**Case Study**

**SET® Expandable Liners Succeed After Cement Does Not**

**Challenge**

In the Utica Shale, an Operator drilled three wells and experienced loss zones and formation integrity issues. After multiple cement squeezes in each of the three wells, formation integrity tests failed in all three wells. A permanent, cost-effective solution was needed to seal the loss zones, to maintain the planned ID (to accommodate a 7-7/8 in. drill bit) and to achieve planned TD with the desired 5-1/2 in. production string.

**Added Value**

SET Openhole Liners (OHL) were installed in two of the three wells, eliminating the need for additional cement squeezes and thereby reducing NPT and well costs (~$40,000/squeeze*). The Operator reached their planned TD with the required wellbore diameter in these two wells.

* Calculated as $30,000 average cement squeeze and four hours WOC at $2,500 /hour.

- **Completion date**: April 2014
- **Location**: Ohio, USA
- **Field / Basin**: Utica Shale
- **Well Type**: Development
- **Base Casing**: 9-5/8 in. (40 lb/ft.)
- **Solution**: 7-5/8 in. OHL
- **Depth**: >5,000 ft. (both wells)
- **Liner Length**: ~600 ft. (both wells)