

Appendix C.

Additional Petrel Figures

This Appendix includes figures of the bedrock and Quaternary models generated in Petrel (Schlumberger, 2016).

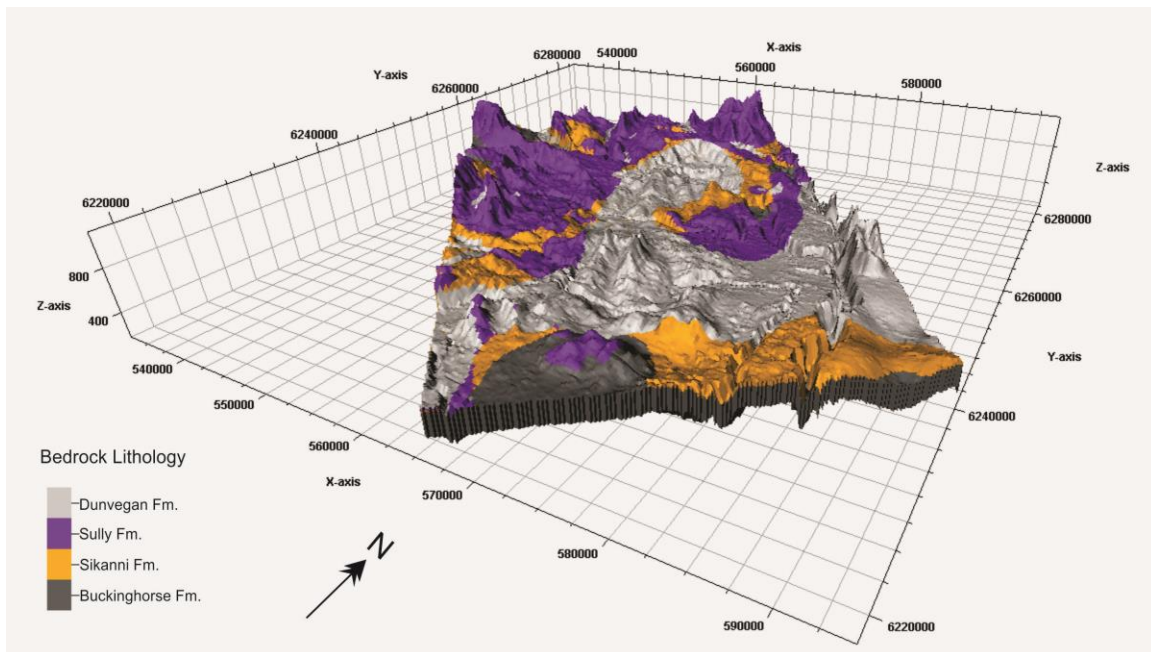


Figure C1. Bedrock model generated in Petrel viewed from the south. 10x vertical exaggeration. As described in section 4.1 of Chapter 4, the inconsistencies in the bedrock stratigraphy are a result of the sparse formation tops, and while formations appear to be missing, they are actually present as very thin layers. See section 4.1 for a full explanation.

