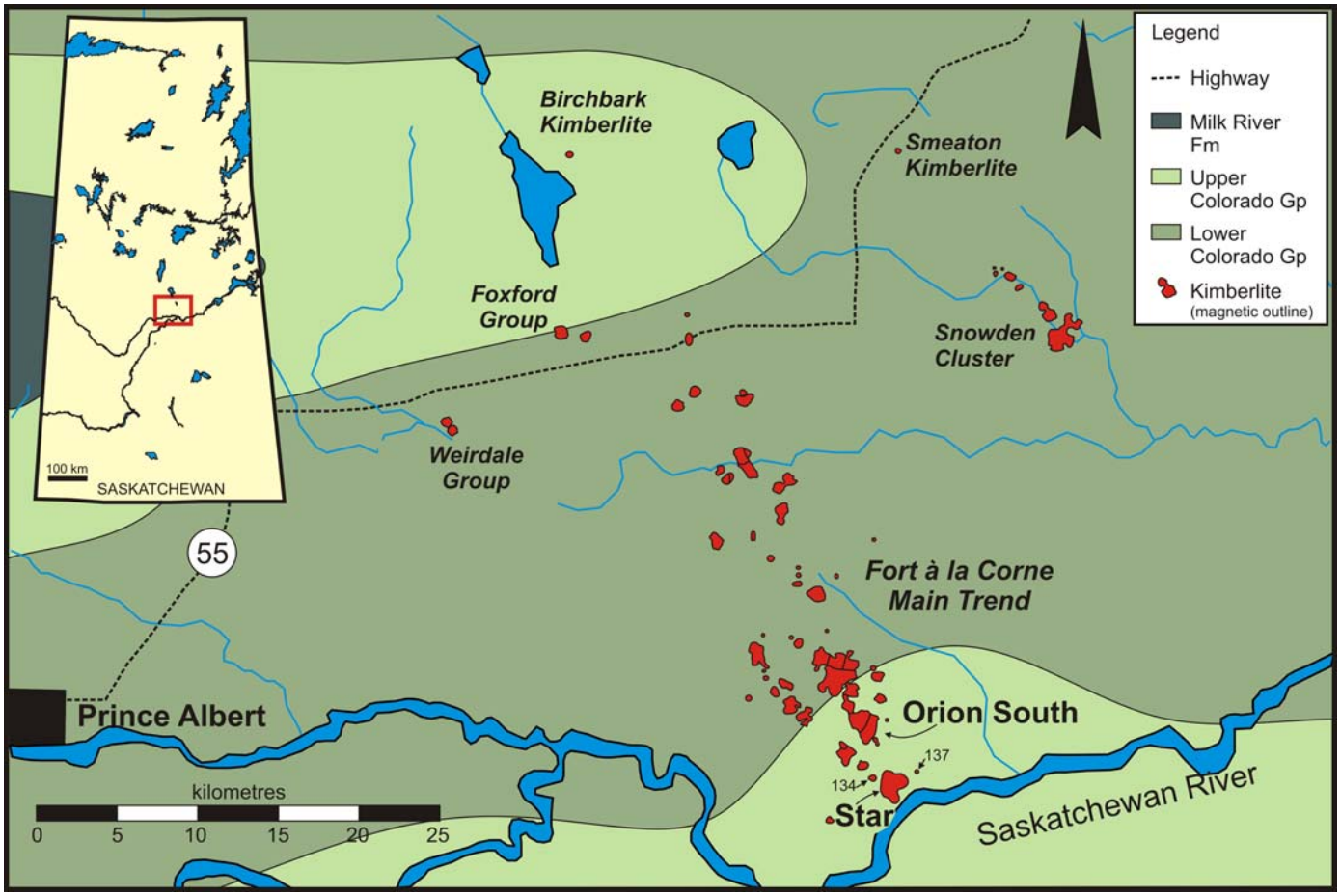


Figure 5.2.1-1: Geology of the