

# **EXCELLON RESOURCES INC.**

# **ANNUAL INFORMATION FORM**

For the Year Ended December 31, 2010

March 22, 2011

#### PRELIMINARY NOTES

Words importing the singular number, where the context requires, include the plural and vice versa and words importing any gender include all genders. All dollar amounts herein are in Canadian dollars, unless otherwise stated. In this annual information form the terms "we", "us", "our" and "ours" refer to the Company.

A glossary of certain technical terms and abbreviations that appear in this annual information form is included under the section entitled "Glossary of Technical Terms and Abbreviations".

In December 2009 the Company changed its year end to December 31 from July 31. The year end change was necessary to make the Company's financial statements directly comparable to other mining companies on a quarterly basis and to have a consistent year end with its subsidiaries. This change in year end required the Company to have a transition period of five months ending December 31, 2009.

## **Note Regarding Forward-Looking Statements**

This annual information form contains forward-looking statements concerning the Company's plans for its properties, operations and other matters. These statements include, without limitation, statements regarding future anticipated exploration program results, the potential discovery and delineation of mineral deposits/resources/reserves, proposed business and financing plans, potential mining and processing scenarios (including the construction of a mill at Platosa), the anticipated success of mineral processing procedures, anticipated continued sales of ore and proposed concentrate sales, anticipated business trends and mineral prices, future anticipated operating costs, revenues and cash flow, and may relate to analyses and other information that are based on forecasts of future results, estimates of amounts not yet determinable and assumptions of management. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as "expects" or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "estimates", "believes", "proposed", "intends" or "does not intend", or stating that certain actions, events or results "may", "could", "would", "might" or "will" be, or not be, taken, occur or be or not be achieved) are not statements of historical fact and may be "forward-looking statements". Forward-looking statements are subject to a variety of risks and uncertainties, which could cause actual events or results to differ materially and adversely from those reflected in the forward-looking statements.

A description of the risk factors applicable to the Company can be found in this annual information form under "Description of the Business – Risk Factors". Should one or more of the risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially and adversely from those described in forward-looking statements. Forward looking statements are made based on management's beliefs, estimates, assumptions and opinions on the date the statements are made and the Company undertakes no obligation to update forward-looking statements if these beliefs, estimates, assumptions and opinions or other circumstances should change. Investors are cautioned against attributing undue certainty or weight to forward-looking statements.

Readers are also cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on forward-looking statements. The Company's actual results, programs and financial position could differ materially from those expressed in or implied by these forward-looking statements, and accordingly, no assurance can be given that the events anticipated by the forward-looking

statements will transpire or occur, or that, if any of them do so, what benefits the Company will derive therefrom.

All of the Company's public disclosure filings may be accessed via SEDAR at www.sedar.com and readers are urged to review these materials, including the technical reports filed with respect to the Company's mineral properties.

# Cautionary Note to United States Investors Concerning Estimates of Indicated and Inferred Resources

This annual information form uses the terms, "Indicated" and "Inferred" Mineral Resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize them. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category or that Mineral Resources will ever be upgraded to Mineral Reserves. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies.

United States investors are cautioned not to assume that all or any part of Indicated Mineral Resources will ever be converted into Mineral Reserves. United States investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists, or is economically or legally mineable or that an Indicated Mineral Resource is economically or legally mineable.

# **Cautionary Note to United States Investors regarding Adjacent or Similar Properties**

This annual information form may also contain information with respect to adjacent or similar mineral properties in respect of which the Company has no interest or rights to explore or mine. The Company advises United States investors that the U.S. Securities and Exchange Commission's mining guidelines strictly prohibit information of this type in documents filed with the SEC. Readers are cautioned that the Company has no interest in or right to acquire any interest in any such properties, and that mineral deposits on adjacent or similar properties are not indicative of mineral deposits on the Company's properties.

# EXCELLON RESOURCES INC. ANNUAL INFORMATION FORM TABLE OF CONTENTS

PRELIMINARY NOTES	
Note Regarding Forward-Looking Statements	
Cautionary Note to United States Investors Concerning Estimates of Indicated and Inferred Resources	
CORPORATE STRUCTURE	
Incorporation	
•	
GENERAL DEVELOPMENT OF THE BUSINESS	
Three-Year History	
DESCRIPTION OF THE BUSINESS	
MINERAL PROJECTS	
Accessibility	
Local Resources	
Infrastructure	9
Structure	
Intrusive Rocks	
Alteration	12
Risk Factors	
DIVIDENDS	30
DESCRIPTION OF CAPITAL STRUCTURE	30
MARKET FOR SECURITIES	31
DIRECTORS AND OFFICERS	
Company Cease Trade Orders and Bankruptcies	
Penalties and Sanctions	
Audit Committee	
LEGAL PROCEEDINGS AND REGULATORY ACTIONS	36
INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	36
TRANSFER AGENTS AND REGISTRARS	36
MATERIAL CONTRACTS	36
INTERESTS OF EXPERTS	36
ADDITIONAL INFORMATION	37
GLOSSARY OF TECHNICAL TERM AND ABBREVIATIONS	37

