



**American  
Exploration & Mining**  
ASSOCIATION

# Secure Supply Chains Start with Us

American Exploration & Mining Association's 128th  
Annual Meeting, Exposition & Short Courses  
December 4 - 9, 2022  
Nugget Casino Resort  
Sparks, Nevada, USA

*First Registration Brochure and Call for Papers*

*Updated 6/28/22*



Short  
Courses  
Dec 4-6



Technical  
Sessions  
Dec 7-9



Exhibits  
Dec 7-9

# American Exploration & Mining Association's 2022 Annual Meeting Sponsors



**\$10,000 and Up**



FLORIN ANALYTICAL SERVICES

Kappes Cassiday & Associates & Florin Analytical Services

Teck American Incorporated

**Teck**



**\$5,000 - \$9,999**

Geotemps, Inc. & Geopros, Inc.

Exsolve

**EXSOLVE**



Crowley Fleck PLLP

**\$2,500 - \$4,999**

Parsons Behle & Latimer



A Professional Law Corporation

SRK Consulting (U.S.), Inc.



Brown and Caldwell



Nugget Casino Resort



NewFields



Perkins Coie

**\$1,000 - \$2,499**

MRC Recruiting



Legarza Exploration LLC



Sailing Rock Consulting



Montgomery & Associates

Brooks & Nelson



Original Creations

**Sailing Rock  
Consulting**



**Up to \$999**

International Directional Services



Become a Sponsor Today ~ Contact Deanna Stroh - [dstroh@miningamerica.org](mailto:dstroh@miningamerica.org)

# Table of Contents

|  |        |
|--|--------|
| Exhibit Hall Hours and Activities.....           | Page 2 |
| Annual Meeting Program Committee.....            | Page 3 |
| Schedule of Events .....                         | Page 4 |
| 2022 Short Course Program at a Glance .....      | Page 5 |
| 2022 Technical Session Program at a Glance ..... | Page 6 |

## 2022 Short Course Program

### Three Day Courses - Sunday, Monday & Tuesday

|  |        |
|--|--------|
| Using SRCE Version 2.0 - New and Updated Training .....                        | Page 7 |
| Practical Methods for Geostatistics, Spatial Analysis and Block Modeling ..... | Page 7 |

### Two Day Courses - Monday & Tuesday

|  |             |
|--|-------------|
| Understanding the SEC's New Mining Disclosure Rule: S-K 1300 ..... | Page 8      |
| NEPA Training .....  | Pages 8 & 9 |

### One Day Short Courses - Monday

|   |         |
|---|---------|
| Mastering EXCEL for Earth Science Professionals ..... | Page 9  |
| MSHA Surface Refresher Training - 8 Hr .....          | Page 10 |

### One Day Short Courses - Tuesday

|  |         |
|--|---------|
| Fundamentals of Mineral & Metallurgical Processing .....             | Page 10 |
| U.S. Mining Law One Day Short Course & Handbook .....                | Page 11 |
| Mine to Mill Reconciliation: Tool for Productivity Improvement ..... | Page 12 |

|                            |               |
|----------------------------|---------------|
| 2022 Call for Papers ..... | Pages 13 & 14 |
|----------------------------|---------------|

## 2022 Technical Session Program

### Wednesday Morning Sessions

|  |               |
|--|---------------|
| State & Province Reports I .....   | Page 15       |
| Alaska: The Minerals, the Standards, and the Challenges .....  | Page 15       |
| Growth Companies .....   | Page 15       |
| Sustainable Mining to Support the Renewable Energy Transition.....   | Pages 15 & 16 |
| Exploration & Mine Permitting: Success Strategies for a Changing Process.....  | Page 16       |
| Old Meets New: Merging Old School Tactics with New Technology to Define and Manage<br>Social, Political, Regulatory, and Reputational Risk - Positive Strategies for<br>Media, Community Engagement and Social License ..... | Pages 16 & 17 |

### Wednesday Afternoon Sessions

|  |               |
|--|---------------|
| State & Province Reports II .....                                      | Page 17       |
| Accessing Capital for Exploration, Development and Operations .....    | Page 17       |
| New Projects in Old Districts .....                                    | Pages 17 & 18 |
| Technical and Partnership Strategies for Hardrock AML Cleanup.....     | Pages 18      |
| Multiple Use on Public Lands and the Nation's Needs for Minerals ..... | Pages 18 & 19 |

### Thursday Morning Sessions

|   |               |
|---|---------------|
| Domestic Critical Minerals Development:<br>Battery-powered Rubber Hitting the Road or Deer in the Headlights? ..... | Page 19       |
| Students & Junior Professionals .....   | Pages 19 & 20 |
| Mining Hydrology I .....  | Page 20       |
| NEPA Reform & Permitting for Strategic Minerals .....   | Pages 20 & 21 |
| Beyond Consultation: Toward Collaboration with Indian Tribes in<br>U.S. Mining and Infrastructure Projects .....    | Page 21       |

## Table of Contents... (continued)

### Thursday Afternoon Sessions

|   |         |
|---|---------|
| Large Left Lateral Leaps to Geologic .....  | Page 22 |
| Securing Mining's Future with Innovative HR (People) Strategies .....   | Page 22 |
| Mining Hydrology II: Site Characterization - Identifying, Quantifying, and Evaluating Uncertainty .....   | Page 22 |
| Large Left Lateral Leaps for Environmental Professionals - Mining and The Green Economy<br>Ready! Set! Go! The Race is on for Environmental Stability ..... | Page 23 |
| ESG & Responsible Mining .....  | Page 23 |

### Friday Morning Sessions

|  |               |
|--|---------------|
| The Curt Everson Great Basin Exploration Session .....                           | Pages 23 & 24 |
| Resource Reserve Reporting Guidelines .....                                      |               |
| Artificial Intelligence & Data Analytics Applications in Mining Operations ..... | Page 24       |
| Mine Closure and Reclamation .....   | Pages 24 & 25 |
| We Can Secure Our Supply Chains, But Will They Let Us? .....                     | Page 25       |

|   |         |
|---|---------|
| Annual Meeting Sponsorships .....                   | Page 26 |
| Student Poster Contest .....                        | Page 27 |
| Professional Poster Participants .....              | Page 28 |
| Nugget Registration Information .....               | Page 29 |
| Annual Meeting Registration Information .....       | Page 30 |
| Advanced Discount Registration Form .....           | Page 31 |
| Exhibitor Advanced Discount Registration Form ..... | Page 32 |

### Exhibitor & Core Shack Listings

|                        |               |
|------------------------|---------------|
| By Company .....       | Pages 33 - 35 |
| By Category .....      | Pages 35 - 39 |
| By Booth Number .....  | Pages 39 - 42 |
| Exhibit Hall Map ..... | Outside Cover |

## EXHIBIT HALL HOURS & ACTIVITIES

### TUESDAY DECEMBER 6 ~ 8:00 am - 5:00 pm

- Exhibitor Set up

### WEDNESDAY DECEMBER 7 ~ 9:00 am - 6:30 pm

- Exhibits Open ~ 9:00 am
- Morning Coffee Break ~ 9:35 - 10:20
- Exhibit Hall A La Carte Lunch Station ~  
    Noon - 1:30 pm

### Afternoon Coffee Break ~ 3:35 - 4:20

- Welcoming Reception ~ 5:30 pm - 6:30 pm

### THURSDAY DECEMBER 8 ~ 9:00 am - 6:30 pm

- Exhibits Open ~ 9:00 am
- Morning Coffee Break ~ 9:35 - 10:20
- Exhibit Hall A La Carte Lunch Station ~  
    Noon - 1:30 pm
- Afternoon Coffee Break ~ 3:35 - 4:20
- Happy Hour Reception ~ 5:30 pm - 6:30 pm

### FRIDAY DECEMBER 9 ~ 9:00 am - 11:00 am

- Exhibits Open ~ 9:00 am - 11:00 am
- Morning Coffee Break ~ 9:35 - 10:20
- **TEAR DOWN - 11:00 am - 5:00 pm**

## Annual Meeting Program Committee



### 2022 Program Chairman

**Todd Glindeman**  
Mining Market Sector Director  
Brown and Caldwell  
Boise, ID  
[TGlinderman@brwncald.com](mailto:TGlinderman@brwncald.com)



### 2022 Program Co-Chairman

**Chris Guedes**  
Permitting Manager  
Itafos Conda LLC  
Soda Springs, ID  
[cguedes@itafos.com](mailto:cguedes@itafos.com)



Todd Glindeman is the Mining Market Sector Director for Brown and Caldwell (BC) and is based in Boise, Idaho. He has been with BC his entire 21-year career. Todd has been leading and managing large-scale mining compliance and permitting projects in Idaho for more than decade. He works with mining industry partners to develop plans for efficiently addressing regulatory challenges and negotiating the permitting processes. He has more than 20 years of experience in client service, program and project management, and environmental services.

Todd graduated from the University of Idaho with BS and MS degrees in Environmental Science in 1999 and 2006, respectively. He is an active member of the Idaho Mining Association and has participated as a conference planning committee member for the Idaho Mining Conference since its inception in 2018. Todd has also participated in board positions for the Boise Section SME, including serving as the 2018–19 Chair.

Chris Guedes began NEPA permitting full-time in 2013. Prior to working in the NEPA field, Chris worked as a civil engineer as well as in the medical private practice industry in management and consulting. Chris holds a BA in Business Management, an MBA, and a BS in Civil Engineering.

### 2022 Annual Meeting Staff Committee Members & Staff Contacts

#### Staff Committee Members

##### AEMA Executive Director

**Mark Compton**  
Executive Director  
509.624.1158 x 116  
[mcompton@miningamerica.org](mailto:mcompton@miningamerica.org)

##### Meeting & Exhibit Coordinator

**Pat Heywood**  
Operations & Finance Director  
509.624.1158 x 112  
[pheywood@miningamerica.org](mailto:pheywood@miningamerica.org)

##### Exhibitor Management & Registration

**Mike Heywood**  
Exhibitor & Membership Services  
509.624.1158 x 110  
[mheywood@miningamerica.org](mailto:mheywood@miningamerica.org)

#### Staff Contacts

**Kenna O'Neill**  
Communications & Outreach  
Manager  
509.624.1158 x 117  
[koneill@miningamerica.org](mailto:koneill@miningamerica.org)

**Sidney Smith**  
Government Affairs Manager  
509.624.1158 x 115  
[ssmith@miningamerica.org](mailto:ssmith@miningamerica.org)

**Deanna Stroh**  
Executive & Convention Svcs.  
Assistant  
509.624.1158 x 111  
[dstroh@miningamerica.org](mailto:dstroh@miningamerica.org)



### 2022 AEMA President

**Ron Rimelman, B.Sc.**  
Vice President, Environment,  
Health, Safety & Sustainability  
NOVAGOLD Resources, Inc.  
Evergreen, CO  
[ron.rimelman@novagold.com](mailto:ron.rimelman@novagold.com)



Ron Rimelman worked as a consultant to NOVAGOLD for 18 months prior to joining the Company in 2011. He is Vice President, Environment, Health, Safety & Sustainability. With nearly 30 years of environmental experience, Ron has managed environmental impact assessments and permitting activities for mines around the world, with a focus in Alaska and other northern climates. His most recent position was Vice President Environmental Services for Tetra Tech Inc., where he coordinated the natural resources group and took the lead on a range of projects, including preparing environmental impact statements for the Kensington and Red Dog Mines in Alaska. Ron also has extensive experience with mine permitting and water resource analysis, as well as financial and personnel management.



## SCHEDULE OF EVENTS



### SUNDAY DECEMBER 4

- 7:00 - 8:00 Sunday Short Course Badge Pickup
- 8:00 - 5:00 3-Day Short Courses
- 3:00 - 5:00 Registration & Packet Pick Up

### MONDAY DECEMBER 5

- 7:00 - 5:00 Registration & Packet Pick Up
- 8:00 - 5:00 Short Courses

### TUESDAY DECEMBER 6

- 7:00 - 5:00 Registration & Packet Pick Up
- 8:00 - 5:00 Short Courses
- Exhibitor, Core Shack & Student Poster & Professional Poster Set Up
- 2:30 - 5:00 AEMA Board Meeting - 3rd Fl. Southern Pacific
- 6:00 - 8:00 Hosted Awards & Recognition Reception - 5th Fl - Chalet Terrace

### WEDNESDAY DECEMBER 7

- 7:00 - 5:30 Registration & Packet Pick Up
- 7:00 - 9:15 Burrito Breakfast - *hosted by Kappes Cassidy & Florin Analytical Services*
- 8:00 - 11:30 Morning Technical Sessions
- 9:00 - 6:30 Exhibit Hall & Student Posters
- 9:35 - 10:20 Exhibit Hall Coffee Break (All sessions break)
- Noon - 1:30 Wednesday Keynote Speaker Luncheon - 1st Fl. Celebrity Showroom
- Exhibit Hall A La Carte Lunch Station
- 2:00 - 5:30 Afternoon Technical Sessions
- 3:35 - 4:20 Exhibit Hall Coffee Break (All sessions break)
- 5:30 - 6:30 Welcoming Reception in the Exhibit Hall
- 6:30 - 7:30 Students & Junior Professionals Reception

### THURSDAY DECEMBER 8

- 7:00 - 5:30 Registration & Packet Pick Up
- 7:00 - 9:15 Burrito Breakfast - *hosted by Kappes Cassidy & Florin Analytical Services*
- 8:00 - 11:30 Morning Technical Sessions
- 9:00 - 6:30 Exhibit Hall & Student Posters
- 9:35 - 10:20 Exhibit Hall Coffee Break (All sessions break)
- Noon - 1:30 Thursday Keynote Speaker Luncheon - 1st Fl. Celebrity Showroom
- Students & Junior Professionals Luncheon - 5th Fl. Chalet Terrace
- Exhibit Hall A La Carte Lunch Station
- 2:00 - 5:30 Afternoon Technical Sessions
- 3:35 - 4:20 Exhibit Hall Coffee Break (All sessions break)
- 5:30 - 6:30 Happy Hour Reception in the Exhibit Hall

### FRIDAY DECEMBER 9

- 7:00 - 11:00 Registration & Packet Pick Up
- 7:00 - 9:15 Burrito Breakfast - *hosted by Kappes Cassidy & Florin Analytical Services*
- 8:00 - 11:30 Morning Technical Sessions
- 9:00 - 11:00 Exhibit Hall & Student Posters
- 9:35 - 10:20 Exhibit Hall Coffee Break (All sessions break)
- 11:00 - 5:00 Exhibit Tear Down

## AEMA'S 2022 SHORT COURSE PROGRAM

| Date  | Three Day Short Courses  |  | Two Day Short Courses  |  | One Day Short Courses  |  |  |
|---|--|--|--|--|--|--|--|
| <b>SUNDAY</b><br><b>DEC 4</b><br>8:00 - 5:00  | <b>Using SRCE Version 2.0 New &amp; Updated Training</b><br><br>Jeff Parshley<br><i>SRK (U.S.), Inc.</i> | <b>Practical Methods for Geostatistics, Spatial Analysis &amp; Block Modeling</b><br><br>Todd McCracken<br><i>BBA E&amp;C Inc.</i> |  |  |  |  |  |
| <b>MONDAY</b><br><b>DEC 5</b><br>8:00 - 5:00  | <b>Using SRCE Version 2.0 New &amp; Updated Training</b><br><br>Jeff Parshley<br><i>SRK (U.S.), Inc.</i> | <b>Practical Methods for Geostatistics, Spatial Analysis &amp; Block Modeling</b><br><br>Todd McCracken<br><i>BBA E&amp;C Inc.</i> | <b>Understanding the SEC's New Mining Disclosure Rule S-K 1300</b><br><br>Greg Gosson<br><i>Wood &amp; Stella Searston Mine Technical Services</i> | <b>NEPA Training</b><br><b>Matt Petersen</b><br><i>SWCA Environmental Consulting</i> | <b>Mastering EXCEL for Earth Science Professionals</b><br><br>Javad Sattarvand<br><i>University of Nevada, Reno</i>                                      | <b>MSHA Surface Refresher Training 8 Hr</b><br><br>Tim Pruitt<br><i>Pruitt Safety</i>          |  |
| <b>TUESDAY</b><br><b>DEC 6</b><br>8:00 - 5:00   | <b>Using SRCE Version 2.0 New &amp; Updated Training</b><br><br>Jeff Parshley<br><i>SRK (U.S.), Inc.</i> | <b>Practical Methods for Geostatistics, Spatial Analysis &amp; Block Modeling</b><br><br>Todd McCracken<br><i>BBA E&amp;C Inc.</i> | <b>Understanding the SEC's New Mining Disclosure Rule S-K 1300</b><br><br>Greg Gosson<br><i>Wood &amp; Stella Searston Mine Technical Services</i> | <b>NEPA Training</b><br><b>Matt Petersen</b><br><i>SWCA Environmental Consulting</i> | <b>Fundamentals of Mineral &amp; Metallurgical Processing</b><br><br>Corby Anderson<br><i>Colorado School of Mines &amp; Courtney Young Montana Tech</i> | <b>U.S. Mining Law</b><br>Richard Angell & Kevin Johnson<br><i>Parsons Behle &amp; Latimer</i> | <b>Mine To Mill Reconciliation: Tool for Productivity Improvement</b><br><br>Abani Samal<br><i>GeoGlobal LLC</i> |
| <b>Tuesday Evening - Hosted Awards &amp; Recognition Reception - Chalet Terrace 6:00 - 8:00</b> |  |  |  |  |  |  |  |



## AEMA'S 2022 TECHNICAL SESSION PROGRAM

|                                  | MINERAL DEPOSITS<br>GEOLOGY & EXPLORATION  |  | BUSINESS & FI-<br>NANCE  | OPERATIONS   | ENVIRONMENTAL  | LEGISLATIVE &<br>PUBLIC AFFAIRS  | EXHIBIT HALL  |
|----------------------------------|--|--|--|--|--|--|---|
| DEC 7<br>WED AM<br>8:00 - 11:30  | <b>State &amp; Province Reports I</b><br><br>John Muntean<br><i>NV Bureau Mines &amp; Geology</i>  | <b>Alaska: The Minerals, the Standards &amp; the Challenges</b><br><br>Deantha Skibinski<br><i>AK Miners Association</i> | <b>Growth Companies</b><br><br>John Antwi<br><i>Elim Group of Companies</i>  | <b>Sustainable Mining to Support the Renewable Energy Transition</b><br><br>Dave Ellerbroek<br><i>Brown and Caldwell</i> &<br>Ehsan Vahidi<br><i>University of Nevada-Reno</i>                     | <b>Exploration and Mine Permitting: Success Strategies for a Changing Process</b><br><br>Ben Veach<br><i>Stantec</i> &<br>Rob Mullener<br><i>DeLamar Mining</i>      | <b>Old Meets New: Merging Old School Tactics with New Technology to Define and Manage Social, Regulatory, and Reputational Risk</b><br><br>Adam Hawkins<br><i>Global External Relations</i>                            | Exhibit Hall hours<br>9:00 - 6:30                                   |
| NOON - 1:30                      | WEDNESDAY KEYNOTE SPEAKER LUNCHEON - CELEBRITY SHOWROOM  |  |  |  |  |  | SANDWICH LUNCH  |
| DEC 7<br>WED PM<br>2:00 - 5:30   | <b>State &amp; Province Reports II</b><br><br>John Muntean<br><i>NV Bureau Mines &amp; Geology</i>   |  | <b>Accessing Capital for Exploration, Development &amp; Operations</b><br><br>Tim Alch<br><i>TAA Advisory, LLC</i>                       | <b>New Projects in Old Districts</b><br><br>Kennet Bertelsen<br><i>Morrison-Maierle</i> &<br>Samuel Siebenaler<br><i>Big Rock Industries</i>   | <b>Technical &amp; Partnership Strategies for Hardrock AML Cleanup</b><br><br>Kate Garufi<br><i>HDR, Inc.</i> &<br>Natalie Muilenberg<br><i>AZ Dept. of Equality</i> | <b>Multiple Use on Public Lands and the Nation's Needs for Minerals</b><br><br>Laura Granier<br><i>Holland &amp; Hart</i> &<br>Chris Stoneback<br><i>Crowley Fleck</i>   | Exhibit Hall hours<br>9:00 - 6:30                                   |
| 5:30 - 6:30                      | WEDNESDAY WELCOMING RECEPTION - IN THE EXHIBIT HALL  |  |  |  |  |  |   |
| 6:30 - 7:30                      | STUDENTS & JUNIOR PROFESSIONALS RECEPTION  |  |  |  |  |  |   |
| DEC 8<br>THUR AM<br>8:00 - 11:30 | <b>Domestic Critical Minerals Development</b><br><br>Chris Dail<br><i>Perpetua Resources</i> &<br>Peter Vikre<br><i>U.S.G.S.</i>                   |  | <b>Students &amp; Junior Professionals Session</b><br><br>Dale Kerner<br><i>Perpetua Resources</i> &<br>Sena Cicek<br><i>Nevada Gold</i> | <b>Mining Hydrology I</b><br><br>Ron T. Parratt, Jr.<br><i>Newmont</i> &<br>Mike Hardy<br><i>Lumos &amp; Associates</i>  | <b>NEPA Reform &amp; Permitting for Strategic Minerals</b><br><br>Ted Boling &<br>Bob Maynard<br><i>Perkins Coie LLP</i>   | <b>Beyond Consultation: Toward Collaboration with Indian Tribes in U.S. Mining &amp; Infrastructure Projects</b><br><br>Connie Rogers<br><i>Terra Law Group</i> &<br>Collette Brown-Rodriguez<br><i>8-Minute Solar</i> | Exhibit Hall hours<br>9:00 - 6:30                                   |
| NOON - 1:30                      | THURSDAY KEYNOTE SPEAKER LUNCHEON - CELEBRITY SHOWROOM   |  |  |  |  |  | SANDWICH LUNCH  |
| NOON - 1:30                      | STUDENTS & JUNIOR PROFESSIONALS LUNCHEON & STUDENT POSTER AWARDS   |  |  |  |  |  |   |
| DEC 8<br>THUR PM<br>2:00 - 5:30  | <b>Large Left Lateral Leaps to Geologic</b><br><br>Andrew Harley<br><i>SWCA Environmental Consulting</i>   |  | <b>Securing Mining's Future with Innovative HR (People) Strategies</b><br><br>Lindsey Schultz<br><i>MRC Mining Recruiting</i>            | <b>Mining Hydrology II Site Characterization – Identifying, Quantifying, and Evaluating Uncertainty</b><br><br>Scott Effner<br><i>Alloy Group</i> &<br>Dan Stanaway<br><i>Brown &amp; Caldwell</i> | <b>Large Left Lateral Leaps for Environmental Professionals - Mining &amp; the Green Economy</b><br><br>Shawn Calendine<br><i>hydroGEOPHYSICS</i>                    | <b>ESG and Responsible Mining</b><br><br>Jay Gear &<br>Korie Hicel<br><i>Coeur Mining, Inc.</i>  | Exhibit Hall hours<br>9:00 - 6:30                                   |
| 5:30 - 6:30                      | THURSDAY HAPPY HOUR RECEPTION - IN THE EXHIBIT HALL  |  |  |  |  |  |   |
| DEC 9<br>FRI AM<br>8:00 - 11:30  | <b>The Curt Everson Great Basin Exploration Session</b><br><br>Chad Peters<br><i>Ridgeline Minerals</i> &<br>Bob Felder<br><i>Orogen Royalties</i> |  | <b>Resource Reserve Reporting Guidelines</b><br><br>Abani Samal<br><i>GeoGlobal LLC</i>  | <b>Artificial Intelligence &amp; Data Analytics Applications in Mining Operations</b><br><br>Ali Soofastaei<br><i>Vale-Australia</i> &<br>Javad Sattarvand<br><i>University of Nevada-Reno</i>     | <b>Mine Closure &amp; Reclamation</b><br><br>Nick Rauh<br><i>AGRU America</i> &<br>Steve Boyce<br><i>Haley &amp; Aldrich, Inc.</i>                                   | <b>We Can Secure Our Supply Chains, But Will They Let Us?</b><br><br>Mark Compton<br><i>AEMA</i>   | Exhibit Hall hours<br>9:00 - 11:00<br><br>Tear Down<br>11:00 - 5:00 |
| 11:00 - 5:00                     | EXHIBITOR TEAR DOWN  |  |  |  |  |  |   |



## 2022 Short Course Program

### THREE DAY SHORT COURSES | SUNDAY DECEMBER 4, MONDAY DECEMBER 5 & TUESDAY DECEMBER 6

#### USING SRCE VERSION 2.0 – NEW AND UPDATED TRAINING

Cost: \$715

Instructor: **Jeff Parshley**, P.G., C.P.G., Corporate Consultant (Mine Closure), SRK Consulting (U.S.), Inc., Reno, NV

##### Course Description

The Standardized Reclamation Cost Estimator (SRCE) is a public domain Microsoft Excel-based tool that has been used in Nevada for more than 10 years to calculate mine closure costs for financial assurance. The SRCE uses straightforward user inputs to create a first-principles estimate of closure costs. In addition to the Nevada-specific version, another version of SRCE is available for use in other states and internationally.

