

Appendix 9.1

Figures for Chapter 9 of Environmental Statement for Vaynor Quarry ROMP Applications

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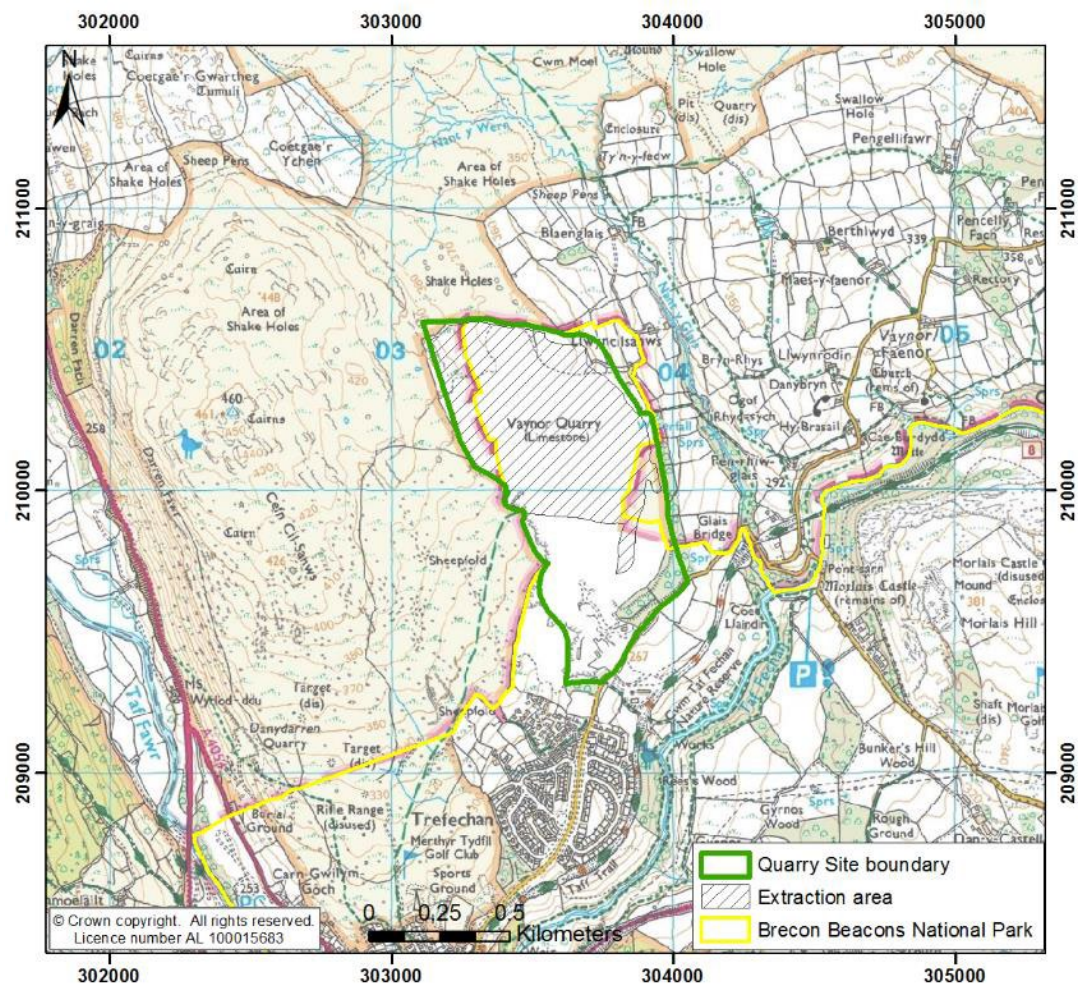


