

Country	From Year	To Year	Clients	Project Description	Company
Argentina SA.02899 Engineering	1999	2000	SRK Consulting Engineers and Scientists	Standard refraction seismic survey (3.500 m over all) to define and map the shape of the overburden - bedrock boundary in the planned upper tailings dam area of the Lama project.	GEC S.A./DMT
Argentina SA.00200 Geology	2000	2000	SRK Consulting Engineers and Scientists	Standard refraction seismic and CMP refraction survey (20.000 m over all) to investigate shallow geological structures in the Lama mining area for the future construction of the lower tailings dam.	GEC S.A./DMT
Argentina SA.00700 Engineering	2000	2000	SRK Consulting Engineers and Scientists	Standard refraction seismic survey (3.600 m over all) to define and map the shape of the overburden - bedrock boundary in the planned power plant area of the Lama project.	GEC S.A./DMT
Argentina SA.02700 Geology	2001	2001	QUANTEC Geofisica Argentina S.A.	Standard refraction seismic survey (4.400 m over all) to define and map the shape of the overburden - bedrock boundary in the Veladero mining area.	GEC S.A./DMT
Argentina SA.00404 Engineering	2004	2004	Minera Argentina Gold S.A.	High resolution standard refraction seismic survey (350 m over all) to define landslide area in the Veladero Taguas Canyon.	GEC S.A.
Argentina SA.00804 Engineering	2004	2004	Minera Argentina Gold S.A. / Golder Associates Inc.	Seismic Refraction tomography and MASW survey (1.500 m over all) to define the shear wave velocity distribution in the foundation soils of the high embankment for the Veladero valley fill leach facility. The p and s-wave results were used to calculate the final liquefaction model.	GEC S.A.
Argentina SA.01004 Geology / Engineering	2004	2005	Barrick Exploration S.A. / Compania Minera Nevada Limitada / Vector Colorado LLC. / SNC Lavallin	Standard refraction seismic survey (13.500 m over all) to define and map the shape of the overburden - bedrock boundary in the planned tailings dam and plant area of the Lama project and to characterize geotechnical parameters.	GEC S.A.
Chile SA.00205 Geology	2005	2005	Compañía Minera Nevada Ltd.	The geophysical program was required to define and map the depths of the bedrock boundary (maximum 50 - 60 m depth) in the Pascua Mine zone (La Olla) with standard refraction seismic p-wave techniques. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material for geotechnical calculations. 2.200 m of high resolution seismic refraction profiles were executed.	GEC S.A.
Argentina SA.00505 Geology	2005	2005	Viceroy Exploration LTD / Golder Associates	The seismic program was required to define and map the depths of the bedrock boundary (approx. 20 - 30 m depth) in the Gualcamayo leach pad area with standard refraction seismic p-wave techniques. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material for geotechnical calculations. 4.000 m of high resolution seismic refraction lines were carried out.	GEC S.A.

Argentina SA.01305 Geology	2005	2005	Compañía Minera Nevada Limitada / Barrick Exploraciones S.A.	The geophysical program was required to define and map the depths of the bedrock boundary in the Lama plant area with standard refraction seismic p-wave techniques. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material for geotechnical calculations. 3.100 m of seismic refraction profiles were executed.	GEC S.A.
Argentina SA.01905 Engineering	2006	2006	Viceroy Exploration LTD / Golder Associates	The seismic program was required to define and map the depths of the bedrock boundary in the Gualcamayo leach pad III area with high resolution seismic refraction tomography techniques . Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material for geotechnical calculations. 2.000 m of seismic refraction tomography lines were carried out.	GEC S.A.
Argentina SA.02005 Uranium Exploration	2006	2006	Maple Minerals Exploration & Development	The seismic program was required to define and map geological structures (paleochannels) down to 300 m depth in the Cerro Solo area, Chubut province, with high resolution refraction tomography techniques . Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material. 25.000 m of seismic refraction tomography lines were carried out.	GEC S.A.
Chile SA.00106 Engineering	2006	2006	Compañía Minera Nevada Ltd. / Golder Associates	The seismic program was required to define geotechnical parameters at Pascua mine site. 1.500 m of high resolution refraction tomography profiles and Multichannel Analysis Surface Wave (MASW) profiles were executed. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.01006 Engineering	2006	2007	Knight Piésold S.A / Xstrata Copper	The seismic program was required to define geotechnical parameters at Pachon mine site. 8.300 m of high resolution refraction tomography profiles were executed. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina-Chile SA.01106 Geology	2006	2007	Compañía Minera Nevada Limitada	The seismic program was required to define geotechnical parameters over the planned tunnel line between the Lama and Pascua Project. 2.000 m of high resolution refraction tomography profiles were carried out. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.01107A Engineering	2007	2007	Minera Agua Rica / Yamana	The seismic program was required to define shallow geological structures in the Agua Rica mine Area for the future construction of 2 water dams. 1.100 m of high resolution refraction tomography profiles were carried out. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.