Over the last two years the non-Nevada version has been significantly upgraded with numerous new features and improved performance to create SRCE 2.0. The new features greatly expand the capabilities and functionality of the model - so much that we have completely re-vamped our standard SRCE training short course.

Because so many of the new features focus on things like detailed cost scheduling, filtering, and tracking costs by category, we have completely updated our curriculum to focus on strategizing the model setup based on site or company specific needs, and the type and intent of the cost estimate.

There will still be a heavy emphasis on hands-on training, but after an initial few simple exercises, we will focus on closure cost types, how to set up a closure chart of accounts, developing useful filters, and effective scheduling for project-specific needs.

Attendees will need to bring a laptop computer and engineering scale ruler for the hands-on exercises. If users wish to bring an existing SRCE model from a previous version, we will show them the process of importing that model into SRCE Version 2.0.

##### About the Instructor:



**Jeff Parshley** is the Corporate Consultant (Mine Closure) of SRK Consulting and an experienced mine closure strategist and regulatory specialist. He has extensive, global experience working with industry and governmental organizations contributing to the development of several regulatory guidelines for mine closure and closure cost estimating and development of closure related corporate standards, policies, and guidance documents. He has worked with legal and policy aspects of mining projects since his early career and regularly works on World Bank and IFC compliance projects. A graduate of Dartmouth College, Jeff has nearly 40 years of experience, including more than 30 years in mine closure.

#### PRACTICAL METHODS FOR GEOSTATISTICS, SPATIAL ANALYSIS AND BLOCK MODELING

Cost: \$715

Instructor: **Todd McCracken**, P. Geo., Director – Mining & Geology, BBA E&C Inc., Sudbury, ON CANADA

##### Course Description

Every resource estimation completed always has an aspect of the job that may not fit within the normal practices and a solution is needed. This 2-day course, geared for geologist, engineers and other mining professional, presents practical methods to overcome the typical “stumbling blocks” for the various stages of a resource estimation while being consistent with industry standards.

Topics to be covered include:

- Data Management
- Domain selection
- Sample compositing
- Block size selection
- Model validation
- Solid / wireframe models
- Top cut / bottom cut
- Geostatistics
- Estimation strategy
- Resource Classification

**Top ‘take aways’:** There are acceptable methods to overcome every obstacle during the resource estimation process.

**Audience:** Attendees should have intermediate to advanced level of geological and resource modeling skills. Should have a solid understanding of geostatistics. This is not a software training course.

**Course delivery strategy:** The course is delivered in a manner where the concepts are presented to the various topics, then draw out examples from the participants to re-enforce the concepts.

##### Laptops are not needed

##### About the Instructor:



**Todd McCracken** is a geologist with more than 30 years of experience in mineral exploration, mine operations and resource estimation. His experience is with mine operations and exploration. Todd’s commodities expertise includes gold, base metals, nickel-PGE, lithium pegmatite, and vanadium. Todd has worked on projects across Canada, the United States, Mexico, Ghana, Peru, Madagascar, Nicaragua, and China.

Todd is the Director - Mining & Geology - Central Canada for BBA. The group provides project management, QA/QC programs, due diligence reviews, resource estimations, mine design, ventilation, rock mechanics, tailing facilities, preliminary economic analysis (PEA), as well as prefeasibility and feasibility studies (PFS and FS).

## 2022 Short Course Program... (Continued)

TWO DAY SHORT COURSES | MONDAY DECEMBER 5 & TUESDAY DECEMBER 6

### UNDERSTANDING THE SEC'S NEW MINING DISCLOSURE RULE: S-K 1300

Cost: \$495

Instructors: **Greg Gosson**, *Technical Director, Geology & Compliance, Wood, Vancouver, Canada and Stella Searston*, *Consulting Geologist, Mining Technical Services, Denver, Colorado*

#### Course Description

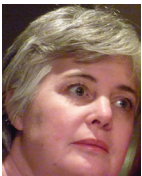
The new SEC rule rescinds Industry Guide 7 and consolidates all mineral property disclosure requirements into Regulation S-K 1300. The new rule modernizes disclosure requirements since IG 7 dates back to 1982, and provides investors with a more comprehensive understanding of registrant's mineral properties. The new rule more closely aligns the SEC's disclosure requirements and policies for mineral properties with current industry and global regulatory practices and standards. S-K 1300 became effective February 25, 2019 and mining registrants can voluntarily immediately comply with the new rule. All mining registrants with the SEC must comply from January 1<sup>st</sup>, 2021 onward.

This short course will compare Regulation S-K 1300 disclosure requirements to the current SEC Industry Guide 7 and will cover the following topics on Regulation S-K 1300:

- Those companies that must comply and those that are exempt
- The three defined stages of mining issuers, and of mineral properties
- Requirements for "summary disclosure" and for "individual property disclosure"
- Determining material mineral properties
- Exploration results, mineral resource and mineral reserve disclosure requirements
- "Initial assessment" reports and their required content
- "Feasibility study" and "pre-feasibility study" reports and their required parameters
- "Technical report summary" report triggers and their required content
- Qualified Person definition, registrant's requirements and QP responsibilities
- Commodity price allowances and marketing study requirements
- Reconciliation disclosure
- Internal controls disclosure requirements
- Voluntary disclosure allowances

Course participants will be provided with a course completion certificate.

#### About the Instructors:



**Stella Searston** has more than 30 years of worldwide experience in mining consulting, mineral exploration, and regulatory compliance issues, with a focus on Australasia, the Pacific, Africa, and North and South America. Stella's specialties include project and property evaluation; resource development; feasibility study and project management including data room setup; commodity and company reviews; technical reviews, audits, and due diligence; and Technical Reports, Technical Report Summaries and Competent Person's Reports under NI 43 101, SK 1300, JORC, and SAMREC.



**Greg Gosson** has 36 plus years in the mining industry; five years as Chief Mining Advisor of the BC Securities Commission; Led the project to revise NI 43-101 in 2005; Involved in drafting legislation on Civil Liability under BC Securities Act, and NI 51-102 Continuous Disclosure Obligations; Former chair, current member of the Mining Technical Advisory and Monitoring Committee on NI 43-101: industry advisory group to the Canadian securities regulators; Member of the PDAC Securities Committee; Member of the CIM Committee on Mineral Resources and Reserves (and Best Practices); Member of the CIMCSA Working Committee on NI 43-101; 12 years as Technical Director, Geology & Compliance with Wood, formerly AMEC/Amec Foster Wheeler.

### NEPA TRAINING

Cost: \$495

Instructor: **Matt Petersen**, *NEPA Technical Director, SWCA Environmental Consultants, Denver, CO*

#### Course Description:

SWCA is offering a two-day short course on implementing streamlining techniques to deliver defensible NEPA decisions on complex mining projects within current CEQ-mandated timeframes. This class will provide practical instruction on planning pre-work specifically to streamline the NEPA process, early and efficient alternatives development, and collaborative impacts analysis planning to minimize re-work. The course will cover the following:

Overview of NEPA as a planning tool to expedite mine plan review

Tips for effective pre-work – Early integration of mine plan development and data gathering work plans with pending NEPA requirements.

Alternative development – issues-driven alternatives development and defensible elimination of alternatives from detailed analysis

Systematic planning impacts analysis – Issue identification and planning for concise issues-based analysis

Flexible NEPA for a changing administration – writing NEPA analysis to conform with existing CEQ regulations while addressing Biden administration EOs and updates to DOI priorities, including climate and environmental justice

**About the Instructor:**



**Matt Petersen** is the NEPA Technical Director for SWCA Environmental Consultants. He has 28 years of experience as a NEPA practitioner and has provided National Environmental Policy Act (NEPA) management or oversight for over 40 large-scale EIS's, including projects in Nevada, Arizona, Alaska, Colorado, Idaho, New Hampshire, Utah, Vermont, Texas, New Mexico, California, and Wyoming. His NEPA experience includes work with most major federal agencies and encompasses mining, resource management plans, ski areas expansions, fire management plans, oil and gas, pipelines, transmission lines, wind farms, airports, and power plants. He has taught applied NEPA seminars and classes for the Bureau of Land Management (BLM), USDA Forest Service (USFS), Bureau of Reclamation (BOR), U.S. Department of Transportation Maritime Administration, and the Federal Aviation Administration (FAA).

**ONE DAY SHORT COURSES | MONDAY DECEMBER 5**

**MASTERING EXCEL FOR EARTH SCIENCE PROFESSIONALS**

Cost: \$330

Instructor: Dr. -Ing Javad Sattarvand, Associate Professor, Kinross Gold Term Position, Mackay School of Earth Sciences & Engineering, Department of Mining and Metallurgical Engineering, Reno, NV

**Requirement:**

Students need to have their laptop with MS Excel installed on it. Students need to have a basic knowledge of using spreadsheets.

**Learning Outcomes:**

Upon completion of this short course you will become familiar with the sources of the data in earth science and engineering and you will be able to use Excel for:

- a. Importing and preparing the input data
- b. Use the power of Excel Formulas
- c. Advanced visualization of the data
- d. Analysis of data using pivot tables and power query

**Topics of the Course**

- A. Data types in exploration and mining operations
- B. Working with Data
  - a) Data preparation
  - b) Data sorting
  - c) Data filtering
  - d) Name ranges and excel tables
  - e) Import, export, and validation of data
  - f) Auditing worksheet formulas
  - g) What-if analysis
- C. Formulas and functions in Excel
  - a) Lookup and reference functions
  - b) Power functions
  - c) Statistical functions
  - d) Math functions
  - e) Data functions
  - f) Reference functions
  - g) Text functions
  - h) Information functions
- D. Data Visualization
  - 1. Charts and Graphs
  - 2. Automation
  - 3. Animation
  - 4. Dynamic Dashboards
- E. Mastering Pivot Tables
  - a. Pivot table formatting
  - b. Sorting, filtering and grouping for pivot tables
  - c. Pivot charts and printing
  - d. Manipulating pivot tables
- F. Power Query
  - a. Connecting to the data source
  - b. Pivoting and unpivoting
  - c. Grouping
  - d. Appending queries
  - e. Merging data with joins
  - f. Using variables

**About the Instructor:**



Dr. Javad Sattarvand, Ph.D., is an associate professor at the Department of Mining and Metallurgical Engineering, at the University of Nevada, Reno since 2015. Dr. Sattarvand received his Ph.D. in Mining Engineering from the University of Rheinisch-Westfälische Technische Hochschule Aachen – Germany in 2009. With 17 years of academic appointments as a lecturer, Assistant Professor and Associate Professor in the USA, Germany, Netherlands, and Iran and supervising 34 Masters and 3 Ph.D. students, he is the teacher for mining automation and mining robotics courses at the University of Nevada, Reno. Dr. Sattarvand has published 26 journal and over 70 conference papers and has received over three million dollars of federal grants, mostly from NIOSH. He has been also the recipient of the prestigious SME's career development grant (\$300K). Dr. Sattarvand's industrial expertise is in mine planning, optimization algorithms, and programming for different mining applications, mine monitoring, and mine control systems. He has founded two start-up companies and his cooperation with major global consulting companies resulted in more than 20 industrial projects and the commercialization of several software and hardware products for mining automation.

## 2022 Short Course Program... (Continued)

ONE DAY SHORT COURSES | MONDAY DECEMBER 5... (Continued)

MSHA ANNUAL SURFACE REFRESHER TRAINING - (8 HR)

Cost: No charge for the course, \$25.00 for lunch

Instructor: Tim Pruitt, Pruitt Safety and Legarza Exploration (sponsor)

- 8 Hour class room training
- Prerequisite - Attendees must have already attended the MSHA 24 hour (Surface) new miner training, and/or be able to show that their last 8hr refresher is not more than three years old. They need to provide me with a copy of their latest 5000-23 form. (For questions call Tim Pruitt at 775-397-3496)

### About the instructor



**Tim Pruitt** is the owner of Pruitt Safety LLC. He has worked in the mine safety business for over 30 years, most of which was working directly for mining companies. Tim worked a number of years for a large drilling company and for the last 4 years as a Safety Consultant. Most of my client's are contract companies working with the mines, mine exploration, and drilling industries.

## ONE DAY SHORT COURSES | TUESDAY DECEMBER 6

### FUNDAMENTALS OF MINERAL & METALLURGICAL PROCESSING

Cost: \$330

Instructors: **Eur-Ing Dr. Corby G. Anderson** *QP CENG FIMMM FICHEME, Harrison Western Professor, Kroll Institute for Extractive Metallurgy, George S. Ansell Department of Metallurgical and Materials Engineering, Colorado School of Mines, Golden, CO and*  
**Dr. Courtney Young**, *QP, Lewis S. Prater Distinguished Professor, Metallurgical & Materials Engineering, Montana Tech, Butte, MT*

### Course Description

This short course is open to anyone wanting to learn about mineral processing and extractive metallurgy operations. It is particularly good as a refresher or introductory course. In this regard, the course begins with simple concepts such as sampling, analysis (mineralogical, chemical and size), material balances and smelter schedules. It then introduces attendees to processing methods and equipment, particularly those utilized in the mining industry (but also the recycling industry as well). Various unit operations are reviewed including comminution (crushing, grinding, screening and classification), mineral separations (flotation, magnetic, gravity and electrostatic), and metal production and purification (hydrometallurgy, pyrometallurgy and electrometallurgy) as well as environmental management (dewatering, tailings disposal, and waste treatment for water, dust and air). Flowsheets of typical operations are reviewed throughout with implications on flowsheet development.

**Attendees will need their laptops.**

### About the instructors:



**Dr. Corby G. Anderson** is a licensed professional engineer with over 40 years of global experience in industrial operations, corporate level management, engineering, design, consulting, teaching, research and professional service. He is a native of Butte, MT. His career includes positions with Thiokol Chemical Corporation, Key Tronic Corporation, Sunshine Mining and Refining Company, H. A. Simons Ltd. and at CAMP-Montana Tech. He holds a BSc in Chemical Engineering from Montana State University and an MSc from Montana Tech in Metallurgical Engineering and Ph.D from the University of Idaho in Mining Engineering - Metallurgy. He is a Fellow of both the Institution of Chemical Engineers and of the Institute of Materials, Minerals and Mining. He shares 13 international patents and 6 new patent applications covering several innovative technologies, 2 of which were successfully reduced to industrial practice. He currently serves as the Harrison Western Professor in the Kroll Institute for Extractive Metallurgy as part of the Mining Engineering Department and the George S. Ansell Department of Metallurgical and Materials Engineering at the Colorado School of Mines. In 2009 he was honored by the Society for Mining Metallurgy and Exploration with the Milton E. Wadsworth Extractive Metallurgy Award for his contributions in hydrometallurgical research. In 2015 he was awarded the International Precious Metals Institute's Tanaka Distinguished Achievement Award. In 2016 he received the Distinguished Member Award from the Society for Mining, Metallurgy and Exploration, the Outstanding Faculty Award from the George S. Ansell Department of Metallurgical and Materials Engineering at Colorado School of Mines and also became a Distinguished Member of the U of Idaho Academy of Engineering. In 2017 he received the EPD Distinguished Lecturer Award from The Minerals, Metals and Materials Society. In 2019 he was named as a Henry Krumb Distinguished SME Lecturer. In 2019 he was also appointed as a Visiting Faculty within the Minerals Engineering Department of Central South University in China, the largest program of Mineral Processing and Extractive Metallurgy in the world.



**Dr. Courtney Young** Dr. Courtney Young is a graduate of three premier mineral/coal processing and extractive metallurgy institutions with a BS in Mineral Processing from Montana Tech in 1984, a MS in Mining and Minerals Engineering from Virginia Tech in 1987, and a Ph.D in Metallurgical Engineering from University of Utah in 1994. He has been a faculty member of Metallurgical and Materials Engineering at Montana Tech since 1993 where he has taught numerous courses in Mineral Processing and Hydrometallurgy. Other related courses include Fire Assay, Materials Handling Design, Flotation, Energy Resources, Gold Processing, and Materials Characterization and Analysis. During this time, Dr. Young has worked on numerous research and consulting projects with various funding sources, particularly mining companies. He has published and presented more than 150 papers. Most of his research has been in flotation, hydrometallurgy, and pyrometallurgy as well as their application to recycling secondary resources including but not limited to waste water, slag, tailings, printed circuit boards, plastics, etc. He recently stepped down from being Dept Head, a position he had for 21 years. As a result, Dr. Young is excited about teaching more and doing more research.

## ONE DAY SHORT COURSES | TUESDAY DECEMBER 7...(Continued)

### U.S. MINING LAW ONE DAY SHORT COURSE AND HANDBOOK

Cost \$330

Instructors: **Richard Angell**, *Director and Vice President* and  
**Kevin Johnson**, *Shareholder, Parsons Behle & Latimer, Salt Lake City, UT*

#### Course Description

This full-day course will provide a comprehensive overview of the mining law in the United States relating to the acquisition, exploration, development, operation and closure of hard rock mining projects on public lands. The course provides in-depth coverage of types of land and mineral ownership in the U.S., types of mineral claims, historical and current issues under the General Mining Law of 1872, the process and issues involved in obtaining, holding and financing mineral tenures, extralateral rights, an overview of environmental permitting, acquiring power, and an overview of water law in the western U.S. The course includes an overview of the typical methods for entering into exploration and development joint venture arrangements, including the revised Rocky Mountain Mineral Law Foundation "Form 5" limited liability company agreement, lease, purchase and sale of exploration and mining project issues, and a discussion of the standard royalty mechanisms including net smelter return and net profits interest royalties. The course also covers current significant environmental issues in the exploration and development of operations, including key air and water discharge issues, environmental impact statements, permitting of tailings facilities, bonding, and mine closure and reclamation issues. The course is ideal for persons who are interested in acquiring mining projects in the U.S., or simply wish to have a refresher on key concepts. The course will include an extensive 200+ page Mining Law handbook and appendices, which include various form royalty and other agreements.

Schedule:

- **Overview of Land & Mineral Ownership in the U.S.**
- **Overview of U.S. Mining Laws**
- **Detailed Review of the General Mining Law of 1872**
- **Acquisition of Mineral Tenures**
- **Financing the Project & Ancillary Concepts**
- **Structure of US Environmental Laws and Regulations**
- **Power and Energy Issues**
- **Essential Concepts of US Water Law**
- **Current Critical Issues and Proposed Rules**
- **Ethical considerations in multi-jurisdictional mining transaction due diligence, safe harbors of multi jurisdictional practice, and essential aspects of a lawyer's ethical duty of confidentiality, the attorney- client privilege and work product immunity**

#### About the instructors



**Rick Angell** is a member of Parsons Behle & Latimer's Environmental, Energy & Natural Resources (EENR) practice group. Rick assists clients with a broad range of environmental compliance, transactional and litigation issues. He is the past chairperson of the EENR practice group and currently a firm vice president and secretary on the firm's Board of Directors.

A significant portion of Rick's practice relates to hazardous materials and wastes and how they are handled for purposes of risk management, accident prevention and regulatory compliance as well as emergency response and long-term remediation in the event there is a release into the workplace or environment. Rick represents clients in administrative and judicial environmental enforcement proceedings, permit applications and appeals, remediation and cost recovery under CERCLA and other statutes as well as toxic tort litigation.

Rick conducts environmental due diligence for acquisitions and financing transactions in the United States and internationally. His transactional and compliance expertise includes development of sustainable business practices and addressing climate change issues. He also comments on behalf of clients on environmental and occupational health rules and permitting issues.

Another substantial component of Rick's regulatory compliance and permitting practice includes voluntary cleanup and redevelopment of contaminated property. Rick has worked on numerous projects around the United States with a focus on natural resource, refining, manufacturing and energy-related matters.



**Kevin W. Johnson** is a member of the firm's Corporate Transactions & Securities, and Environmental, Energy & Natural Resources departments. While Kevin has significant experience in a number of industrial sectors, his practice focuses on devising structures to create value through transactions related to the purchase, sale, development, financing and commercialization of infrastructure and natural resources projects. He has represented national and international clients in a wide variety of transactions. When dealing with infrastructure and natural resources projects, Kevin says he "helps clients turn dirt into cash."

