system. The oversized organic material will be placed near the screen area for future deposit during the reclamation process. The pit/feed conveyor systems feeds a mainline feed conveyor system. The mainline feed conveyor system will incline (or feed a stacker conveyor) and then feed the trommel (screen). The trommel feeds the Pre-Concentration Plant (PCP).

In the PCP, spiral centrifuges concentrate and separate the heavy mineral sands from the lighter clays and quartz sand and then feeds the Wet Concentration Plant. The Wet Concentration Plant (WCP) further reduces and separates the material for processing. The material from the WCP is transported to the Mineral Separation Plant (MSP). The MSP separates valuable and non-valuable mineral products such as zircon, staurolite, rutile, ilmenite, etc. After products have been separated, the final products will be containerized, bulk shipped or loaded on truck or rail dependent upon customer requirements.

The tailings from the PCP/WCP area will be temporarily stockpiled. Tailing will be loaded onto the mainline tails conveyor system. The mainline tails conveyor system will convey material onto a reclamation conveyor. The reclamation conveyor deposits the tailings back into the mined pit area for reclamation.

As part of reclamation the tailings are transported from their stockpiles to the open mined area where they are deposited. The areas are then recontoured, covered with topsoil and revegetated to meet reclamation standards. The operation is a continuous process and while the dragline is operating, backfilling of the pit is occurring as well once the operation gets under way.

On the TIAA portion of the proposed mining area, excavator/dozer trap mining method will be utilized due to the shallower depth of mineral resource. The excavator/dozer trap method is utilized to mine shallower depths. This method has a limited reach, depending on the machine. It also has a lower excavation and production rate. There is more frequent relocation of the machine which results in lost production due to the relocation time. The mining process proceeds as follows: The mining unit (excavator/backhoe/dozer trap) will mine the material. The mining unit will feed a screen. The screen material feeds a pit/feed conveyor system. The oversized/organic material will be placed near the screen area for future deposit during the reclamation process. The pit/feed conveyor system feeds a mainline feed conveyor system. The mainline feed conveyor system will incline (or feed a stacker conveyor) and then feed the trommel. The trommel feeds the PCP. Once at the PCP, the process proceeds as described above.

Alternative 1, the proposed project, consists of 2,413.97-acres as depicted on the U.S. Geological Survey (USGS) 7.5-minute Topographic Maps of Moniac, Georgia and Saint George, Georgia (Figure 1). The center of the site is located near latitude 30.52490044 and longitude -82.12419891. According to the USGS Topographic Map, the elevation at the site ranges from approximately 120 to 175 feet above mean sea level.

The northern boundary of the Alternative 1 site is located approximately 3.73 miles southeast from the nearest boundary of the Okefenokee Swamp National Wildlife Refuge, providing a substantial buffer of protection for this sensitive resource. Alternative 1 contains suitable reserves of heavy mineral sands containing the target minerals suitable for mining. The heavy mineral sands underlying the site are comprised of an average of 2% concentration of the economically viable minerals. The location of Alternative 1 is located within the reasonable 50-mile proximity to the port of Jacksonville. Public services and facilities required to support the mine and protect public health, safety and the environment are available. Alternative 1 has direct rail access, which links to the port of Jacksonville. As a result, the cost of handing/transportation of materials is reduced. The implementation of Alternative 1 is expected to have a beneficial economic impact on the adjacent community due to its projected employment of 150-200 people for 8 years.