D Figures.

Figure 8: Base map of Njord field, North Sea area, offshore Norway.

Figure 9: Inline 1787, Njord field, showing complex geological structure below base of Cretaceous.
Figure 10: Inline 1769, Njord field, showing simple geological structure above base of Cretaceous.

Figure 11: Stacking velocity at well location 6407/7-1S.
Figure 12: Logging data in well 607/7-1S.
Figure 13: Logging data in well 607/7-3.
Figure 14: Normal mechanical compaction RPDTs at well location 6407/7-1S.
Figure 15: Normal mechanical compaction RPDTs displayed with logging data at well location 6407/7-1S.
Figure 16: Difference attribute trends between normal mechanical compaction RPDTs and logging data at well location 6407/7-1S. Positive deviation in velocities indicates cementation while negative deviation indicates overpressure or high porosity.
Figure 17: Empirical RPDTS modelled for normal mechanical compaction, abnormally high porosity, uplift-erosion and late cementation effects.
Figure 18: Comparison between empirical RPDTs modelled for all rock physic events and logging data at well location 6407/7-1S.
Figure 19: Stacking velocity versus traveltime (TWT), Inline 1788. Red curve is velocity at well location 6407/7-1S.

Figure 20: Interval velocity versus depth, inline 1788. Red curve is velocity at well location 6407/7-1S.
Figure 21: $V_s$ calculated from $V_p$ using equation 9 at well location 6407/7-1S.
Figure 22: Seismic RPDTs compared to well log data at well location 6407/7-1S.
Figure 23: Seismic RPDTs along Inline 1788, compared to well log data at well location 6407/7-1S.
Figure 24: Seismic section, Inline 2549, Njord field.
Figure 25: Seismic RPDTs at location (Inline 2502, Xline 910) plotted together with velocity along Inline 2502.
Figure 26: Difference attribute depth trends calculated from seismic RPDTs and normal mechanical compaction RPDTs at location {Inline 2502, Xline 910}.
Figure 27: Difference attribute depth trends calculated from seismic RPDTs and normal mechanical compaction RPDTs at well location 6407/7-1S.
Figure 28: Seismic RPDTs and empirical RPDTs modelled for normal mechanical compaction effect and other unexpected rock physic events of abnormally high porosity, uplift-erosion and late cementation at location {Inline 2502, Xline 910}. 