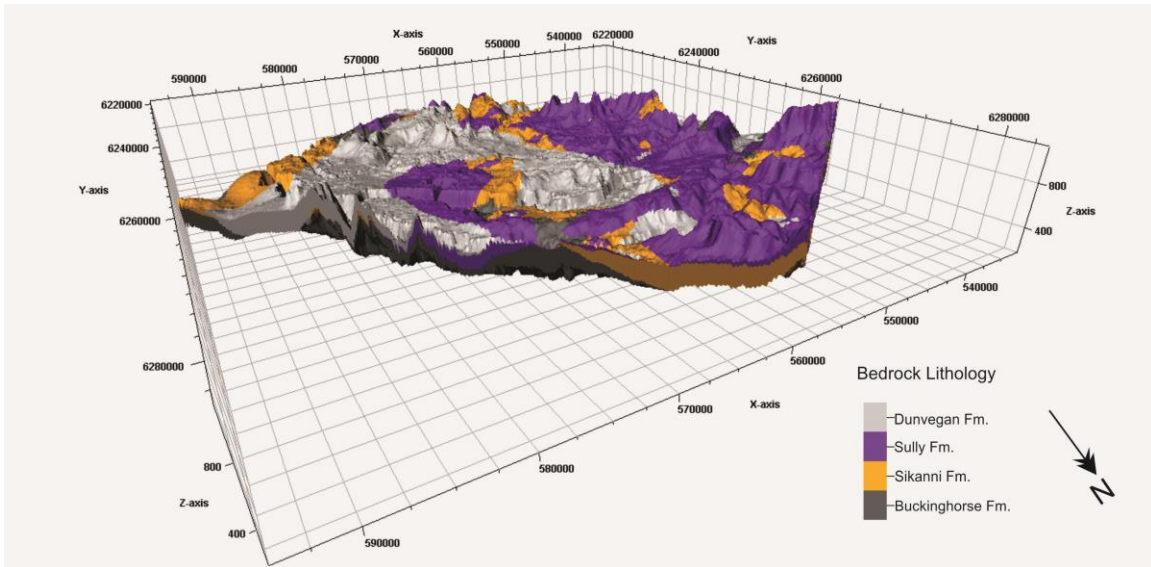


Figure C2. Bedrock model generated in Petrel viewed from the east. 10x vertical exaggeration. As described in section 4.1 of Chapter 4, the inconsistencies in the bedrock stratigraphy are a result of the sparse formation tops, and while formations appear to be missing, they are actually present as very thin layers. See section 4.1 for a full explanation.

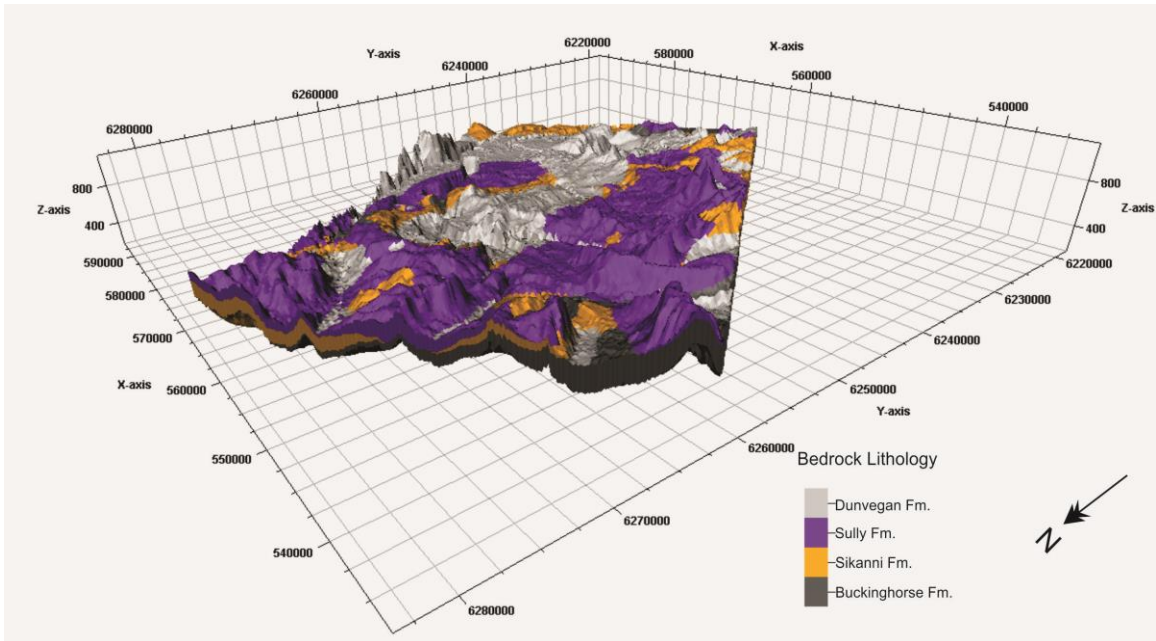


Figure C3. Bedrock model generated in Petrel viewed from the north. 10x vertical exaggeration. As described in section 4.1 of Chapter 4, the inconsistencies in the bedrock stratigraphy are a result of the sparse formation tops, and while formations appear to be missing, they are actually present as very thin layers. See section 4.1 for a full explanation.