Figure 9.1 Site location showing surrounding area

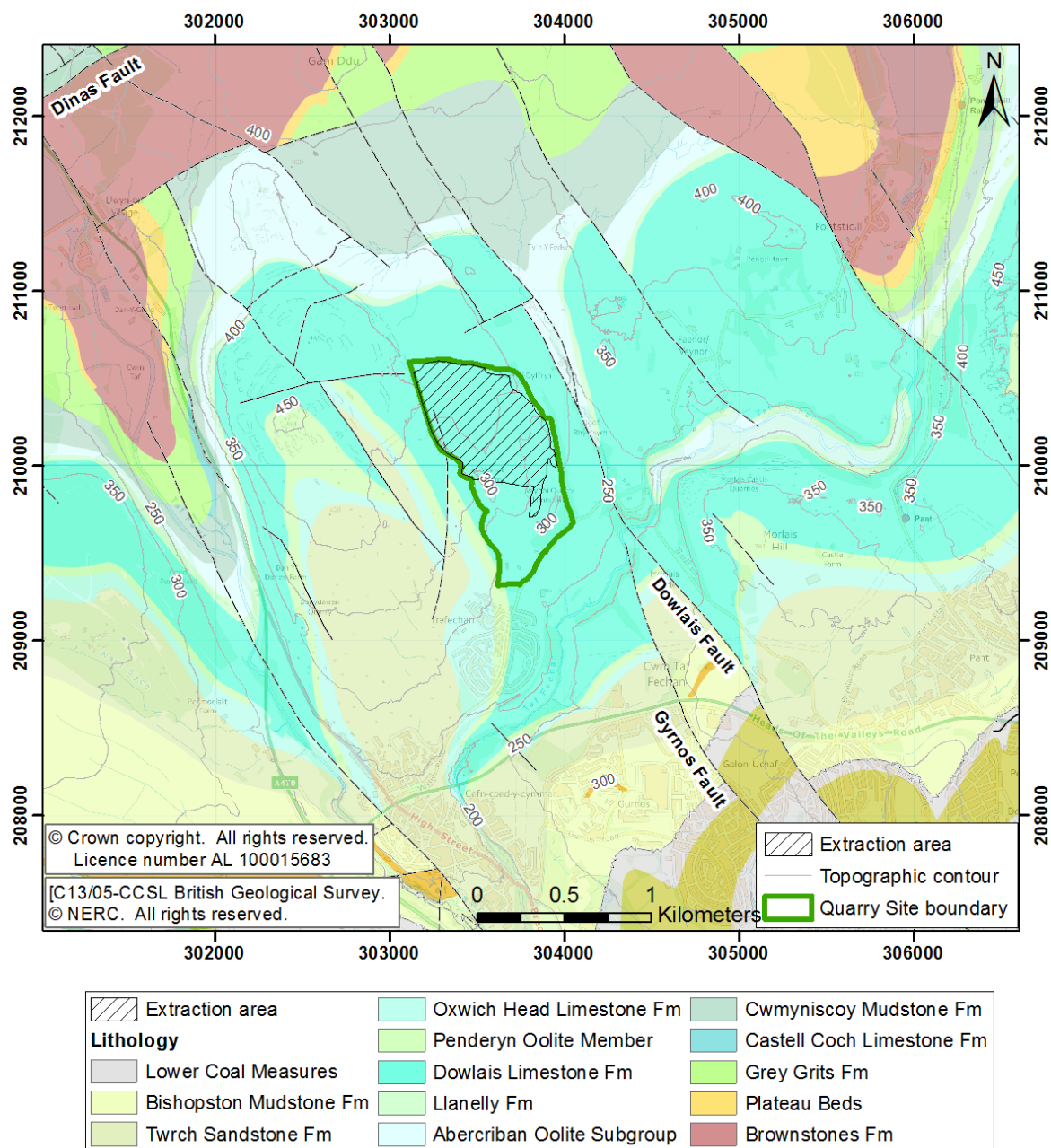


Figure 9.2 Bedrock geology

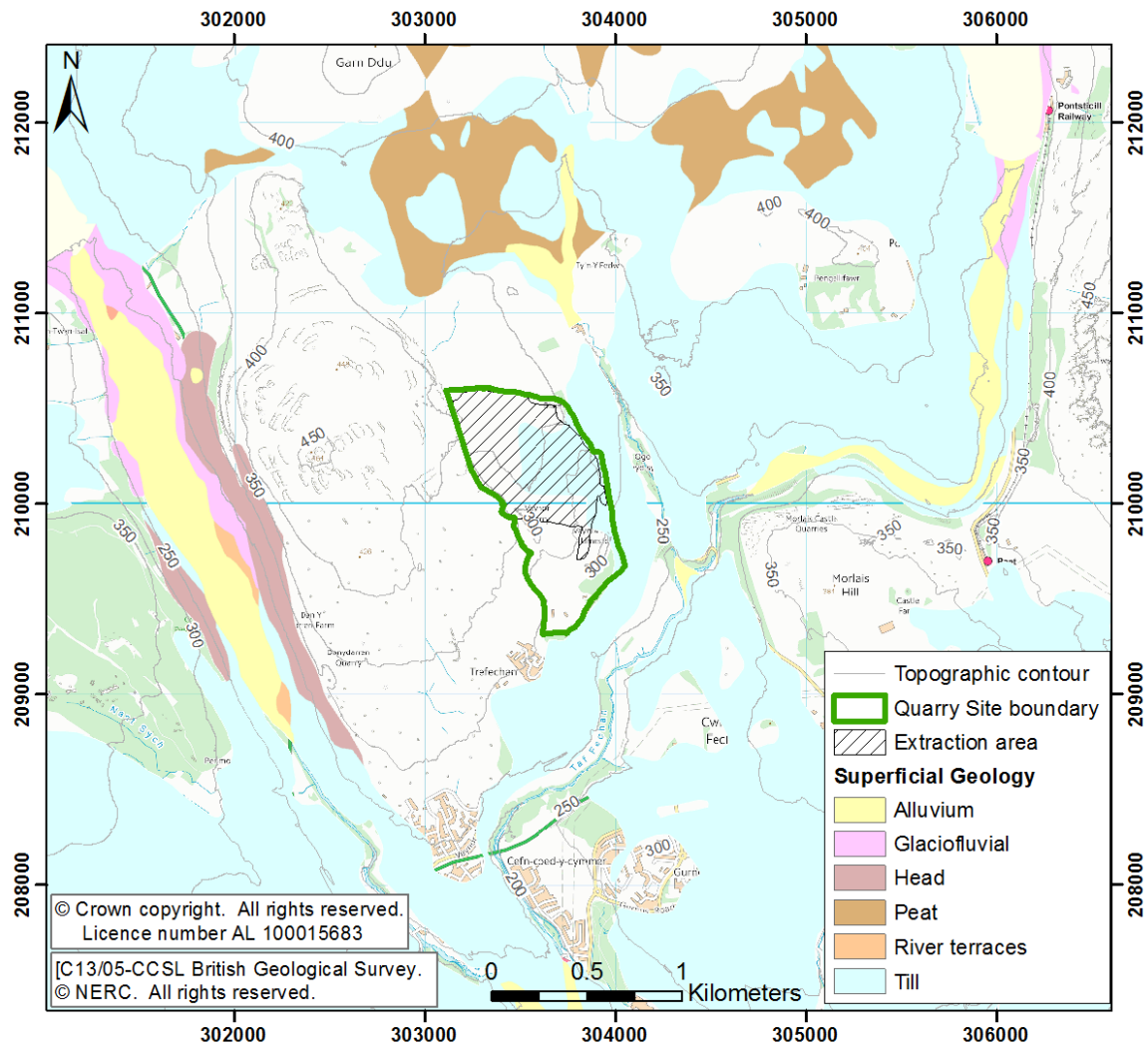


Figure 9.3 Superficial geology

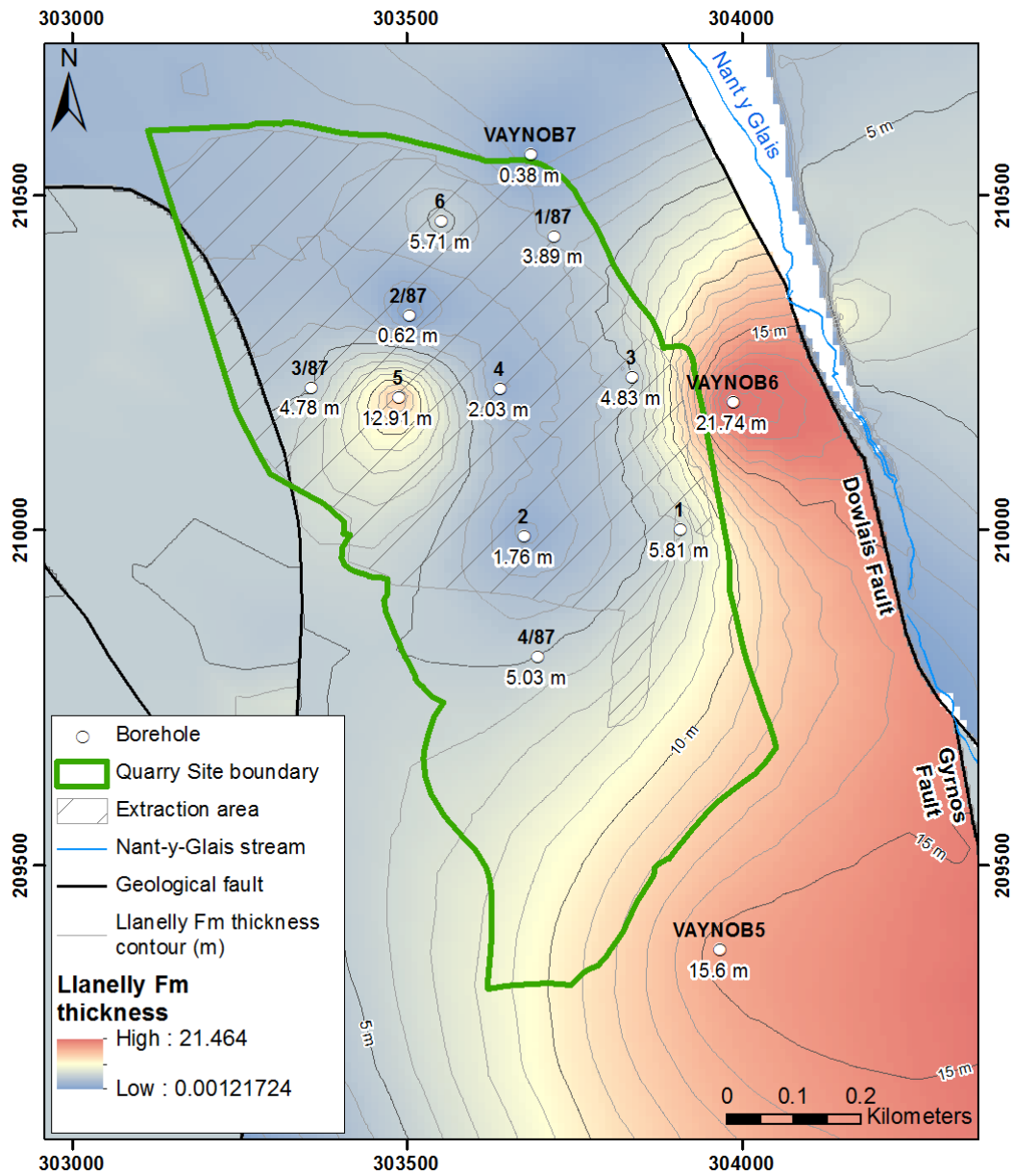


Figure 9.4 Llanelly Formation thickness based on borehole logs and 3D modelling

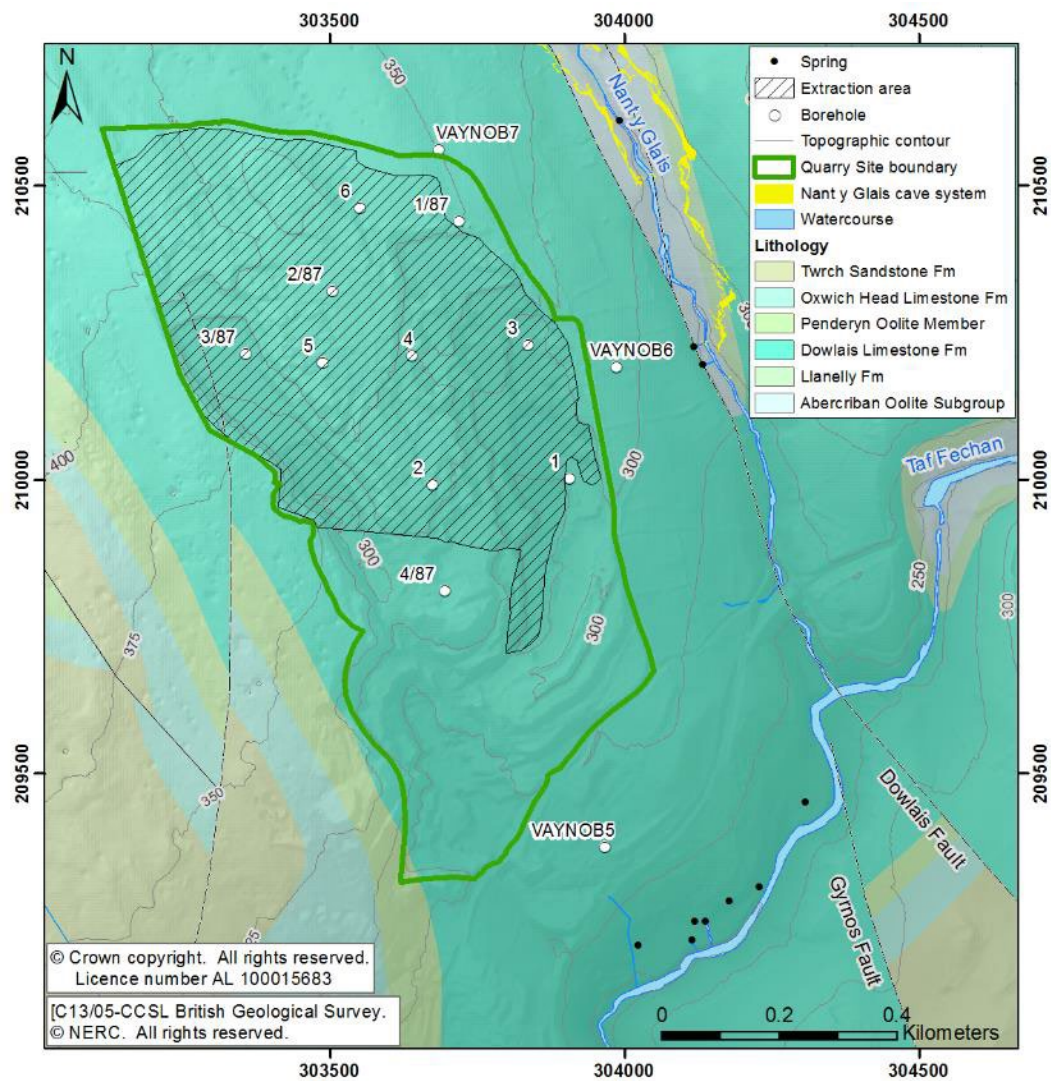


