

## Application: DNA Surveillance®

*Monitor well to well connectivity to improve field development*

Location: Marcellus Basin

## CHALLENGE

Operator engaged Biota with a blind test to differentiate production source from two formations in the Marcellus basin.

## SOLUTION

- Produced fluids were collected from 9 wells representing two formations in the dry gas window of the Marcellus basin.
- Biota's analysis of the Subsurface DNA from produced fluids was used to characterize relative drainage from two different formations and estimate formation contribution for the individual wells.

## RESULTS

- Sufficient subsurface DNA was obtained from all fluids investigated, allowing this to be a successful deployment of Subsurface DNA Diagnostics™ in the Marcellus basin.
- Biota demonstrated accuracy of 90% in a blind test and correctly binned fluid samples into formation-associated groupings.
- The operator is planning to apply Subsurface DNA Diagnostics to investigate drainage-height and optimize well spacing in the Marcellus basin.