Fort à la Corne Area

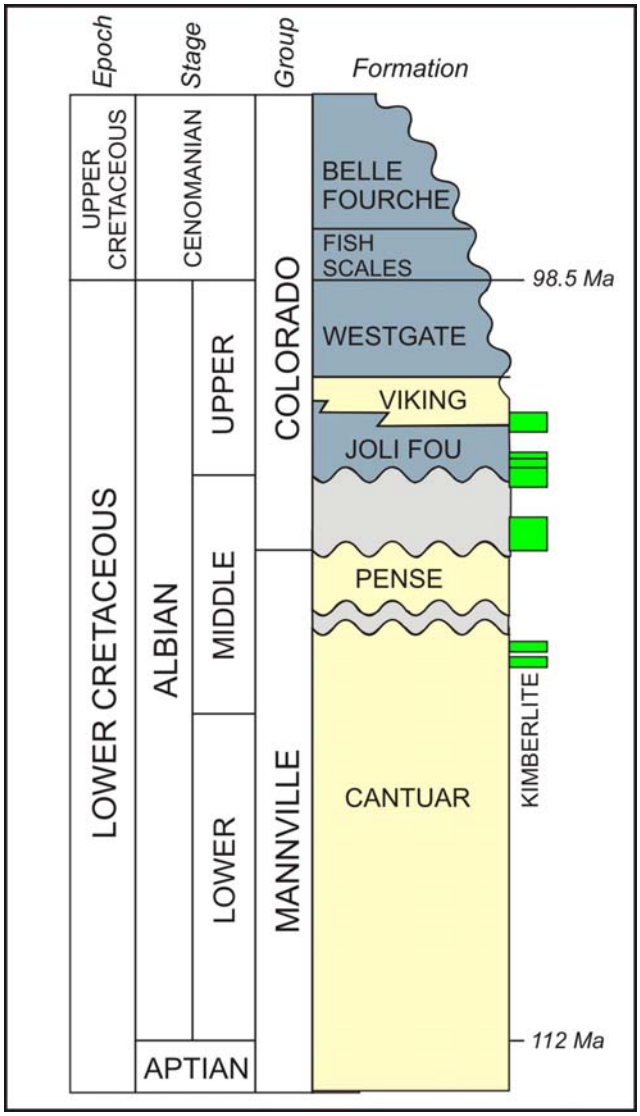
