## The Silicilyte Play in Oman

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The silicilyte play in Oman was developed in the late 80's and in 1989 the first oil discovery in the Athel formation was made in Al-Noor. The first success was followed by number of "interesting data points" before the Al Shomou field was found in 1995.

Al Noor contains very light oil and is currently producing. The Al-Shomou field to date faces substantial development challenges, despite its similarity to the Al-Noor field. None of the other Athel penetrations is economic, although hydrocarbons were encountered in some of them.

The enthusiasm for the Athel play followed the ups and downs of the exploration campaign. The play has been dormant since the late 90's until a review was started in 2004.

In this project a pragmatic approach was taken by comparing various intra-salt lithologies in selected key wells based on the petrophysical data, seismic data and derivatives of seismic data. Qualitative criteria to distinguish a good Athel Formation from other intra salt lithologies were developed. The integration of information from various disciplines was a key success factor for this project.

The identification of 'good' Athel (a hydrocarbon bearing silicilyte of good porosity) is considered to be realistic, however the prediction of flow-rates is bearing a large uncertainty based on the current understanding and the even sparser calibration points.

Intermediate results of dedicated reprocessing confirmed the validity of the new criteria. The criteria were used to revise the risking recipe for the Athel play and changed the portfolio of Athel leads substantially.