

CASE STUDY

Application: **Identify Out-of-Formation Contribution**

Location: Appalachian Basin

CHALLENGE

Operators engaged Biota to differentiate the produced water sources from wells landed in the Marcellus and Geneseo formations with DNA diagnostics to assess out-of-formation contribution.

EVALUATION

- Produced fluids were collected from 9 dry gas wells landed in the Marcellus and Geneseo formations.
- Biota's analysis of the Subsurface DNA from produced fluids was used to characterize relative water drainage from the Marcellus, Geneseo and other formations for each individual well.

RESULTS AND VALUE

- Biota demonstrated accuracy of 90% in correctly determining reservoir formation contribution for each fluid sample.
- Biota's analysis suggests that the operator should evaluate completion practices given the significant out-of-formation contribution from wells landed in the Marcellus (wells 5-7).

