COAL AND GAS OUTBURST COMMITTEE

HALF DAY SEMINAR – Wollongong 8th November, 2019

Contents

Terminology – Coal Burst v Outburst	**Bruce Hebblewhite, UNSW**
Metropolitan Colliery, Longwall 303 Gas Emission	**Shane Kornek, Peabody**
Remote operations of Austar Longwall	**Frank Fulham, Austar**

Editor's comments:

I offer my apologies for arriving late. Consequently, I did not record the discussion for Bruce Hebblewhite's presentation.

The Austar discussion was not recorded by request.

Questions and Discussion

Metropolitan Mine, Longwall 303 Gas Emission

Shane Kornek, Senior Geotechnical Engineer | Geologist - Peabody

(**Editor's note**: Most of the questioners did not identify themselves when they spoke, so they are referred to as Anon)

Shane – We believed there was no need to drill cross measure down holes as there was no geological structure predicted in the Bulli Seam and all historic events occurred on known geological structures.

Wayne Price, Outburst Seminar Committee – What did you learn when you drilled the cross measure drainage holes following the event?

Shane - we confirmed the depth a location of coal seams and interburden units below the longwall panel. Gas samples of the interburdens were also retrieved indicating 1-3 m3/tonne contained in the non-coal lithologies.

Wayne – What method did you use to drain the gas from the Wongawilli seam?

Shane – We didn't really have time to drain it. The cross-measure holes take the gas away from the ventilation when they come on line.

James, **Metropolitan** – After the holes are drilled, no gas comes out until after the longwall passes over the hole. They are more of a goaf gas capture hole. They don't do anything for interburden drainage.

Shane – The gas is coming from fractured rock units in particular the carbonaceous shales with little to no permeability that can't be predrained. The gas is only liberated once the rock is fractured.

Anon2 – What lithologies do the downholes penetrate?

Shane – Generally fine grained sandstones like a laminate, interbedded with carbonaceous shales. Some areas have thicker amounts of dark carbonaceous shales.

Chris Harvey, Outburst Seminar Committee – When you drilled the cross measure holes, did you identify any gas make coming from the strata on drilling?

Shane – No.

Anon3 – Ed: sorry, didn't hear the question. Perhaps about volume of gas released?

Shane – We had a lot of gas going down the face.

James – To dilute it, would have needed about 450 l^3/sec to get it down to 1%, so heaps.

Anon4 – Ed: The depth of cover colours shown in dark blue (500-540m deep,) did it have an impact on the event and could it impact the next longwall?

Shane – It is possible the depth of cover had an impact. It covers a big area. And that was the third longwall extracted under that large surface ridge (500-540m depth region). But we cannot be sure. We are extracting Longwall 304 now and have not yet reached the high-risk area.