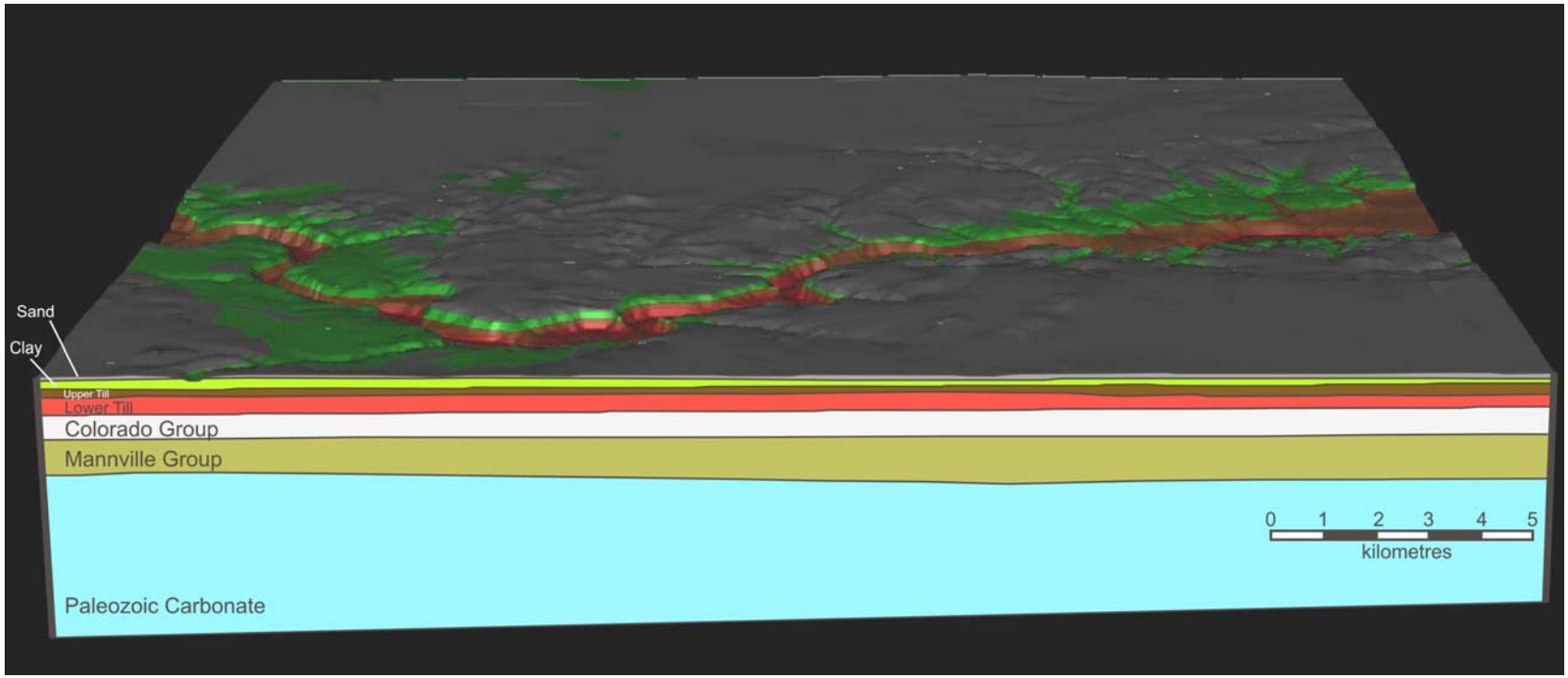
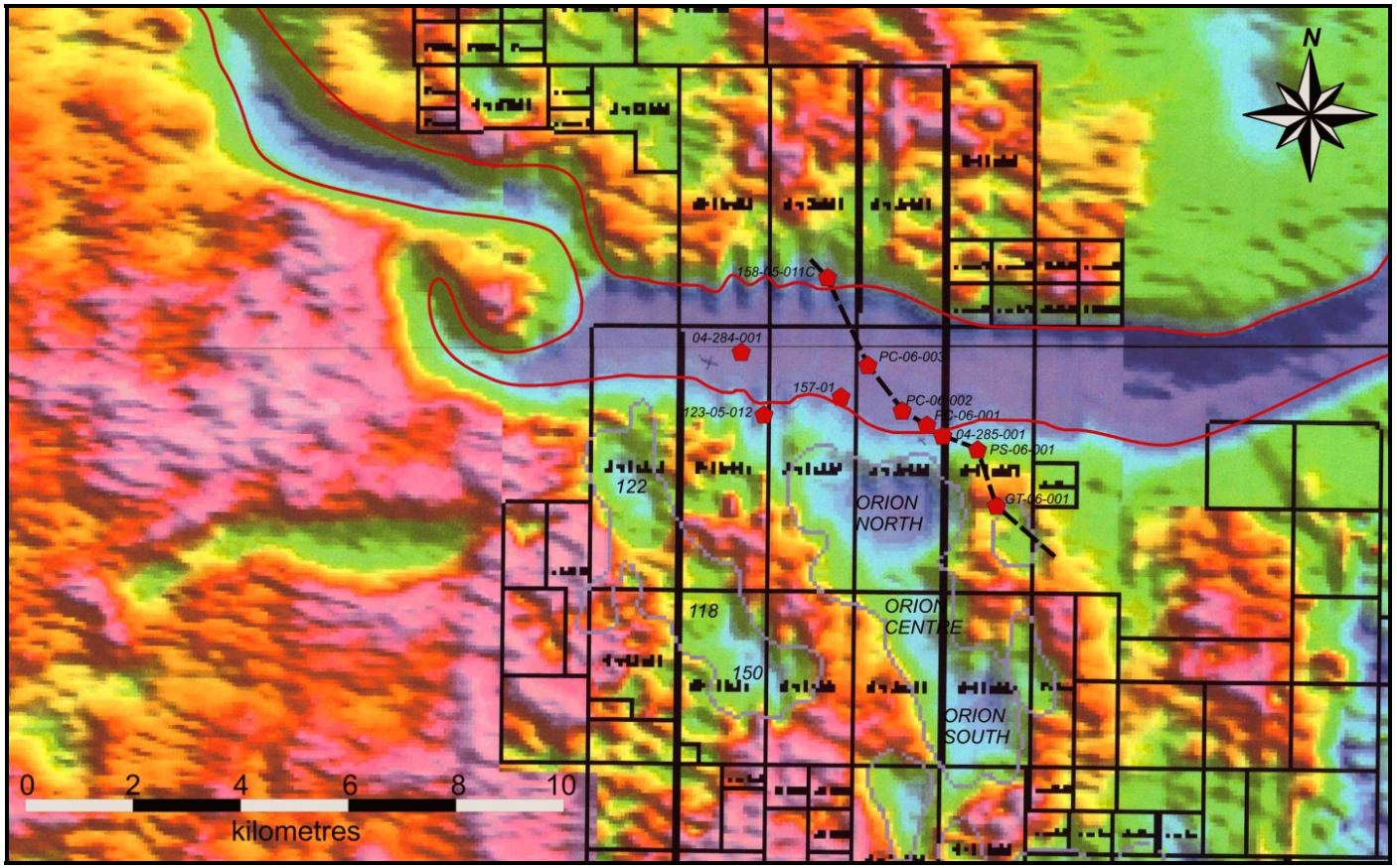


