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**Petroleum Geology of the Peng Lai 19-3 Oil Complex, Bohai Bay, People's Republic of
China**

The Peng Lai 19-3 (PL 19-3) Oil Complex, located in the south central Bohai Bay, People's Republic of China, was discovered in May 1999 with the drilling of the PL 19-3-1 well by Phillips China Inc. The PL 19-3-1 intersected a gross 425-meter hydrocarbon column in Miocene - Pliocene fluvial sandstones at a depth of approximately 1,000 meters. The PL 19-3-2 appraisal well, located 1.6 kilometers south-southwest of the discovery well, intersected a gross hydrocarbon column of 515 meters in the same reservoir interval. Subsequent drilling of an additional five appraisal wells has proven that a large oil accumulation exists. The oil quality varies from 16 - 23o API, with low pour points and low wax content. Gas-to-oil ratios are relatively low and range from 100 - 300 scf/stbo.

The oil complex is located on the northeast extension of a large basinal high and is interpreted as a north-south trending wrench anticline associated with a major north-south strike-slip fault system. En-echelon northeast-southwest trending normal faults are intersected by north-south trending wrench faults. Reservoirs are good quality, stacked, post-rift fluvial sandstones within the Miocene Lower Minghauzhen and Guantao formations; with seals consisting of intraformational mudstones. Source rocks are organic-rich lacustrine mudstones in the syn-rift Oligocene Dongying/Eocene Shahejie formations located in the adjacent sub-basins.

A significant portion of the oil complex is masked by shallow gas covering approximately 30% of the structure. A 4C, OBC seismic survey is planned to help image this portion of the field.