

## **Mark Shimell**

## **Star Diamond Corporation**

# Renewed Evaluation of the Star-Orion South Diamond Project

#### **ABSTRACT**

Star Diamond Corporation has conducted extensive evaluation on the Star and Orion South Kimberlites using core drilling, large diameter drilling ("LDD") and underground bulk sampling. These exploration methods provided information on kimberlite size and internal structure, diamond grade estimation and diamond price estimation, respectively, and which in turn, have been used to estimate the Indicated and Inferred mineral resources available within these kimberlites. In early 2018 a Preliminary Economic Assessment ("PEA") was published, estimating that 66 million carats of diamonds can be recovered over a 34 year LOM, resulting in a post-tax and royalty NPV of \$2.0 billion and an IRR of 19%. Pre-production capital costs were estimated at \$1.41 billion with a total capital cost of \$1.87 billion (including direct, indirect costs and contingency) over the LOM and an initial capital cost payback period of 3.4 years.

The Project shows an unusually high abundance of Type IIa diamonds in the diamond parcels recovered from the Star (26.5%) and Orion South (12.5%) Kimberlites. Type IIa diamonds are very rare and account for approximately less than 2% of all natural rough diamonds mined from kimberlites. Many high-value, top colour, large specials (greater than 10.8 carats) are Type IIa diamonds.

In mid-2017 Star Diamond Corporation executed an option to joint venture agreement with Rio Tinto Exploration Canada ("RTEC"), a wholly-owned subsidiary of Rio Tinto. Rio Tinto refers to Star Diamond's mineral dispositions as Project FalCon. RTEC commenced their fieldwork in 2017 under the option to joint venture agreement, including a bulk sampling program using trench cutter technology.

### **BIOGRAPHY**

Mark Shimell is the Project Manager for Star Diamond Corporation. He is an exploration geologist with over 24 years of international experience in mineral exploration and 18 years of diamond exploration in Canada. Prior to migrating to Canada to work for Star Diamond Corporation, Mr. Shimell worked for A.C.A Howe International U.K on exploration projects within Europe and Africa. Mr. Shimell graduated from Imperial College London (Royal School of Mines) with a degree in Mining Geology in 1995, a Master's degree in 1998 and is a Professional Geoscientist in the Province of Saskatchewan.

