**Uravan Mineral Belt**

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The Uravan mineral belt is an arcuate zone of uranium-vanadium deposits in San Miguel, Montrose, and Mesa counties, Colorado, and [Grand County, Utah](http://en.wikipedia.org/wiki/Grand_County%2C_Utah). It was the area most productive of uranium in the United States in the early 20th century. The mineral belt includes the [Slick Rock](http://en.wikipedia.org/wiki/Slick_Rock%2C_Colorado), Gypsum Valley, [Uravan](http://en.wikipedia.org/wiki/Uravan%2C_Colorado), and [Gateway](http://en.wikipedia.org/wiki/Gateway%2C_Colorado) mining districts.[[11]](http://en.wikipedia.org/wiki/Uranium_mining_in_Colorado#cite_note-11)

Uranium mining in southwest [Colorado](http://en.wikipedia.org/wiki/Colorado) goes back to 1898, when a miner dug ten tons of yellow ore that tested high in [uranium](http://en.wikipedia.org/wiki/Uranium) and [vanadium](http://en.wikipedia.org/wiki/Vanadium) out of a deposit at Roc Creek in [Montrose County, Colorado](http://en.wikipedia.org/wiki/Montrose_County%2C_Colorado), and shipped it to [France](http://en.wikipedia.org/wiki/France), where M. M. C. Friedel and E. Cumenge identified the new mineral that they named [carnotite](http://en.wikipedia.org/wiki/Carnotite). The mineral was mined for its [vanadium](http://en.wikipedia.org/wiki/Vanadium), with [uranium](http://en.wikipedia.org/wiki/Uranium) as a byproduct.

Although [radium](http://en.wikipedia.org/wiki/Radium) had been discovered in 1898, it had been derived from [pitchblende](http://en.wikipedia.org/wiki/Pitchblende), and the radium content of [carnotite](http://en.wikipedia.org/wiki/Carnotite) was not known. [Carnotite](http://en.wikipedia.org/wiki/Carnotite) was suspected to contain [radium](http://en.wikipedia.org/wiki/Radium) as early as 1903, on the basis of the anomalously high radioactivity of carnotite ores.[[12]](http://en.wikipedia.org/wiki/Uranium_mining_in_Colorado#cite_note-12) But it was not until 1911 that the [radium](http://en.wikipedia.org/wiki/Radium) content of [carnotite](http://en.wikipedia.org/wiki/Carnotite) was confirmed by the [Marie Curie](http://en.wikipedia.org/wiki/Marie_Curie) laboratory in [Paris](http://en.wikipedia.org/wiki/Paris).[[13]](http://en.wikipedia.org/wiki/Uranium_mining_in_Colorado#cite_note-13) Although no more than a trace of [radium](http://en.wikipedia.org/wiki/Radium) was present in the ore, newly discovered medical applications had made radium worth $100 per milligram, making the radium in the carnotite ore worth much more than the [vanadium](http://en.wikipedia.org/wiki/Vanadium) or [uranium](http://en.wikipedia.org/wiki/Uranium).

Once [carnotite](http://en.wikipedia.org/wiki/Carnotite) was known to contain [radium](http://en.wikipedia.org/wiki/Radium), prospectors rushed to the [Colorado Plateau](http://en.wikipedia.org/wiki/Colorado_Plateau) of southwest [Colorado](http://en.wikipedia.org/wiki/Colorado) and adjacent southeast [Utah](http://en.wikipedia.org/wiki/Utah), and found [carnotite](http://en.wikipedia.org/wiki/Carnotite)-bearing sandstones of the Jurassic [Morrison Formation](http://en.wikipedia.org/wiki/Morrison_Formation) in [Mesa](http://en.wikipedia.org/wiki/Mesa_County%2C_Colorado), [Montrose](http://en.wikipedia.org/wiki/Montrose_County%2C_Colorado), and [San Miguel](http://en.wikipedia.org/wiki/San_Miguel_County%2C_Colorado) counties in Colorado. The carnotite was at first shipped to Europe for processing, but by 1913, the [Standard Chemical Company](http://en.wikipedia.org/w/index.php?title=Standard_Chemical_Company&action=edit&redlink=1) had built a radium processing plant in [Montrose County](http://en.wikipedia.org/wiki/Montrose_County%2C_Colorado) that had become the world’s largest supplier of [radium](http://en.wikipedia.org/wiki/Radium).[[14]](http://en.wikipedia.org/wiki/Uranium_mining_in_Colorado#cite_note-14)

The [Uravan](http://en.wikipedia.org/wiki/Uravan%2C_Colorado) mineral belt of Colorado and Utah supplied about half the world's [radium](http://en.wikipedia.org/wiki/Radium) from 1910 to 1922, and [vanadium](http://en.wikipedia.org/wiki/Vanadium) and [uranium](http://en.wikipedia.org/wiki/Uranium) were byproducts. The mines were forced out of business in 1923, when rich pitchblende deposits in the [Belgian Congo](http://en.wikipedia.org/wiki/Belgian_Congo) forced down the price of [radium](http://en.wikipedia.org/wiki/Radium). Mining revived in 1935 when the price of vanadium rose, and boomed after [World War II](http://en.wikipedia.org/wiki/World_War_II) when the government stockpiled [uranium](http://en.wikipedia.org/wiki/Uranium) for nuclear weapons programs.[[15]](http://en.wikipedia.org/wiki/Uranium_mining_in_Colorado#cite_note-15)

The Uravan mineral belt contains what was the last producing uranium mine in the state, the Topaz Mine, part of the Sunday Complex near [Uravan, Colorado](http://en.wikipedia.org/wiki/Uravan%2C_Colorado), which was closed down on March 18, 2009 by then owner [Denison Mines](http://en.wikipedia.org/wiki/Denison_Mines) due to depressed uranium prices.[[16]](http://en.wikipedia.org/wiki/Uranium_mining_in_Colorado#cite_note-16)

[Energy Fuels Inc.](http://en.wikipedia.org/w/index.php?title=Energy_Fuels_Inc.&action=edit&redlink=1) has applied for a permit to rehabilitate and begin pilot production at the Torbyn mine, a former uranium producer in [Mesa County](http://en.wikipedia.org/wiki/Mesa_County%2C_Colorado) just east of [Gateway](http://en.wikipedia.org/wiki/Gateway%2C_Colorado).[[17]](http://en.wikipedia.org/wiki/Uranium_mining_in_Colorado#cite_note-17)