Figure 5.2.1-2: Cretaceous Stratigraphic Column of the Fort à la Corne Area



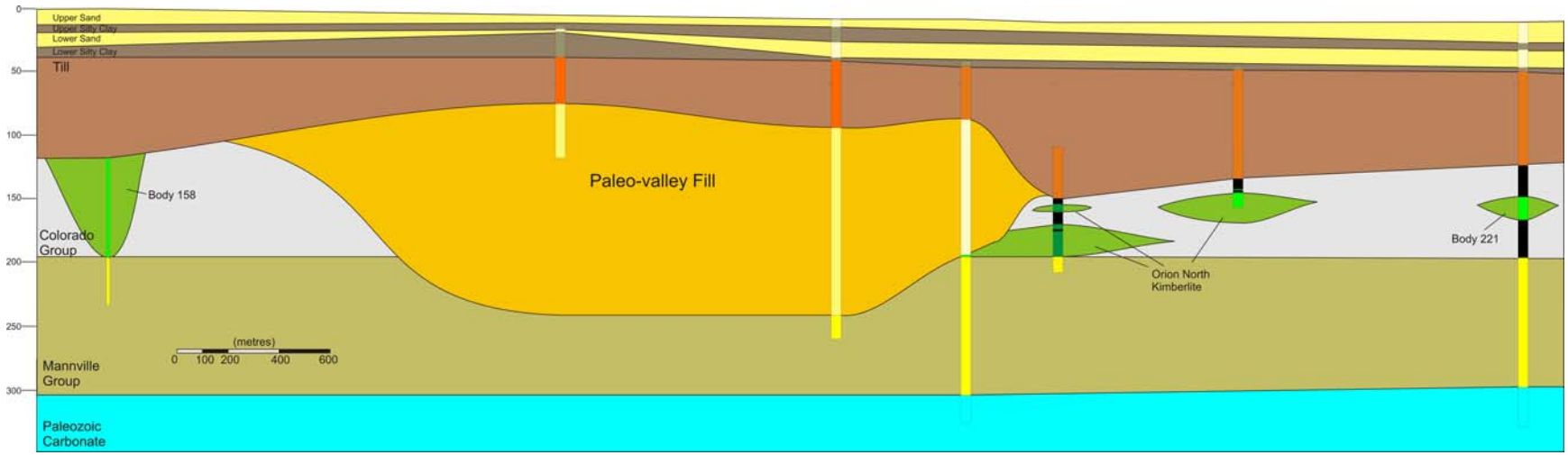
Note: View towards north with a 6:1 vertical exaggeration. Saskatchewan River cutting into progressively deeper strata.

Figure 5.2.1-3: Regional Country Rock Block Model for the Southern FalC Area



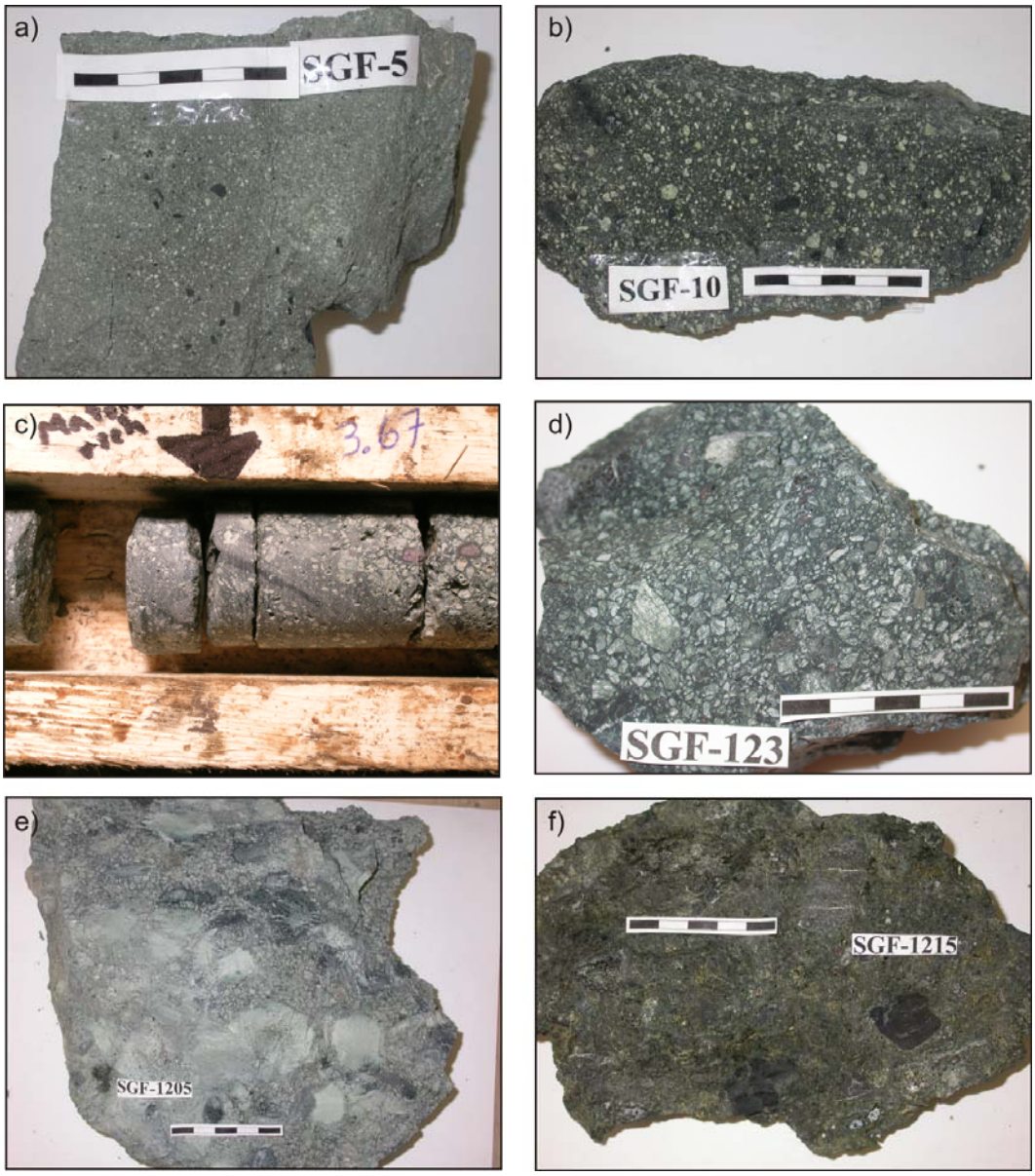
Note: ~130 m below surface paleochannel (blue outlined in red) cutting into, and at depth, through the Colorado shales.

