



Colorado School of Mines Office for Technology Transfer

Methods of Managing Water in Oil Shale Development

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Description: This invention is a system and method of providing water management and utilization during the process of dewatering and retorting of oil shale. More specifically, the process described relates to co-producing potable and non-potable water, for various uses, during the extraction of petroleum from shale oil deposits. Generally, the process allows the production of multiple streams of waters or varying salinity and pressures at least one of which is of high enough pressure for reinsertion into geological formations or reservoirs, and another which may supply a potable water source. In one embodiment, the high pressure required for reinserting the non-potable water into geological formation or reservoirs may be utilized for producing the potable water supply. In another embodiment, the non-potable water supply may also be used for entraining and sequestering undesired emissions, such as CO₂.

Potential Areas of Application

- Oil shale drilling
- Sequestering of CO₂
- Production of potable water

Main Advantages of this Invention

- Cost of producing potable water is low
- Reuse of water in drilling procedures
- Significant dewatering of the oil shale deposit

Intellectual Property Status: Patent granted

ID number: US Patent 7,662,275

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

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