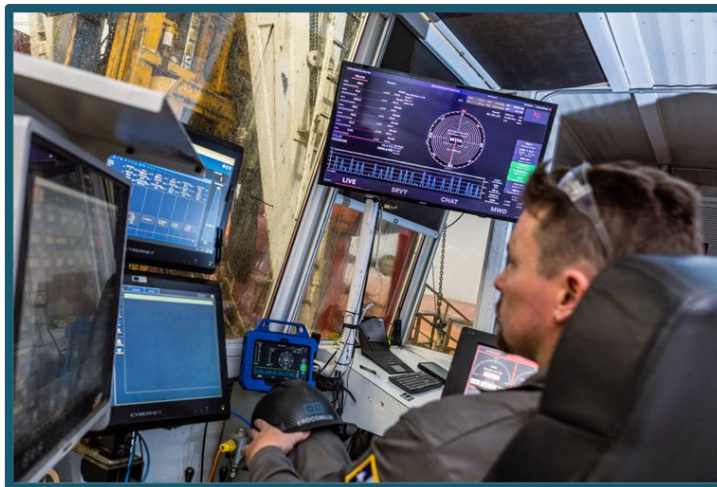


ERDOS MILLER

Ken Miller

OVERVIEW

- **Who we are**
- **Erdos Miller Product Features**
- **Demo**
- **Q&A**



OVERVIEW OF FEATURES

- **Continuous Inclination/Azimuth**
- **Pulse Overdrive**
- **BabelFish**
- **Manual Sync**
- **MEM Sensors**
- **Survey Compression**
- **Azimuthal Gamma**

FEATURES – CONTINUOUS INCLINATION/AZIMUTH

- **What are the benefits?**

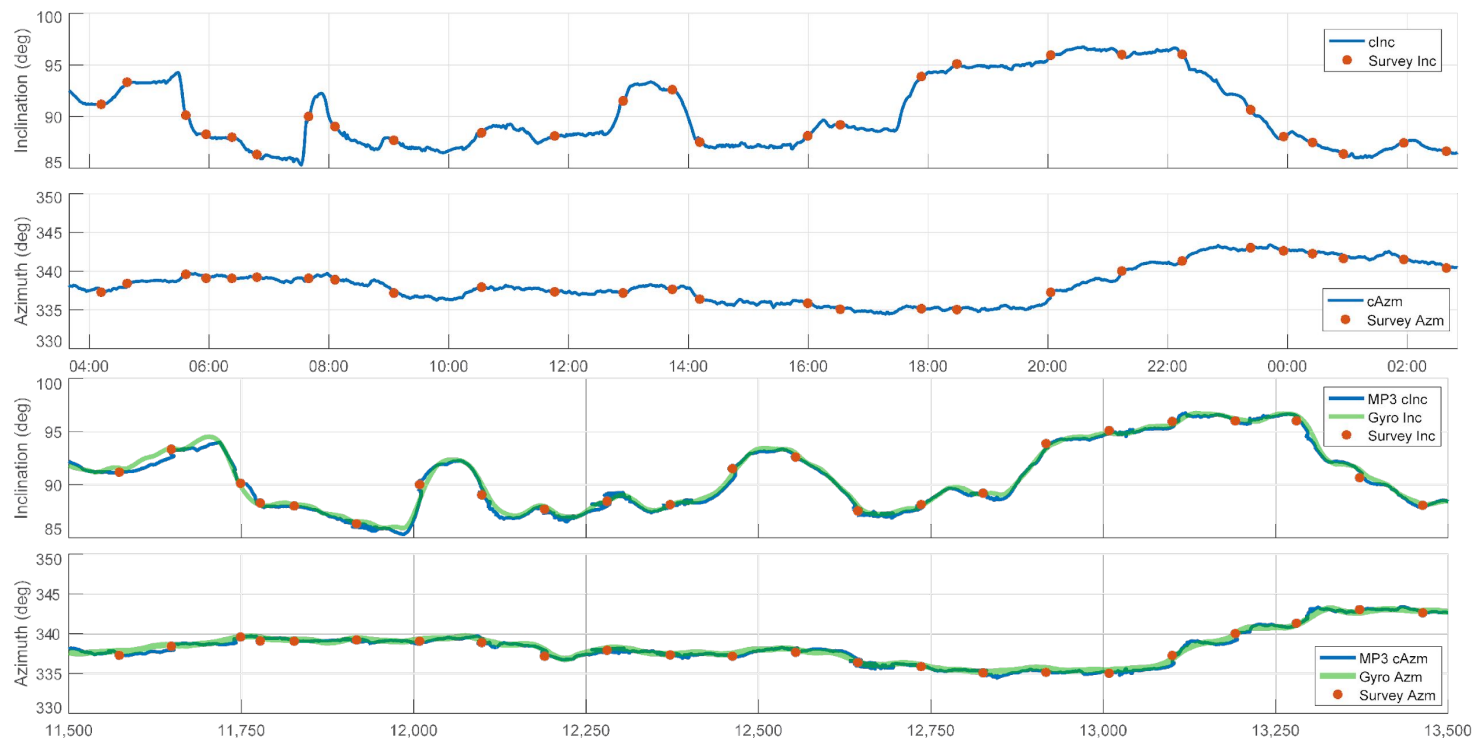
- Continuous inclination and Azimuth allow for constant monitoring of the bore hole direction without stopping for surveys.