Figure 5.2.1-4: Regional Apparent Conductivity Depth Slice



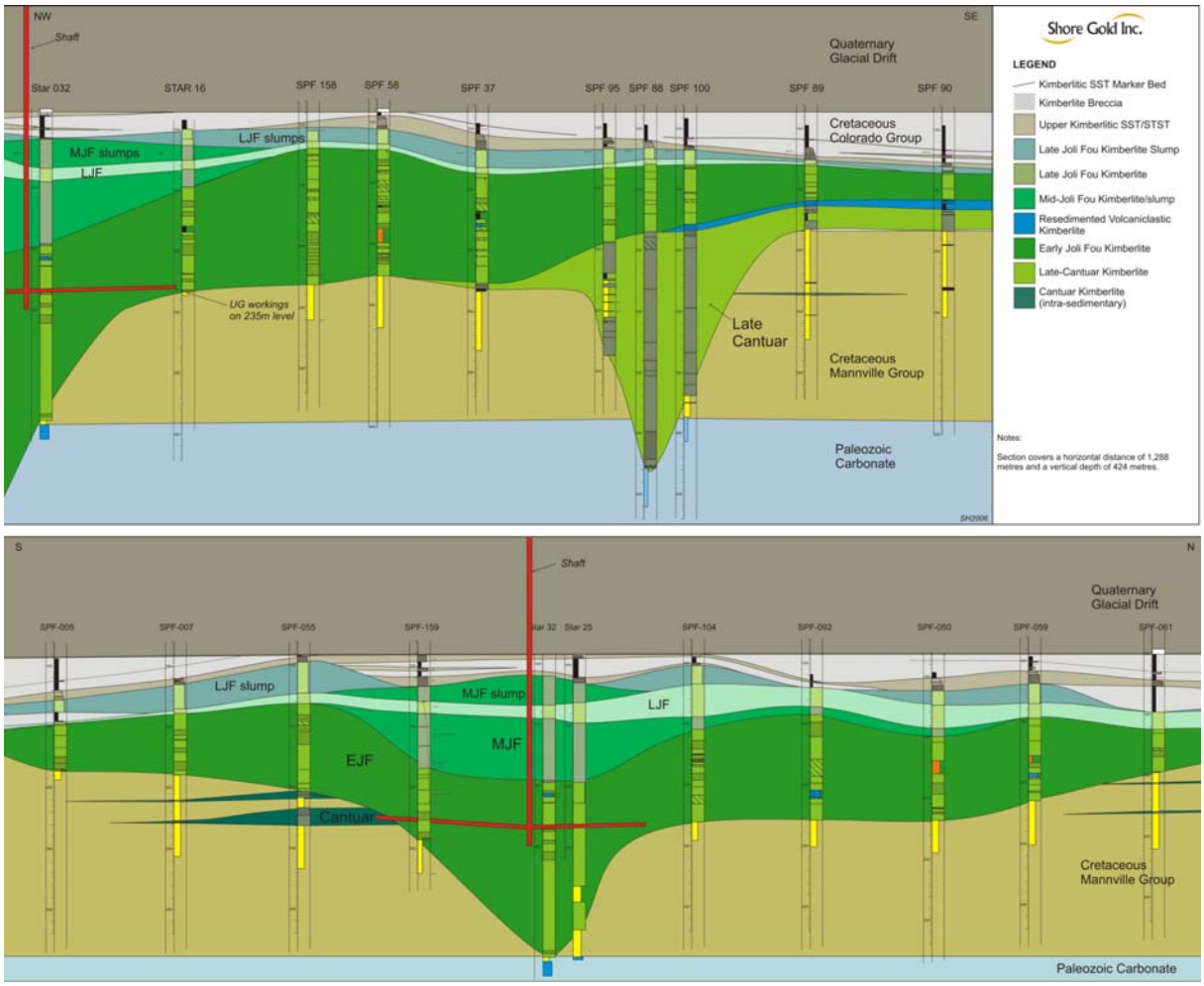
Note: 5:1 vertical exaggeration.

