

## **Analysis of a Potential Blind Geothermal System in the Northern Reese River Basin**

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Abstract: The northeastern part of the Reese River basin (NRRB) situated ~15 km SE of Battle Mountain, NV, adjacent to the northern Shoshone Range and Argenta Rim, scored highly in the Nevada geothermal play fairway analysis (PFA) for potential hidden geothermal systems (Fig. 1). Consequently, this site (here referred to as Argenta Rise) was chosen for detailed study as part of the INnovative Geothermal Exploration through Novel Investigations Of Undiscovered Systems (INGENIOUS) project. At Argenta Rise, we are currently integrating geological (e.g. structural analysis and geologic mapping) and geophysical datasets (e.g. gravity and magnetics) to build a structural model and to identify specific favorable sites for potential geothermal upwelling. Based on geologic maps, and recently acquired gravity and magnetic data, four favorable structural settings within the broader stepover were identified. These include three hybrid settings, and fault bend.