processing system to support mineral extraction. This mining technique uses a closed loop system designed for water reuse and recycling. It is estimated that 83% of the water within the system is reused. Approximately 17% is lost to evaporation, retention on processed minerals and infiltration to the surficial aquifer in the tailings/reclamation cell. This process reduces environmental impacts by decreasing UFA withdrawals.

Twin Pines will only pump water from the UFA wells when water is needed to be added to maintain the optimal water volume in the process water pond. Water usage will be monitored by installing flow meters on the production wells in the UFA and throughout the mineral processing system. Twin Pines will perform regular meter maintenance, testing, and calibration to ensure best practice water conservation. Attachment A illustrates the process flow for the proposed mining operations.

4.4 Percentage of Make-Up Water (MUW)

This proposed system at the Saunders Mine operations inherently minimizes the amount of MUW needed by recycling and reusing water. Water losses are primarily due to evaporation and infiltration of water in the tailings back into the Surficial Aquifer (16%) and the remaining moisture in the final product (<1%).

4.5 Water Conservation Measures

Twin Pines will implement the following conservation measures at the proposed Saunders Mine:

- Recycling and reuse of water within the mining system
- Pipeline inspection and detection of leaks,
- Meter maintenance, testing, replacement, calibration,
- Promote a water conservation education program,
- Prevention of unauthorized or excessive water use.

This will be a new mine site using a mining technique that is different from conventional "wet mining", which utilizes a dredge and floating concentrator to mine and process heavy mineral- bearing sands. The "dragline" method is flexible and allows for strategic recovery of existing ore resources. The maximum mining depth is 50 feet. More precision is possible than with typical dredge mining methods. In addition, having the PCPs located in close proximity of the wet processing plant and process water pond allows for concentrating activities in one centralized location, thereby decreasing energy demands and creating an efficient method for process water reuse and recirculation.

Most of the pipelines will be installed above ground and will be inspected on a regular basis. When the mining operation is active, Twin Pines will train their employees to inform them of the importance of water conservation practices at the plant.

4.6 Water Conservation Measures and Upgrades

Conservation measures and improvements are selected based on operational benefit and cost savings. Measures and improvements will be reviewed periodically as part of the audit and review process by site management and those measures deemed appropriate will be implemented.

4.7 Plumbing Ordinances and/or Codes

Twin Pines will be in compliance with applicable plumbing code provisions requiring the use of ultra-