Mining the Trough Dyke Zone at Mponeng Mine, South Africa

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The Trough dyke / fault zone at Mponeng mine is an abnormally active geological feature. Mining in the vicinity of this feature has released many large magnitude events. These large energy releases, which have the potential to result in big losses, have not been problematic. This is not attributed to luck and is a direct result of design.

This presentation outlines some salient features of this fault zone structure and similar type features on the mine property. It also looks at how modeling and visualization are invaluable tools in managing seismicity.