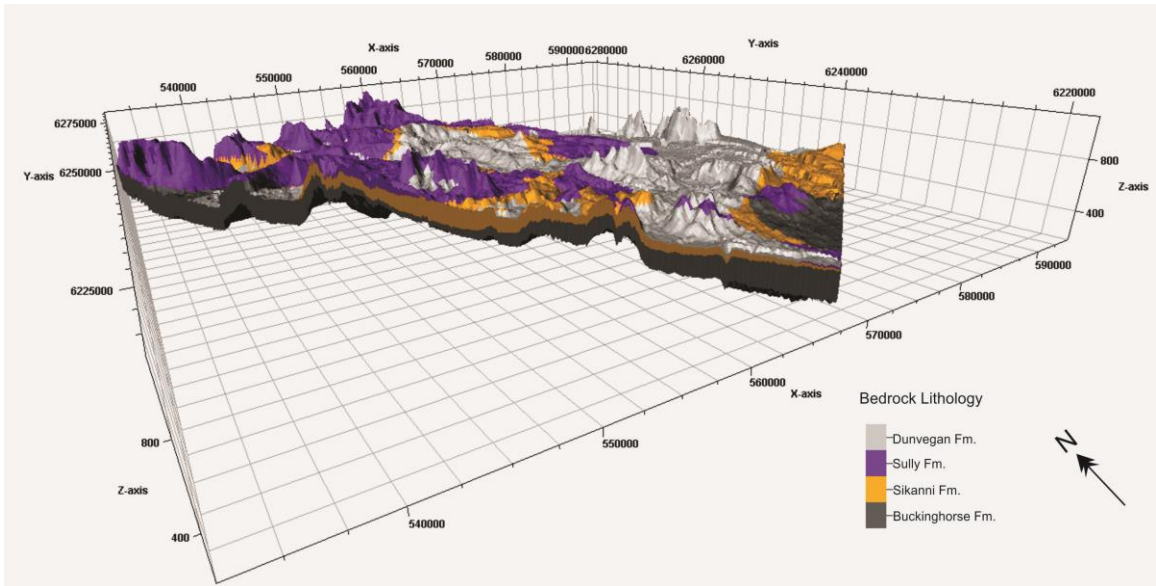


Figure C4. Bedrock model generated in Petrel viewed from the west. 10x vertical exaggeration. As described in section 4.1 of Chapter 4, the inconsistencies in the bedrock stratigraphy are a result of the sparse formation tops, and while formations appear to be missing, they are actually present as very thin layers. See section 4.1 for a full explanation.