Argentina SA.01107 Engineering	2007	2008	Minera Agua Rica / Yamana	The seismic program was required to define geotechnical parameters (RQD values / elastic parameters) over the planned principal mine access road from Andalgala to Agua Rica mine site . 8.500 m of high resolution refraction tomography profiles and 115 ReMi (refraction microtremor technique) s-wave profiles were executed. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Chile SA.00108 Geology / Groundwater Exploration	2008	2008	Compañía Minera Nevada Ltd.	The seismic program was required to define shallow geological structures and to detect water bearing sediment formations in the Potrerillos area nearby the Pascua Mine Site. 920 m of high resolution seismic refraction tomography profiles (RST) were carried out. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Chile SA.00208 Geology	2008	2008	Compañía Minera Nevada Ltd.	The seismic program was required to define shallow geological structures and bedrock boundary in the Rio el Torro area nearby the Pascua Mine Site. 5.360 m of high resolution seismic refraction tomography profiles (RST) were carried out. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.00808 Geology	2008	2008	Minera Agua Rica / Yamana Gold Inc.	The seismic program was required to define geological features over the planned tunnel line between Agua Rica mine site and Campo Arenal. 6.000 m of high resolution seismic refraction tomography (SRT) and reflection seismic profiles were carried out. Secondary survey objectives is to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.01108 Mineral Exploration	2008	2008	Hochschild Mining	The seismic program was required to detect and map shallow mineralized steep dipping veins in the area of San Jose mine site . 6.000 m of high resolution seismic refraction tomography profiles (RST) were executed. Secondary survey objectives will be to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.01608 Geotechnical Survey / Engineering	2008	2008	UTE Rio Turbio/ Tecna / Isolux Corsan IECSA / GHESA S.A.	The seismic program was required to define geotechnical parameters over the planned power plant area in the town of Rio Turbio, Santa Cruz province. 550 m of high resolution seismic refraction tomography profiles (RST) and 23 ReMi Soundings were carried out. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.

Chile SA.01708 Geotechnical Survey / Engineering	2009	2009	Barrick Chile / BGC Engineering Inc. / AMEC International S.A./ ARCADIS Geotecnica/ Piteau Associates Engineering Ltd.	The seismic program was required to define geotechnical parameters over the proposed plant, waste dump, tailings & cleaner dam and heap leach pad areas at Cerro Casale mine site. 22.500 m of high resolution seismic refraction tomography profiles (RST) and 115 ReMi Soundings were carried out. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Chile SA.00209 Reprocessing	2009	2009	Compania Minera Nevada Ltd. / BGC Engineering Inc.	Reprocessing and Calibration of heigh resolution seismic refraction tomography data of the Caliza plant site area in the Potrerillos valley nearby the Pascua mine site.	GEC S.A.
Argentina SA.00409 Glacier Study	2009	2009	Xstrata Copper / BGC Engineering Inc.	The seismic programm was required to investigate and determine the characteristics of high Andes rock glaciers. The main survey objective was to detect and map ground ice bodies in rock glaciers at Pachon mine site. The geophysical survey was designed in particular to understand in more detail the role of the ground ice present in the rock glaciers within the hydrological cycle and in the general regional hydrology. 2.000 m of high resolution refraction seismic tomography (SRT) were carried out.	GEC S.A.
Argentina SA.00509 Geotechnical Survey / Engineering	2009	2009	Isolux Corsan / Tecna	80 m high resolution seismic refraction tomography (SRT) and 4 ReMi soundings were carried out to investigate shallow geological structures and provide any additional information regarding subsurface geology conditions for the future construction of the plant facilities Loma de Lata.	GEC S.A.
Argentina SA.00310 Mineral Exploration	2010	2010	Cerro Vanguardia S.A. / Anglo Ashanti Gold	The seismic program was required to investigate shallow mineral bearing formations (veins) with special focus on high lateral resolution down to 150 m depth at Cerro Vanguardia mine site. 39.750 m of high resolution seismic refraction tomography profiles (RST) were executed. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.00410 Geotechnical Survey / Engineering	2010	2010	BGC Engineering Inc.	The seismic program was required to define the bedrock boundary down to 60 m depth in the Taguas area at Lama mine site. 1.950 m of high resolution seismic refraction tomography profiles (RST) were executed. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.