Figure 9.5 Local geology

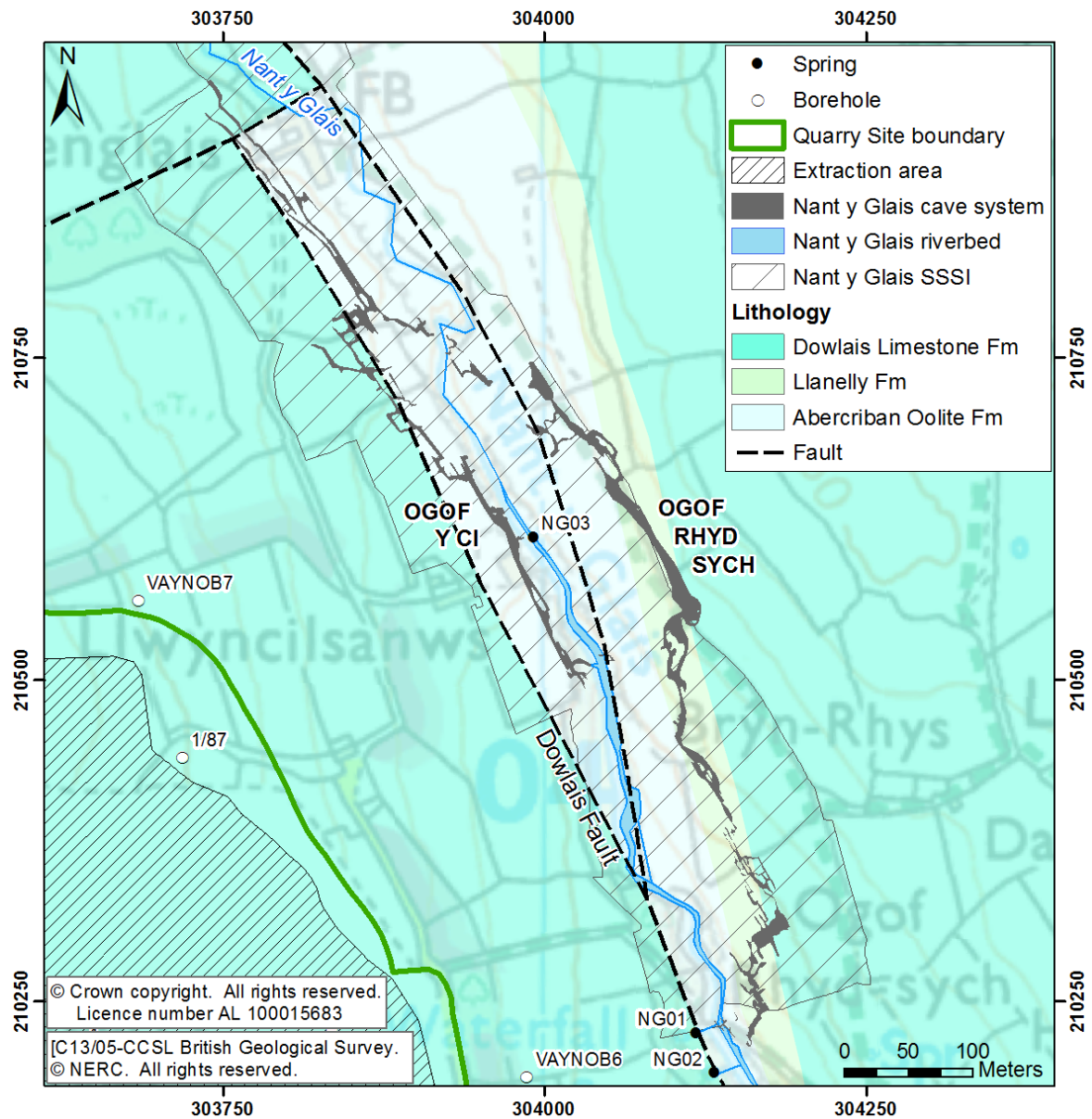


Figure 9.6 Nant y Glais cave system

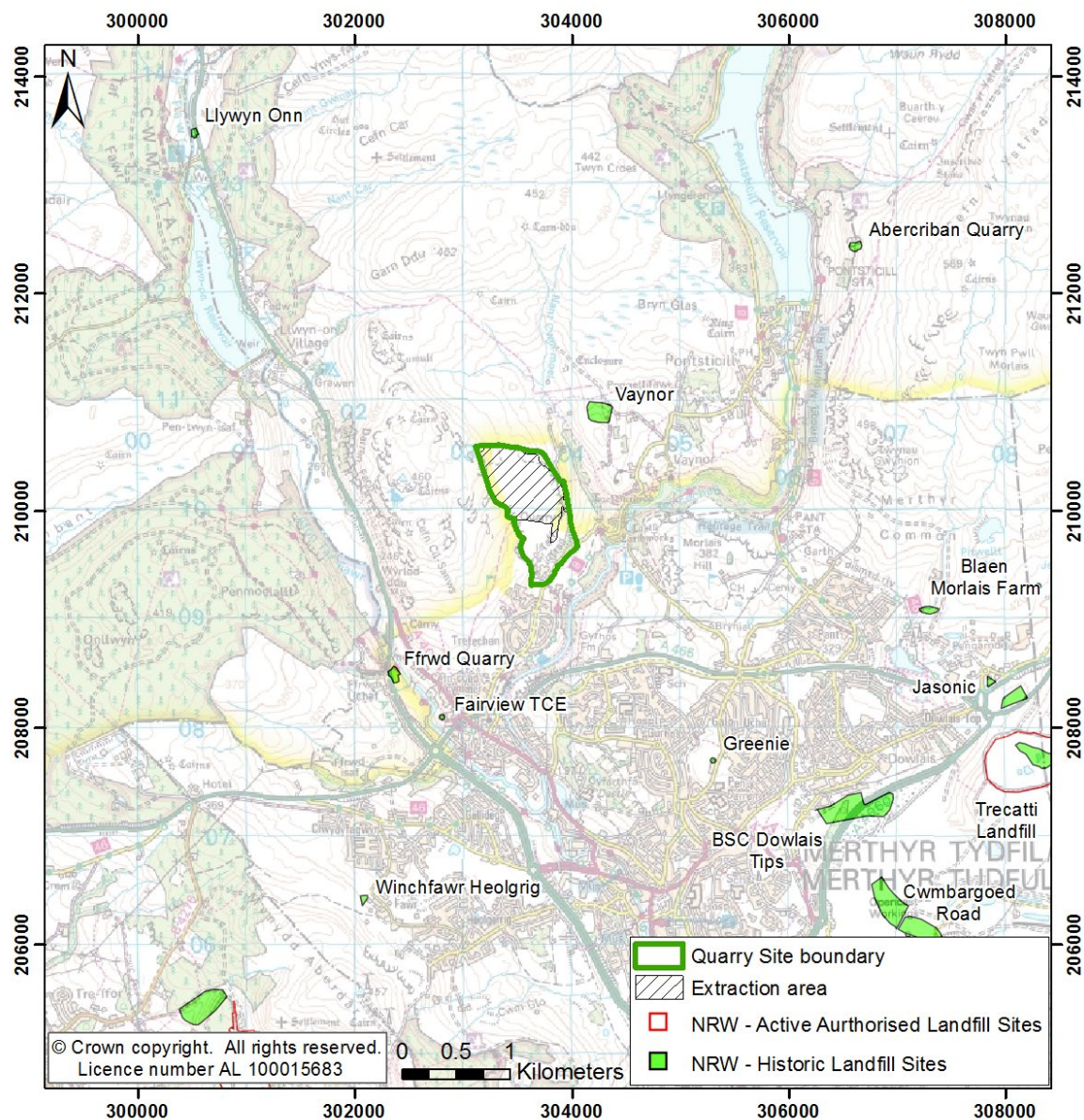


Figure 9.7 Neighbouring historical landfills around the Site

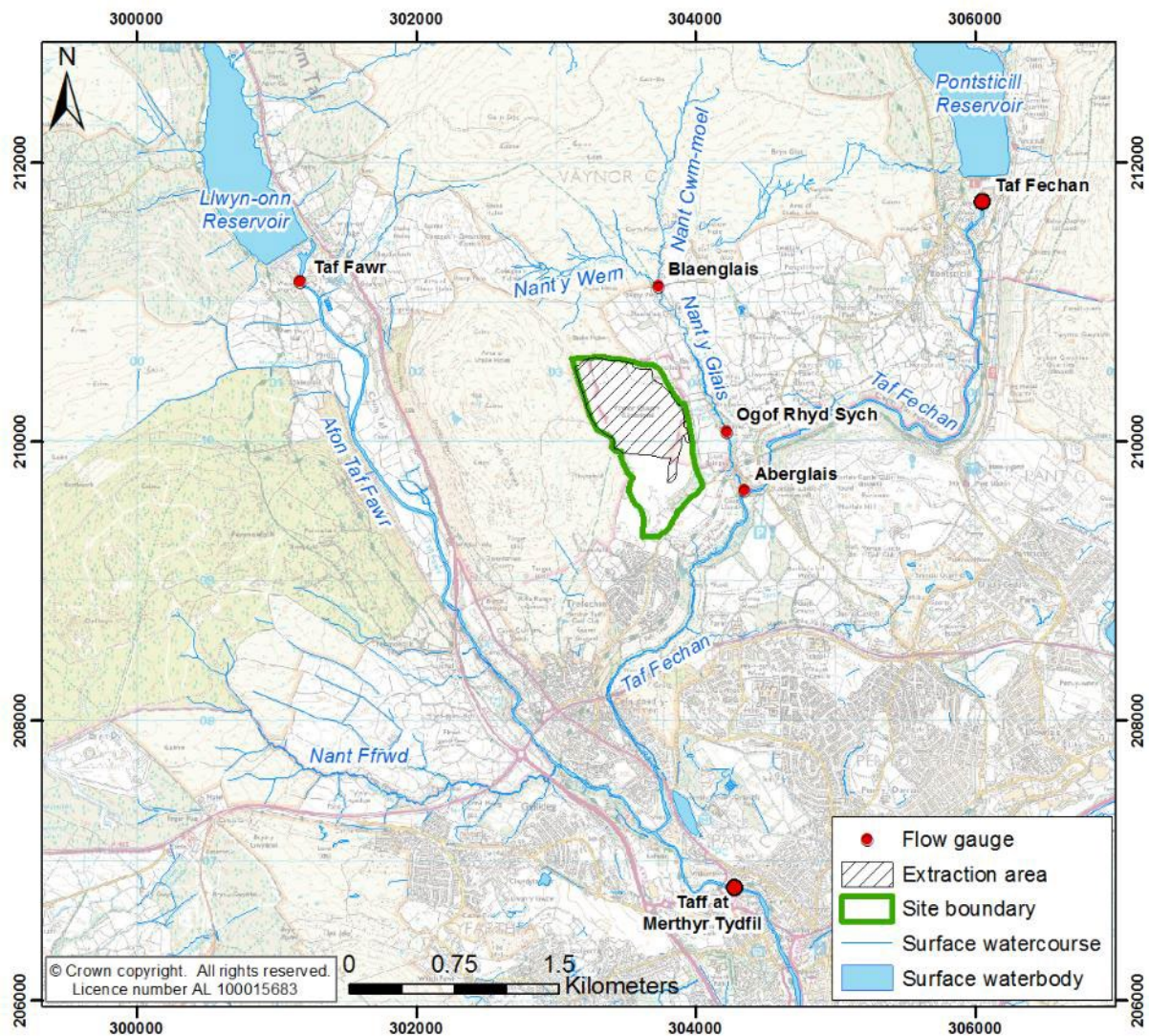


Figure 9.8 Surface water features in proximity to the Site

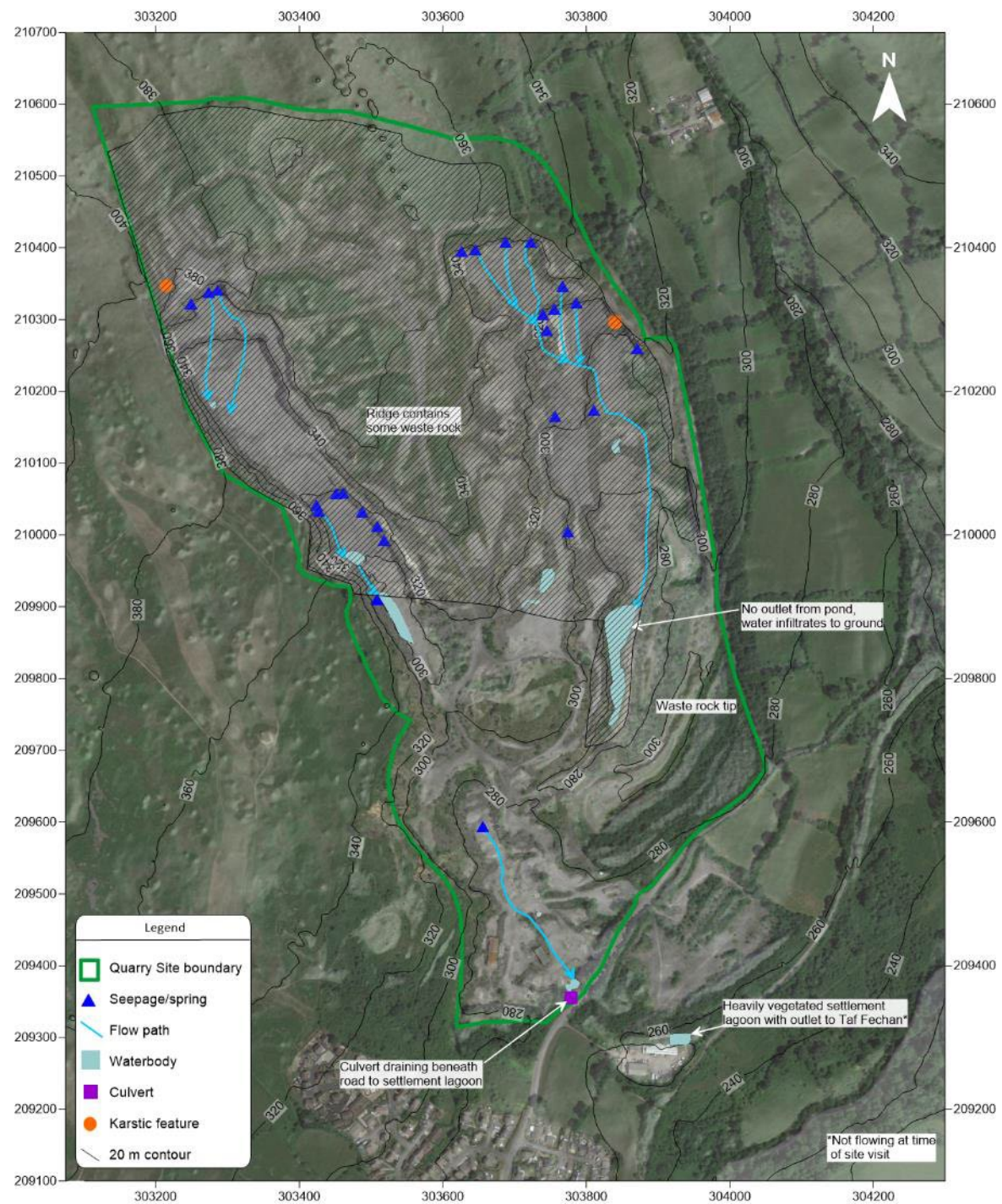