Kevin previously was Executive Vice President and General Counsel of Molycorp, Inc., a publicly traded international rare earth mining and processing company with corporate offices in Denver, where he was responsible for all aspects of Molcorp's legal affairs on a global basis. Before joining Molycorp, Kevin was a partner at Holland & Hart in Denver, Colorado. Kevin began his legal career at The Dow Chemical Company, where he had the opportunity to live and work in Europe for five years. Kevin speaks Spanish.



## 2022 Short Course Program... (Continued)

### ONE DAY SHORT COURSES | TUESDAY DECEMBER 6...(Continued)

#### MINE TO MILL RECONCILIATION: Tool for productivity improvement

Cost \$330

Instructor: **Abani R. Samal**, Ph.D, CPG, RM- SME, Fellow-SEG, Principal, GeoGlobal LLC, Salt Lake City, UT

##### Course Description

Mining is an integrated operation that includes exploration, mining (extraction), processing, and metallurgy where metals are extracted. A mining-plan of operation forecasts the amount of ore to be mined and/or metal to be produced at the beginning of the year. Success in annual production may be due to many reasons such as a good mine plan based on a nearly robust resource/ reserve model; execution of mine-plan in the operation supported by reliable laboratory services and disciplined work-culture led by a competent workforce. Productivity of an operation is a comparison of the amount of ore mined or metals extracted vs. planned. A model-mine-mill (M3) reconciliation process helps to gain knowledge on the actual reasons for achieving the planned production or, not.

In reality, when properly implemented, a detailed model-mine-mill (M3) reconciliation process leads to finding out the areas for further improvements leading to substantial improvements in productivity. A successful mining operation conducts the reconciliation at regular time intervals.

This workshop is designed to provide a forum for constructive discussion and learning on how mine to mill reconciliation can be helpful in improving productivity of the mining operation. The topic is very relevant to mining engineers, geologists and others in a producing mine.

1. Reconciliation: An introduction to the concept
  - a. Fundamental definitions
  - b. Mine planning, production and reconciliation
  - c. Examples
2. Various types and nodes of reconciliation in a mining project: LT Resource/reserve, ST Resource/Reserve, Production, Stock piles and Mill
  - a. Reconciliation between Long-term-Short-term resource estimations
  - b. Reconciliation between Short-term resource model vs production data
  - c. Mine planning vs production -
  - d. Issues with volumetric
  - e. Process plant: Tons & grades received
3. Factors in reconciliation
  - a. Grade estimation
  - b. Drill density
  - c. Time lag between ST planning and mining
  - d. Stock piles: Quality and Quantity measurements AS/PV
4. Best practices
  - a. Error measurements
  - b. Examples

The workshop provides the participants an unique learning experience to the industry professionals.

**Format:** The workshop will be interactive and will consist of lectures and hands-on exercises. Participants will work with the instructor individually or, in group on small exercises which as intended to provide a unique learning experience.

**Workshop material:** The printed copies of the PowerPoint presentation slides will be provided. Selected articles / papers will also be used for discussions. Selected chapters of various published books will also be used in this course.

##### About the instructor



Dr. Abani Samal has a wealth of knowledge and experience in the field of economic geology and valuation of mineral resources. He has extensive training (MS and PhD) in economic geology and geostatistics. He is also well recognized for his expertise in advanced geostatistics and mineral resource estimation. He is proficient in English and Odia. Dr. Samal has both industry and academic teaching experience which uniquely qualifies him to deliver this training program. In last 20 years in industry, he has gained experience in various commodities including iron ore, Cu-Mo-Au, Au-Ag, Pb-Zn-Ag deposits around the world. He has > 15 years of iron ore experience on projects around the world. His outstanding contributions to the industry are well recognized through his publications and presentations of his research and findings in various national and international conferences. Dr. Samal is a registered member of SME (RM-SME), a certified professional geologist (CPG) and a Fellow of the Society for Economic Geologists (SEG).

Dr. Samal is a qualified person as per international resource reserve reporting standards such as JORC (Australia) and NI-43-101 (Canada). Dr Samal is also an honorary member of CRIRSCO.

Dr. Samal has offered many short courses in public domain and also on site projects. Dr. Samal is known for delivering difficult and challenging topics in simple language to make it more meaningful.



## Call for Technical Session Papers

All interested professionals are invited to submit abstracts of 200 - 400 words highlighting the major points of their paper and a short bio no later than July 31, 2022.

### Abstracts must include:

- Complete name of the author, position, company/organization, business address, phone number and email address.
- Name of the **session** you wish to participate in. Do not put down the Interest Track.
- Abstracts must be in MS Word and sent as an attachment to an email. No PDF files.

### Where to Send:

Completed abstracts and bios should be sent to Pat Heywood at AEMA - pheywood@miningamerica.org. After review, your abstract will be forwarded to the Session Chair for final approval. You will be notified by the Session Chair if you are accepted. If accepted, a longer abstract to be published in the AEMA Abstract Book will be due on or before September 30.

### AEMA TECHNICAL SESSIONS

Concurrent sessions begin on Wednesday December 7 and run through Friday morning December 9. Morning sessions begin at 8:00 and end at 11:30. Afternoon sessions begin at 2:00 and end at 5:30. There is a mandatory 45 minute coffee break each morning and afternoon in the exhibit hall.

Each session typically has 5- 6 speakers. Talks are no longer than 30 minutes including Q & A. Exact timing and setup of your session will be the decision of the Session Chair.

Formal papers are not required at our Annual Meeting. We request the extended abstract and also a copy of your presentation. Your presentation will be installed on your session chair's computer during the annual meeting and a copy of that will be given to AEMA after your session. Copies will be available to those who attended the technical sessions and request them.

### ANNUAL MEETING REGISTRATION AND FEES

We will comp technical session registration for 1 speaker per talk (maximum of 6 comped speakers per session) provided they are either individual members of AEMA, one of the two corporate representatives of a member company, or employed by a member company. The exception to this is employees of the federal government and state regulatory agencies & geological surveys. This exception DOES NOT apply to college or university professors or other employees of colleges and universities who are not associated with the state geological survey/bureau of mines. Non-member speakers will be required to register at the member rate of \$350.

We do not mail registration packets. Packet pickup begins on Sunday December 4 from 3 - 5 p.m. and continues throughout the week. The AEMA registration desk will be located on the 2nd floor of the Nugget Casino Resort in the foyer close to the casino tower (formerly east tower) elevators.

Speakers are expected to pay their own expenses. All registration and housing information will be on the AEMA website soon. <https://www.miningamerica.org/> Information for booking rooms at the Nugget Casino Resort can be found in this brochure. **Do not register as a speaker until your presentation has been accepted.**

### Important:

***Before submitting your abstract, be sure to read the session description carefully to ensure your proposed paper is a good fit for the session.***

## SESSIONS ACCEPTING PAPERS - BY AREA OF INTEREST

### MINERAL DEPOSITS, GEOLOGY & EXPLORATION

- **ALASKA: The Minerals, the Standards, and the Challenges**, *Chaired by: Deantha Skibinski, Executive Director, Alaska Miners Association, Anchorage, AK*
- **Domestic Critical Minerals Development: Battery-powered Rubber Hitting the Road or Deer in the Headlights?** *Co-chaired by: Christopher Dail, Exploration Manager, Perpetua Resources, Donnelly, ID and Peter Vikre, Research Geologist, U.S. Geological Survey, University of Nevada, Reno, Reno, NV*
- **Large Left Lateral Leaps to Geologic**, *Chaired by: Andrew Harley, Ph.D, Mining Director, SWCA Environmental Consultants, Broomfield, CO*
- **The Curt Everson Great Basin Session - 2022**, *Co-Chaired by: Chad Peters, P.Geo, President, CEO & Director, Ridgeline Minerals, Winnemucca, NV and Bob Felder, Director, Orogen Royalties, Reno, NV*

## BUSINESS & FINANCE

- **Growth Companies**, *Chaired by: John Antwi, President, Elim Group of Companies, Reno, NV*
- **Accessing Capital for Exploration, Development & Operations**, *Chaired by: Tim Alch, Financial Analyst, Managing Partner, TAA Advisory LLC, Edgewater, NJ*
- **Students & Junior Professionals**, *Chaired by: Dale Kerner, Permitting Manager, Perpetua Resources, Donnelly, ID & Sena Cicek, Nevada Gold, Elko, NV*
- **Securing Mining's Future with Innovative HR (People) Strategies**, *Chaired by: Lindsey Schultz, CEO, MRC Mining Recruiting, Denver, CO*

## OPERATIONS

- **Sustainable Mining to Support Renewable Energy Transition**, *Co-Chaired by David A. Ellerbroek, Vice President for Client Service and Strategy, Brown and Caldwell, Lakewood, CO & Dr. Ehsan Vahidi, Assistant Professor and John N. Butler Endowed Professor University of Nevada, Reno, NV*
- **New Projects in Old Districts**, *Co-Chaired by: Kennet Bertelsen, PE, Senior Civil Engineer, Morrison-Maierle, Spokane, WA & Samuel Siebenaler, Vice President Corporate Development, Big Rock Industries, Monroe, WA*
- **Mining Hydrology I**, *Co-Chaired by: Ronald T. Parratt, Jr., Environmental Specialist, Newmont, Victor, CO & Mike Hardy, P.E., P.G., WRS, Project Manager, Lumos & Associates, Reno, NV*
- **Mining Hydrology II - Site Characterization - Identifying, Quantifying, and Evaluating Uncertainty**, *Co-Chaired by: Scott Effner, P.G., Senior Principal Hydrogeologist, Alloy Group, Gunnison, CO & Dan Stanaway, Senior Scientist, Brown and Caldwell, Boise, ID*
- **Artificial Intelligence & Data Analytics Applications in Mining Operations**, *Co-Chaired by: Javad Sattarvand, Ph.D., Associate Professor, University of Nevada, Reno & Ali Soofastaei, Ph.D., Artificial Intelligence Projects Leader, Vale-Australia-Brisbane*

## ENVIRONMENTAL

- **Technical & Partnership Strategies for Hardrock AML Cleanup**, *Co-Chaired by: Kate Garufi, Rocky Mountain Region Remediation Lead, HDR, Inc., Denver, CO & Natalie Muilenberg, PMP, CAPM Program Manager, Watershed Improvement Unit, at Arizona Department of Environmental Quality ADEQ, Tempe, AZ*
- **NEPA Reform & Permitting for Strategic Minerals**, *Co-Chaired by: Edward (Ted) Boling, Partner, Perkins Coie LLP, Washington, DC & Bob Maynard, Partner, Perkins Coie LLP, Boise, ID*
- **Large Left Lateral Leaps for Environmental Professionals - Mining And The Green Economy: Ready! Set! Go! The Race Is On For Environmental Sustainability**, *Chaired by: Shawn Calendine, Geoscientist, hydroGEOPHYSICS, Inc., Tucson, AZ*
- **Mine Closure & Reclamation**, *Co-Chaired by: Nick Rauh, Mining Technical Sales Manager, AGRU America, Inc., Fernley, NV & Steve Boyce PE, Nevada Mining Practice Leader, Haley & Aldrich, Inc., Elko, NV*

## LEGISLATIVE & PUBLIC AFFAIRS

- **Old Meets New: Merging Old School Tactics with New Technology to Define and Manage Social, Regulatory, and Reputational Risk - Positive Strategies for Media, Community Engagement, and Social License**, *Chaired by: Adam Hawkins, President, Global External Relations, Phoenix, AZ*
- **Multiple Use on Public Lands and the Nation's Needs for Minerals**, *Co-Chaired by: Laura Granier, Partner, Co-Chair of Mining, Holland & Hart LLC, Reno, NV & Chris Stoneback, Partner, Billings, MT*
- **ESG and Responsible Mining**, *Chaired by: Jay Gear, Vice President Environment, Health & Safety, and Korie Hickel, Director, ESG, Community & Government Relations, Coeur Mining, Inc., Chicago, IL*
- **We Can Secure Our Supply Chains, But Will They Let Us?**, *Chaired by: Mark Compton, Executive Director, American Exploration & Mining Association, Spokane Valley, WA*

**Exhibit Booth & Core Shack tables are still available.**

**Contact Mike Heywood for information and pricing.**

**[mheywood@miningamerica.org](mailto:mheywood@miningamerica.org)**



# 2022 Technical Session Program

## MORNING SESSIONS | WEDNESDAY DECEMBER 7

SESSION TIMES: 8:00 - 11:30 COFFEE BREAK 9:35 - 10:20

### STATE & PROVINCE REPORTS (Part 1)

#### Area of Interest - Mineral Deposits, Geology & Exploration

Chaired by: **John Muntean Ph.D**, Director, Ralph J. Roberts Center for Research in Economic Geology (CREG) Arthur Brant Chair in Exploration Geology, Nevada Bureau of Mines and Geology, University of Nevada Reno

#### Session Description:

Want to hear about exploration and mining activities for the past year in Western States and Provinces? In this all-day session, Economic Geologists from Western US States and Canadian Provinces will report on the exploration and development activities in metals and industrials for the past year in their respective areas. These specialists will also provide their insight into new mineral commodities and areas which are experiencing activity, and opportunities and challenges. The afternoon session is finished with a summary of USGS activities and mineral exploration trends.

#### John Muntean



John Muntean is an Associate Professor with the Nevada Bureau of Mines and Geology (NBMG), at the University of Nevada Reno (UNR). There he serves as the Director of the Ralph J. Roberts Center for Research in Economic Geology, which is a mineral industry associates programs, where annual donations are pooled together to fund graduate student research on Nevada's mineral deposits. He is also the Arthur Brant Chair in Exploration Geology at UNR, and is currently serving as the Acting Director of the Nevada Bureau of Mines and Geology. In the past he worked for Placer Dome, Homestake, and Santa Fe Pacific.

### ALASKA: The Minerals, the Standards, and the Challenges

#### Area of Interest - Mineral Deposits, Geology & Exploration

Chaired by: **Deantha Skibinski**, Executive Director, Alaska Miners Association, Anchorage, AK

#### Session Description:

Amid massive supply chain shortages and a mad dash for domestic mineral production, Alaska's mineral potential should make it a stand-out jurisdiction for new mining activity. But with inconsistent federal policies, the industry's challenges are piling up. Hear from industry and supportive lawmakers about what can be done to help Alaska be new sources of minerals the nation so desperately needs.

#### Deantha Skibinski



Deantha was born and raised in Anchorage and Big Lake, Alaska and is a graduate of the University of Alaska. She came to AMA from the Resource Development Council, where she worked as a projects coordinator for seven years. In that role, she advocated for the mining and tourism industries and managed efforts on the cruise ship head tax and mining shutdown ballot initiative campaigns and administered the Alaska

Alliance for Cruise Travel, an organization promoting tourism businesses benefiting from visitors to our state. Deantha is an Executive Committee member of the Armed Services YMCA of Alaska, an organization dedicated to supporting military members and their families. She has served on past Governors' Transition Teams, is a recipient of the Top Forty Under 40 award, and was one of a delegate to the first-ever Conference of Young Alaskans.

### GROWTH COMPANIES

#### Area of Interest – Business & Finance

Chaired by: **John Antwi**, President, Elim Group of Companies, Reno, NV

#### Session Description:

Most sectors of the global economies that show significant growth have minimal barriers to entry, the Tech Industry is a typical example. How many startup mining companies survive the market expectations and transition to mid-tier and major mining companies? When they survive startup, how is growth defined for such a junior exploration or mining company? What is the ideal business model for these growth companies to provide maximum shareholder value? What are the barriers to entry and how can startups be encouraged in the mining sector?

In this session we will be looking to explore how to start and grow an exploration and mining company and some success stories in this market.

#### John Antwi



John Antwi is a mining executive with over 30 years of experience in Mine Technical and Financial Services with a knack for identifying the potential of geologic assets. He is a value driver with expertise in achieving strategic, operational, and financial goals for junior, mid-tier, and senior mining production companies. John is an innovative senior executive with expertise in implementing portfolio optimization initiatives and

recommending project development opportunities to support corporate strategic objectives. He began his career by rendering geological services for a gold mining company in Africa and progressed to top performing executive overseeing growth initiatives, mergers and acquisitions with multi-billion-dollar organizations in the United States and Canada. Until the acquisition of Klondex Mines by Hecla, John was the Senior Vice President for Corporate Development and Planning for Klondex.

John served on the American Exploration & Mining Association's board and is a founder, President and Director of Elim Group of Companies. Mr. Antwi has a bachelor's degree in Geological Engineering from KNUST, Ghana and a Masters degree in Mineral Economics from the Colorado School of Mines.

### SUSTAINABLE MINING TO SUPPORT THE RENEWABLE ENERGY TRANSITION

#### Area of Interest – Operations

Chaired by: **David A. Ellerbroek**, Vice President for Client Service and Strategy, Brown and Caldwell, Lakewood, CO and **Dr. Ehsan Vahidi**, Assistant Professor and John N. Butler Endowed Professor University of Nevada, Reno

#### Session Description:

Environmental impacts associated with metals and mineral production techniques have been significantly reduced in recent years. However, the current "green" mining techniques need to become more widespread and there should be a focus to investigate new environmentally friendly techniques. Massive investment in renewable energy technologies is required to support the transition to low-carbon technologies for producing electricity and to prevent the worst impacts of climate change. This investment needs to occur not only in developed countries but also in developing countries where approximately 2 billion people still don't have access to reliable electric power. The challenge for the mining industry is to convert mineral development into a low- or zero-carbon process so that the benefits of installing renewable energy projects are not offset by carbon emissions from mineral development.

(Continued on next page)

## 2022 Technical Session Program... (continued)

### MORNING SESSIONS | WEDNESDAY DECEMBER 7... (continued)

SESSION TIMES: 8:00 - 11:30 COFFEE BREAK 9:35 - 10:20

#### SUSTAINABLE MINING TO SUPPORT THE RENEWAL ENERGY TRANSITION... (continued)

This session aims to bring together researchers from academia and industry to exchange knowledge on developing, operating, and advancing sustainable and green mining technologies. Presentations providing perspective on both technical as well as policy-based challenges or broader mining engineering challenges toward sustainability are welcome.

##### David A. Ellerbroek



Dave Ellerbroek works at Brown and Caldwell as Director of Client Service and has more than 30 years experience working in the environmental, water and engineering industries leading technical teams at the project, program and executive levels. His technical background includes working in the mining and oil and gas industry solving problems related to hydrology, geochemistry and environmental engineering.

He also teaches part time at Western Colorado University with a focus on environmental management related to sustainability transitions and mine reclamation.

##### Dr. Ehsan Vahidi



Dr. Ehsan Vahidi received his B.Sc. and M.Sc. degrees in Metallurgical Engineering, from Sharif University of Technology and the University of Tehran, respectively. After earning his second master's degree in Environmental Engineering from the University of South Florida, he obtained his Ph.D. from Purdue University in Environmental & Ecological Engineering. His Ph.D. research on the sustainability assessment

of rare earth production sponsored by the Department of Energy led to several awards including the first-ever *Ecological Sciences and Engineering (ESE) Outstanding Research Award*, the *2018 College of Engineering Outstanding Graduate Student Research Award*, and the prestigious *Donnan Dissertation Fellowship* from the Purdue Graduate School.

#### EXPLORATION AND MINE PERMITTING: SUCCESS STRATEGIES FOR A CHANGING PROCESS

##### Area of Interest – Environmental

Chaired by: **Ben Veach, PE**, U.S. Mining Sector Leader, Stantec, Reno, NV and **Rob Mullener**, Permitting Manager, DeLamar Mining Co., Boise, ID

##### Session Description:

Over the last year, administrative changes to procedures have taken effect on both federal and private lands. These changes have a definite impact on the permitting of mines and exploration projects. Procedures for permitting will continue to evolve and have an impact on our industry. How are others finding success? What is working and what is not?

This session will explore how the changes to permitting and environmental regulations have impacted the landscape for mining and exploration. What are the results of changes and how are they impacting our industry? Learn from the experts how to avoid painful delays in permitting. Topics will include NEPA, USFWS Permitting, Mine Planning and Groundwater Successes and Failures.

##### Ben Veach, PE



Ben, a Principal in the Environmental Services group, is responsible for the operations within the Stantec Mining footprint in the US. He brings more than 30 years of Nevada consulting experience as a project manager, engineer, and land use planner. His primary responsibility is to provide environmental mining support to the Stantec staff and clients across the US.

His duties include being the responsible safety officer, financial lead, and all things related to the operation and maintenance of the Stantec Quality Management program. He leads a group of NEPA specialists, Wildlife biologists, Geologists, and Water specialists, all focused on serving the mining industry. Ben brings a unique mixture of civil engineering and land use planning to the team that is useful at improving communications and focus to the project team. He has proven the ability to lead diverse teams of professionals from project inception through build-out on a wide range of projects.

##### Rob Mullener



Mr. Mullener has amassed over 25 years of professional experience in the areas of mine permitting, geology, mining geology, engineering, and project management. His experience includes geologic mine planning, mine modeling, metal and nonmetal resource evaluations, site assessments, geophysical investigations, geologic field mapping, geologic drafting, collecting and analyzing field data, supervising drilling, surveying, overseeing construction crews, providing oversight of environmental regulations and procedures, and complying to strict environmental regulations in sensitive areas. He has also acted in the role of senior designer/CAD Coordinator for process mechanical and civil engineering projects, including field investigations, construction oversight, and three-dimensional (3D) modeling. Mr. Mullener is currently the Permitting Manager for Integra DeLamar and is actively engaged in permitting the DeLamar Mine in southwest Idaho along the Oregon border.

#### OLD MEETS NEW: MERGING OLD SCHOOL TACTICS WITH NEW TECHNOLOGY TO DEFINE AND MANAGE SOCIAL, POLITICAL, REGULATORY, AND REPUTATIONAL RISK - Positive Strategies for Media, Community Engagement, and Social License.

##### Area of Interest - LEGISLATIVE & PUBLIC AFFAIRS

Chaired by: **Adam Hawkins**, President, Global External Relations, Phoenix, AZ

##### Session Description:

You will learn from industry experts on how to build and maintain a coalition of support around your operation. This session will show you how to use tried and true, as well as modern tactics for growing and maintaining your project's support base. This will include:

- **Back to the Basics:** A quick refresher of how to communicate in a way that gets measurable results.
- **Simplifying Data Analytics:** Understanding and using public opinion research to help you identify audiences and communicate with them effectively.
- **Understanding Risk:** Dive into the factors around social, political, regulatory, and reputational risk. Develop strategies for risk mitigation/ elimination.
- **Using Modern Methods:** Discover new ways to assess risk and mitigate risk factors.



