



**SEG
2018**

Metals, Minerals, and Society

Keystone, Colorado, USA
September 22-25, 2018



SEG 2018 Field Trip Itinerary (Preliminary)

FT05 - Cripple Creek and Victor Mines

www.seg2018.org/field-trips.html#5

Date: September 21, 2018

Location: Departing from and returning to
Keystone, CO, USA

Leader: Douglas White

Included: Lunches, soft drinks, and bottled water.
Field guidebooks (provided by SEG, distributed at SEG
2018). Safety glasses and hard hats (provided
by Newmont).

Not Included: Additional clothing/gear.



Trip to Cripple Creek: Regional geology and mining will be discussed, including Breckenridge Alma and Fairplay Placer operations, South Park Geology, Sweet Home mine rhodochrosite, Lake George pegmatites, and the Florissant Fossil Beds.

Mine Tour: The tour will include stops at mining overlooks to review district geology and history. Current mining and process operations, reclamation, and community relations will also be discussed.

Cripple Creek Summary: The Cripple Creek mining district, a world-class district located 20 miles west of Colorado Springs, Colorado, has produced over 25 Moz of gold (750 tonnes). Mineralization is hosted in a Tertiary age alkaline volcanic/diatreme complex. Country rocks surrounding the volcanic diatreme are composed of Proterozoic-age Precambrian granites and metamorphic units. Gold mineralization within the Cripple Creek district occurs in two principal styles, although they are commonly overlapping: (1) broad zones of low-grade, gold-pyrite and telluride mineralization, which is microfracture controlled and disseminated, and (2) as fracture zones containing high-grade, gold-silver tellurides. Regional and district geology will be discussed during the field trip.

Gold has been produced from this district since its discovery in 1891. Historic production from underground mines and small, shallow surface mines is approximately 20 Moz of gold. Recent surface gold production, since 1995, is nearly 5.7 Moz. During 2016–2017, production reached 400 k oz annually as processing capacity increased from one to two valley leach facilities and a flotation and carbon-in-leach mill circuit were added to process higher-grade ores. Expected mine life is 2026. Sustaining mining for over 128 years is a product of exploration success, expanding the understanding of the deposit, and evolving lower-cost mining and processing methods.

Exploration activities continue in the district to optimize surface reserves, resources, and evaluation of underground potential. The current focus is on the surface open cut operations. To extend mine life, Newmont provides regional and cooperate support to the CC&V Geology team. Working within a regional network of mines provides new opportunities.

Newmont Mining Corporation acquired the CC&V operation in August 2015. The operation is part of Newmont's North American Region, headquartered in Elko, Nevada. Newmont has continued the project commitment to safe operations, historic preservation, reclamation, community relations, regulatory compliance, agency engagement, and recycling.

The elevation at the mine is about 3,100 m. Please bring warm, waterproof jackets. Long pants and closed-toe shoes are required.

(continued on next page)

Itinerary

Day 1 - Friday, September 21, 2018

- 7:30am - 8:00am: Loading
- 8:00am - 10:30am: Travel to Cripple Creek and Victor Operation
- 10:30am - 3:30pm: Mine tour
- 3:30pm - 6:00pm: Return to Keystone

Leader

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