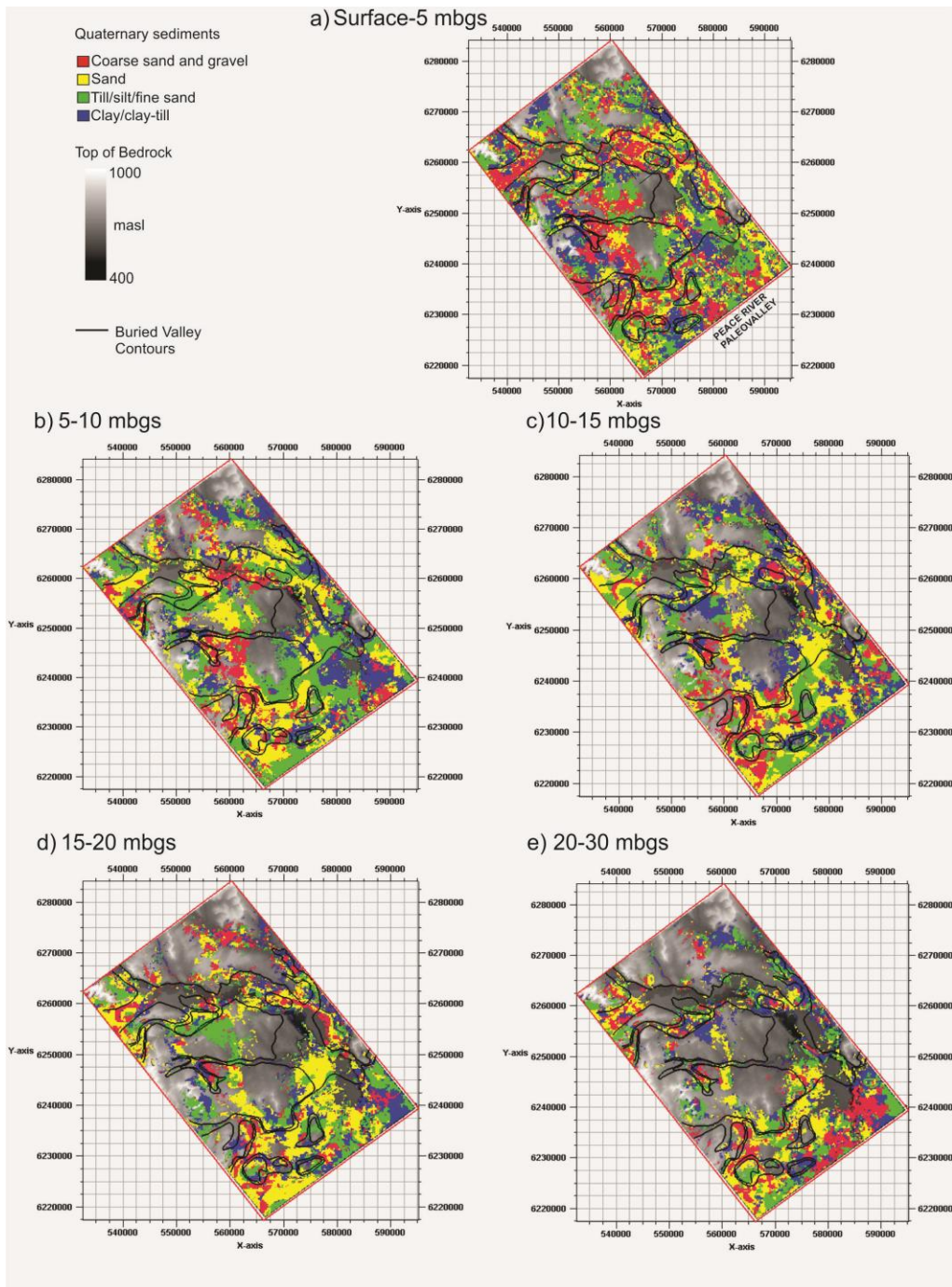