- Making Your Message Viral: Learn the tricks of the trade that social media influencers use to engage and energize your support base.
- Grassroots 101: Learn how to build traditional support coalitions and keep supporters engaged and on message.

#### Adam Hawkins



Adam is one of the leading practitioners in social license to operate – the support needed from the community to develop and sustain large-scale projects. He lectures frequently on the subject and has helped clients across the globe develop successful community engagement plans. A fixture in the public affairs, communications, and lobbying community for over a decade, Adam’s insight is sought after and trusted

by clients across the globe. Adam started his career as a staffer in the United States Senate. Prior to launching Global, Adam worked in house for Rio Tinto and within two leading public policy firms, assisting clients on issues that included environment; water, natural resources, taxation, HR, commerce, transportation, and public lands. All of this experience has made Adam adept at working with key regulators such as the Environmental Protection Agency, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, Mining Safety and Health Administration, and Army Corps of Engineers. Adam graduated with honors from Thunderbird School of International Business with a MBA and holds a BA/BS from Arizona State University.

#### AFTERNOON SESSIONS | WEDNESDAY DECEMBER 7

SESSION TIMES: 2:00 - 5:30 COFFEE BREAK 3:35 - 4:20

#### STATE & PROVINCE REPORTS (Part 2)

*Area of Interest - Mineral Deposits, Geology & Exploration*

Chaired by: **John Muntean Ph.D**, Director, Ralph J. Roberts Center for Research in Economic Geology (CREG) Arthur Brant Chair in Exploration Geology, Nevada Bureau of Mines and Geology, University of Nevada Reno

#### Session Description:

Want to hear about exploration and mining activities for the past year in Western States and Provinces? In this all-day session, Economic Geologists from Western US States and Canadian Provinces will report on the exploration and development activities in metals and industrials for the past year in their respective areas. These specialists will also provide their insight into new mineral commodities and areas which are experiencing activity, and opportunities and challenges. The afternoon session is finished with a summary of USGS activities and mineral exploration trends.

**Hosted Awards & Recognition Reception  
Tuesday 6:00 - 8:00**

**5th Floor Chalet Terrace**

**Please wear your badge  
Open to all Annual Meeting attendees**

#### ACCESSING CAPITAL FOR EXPLORATION, DEVELOPMENT & OPERATIONS

*Area of Interest - Business & Finance*

Chaired by: **Tim Alch**, Financial Analyst, Managing Partner, TAA Advisory LLC, Edgewater, NJ

#### Session Description:

What are the successful miners and explorers doing to access capital? What are recent key trends telling us? What can owners, operators and stake holders do to increase the odds of attracting investors and capital? Join us for a lively discussion and q&a with leading experts about the latest issues, trends and ways to get the right attention. Get your questions answered.

#### Tim Alch



Tim is Managing Partner of TAA Advisory. Tim is known for project management, team building, corporate and business development and financial and investment and minerals market advisory. His career spans equity, investment analysis, executive placement and event management. He is a Senior Associate of and was a Managing Director of Behre Dolbear; SVP of Anderson & Schwab; Equity Analyst at Paine Webber, Prudential Securities, and Dean Witter Reynolds and Senior Consultant: Industry Analyst at CRU International (London), World Steel Dynamics (New York) and Resource Strategies (Philadelphia). He is an Honors Geology graduate and John Mason Clarke fellow Amherst College and studied Mineral Economics at Penn State. Tim is a member of SME, AEMA, PDAC & NCUSCR; an Executive Committee Member (2008-16) and Executive Director (2016-21) of NY SME; and an SME Finance Strategic Committee Member (2017-20). In 2020 Tim was selected as the 2020 recipient of the SME President’s Citation for Local Section Service Award.

#### NEW PROJECTS IN OLD DISTRICTS

*Area of Interest - Operations*

Chaired by: **Kennet Bertelsen, PE**, Senior Civil Engineer, Morrison-Maierle, Spokane, WA and **Sam Siebenaler**, Vice President Corporate Development, Big Rock Industries, Cascade, CO

#### Session Description:

Old mining districts can offer a wealth of opportunity for the right project including but not limited to new mines. As the regulatory landscape continually changes, so do the opportunities and challenges presented by historic mining districts. This session will host presentations by those who are pioneering new projects in old mining districts. Projects range from new mines taking advantage of the same commodity the area was known for, to projects with no connection to the districts’ original claim to fame.

#### Kennet Bertelsen



Kennet is a senior civil engineer providing project management and design oversight on a variety of infrastructure projects for private and public clients. He has provided fresh water supply, booster station, stormwater analysis, haul road design, and wastewater treatment infrastructure planning and design to mining clients in Alaska, Montana, Idaho, Wyoming, Nevada, and Colorado. Throughout the Pacific Northwest he has worked on industrial site characterization and redevelopment for warehouses, production facilities, maintenance facilities and fuel storage/distribution, including development within superfund sites. This includes completing fuel storage containment design and 40 CFR 112 compliance for over 60 new and existing sites.

*(continued on next page)*

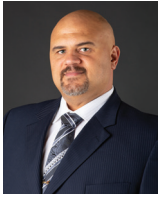
## 2022 Technical Session Program... (continued)

### AFTERNOON SESSIONS | WEDNESDAY DECEMBER 7... (cont'd.)

SESSION TIMES: 2:00 - 5:30 COFFEE BREAK 3:35 - 4:20

#### NEW PROJECTS IN OLD DISTRICTS... (continued)

##### Sam Siebenaler



Sam is an Economic Geologist with nearly 20 years of experience, including 15 years in mining and exploration. He is currently the VP of Corporate Development, helping manage growth strategies for multiple companies, including companies undertaking junior exploration, geologic exploration consulting, and critical mineral recycling. He formerly worked as a Senior Geologist II at Newmont Mining, where he was involved with exploration project development, economic analysis, royalty oversight, strategic planning, metallurgical studies, and geotechnical work. He also is experienced in sales, lead generation, marketing, and estimating. Before entering the mining industry, he served in the US Army as an Information Systems Assurance Officer. He has a passion for leadership and enjoys mentoring early career geologists as well as transitioning military veterans.

#### TECHNICAL AND PARTNERSHIP STRATEGIES FOR HARDROCK AML CLEANUP

Chaired by: **Kate Garufi**, PMP - Rocky Mountain Remediation Lead, HDR, Denver, CO and **Natalie Muilenberg**, PMP, CAPM – Program Manager, Watershed Improvement Unit, Arizona Department of Environmental Quality, Tempe, AZ

##### Session Description:

Over 150 years of mining history in the United States has resulted in over half a million abandoned or inactive hardrock mine sites located on public, private, and tribal lands across the country. Abandoned or inactive mines may include waste rock and overburden dumps, tailings, unstable surface and underground mine water impoundments, acid mine drainage, discharging adits, and heap leach piles. The impact of abandoned mines is significant; contaminants from mining affect the biological, recreational, industrial, and municipal use of watersheds for many miles. In addition to numerous environmental hazards, abandoned mines present threats to public safety like open shafts and confined spaces with atmospheric hazards. Aside from the sheer magnitude of potential sites and widespread impacts, many of the original miners are long gone, leaving a significant funding shortfall and liability challenges that further complicate the management and remediation of these sites.

Hear from federal, state, tribal, and private speakers about source control technologies, modeling and water quality improvement assessments, and multi-party partnerships that have resulted in expedited and successful AML cleanup, watershed improvements, and site reuse.

##### Session 1 (95 min): The Great Balancing Act: Project Management Strategies to Expedite Abandoned Mine Cleanup and Improve Watersheds While Balancing Regulatory Uncertainty

This session will be a collection of case studies focused on AML site cleanup strategies that balance source control technologies, watershed modeling, and water quality improvements metrics and measurements to promote effective, efficient, and realistic cleanup of AML sites, and answer that age-old question: How clean is clean enough? *Case studies and speakers TBD based on call for abstracts.*

##### Session 2 (70 min): Improving the Legacy: How Local Partnerships and National Initiatives Are Advancing Abandoned Mine Cleanup

This session will be a panel session with Federal, State, Tribal, and private sector panelists that will provide a brief update on Good Samaritan regulations and discuss AML cleanup successes, focusing on legal and non-legal tools for partnerships to advance AML cleanup. Each panelist will provide a brief presentation focused on partnership tools/strategies

used at AML sites, common pitfalls, and lessons learned. These brief presentations will be followed by a facilitated Q&A session with strong audience participation encouraged.

##### Kate Garufi



Kate is a senior project manager with over 18 years of experience. She serves as HDR's Rocky Mountain Remediation Lead, Site Investigation and Remediation Practice Group Chair, and remediation service line lead for HDR's Mining Team. Kate is an experienced environmental remediation leader with national remediation program management and implementation experience. Proficient in environmental regulations and with a knack for problem-solving, she has supported the development and implementation of remediation strategies at complex Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) projects across the country. Her experience also includes planning, compliance, and remediation support at active mines, inactive mines, and abandoned mine lands pursuant to Federal and State regulations. Before transitioning to the consulting, she served as a proven expert and go-to national resource for the USEPA's Headquarters Superfund (CERCLA) Remediation Office in hazardous waste and abandoned mine land cleanup, CERCLA and Resource Conservation, and Recovery Act (RCRA) policy, and Superfund site management. During her time at EPA, she successfully managed the development and implementation of national policy and was a leader in change management efforts in Superfund site remediation.

##### Natalie Muilenberg



Natalie Muilenberg, PMP is the Watershed Improvement Unit Manager at the Arizona Department of Environmental Quality, where she leads a team of hydrogeologists and scientists in delivering impactful projects that reduce contamination in Arizona's rivers and streams. She oversees the state's efforts to remediate abandoned mine lands, mitigate nonpoint source pollution, and engage community scientists. With a background in biology, creative writing, and sustainability, she enjoys finding interdisciplinary solutions to Arizona's most pressing environmental and public health challenges. When she isn't in the field for work, she's outside enjoying Arizona's mountains and surface waters.

#### MULTIPLE USE ON PUBLIC LANDS AND THE NATION'S NEEDS FOR MINERALS

##### Area of Interest - Legislative & Public Affairs

Chaired by: **Laura Granier**, Partner, Holland & Hart, Reno, NV, and **Chris Stoneback**, Partner, Crowley Fleck, Billings MT

##### Session Description:

Multiple Use, Mineral Development and the Nation's Supply Chains, National Security and Renewable Energy Goals.

##### Laura Granier



Laura Granier is a partner at the law firm of Holland & Hart where she focuses her practice on mining, energy and natural resource issues. Her practice includes regulatory work and litigation with a focus on natural resources, mining law, public lands, energy, and water. She has successfully handled issues of first impression involving mineral resources in Nevada and has been extensively involved in the land use planning process in Nevada for Greater Sage Grouse conservation efforts. Laura was lead counsel for the nine Nevada counties and several private plaintiffs who successfully challenged the 2015 land use plan amendments – obtaining an order from the United States District Court for Nevada remanding the LUPAs. Ms. Granier has successfully handled litigation involving complex land tenure issues for various mining projects throughout Ne-



vada. She has worked closely with state legislators in previous sessions on challenging issues related to water, mineral resources, revenue, education and land use. Her regulatory experience includes a broad spectrum of work before various agencies with regulatory jurisdiction over environmental issues, mining, water, education, taxes, land use, and public utilities.

#### Chris Stoneback



Christopher (Chris) C. Stoneback is a Partner in the Firm's Litigation and Energy, Environment, and Natural Resources Departments. Chris co-chairs the Firm's Energy and Environment Practice Group. Chris' practice focuses on civil litigation, particularly environmental, natural resources, and commercial litigation, and also on environmental due diligence, permitting, compliance, and remediation. Chris has tried numerous cases from inception through jury verdict and appeal, and has considerable experience in conducting environmental due diligence for natural resource transactions and managing the legal aspects of permitting natural resource operations, including mining permits, water discharge permits, and air quality permits. Chris has litigated in both State and Federal courts and in administrative agencies, and he has presented legal education seminars on current environmental issues, the legal challenges expected for natural resource permittees, and Montana's constitutional environmental provisions. Chris has also drafted, lobbied for, and seen enactment of environmental legislation aimed at achieving client needs. He is licensed to practice in Montana, Colorado, Wyoming, and North Dakota.

### MORNING SESSIONS | THURSDAY DECEMBER 8

SESSION TIMES: 8:00 - 11:30 COFFEE BREAK 9:35 - 10:20

#### DOMESTIC CRITICAL MINERALS DEVELOPMENT: Battery-powered Rubber Hitting the Road or Deer in the Headlights?

*Area of Interest - Mineral Deposits, Geology & Exploration*

Chaired by: **Christopher Dail**, *Manager, Exploration, Perpetua Resources, Donnelly, ID and*

**Peter Vikre**, *U.S. Geological Survey, Reno Office, Geology, Minerals, Energy and Geophysics Science Center, Mackay School of Earth Sciences and Engineering, University of Nevada-Reno, Reno, NV*

#### **Session Description:**

Supplies of largely imported critical minerals, characterized by absence or long running decline of domestic production, have been further compromised by supply chain bottlenecks resulting from the COVID-19 pandemic and Ukraine invasion. Increasing support for domestic production of critical minerals by government agencies (DOD, DOE, DOI) has resulted in development of mine plans and processing facilities for mostly to entirely imported battery components (Li, Co) and commodities necessary for energy production, national defense, and technological competitiveness (REE, Te, Ni, Nb...). This session will explore government-industry commitments to new mine and processing facility developments with an emphasis on advanced projects that have future production of critical minerals in the headlights.

#### Chris Dail



Chris has 35 years of experience as an exploration geologist. His experience includes project to program level planning and execution across several continents and on a variety of mineral deposit types. Chris' role at Perpetua Resources is primarily focused on identifying and evaluating the exploration potential for new prospects and deposits within the project area. Chris has been

with Perpetua since the company was founded. He decided to join the project because of the opportunity to help restore fisheries and habitat at the site and bring stable, well-paying jobs to a rural area depending on seasonal, often low paid tourism-type jobs. He believes Perpetua's goal to use modern mining practices and leave behind positive legacy. Chris enjoys recreating throughout Idaho and the surrounding region including cross country and downhill skiing, rafting, sailing his historic wooden sailboat in lake Coeur d'Alene and hiking through the variety of terranes in the region with his wife.

#### Peter Vikre



Peter Vikre is a research geologist with the US Geological Survey in Reno, Nevada, where he investigates the characteristics and origin of metal deposits in the western United States. Recent research has focused on the sources of components of hydrothermal minerals that comprise metal deposits, and on inventorying domestic critical mineral resources in intrusion-related deposits. He has authored numerous publications on these themes. Previously he was the exploration manager of the Great Basin division for ASARCO Incorporated. He holds a BA degree from Dartmouth College, and MS and PhD degrees from Stanford University.

### STUDENTS & JUNIOR PROFESSIONALS

*Area of Interest - Business & Finance*

Chaired by: **Dale Kerner**, *Permitting Manager, Perpetua Resources, Donnelly, ID and*

**Sena Cicek**, *Geotechnical Engineer - Leeville Underground Complex, Nevada Gold, Elko, NV*

#### **Session Description:**

It's what you know, who you know....and who knows YOU. Engagement and exposure with mining industry professionals is advantageous for students and those in the early stages of their careers. Whether its landing that first job or identifying new opportunities for development, learning the value of networking early and often is a high-value life skill. This session provides a venue for (1) students seeking to demonstrate their interest in advancing mining through their academic research, or (2) junior professionals who want to bring new ideas or observations to their peers. Attendees should come ready to meet those who are (and will be) shaping the future of our nation's mining industry.

#### Dale Kerner



Dale Kerner is a Professional Geologist licensed in the State of Idaho. He currently serves as the Permitting Manager for Perpetua Resources, working to obtain the many permits and approvals required for mining and reclaiming the historic Stibnite Gold Project in central Idaho. Prior to joining Perpetua Resources predecessor, Midas Gold in 2017, Dale had an 18-year career in environmental consulting that included geological exploration, mine planning & permitting, and NEPA project planning and coordination. Dale obtained degrees at Boise State University (MS Geology) and the University of Wisconsin/Eau Claire (BS Geology). Dale is an active member of the SME Boise Section and the Idaho Mining Association Conference Planning Committee. He utilizes these platforms to build meaningful connections between the mining industry, the public and the educational institutions that are developing our nation's future mining workforce.

*(continued on next page)*

## 2022 Technical Session Program... (continued)

### MORNING SESSIONS | THURSDAY DECEMBER 8

SESSION TIMES: 8:00 - 11:30 COFFEE BREAK 9:35 - 10:20

STUDENTS & JUNIOR PROFESSIONALS...(continued)

#### Sena Cicek



Sena Cicek is a geotechnical engineer at Nevada Gold Mines' Leeville Underground Complex. Sena holds BS and MSc degrees in Mining Engineering from Middle East Technical University (METU) and West Virginia University, respectively. Sena's university research included developing a methodology for rating floor quality in underground coal mines which encountered floor failure (Coal Mine Floor Rating [CMFR]). Sena is an active member of the Society of Mining Metallurgy and Exploration (SME); she helped establish the SME Student Chapter in Turkey and is currently working as a Section Counselor for the SME METU Student Chapter. She serves on SME's Young Leaders Committee (YLC), is co-chair of the YLC Global Section Subcommittee (2019-2020) and contributes to a variety of SME committees and subcommittees. In 2022, she was nominated for the SME Board of Directors Internship Selection Committee, and Mining & Exploration Representative for the Mining Engineering Committee. Sena's career ambitions include a leadership role in operations oversight where she can promote diversity and inclusion, effective communication and employee recognition, and an atmosphere of equal opportunity with a focus on continuous improvement of the workplace and work practices.

### MINING HYDROLOGY I

#### Area of Interest - Operations

**Chaired by:** **Ronald T. Parratt Jr.**, *Water & Energy Specialist, Newmont Mining Corporation, Victor, CO* and  
**Mike Hardy**, *Senior Project Manager, Lumos & Associates, Reno, NV*

#### Session Description:

The various aspects of minerals extraction all have challenges to overcome related to water. Whether they are related to sustainability, environmental regulations, exploration, development or operations; challenges related to water continue to drive decision making. This session seeks to present various challenges related to water within the current landscape of mining, and exploration, and the solutions applied meet project and company goals and requirements.

#### Ronald T. Parratt, Jr.

Ronald Parratt is a professional mining hydrogeologist working as the Site Water Coordinator – Water and Energy Specialist for Newmont Mining Corporation at their Cripple Creek and Victor operations in Colorado. He has 15 years of experience and expertise in mining hydrology including, ground water modeling, mine dewatering, water quality program management, and permitting. His interest in hydrogeology began while working as a driller's assistant for Layne Christensen Drilling in AZ. This inspired him to get his master's degree in Hydrogeology at the University of Nevada, Reno. He worked for Newmont as an Engineer II: Hydrogeologist at their Twin Creeks, Midas and Phoenix mines and during his time with Schlumberger Water Services, he worked as a Project Hydrogeologist on several projects throughout Nevada, Idaho and Chile. In his spare time, he enjoys being in the outdoors with his family, golfing and hiking.

#### Michael Hardy



Michael has over 30 years in the field of water resources with the majority of his experience in regional groundwater characterization and analysis, water rights, well field management, and exploration and production well drilling. Michael began his career as a hydrogeologist for an in-situ lithium mining operation in western central Nevada. Some of his responsibilities included managing an extensive wellfield (60 plus wells), company water rights and conducted multiple well drilling projects. After 9 years, Michael went to work for water resource company where he was a project manager of large water infrastructure projects in excess of \$4.3 million. Michael joined Lumos & Associates, Inc. in 2003 where he has managed multiple large groundwater investigations, water infrastructure projects and water rights. Michael is also a very active member with the Nevada Water Resources Association where he was a Board Member, past President and Treasurer for the organization.

### NEPA REFORM & PERMITTING FOR STRATEGIC MINERALS

#### Area of Interest - Mineral Deposits, Geology & Exploration

**Chaired by:** **Edward (Ted) Boling**, *Partner, Perkins Coie LLP, Washington, DC* and  
**Bob Maynard**, *Partner, Perkins Coie LLP, Boise, ID*

#### Session Description:

This session will provide an updated critical look at NEPA since President Biden announced policy support for sustainable production of "strategic and critical materials necessary for the clean energy transition — such as lithium, nickel, cobalt, graphite, and manganese for large-capacity batteries" ([Memorandum on Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended | The White House](#)). Additionally, the session will focus on the Council on Environmental Quality's amendments to its government-wide NEPA regulations. CEQ has committed to a "comprehensive reconsideration of the 2020 Rule to evaluate its legal basis, policy orientation, and conformance with Administration priorities, including the Administration's commitment to addressing climate change and environmental justice." Under Executive Order 14008, CEQ's NEPA review will need to include provisions "to ensure that Federal infrastructure investment reduces climate pollution, and to require that Federal permitting decisions consider the effects of greenhouse gas emissions and climate change" and "to accelerate the deployment of clean energy and transmission projects in an environmentally stable manner." Finally, the session will cover the Biden-Harris Administration's Fundamental Principles for Domestic Mining Reform. (<https://www.doi.gov/sites/doi.gov/files/biden-harris-administration-fundamental-principles-for-domestic-mining-reform.pdf>)

The panel will feature NEPA experts with practical experience concerning mining projects. The presentations and discussion will focus on the CEQ's Phase 1 changes to Purpose and Need and Effects regulations, the Phase 2 proposals for comprehensive amendment of the 2020 regulations, the implications of changes directed by Administration policy, and provide an update on the changes CEQ is considering with examples of incorporating clean energy and mining reform principles into NEPA documents. The session will cover other current developments regarding NEPA in the courts and Congress.

#### Panelists include:

- **Kaycee M. Royer**, *Associate, Perkins Coie LLP, Boise, Idaho*

## Ted Boling



Edward (Ted) Boling served as the country's top National Environmental Policy Act (NEPA) attorney as an associate director at the Council on Environmental Quality (CEQ) in the Executive Office of the President. Ted served at CEQ, the U.S. Department of the Interior (DOI), and the U.S. Department of Justice (DOJ) in Democratic and Republican administrations. His experience includes deep involvement in federal infrastructure permitting issues and the first comprehensive revision of CEQ's NEPA regulations in 40 years.

Drawing on over 30 years of high-level public service, Ted currently advises leaders on transportation and energy development projects, agencies that must hire outside counsel, and the environmental professionals that support them on the development of renewable energy, resource development, transportation, and infrastructure. Clients are drawn to working with him because they know that by tapping into his experience, they will be able to prudently manage and effectively defend the choices they make, resources they commit, and risks to which they expose their organizations.

