

### ***Subsurface Reclamation for an ICP Oil Shale Project***

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Shell successfully completed a test of groundwater isolation using a freeze wall, the in situ oil shale conversion process (ICP), oil production, and active source zone groundwater reclamation of its Mahogany Isolation Test (MIT) project on Shell fee lands in the Piceance Creek Basin. The MIT was a small-scale field project executed to evaluate the effectiveness of containment through ground freezing technology in the oil shale environment and was a microcosm of a commercial ICP project testing the life cycle of ICP that also included oil shale pyrolysis and groundwater reclamation. Baseline water quality was established prior to pyrolysis and compared to potential constituents of concern (CoCs) generated or potentially exacerbated by the ICP process. Field data from active source zone remediation and subsequent groundwater monitoring will be discussed.