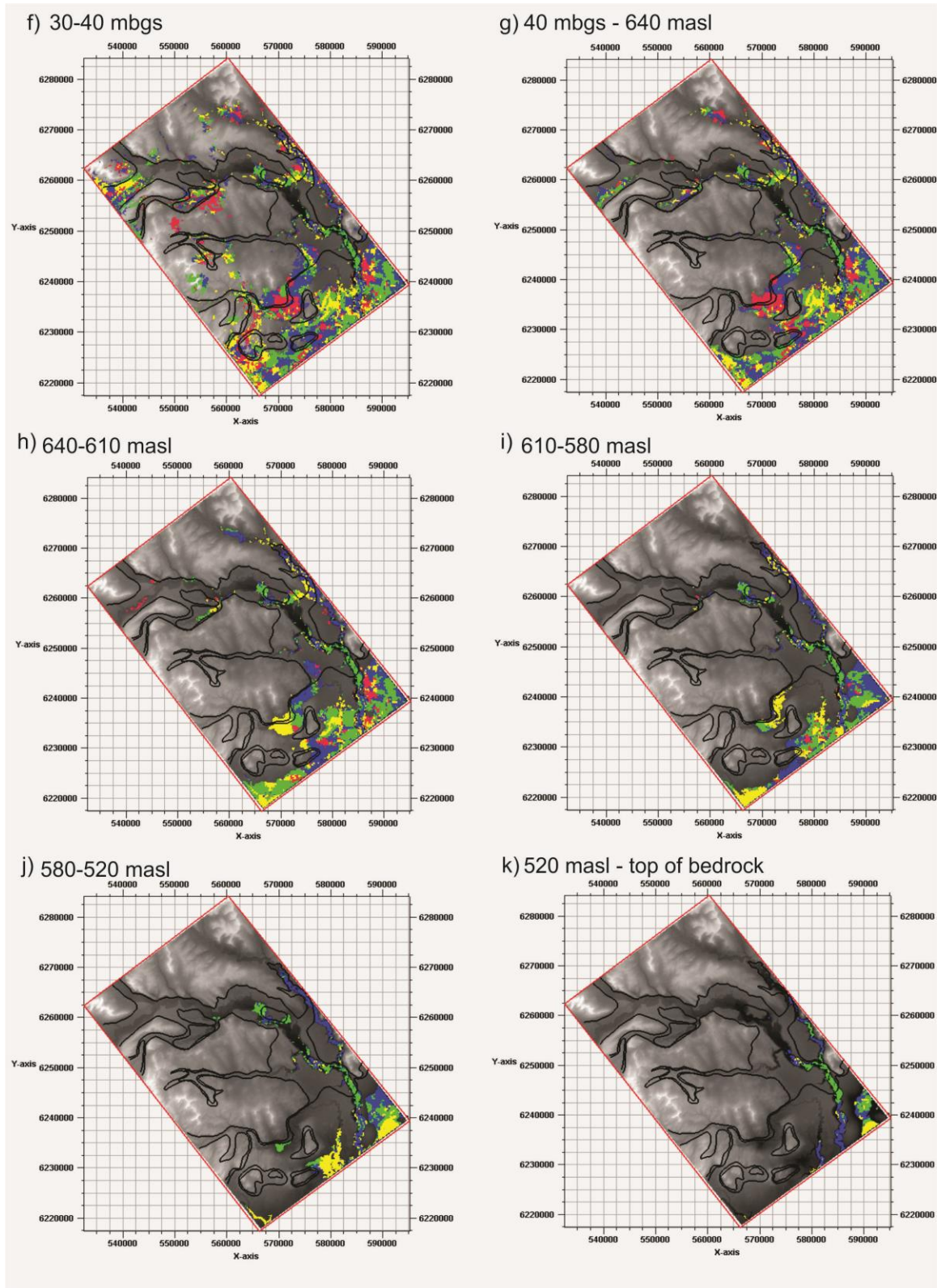


