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# **EARLY PERMIAN SILICICLASTIC SYSTEM OF THE NORTH-GONDWANALAND: A COMPARISON BETWEEN NILAWAHAN GROUP OF NORTH PAKISTAN AND HAUSHI GROUP OF OMAN**

**Iftikhar Ahmed Abbasi<sup>1</sup>, Muhammad Haneef<sup>2</sup>, Mohammad Asif Khan<sup>3</sup>**

<sup>1</sup>Earth Science Department, Sultan Qaboos University, Al-Khod, Muscat, Oman

<sup>2</sup>Department of Geology, University of Peshawar, Pakistan

<sup>3</sup>National Center of Excellence in Geology, University of Peshawar, Pakistan

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## **ABSTRACT**

The early Permian siliciclastic system of the north Gondwanaland is represented by the rocks of the Haushi Group in the Oman Interior Basin and the Nilawahan Group in the Salt Ranges of the northern Pakistan. The rocks of the two, time-equivalent groups, though exposed ~2500 kilometers apart, share great similarities in their lithofacies association, composition and depositional systems. The upper Paleozoic sediments of the Haushi Group host major hydrocarbon reservoirs in Oman Interior Basin. This clastic sequence represents 3<sup>rd</sup> episode of Gondwanan glaciation in the Arabian Peninsula and is composed of glacial and glacio-fluvial deposits of the Al-Khlata Formation, overlain by fluvial dominated Gharif Formation. This clastic sequence is widely distributed in subsurface of the Oman Interior Basin and surrounding parts of the Arabian Peninsula such as in Saudi Arabia and U.A.E. The siliciclastic rocks of the late Paleozoic Nilawahan Group in the Salt Ranges in north Pakistan are comprised of glacial and glaciofluvial Tobra Formation, deltaic to estuarine Dandot Formation overlain by the fluvial Warchha Formation, and near-shore, coastal-marine Sardhai Formation. This study describes and compares the lithofacies association of the two groups to interpret the depositional system and tectonic context of the two widely-apart sedimentary sequences.