- **FAQ**

- Does it work well?
 - Yes, our continuous azimuth is accurate.
- Does your continuous inc/az work north/south?
 - Yes, our continuous azimuth works just as well NS as EW.
- Are there any drawbacks to continuous azimuth?
 - When we drill exactly along the dip angle + or – 2.5°

[Case Study](#)

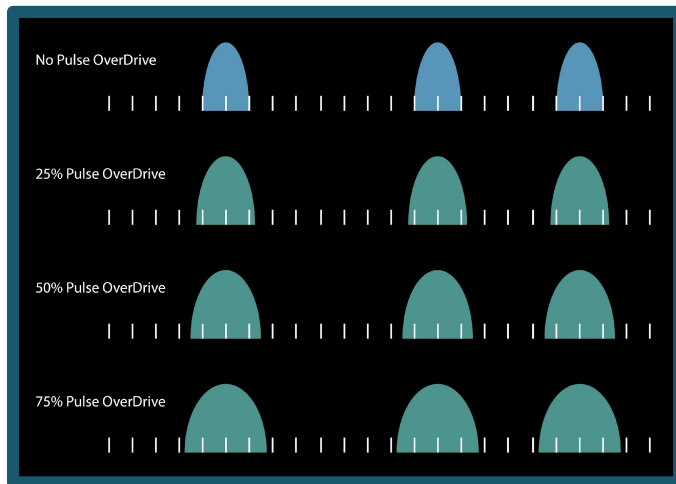
FEATURES – CONTINUOUS INCLINATION/AZIMUTH



FEATURES – PULSE OVERDRIVE

- **What does it do?**

- Pulse Overdrive allows you to drill deeper with faster pulse widths.



[Pulse Overdrive App note](#)

FEATURES – BABELFISH

- **What are the benefits?**

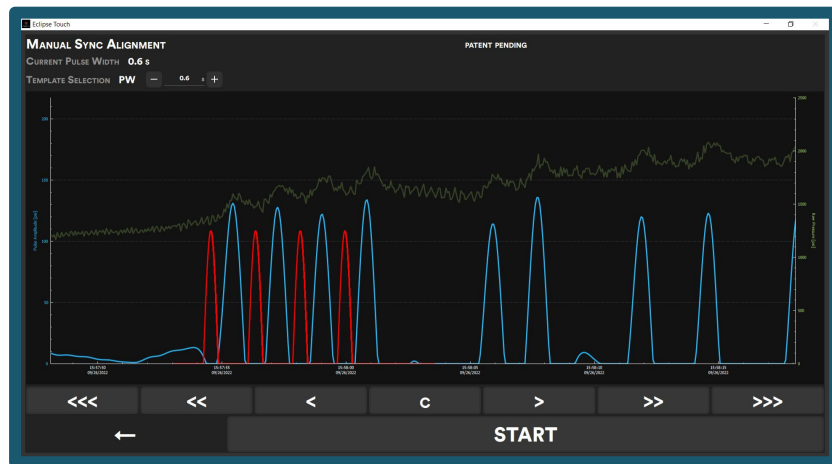
- Allows customers to connect MicroPulse directly to Schlumberger's Rotary Steerable systems for real-time comms.
- Significantly increase NPT.
- Saves time and money for the operator and more value provided by the directional company.

