

CHALLENGE

Decode EM telemetry through entire well in area that has traditionally been difficult to decode, due to the salt, anhydrite and limestone formations above the lower meramec target zone.

SOLUTION

- EvoOne Unified Telemetry was deployed to overcome formation related issues that prevent other EM tools from successful deployments in this area.

OUTCOME

- Finished well decoding EM in 4hz signal at a very low 5 watt power setting.
- Decoded EM telemetry with ground antennas, no 3rd party antenna drop.

Doing More With Less Power

EM telemetry was decoding in a 4hz-4cycle-5watts tool configuration in the lateral at over 20,000ft. This tool configuration is very conservative, especially considering the history of EM decoding in Oklahoma. The five watt power setting is one of the tool's lowest power settings. This leaves room to downlink to 10, 20, or 30 watt power settings to boost higher decoding rates when needed.

No Antenna Drop

Traditionally in these areas where EM signal is difficult to decode, the client would normally deploy antenna dropped into a offset well to overcome formation issues which caused decoding problems. No antenna drop was required on this application. EvoOne still had flexibility to go to a much higher power setting and shorter wave length setup, providing the client with broader range of allowable configurations and power output setting for data transmission enhancement. This allowed the customer to optimize their operating expenditures, maintain highest data quality and eliminate HSE risk associated with antenna drop in a offset well.

nLight™ Post Run Display

Below we see EvoOne's post run software display of entire well.

