



Fig. 4. Lithostratigraphy, correlation, sequence stratigraphy, paleontologic dating, and porosity in wells 7128/4-1 and 7128/6-1 and the composite Upper Paleozoic section assembled by Bugge et al. (1995) from five IKU wells (labelled in center column). Tops of lithostratigraphic units (L-1 through L-9) and major depositional sequences (S-1 through S-7) are labelled. Stages of platform evolution (Table 1) are labelled '0' through '4' at far left. Seismic reflectors (left) are given informal names used within Statoil. Cored intervals are indicated by vertical bars. Gamma ray (GR) log scale is 0-150 API units for exploration wells and 0-300 API units for IKU wells. For IKU wells 7030/03-U-01 and 7129/10-U-02, wireline GR logs are not available, so core-surface GR logs (courtesy of Tom Bugge, IKU Petroleum Research) were normalized to match approximately the GR scale of the wireline logs. Displacement of the GR profile to the right in 7128/6-1 with respect to 7128/4-1 reflects differences in mud composition (KCl-bearing mud in 7128/6-1) and centering of logging tool in drill-hole (tool pressed into contact with hole wall in 7128/6-1). In the exploration wells, porosity profiles are based on calibration of density log to core measurements. In the IKU wells, the porosity profile connects individual plug measurements. IKU seismic units of Bugge et al. (1995) are labelled in IKU GR column. Short dashed lines labelled '1' through '6' in the IKU porosity column are sequence boundaries of Stemmerik et al. (1995). Lithology column for well 7128/6-1 is based on core description (Appendix 1) and thin sections of sidewall cores and cuttings samples. Ages for well 7128/6-1 refer to fusulinid datings by V. I. Davydov, Inger Nilsson, and Groves & Walman (1997) and palynologic datings in Early Carboniferous strata (D. McLean, University of Sheffield, unpublished 1994 report for Norske Shell). Ages for IKU wells are from Bugge et al. (1995).