Argentina SA.00510 Lithium Exploration	2010	2011	LITHIUM AMERICAS / EXAR	The high resolution seismic refraction tomography program (SRT - 50.000 m) was required to identify and define the depth of the bedrock basement over the Cauchari-Olaroz Salar area. Further purposes of the survey were to map geologic stratigraphy and structure relative to the occurrence of lithium brine, identify layers that are thought to be representative of lithium-bearing brine and to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.00810 Geotechnical Survey / Engineering	2010	2010	AUSENCO VECTOR Peru / Minera Andes S.A.	The seismic program was required to define the bedrock boundary down to 60 m depth in the camp site and Embarrada area at Los Azules project site. 3.250 m of high resolution seismic refraction tomography profiles (RST) were executed. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.01010 Geotechnical Survey / Engineering	2010	2010	AUSENCO VECTOR Peru / Minera Andes S.A.	The seismic program was required to define the bedrock boundary down to 60 m depth in the pit area area at Los Azules Mine site. 13.050 m of high resolution seismic refraction tomography profiles (RST) were executed. Secondary survey objectives were to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.00411 Lithium Exploration	2011	2011	RODINIA Minerals Inc.	The high resolution seismic refraction tomography program (SRT -52.000 m) was required to identify and define the depth of the bedrock basement over the Diablillos Salar area. Further purposes of the survey are to map geologic stratigraphy and structure relative to the occurrence of lithium brine, identify layers that are thought to be representative of lithium-bearing brine and to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material.	GEC S.A.
Argentina SA.00511 Geotechnical Survey / Engineering	2011	2011	AMEC International	In August 2011 GEC - GEOPHYSICAL EXPLORATION & CONSULTING S.A. was contracted by AMEC to carry out a p-Wave Refraction Tomography Seismic Survey (550 m) at Los Bronces mine site to investigate shallow geological structures and to provide any additional information or interpretations regarding subsurface geology conditions and / or characteristics of surficial material (faults, weakness or weathering zones, depression zones, etc.) for the future mine construction work in this area. Additionally s-wave soundings with the ReMi Microtremor Technique (5 Soundings) were carried out at site for further geotechnical calculations of the elastic constants / moduli (e.g. Young, Bulk, Poisson, etc.).	GEC S.A.