Figure C5. Plan view maps of facies distribution using Sequential Indicator Simulation (SIS) and gamma-ray range 1 (see Chapter 3). The outline of the buried valley network is shown in black (Levson in Petrel Robertson Consulting Ltd., 2015). Zones shown are the generated elevation surfaces in Petrel in metres below ground surface (mbgs) and absolute elevation in metres above sea level (masl). Note that g) illustrates the areas where Quaternary material is present below the 40 mbgs elevation slice and above the absolute elevation of 640 masl.

Figure C5 Cont'd:



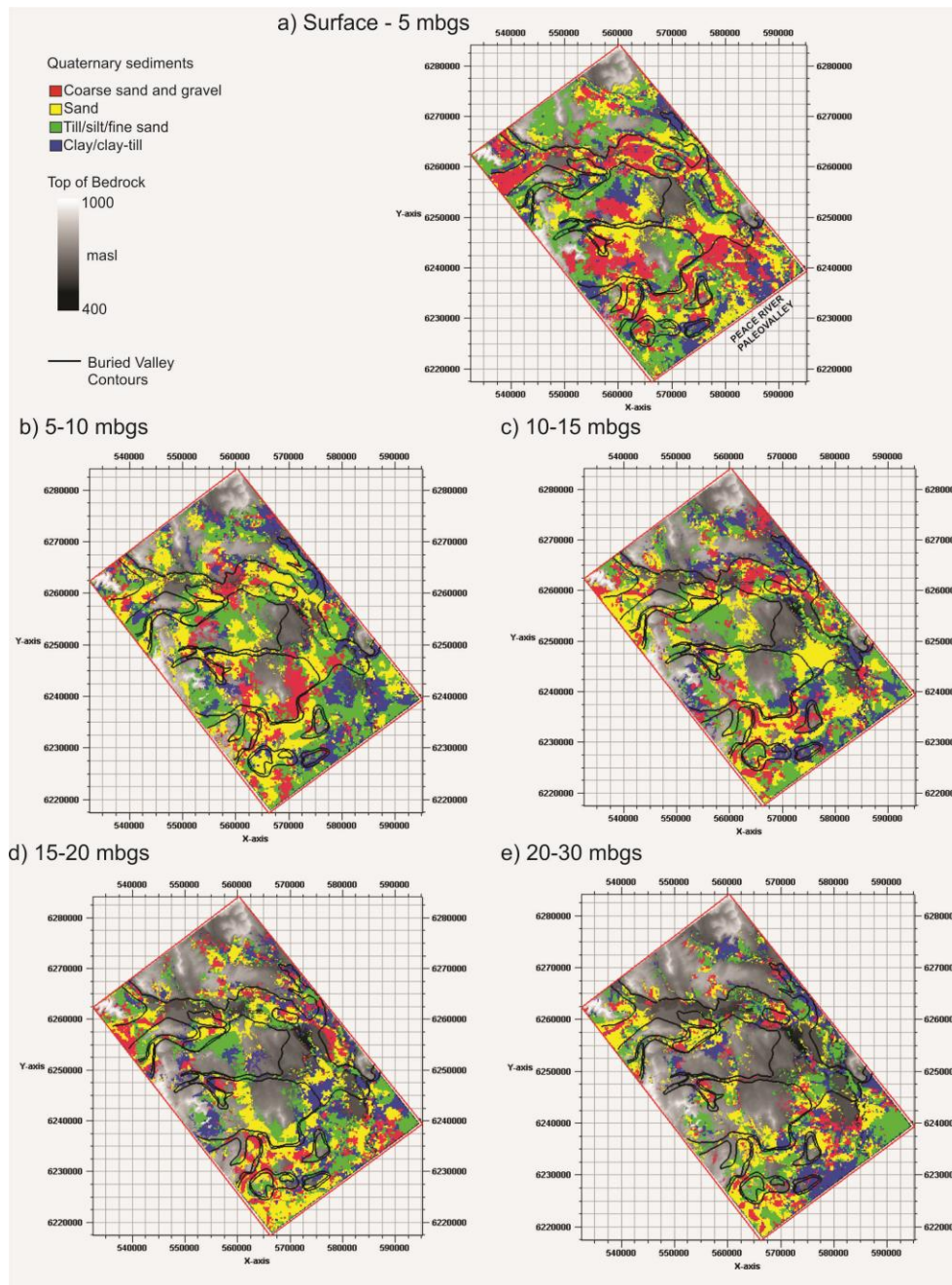
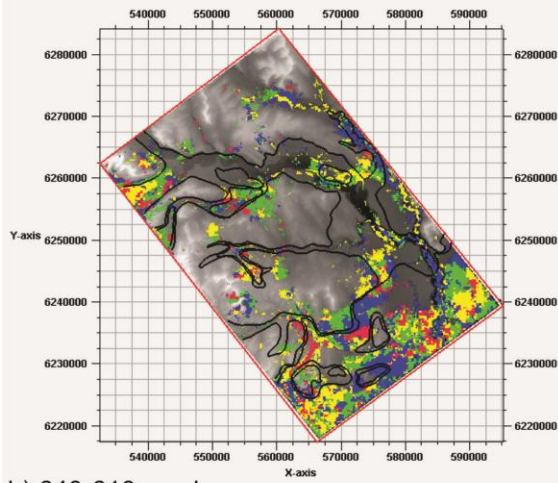


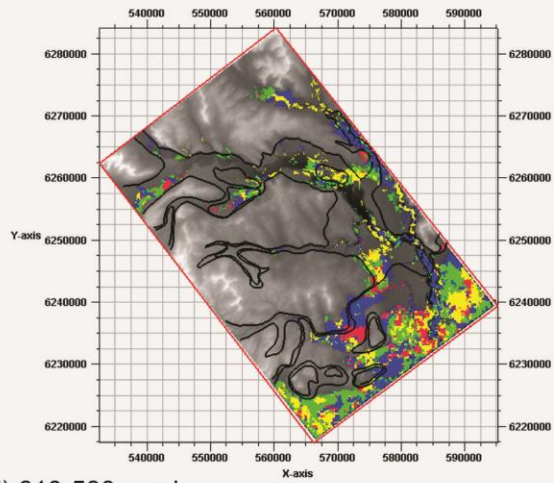
Figure C6. Plan view maps of facies distribution using Sequential Indicator Simulation (SIS) and gamma-ray range 2 (see Chapter 3). The outline of the buried valley network is shown in black (Levson in Petrel Robertson Consulting Ltd., 2015). Zones shown are from the generated elevation surfaces in Petrel in metres below ground surface (mbgs) and absolute elevation in metres above sea level (masl). Note that g) illustrates the areas where Quaternary material is present below the 40 mbgs elevation slice and above the absolute elevation of 640 masl.