Figure 5.2.1-5: North to South Cross-Section Across Paleochannel



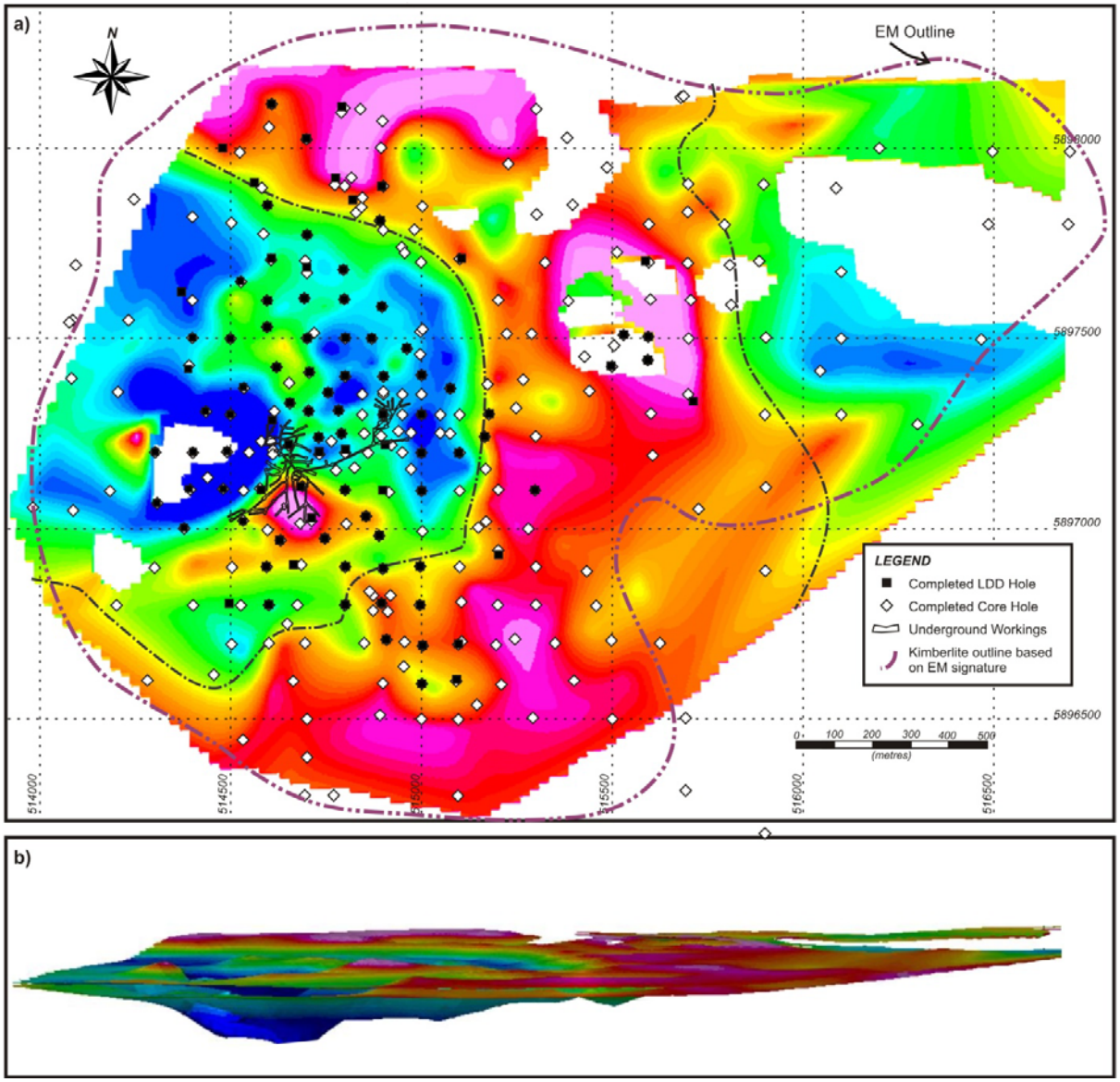
Notes: a) Ash-rich LJF sample with small (1-5mm) shale clasts; b) Matrix-rich MJF sample with 5-20 mm shale clasts; c) Underground sub-horizontal core sample delineating the contact between olivine-rich EJF (right) and matrix-rich MJF (left) (36.5 mm diameter core); d) Olivine macrocryst-rich, clast-supported EJF pyroclastic kimberlite; e) Precambrian basement-dominated xenolithic EJF kimberlite; f) Dark green, matrix- to clast-supported, olivine- and xenolith-rich pyroclastic Cantuar kimberlite.