Chile SA.00711 Lithium Exploration	2011	2011	LITHIUM 3 Energy	The purposes of the high resolution seismic refraction tomography survey (20.000 m) were to map geologic stratigraphy and structure relative to the occurrence of lithium brine, identify layers that are thought to be representative of lithium-bearing brine and to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material (lithology, faults, weak or weathering zones, depression zones, etc.).	GEC S.A.
Argentina SA.00212 Lithium Exploration	2012	2012	Eramine South America	The purposes of the high resolution seismic refraction tomography survey (32.800 m) was conducted for lithium exploration over the Centenario and Ratones Salar claims optioned by ERAMINE SOUTH AMERICA in the Salta province, northern Argentina. Main survey objective was the identification and detailed definition of brine bearing formations. Further purposes of the survey were to map geologic stratigraphy and structure relative to the occurrence of lithium brine, identify layers that are thought to be representative of lithium-bearing brine and to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material (lithology, faults, weak or weathering zones, depression zones, etc.).	GEC S.A.
Argentina SA.00512 Lithium Exploration	2012	2012	Eramine South America	The purposes of the high resolution seismic refraction tomography survey (15.400 m) was conducted for lithium exploration over the Carachi Pampa Salar claim optioned by ERAMINE SOUTH AMERICA in the Catamarca province, northern Argentina. Main survey objective was the identification and detailed definition of brine bearing formations. Further purposes of the survey were to map geologic stratigraphy and structure relative to the occurrence of lithium brine, identify layers that are thought to be representative of lithium-bearing brine and to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material (lithology, faults, weak or weathering zones, depression zones, etc.).	GEC S.A.
Argentina SA.00213 Lithium Exploration	2013	2013	Eramine South America	The purposes of the high resolution seismic refraction tomography survey (28.450 m) was conducted for lithium exploration over the Centenario and Ratones Salar claims optioned by ERAMINE SOUTH AMERICA in the Salta province, northern Argentina. Main survey objective was the identification and detailed definition of brine bearing formations. Further purposes of the survey were to map geologic stratigraphy and structure relative to the occurrence of lithium brine, identify layers that are thought to be representative of lithium-bearing brine and to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material (lithology, faults, weak or weathering zones, depression zones, etc.).	GEC S.A.

Argentina SA.00213 Lithium Exploration	2014	2014	Eramine South America	<p>The purposes of the high resolution seismic refraction tomography survey (7.500 m) was conducted for lithium exploration over the Centenario Norte Salar claims optioned by ERAMINE SOUTH AMERICA in the Salta province, northern Argentina. Main survey objective was the identification and detailed definition of brine bearing formations.</p> <p>Further purposes of the survey were to map geologic stratigraphy and structure relative to the occurrence of lithium brine, identify layers that are thought to be representative of lithium-bearing brine and to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material (lithology, faults, weak or weathering zones, depression zones, etc.).</p>	GEC S.A.
Argentina SA.00613 Geotechnical Survey / Engineering	2013	2014	Lombardi / Vialidad de San Juan	<p>In August 2011 GEC - GEOPHYSICAL EXPLORATION & CONSULTING S.A. was contracted by Lombardi to carry out a p-Wave Refraction Tomography Seismic Survey (2.200 m) at Agua Negra project site to investigate shallow geological structures and to provide any additional information or interpretations regarding subsurface geology conditions and / or characteristics of surficial material (faults, weakness or weathering zones, depression zones, etc.) for the future tunnel construction connecting San Juan with Chile. In addition soundings with the ReMi Microtremor Technique (6 Soundings) were carried out at the Chilean tunnel portal site for further geotechnical calculations of the elastic constants / moduli (e.g. Young, Bulk, Poisson, etc.).</p>	GEC S.A.
Argentina SA.00714 Geotechnical Survey / Engineering	2014	2015	Jaime Lande y Asociados S.A.	<p>In June 2015 GEC - GEOPHYSICAL EXPLORATION & CONSULTING S.A. was contracted by Jaime Lande y Asociados S.A. to carry out a p-Wave Refraction Tomography Seismic Survey (4.000 m) at the Portrero de Clavillo project site (Tucuman) to investigate shallow geological structures and to provide any additional information or interpretations regarding subsurface geology conditions and / or characteristics of surficial material (faults, weakness or weathering zones, depression zones, etc.) for the future dam construction.</p>	GEC S.A.
Argentina SA.00213 Lithium Exploration	2016	2016	Litio Minera Argentina S.A/ International Lithium Corporation	<p>The purposes of the high resolution seismic refraction tomography survey (25.000 m) was conducted for lithium exploration over the Lullailaco Salar claims optioned by LITIO MINERA ARGENTINA S.A. in the Salta province, northern Argentina. Main survey objective was the identification and detailed definition of brine bearing formations.</p> <p>Further purposes of the survey were to map geologic stratigraphy and structure relative to the occurrence of lithium brine, identify layers that are thought to be representative of lithium-bearing brine and to provide any additional information or interpretations regarding subsurface geology conditions or characteristics of surficial material (lithology, faults, weak or weathering zones, depression zones, etc.).</p>	GEC S.A.