Figure C6 Cont'd:

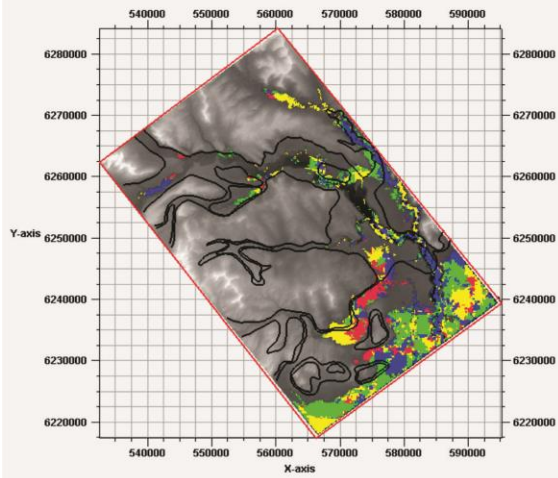
f) 30-40 mbgs



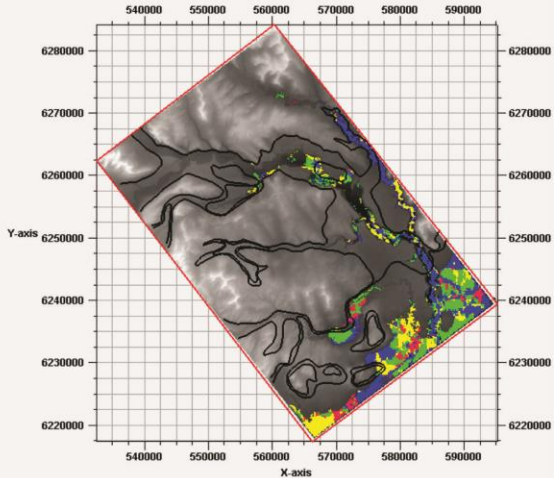
g) 40 mbgs - 640 masl



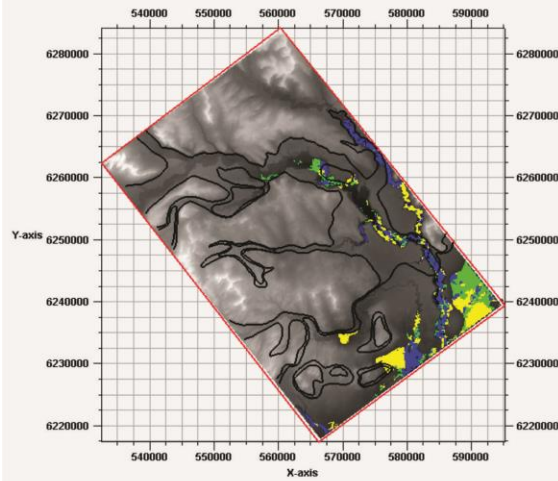
h) 640-610 masl



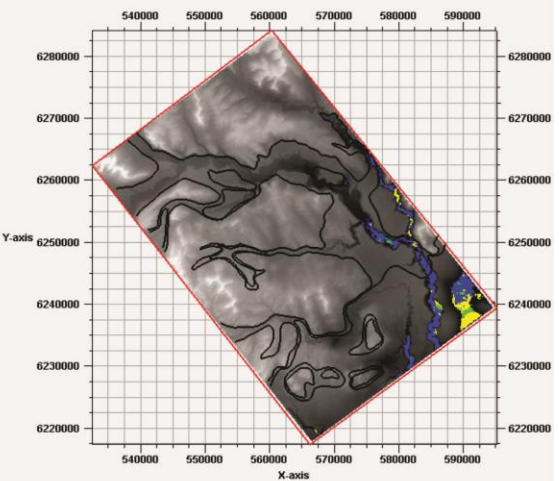
i) 610-580 masl



j) 580-520 masl



k) 520 masl - top of bedrock



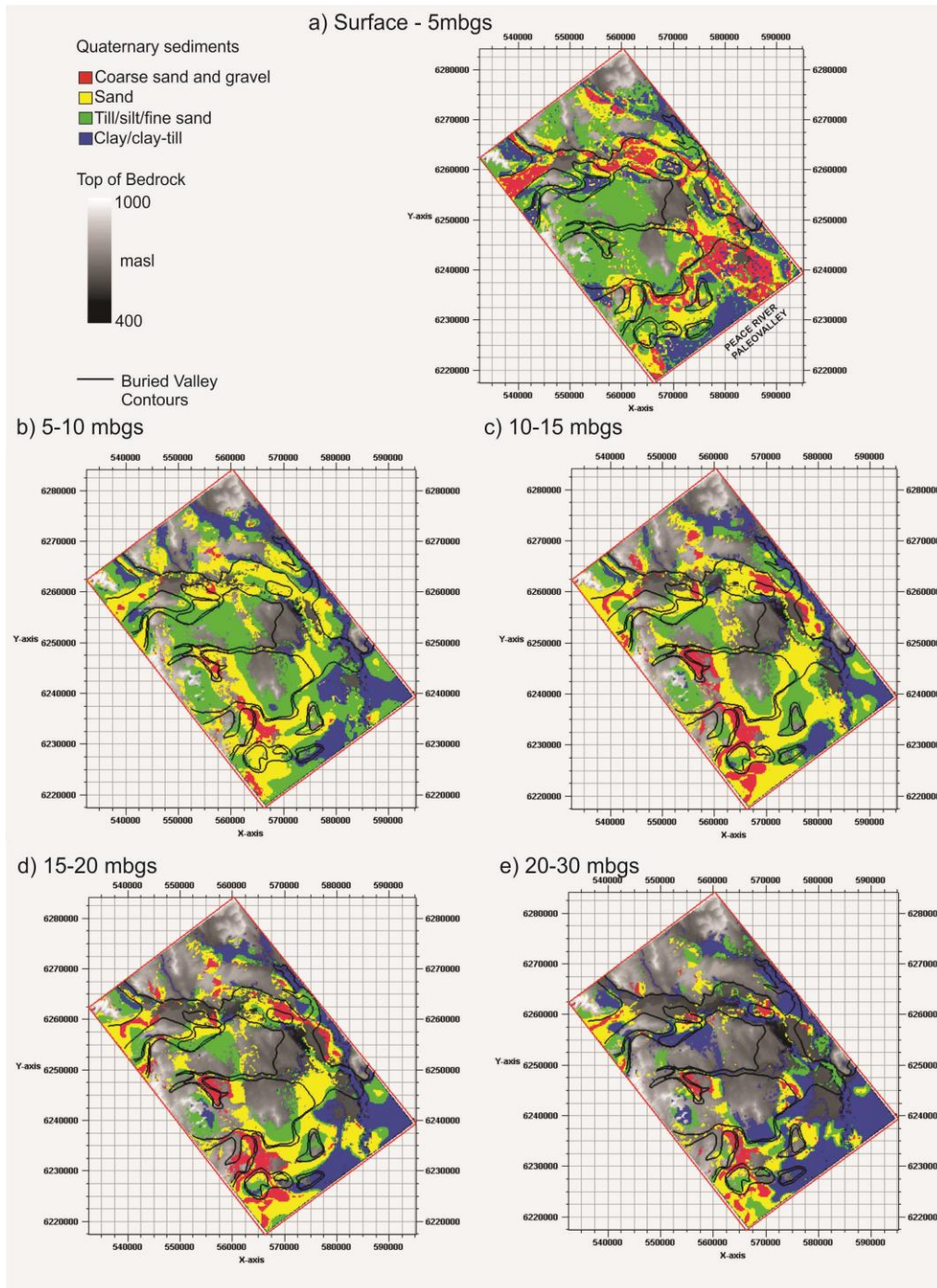


Figure C7. Plan view maps of facies distribution using Assign Values (AV). Zones shown are from the generated elevation surfaces in Petrel in metres below ground surface (mbgs) and absolute elevation in metres above sea level (masl). The outline of the buried valley network is shown in black (Levson in Petrel Robertson Consulting Ltd., 2015). Note that g) illustrates the areas where Quaternary material is present below the 40 mbgs elevation slice and above the absolute elevation of 640 masl.

Figure C7 Cont'd:

