

SEG FOUNDATION STUDENT FIELD TRIP 14
COPPER-GOLD-SILVER-MOLYBDENUM METALLOGENY OF NORTHERN CHILE
MARCH 6 – 14, 2015

– ITINERARY –

| Date | Itinerary | Overnight |
|-------------------|--|-----------|
| 6-Mar Friday | <p>7:00 PM Assemble at Hotel La Casona, Copiapó Safety and Logistics Meeting for all participants.</p> <p><u>Evening Lecture:</u> Regional Geology of Northern Chile and Introduction to Mine Visits</p> <p><u>Lodging:</u> Hotel La Casona reservas@lacasonahotel.cl Bernardo O'Higgins No. 150 Telé: +56-52-217-278 or 277</p> | Copiapó |
| 7-Mar Saturday | <p>7:30 AM Depart for Punta del Cobre Cu-(Au) breccia-manto system. Discuss Punta del Cobre District mineralization styles and Cu-Au vein systems</p> <p><u>Contacts:</u> Radu Almasán ralmasan@pucobre.cl Superintendente de Geología Telé: +56-52-205885 Pucobre</p> <p><u>Evening Lecture:</u> Epithermal Systems; Geochemistry and Alteration Characteristics</p> <p><u>Lodging:</u> Hotel La Casona</p> | Copiapó |
| 8-Mar Sunday | <p>6:30 AM Depart for Esperanza high-sulfidation epithermal system Discuss northern Chile high- and low-sulfidation Au-Ag systems, styles and ages.</p> <p><u>Contacts:</u> Chico Azevedo Chico.Azevedo@gfexpl.com Gold Fields Exploration</p> <p><u>Lodging:</u> Hotel La Casona</p> | Copiapó |
| 9-Mar Monday | <p>6:30 AM Depart for Atacama Kozán Cu-Fe vein/skarn system Discuss Cu-Fe vein/skarn mineralization in andesitic volcanic rocks</p> <p><u>Contacts:</u> Cindy Gonzalez Salazar, Jefe Geologia cindygonzalez@atacamakozan.cl S.C. Minera Atacama Kozan Telé: +56-52-203824</p> <p><u>Lodging:</u> Hotel La Casona</p> | Copiapó |
| 10-Mar Tuesday | <p>6:00 AM Depart for Manto Verde breccia-hosted Cu-(Au) systems Discuss breccia orebodies; Atacama regional fault zone, and structural control of breccia-type orebodies</p> <p><u>Contacts:</u> Mauricio J. Arce S., Super. Geologia mauricio.arces@angloamerican.com Telé: +56-52-204-228 Alfonso Sanguinetti Rojas, Sr. Explo alfonso.sanguinetti@angloamerican.com Anglo Chile Telé: +56-52-204-229</p> <p><u>Evening Lecture:</u> Chilean manto-type Cu-Ag systems</p> <p><u>Lodging:</u> Hostería Taltal hosteriataltal1@gmail.com Avenida Calle Esmeralda, 671 Telé: +56-55-611-173 Fax: -625</p> | Taltal[2] |

| Date | Itinerary | | Overnight |
|---------------------|-------------------|--|---|
| 11-Mar Wednesday | 7:30 AM | Depart for Franke manto-type Cu-Ag system Discuss manto-type Cu-Ag systems in northern Chile | |
| | <u>Contacts:</u> | Eduardo Pérez, Jefe de Geologo Guillermo Santander, HR Antofagasta Office: KGHM Minera Franke | eduardo.perez@kghm.com guillermo.santander@KGHM.com Telé: (+56) 55-256-3453 - Santander |
| | <u>Lodging:</u> | Hostería Taltal | Taltal[2] |
| 12-Mar Thursday | 6:30AM | Depart for El Guanaco high-sulfidation Au-(Cu-As) system Compare El Guanaco to Esperanza; discuss variations in epithermal systems | [3] |
| | <u>Contacts:</u> | Stabro Kasaneva Christián Cubelli, Gerente General Guanaco Compania Minera Limitada | stabro.kasaneva@minaguanaco.cl christian.cubelli@minaguanaco.cl |
| | <u>Lodging:</u> | Hotel Holiday Inn Express Avenida Grecia 1490 | ventas.anf@hilatam.com Telé: (+56) 55-228-888 Antofagasta[4] |
| 13-Mar Friday | 6:00AM | Depart for Fortuna de Cobre / Lomas Bayas Cu-Mo porphyry Discuss Paleocene-age porphyry systems; exploration considerations for large hydrothermal systems; supergene oxidation and oxide production | |
| | <u>Contacts:</u> | Mauricio Rubio Gonzales Martha Aguilera Glencore | Mauricio.Rubio@glencore.cl Martha.Aguilera@glencore.cl |
| | <u>Evening:</u> | Closing dinner hosted by SEG Foundation Awarding of Certificates of Completion to participants | |
| | <u>Lodging:</u> | Hotel Holiday Inn Express | Antofagasta |
| 14-Mar Saturday | End of Field Trip | Participants depart on their own schedules The charter motor coach will take participants to Antofagasta airport (ANF) | Antofagasta |

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[1] - Distance: Copiapo to Manto Verde, approx 150 km

[2] - Distance: Manto Verder to Taltal, approx. 375 km

[3] - Distance: PanAmerican Highway to El Guanaco = approx. 90 km round-trip

[4] - Distance: Taltal to Antofagasta, 309 km

Emergency Contacts

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|----------------------|-----|
| Carabineros (Police) | 133 |
| Ambulance | 131 |

| <u>Location</u> | <u>Medical Center</u> | |
|-----------------|---|-------------------------|
| Copiapó | Hospital Regional de Copiapó - San José del Carmen Los Carrera No. 1320 | Telé: (+56) 52 246-7000 |
| | Hospital Avda Vicuna | Telé: (+56) 52 223-1580 |
| El Salvador | Hospital de El Salvador Avda Diego Portales | |
| Antofagasta | Hospital Regional Avda Argentina 1962 | Telé: (+56) 55 656-602 |
| | Hospital Veintiuno de Mayo | |
| | Centro Médico Baquedano Ave. Baquedano at Jorge Washington | |