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Seismic recognition of incised valleys in the Malay Basin

MD. NOR MANSOR & K.W. RUDOLPH Esso Production Malaysia Inc. Kompleks Antarabangsa Jalan Sultan Ismail Kuala Lumpur

Because of the heterogeneity and discontinuity of many reservoirs, seismic recognition and mapping of incised valleys and other channels is an important aspect of development geoscience. Incised valleys also represent an exploration target in themselves, although limited in size. However, as shown by examples and seismic modelling, there is no single seismic signature that is characteristic of incised valleys/channels in the Malay Basin. The most important criteria in seismic recognition of incised valleys is the map distribution of seismic attributes. Horizon slices and isochron slices are among the many

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seismic attributes that are very useful in recognizing incised valleys and channels. Sand versus shalefilled channels and their encasing stratigraphy can be distinguished (on a risked basis) based on well calibration, seismic modelling, DHI characteristics and compactional geometry.