Figure 9.9 Surface water features identified at the Site

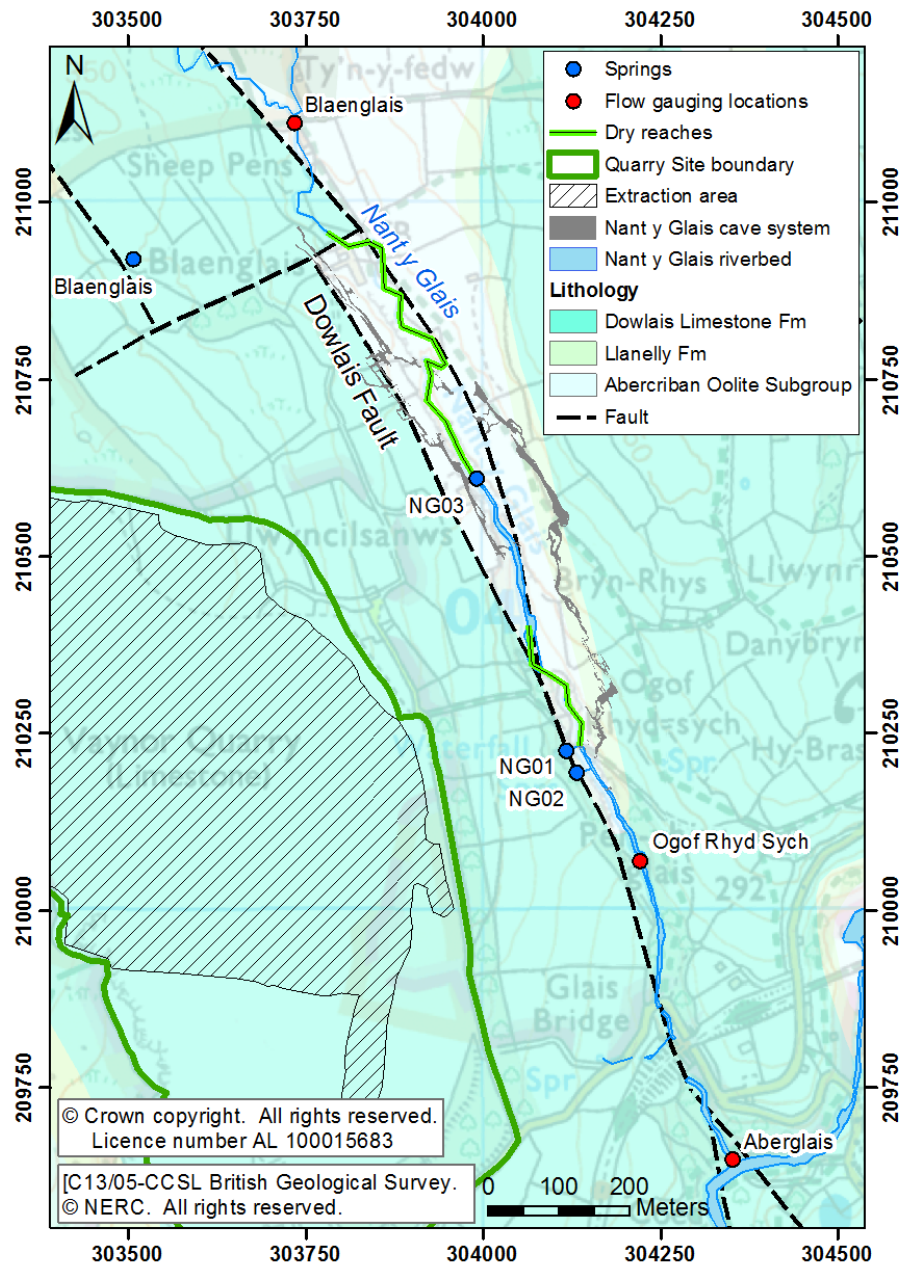


Figure 9.10 Nant y Glais gauging locations, springs and dry reaches

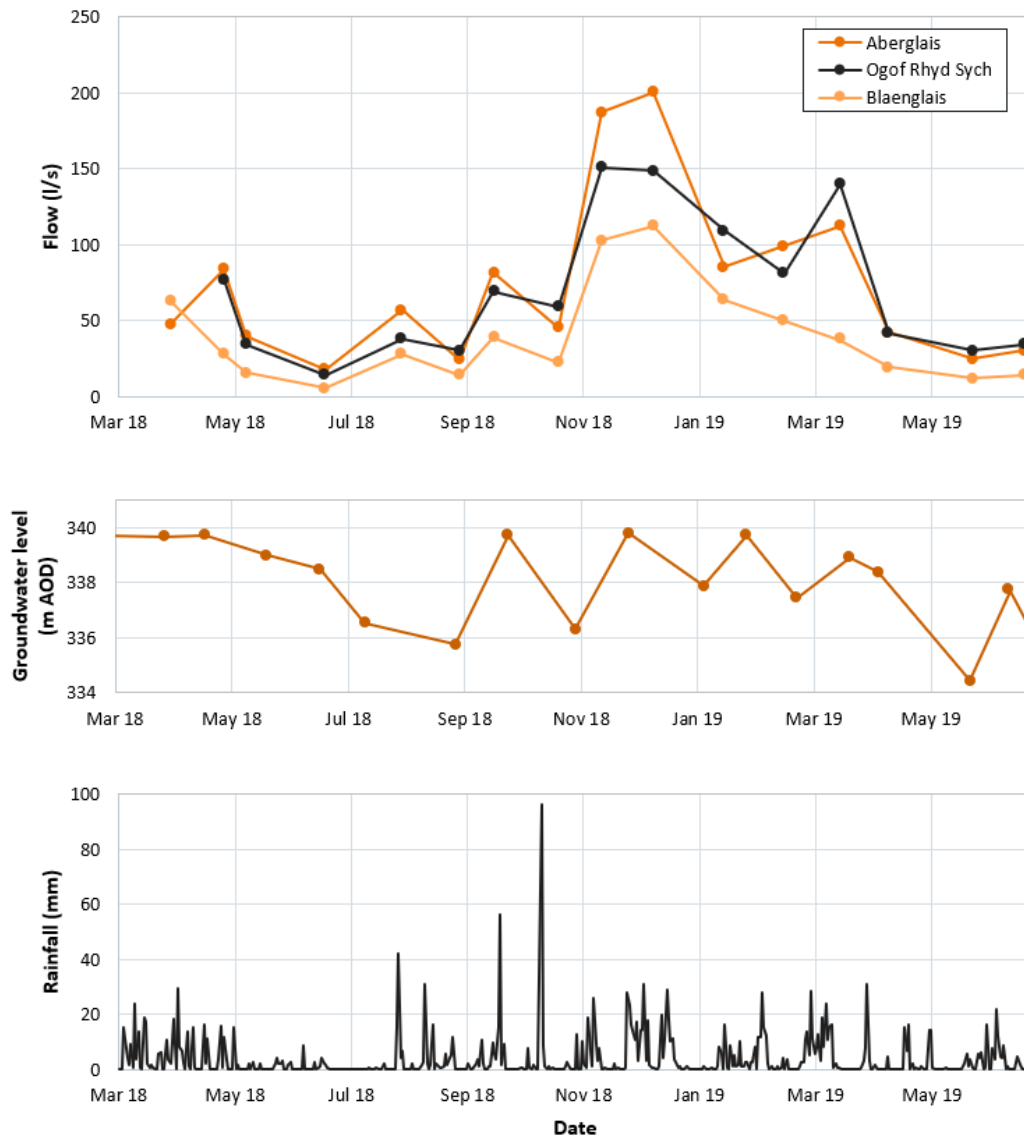


Figure 9.11 Stream flow rate along Nant y Glais compared to groundwater levels at VaynOB07a and rainfall at Pontsticill Upper station

