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An update to the history of solution mining at the Cane Creek Mine, Moab, Utah – 2006-2021

Brandon Bartosh Intrepid Potash – Moab LLC

Abstract

In 2006, Harvey et al. provided a history of the solution mining activities at the Cane Creek Mine near Moab, Utah and introduced the first solution mining cavern drilled by Intrepid Mining LLC, which occurred in 2002. In this paper we give an update on how the implementation of the horizontal drilling technology utilized at the Cane Creek Mine has performed over the years as well as information about the additional well drilling development activities at the Cane Creek Mine. The updates will explain how well drilling activity has affected the material production of the mining operation. The first update is the addition of Well 29H to

the original cavern. Completed in 2012, Well 37H was also drilled and joined into the existing cavern. Furthermore, two additional caverns have been developed. In 2013, the second cavern was completed, as a two well horizontal system, with the drilling of Wells 39H and 40H. In 2014, a third independent cavern was placed into operation through Wells 42H and 43H. Finally, we give an update on the declining performance of the flooded mine works in Potash 5.

Key words: Cavern Development, Dissolution, Lateral Drilling, Paradox Basin, Potash, Solution Mining History, Utah, Well Design, Drilling, and Completion

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