**GROSVENOR INQUIRY SUBMISSION. RECOMMENDATION CEMENTITIOUS GROUT USE**

1. **The April 2020 Incident in MG 104 Pre-Driven Recovery Road that generated Ethylene, be subject to full Independent Investigation and Review.**

**The Sean Muller (SIMTARS) “Assessment of Gas Chromatographic Data; part of Inspectorate Investigation M20-0007 Grosvenor Explosion” mention the Grosvenor Mine detected Ethylene in the LW 104 Recovery Road on the 21st April 2020.**

**This is the only place I can locate in the 96-page Report, that directly links a chemical exothermic reaction causing coal to heat sufficiently to cause the production of Ethylene.**

**There is no indication whether this grout was used on the LW104 extracted block or the face at any stage.**

**The sample was then reanalysed a further Six times to presumably confirm the results.**

**The results for these samples appeared to not be saved into the LW104 or Surface Gas Well SPW files.**

**The Report states that the Pre-Driven Recovery has been backfilled with a cementitious grout, causing an exothermic reaction and heated the surrounding coal.**

**On the 1st of May the Grosvenor Ventilation Officer made the following Ventilation change for the LW104 Pre-Driven Recovery Road. (Presumably when the assessed the Heating was no longer active).**

***MG 103 1 c/t Dogleg changed from 38.6 to 40.5m3/s***

***104 X Drive Chute Road 2 changed from 28.5 to 35.6m3/s***

***Model shows 6m3/s drop to LW Return***

**2.4.10 MG Compartment – Pre-driven Recovery Road 13**

***During the processing of the data the following observations where made:***

***• On the 21st of April, a sample taken on the 19th of April was run for this location. The operator integrated ethylene, which resulted in the sample being repeated another 6 times, presumably to confirm the results. The Graham’s ratio was approx. 0.58 with approx. 127ppm CO.***

***The results for these samples appeared to not be saved into the LW104 or Surface Gas Well SPW files.***

***• It is understood that this roadway had been /was being back filled with grout which has an exothermic reaction and would have heated up the surrounding coal.***