

ESG Microseismic Seminar - Technical Program - Room A - Val d'Or, Quebec			
Monday, October 24th, 2016			
Morning Session			
Start	End		
8:00	8:30	Registration	
8:30	8:35	Welcoming Remarks	Alexander Mataseje, ESG Solutions
8:35	9:10	Seismic Innovations and Techniques Developed and Applied to the Petroleum and Mining Industry in Recent Years	Adam Baig, ESG Solutions
9:10	9:45	Spectraseis Portal - Remote Visualization of Seismicity	Alexander Mataseje, ESG Solutions
9:45	10:15	Public Perception of Seismic Hazard	Adam Baig, ESG Solutions
10:15	10:30	Coffee Break	
10:30	11:05	Client Talk - KLG Macassa Mine	Richard Hong, Kirkland Lake Gold
11:05	11:35	Characterizing Variations in Stress and Fracturing Following Production Using the Collective Behaviour of Seismicity	Lindsay Smith-Boughner, ESG Solutions
11:35	12:00	Vibration/Blast monitoring Using Seismic Systems & Blast-monitoring Modules; Case Studies	Alexander Mataseje, ESG Solutions
12:00	13:00	Lunch	
Afternoon Session			
13:00	13:35	Client Talk - TBD	TBD
13:35	14:05	Imaging Stress in a Sill Pillar	Adam Baig, ESG Solutions
14:00	14:35	Using Seismic Moment Tensor Inversion to Resolve Rotations in the Stress Field Following the Development of a Stope.	Lindsay Smith-Boughner, ESG Solutions
14:35	14:50	Coffee Break	
14:50	15:15	Seismic Systems as an Integration Platform for the Betterment of Mining and Mine Management	Alexander Mataseje, ESG Solutions
15:15	16:00	<p>Breakout Session:</p> <ol style="list-style-type: none"> 1. Stress Management 2. Geomechanics and Numerical Modeling 3. Seismic Hazard 4. Tomography 5. Instrumentation 	Group Discussion

ESG Microseismic Workshop - Room B - Val d'Or, Quebec			
Monday, October 24th, 2016			
Microseismic Systems Workshop - Morning Session			
Start	End		
8:00	8:30	Registration	
8:30	8:35	Welcoming Remarks	Ian Leslie, ESG Solutions
8:35	9:15	Microseismic Systems Overview	Alexander Mataseje, ESG Solutions
9:15	9:40	Intro to Seismology - Basic Principles	Ian Leslie, ESG Solutions
9:40	10:15	Microseismic System Hardware Components & Functionality	Ian Leslie, ESG Solutions
10:15	10:30	Coffee Break	
10:30	11:00	Timing Technologies and Their Advantages	Alexander Mataseje, ESG Solutions
11:00	11:30	Paladin Functionality & Configuration	Ian Leslie, ESG Solutions
11:30	12:00	Hyperion Seismic Software - Acquisitoin Basics	Ian Leslie, ESG Solutions
12:00	13:00	Lunch	
Microseismic Systems Workshop - Afternoon Session			
13:00	13:35	Hyperion Seismic Software - Visualization, Alerts, & Maintenance	Ian Leslie, ESG Solutions
13:35	14:20	Troubleshooting Microseismic Systems	Ian Leslie, ESG Solutions
14:20	14:45	Advances in Seismic Acquisition - Acquisition Groups, SSR	Alexander Mataseje, ESG Solutions
14:35	14:50	Coffee Break	
14:50	15:35	Practical Considerations for the Installatoin of Seismic System Components in Mines	Ian Leslie, ESG Solutions
15:35	16:00	<p>Focus Session:</p> <p>Improvements for ESG systems deployment & maintenance</p> <ol style="list-style-type: none"> 1. Installation Methods 2. Maintenance Tools 3. ESG Involvement 4. Client Resources 	Group Discussion (Led by ESG)