

Some aspects of and research need for future development of Piceance Basin oil shale

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The five current Federal Research Development and Demonstration (RD&D) leases in Colorado are all in mid-Basin. If converted to standard leases, they would contain about ten percent of the total Federally owned in-basin resource. Two additional mid-basin leases are currently being evaluated. All propose to use some variation of in-situ methods. Reportedly, resource recovery using in-situ methods results in recovery in the range of 10 to 50 percent, with little prospect of producing co-products, such as cement, metals, Rare Earths, etc. The combined potential value of co-products could be equal to that of shale oil. Following in-situ recovery, the remaining 50 to 90 percent of the resource of >150 billion barrels, with a market value of several trillion dollars, would be of lower grade and more difficult to recover by future generations. A 5,120 acre lease in mid-Basin contains about 15+ billion barrels, about equivalent to the resource in the Prudhoe Bay field. Pending results from the existing RD&D leases, further such leasing is clearly not warranted. Research and development (R&D) is needed on a wide range of recovery methods, including underground mining, surface mining, and any other promising method. R&D opportunities should be made available to Federal agencies, academic institutions, and the private sector.