Ted's extensive government experience at CEQ included the development of the National Ocean Policy, CEQ's climate change guidance, and the regulatory response to the Deepwater Horizon disaster. He drafted NEPA guidance on mitigation and monitoring, cumulative impacts analysis, and the development categorical exclusions from detailed NEPA documentation. Ted advised the White House on the establishment of numerous national monuments, including the first marine national monuments in the United States and the largest marine protected areas in the world. He also assisted in briefing three U.S. Supreme Court cases.

## Bob Maynard



Bob Maynard is a partner based in the Perkins Coie Boise office and chair of the firm's Mining/Oil & Gas Group. Bob has more than forty years of experience in National Environmental Policy Act (NEPA) and other environmental and natural resources law. He has assisted numerous mining projects with permitting and other regulatory, transaction, and litigation matters and issues in the eastern and western U.S. and Alaska. His work has encompassed the prospecting, exploration, development, production and reclamation/closure operation phases. He served many years as a federal attorney representing the U.S. Forest Service regarding mining and other matters in Alaska and Washington D.C. He speaks and writes frequently on NEPA and other environmental and natural resources law and policy topics.

## BEYOND CONSULTATION: Toward Collaboration with Indian Tribes in U.S. Mining and Infrastructure Projects

### Area of Interest: Environmental

Chaired by: **Connie Rogers**, Principal, Terra Law Group, Denver, CO and **Collette Brown-Rodriguez**, Director Community & Tribal Relations, 8-Minute Solar, Tucson, AZ

### Session Description:

This session will include perspectives from Native Americans working in or with the mining industry, along with industry representatives, to review the increasing role of Tribes, and proactive measures being undertaken by the mining industry to meet the challenges of increased attention to tribal resources in evaluation of mining projects. Specific topics may include:

- Communicating with Tribes – Moving Past “Check the Box” and Toward Mutual Understanding

- Tribal Monitoring and Tribal Third Party Contracting.
- Community Benefit Agreements.
- Open Forum. Join the presenters for an open discussion with the audience.

*Speakers:* Invitations in process. Because of the unique nature of this session, there is no call for papers.

## Connie Rogers



Connie Rogers helps clients get their projects approved and operational. Connie advises clients in navigating complex regulatory regimes and environmental reviews, with an emphasis on compliance with federal land management statutes, the National Environmental Policy Act, species protection statutes, federal Indian law, cultural resource and religious

freedom concerns, and international human rights and indigenous peoples issues. Connie's clients include companies, local governments, non-profits and educational institutions in developing and implementing major infrastructure (water, wastewater, transmission), mining, energy (conventional and renewable) projects. Connie previously practiced in a large Rocky Mountain regional law firm, and served as Deputy Solicitor for Energy and Mineral Resources at the U.S. Department of the Interior, where she was the lead lawyer on issues relating to the development of renewable and conventional energy and mineral resources on Interior-managed lands.

## Collette Brown-Rodriguez



With 20+ years of experience as a project management & program development leader focused on tribal affairs, She has been integral to executing complex problem solving, resource management, and establishing organizational cohesion to engage tribes across North America. She has experience in uranium mine reclamation, coal, oil & gas, and base metals mining operations and project development.

Member of the Confederated Salish Kootenai Tribe and descendant of the Navajo Nation. Passionate about utilizing my multidisciplinary expertise & public speaking background to influence tribal affairs while delivering optimal business results. She holds a Bachelor's in Environmental Science and will be completing her MBA from University of Arizona, May of 2022.

### GET YOUR TICKETS EARLY

*Don't forget to include your luncheon tickets when you register. Our guarantees are due before many of you arrive. If you want a seat at the table you must order ahead of time.*

### Keynote Luncheons

*Wednesday & Thursday Noon - 1:30 \$65*

### Students & Junior Professionals Luncheon

*Thursday Noon - 1:30 \$55*



## 2022 Technical Session Program... (continued)

### AFTERNOON SESSIONS | THURSDAY DECEMBER 8

SESSION TIMES: 2:00 - 5:30 COFFEE BREAK 3:35 - 4:20

#### LARGE LEFT LATERAL LEAPS TO GEOLOGIC

##### Area of Interest - Mineral Deposits, Geology & Exploration

Chaired by: **Andrew Harley, Ph.D**, Mining Director, SWCA Environmental Consultants, Broomfield, CO

This year we will work to keep the tradition of provocative talks, accentuated by “inspired” discussions and commentary from the audience alive. Maybe even pour more life into it. Of course, we will count on (un)conventional beverages to help. The session is targeting presentations at the cutting edge of exploration science. This is a good forum for new ideas on exploration and development of mineral projects to see the light-of day. Topics of interest include technologies improving the effectiveness and productivity of exploration, improvement of energy efficiency and productivity waste reduction for mining and processing, geomicrobiology, data driven innovation, data analytics and artificial intelligence.

##### Andrew Harley, Ph.D



Dr. Andrew Harley has over 30 years experience with a background in geochemistry, soil science, plant nutrition and agronomy, Dr. Harley is able to integrate innovative solutions to reduce costs and improve efficiencies throughout the mine life cycle. Recent mining work includes: Geochemical evaluation and waste rock characterizations; supporting permit and license applications for proposed

mining, ore processing and smelting operations, 3<sup>rd</sup> party NEPA support, and supporting mining companies with water quality issues including overburden characterization and land application of treated water. Dr. Harley’s academic research involved understanding the role of weathering reactions of minerals for nutrient controls in agriculture soils and the development of mineral-based fertilizers.

#### SECURING MINING’S FUTURE WITH INNOVATIVE HR (PEOPLE) STRATEGIES

##### Area of Interest - Business & Finance

Chaired by: **Lindsey Schultz**, CEO, MRC Recruiting, Corporate Operations, Denver, CO

##### Session Description:

The mining industry is entering an exciting time – with topics such as a ‘super cycle’, energy independence, and electrification and decarbonization, a looming talent shortage and knowledge gap there is much to do. All of which, require people. Mining companies and their HR practitioners must be prepared to employ radical and innovative HR/ Recruiting/People Strategies to tackle existing and predicted industry challenges to attract and retain its workforce.

This session will dive into HR solutions such as:

- Building sustainable and values based work cultures
- Modernizing employee/contractor reward programs
- Training and development for a changing workforce and embracing non-traditional candidates outside of mining
- Recruiting the next generation of mining professionals
- Diversity, Equity & Inclusion programs

##### Lindsey Schultz



Lindsey has 17 years’ experience in HR and Recruiting. She is the CEO of MRC – a longstanding boutique recruiting firm focused on providing top talent to the mining industry. She holds a Bachelor of Arts degree in Human Resources and Organizational Behavior from the University of New Mexico and an MBA from Arizona State University. She has recently completed a course through Stanford University Graduate School of Business called Leveraging Diversity & Inclusion for Organizational Excellence. She is an active member in Women in Mining, AEMA, SME and number of other mining related associations. Lindsey believes MRC has the unique ability to help both clients and candidates find win-win scenarios. To create positive outcomes and networks, she has built a team of trusted partners to provide resume building and editing, professional coaching and consulting support for international candidates and clients. She advocates for and works diligently to help her clients build diverse and inclusive teams.

#### MINING HYDROLOGY II: SITE CHARACTERIZATION – IDENTIFYING, QUANTIFYING, AND EVALUATING UNCERTAINTY

##### Area of Interest - Operations

Chaired by: **Scott Effner**, Senior Principal Hydrogeologist, Alloy Group, Gunnison, CO and **Dan Stanaway**, Senior Scientist, Brown and Caldwell, Boise, ID

##### Session Description:

Site characterization is a complex process that involves data collection, analysis, and modeling to support feasibility studies, permitting, and closure planning for new mines. Site characterization forms the basis from which mining decisions are made and these decisions inherently contain risk. This session will focus on strategies to identify, quantify, and evaluate uncertainty related to hydrologic modeling, geochemistry, site-wide water balance evaluations, mine water and rock management, environmental compliance, and plan of operations.



##### Scott Effner

Scott Effner, P.G. is a Senior Principal Hydrogeologist for Alloy Group. He has 30 years of experience working in mining hydrogeology and geochemistry. His main areas of expertise are in the design of site characterization programs, geochemical and ground-water modeling, mine water inflow prediction, water quality monitoring, water supply evaluation, and the preparation of feasibility studies and permitting documents. Over the course of his career, Scott has provided hydrologic and geochemical consulting services to numerous projects in the western US and Latin America including mines for precious metals, copper, coal, phosphate, and industrial minerals.



##### Dan Stanaway

Dan Stanaway has more than 10 years of experience in water resources science and management. He is a Senior Scientist at Brown and Caldwell and manages mine permitting, water modeling, and water rights teams. Dan has overseen the development of hydrologic, water temperature, and water chemistry modeling as well as aquifer testing programs. Prior to joining Brown and Caldwell, Dan spent 5 years at the Idaho Department of Water Resources working on water rights and supply modeling and water administration. Dan has a master’s degree in hydrologic sciences and a bachelor’s degree in environmental studies and resource management from Michigan State University.

## LARGE LEFT LATERAL LEAPS FOR ENVIRONMENTAL PROFESSIONALS - MINING AND THE GREEN ECONOMY: READY! SET! GO! THE RACE IS ON FOR ENVIRONMENTAL SUSTAINABILITY

*Area of Interest - Environmental*

Chaired by: **Shawn Calendine**, *Geoscientist, hydroGEOPHYSICS, Inc., Tucson, AZ*

### **Session Description:**

Elements of the green economy are becoming increasingly prominent worldwide. Governments, industries, and communities are enthusiastically committing to transforming how we produce and use energy, promoting sustainability, and reducing negative environmental impacts. An essential solution for many of these challenges is green energy. However, as we focus on new and innovative green energy technologies, our ability to harness their sustainability power rests on raw materials sourced from geologic resources. As the market for raw minerals increases, demand will quickly outstrip supplies due to a sluggish regulatory environment hampered by a negative public perception of mining. How will the mining industry, the regulatory environment, and the public's often-negative opinion of mining manage the intense changes needed to respond to the heightened need for increased mineral production to support sustainable energy?

**In this session, speakers will give 8-minute flash talks to pose questions for discussion in their presentation conclusions. Presenters can have as many slides as they want, but they must finish in the 8 minutes allotted.**

### **Shawn Calendine**



Shawn Calendine is the Marketing & Development Manager at hydroGEOPHYSICS, a leader in the field of geophysical consulting and geosciences servicing the environmental, engineering, groundwater, mining, oil and gas, and natural-resource exploration industries. Shawn creates long-term value for hydroGEOPHYSICS by bringing a robust professional quality to the company's marketing environment and by developing strong relationships with clients, building trust through integrity, flexibility, a deep understanding of client needs, along with decades of experience as an environmental scientist and geoscientist.

## ESG AND RESPONSIBLE MINING

*Area of Interest: Legislative & Public Affairs*

Chaired by: **Jay Gear**, *Vice President Environment, Health & Safety, and Korie Hickel*, *Director, ESG, Community & Government Relations, Coeur Mining, Inc., Chicago, IL*

### **Session Description:**

Responsible Mining, Sustainability, and ESG are all related practices, but yet different in their own way. This inaugural session for AEMA will explore how principles of modern mining and ESG have been at the forefront of integrating mining fundamentals with society and the investment community. As ESG is defined through three broad terms, "Environmental", "Social", and "Governance", the importance to showcase and disclose how mining is performed and how the mining companies conduct their business through all phases of the mine life cycle during these times are paramount to sustain a social license to operate and mission related investing, not only locally but also across a global spectrum. Plus, mining is centric to a unique role as the primary raw materials provider to support a Just Transition to a sustainable energy future. The session will delve into navigating the complexities of ESG, through its dynamic and ever evolving nature, as well as explore policy, instituting best practices, and overcoming challenges that are unique to the mining industry.

### **Jay Gear**



Jay Gear joined Coeur Mining in 2014 and transitioned to the Vice President of Environment in February 2018. Gear is an accredited environmental management and science professional with over two decades of progressive experience in the mining, chemical, and consulting industries. Gear currently oversees all aspects of Coeur's environmental efforts, which include, permitting, environmental performance, strategic planning, corporate responsibility, etc. Before joining Coeur, Jay worked in the environmental and public policy group at a molybdenum mining operation in New Mexico, in the corporate environmental remediation group for a leading chemical and ammunitions company, and in the environmental consulting field primarily with the investigation and remediation of impacted industrial sites throughout the United States, Puerto Rico, and Canada. Mr. Gear holds a Bachelor of Science degree in Watershed Management with a hydrogeology emphasis from the University of Wisconsin in Stevens Point.

### **Korie Hickel**



Korie joined Coeur in 2018 and is responsible for leading ESG strategy and implementation for the company, with a strong focus on corporate ESG reporting and disclosures, cross-site alignment, stakeholder engagement and community relations. She steers Coeur's Climate Working Group which oversees the company's long-term strategy to assess and mitigate climate-related risks and opportunities and oversees the development of the annual ESG report. Korie sits on the Sustainability Accounting Standards Board (SASB) sector advisory group, and in 2021, was appointed to the Global Reporting Initiative's (GRI) Mining Sector Standard Working Group, an expert project group leading the creation of a new sector reporting standard. Additionally, she is active in multiple industry ESG groups. Throughout her career, Korie has focused on collaborating with varied stakeholder groups including indigenous communities, non-profits, government agencies and academics, identifying and implementing solutions to public health problems. Prior to Coeur, Korie worked for the Alaska Native Tribal Health Consortium, the largest and most comprehensive tribal health organization in the United States.

## THE CURT EVERSON GREAT BASIN EXPLORATION SESSION

*Area of Interest - Mineral Deposits, Geology & Exploration*

Chaired by: **Chad Peters, P.Geo**, *President, CEO & Director, Ridgeline Minerals, Winnemucca, NV and Bob Felder*, *Director, Orogen Royalties, Reno, NV*

### **Session Description:**

Nevada and the Great Basin continue to be a top jurisdiction for exploration and mining investment, due to the rich mineral endowment, extensive infrastructure and favorable regulatory process. The area remains a busy arena of competition among major and junior companies, as evidenced by significant resource expansion among the majors and a large number of newly listed junior companies raising capital and exploring for a variety of commodities. Competition for claim stakers, soil samplers, geophysical contractors, drill rigs and geologists is very high. Amidst all of this, there are companies doing high-quality geologic work advancing existing projects and in search of new discoveries. This year's session will focus on exploration to resource stage projects with an emphasis on geologic innovation, breakthroughs and successes.

## 2022 Technical Session Program... (continued)

### MORNING SESSIONS | FRIDAY DECEMBER 9

SESSION TIMES: 8:00 - 11:30 COFFEE BREAK 9:35 - 10:20

#### THE CURT EVERSON GREAT BASIN EXPLORATION SESSION... (continued)

##### Chad Peters



Chad is a registered professional geologist and the President, CEO and co-founder of Ridgeline Minerals, a Nevada focused junior explorer. Chad and his team have raised \$14 million in the public markets since 2019 as well completed an IPO on the TSX Venture in 2020. Prior to co-founding Ridgeline Minerals Chad was a managing member of the Premier Gold Mines Ltd.

Exploration team responsible for the discovery of over 10 Moz. of gold in Canada and the US.

##### Bob Felder



Bob Felder is a Director of Orogen Royalties Inc. following the successful merger of Renaissance Gold and Evrim Resources in 2020. Bob has worked on the exploration side of the mining industry for most of the past 40 years, beginning in technical positions as an exploration geologist, and progressing into management and executive roles, for both major and junior companies. He has been involved in the

discovery and resource development of several projects in Nevada which have subsequently become mines, and through that experience has become very well versed in all aspects of mineral exploration and development.

Bob is active in the Nevada geologic community and currently serves on the Nevada Minerals Commission, as a Director of the Geological Society of Nevada (GSN) Foundation and as a Vice President of the Nevada Chapter of The American Institute of Professional Geologists (AIPG).

## ARTIFICIAL INTELLIGENCE & DATA ANALYTICS APPLICATIONS IN MINING OPERATIONS

### Area of Interest - Operations

Chaired by: **Javad Sattarvand, Ph.D.**, Associate Professor, *University of Nevada, Reno and*

**Ali Soofastaei, Ph.D.**, *Artificial Intelligence Projects Leader, Vale-Australia-Brisbane, Brisbane, QLD, AUSTRALIA*

### Session Description:

The mining industry is increasingly using AI to optimize processes, enhance decision-making, derive value from data, and improve safety. While there are many benefits to its implementation, it is still very new, and there is much work that needs to go into a successful application. Planning, research, communication, and change management are all essential foundations for implementation. In an industry that can be reluctant to change, industry collaboration is essential to communicate the advantages of AI and establish best practices for AI technology.

The AI in Mining session will focus on AI & Data Analytics applications in the mining industry. During this session, the industries and universities will collaborate on the future of AI from a wide range of perspectives. The session so their paper will be a fit. It also goes a long way in selling your session to the attendees.

##### Javad Sattarvand



Dr. Javad Sattarvand, Ph.D., is an associate professor at the Department of Mining and Metallurgical Engineering, at the University of Nevada, Reno since 2015. Dr. Sattarvand has received his Ph.D. in Mining Engineering from the University of Rheinisch-Westfälische Technische Hochschule Aachen – Germany in 2009. With 17 years of academic appointments as

a lecturer, Assistant Professor and Associate Professor in the USA, Germany, Netherlands, and Iran and supervising 34 masters and 3 Ph.D. students, he is the teacher for mining automation and mining robotics courses at the University of Nevada, Reno. Dr. Sattarvand has published 26 journal and over 70 conference papers and has received over three million dollars of federal grants, mostly from NIOSH. He has been also the recipient of the prestigious SME's career development grant (\$300K). Dr. Sattarvand's industrial expertise is in mine planning, optimization algorithms, and programming for different mining applications, mine monitoring, and mine control systems. He has founded two start-up companies and his cooperation with major global consulting companies resulted in more than 20 industrial projects and the commercialization of several software and hardware products for mining automation.

##### Ali Soofastaei



Dr. Ali Soofastaei is an artificial intelligence scientist and an industrial global project leader. He leads innovative industrial projects in the field of artificial intelligence (AI) applications to improve safety, productivity, and energy efficiency, and to reduce maintenance costs. Dr. Soofastaei completed his Ph.D. at The University of Queensland (UQ) in the field of AI applications in mining engineering where he led a revolution in the use of deep learning (DL) and AI methods to increase energy efficiency, reduce operation and maintenance costs, and reduce greenhouse gas emissions in surface mines. Currently he is leading an AI Program in Vale.

## MINE CLOSURE AND RECLAMATION

### Area of Interest: Environmental

Chaired by: **Nick Rauh**, *Mining Technical Sales Manager, AGRU America, Inc., Fernley, NV and*

**Steve Boyce PE**, *Nevada Mining Practice Leader, Haley & Aldrich, Inc., Elko, NV*

### Session Description:

Mine closure is a critical component of environmental management in the mining industry. A thorough mine closure and reclamation plan is a complicated and often overlooked aspect in the design life of a site. This session will include technical presentations and case studies on the closure and reclamation process from shut down to post-closure monitoring by mining professionals across the industry.

##### Nick Rauh



Nick Rauh is the Mining Sales Manager for AGRU America, Inc. in Reno, Nevada. Before taking over the Mining Division, Nick served as the Technical Manager for the Western and Central United States for AGRU. Prior to working on the manufacturing side, he served as a project engineer for a geosynthetic installation contractor for a number of years. Nick received a BS in Civil Engineering from the University of Nevada, Reno.



**Steve Boyce**



Steve Boyce is a professional civil engineer and Nevada Mining Practice Leader for Haley and Aldrich, Inc. Steve graduated with an MS in Civil Engineering and an MBA from the University of Nevada. He has been active in the mining industry in Nevada, North America, and globally for over 30 years, performing roles in the regulatory, operations, and consulting arenas over that time. He has been completing and facilitating mine closure since

1997 and as a lifetime Nevada resident enjoys free time in the Nevada and Idaho outdoors.

**WE CAN SECURE OUR SUPPLY CHAINS,  
BUT WILL THEY LET US?**

*Area of Interest: Legislative & Public Affairs*

Chaired by: **Mark Compton**, *Executive Director, American Exploration & Mining Association, Spokane, WA*

**Session Description:**

The Biden administration has very clear priorities, including addressing climate change through renewable energy and vehicle electrification, rebuilding infrastructure, and highlighting environmental justice issues. Geopolitical events and global mineral demand clearly demonstrate the need to establish secure mineral supply chains for our economic and national security. This session will explore actions taken by the administration and Congress to help and/or hinder our quest to build and maintain a strong domestic mining industry to safely and responsibly provide the minerals society requires, as well as a look forward to what we can expect in 2023.

**Mark Compton**



Mark rejoined AEMA after serving six years as the Utah Mining Association’s (UMA) President. Having worked for AEMA, then known as the Northwest Mining Association, from 2008-2012 as the Government Affairs Manager, he already possesses an organic familiarity with the Association, its membership, and the issues.

Additionally, Mark possesses over a quarter century of government affairs experience. Prior to his tenure at UMA, he served as AEMA’s Government Affairs Manager and worked as a member of Idaho Governor C.L. “Butch” Otter’s gubernatorial and congressional staff, where he handled issues focusing on natural resources and economic development in northern Idaho.

He has a profound appreciation for the importance of responsible resource development to our economy and our way of life. He believes that by working together, AEMA and its members can ensure the U.S. mining industry remains strong and is able to produce the raw materials on which our modern society depends.

A graduate of the University of Montana, Mark lives with his wife Kelley on the outskirts of Coeur d’Alene, ID.