Figure 5.2.1-6: Photographs of Underground Hand Samples and Core from the Star Kimberlite



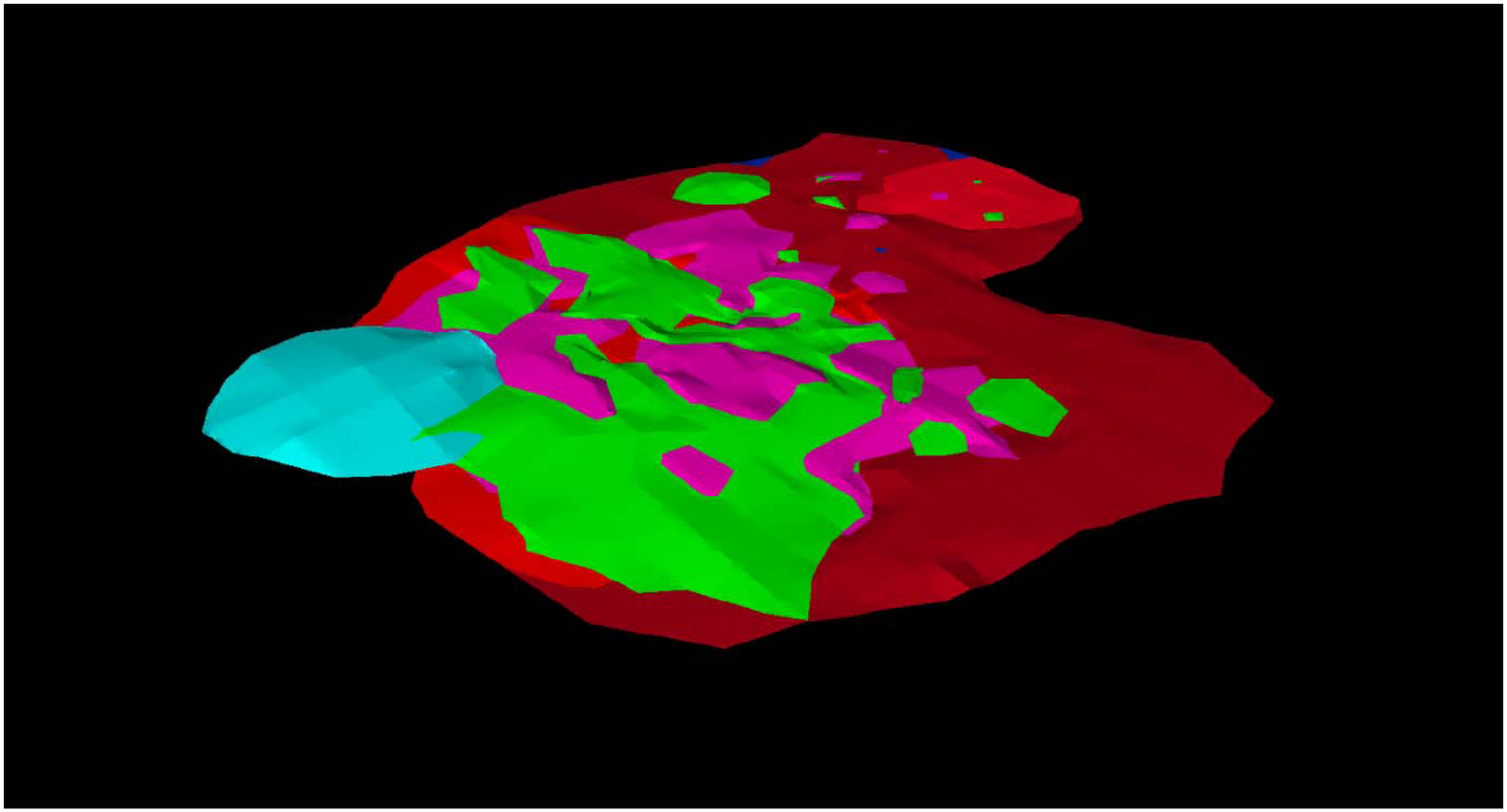
Note: The figure illustrates the host Cretaceous sedimentary rocks and the relationship with distinct kimberlite eruptive phases, reworked equivalents and relatively young marine reworked kimberlitic sediments. Top: section North-east viewing along the axis of a trough of thickened EJF which appears to have scoured into earlier deposited kimberlite phases, perhaps the result of a south-easterly laterally-directed eruptive blast. Bottom: West viewing section running along the partially preserved EJF feeder vent (Harvey et al. 2006).

