



# Welcome



## **Speaker Information**

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■ Sep 18, 2025

NOV



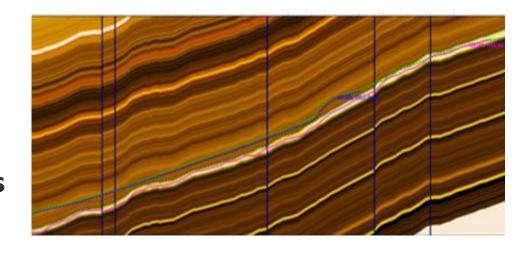


## Application and Challenges

Coal Bed Methane

Geosteering 3 - 6 ft thick zones

 Multilateral fishbone wells with open hole sidetracks



Up-dip



#### Coal Bed Methane overview

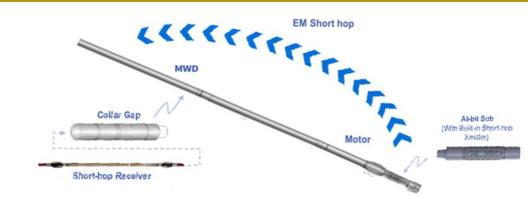
- Typically, shallow (1,000 4,000 ft TVD)
- Shorter laterals (often 2,500–5,000 ft)
- Drilling Conditions
  - Lateral 6 1/8" hole size
  - Avg ROP ~75 ft/hr.
  - Highly cleated and prone to coal sloughing
  - 1/10<sup>th</sup> compressive strength of West Texas Shale
- At the bit measurements are critical to landing and staying in zone.

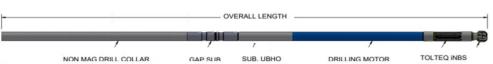




#### **iNBS** Solution

- Total Length ~33"
- Measurements:
  - Cont Inc at Bit
  - Azi GR
  - Azi Res optional
- Short hop hard wired receiver to MWD
- Hop distance up to 70+ feet
- 4 Quadrant in RT
- 16 sector in RM







## Challenges - Data Transmission

- GR Decoding: Developed data compression to improve the rate at which RT GR was decoded at surface
- Improved Resolution: Improved resolution from 1 API to 0.25 API for RT data



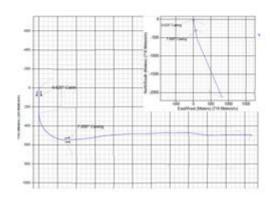
#### Results

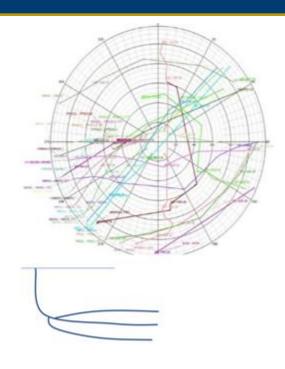
Total Wells: 58

Total Footage: 841k ft

• 95+% in zone

- 0 NPT in last 14 months
- Longest tri lateral drilled: 16,702 ft







### **US** applications

- GeoSteering
  - Landing a curve
  - Reduce tortuosity
  - Smoother wellbore for casing
- GeoStopping
  - Casing point detection
  - Coring point detection
- Vibration measurements
  - At bit vibration measurements









## Thank You

