

*Oaths Act 1867***Statutory Declaration****QUEENSLAND****TO WIT**

I, Keith Joseph Brennan, of 44 Nelson Street, Mackay, Queensland, 4740, in the State of Queensland, do solemnly and sincerely declare that:

1. I am an Inspector of Mines within the Coal Inspectorate within Resources Safety and Health Queensland.
2. In response to a request from the Board of Inquiry, I provide the following evidence to assist the Inquiry.

*Inspection on 15 August 2019*

3. On 15 August 2019 I went to the Grasstree Mine to conduct a general inspection. This inspection was primarily about the proposed sealing of longwall 909. After my inspection, I prepared a mine record entry ("MRE") (RSH.002.082.0001).
4. Prior to travelling to the mine I reviewed Lotus Notes and identified that there had been a gas exceedance at the mine on 28 July 2019 that was reported to Inspector of Mines Geoff Nugent. I printed out the Lotus Notes entry as it existed at that time (as the Form 5A had not yet been provided to the Inspectorate and therefore was not recorded in Lotus Notes) and then travelled to the mine.
5. My MRE records that I participated in an opening meeting with Site Senior Executive Mr Damian Wynn and Underground Mine Manager Mr Kelvin Schiefelbein. The MRE records that during the opening a review of a gas exceedance of 2.8% CH<sub>4</sub> at Longwall Tailgate was conducted. I do not now recall the specific details of the discussion of that gas exceedance HPI during the opening meeting. My normal practice is to read through the Lotus Notes record of the notification and ask questions about the exceedance. The issues that I normally am concerned to address are issues such as

what caused the HPI and whether the mine understood what had occurred, and discussion of the corrective actions proposed by the mine.

6. As the primary purpose of my inspection concerned the sealing of a longwall, I went to the control room and requested the last five weeks of monitoring data from Longwall 909. This is my usual practice when it comes to sealing a long wall, in that I attend at the mine, and I review the gas data in the control room, and conduct an inspection of the proposed sealing area. Whilst I don't have a specific recollection of all of the data that I reviewed in the control room, the MRE reveals that in reviewing the gas logs I observed that there had been an exceedance of 2.6% methane on 28 July 2019. As it was slightly lower than the methane exceedance I had reviewed in the opening meeting, I must have then asked if it had been reported, and I was told that it was reported to Inspector Nugent. The MRE suggests that I checked the form 1A to confirm that the HPI had been reported to Inspector of Mines Nugent.
7. The MRE records that at the conclusion my inspection, I conducted a close-out meeting with the SSE. I don't have a specific recollection of this meeting, but the MRE suggests to me that I confirmed during this close out meeting that the gas exceedance in the gas log had been reported.

*HPI on 25 March 2020*

8. At 8:24pm on 25 March 2020 I received a telephone call from Mr Schiefelbein advising me that a HPI had occurred at Longwall 808 at Grasstree Mine at 5:50pm. I took notes in my diary during the conversation and they are a rough note of my conversation (RSH.002.062.0001). I have limited recollection of this conversation.
9. My notes states "*Grasstree: Gas exceedance 808*". This means that I was told by Mr Schiefelbein that there had been an exceedance at Longwall 808 at Grasstree Mine.
10. My notes then read "*left 4 shields back created vent – staggered arrangement*". This means that I was told by Mr Schiefelbein that he thought the reason the exceedance had occurred was because they had left four shields back during the cutting cycle and that this had created a ventilation dead spot. I know that when four shields are left back it can create a ventilation dead spot, where gas can accumulate, and goaf gases can be drawn from the goaf. I believe the reference to 'staggered arrangement' was because I

asked a question as to whether they were using a staggered arrangement to advance the shields. I believe I wanted to know that because they had left four shields back. A staggered arrangement is when every second shield is advanced, for instance, 1 and 3, and then 2 and 4. Staggered advancing means that you have better roof control and better ventilation.

11. My notes then read "*not to use block advance not to use rabbit mode*". This means that Mr Schiefelbein and I discussed that as the exceedance had been caused by leaving four shields back, the mine should not be using block advance or rabbit mode. "Block advance" is when you advance a number of shields at the one time. "Rabbit mode" is a phrase used by the mine and not one that I am familiar with, but I take it to mean that they were using a method of progressing the shields faster than by a staggered advance. I believe that during the conversation, either I suggested to the mine that they should not be using block advance or rabbit mode, or that alternatively, I would have been told by Mr Schiefelbein that part of the mine's solution was that they would not use rabbit mode or block advance.
12. My notes report "*2.63% peak 17 minutes*". This means that I was told that the peak methane level was 2.63% and the methane level was in excess of 2.5% for seventeen minutes.
13. My note also records "*+ added Sherwood curtain*". This means that during the conversation there was a discussion about the mine adding a Sherwood curtain as part of their solution. Sherwood curtains are a ventilation control device that allows a mine to direct the flow of air to control ventilation flow.
14. My notes then read "*MSO Aaron Fielding AF/Crew -4.2%*". I believe MSO means Mine Senior Official, and that means that Mr Schiefelbein and I would have discussed who was in charge at the time. I would have been told that Aaron Fielding was in charge of the afternoon shift crew on that day. I believe I wanted to know who was in charge, because I had taken a call for a HPI on 20 March 2020 where it was caused by block pushing and I wanted to know if it was the same crew. I don't now recall what 4.2% is a reference to.
15. I recall asking Mr Schiefelbein if the crew who had engaged in block pushing on 20 March 2020 had been doing the same thing, as it seemed the HPI was very similar to



the one on 20 March 2020. I was concerned as I knew that the longwall at Grasstree had a stone roof and floor. These conditions result in high production values, but when the longwall retreats quickly, it can result in the goaf not caving as it should, creating a void behind the shields and a subsequent wind blast could result in goaf gases being blown into the ventilation circuit.