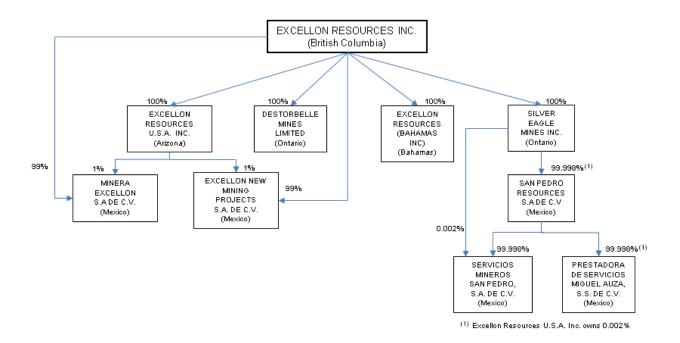
#### **CORPORATE STRUCTURE**

## **Incorporation**

Excellon Resources Inc. ("**Excellon**" or the "**Company**") was incorporated under the *Company Act* (British Columbia) on March 4, 1987. The registered office of the Company is located at 1055 West Hastings St., Suite 2200, Vancouver, British Columbia V6E 2E9 and the principal office of the Company is located at 20 Victoria Street, Suite 900, Toronto, Ontario M5C 2N8. The Company's telephone number is (416) 364-1130 and its website address is www.excellonresources.com.

## **Corporate Structure**

The diagram below sets out the organizational structure of the Company:



#### GENERAL DEVELOPMENT OF THE BUSINESS

#### **Three-Year History**

The Issuer is a mineral resource company engaged in the acquisition, exploration, development and mining of mineral properties. During the past three years the Issuer has been involved primarily in the exploration and development of its Platosa Property in Durango State, Mexico. The Company is producing silver, lead and zinc from high-grade manto deposits on its Platosa Property.

Certain of the following information regarding the Platosa Property has been summarized from the NI 43-101 report entitled "Technical Report on the Platosa Property, Bermejillo, Durango State, North Central Mexico," dated January 15, 2010 prepared for Excellon (the "Platosa Property Report"). The information has been updated to reflect significant results and events from the date of the Platosa Property Report up to early 2011.

In 1996, Excellon acquired the historic Platosa Mine property and staked the surrounding Excelmex and Poeta claims. At approximately the same time, Exploraciones de Alitplano, S.A. de C.V. ("Altiplano") staked the adjacent Saltillera property. Apex Silver Mines Limited ("Apex") optioned the Saltillera property from Altiplano and in 1997 optioned the Platosa Property from Excellon.

In 2001, Excellon and Apex entered into an agreement whereby Excellon was able to earn a 51% interest in both the Platosa and Saltillera properties in return for carrying out certain expenditures on the properties. In January 2004, the Company and Apex renegotiated their agreement with respect to the properties and as a result the properties were divided into three areas, the Excellon 100%/Apex Royalty Area, The Apex Joint Venture Area and the Altiplano Area. For detail of these areas, please see the section entitled "Description of the Business - Mineral Properties - Property, Location, Description and Access" section of this report. Subsequently the Company has staked additional ground surrounding the three areas.

In August 2004, the Company commenced a program to carry out small-scale, test-mining of the existing high-grade Indicated Mineral Resource, and a concurrent underground exploration program, in the 100%/Apex Royalty Area of the Property. The Company celebrated the start of its ramp with a "First Blast Ceremony" on September 1, 2004.

In early 2005, the Company entered into an agreement with Minera Maple, S.A. de C.V. ("Maple") (formerly known as Compañia Fresnillo Unidad Naica) a subsidiary of Industria Penoles ("Penoles") for the sale of crushed test-mine ore. In June of 2005, the Company began shipping crushed ore to the Maple mining and processing facility. Shipments of crushed ore to Maple continued on a regular basis until the end of January 2009 when the Maple-Excellon contract expired. Between 2005 and January 31, 2009 the Company shipped 139,425 tonnes of crushed ore containing 5,661,795 oz of silver, 31,714,193 lb of lead and 33,927,237 lb of zinc to Maple.

