Harmony Gold Mining Company Limited













Henry Hollander Section Geologist Joel Mine Phone: 057 733 7250 29 April 2015

To whom it may concern

Re: Water and Methane Sealing At Joel Mine

Joel Mine is known for major water (30,000 to 100,000 Litres per hour) and methane (Above 5%) intersections. This necessitated us to look at very effective ways of sealing the water and methane. After trying various companies unsuccessfully, we decided to give Sealchem an opportunity to try and seal the water and methane in 2002. This proved to be very successful and resulted in the company being on our shaft ever since. Not only are there chemicals very effective, they also have a 100% accident free record.

The chemicals currently used on Joel Mine are as follows:

- FSG A+B Fast set grout (Magnesium based) Water & methane sealing -Very fine fissures and consolidation product.
- 2. POLYSEAL (urethane) Water sealing and open leaks
- 3. GROUTEX 101(Latex based) Water sealing big volumes
- 4. MSG (Cement based) Water sealing and consolidation.

Feel free to contact me if you have any questions

Regards

Henry Hollander