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**Shale Diapirism Versus Down-Building in the Quinault Formation, Olympic Peninsula, Washington: Key Criteria for Interpreting the Origin of Diapiric Structures**

The Quinault Formation, located on the coast of Washington, is characterized by mildly deformed fluvial to shallow marine sediments punctuated by highly deformed *mélange* belts of the Hoh rock assemblage. Some of these *mélange* zones have been interpreted as diapiric intrusions of over-pressured shale. Although observations made in the field strongly support the interpretation of these zones as shale diapirs, their origin as intrusive bodies is questionable. I suggest that down-building rather than over-pressured intrusion is the process responsible for the emplacement of these diapiric structures. In order to validate this claim the following list of key criteria must be considered. 1. No portion of the overburden was deformed or removed to accommodate the diapiric structure. 2. The geometry and thickness of beds in strata adjacent to the structure change near the margins of the structure. 3. The depositional facies of the overburden must be consistent with the controls on down-built structures. 4. The age and relationship of faulting at the margins of the structure are not consistent with the formation of the structure but are due to later deformation. 5. Shear and flow indicators are consistent with passive, syndepositional growth of the diapiric structure. Testing field observation against these criteria provides a definitive and substantiated interpretation for the origin of diapiric structures. Observational support of down-building in the Quinault suggests that down-building is a process not restricted to passive margin settings but is a controlling factor for diapir growth in the forearc setting of Western Washington.