In mid-March 2009 the company entered into an agreement with Silver Eagle Mines Inc. ("**SEG**") for the toll milling of Platosa ore in SEG's flotation plant located in the town of Miguel Auza located in northern Zacatecas State approximately 220 km south of Platosa. Between March 19, 2009 and December 31, 2009, 57,209 tonnes grading 994 g/t Ag, 8.04% Pb, 8.81% Zn of Platosa ore were processed at SEG's mill.

On June 2, 2009 the Company completed the acquisition, through a plan of arrangement, of SEG. Under the arrangement, Excellon acquired all of the issued and outstanding common shares of Silver Eagle with Silver Eagle shareholders receiving 0.2704 Excellon common shares in exchange for each Silver Eagle share held. The Company issued 14,997,000 shares and paid transaction costs for a total purchase price of \$5,488,722. The net cash cost to Excellon was \$2,118,722. Silver Eagle's primary assets were its Miguel Auza mine, mill and adjacent properties located in Zacatecas State, Mexico. The acquisition of SEG provided Excellon with a fully operational mill and the capacity to process up to approximately 450 tonnes of Platosa ore per day. The Company has been processing its Platosa ore at SEG's Miguel Auza mill since March 19, 2009 and is shipping the concentrate to Manzanillo, a port city on the west coast of Mexico. The Company produces two concentrates; a silver-lead concentrate and a silver-zinc concentrate.

In connection with the establishment of concentrate production the Company entered into a long-term off-take agreement to sell its lead-silver and zinc-silver concentrates to Consorcio Minero de Mexico Cormin Mex, S.A. de C.V. ("Cormin Mexico"), a Trafigura Group Company. Cormin Mexico is based in Mexico City, is a trader of base metal concentrates and provides financial services to the mining industry.

On November 13, 2009, Excellon purchased the remaining 49% joint venture interest in the Apex Joint Venture Area from Golden Minerals Company (formerly Apex), for US\$2.0 million in cash and a 1% Net Smelter Returns royalty.

After a temporary suspension of the exploration drilling program at the end of 2008, surface diamond drilling program resumed in mid-July 2009 and has continued without interruption since that time. During 2009 the Company was successful in adding resources to the NE-1 Manto and discovered the 623 Manto, located between the Guadalupe South and NE-1 mantos. Representative intersections were as follows: Hole EX09-LP623-1,121 g/t (32.7 oz/T) Ag, 11.58% Pb, 9.20% Zn over 3.20 metres (m) and hole EX09-LP654 - 1,195 g/t (34.8 oz/T) Ag, 14.8% Pb, 15.0% Zn over 7.05 m. Both intersections are estimated true widths. A Mineral Resource estimate was prepared for the 623 Manto and it is included in the estimate discussed below.

Drilling was also carried out in the Saltillera-la Zorra area located five kilometres west of the Platosa Mine and while interesting geology was intersected there was no significant mineralization encountered.

On December 10, 2010, Excellon announced a revised Mineral Resource estimate for Platosa. The estimate was prepared by Scott Wilson Roscoe Postle Associates Inc., independent geological and mining consultants of Toronto, Ontario ("Scott Wilson RPA"). The current Mineral Resource estimate is shown in the table below.

Platosa Project - Summary of Mineral Resources Estimate as at October 31, 2009

Category	Tonnes [t]	Silver [g/t]	Lead [%]	Zinc [%]
Indicated	579,000	909	9.09	10.51
Inferred	160,000	731	7.44	7.57

#### Notes:

- . CIM definitions were followed for the classification of Mineral Resources.
- 2. Mineral Resources are estimated at an incremental NSR cut-off value of U.S. \$86 per tonne
- 3. NSR metal price assumptions: Silver U.S. \$16.00/oz, Lead U.S. \$0.80/lb, Zinc U.S. \$1.00/lb.
- Estimate is of Mineral Resources only and, because these do not constitute Mineral Reserves, they do not have any demonstrated economic viability.
- National Instrument 43-101 compliant Mineral Resource estimate prepared by Scott Wilson Roscoe Postle
  Associates Inc., independent geological and mining consultants of Toronto, Ontario. Prepared as at October
  31, 2009.

Between September 2009 and October 2010 the Company carried out an exploration program at Miguel Auza. This work concentrated on a search for areas of economic interest outside of the immediate area of SEG's activities. A 12-hole drilling program was carried out on the Madera quartz-calcite epithermal veins and although the veins persisted to a depth of over 400 metres no significant mineralization was encountered. These results were reported in press releases dated May 25, 2010 and June 16, 2010. The property continues to hold significant potential; however, no exploration is planned for the immediate future.

In 2010 the Company continued its aggressive diamond drilling program at Platosa and carried out additional geophysical surveys, namely 3D Induced Polarization over a grid encompassing the mine and surrounding area and a ZTEM airborne survey over a large portion of the property. During the year significant new mineralization was added to the 6A/6B Manto and in October, the Company announced the discovery of the high-grade Pierna Manto situated between the Rodilla and NE-1 mantos. Hole LP875 intersected 6.10 metres (m) of massive sulphides grading 1,489g/t (43 oz/T) Ag, 10.65% Pb, 21.63% Zn. Hole LP884 intersected 10.76 m of massive sulphides grading 651g/t (19 oz/T) Ag, 7.86% Pb, 15.79% Zn. Both intersections are estimated true widths. Pierna drilling results were reported in

press releases dated September 8, 2010, November 4, 2010, November 17, 2010 and January 13, 2011. This manto remains open in several directions.

Early 2011 exploration drilling is focussed on the Rincon del Caido -6A/6B Corridor, extending 1.5 km northwest of the 6A/6B Manto, where indications of a proximal environment favourable for the discovery of a large-tonnage deposit were found during 2010.

## **DESCRIPTION OF THE BUSINESS**

Excellon is developing and mining the silver-lead-zinc mineralization on its 58,054-hectare [143,455-acre] Platosa Property ("Platosa") in northeastern Durango State, Mexico. The style of mineralization at Platosa resembles that of several of the world-class carbonate replacement deposits ("**CRD**") of Mexico.

As at December 31, 2010, the Company and its wholly-owned subsidiaries employed 231 individuals. In addition, the Company employs several outside contractors on a fee-for-service basis for conducting exploration and mining activities.

#### MINERAL PROJECTS

The Company's principal property is the Platosa Property in Durango State, Mexico. It also holds the Miguel Auza property located in northern Zacatecas State. This was acquired via the SEG transaction as described above. Ore produced at the Platosa Mine is processed at the Company's mill located on the Miguel Auza property.

Until early in the first quarter of 2011 the Miguel Auza mine was kept on care and maintenance. The Company does not plan to explore or develop mineral resources at Miguel Auza in the near future and it is focusing all of its efforts on the Platosa Property.

## **Platosa Property**

Certain of the following information regarding the Platosa Property has been summarized from the NI 43-101 report entitled "Technical Report on the Platosa Property, Bermejillo, Durango State, North Central Mexico," dated January 15, 2010 prepared for the Company by Scott Wilson RPA (the "**Platosa Property Report**"). The information has been updated to reflect significant results and events from the date of the Platosa Property Report up to late-March 2011. Further information regarding the Platosa Property can be found in the Platosa Property Report, which can be found on SEDAR at www.sedar.com.

## **Property Location, Description and Access**

## Mining Rights

The Platosa Property is located in the State of Durango, north central Mexico, approximately 45 km north of the city of Torreon. The property was expanded considerably during 2010 and now consists of 79 Mining Concessions covering a total area of 58,054.2558 ha. Seventy-six of these concessions and fractional concessions are held directly by Excellon and the other three are held under option. Most are subject to royalty agreements. Excellon also holds certain surface rights for portions of the property.

The property is divided into four areas nominally named to reflect the mineral rights and underlying agreements, if any:

Excellon 100%/Golden Minerals Royalty Area: This area comprises 46 concessions totalling 10,118.3543 ha. It contains the Platosa mantos, current Mineral Resources, and Platosa Mine plus the surrounding

area which prior to November 2009 had been held in Joint Venture with Apex Silver Mines Limited (Apex). In November 2009, Apex's successor, Golden Minerals Company, sold to Excellon its interest in the former Joint Venture concessions and its royalty in what was formerly referred to as the Excellon100%/Apex Royalty Area for US\$2,000,000 and a 1% Net Smelter Return ("NSR") royalty on the combined property.

Altiplano Area: This area comprises 20 concessions owned by Excellon totalling 11,076.3756 ha. These 20 concessions are subject to a 3% NSR payable in the event of a discovery and subsequent production to Exploraciones de Altiplano, S.A. de C.V., a private Mexican company.

Sundance Option: This area comprises three concessions/concession applications totalling 17,190.5504 ha beneficially owned by Sundance Minerals Ltd., a private Canadian company. Excellon made a \$50,000 cash payment on signing a binding letter of intent, can earn a 60% interest in the property by completing \$1,500,000 in exploration expenditures over three years and an additional 15% by completing a preliminary feasibility study within another three years. Under certain conditions either Sundance or Excellon is entitled to a Net Smelter Return royalty of 2.5%. The Sundance Option agreement was disclosed in a press release dated November 2, 2010.