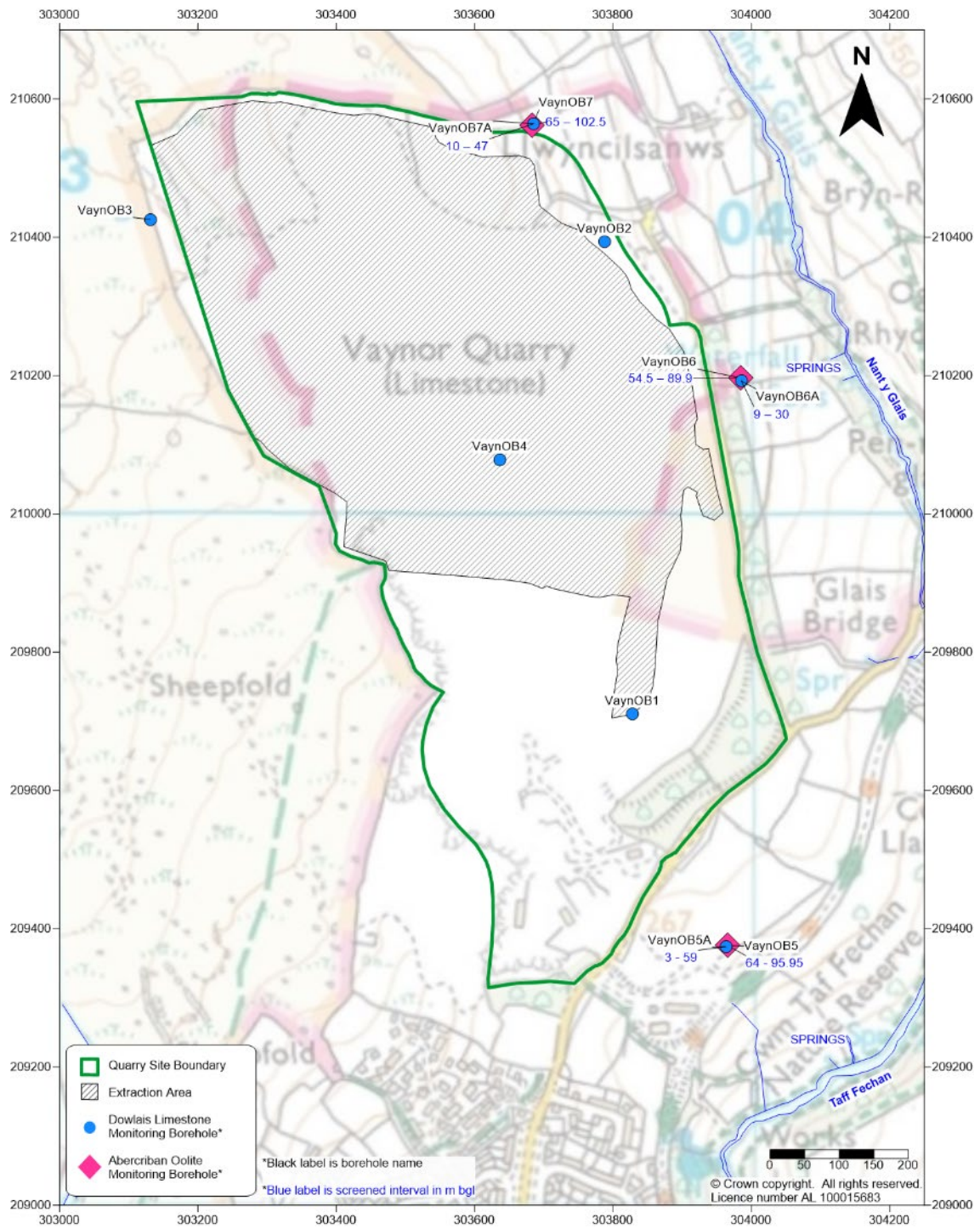


Figure 9.12 Groundwater monitoring locations

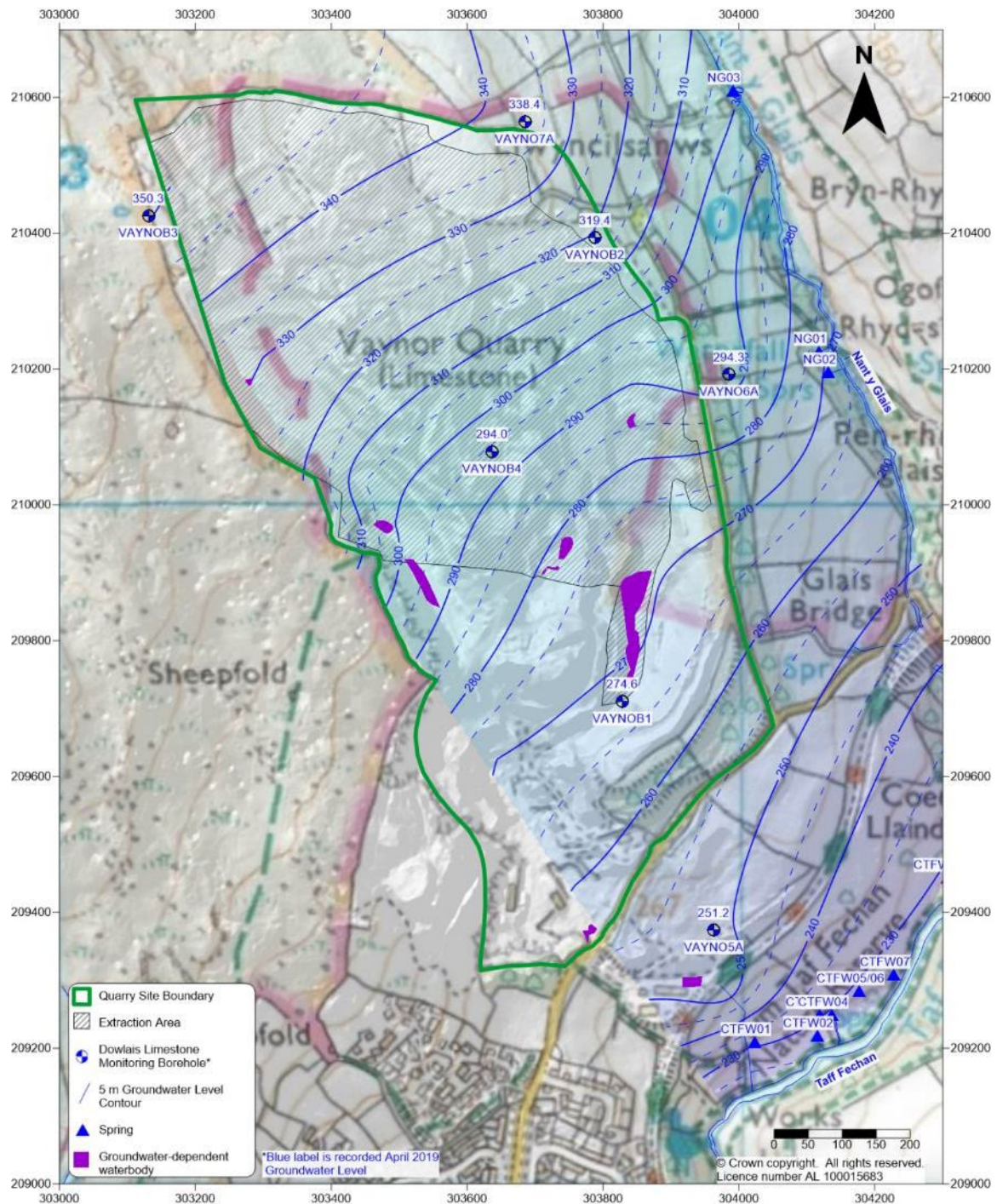


Figure 9.13 Dowlais Limestone groundwater contours: April 2019

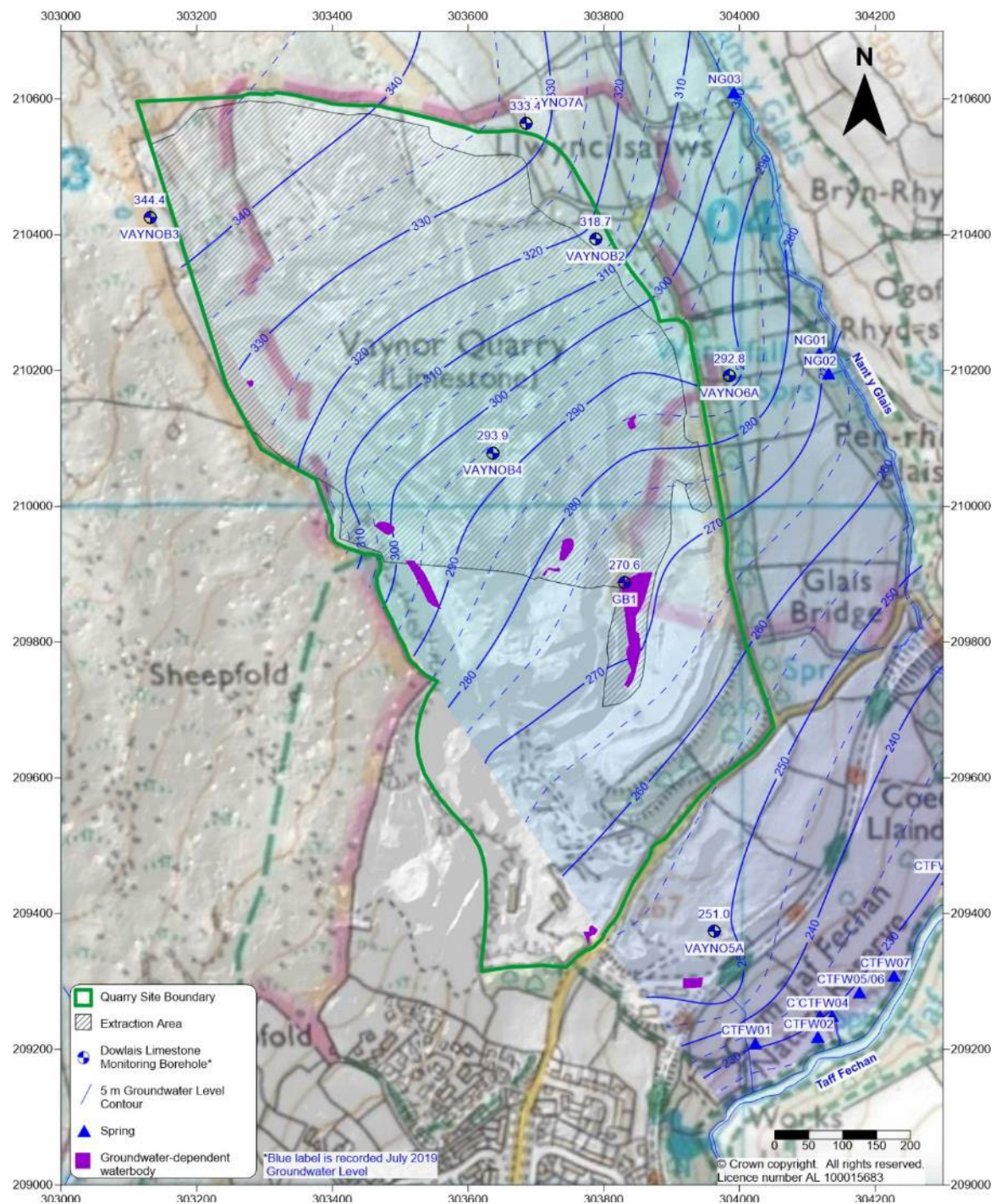


Figure 9.14 Dowlais Limestone groundwater contours: July 2019

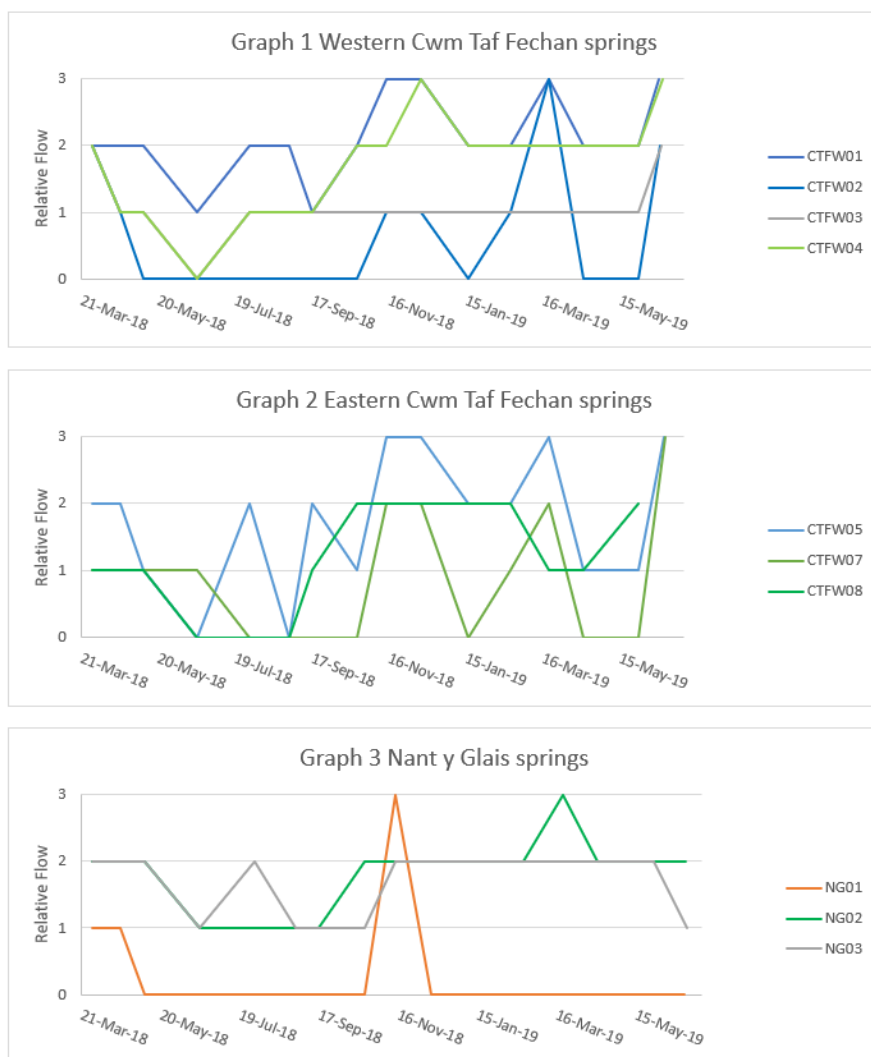


Figure 9.15 Flow monitoring data

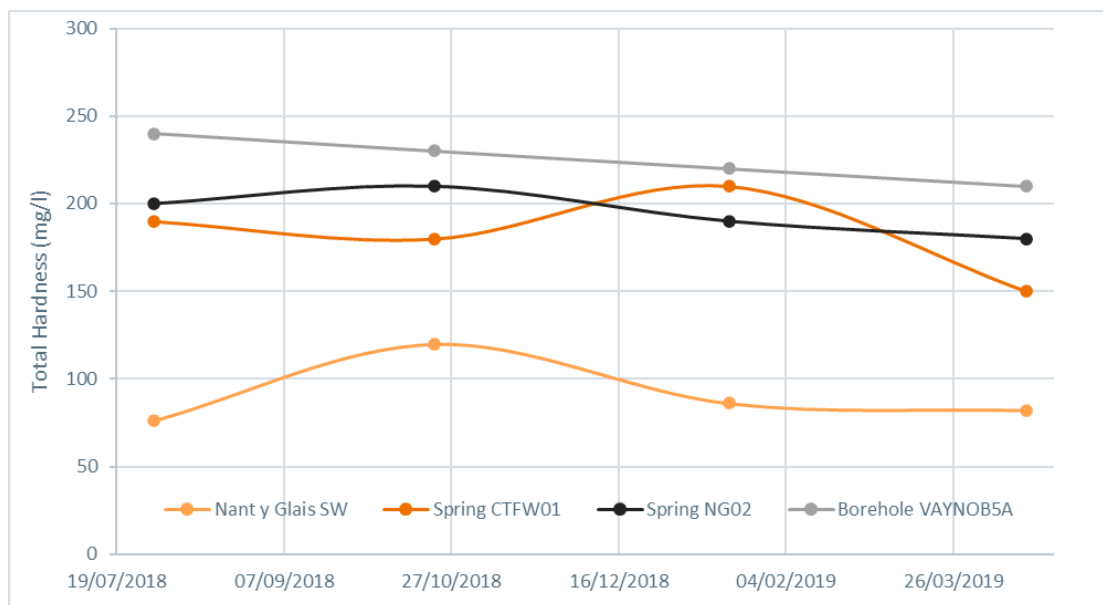


Figure 9.16 Total hardness values from surface water and groundwater quality sampling

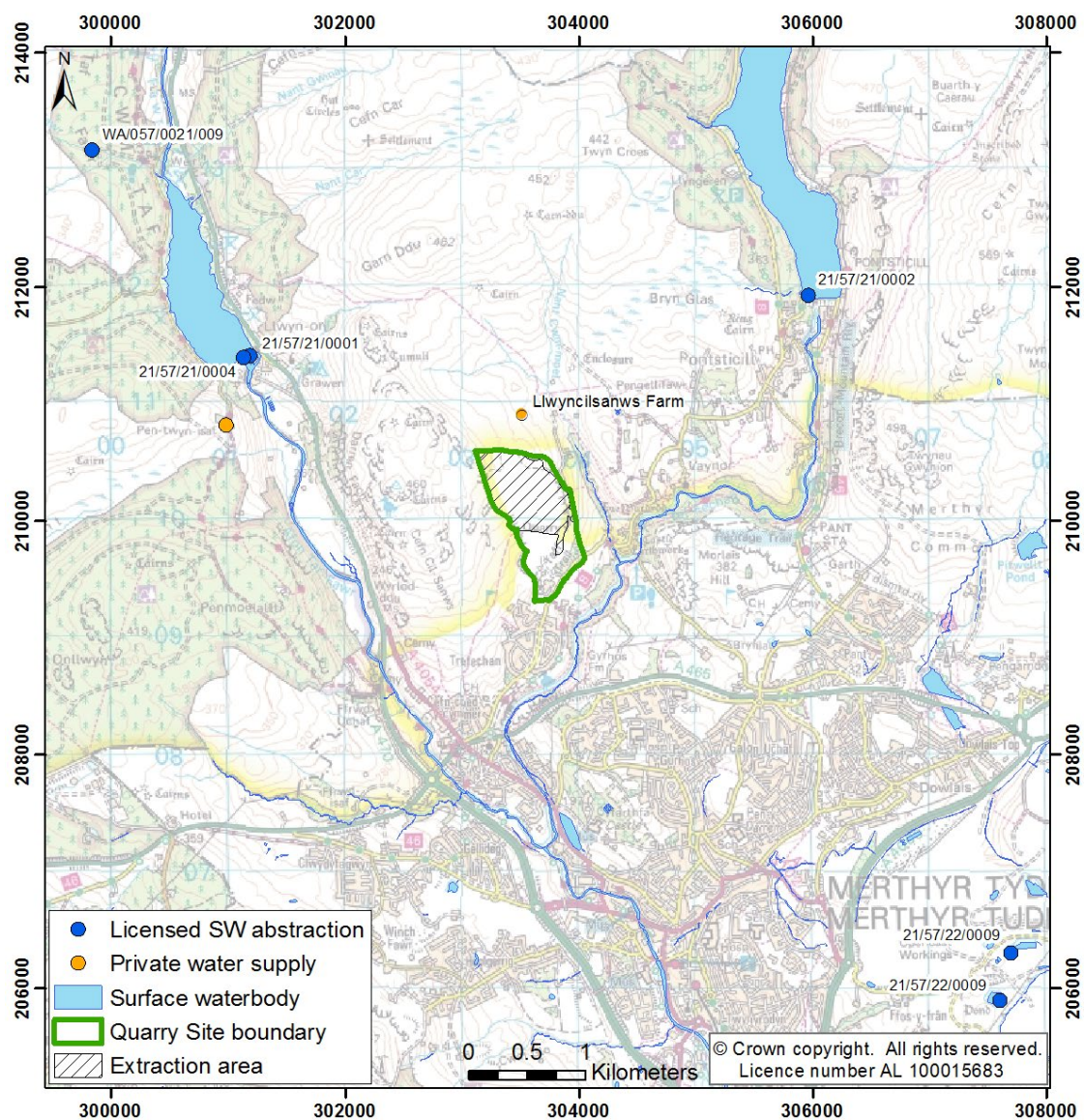


Figure 9.17 Licenced abstractions and private water supplies



Figure 9.18 Llwynsilanws Farm springs (from July 2018 visit)

