



**SEG  
2018**

**Metals, Minerals, and Society**

Keystone, Colorado, USA  
September 22-25, 2018



## **SEG 2018 Field Trip Itinerary** (Preliminary)

### **FT03 - Lithium and Gold Associated with Rhyolites**

[www.seg2018.org/field-trips.html#3](http://www.seg2018.org/field-trips.html#3)

**Date:** September 18-21, 2018

**Location:** Departing from and returning to Reno, NV, USA with three nights in Tonopah, NV

**Leaders:** Ruth A. Carraher, Jonathan G. Price, Ted Wilton

**Included:** Three nights lodging (September 18, 19, and 20) in Tonopah, Nevada; transportation by van from and back to Reno; meals while on the road (breakfasts on September 19-21; lunches on September 18-21; dinners on September 18-20).

**Not Included:** Airline flights to and from Reno; hotel in Reno on September 17 and 21.



The closest hotels to the airport are listed below. Participants staying in hotels will be picked up at the Best Western Hotel, 1981 Terminal Way on Tuesday, September 18, 2018, at 8:00am.

**Best Western Sure Stay Plus Hotel**, 1981 Terminal Way, Reno, NV 89502

+1 (800) 780-7234 or +1 (775) 348-6370

<http://bit.ly/BWreno>

**Hyatt Place Reno Tahoe Airport**, 1790 East Plumb Lane, Reno, NV 89502

+1 (775) 826-2500

<http://bit.ly/HYATTreno>

The field trip will examine active mines and exploration projects, geochemical and geophysical data, and tectonic setting to address a series of questions about lithium and gold deposits. What is the relation of magma chemistry to mineralization? Is melting of peculiar crust necessary? How do lithium-rich brines and lithium-rich clay deposits form? What are the roles of meteoric water and hydrothermal fluids in the formation of the lithium deposits? How does eruption of tuff impact potential gold mineralization? How important is tectonic setting to the development of world-class lithium and gold deposits? What are the best guides for exploration?

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# Itinerary

## Day 1 - Tuesday, September 18, 2018

- 7:30am - 7:40am: Participants who need to drop off a vehicle will meet at 7:30am in the parking lot of the Nevada Bureau of Mines and Geology, Great Basin Science Sample and Records Library, 2175 Raggio Parkway, Reno, NV 89512. Depart promptly at 7:40am.
- 7:50am - 8:00am: Participants who fly into Reno will meet in the lobby of the Best Western Hotel, 1981 Terminal Way, Reno, NV 89502. Depart promptly at 8:00am.
- 10:30am: Rest stop in Hawthorne
- 12:00pm - 4:00pm: Tour the Eastside Project, Monte Cristo Range – a gold-silver deposit
- 4:30pm - 6:00pm: Drive to Tonopah to examine Eastside core, perhaps after checking in at the Mizpah Hotel.
- 6:30pm: Dinner in Tonopah, with discussions regarding Li and Au.

### Accommodation

**Mizpah Hotel**, 100 North Main Street, Tonopah, Nevada 89049  
+1 (855) 337-3030 or +1 (775) 482-3030 | [www.themizpahhotel.com](http://www.themizpahhotel.com)

## Day 2 - Wednesday, September 19, 2018

- 8:00am: Depart the parking lot of the Mizpah Hotel
  - Stop 1** along the road on the east side of Clayton Valley for an overview of the tectonic setting and view of the lithium brine ponds.
  - Stop 2** with Albemarle Corp., discussion of the brine ponds and hydrogeology of the basin.
  - Stop 3** at the south end of Angel Island, to examine the lithium-rich clay deposits there (Cypress Development Corp. & Red Rock Exploration), plus a brief discussion of the work of Pure Energy Minerals in the southern part of Clayton Valley.
  - Stop 4** between Clayton Ridge and the Montezuma Range to examine fresh and weathered rhyolite tuff in outcrop and obsidian in the streambed (potential sources of lithium).
  - Stop 5** at the South Lithium Basin project – to examine outcropping clay and related lacustrine sediments.
  - Stop 6** back in Tonopah to examine core from the South Lithium Basin project.
- 7:00pm: Dinner in Tonopah, with discussions with discussion of Au-mining scams on playas, analytical methods for Li-clay deposits, and regulatory issues regarding Li mining.

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## Day 3 - Thursday, September 20, 2018

- 8:00am: Depart the parking lot of the Mizpah Hotel.
- 9:15am: Arrive at the Round Mountain mine.  
Most of the day will be tours of the gold mines at Round Mountain and nearby Gold Hill.
- 4:00pm: Return to Tonopah for a tour and dinner at the Tonopah Mining Park, plus examination of core and geophysical data from Pure Energy Minerals' project in Clayton Valley.
- 6:30pm: Dinner at the Tonopah Mining Park.

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## Itinerary *(cont.)*

### Day 4 - Friday, September 21, 2018

- 8:00am: Depart the parking lot of the Mizpah Hotel.
- 8:30am: Tour Hasbrouck Mountain, a gold-silver deposit.
- 11:30am: Depart for Reno, by way of Columbus Salt Marsh – another lithium prospect.
- 5:00pm: Arrive in Reno in time for the Friday evening Geological Society of Nevada meeting.

### Accommodation

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## Leaders

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