**Why I don’t believe in reconciliation**

S. Dunham1

Note: Presenting author’s name should be underlined.

1. Director, SD2 Pty Ltd, Nanango, QLD 4615. scott@sd2.com.au

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# ABSTRACT

For decades we’ve been focusing on reconciliation as a tool to validate mineral resource estimate. And for decades we’ve been misleading ourselves.

The concept of reconciliation is simple. Predict, measure, compare and assess the quality of the prediction. This four-step process reflects the ideas of statistical process control and the plan-do-check-act cycle of Shewhart and Deming fame and our intuitive understanding of using system feedback to improve performance. In an ideal world where data is robust and dense this type of feedback loop can be useful. In the mining industry however, there are some fundamental flaws with the conceptual framework.

At almost every stage of the process from pre-estimation through to final production the mining system is plagued by material challenges with data and measurement quality and quantity, system delays, and losses from a supposedly closed system. These issues can and do impact on the benefits sought from reconciliation. Instead of providing feedback leading to improved estimation, reconciliation can result in poor decisions and exacerbate the noise in an already noisy system.

Before we can rely on reconciliation as a management tool, we need to address the multiple challenges present in our everyday practices. Some of the most critical issues are addressed in this paper.