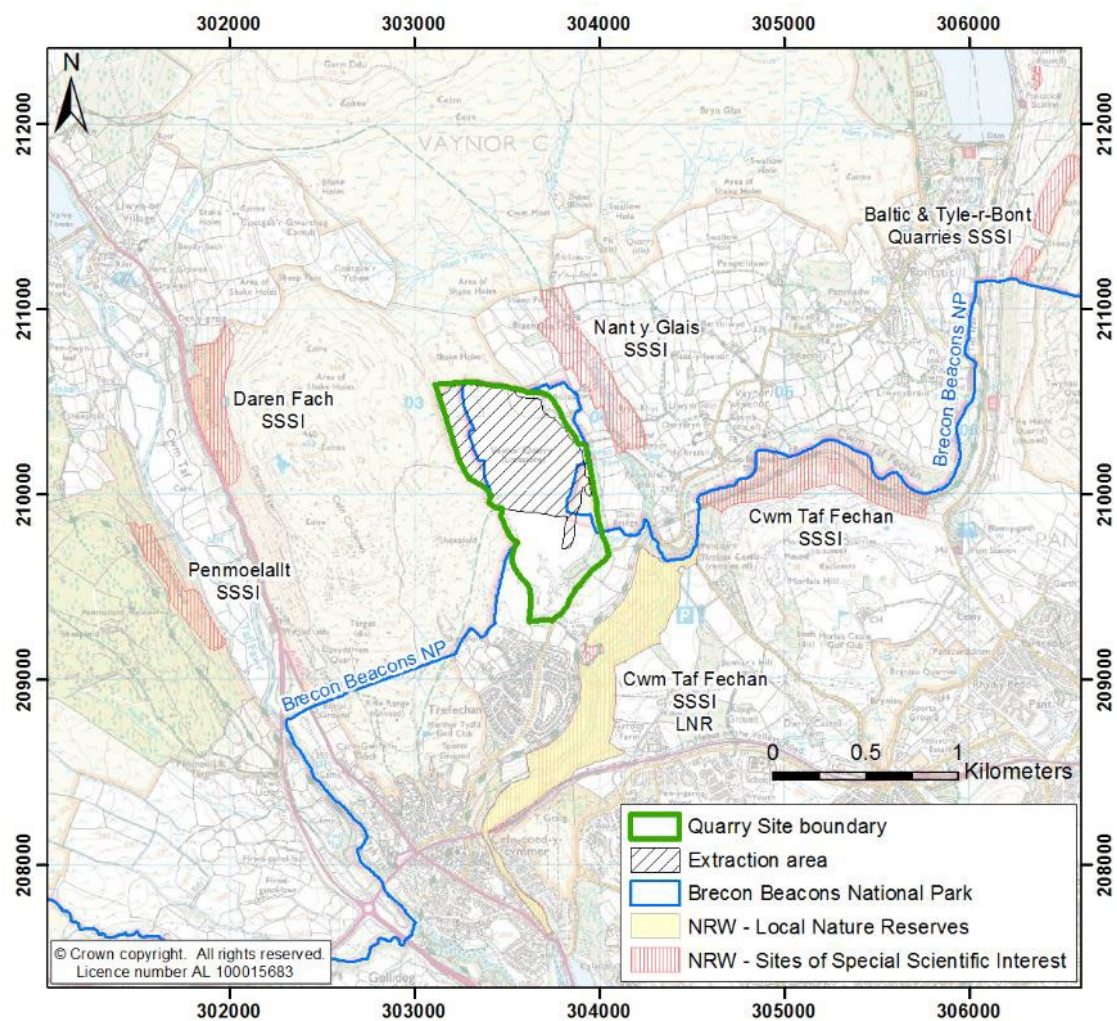


Figure 9.19 Neighbouring designated sites

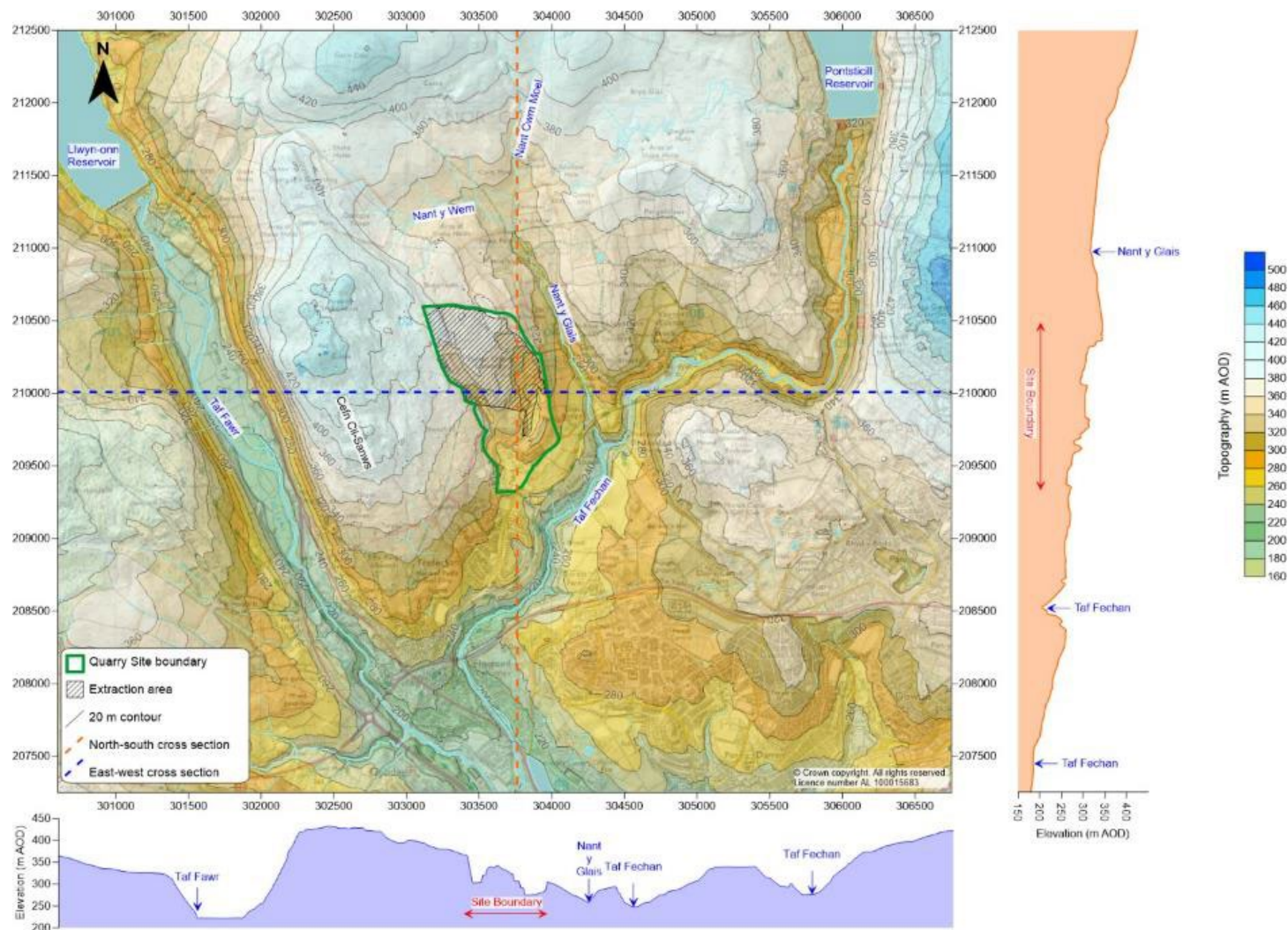


Figure 9.20 Topography around the Site

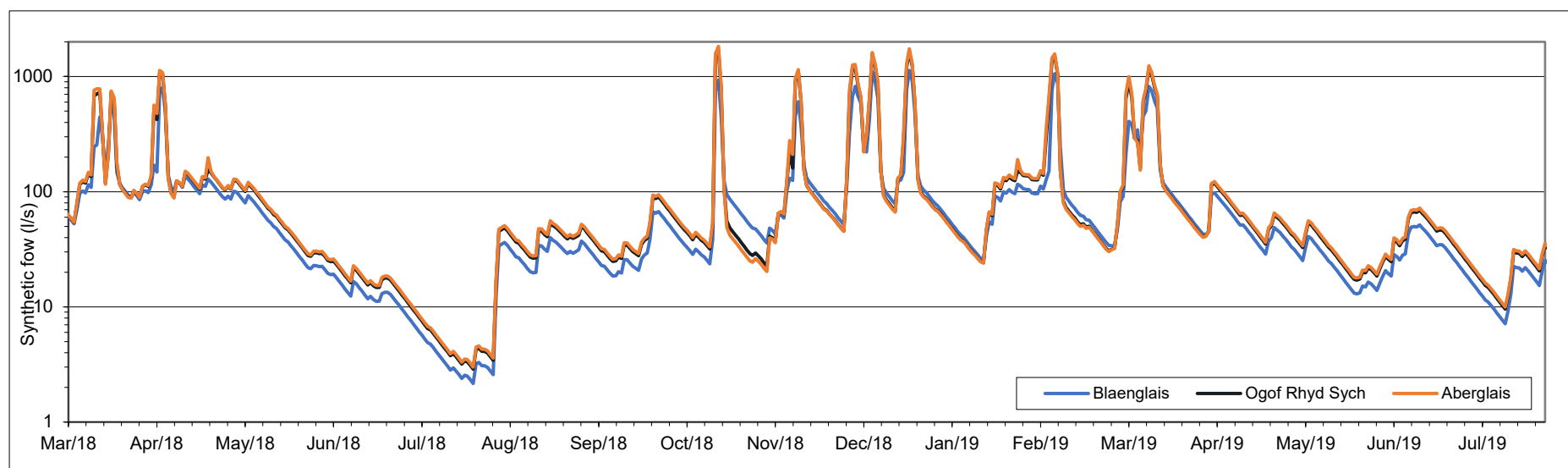


Figure 9.21 Synthetic Nant-y-Glais flow rate at the three gauging locations

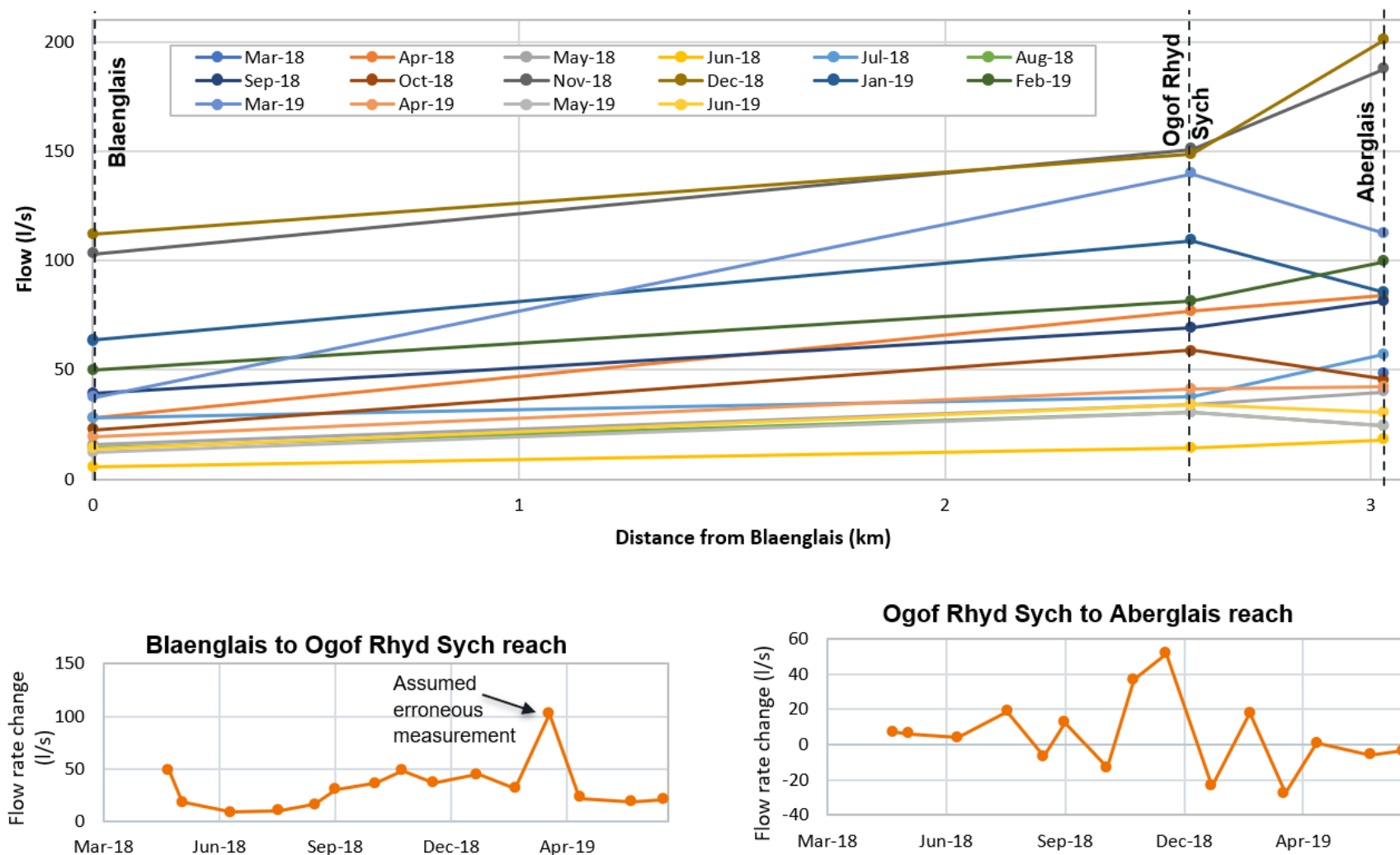


Figure 9.22 Stream flow rate variation over time along Nant y Glais

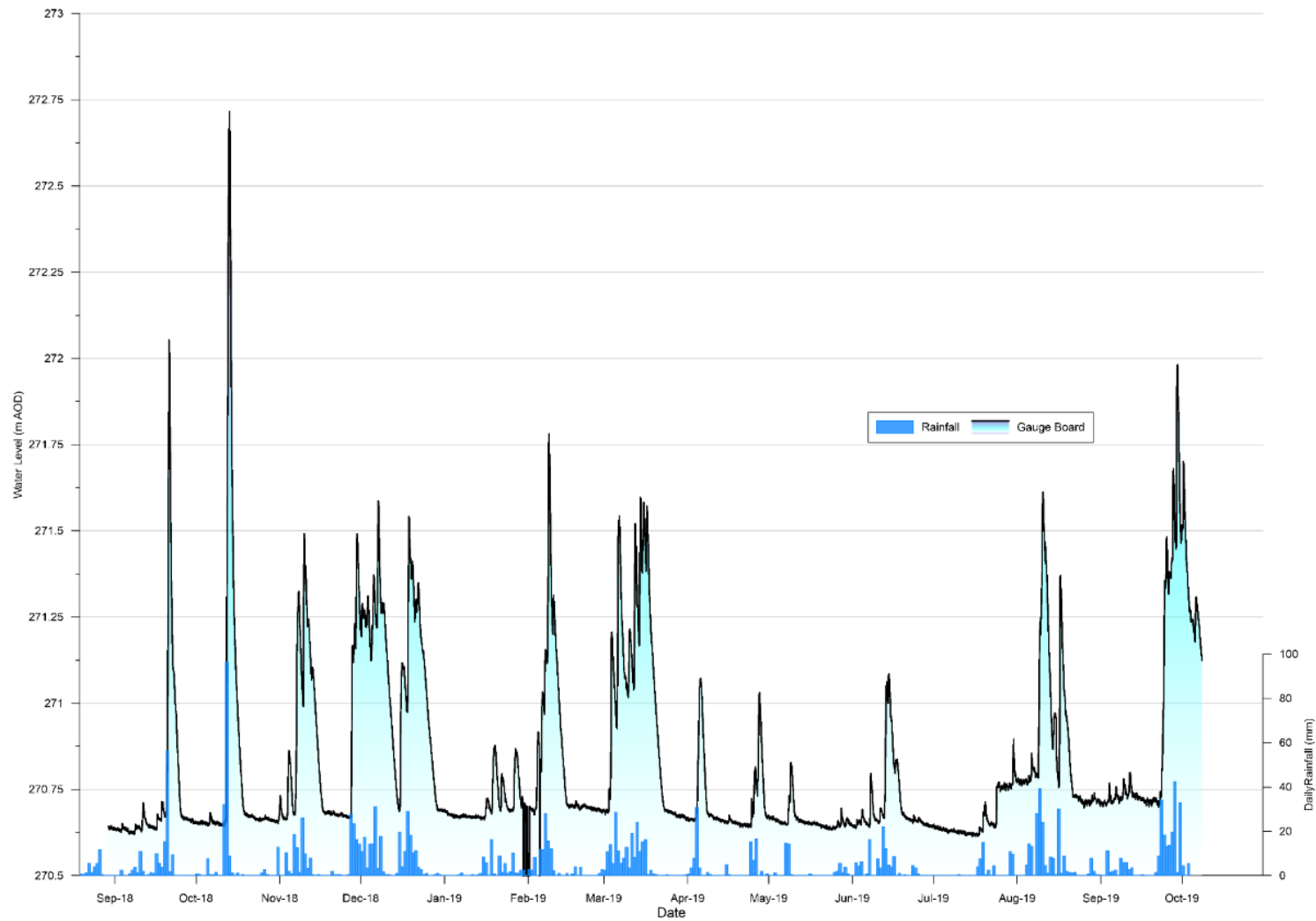


Figure 9.23 Gauge board levels

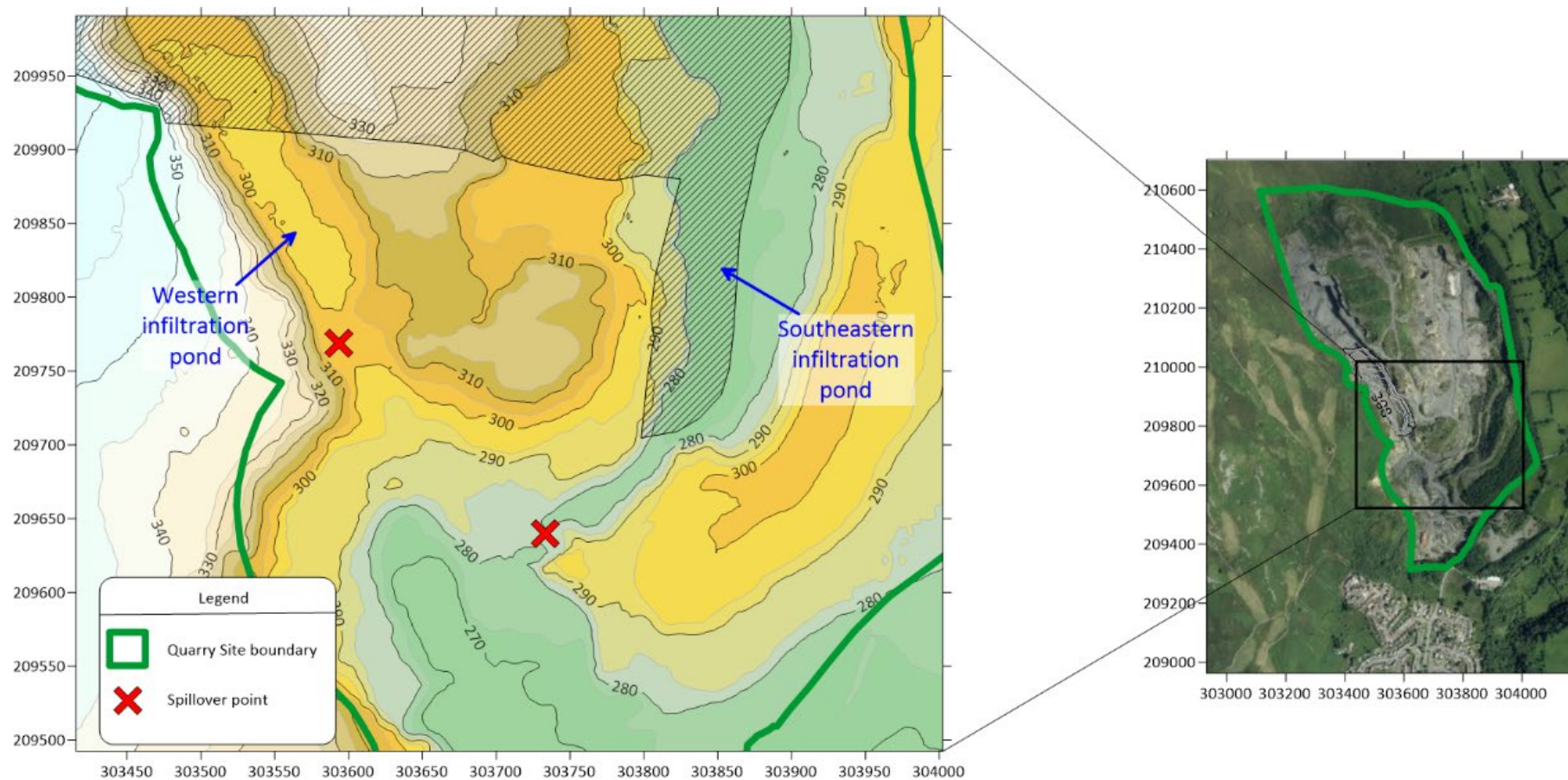


Figure 9.24 Location of spillover points from the eastern and western arm

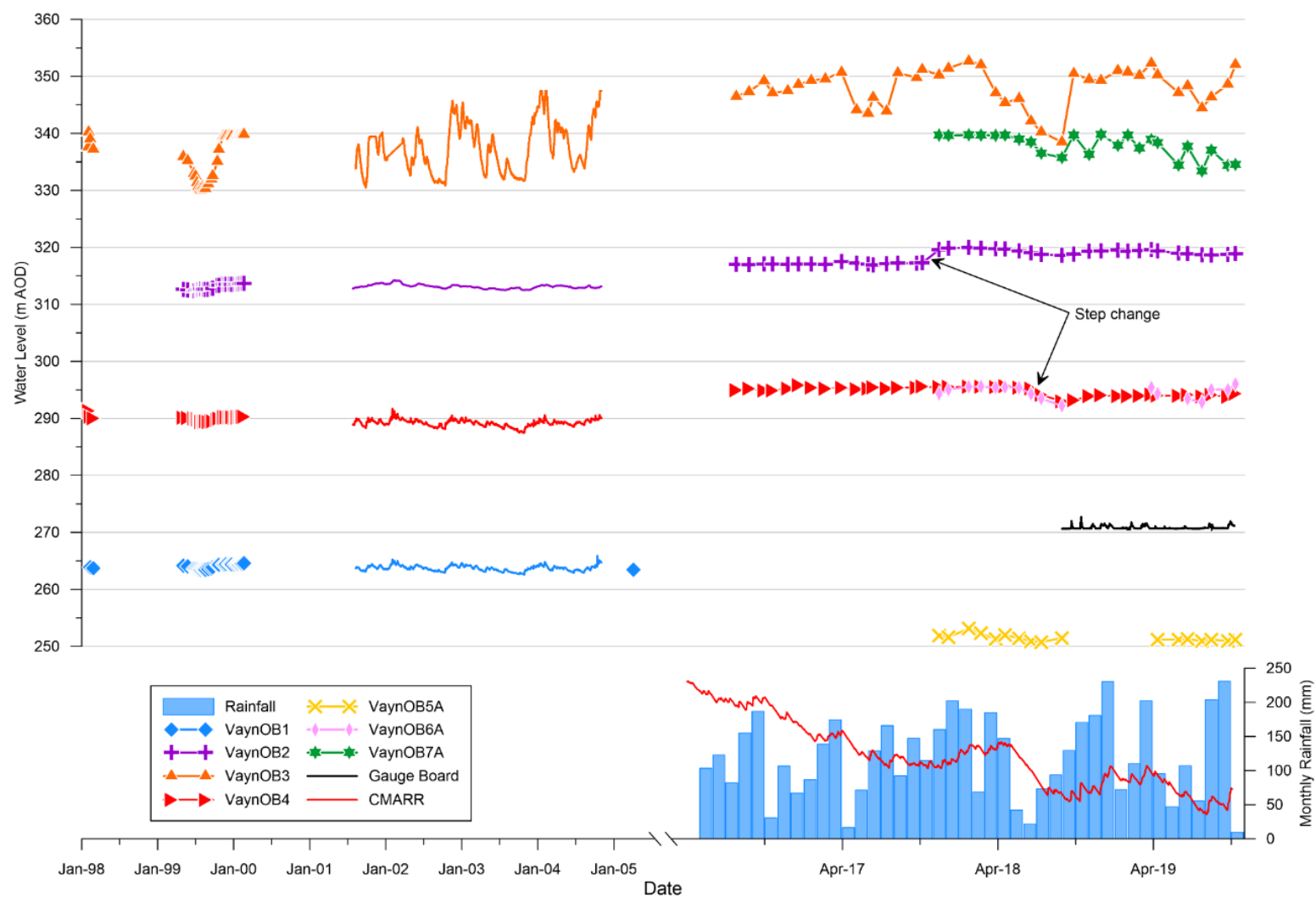


Figure 9.25 Dowlais limestone groundwater hydrographs