- **FAQ**

- Do you need a translator? Any additional electronics required?
 - No, you do not. The MicroPulse connects directly to Schlumberger's Babelfish electronics.

FEATURES – MANUAL SYNC

- **What are the benefits?**
 - No MWD sync detector is perfect! Manual Sync saves NPT through allowing the rig to avoid a recycle of the pumps.



FEATURES – MEMS SENSORS

- **What are the benefits?**

- Provides a better continuous inclination/azimuth.
- Allows for a higher dynamic range.
- Higher level vibration than a traditional sensor.
- More robust than their previous counterparts.

- **What are the disadvantages of MEMS?**

- Recalibration may be required for MEMS sensors 2-3 times in a year period between wells as opposed to once or twice for a traditional sensor.

- **FAQ**

- Are MEM Sensors less accurate than their previous counterparts?
 - No, they are not MEMS sensors have come a long way.

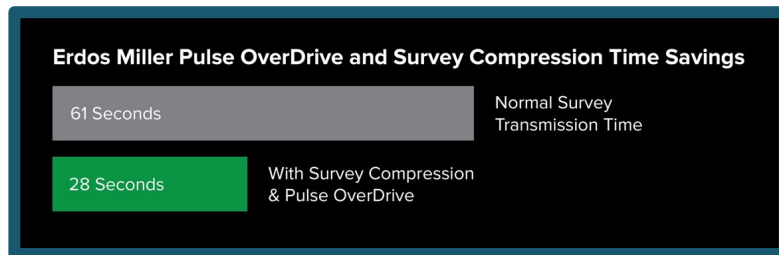
FEATURES – SURVEY COMPRESSION

- **What are the benefits?**

- Survey compression increases the chance of receiving a survey without a recycle while simultaneously receiving logging data faster. Survey is more likely to be received while receiving gamma faster.

- **FAQ**

- Why is your survey more likely to be received?
 - A survey with survey compression is made up of 33% less bits. This means 33% less chance for error. Less recycling more logging data.



FEATURES – Azimuthal Gamma

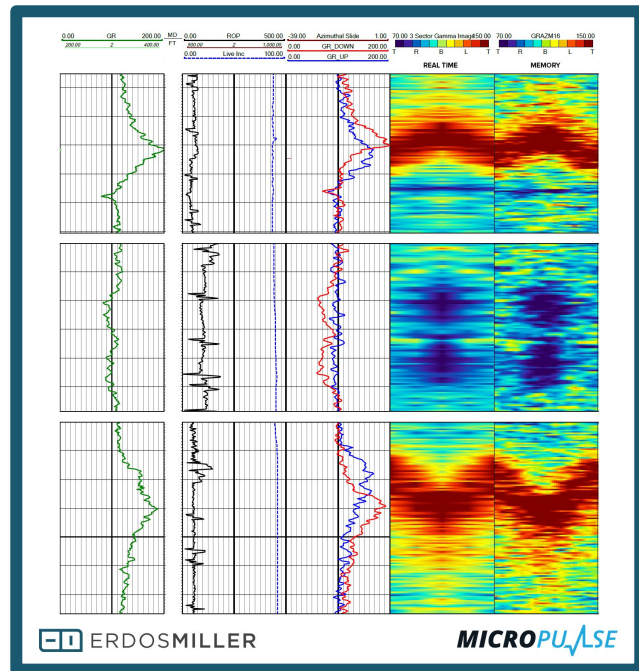
- **What are the benefits?**

- Azimuthal Gamma measurement allows you to keep the well more accurately in the production zone while drilling. (i.e. Produce more gas & oil)

- **FAQ**

- How many sectors are available in real-time?
 - 4, 8, or 16 sectors compressed.
- What is the most common real-time?
 - 8 sectors compressed.
- How many sectors are there in memory?

- 16 sectors



THANK YOU

QUESTIONS?