**AEMA offers full-time student discounts with paid membership of \$40.00**

- Full convention registration \$0.00
- 50% discount on short courses
- Travel assistance is available

*Exhibit Hall Lunch Station*



*The exhibit hall sandwich lunch is expanding this year. Lunch items will be a la carte and the menu choices will include a variety of items.*

# 2022 ANNUAL MEETING SPONSORSHIP OPPORTUNITIES

**PLEASE LIMIT YOUR CATEGORIES TO 3 PER SPONSORSHIP.**



|   | <b>Minimum</b>        | <b>Exclusive</b> |
|---|-----------------------|------------------|
| <b>SHORT COURSES</b>  |                       |                  |
| <input type="checkbox"/> Short Course Sponsors  | \$ 500                | \$ 30,000        |
| <b>FOOD &amp; BEVERAGE (per day)</b>  |                       |                  |
| • Coffee Breaks <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday  | \$ 500                | \$ 4,000         |
| • Lunches <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday  | \$ 500                | \$ 4,000         |
| <b>RECEPTIONS</b>   |                       |                  |
| <input type="checkbox"/> Tuesday - Awards & Recognition Reception   | \$ 2,500              | \$ 30,000        |
| <input type="checkbox"/> Wednesday - Welcoming Reception in the Exhibit Hall  | \$ 2,500              | \$ 35,000        |
| <input type="checkbox"/> Wednesday - AEMA Society, Student & Junior Professionals Mixer   | \$ 1,000              | \$ 5,000         |
| <input type="checkbox"/> Thursday - Happy Hour Reception in the Exhibit Hall  | \$ 2,500              | \$ 35,000        |
| <b>EXHIBIT HALL TECHNICAL SESSION BREAKS (each break)</b>   |                       |                  |
| Morning <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday                      | \$ 500                | \$ 7,500         |
|   | \$ 500                | \$ 6,000         |
| Afternoon <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday Morning Moose Milk | \$ 500                | \$ 5,000         |
| <b>MEALS</b>  |                       |                  |
| <input type="checkbox"/> Wednesday - Wednesday Keynote Speaker Luncheon   | \$ 2,500              | \$ 16,000        |
| <input type="checkbox"/> Wednesday - Exhibit Hall A La Carte Lunch  | \$ 300                | \$ 6,000         |
| Thursday - Government Industry Breakfast  | Sponsorship is Filled |                  |
| <input type="checkbox"/> Thursday - Thursday Keynote Speaker Luncheon   | \$ 2,500              | \$ 16,000        |
| Thursday - AEMA Society, Student & Junior Professionals Luncheon  | Sponsorship is Filled |                  |
| <input type="checkbox"/> Thursday - Exhibit Hall A La Carte Lunch   | \$ 300                | \$ 6,000         |
| <b>GENERAL SPONSORSHIP OPPORTUNITIES</b>  |                       |                  |
| Registration Bag  | Sponsorship is Filled |                  |
| <input type="checkbox"/> Student Travel Aid   | \$ 500                | \$ 22,000        |
| <input type="checkbox"/> Student Poster Session   | \$ 500                | \$ 4,500         |
| <input type="checkbox"/> Professional Poster Session  | \$ 300                | \$ 4,500         |
| <input type="checkbox"/> General Convention Sponsors  | \$ 100                |                  |
| <b>TECHNICAL SESSIONS</b>   |                       |                  |
| <input type="checkbox"/> Technical Session Sponsors   | \$ 500                | \$ 30,000        |
| <input type="checkbox"/> Thursday Environmental LLLL Session - beer   | \$ 100                | \$ 2,000         |
| <input type="checkbox"/> Thursday Traditional LLLL Session - beer   | \$ 100                | \$ 2,000         |
| <b>EXHIBIT HALL</b>   |                       |                  |
| <input type="checkbox"/> Core Shack Displays  | \$ 500                | \$ 5,000         |
| <input type="checkbox"/> Exhibit Hall Bars  | \$ 500                | \$ 5,000         |
| Exhibit Hall Aisle Signs  | Sponsorship is Filled |                  |

### 2022 Annual Meeting Sponsorship Agreement

*Complete this form and return it by mail to AEMA 16201 E. Indiana Ave., Ste. 3280, Spokane Valley, WA 99212-2385;  
or by email: [dstroh@miningamerica.org](mailto:dstroh@miningamerica.org)*

Event Sponsored \_\_\_\_\_ Amount \$ \_\_\_\_\_

Sponsoring Company \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Email \_\_\_\_\_

Address \_\_\_\_\_

City, State, Postal Code \_\_\_\_\_

Payment  Please Invoice Me  Check  VISA  MasterCard  American Express  Discover

Card Number \_\_\_\_\_ Expir Date \_\_\_\_\_

Name as it appears on the Card (please print) \_\_\_\_\_

Cardholder Email: \_\_\_\_\_

# Student Poster Contest

The Student Poster Contest is designed to give young men and women the opportunity to present papers to the convention attendees. This year's contest will be judged on Wednesday, December 7. Set up will take place on Tuesday, December 6.

## CONTEST DESCRIPTION

The contest is structured to simulate the presentation of a project or process to management by an engineer, geologist or metallurgist. The candidate will be judged on his/her ability to convey meaning and conviction that the work is significant and is of benefit to the minerals industry. The contest provides an excellent opportunity for young people to meet leaders in the minerals industry and to develop communication skills with other professionals who may not necessarily be skilled in the student's particular discipline. We are accepting papers dealing with exploration, operations, management, economics, reclamation and other subjects pertinent to the mining industry.

## PRIZES TO BE AWARDED

- Grand Prize ~ \$350 - Check donated by Sponsors of the 2022 AEMA Annual Meeting
- 2nd Prize ~ \$200 - Check donated by Sponsors of the 2022 AEMA Annual Meeting
- 3rd Prize ~ \$150 - Check donated by Sponsors of the 2022 AEMA Annual Meeting
- 4th Prize ~ \$100 - Check donated by Sponsors of the 2022 AEMA Annual Meeting
- 5th Prize ~ \$ 75 - Check donated by Sponsors of the 2022 AEMA Annual Meeting

## SPECIFICATIONS

### BOOTH DIMENSIONS:

Each student will be provided a 4' x 8' poster board display unit (that will accept push pins), a table and a chair.

### DISPLAY MATERIALS:

The display materials for hanging on the panels should be maps, diagrams, charts and posters that are of good quality. Core, rock samples, test results, demonstrations, handouts or other such items can be displayed or distributed on the table.

### SET UP & JUDGING:

Exhibitor, core shack and student poster set up will take place between 8:00 am and 5:00 pm on Tuesday December 6. Judging will be on Wednesday morning December 7. Students are expected to be at their posters in the morning and ready to discuss their poster projects. Prizes will be awarded during the Students & Junior Professionals Luncheon on Thursday.

## COST

Technical Session fees are waived for all full time students who are members or become members of AEMA. Student membership fees are \$40.00 annually. Student travel aid is available. Contact Pat Heywood - pheywood@miningamerica.org

This entry form does not constitute a registration. Students must complete and return a registration form. See form in this brochure, or online at [www.miningamerica.org](http://www.miningamerica.org)

## HOW TO ENTER

Interested students should complete and return the registration form below to AEMA on or before November 20. If you have any questions please contact Pat Heywood [pheywood@miningamerica.org](mailto:pheywood@miningamerica.org).

## 2022 STUDENT POSTER CONTEST ENTRY FORM

Return the completed form to AEMA~ 16201 E. Indiana Ave., Ste. 3280, Spokane Valley, WA 99216  
or Email to: [pheywood@miningamerica.org](mailto:pheywood@miningamerica.org)

Student Name \_\_\_\_\_

School \_\_\_\_\_

Preliminary Title of Presentation (may be changed prior to November 1) \_\_\_\_\_

\_\_\_\_\_

Email \_\_\_\_\_ Cell Phone \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_ Postal Code \_\_\_\_\_ Country \_\_\_\_\_

# Professional Poster Exhibition



## DESCRIPTION

We are accepting papers dealing with exploration, geochemistry, geophysics, metallurgy, engineering, economics, reclamation, operations, and other subjects pertinent to the mining and mineral exploration industry. This poster session is designed to help bridge science and industry, inspire collaborative efforts in mineral exploration, and showcase research applied to mineral deposits. The core shack and exhibit hall are available for companies interested in promotional-type displays.

## SPECIFICATIONS

**Board Dimensions:** Each presenter will be provided a 4' x 8' poster board display unit and a chair.

**Display Materials:** The display materials for hanging on the panels should be posters, maps, or diagrams of good quality.

**Set Up:** Display set up will take place between 8:00 am and 5:00 pm on Tuesday, December 6.

## COST

The Exhibit Only registration fee is waived for one individual per poster. If you are not a current member of AEMA there is a place on the registration form you can join or renew. Poster Session participants must be either an individual member, be employed by a Corporate member company, or be a government employee, If you want to attend the technical sessions, a technical session badge must be purchased. **This entry form does not constitute a registration.** Please complete the **exhibitor registration** form in this brochure or online at [www.miningamerica.org](http://www.miningamerica.org).

## HOW TO ENTER

Interested parties should complete and return the registration form below to AEMA on or before November 1. If you have any questions please contact Pat Heywood, [pheywood@miningamerica.org](mailto:pheywood@miningamerica.org).

## 2022 POSTER EXHIBITION ENTRY FORM

Return the completed form to AEMA, 16201 E. Indiana Ave., Ste. 3280, Spokane Valley, WA 99216 or Email to: [pheywood@miningamerica.org](mailto:pheywood@miningamerica.org)

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Preliminary Title of Presentation (may be changed prior to Nov. 1) \_\_\_\_\_

\_\_\_\_\_

Email \_\_\_\_\_ Cell Phone \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_ Postal Code \_\_\_\_\_

Country \_\_\_\_\_



# Hotel Registration Information

Nugget Casino Resort  
1100 Nugget Avenue  
Sparks, Nevada



**Room Reservations:** (800) 648-1177

or <https://reservations.travelclick.com/96145?groupID=3392028>

Refer to our GROUP name - **GAEMA22** to get our discounted rate

**Government rate:**

Refer to our GROUP name - **GAEMAGV**

**Online reservations:** From our website -

<https://www.miningamerica.org/> click on the **Annual Meeting** tab and then **Registration & Housing**.

All attendees, speakers, chairs and exhibitors are responsible for making their own guest folio; room, tax, resort fee and incidental charges. The hotel requires a one night's room deposit, per room, to guarantee accommodations. All major credit cards are accepted for the deposit, which is refundable if cancellation is made forty-eight (48) hours prior to arrival. This deposit guarantees the room until 12:00 midnight, on the scheduled arrival date. Check-in is 3:00 pm and Check-out is 11:00 am.

## IMPORTANT INFORMATION ~ DON'T BE SCAMMED BY IMPOSTORS

**We will not be using any outside company or agency to book rooms. In order to reserve your room you must either reserve it on-line through the AEMA website, or call the Nugget Casino Resort directly at the above listed phone number.**

### ROOM RATES

Resort and Casino (formerly West and East) Towers (Single or Double Occupancy) - \$109

Triple and Quad occupancy rates are \$10 per person over the quoted rate

Limited number of Government Rate Rooms \$90

Our discounted resort fee is \$23

Rates apply three days before (December 1) and three days after (December 12)

Room Reservation Cut-off is November 4, 2022

### HOSPITALITY CONTACT

Hospitality Suite Reservations & Food & Beverage (for suite or exhibit booth)

Liz Shepard

[Elizabeth.Shepard@marnellgaming.com](mailto:Elizabeth.Shepard@marnellgaming.com)

775.356.3312



*Casino Tower - double queen (above)*

*Casino Tower - petite king rooms (below)*



*Hotel Tower king double queen room*



*Hotel Tower petite king room*



## Registration Information

### **EVERYONE MUST REGISTER...**

This includes chairs, speakers & exhibitors. To receive the advanced discounted registration fee your completed registration form must be received by AEMA on or before midnight PST Sunday, November 20, 2022.

Complimentary Exhibit Hall Spouse Passes are available by request. Contact Mike Heywood - email: mheywood@miningamerica.org, 509.624.1158 x 110.

### **CANCELATIONS/SUBSTITUTIONS...**

Your registration fee minus a 20% cancellation charge will be refunded if your written notification is received by AEMA on or before November 20, 2022. After that date, refunds will not be issued. You may send a substitute from your organization. Should the in-person 2022 AEMA Annual Meeting be canceled due to COVID-19, we will refund any canceled registration fees in full with no penalty.

### **PACKET PICKUP & ON SITE REGISTRATION**

AEMA on site registration and badge pickup will be located on the 2nd floor of the Nugget. AEMA registration desk hours:

- **Sunday December 4**  
Registration for the SRCE short course will be on the 2nd floor adjacent to the course room Sunday morning 7:00 - 8:00  
Evening registration will be 3:00 pm - 5:00 pm
- **Monday December 5**  
7:00 am - 5:00 pm
- **Tuesday December 6**  
7:00 am - 5:00 pm
- **Wednesday December 7**  
7:00 am - 5:30 pm
- **Thursday December 8**  
7:00 am - 5:30 pm
- **Friday December 9**  
7:00 am - 11:00 am

### **CONTINUING LEGAL EDUCATION CREDITS**

AEMA will seek 6.8 hours of Continuing Legal Education credit in 60-minute states and 8.2 hours of CLE credit in 50-minute states for the **U.S. Mining Law Short Course** and up to 17 hours of CLE credit in 60-minute states and 20.4 hours of CLE credit in 50-minute states for general registration **Environmental and Legislative and Public Affairs programming**.

The State Bar of Arizona does not approve or accredit CLE activities for the Mandatory Continuing Legal Education requirement. This activity may qualify for up to 17 hours toward your annual CLE requirement for the State Bar of Arizona, including 0 hour(s) of professional responsibility.

Credit hours are estimated and are subject to each state's approval and credit rounding rules.

Please visit the conference website at <https://www.miningamerica.org/2022-annual-meeting/> and scroll down to the CLE Bar for updates as we get them.

### **ATTENTION STUDENTS, CHAIRS, SPEAKERS & EXHIBITORS**

**STUDENTS:** Technical session registration fees are waived for all full time college students who are AEMA members (or join when registering). Annual membership fees for students - \$40.00. AEMA also has travel and lodging assistance available to qualified students. Contact Pat Heywood - pheywood@miningamerica.org for more information.

**SHORT COURSE INSTRUCTORS & SPEAKERS:** We will comp short course registration if you are an AEMA individual member, one of the two corporate representatives or employee of a corporate member. The exception to this is employees of the federal government and state regulatory agencies & geological surveys. This exception DOES NOT apply to college or university professors or other employees of colleges and universities who are not associated with the state geological survey/bureau of mines. Should they choose not to become a member they will pay 50% of the course fee.

**IMPORTANT -- Speakers -- Please indicate which short course you are speaking in on the line provided on the registration form.**

**TECHNICAL SESSION CHAIRS & SPEAKERS:** We will comp technical session registration for session chairs and 1 speaker per talk (maximum of 6 comped speakers per session) provided you are either individual members of AEMA, one of the two corporate representatives of a member company, or employed by a member company. The exception to this is employees of the federal government and state regulatory agencies & geological surveys. This exception DOES NOT apply to college or university professors or other employees of colleges and universities who are not associated with the state geological survey/bureau of mines. Non-member session chairs and speakers will be required to register at the member rate of \$400. **IMPORTANT -- Speakers --- Please indicate which session you are speaking in on the line provided on the registration form - do not enter the Interest Area or your talk title.**

**EXHIBITORS:** Registration is in addition to reserving your booth space. **Please coordinate.** You are allowed 2 complimentary technical session badges and 2 complimentary exhibit hall only badges per booth space. **VIP Guest Passes are for customer/client use only.** They may not be used for company employees. Additional company employees should complete a registration form and pay the Exhibit Hall Pass Fee of \$85.00. If you exceed this allotment, you will be billed. Exhibitors who receive a complimentary technical session badge as a short course chair, technical session chair or technical session speaker will not count against these allotments. You must be registered prior to November 20, 2022.

**ANYONE NOT REGISTERED PRIOR TO MIDNIGHT NOVEMBER 20, 2022 PST WILL BE CHARGED AN ADDITIONAL \$50 LATE FEE WHEN REGISTERING ON SITE - WE WILL NOT INVOICE -- NO EXCEPTIONS**

# 2022 Advanced Discount Registration Form

Return to AEMA by email to [mheywood@miningamerica.org](mailto:mheywood@miningamerica.org), or mail to AEMA, 16201 E Indiana Ave., Ste. 3280, Spokane Valley, WA 99216, USA. To qualify for Advance Registration Pricing, your completed form must be received by AEMA no later than Sunday November 20, 2022

Name: \_\_\_\_\_ Preferred first name for badge: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State/Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
 Country: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Email: \_\_\_\_\_ Twitter: \_\_\_\_\_  
 Instagram \_\_\_\_\_

**ANNUAL MEMBERSHIP DUES** - you must join, renew or have a current membership to get discount rates

|   | New                      | Renew                    |       |                             |
|---|--------------------------|--------------------------|-------|-----------------------------|
| Individual Active                                 | <input type="checkbox"/> | <input type="checkbox"/> | \$140 |                             |
| Retired Senior (65 and over & not working)        | <input type="checkbox"/> | <input type="checkbox"/> | \$ 70 |                             |
| Full-time University Student (ID required)        | <input type="checkbox"/> | <input type="checkbox"/> | \$ 40 |                             |
| <input type="checkbox"/> My membership is current |                          |                          |       | <b>Membership Fee</b> _____ |

**SHORT COURSE REGISTRATION** -(student discounts available on some courses - contact AEMA)

**Three day course**

- Using SRCE Version 2.0 - New & Updated \$ 715
- Practical Methods for Geostatistics, Spatial Analysis & Block Modeling \$ 715

**Two day courses**

- Understanding the SEC's New Mining Disclosure Rule: S-K 1300 \$ 495
- NEPA Training \$ 495

**One day courses**

- Mastering EXCEL for Earth Science Professionals (1 day Mon) \$ 330
- MSHA Refresher Course **Course is no charge - lunch is \$25** (1 day Mon) \$ 25
- U.S. Mining Law (1 day Tues)  **Optional CLE Credit (this course only add) \$ 100** \$ 330
- Fundamentals of Mineral & Metallurgical Processing (1 day Tues) \$ 330
- Mine to Mill Reconciliation (1 day Tues) \$ 330
- I am a **Short Course Chair/Speaker Member**(check course box above) No Fee
- Non-mbr speakers pay 1/2 course fee**

**Short Course Fee** \_\_\_\_\_

**FULL REGISTRATION** (includes technical sessions, exhibit hall & social functions)

|  | <b>Member or<br/>US Gov't</b> | <b>Non-Member</b> |                                   |
|--|-------------------------------|-------------------|-----------------------------------|
| <input type="checkbox"/> Full Registration <input type="checkbox"/> <b>Optional CLE Credits for Tech Sessions - add \$ 350</b> | \$ 400                        | \$ 675            |                                   |
| <input type="checkbox"/> Retired Senior (65 and over & not working)  | \$ 325                        | \$ 600            |                                   |
| <input type="checkbox"/> I am a Technical Session Chair* or Short Course Chair   | No Fee                        | No Fee            |                                   |
| <input type="checkbox"/> I am a Technical Session Speaker *  | No Fee                        | \$ 415            |                                   |
| <b>*enter session name:</b> _____  |                               |                   |                                   |
| <input type="checkbox"/> Full Time University Student (ID required)  | No Fee                        | \$ 175            |                                   |
| <input type="checkbox"/> Press Pass (1 per media group)  | No Fee                        | No Fee            |                                   |
| <input type="checkbox"/> AEMA Current Year Society Mentees   | No Fee                        | N/A               |                                   |
|  |                               |                   | <b>Tech Session Reg Fee</b> _____ |

**If you require CLE credit in any state other than Colorado, Idaho, Nevada, or Utah, please contact Pat Heywood with your registration so that AEMA can apply for CLE credit in your state.**

**EXHIBIT HALL ONLY REGISTRATION** (includes exhibit hall & social functions)

- Exhibit Hall Pass \$ 85 \$ 275 **Exhibit Hall Only Reg** \_\_\_\_\_

**MEAL AND DRINK TICKETS**  Special food requirements \_\_\_\_\_

|   | Quantity | \$          |                                       |
|---|----------|-------------|---------------------------------------|
| <b>Wednesday</b>                                  |          |             |                                       |
| Wednesday Keynote Speaker Luncheon                | _____    | @ \$65 ea = | _____                                 |
| <b>Thursday</b>                                   |          |             |                                       |
| Thursday Keynote Speaker Luncheon                 | _____    | @ \$65 ea = | _____                                 |
| Thursday Students & Junior Professionals Luncheon | _____    | @ \$55 ea = | _____                                 |
| Students with ID's are no charge                  | _____    | No Fee      | _____                                 |
| <b>Drink Tickets</b>                              | _____    | @ \$ 8 ea = | _____                                 |
|   |          |             | <b>Meal &amp; Drink Tickets</b> _____ |

**TOTAL AMOUNT DUE AND FORM OF PAYMENT**

**Total Amount Due** \$ \_\_\_\_\_

Check  Visa  MasterCard  American Express  Discover  PO (Government Agency) \_\_\_\_\_

Card Number \_\_\_\_\_ Expir Date \_\_\_\_\_

Name as it appears on the Card (please print) \_\_\_\_\_ Email \_\_\_\_\_

# 2022 Exhibitor Advanced Discount Registration Form

Return to AEMA by email to mheywood@miningamerica.org or mail to AEMA, 16201 E Indiana Ave., Spokane Valley, WA 99216, USA. To qualify for Advance Registration Pricing, your completed form must be received by AEMA no later than Sunday November 20, 2022

Exhibiting Company \_\_\_\_\_ Booth # \_\_\_\_\_  
 Name as you want it to appear on your badge - please print clearly \_\_\_\_\_  
 Title \_\_\_\_\_  
 Company if different from above \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State/Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
 Country: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Email: \_\_\_\_\_ Instagram \_\_\_\_\_ Twitter: \_\_\_\_\_

**ANNUAL MEMBERSHIP DUES** - you must join, renew or have a current membership to get discount rates

|   | <u>New</u>               | <u>Renew</u>             |       |                             |
|---|--------------------------|--------------------------|-------|-----------------------------|
| Individual Active                                 | <input type="checkbox"/> | <input type="checkbox"/> | \$140 |                             |
| Retired Senior (65 and over & not working)        | <input type="checkbox"/> | <input type="checkbox"/> | \$ 70 |                             |
| Full-time University Student (ID required)        | <input type="checkbox"/> | <input type="checkbox"/> | \$ 40 |                             |
| <input type="checkbox"/> My membership is current |                          |                          |       | <b>Membership Fee</b> _____ |

**SHORT COURSE REGISTRATION** -(student discounts available on some courses - contact AEMA)

**Three day course**

|   |        |  |
|---|--------|--|
| <input type="checkbox"/> Using SRCE Version 2.0 - New & Updated                                 | \$ 715 |  |
| <input type="checkbox"/> Practical Methods for Geostatistics, Spatial Analysis & Block Modeling | \$ 715 |  |

**Two day courses**

|   |        |  |
|---|--------|--|
| <input type="checkbox"/> Understanding the SEC's New Mining Disclosure Rule: S-K 1300 | \$ 495 |  |
| <input type="checkbox"/> NEPA Training  | \$ 495 |  |

