

Short Course on Ore Deposits Mapping
Curso Corto sobre Cartografía de Yacimientos Minerales

September 1-11. 2005

Course Details:

Mark Barton and Eric Seedorff will be leading an extended field trip through the Great Basin that will be an opportunity to see ore deposits of various types and ages, set in the context of the structural and magmatic evolution of the region. The trip is designed for graduate students taking an advanced ore deposits class, but we will make available approximately 15 slots for members of industry. The trip will include a course that teaches the “Anaconda-style” of detailed mapping in the Yerington district, Nevada. The district contains porphyry copper and skarn mineralization, but the mapping method is adaptable to any type of deposit. The trip will also include tours of Birch Creek, California [F-Be-W-(Zn) greisen / skarn], Humboldt, Nevada [IOCG occurrences], the Eureka district, Nevada [partially superimposed systems, with a Carlin-type Au occurrence at Archimedes, porphyry Mo-Cu to replacement Zn-Pb-Ag at Ruby Hill, and top of F-W-Zn-Be-(Mo-Sn) system at McCullough Butte], and brief overviews of the Robinson district, Nevada [porphyry Cu-(Mo-Au) and related skarn and distal Au-Ag deposits], Tonopah, Nevada [low-sulfidation epithermal Ag-Au], Goldfield, Nevada [high-sulfidation epithermal Au], and Oatman, Arizona [LS epithermal Au-Ag].

The trip will take 11 days round trip from Tucson, covering about 3000 miles in 4WD vehicles. Alternatively, industry geologists can begin and end the trip in Reno and do the Birch Creek, Yerington, and Humboldt segments in 8 days (1 – 8 September) but miss everything from Eureka onward. The cost of the trip for industry geologists will be US\$2400 (same price for either the 8- or 11-day options), which includes ground transportation, lunches in the field, double-occupancy accommodations in motels each night during the trip, and a personal copy of SEG Guidebook Volume 32. Breakfasts and dinners are not included in the cost of the trip, which can be purchased at restaurants. Industry participants also will need to provide their own transportation to Tucson or Reno and spend two nights in motels of their choice in Tucson or Reno the night preceding and following the trip. You can respond via e-mail to Seedorff@geo.arizona.edu or lzurcher@geo.arizona.edu with an expression of interest, and we will contact you about reserving a place. We expect this trip to sell out quickly.

Course Tentative Outline:

| Date | Location | Geology | Duration | Driving time (hrs) |
|-------------|---|---|-----------------|---------------------------|
| 1-Sep-05 | drive from Tucson to Bishop | | all day | 12 hrs |
| 2-Sep-05 | Birch Creek and drive to Yerington | Birch Creek pluton & aureole field trip: Granite-related F-Be-W(-Zn) greisen/skarn | 7 am to 5 pm | 3 hrs |
| 3-Sep-05 | Yerington | Yerington District field trip; Ankles to scalp view of magmatic-hydrothermal system(s) | 8 am to 6 pm | |
| 4-Sep-05 | Yerington | Albite Hills Na(Ca) alteration field trip; and MacArthur Cu porphyry bench mapping | 7-9; 9-5 | |
| 5-Sep-05 | Yerington | MacArthur Cu porphyry bench mapping | 7 am to 5 pm | |
| 6-Sep-05 | Yerington | Ludwig skarn complex aureole (hornfels/marble, endoskarn, skarn, lode) field trip | 7 am to 6 pm | |
| 7-Sep-05 | Yerington and drive to Lovelock | Casting Copper skarn mapping | 8 am to 5 pm | 2 |
| 8-Sep-05 | Humboldt and drive to Eureka | Buena Vista hills and Buena Vista mine area field trip; IOCG bottom to middle part of system | 8 am to 4 pm | 4 |
| 9-Sep-05 | Eureka and drive to Ely | Archimedes, Ruby Hill and McCullough Butte field trip; Carlin Au, porphyry Mo-Cu to replacement Zn-Pb-Ag, and top of F-W-Zn-Be(-Mo-Sn) superimposed systems | 8 am to 6 pm | 1 |
| 10-Sep-05 | Ely and drive to Las Vegas via Tonopah, Goldfield | Robinson porphyry Cu(-Mo-Au) and replacement systems field trip (2 hours), Tonopah adularia-sericite epithermal Ag-Au overview (1 hour), and Goldfield acid-sulfate Au overview (2 hours) | 7 am to 7 pm | 7 |
| 11-Sep-05 | Drive from Las Vegas to Tucson via Oatman | Oatman epithermal Au field trip (3 hours) | 7 am to 7 pm | 8 |