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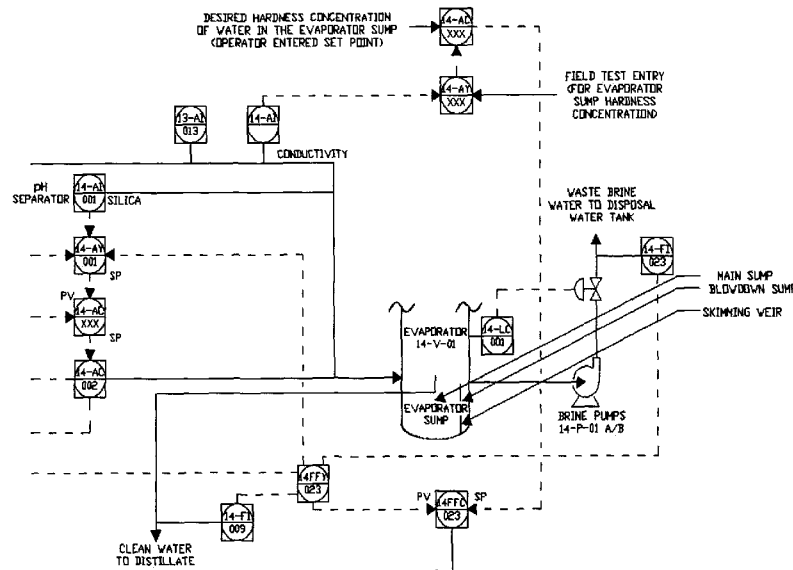


FIGURE 1A

(57) Abstract: A contaminant control system for an evaporative water purification process as deployed in a steam assisted gravity drainage process facility for in situ heavy oil recovery. The contaminant control system is specifically designed to simultaneously control silica, hardness and oil contaminant present in the evaporator feed water to prevent fouling of heat exchange surfaces and improve system reliability and can be applied to many evaporator designs available on the market.