**One day courses**

|  |        |  |
|--|--------|--|
| <input type="checkbox"/> Mastering EXCEL for Earth Science Professionals (1 day Mon)   | \$ 330 |  |
| <input type="checkbox"/> MSHA Refresher Course <b>Course is no charge - lunch is \$25 (1 day Mon)</b>                                  | \$ 25  |  |
| <input type="checkbox"/> U.S. Mining Law (1 day Tues) <input type="checkbox"/> <b>Optional CLE Credit (this course only add) \$100</b> | \$ 330 |  |
| <input type="checkbox"/> Fundamentals of Mineral & Metallurgical Processing (1 day Tues)   | \$ 330 |  |
| <input type="checkbox"/> Mine To Mill Reconciliation (1 day Tues)  | \$ 330 |  |
| <input type="checkbox"/> I am a <b>Short Course Chair/Speaker Member</b> (check course box above)                                      | No Fee |  |
| <input type="checkbox"/> <b>Non-mbr speakers pay 1/2 course fee</b>  |        |  |

**Short Course Fee** \_\_\_\_\_

**EXHIBITOR FULL REGISTRATION**

2 free per booth space - please coordinate

|  | <u>Member or<br/>US Gov't</u> | <u>Non-Member</u> |                                   |
|--|-------------------------------|-------------------|-----------------------------------|
| <input type="checkbox"/> Full Registration (using 1 of 2 free passes)          | No Fee                        | No Fee            |                                   |
| <input type="checkbox"/> <b>Optional CLE Credits for Tech Sessions</b>         | <b>\$ 350</b>                 | <b>\$ 350</b>     |                                   |
| <input type="checkbox"/> Additional Paid Registration                          | \$ 400                        | \$ 675            |                                   |
| <input type="checkbox"/> I am a Technical Session Chair* or Short Course Chair | No Fee                        | No Fee            |                                   |
| <input type="checkbox"/> I am a Technical Session Speaker *                    | No Fee                        | No Fee            |                                   |
| *enter session name: _____   |                               |                   |                                   |
| <input type="checkbox"/> Full Time University Student (ID required)            | No Fee                        | \$ 175            | <b>Tech Session Reg Fee</b> _____ |

**If you require CLE credit in any state other than Colorado, Idaho, Nevada, or Utah, please contact Pat Heywood with your registration so that AEMA can apply for CLE credit in your state.**

**EXHIBIT HALL ONLY REGISTRATION** (2 free per booth space)

|   |        |        |                                |
|---|--------|--------|--------------------------------|
| <input type="checkbox"/> Exhibit Hall Pass - (using one of the two free passes) | No Fee | No Fee |                                |
| <input type="checkbox"/> Prof Poster Session Presenter (1 per poster)           | No Fee | No Fee |                                |
| <input type="checkbox"/> Additional Paid Exhibit Hall Pass                      | \$ 85  | \$ 275 | <b>Expo Only Reg Fee</b> _____ |

**MEAL AND DRINK TICKETS**  Special food requirements

|   | <u>Quantity</u>   | <u>\$</u> |                                       |
|---|-------------------|-----------|---------------------------------------|
| <b>Wednesday</b>                                  |                   |           |                                       |
| Wednesday Keynote Speaker Luncheon                | _____ @ \$65 ea = | _____     |                                       |
| <b>Thursday</b>                                   |                   |           |                                       |
| Thursday Keynote Speaker Luncheon                 | _____ @ \$65 ea = | _____     |                                       |
| Thursday Students & Junior Professionals Luncheon | _____ @ \$55 ea = | _____     |                                       |
| Students with ID's are no charge                  | _____ No Fee      | _____     |                                       |
| <b>Drink Tickets</b>                              | _____ @ \$ 8 ea = | _____     | <b>Meal &amp; Drink Tickets</b> _____ |

**TOTAL AMOUNT DUE AND FORM OF PAYMENT**

**Total Amount Due** \$ \_\_\_\_\_

Check  Visa  MasterCard  American Express  Discover  PO (Government Agency) \_\_\_\_\_

Card Number \_\_\_\_\_ Expir Date \_\_\_\_\_

Name as it appears on the Card (please print) \_\_\_\_\_ Email: \_\_\_\_\_



## 2022 Exhibitors By Company

### A

**Acker Drill Company**, *Drilling Equipment, Drilling Rigs*, 229  
**ACZ Laboratories, Inc.**, *Analytical Laboratory Services*, 219  
**Agilent Technologies**, *Atomic Spectroscopy, Laboratory Equipment*, 734  
**AGRU America, Inc.**, *Geosynthetics, Liners*, 203 and 205  
**Alaska Marine Lines, Inc.**, *Transportation Services*, 233  
**Alloy Group**, *Environmental Engineers*, 759  
**ALS Minerals**, *Assay Laboratory, Laboratory Analytical Services*, 123  
**American Assay Laboratory**, *Assay Laboratory, Mineralogy Analyzer*, 700  
**American Lithium**, *Lithium Company*, 834  
**Analytik Jena US LLC**, *Spectroscopy*, 741  
**ARCADIS**, *Environmental Consultants, Engineering Services*, 428  
**ASC Engineered Services**, *Grooved Piping Products*, 231  
**Authentic Drilling, Inc.**, *Drilling Company*, 534  
**Avantor**, *Laboratory Equipment & Supplies, Laboratory Chemicals*, 115

### B

**Baroid Industrial Drilling Products**, *Drilling Fluid Products*, 718 and 720  
**Barr Engineering Co.**, *Engineers*, 822 and 824  
**Big Rock Exploration**, *Mineral Exploration*, 652  
**Bison Engineering Inc.**, *Environmental Consulting/Permitting, Environmental Services*, 502  
**Boart Longyear**, *Drilling Services, Drilling Company*, 708 and 710  
**Broadbent & Associates, Inc.**, *Environmental Consulting, Water Resources*, 523  
**Bureau Veritas Minerals**, *Assay Laboratory*, 739

### C

**Cementation USA Inc.**, *Mine Construction*, 644  
**CGS Mule, LLC**, *Geological Supplies*, 309  
**Challenger Pipe & Steel**, *Steel Pipe & Casing, Grooved Piping Products*, 217  
**CleanTech Environmental**, *Environmental Services*, 308  
**Coeur Products Ltd Inc.**, *Core Boxes, Core Drills*, 124 and 126  
**Colorado School of Mines**, *Educational/University, Metallurgy/Mining Departments*, 744  
**Concrete Canvas**, *Concrete Coverings*, 748  
**Contech Engineered Solutions LLC**, *Pipe, Erosion Control Products*, 729  
**Cornell Pump Company**, *Pumps*, 334  
**Costmine**, *Mine Information, Cost Estimating Services*, 338  
**CREG (Center for Research Economic Geology)**, *Research*, 315  
**Custom Linings**, *Liners*, 535

### D

**Datamine North America**, *Mining Software*, 511  
**DEA Incorporated/KonNx**, *Electrical Distribution Equipment*, 640  
**Devico**, *Directional Core Drilling, Downhole Survey Tools*, 327  
**DGI Geoscience US Inc.**, *Wireline Logging*, 328  
**Dias Geophysical**, *Geophysical Services*, 312  
**Drilling HQ**, *Diamond Core Supplies*, 413 and 415  
**Dyno Nobel Inc.**, *Explosives*, 207 and 209

### E

**Eastern Driller Mfg. Co., Inc.**, *DTH Hammers & Bits*, 642  
**EC Applications, Inc.**, *Geosynthetics*, 409

**EcoMister Evaporator**, *Dewatering Evaporator*, 742  
**EDCON-PRJ, Inc.**, *Geophysical Services*, 337 and 339  
**Ellington Geological Services**, *Analytical Laboratory Services, Laboratory Services*, 725  
**EMX Royalty Corp.**, *Mining Company*, 524  
**Energy Laboratories, Inc.**, *Environmental Laboratory Services*, 322  
**Engineering & Mining Journal**, *Mining Publications*, 425  
**Engineering Analytics, Inc.**, *Engineering Consultants*, 326  
**ENSERO**, *Water Treatment, Reclamation*, 653  
**Envirocon, Inc.**, *Environmental and Reclamation Services*, 832  
**Environmental Products & Applications, Inc.**, *Dust Control-Roads and Erosion*, 210  
**EnviroTech Services, Inc.**, *Liners*, 406  
**ESI Liners**, *Geosynthetics, Liner Installation*, 424  
**Evoqua Water Technologies**, *Water Treatment*, 533

### F

**Falcon Drilling Inc.**, *Drilling Company*, 752  
**First Drilling Group**, *Drilling Company*, 730 and 732  
**Florin Analytical Services**, *Analytical Laboratory Services, Laboratory Services*,  
**FORDIA/Matex**, *Drilling Products*, 113  
**Foremost**, *Drilling Products*, 432  
**Forgen**, *Environmental Remediation*, 838  
**Foth Infrastructure & Environment, LLC**, *Environmental Engineering*, 427 and 429  
**Frontier-Kemper Constructors, LLC**, *Mine Construction, Tunneling*, 111

### G

**Gallagher**, *Insurance*, 508  
**Geo-Logic Associates**, *Engineering Consultants*, 314  
**GEOKON**, *Geophysical Instrumentation*, 643  
**Geological Society of Nevada (GSN)**, *Books & Publications*, 318  
**Geopros, Inc.**, *Direct Staffing Services for Industry*, 237  
**Geotek, Ltd**, *Core Log Analysis*, 848  
**Geotemps, Inc.**, *Staffing Services/Mining Industry-Temporary*, 239  
**Golder Associates Inc.**, *Mine Engineering, Environmental Consultants*, 133

### H

**Hard Rock Consulting, LLC**, *Geologic Consultants, Engineering Consultants*, 775  
**Harrison Western Construction Corporation**, *Contract Mining, Underground Construction*, 330  
**Hexagon Mining**, *Mine Modeling Software, Mine Software*, 332  
**Hidden Valley Insurance Inc.**, *Insurance Services, Insurance & Risk Management*, 435  
**Hoffman Diamond Products, Inc.**, *Diamond Bits*, 227  
**Hole Products**, *Drilling Supplies*, 724  
**HOLT Services inc.**, *Dewatering Wells, Environmental Drilling*, 525  
**hydroGEOPHYSICS, Inc.**, *Geophysical Services*, 423  
**HyperSciences**, *Hypersonic Drilling Equipment*, 434

## 2022 Exhibitors By Company... (continued)

### I

**IMDEX Limited**, *Drilling Fluids & Solids Control, Down Hole Survey/XRF Rentals*, 414 and 416  
**Imperial Pipe**, *Steel Pipe*, 517  
**Inland Tarp & Liner**, *Liners*, 532  
**International Directional Services (IDS)**, *Gyro Surveying & Instrument Rentals, Directional Drilling Services & Motor Sales*, 130 and 132  
**International Lining Technology**, *Liner Installation, Geosynthetics*, 304  
**ioneer USA Corporation**, *Mining Company*, 774  
**Iron Woman Construction & Environmental Services LLC**, *Mine Construction*, , 426  
**Itasca Denver, Inc.**, *Hydrology, Geomechanics & Geochemistry Consulting, Environmental Consulting & Permitting*, 538

### J

**entech Drilling Supply, Inc.**, *Drilling Supplies*, 129  
**Just Refiners USA Inc.**, *Refiners*, 210 B

### K

**Kappes, Cassiday & Associates**, *Engineering Consulting Services, Laboratory Services*, 208  
**Klepfer Mining Services, LLC**, *Environmental Services*, 436  
**Knight Piesold**, *Consulting Engineers, Environmental Consulting & Permitting*, 722

### L

**Laszlo Photography, Inc.**, *Photography*, 900  
**Layne Christensen Company**, *Drilling Services*, 702  
**Legend, Inc.**, *Geological Supplies, Assay Supplies*, 726  
**Linkan Engineering**, *Water Management*, 417  
**Lumos & Associates, Inc.**, *Engineering and Environmental Consultants*, 302

### M

**Mackay School of Earth Sciences & Engineering**, *Educational / University*, 317  
**Major Drilling**, *Drilling Company*, 836  
**McClelland Laboratories, Inc.**, *Analytical Laboratory*, 522  
**McGinley & Associates**, *Environmental Consultants*, 648 and 650  
**MES Mining**, *Underground Mining Contractor, Tunneling*, 324  
**MICROMINE**, *Intuitive Mining Solutions*, 412  
**Mill Man Steel Inc. and Mavrik Environmental & Exploration**, *Steel Fabrication, Drilling Products*, 232  
**Millcreek Engineering**, *Engineers*, 404  
**Minerals Unlimited, LLC**, *Water Treatment*, 528  
**Montgomery & Associates**, *Engineering*, 747  
**MTech/CAMP**, *University, Metallurgical Consulting*, 335  
**Mount Sopris Instrument Company Inc./AXIS**, *Geophysical Logging Equipment*, 403 and 405

### N

**Nevada Bureau of Mines & Geology**, *Geological Survey*, 313  
**Nevada Division of Minerals**, *Information of Geology & Mining in Nevada*, 319  
**NewFields**, *Consulting Engineering, Environmental Consultants*, 211  
**Nilex**, *Liners, Pipe*, 846  
**North America Mining Magazine**, *Trade Publication*, 826  
**Northwest Linings and Geotextile Products, Inc/Sierra Geosynthetic Services, Inc.**, *Liner Installation, Geosynthetics*, 512

**Northwest Machine Works, Inc.**, *Drilling Products, Underground Core Drilling Parts*, 235

### O

**O'Keefe Drilling**, *Drilling Company*, 437 and 439  
**OREAS North America Inc.**, *Certified Reference Materials*, 830  
**Original Creations**, *Bronze Sculptures*, 1

### P

**Pace Analytical Services Inc.**, *Laboratory Services, Environmental Laboratory Services*, 307  
**Pacific Inter-Mountain Distributon, LLC**, *Erosion Control Products*, 407  
**Paragon Geochemical Laboratories, Inc.**, *Analytical Laboratory*, 516  
**Parsons Behle & Latimer**, *Legal Services*, 218  
**PayneWest Insurance**, *Insurance Services, Bonding*, 215  
**Perpetua Resources**, *Junior Exploration Company*, 537  
**Pioneer Technical Services, Inc.**, *Engineering and Environmental Consultants*, 306  
**Piteau and Associates**, *Engineering and Environmental Consultants*, 526  
**Placer Gold Design**, *Mining Related Fine Jewelry, Awards, Gift Items, Jewelry*, 109  
**Precision Geosurveys Inc.**, *Airborne Geophysics*, 504  
**Premier Drilling**, *Drilling Company*, 513  
**Promine Inc**, *Mining Software, Surveying/Mapping*, 536

### R

**REI Drilling/DPI Drilling Products**, *Drilling Services, Drilling Supplies*, 310  
**RESPEC (MDA)**, *Mining Software*, 743  
**RockTech USA**, *Drilling Products, Drill Hole Survey*, 323 and 325  
**Ruen Drilling, Inc.**, *Drilling Company*, 333

### S

**Sample Archive System**, *Core Boxes*, 433  
**Schramm Inc.**, *Drilling Rigs and Compressors*, 278  
**SciAps, Inc.**, *Hand Held Spectrometer*, 844  
**SGS**, *Analytical Laboratory Services, Metallurgical Consulting*, 749  
**Simcoe Geoscience**, *Geophysical*, 305  
**Skycatch**, *Drone Mapping*, 531  
**Skyline Assayers & Laboratories**, *Assay Laboratory, Laboratory Analytical Services*, 638  
**SkyTEM Canada Inc.**, *Airborne Geophysical Services*, 303  
**Skyward Specialty Insurance Group**, *Insurance Services*, 723  
**Society for Mining, Metallurgy & Exploration, Inc. (SME)/MEC**, *Professional Association*, 418  
**Solmax Geosynthetics LLC**, *Geosynthetics, Liners*, 402  
**SpecTIR, LLC**, *Hyperspectral Imaging*, 212  
**SRK Consulting (US), Inc.**, *Consulting Engineers*, 223 and 225  
**Stantec Consulting Services**, *Environmental Consultants*, 222 and 224  
**Superior Industries**, *Material Handling*, 226  
**SVL Analytical, Inc.**, *Analytical Services*, 316  
**SWCA**, *Environmental Consulting*, 214

### T

**TechLine Alaska**, *Drilling Supplies*, 647  
**Terramac**, *Crawler Carriers*, 649  
**Tetra Tech**, *Engineering Consultants, Environmental Consultants*, 704  
**The Mining Record**, *Mining Publications, Maps*, 719 and 721

## 2022 Exhibitors By Company... (continued)

T...(continued)

**Timberline Drilling, Drilling Company, 127**

**TonaTec, Drilling Company, 131**

**Tsurumi (America), Inc., Pumps, 753**

### U

**U. S. Bureau of Land Management, Government, 117 and 119**

**U. S. Forest Service, Government, 840 and 842**

**U. S. Geological Survey, Government, 746**

**United Central Industrial Supply, Cap Lamps, Gas Detection, Mine Rescue, Ventilation Products, Services, 329**

**Utah Mining Association, Mining Association, 731**

### V

**Veolia Water Solutions & Technologies, Water Treatment, 422**

**Victaulic, Grooved Piping Products, 733**

### W

**WaterSolve, LLC, Dewatering, 727**

**Welsh Hagen Associates, Environmental Engineers, 438**

**Westland Resources, Environmental Consulting & Permitting, 712**

**Western Environmental Testing Laboratory, Environmental Laboratory Services, 419**

**Western Nevada Supply, Commercial Supply House, 514**

**Wilderness Medics, Inc., Medical Services, 336**

**Women's Mining Coalition, Education/Governmental Affairs, Public Affairs/Grassroots, 408**

**Wood, Engineering and Environmental Consultants, Consulting Engineers, 527**

**Wood Rodgers, Surveying, Aerial Mapping, 518**

### Y

**Yellow Jacket Drilling Services, Drilling Company, 519**

### Z

**Zonge International, Inc., Geophysical Services, Geophysical Instrumentation, 213**

### CORE SHACK

**Allied Copper Corp, Mining Company, C 18**

**Arizona Silver, Junior Exploration Company, C 2**

**Aston Bay Holdings, Junior Exploration Company, C 15**

**Gold Bull Resources, Junior Exploration Company, C 17**

**Gold Royalty (Ely Gold Royalties), Royalty, C 14**

**Nevada Exploration Inc., Junior Exploration Company, C 8**

**Rex Minerals, Junior Exploration Company, C 16**

**Silver Range Resources, Junior Exploration Company, C 3**

**Stephen Smith, Inc./Larry R. Moyer, LLC, Junior Exploration Company, C 1**

**W R H Nevada Properties LLC, Junior Exploration Company, C 13**



**American  
Exploration & Mining  
ASSOCIATION**

## 2022 Exhibitors By Category

### A

#### **Aerial Mapping**

Wood Rodgers, 518

#### **Airborne Geophysical Services**

Precision Geosurveys Inc., 504

SkyTEM Canada Inc., 303

#### **Analytical Laboratory**

ACZ Laboratories, Inc., 219

Ellington Geological Services, 725

Florin Analytical Services,

McClelland Laboratories, Inc., 522

Paragon Geochemical Laboratories, Inc., 516

SGS, 749

SVL Analytical, Inc., 316

#### **Assay Laboratory**

ALS Minerals, 123

American Assay Laboratory, 700

Bureau Veritas Minerals, 739

Skyline Assayers & Laboratories, 638

#### **Assay Supplies**

Legend, Inc., 726

#### **Atomic Spectroscopy**

Agilent Technologies, 734

### B

#### **Bonding**

PayneWest Insurance, 215

#### **Books & Publications**

Geological Society of Nevada (GSN), 318

#### **Bronze Sculptures**

Original Creations, 1

### C

#### **Cap Lamps, Gas Detection, Mine Rescue, Ventilation Products, Services**

United Central Industrial Supply, 329

#### **Certified Reference Materials**

OREAS North America Inc., 830

#### **Commercial Supply House**

Western Nevada Supply, 514

#### **Concrete Coverings**

Concrete Canvas, 748

#### **Consulting Engineering**

NewFields, 211

#### **Consulting Engineers**

Knight Piesold, 722

SRK Consulting (US), Inc., 223 and 225

Wood, 527

#### **Contract Mining**

Harrison Western Construction Corporation, 330

## 2022 Exhibitors By Category... (continued)

### **Core Boxes**

Coeur Products Ltd Inc., 124 and 126  
Sample Archive System, 433

### **Core Drills**

Coeur Products Ltd Inc., 124 and 126

### **Core Log Analysis**

Geotek, Ltd, 848

### **Cost Estimating Services**

Costmine, 338

### **Crawler Carriers**

Terramac, 649

## D

### **Dewatering**

HOLT Services inc., 525  
WaterSolve, LLC, 727

### **Dewatering Evaporator**

EcoMister Evaporator, 742

### **Diamond Bits**

Hoffman Diamond Products, Inc., 227

### **Diamond Core Supplies**

Drilling HQ, 413 and 415

### **Direct Staffing Services for Industry**

Geopros, Inc., 237

### **Directional Core Drilling**

Devico, 327

### **Directional Drilling Services & Motor Sales**

International Directional Services (IDS), 130 and 132

### **Down Hole Survey/XRF Rentals**

IMDEX Limited, 414 and 416

### **Downhole Survey Tools**

Devico, 327

### **Drill Hole Survey**

RockTech USA, 323 and 325

### **Drilling Company**

Authentic Drilling, Inc., 534  
Boart Longyear, 708 and 710  
Falcon Drilling Inc., 752  
First Drilling Group, 730 and 732  
Major Drilling, 836  
O'Keefe Drilling, 437 and 439  
Premier Drilling, 513  
Ruen Drilling, Inc., 333  
Timberline Drilling, 127  
TonaTec, 131  
Yellow Jacket Drilling Services, 519

### **Drilling Equipment**

Acker Drill Company, 229

### **Drilling Fluid Products**

Baroid Industrial Drilling Products, 718 and 720  
IMDEX Limited, 414 and 416

### **Drilling Products**

FORDIA/Matex, 113  
Foremost, 432  
Mill Man Steel Inc. and Mavrik Environmental & Exploration, 232  
Northwest Machine Works, Inc., 235  
RockTech USA, 323 and 325

### **Drilling Rigs**

Acker Drill Company, 229  
Schramm Inc., 278

### **Drilling Services**

Boart Longyear, 708 and 710  
Hole Products, 724  
Jentech Drilling Supply, Inc., 129  
Layne Christensen Company, 702  
Premier Drilling, 513  
REI Drilling/DPI Drilling Products, 310  
TechLine Alaska, 647