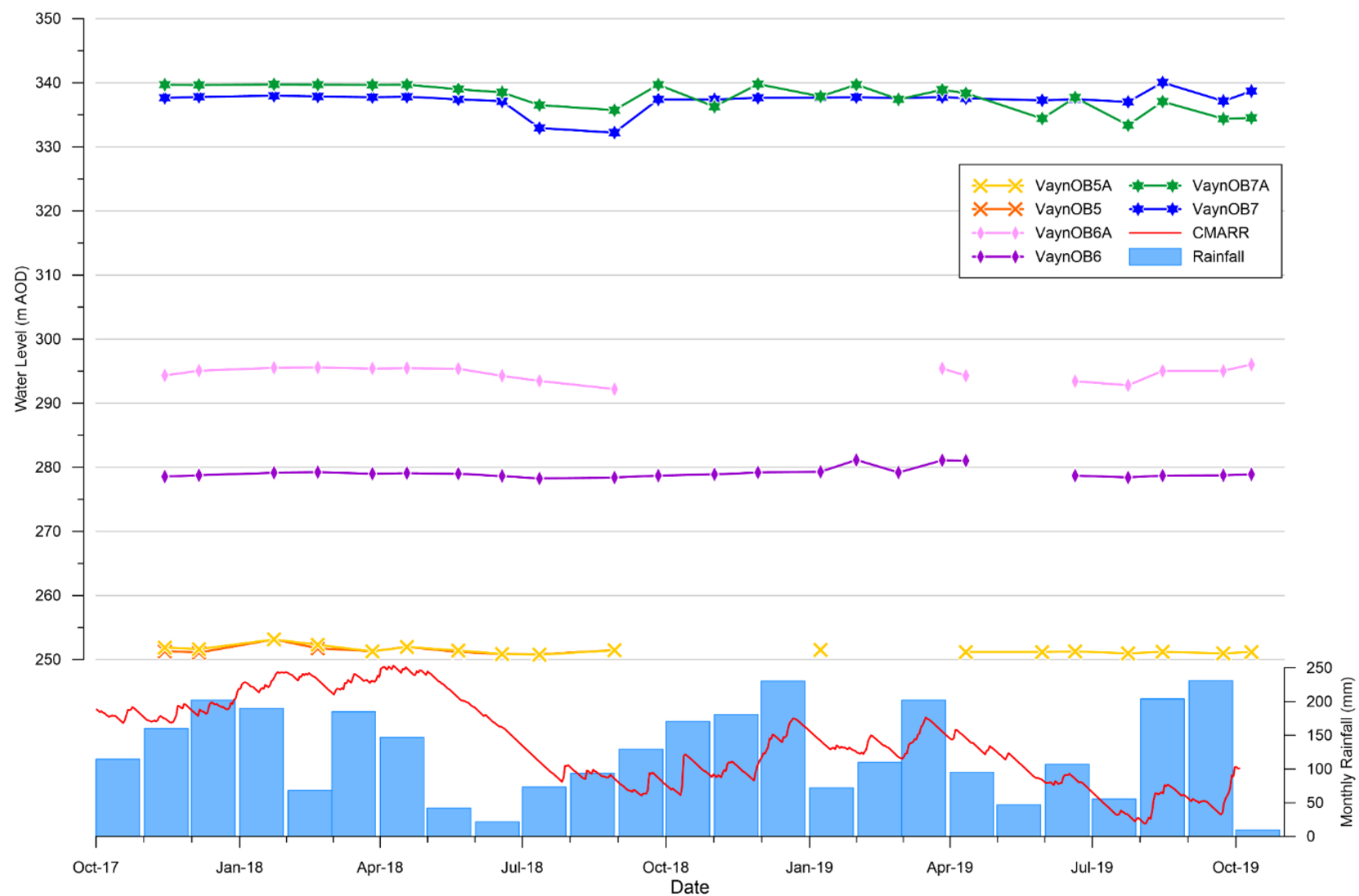


Figure 9.26 Abercriban Oolite and Dowlais limestone groundwater hydrographs

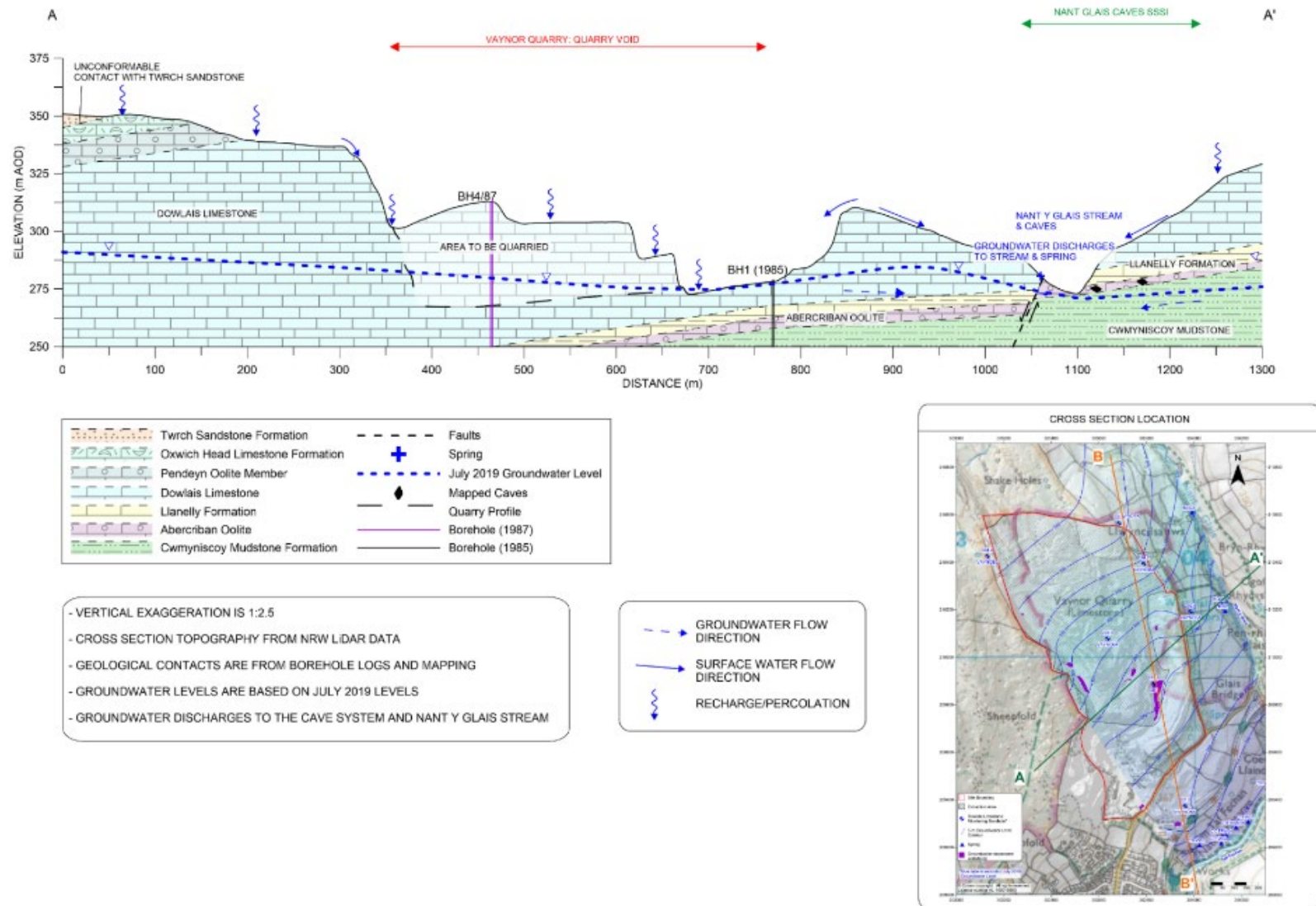


Figure 9.27 Conceptual hydrogeological cross section running east-west

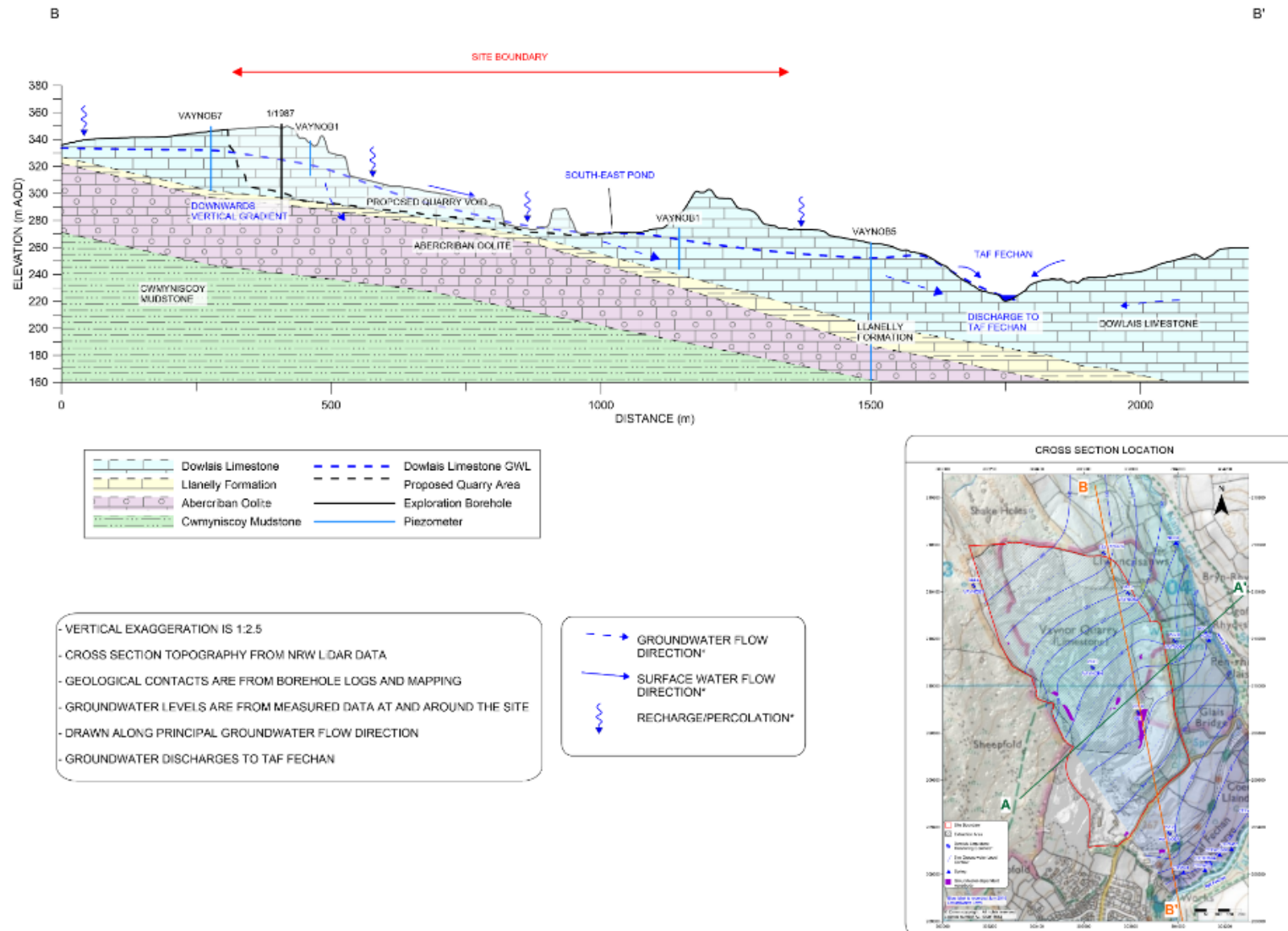


Figure 9.28 Conceptual hydrogeological cross section running north-south