16. My notes then read “*Shears -> high production. 50m<sup>3</sup>/s – 180,000 weekly, 7 day average 200,000*”. I would have asked about the ventilation quantities across the face and Mr Schiefelbein would have said 50m<sup>3</sup>/s. ‘180,000 weekly’ and ‘7 day average’ 200,000 is a reference to the amount of coal being produced at the mine; I do not recall if I asked or if Mr Schiefelbein volunteered this information. I believe that we discussed part of the reason for the gas exceedance was the high level of production, and I believe that I asked questions as to what the production rates were, which explains my notation.
17. Although it does not appear in my notes, I do recall that I reminded Mr Schiefelbein that there had been five HPI’s for gas exceedances since 20 March 2020 and that I reiterated my recommendation from 20 March 2020 that a coordinator be placed on the face to ensure that workers were not engaging in block pushing. At the conclusion of the phone call I was satisfied that Mr Schiefelbein was going to ensure that block pushing did not continue. As a consequence of my conversation with the mine, I considered that the proposed response by the mine would be satisfactory and that it was not necessary for me to intervene further.

*HPI on 6 April 2020*

18. At 12:30pm on 6 April 2020 I received a telephone call from Mr Schiefelbein. I took notes of this conversation and these notes are a rough record of my conversation with Mr Schiefelbein (RSH.002.063.0001). I have limited recollection of this conversation.
19. My notes record “*Kelvin Grasstree 808l/w 11.14am T/G 0M sensor - layering*”. This means that I received a telephone call from Mr Schiefelbein from Grasstree Mine advising that at 11:14am there had been an exceedance at the zero metre sensor at the tailgate which was caused by layering of methane.



20. My notes then read "*4.36% -> 11.40am. Fail mode*". That means that Mr Schiefelbein told me that the exceedance recorded 4.36% at 11:40am, and then went into failure mode. I know that after 5% the sensors will latch and no longer record any increase because it has gone into failure mode.
21. My notes then read "*TG drive sensor read 0.4% outbye 2.2% max average 1.7%*". This means that I was advised that the tailgate drive sensor was reading 0.4% and the outbye sensor was reading 2.2% maximum, with an average of 1.7%. Those readings meant that at the same time there was the high reading at the zero metre sensor, the tailgate drive sensor and the outbye sensors were not recording an exceedance greater than 2.5%. This information was relevant as it indicated that the recording at the zero metre sensor was likely caused by a layering of methane.
22. My notes then read "*#197 under canopy ½ shield in roadway*". This means that I would have asked questions as to where the last shield was located, as that was where the zero metre sensor that had the exceedance was. My note suggests that I was told that the sensor was at shield 197, and that half of the shield was in the tailgate roadway. I know that this is a location where layering could occur in the canopy.
23. My notes then read "*Investigate. Goaf Fall. Spikes of gas 15 min prior to T/G R/sensor*". This note suggest that I asked Mr Schiefelbein if they had investigated whether there had been a goaf fall, and I was informed that there had been a goaf fall 15 minutes prior to the tailgate real time sensor reading of 2.2%.
24. My notes then read "*Goaf well 1200 lts/s → 400 lt/s*". This means that I would have asked Mr Schiefelbein about the drainage at the mine. My note suggests that I was informed that the goaf wells were supposed to be performing at 1,200l/s, but was only performing at 400lt/s/.
25. My note then reads "*50m (70m due to surface creek)*". This is related to the previous entry. I believe that because I had been informed that the wells were not performing at 1200 litres per second, that I would have wanted to know why the goaf wells were underperforming. My note suggests that Mr Schiefelbein informed me that the goaf wells were normally 50 metres apart, but due to a creek on the surface, they had to be placed at 70 metres apart.

26. My notes then read "*Shearer 185# - 180 → 185m D/SHUFFLE*". This means that I would have asked Mr Schiefelbein where the shearer was located when the exceedance occurred, and he told me that it was located at shield #185. My note suggests that he then told me that the shearer was doing a double shuffle between shields 180 and 185.
27. Although it does not appear in the notes, I do recall I checked with Mr Schiefelbein that the cause of the exceedance was not a block push or rabbit run.
28. Again, although this does not appear in the notes, during this discussion I also recall asking Mr Schiefelbein about the technology that was in place to alert coal mine workers of pending goaf falls resulting in the flushing of goaf gas. I also asked him whether the maingate operators were monitoring shield pressures, as this can alert the operators to pending goaf falls. When the strata in the roof moves it affects the pressure on the shields. The workers on the face should be made aware of pending goaf falls by those monitoring the equipment.

And I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the *Oaths Act 1867*.

[REDACTED]

Signature of declarant/deponent

Taken and declared before me at Mackay this twenty-fourth day of July 2020

[REDACTED]

A Justice of the Peace/Commissioner  
for Declarations