### **Drone Mapping**

Skycatch, 531

### **DTH Hammers & Bits**

Eastern Driller Mfg. Co., Inc., 642

### **Dust Control-Roads and Erosion**

Environmental Products & Applications, Inc., 210

## E

### **Education/Governmental Affairs**

Women's Mining Coalition, 408

### **Educational / University**

Colorado School of Mines, 744  
Mackay School of Earth Sciences & Engineering, 317

### **Electrical Distribution Equipment**

DEA Incorporated/KonNx, 640

### **Engineering and Environmental Consultants**

Lumos & Associates, Inc., 302  
Pioneer Technical Services, Inc., 306  
Piteau and Associates, 526  
Wood, 527

### **Engineering Consultants**

ARCADIS, 428  
Barr Engineering Co., 822 and 824  
Engineering Analytics, Inc., 326  
Geo-Logic Associates, 314  
Hard Rock Consulting, LLC, 775  
Kappes, Cassiday & Associates, 208  
Millcreek Engineering, 404  
Montgomery & Associates, 747  
Tetra Tech, 704

### **Environmental and Reclamation Services**

Envirocon, Inc., 832



## 2022 Exhibitors By Category... (continued)

E...(continued)

### **Environmental Consultants**

ARCADIS, 428  
Broadbent & Associates, Inc., 523  
Golder Associates Inc., 133  
McKinley & Associates, 648 and 650  
NewFields, 211  
Stantec Consulting Services, 222 and 224  
SWCA, 214  
Tetra Tech, 704

### **Environmental Consulting & Permitting**

Bison Engineering Inc., 502  
Itasca Denver, Inc., 538  
Knight Piesold, 722  
Westland Resources, 712

### **Environmental Drilling**

HOLT Services inc., 525

### **Environmental Engineering**

Alloy Group, 759  
Foth Infrastructure & Environment, LLC, 427 and 429  
Welsh Hagen Associates, 438

### **Environmental Laboratory Services**

Energy Laboratories, Inc., 322  
Pace Analytical Services Inc., 307  
Western Environmental Testing Laboratory, 419

### **Environmental Remediation**

Forgen, 838

### **Environmental Services**

Bison Engineering Inc., 502  
CleanTech Environmental, 308  
Klepfer Mining Services, LLC, 436

### **Erosion Control Products**

Contech Engineered Solutions LLC, 729  
Pacific Inter-Mountain Distributon, LLC, 407

### **Explosives**

Dyno Nobel Inc., 207 and 209

## G

### **Geologic Consultants**

Hard Rock Consulting, LLC, 775

### **Geological Supplies**

CGS Mule, LLC, 309

### **Geological Supplies**

Legend, Inc., 726

### **Geological Survey**

Nevada Bureau of Mines & Geology, 313

### **Geophysical Instrumentation**

GEOKON, 643  
Zonge International, Inc., 213

### **Geophysical Logging Equipment**

Mount Sopris Instrument Company Inc./AXIS, 403 and 405

### **Geophysical Services**

Dias Geophysical, 312  
EDCON-PRJ, Inc., 337 and 339  
hydroGEOPHYSICS, Inc., 423  
Simcoe Geoscience, 305  
Zonge International, Inc., 213

### **Geosynthetics**

AGRU America, Inc., 203 and 205  
EC Applications, Inc., 409  
ESI Liners, 424  
International Lining Technology, 304  
Northwest Linings and Geotextile Products, Inc/Sierra Geosynthetic Services, Inc., 512  
Solmax Geosynthetics LLC, 402

### **Government**

U. S. Bureau of Land Management, 117 and 119  
U. S. Forest Service, 840 and 842  
U. S. Geological Survey, 746

### **Grooved Piping Products**

ASC Engineered Services, 231  
Challenger Pipe & Steel, 217  
Victaulic, 733

### **Gyro Surveying & Instrument Rentals**

International Directional Services (IDS), 130 and 132

## H

### **Hand Held Spectrometer**

SciAps, Inc., 844

### **Hydrology, Geomechanics & Geochemistry Consulting**

Itasca Denver, Inc., 538

### **Hypersonic Drilling Equipment**

HyperSciences, 434

### **Hyperspectral Imaging**

SpecTIR, LLC, 212

## I

### **Information of Geology & Mining in Nevada**

Nevada Division of Minerals, 319

### **Insurance & Risk Management**

Gallagher, 508  
Hidden Valley Insurance Inc., 435  
PayneWest Insurance, 215  
Skyward Specialty Insurance Group, 723

### **Intuitive Mining Solutions**

MICROMINE, 412

## J

### **Jewelry**

Placer Gold Design, 109

### **Junior Exploration Company**

Perpetua Resources, 537

## 2022 Exhibitors By Category... (continued)

L

### **Laboratory Analytical Services**

ALS Minerals, 123  
Skyline Assayers & Laboratories, 638

### **Laboratory Chemicals**

Avantor, 115

### **Laboratory Equipment & Supplies**

Agilent Technologies, 734  
Avantor, 115

### **Laboratory Services**

Ellington Geological Services, 725  
Florin Analytical Services, 208  
Kappes, Cassiday & Associates, 208  
Pace Analytical Services Inc., 307

### **Legal Services**

Parsons Behle & Latimer, 218

### **Liner Installation**

ESI Liners, 424  
International Lining Technology, 304  
Northwest Linings and Geotextile Products, Inc/Sierra Geosynthetic Services, Inc., 512

### **Liners**

AGRU America, Inc., 203 and 205  
Custom Linings, 535  
EnviroTech Services, Inc., 406  
Inland Tarp & Liner, 532  
Nilex, 846  
Solmax Geosynthetics LLC, 402

### **Lithium Company**

American Lithium, 834

M

### **Maps**

The Mining Record, 719 and 721

### **Material Handling**

Superior Industries, 226

### **Medical Services**

Wilderness Medics, Inc., 336

### **Metallurgical Consulting**

MTech/CAMP, 335  
SGS, 749

### **Metallurgy/Mining Departments**

Colorado School of Mines, 744  
MTech/CAMP, 335

### **Mine Construction**

Cementation USA Inc., 644  
Frontier-Kemper Constructors, LLC, 111  
Iron Woman Construction & Environmental Services LLC, 426

### **Mine Engineering**

Golder Associates Inc., 133

### **Mine Information**

Costmine, 338

### **Mine Modeling Software**

Hexagon Mining, 332

### **Mineral Exploration**

Big Rock Exploration, 652

### **Mineralogy Analyzer**

American Assay Laboratory, 700

### **Mining Association**

Utah Mining Association, 731

### **Mining Company**

EMX Royalty Corp., 524  
ioneer USA Corporation, 774

### **Mining Publications**

Engineering & Mining Journal, 425  
The Mining Record, 719 and 721

### **Mining Related Fine Jewelry, Awards, Gift Items**

Placer Gold Design, 109

### **Mining Software**

Datamine North America, 511  
Promine Inc, 536  
RESPEC (MDA), 743

P

### **Photography**

Laszlo Photography, Inc., 900

### **Pipe**

Nilex, 846  
Contech Engineered Solutions LLC, 729

### **Professional Association**

Society for Mining, Metallurgy & Exploration, Inc. (SME)/MEC, 418

### **Public Affairs/Grassroots**

Women's Mining Coalition, 408

### **Pumps**

Cornell Pump Company, 334  
Tsurumi (America), Inc., 753

R

### **Reclamation**

ENSERO, 653

### **Refiners**

Just Refiners USA Inc., 210 B

### **Research**

CREG (Center for Research Economic Geology), 315

S

### **Spectroscopy**

Analytik Jena US LLC, 741

### **Staffing Services/Mining Industry-Temporary**

Geotemps, Inc., 239

## 2022 Exhibitors By Category... (continued)

### Steel Fabrication

Mill Man Steel Inc. and Mavrik Environmental & Exploration, 232

S...(continued)

### Steel Pipe & Casing

Challenger Pipe & Steel, 217

Imperial Pipe, 517

### Surveying

Wood Rodgers, 518

Promine Inc, 536

T

### Trade Publication

North America Mining Magazine, 826

### Transportation Services

Alaska Marine Lines, Inc., 233

### Tunneling

Frontier-Kemper Constructors, LLC, 111

MES Mining, 324

U

### Underground Construction

Harrison Western Construction Corporation, 330

MES Mining, 324

### Underground Core Drilling Parts

Northwest Machine Works, Inc., 235

### University

MTech/CAMP, 335

W

### Water Management

Linkan Engineering, 417

### Water Resources

Broadbent & Associates, Inc., 523

### Water Treatment

ENSERO, 653

Evoqua Water Technologies, 533

Minerals Unlimited, LLC, 528

Veolia Water Solutions & Technologies, 422

### Wireline Logging

DGI Geoscience, 328

### CORE SHACK

#### Junior Exploration Company

Arizona Silver, C 2

Aston Bay Holdings, C 15

Gold Bull Resources, C 17

Nevada Exploration Inc., C 14

Rex Resources, C 16

Silver Range Resources, C 3

W R H Nevada Properties, LLC, C 13

#### Mining Company

Gold Royalty, C 14

## 2022 Exhibitors By Booth Number

### Royalty Company

W R H Nevada Properties, LLC, C 13

1

1 Original Creations, Bronze Sculptures

100's

109 Placer Gold Design, Mining Related Fine Jewelry, Awards, Gift Items, Jewelry

111 Frontier-Kemper Constructors, LLC, Mine Construction, Tunneling

113 FORDIA/Matex, Drilling Products

115 Avantor, Laboratory Equipment & Supplies, Laboratory Chemicals

117 and 119 U. S. Bureau of Land Management, Government

123 ALS Minerals, Assay Laboratory, Laboratory Analytical Services

124 and 126 Coeur Products Ltd Inc., Core Boxes, Core Drills

127 Timberline Drilling, Drilling Company

129 Jentech Drilling Supply, Inc., Drilling Supplies

130 and 132 International Directional Services (IDS), Gyro Surveying & Instrument Rentals, Directional Drilling Services & Motor Sales

131 TonaTec, Drilling Company

133 Golder Associates Inc., Mine Engineering, Environmental Consultants

200's

203 and 205 AGRU America, Inc., Geosynthetics, Liners

207 and 209 Dyno Nobel Inc., Explosives

208 Kappes, Cassidy & Associates, Engineering Consulting Services, Laboratory Services

208 Florin Analytical Services, Analytical Laboratory Services, Laboratory Services

210 Environmental Products & Applications, Inc., Dust Control-Roads and Erosion

210 B Just Refiners USA Inc., Refiners

211 NewFields, Consulting Engineering, Environmental Consultants

212 SpecTIR, LLC, Hyperspectral Imaging

213 Zonge International, Inc., Geophysical Services, Geophysical Instrumentation

214 SWCA, Environmental Consulting

215 PayneWest Insurance, Insurance Services, Bonding

217 Challenger Pipe & Steel, Steel Pipe & Casing, Grooved Piping Products

218 Parsons Behle & Latimer, Legal Services

219 ACZ Laboratories, Inc., Analytical Laboratory Services,

222 and 224 Stantec Consulting Services, Environmental Consultants,

223 and 225 SRK Consulting (US), Inc., Consulting Engineers

226 Superior Industries, Material Handling

227 Hoffman Diamond Products, Inc., Diamond Bits

229 Acker Drill Company, Drilling Equipment, Drilling Rigs

231 ASC Engineered Services, Grooved Piping Products

232 Mill Man Steel Inc. and Mavrik Environmental & Exploration, Steel Fabrication, Drilling Products

## 2022 Exhibitors By Booth Number... (Continued)

- 233 Alaska Marine Lines, Inc., *Transportation Services*
- 235 Northwest Machine Works, Inc., *Drilling Products, Underground Core Drilling Parts*
- 237 Geopros, Inc., *Direct Staffing Services for Industry*
- 239 Geotemps, Inc., *Staffing Services/Mining Industry-Temporary*
- 278 Schramm Inc., *Drilling Rigs and Compressors*
- 300's**
- 302 Lumos & Associates, Inc., *Engineering and Environmental Consultants*
- 303 SkyTEM Canada Inc., *Airborne Geophysical Services*
- 304 International Lining Technology, *Liner Installation, Geosynthetics*
- 305 Simcoe Geoscience, *Geophysical*
- 306 Pioneer Technical Services, Inc., *Engineering and Environmental Consultants*
- 307 Pace Analytical Services Inc., *Laboratory Services, Environmental Laboratory Services*
- 308 CleanTech Environmental, *Environmental Services*
- 309 CGS Mule, LLC, *Geological Supplies*
- 310 REI Drilling/DPI Drilling Products, *Drilling Services, Drilling Supplies*
- 312 Dias Geophysical, *Geophysical Services*
- 313 Nevada Bureau of Mines & Geology, *Geological Survey*
- 314 Geo-Logic Associates, *Engineering Consultants*
- 315 CREG (Center for Research Economic Geology), *Research*
- 316 SVL Analytical, Inc., *Analytical Services*
- 317 Mackay School of Earth Sciences & Engineering, *Educational / University,*
- 318 Geological Society of Nevada (GSN), *Books & Publications*
- 319 Nevada Division of Minerals, *Information of Geology & Mining in Nevada*
- 322 Energy Laboratories, Inc., *Environmental Laboratory Services*
- 323 and 325 RockTech USA, *Drilling Products, Drill Hole Survey*
- 324 MES Mining, *Underground Mining Contractor, Tunneling*
- 326 Engineering Analytics, Inc., *Engineering Consultants*
- 327 Devico, *Directional Core Drilling, Downhole Survey Tools*
- 328 DGI Geoscience US Inc., *Wireline Logging*
- 329 United Central Industrial Supply, *Cap Lamps, Gas Detection, Mine Rescue, Ventilation Products, Services*
- 330 Harrison Western Construction Corporation, *Contract Mining, Underground Construction*
- 332 Hexagon Mining, *Mine Modeling Software, Mine Software*
- 333 Ruen Drilling, Inc., *Drilling Company*
- 334 Cornell Pump Company, *Pumps*
- 335 MTech/CAMP, *University, Metallurgical Consulting*
- 336 Wilderness Medics, Inc., *Medical Services*
- 337 and 339 EDCON-PRJ, Inc., *Geophysical Services*
- 338 Costmine, *Mine Information, Cost Estimating Services*
- 400's**
- 402 Solmax Geosynthetics LLC, *Geosynthetics, Liners*
- 403 and 405 Mount Sopris Instrument Company Inc./AXIS, *Geophysical Logging Equipment,*
- 404 Millcreek Engineering, *Engineers*
- 406 EnviroTech Services, Inc., *Liners*
- 407 Pacific Inter-Mountain Distributon, LLC, *Erosion Control Products*
- 408 Women's Mining Coalition, *Education/Governmental Affairs, Public Affairs/Grassroots*
- 409 EC Applications, Inc., *Geosynthetics*
- 412 MICROMINE, *Intuitive Mining Solutions*
- 413 and 415 Drilling HQ, *Diamond Core Supplies*
- 414 and 416 IMDEX Limited, *Drilling Fluids & Solids Control, Down Hole Survey/XRF Rentals*
- 417 Linkan Engineering, *Water Management*
- 418 Society for Mining, Metallurgy & Exploration, Inc. (SME)/MEC, *Professional Association*
- 419 Western Environmental Testing Laboratory, *Environmental Laboratory Services*
- 422 Veolia Water Solutions & Technologies, *Water Treatment*
- 423 hydroGEOPHYSICS, Inc., *Geophysical Services*
- 424 ESI Liners, *Geosynthetics, Liner Installation*
- 425 Engineering & Mining Journal, *Mining Publications*
- 426 Iron Woman Construction & Environmental Services LLC, *Mine Construction*
- 427 and 429 Foth Infrastructure & Environment, LLC, *Environmental Engineering*
- 428 ARCADIS, *Environmental Consultants, Engineering Services*
- 432 Foremost, *Drilling Products*
- 433 Sample Archive System, *Core Boxes*
- 434 HyperSciences, *Hypersonic Drilling Equipment*
- 435 Hidden Valley Insurance Inc., *Insurance Services, Insurance & Risk Management*
- 436 Klepfer Mining Services, LLC, *Environmental Services*
- 437 and 439 O'Keefe Drilling, *Drilling Company*
- 438 Welsh Hagen Associates, *Environmental Engineers*
- 500's**
- 502 Bison Engineering Inc., *Environmental Consulting/Permitting, Environmental Services*
- 504 Precision Geosurveys Inc., *Airborne Geophysics*
- 508 Gallagher, *Insurance*
- 511 Datamine North America, *Mining Software*
- 512 Northwest Linings and Geotextile Products, Inc/Sierra Geosynthetic Services, Inc., *Liner Installation, Geosynthetics*
- 513 Premier Drilling, *Drilling Company*
- 514 Western Nevada Supply, *Commercial Supply House*



## 2022 Exhibitors By Booth Number... (Continued)

### 500's...(continued)

- 516 Paragon Geochemical Laboratories, Inc., Analytical Laboratory
- 517 Imperial Pipe, Steel Pipe
- 518 Wood Rodgers, Surveying, Aerial Mapping
- 519 Yellow Jacket Drilling Services, Drilling Company
- 522 McClelland Laboratories, Inc., Analytical Laboratory
- 523 Broadbent & Associates, Inc., Environmental Consulting, Water Resources
- 524 EMX Royalty Corp., Mining Company
- 525 HOLT Services inc., Dewatering Wells, Environmental Drilling
- 526 Piteau and Associates, Engineering and Environmental Consultants
- 527 Wood, Engineering and Environmental Consultants, Consulting Engineers
- 528 Minerals Unlimited, LLC, Water Treatment
- 531 Skycatch, Drone Mapping
- 532 Inland Tarp & Liner, Liners
- 533 Evoqua Water Technologies, Water Treatment
- 534 Authentic Drilling, Inc., Drilling Company
- 535 Custom Linings, Liners
- 536 Promine Inc, Mining Software, Surveying/Mapping
- 537 Perpetua Resources, Junior Exploration Company
- 538 Itasca Denver, Inc., Hydrology, Geomechanics & Geochemistry Consulting, Environmental Consulting & Permitting

### 600's

- 638 Skyline Assayers & Laboratories, Assay Laboratory, Laboratory Analytical Services
- 640 DEA Incorporated/KonNx, Electrical Distribution Equipment
- 642 Eastern Driller Mfg. Co., Inc., DTH Hammers & Bits
- 643 GEOKON, Geophysical Instrumentation
- 644 Cementation USA Inc., Mine Construction
- 647 TechLine Alaska, Drilling Supplies
- 648 and 650 McGinley & Associates, Environmental Consultants
- 649 Terramac, Crawler Carriers
- 652 Big Rock Exploration, Mineral Exploration
- 653 ENSERO, Water Treatment, Reclamation

### 700's

- 700 American Assay Laboratory, Assay Laboratory, Mineralogy Analyzer
- 702 Layne Christensen Company, Drilling Services
- 704 Tetra Tech, Engineering Consultants, Environmental Consultants
- 708 and 710 Boart Longyear, Drilling Services, Drilling Company
- 712 Westland Resources, Environmental Consulting & Permitting
- 718 and 720 Baroid Industrial Drilling Products, Drilling Fluid Products
- 719 and 721 The Mining Record, Mining Publications, Maps
- 722 Knight Piesold, Consulting Engineers, Environmental Consulting & Permitting

- 723 Skyward Specialty Insurance Group, Insurance Services
- 724 Hole Products, Drilling Supplies
- 725 Ellington Geological Services, Analytical Laboratory Services, Laboratory Services
- 726 Legend, Inc., Geological Supplies, Assay Supplies
- 727 WaterSolve, LLC, Dewatering
- 729 Contech Engineered Solutions LLC, Pipe, Erosion Control Products
- 730 and 732 First Drilling Group, Drilling Company
- 731 Utah Mining Association, Mining Association
- 733 Victaulic, Grooved Piping Products
- 734 Agilent Technologies, Atomic Spectroscopy, Laboratory Equipment
- 739 Bureau Veritas Minerals, Assay Laboratory
- 741 Analytik Jena US LLC, Spectroscopy
- 742 EcoMister Evaporator, Dewatering Evaporator
- 743 RESPEC (MDA), Mining Software
- 744 Colorado School of Mines, Educational/University, Metallurgy/Mining Departments
- 746 U. S. Geological Survey, Government
- 747 Montgomery & Associates, Engineering
- 748 Concrete Canvas, Concrete Coverings
- 749 SGS, Analytical Laboratory Services, Metallurgical Consulting
- 752 Falcon Drilling Inc., Drilling Company
- 753 Tsurumi (America), Inc., Pumps
- 759 Alloy Group, Environmental Engineers
- 774 ioneer USA Corporation, Mining Company
- 775 Hard Rock Consulting, LLC, Geologic Consultants, Engineering Consultants

### 800's

- 822 and 824 Barr Engineering Co., Engineers
- 826 North America Mining Magazine, Trade Publication
- 830 OREAS North America Inc., Certified Reference Materials
- 832 Envirocon, Inc., Environmental and Reclamation Services
- 834 American Lithium, Lithium Company
- 836 Major Drilling, Drilling Company
- 838 Forgen, Environmental Remediation
- 840 and 842 U. S. Forest Service, Government
- 844 SciAps, Inc., Hand Held Spectrometer
- 846 Nilex, Liners, Pipe
- 848 Geotek, Ltd, Core Log Analysis

### 900's

- 900 Laszlo Photography, Inc., Photography

## 2022 Exhibitors By Booth Number... (Cont'd.)

### CORE SHACK

- C 1 **Stephen Smith, Inc./Larry R. Moyer, LLC**, *Junior Exploration Company*
- C 2 **Arizona Silver**, *Junior Exploration Company*
- C 3 **Silver Range Resources**, *Junior Exploration Company*
- C 8 **Nevada Exploration Inc.**, *Junior Exploration Company*
- C 13 **W R H Nevada Properties LLC**, *Junior Exploration Company*
- C 14 **Gold Royalty (Ely Gold Royalties)**, *Royalty*
- C 15 **Aston Bay Holdings**, *Junior Exploration Company*
- C 16 **Rex Minerals**, *Junior Exploration Company*
- C 17 **Gold Bull Resources**, *Junior Exploration Company*
- C 18 **Allied Copper Corp**, *Mining Company*



# AMERICAN EXPLORATION & MINING ASSOCIATION

DECEMBER 2022

NUGGET & SIERRA BALLROOMS



**American  
Exploration & Mining  
ASSOCIATION  
2022**

Red or yellow spaces are reserved  
Last updated 05/09/2022



9 X 10 Booths in rows designated with •  
124-132, 700 are 8 X 10  
All others 10 X 10  
All aisles at minimum 10' wide except as noted  
Floor Plan Subject to Fire Marshal Approval