Figure 5.2.1-7: Cross-Sections Across the Western Portion of the Star Kimberlite



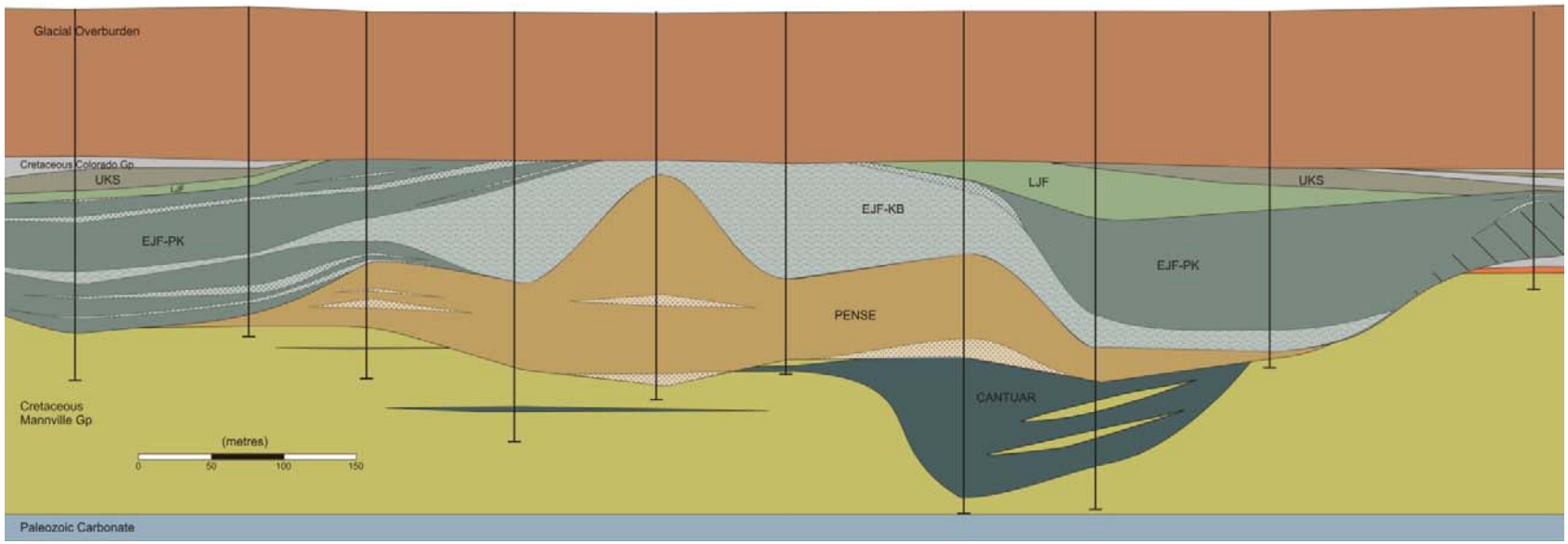
Note: Lows are blue; highs are magenta of the top contact of the main olivine-rich kimberlite unit (Early Joli Fou) on the Star Kimberlite. Three distinct zones are distinguished: 1. a west-central zone of low relief (Crater zone); 2. an arcuate high surrounding the low (Tuff ring zone); and 3. a distal relative low (Distal zone). Approximation of kimberlite outline based on electro-magnetic (EM) signature. Note the underground workings at the center of the body. b) Three dimensional view looking towards the north.

Figure 5.2.1-8: Topographic Elevation Map



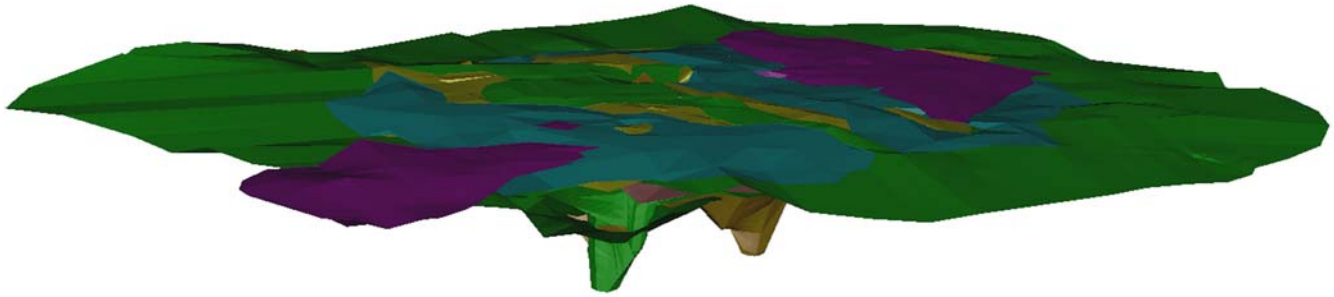
Note: North–northeastern view of the Star Kimberlite. Red: EJF Kimberlite; Dark Blue: Pense Kimberlite; Light Red: LJF Kimberlite; Magenta: LJF Slump; Green: KDF; Light Blue: kimberlite from body 134. (Note: Cantuar and MJF not visible in this view).

Figure 5.2.1-9: Star Kimberlite 3-D Geological Model



Note: View towards the north.

Figure 5.2.1-10: Orion South Kimberlite Cross-Section along UTM Line 5900600N



Note: Dark Green: Cantuar Kimberlite; Light Brown: Pense Kimberlite; Green: EJF; Blue: LJF; Purple: Viking Kimberlite.

Figure 5.2.1-11: 3D Northwest-View of the Orion South Kimberlite Geological Model