Others: This area comprises 10 concessions/concession applications totalling 19,668.9755 ha. They are owned 100% by Excellon and with the exception of a 2,568.5 ha portion of one concession, which was contributed to the Sundance Option are not subject to any underlying agreement or royalty.

During 2010, the Company applied for several new concessions and these are included in the descriptions above. The process from application to the issuance of formal title documents in Mexico is a long one but once the application is accepted by Mining Bureau authorities tenure is assured. The determination of exact concession boundaries and surface area is responsibility of these authorities since applications often include existing concessions within their boundaries. For this reason the hectares noted above are subject to small changes.

## Surface Rights

Early in its history at Platosa, Excellon purchased the surface rights for two parcels (33.0 ha and 405.1 ha) totalling approximately 438.1 ha of land in the mine area from the Villalobos family. During the same time period, Excellon entered into a 30-year lease agreement for 27.1 ha parcel of land where the portal and other surface infrastructure are located. This lease agreement was with the Ejido la Sierrita (the "Ejido"). (An Ejido is a communal surface rights ownership group common in Mexico.) In addition, this land provided sufficient area to stockpile ore and waste, for the crushing plant, and for the drill core logging and storage area. The same agreement allowed Excellon to access and carry out exploration activities on an additional 4,247 ha of Ejido land adjacent to the 27.1 parcel. In late 2008, Excellon and the Ejido undertook a renegotiation of the agreement and in April 2008 signed a new 30-year agreement. This agreement saw Excellon gain ownership of the 27.1 ha parcel and access to a reduced area of 1,100 ha of land for exploration and any other mining, processing, and tailings disposal activities. In turn, Excellon turned over ownership of 346.36 ha of the 438.1 ha noted above to the Ejido to now own 118.84 ha of surface rights in this area.

In August 2007, Excellon purchased an additional 622.0 ha of surface rights north and adjacent to the 27.1 ha block. This block covered a portion of the Guadalupe Manto and its acquisition enabled an expansion of the immediate mine area surface exploration program. These surface rights also provide access to the main highway north to Chihuahua and south to Torreon.

## Accessibility

The Platosa Property is located in northeastern Durango State, 45 km north of the city of Torreon, an industrial centre with more than one million people when combined with the adjacent cities of Gomez Palacio and Lerdo. The Torreon International Airport is serviced by several daily non-stop flights to and

from Mexico City and the United States. The property is approximately a one-hour drive from the airport, via Mexico Highway 49, which is a major north-south trucking route. Rail and power transmission lines run parallel to the highway, and the entire project area is easily accessible year-round with two-wheel-drive vehicles.

#### Climate

The climate of the region is warm and dry, and vegetation comprises mesquite trees, desert scrub and cactus. The mean annual temperature in the area is 22.0°C, and the monthly means range from 14.4°C in January to 28.1°C in July. The average annual rainfall measured at Torreon is 265.9 mm.

#### Local Resources

The town of Bermejillo (pop. 7,000) is five kilometres to the south of Platosa and serves as a source of basic services, supplies and labour. Torreon is the major supply centre in the region. A lead smelter and zinc and silver refineries in Torreon are the property of Penoles, the second largest mining company in Mexico and partly through an affiliated company, Fresnillo plc, the world's largest producer of refined silver

#### Infrastructure

The Platosa Property site and mine facilities include the following:

- The surface mine site and associated facilities, including: offices, shops, compressors, fuel storage, electric substations, standby generators, crushing and stockpile facilities, portal, ventilation fans, run of mine ore storage, underground and surface water-settling ponds, diamond drill core logging and storage facilities, and dry facilities.
- Facilities providing basic infrastructure to the mine, including: access roads, electric power distribution, and septic treatment.
- Underground infrastructure, including: ramps, raises, ventilation/service raises, explosives magazines, dewatering pumps and underground mobile equipment fleet.
- Grid electric power supply to the site.

## **History**

Records of the early history of prospecting and mining in the Platosa area are not known to exist, however, it is speculated that the deposits were discovered by Spanish explorers in the 16th or 17th century. Small-scale mining was carried out at Platosa sporadically from that period up to the 1970s. The Villalobos family mined at Platosa in the early 1970s. From the extent of these mine workings, the total historic production from Platosa is estimated to be in the range of 25,000 t to 50,000 t. Smelter sheets from the 1970s quote grades of 0.35 to 1.75 g/t Au, 3,000 to 3,750 g/t Ag, 30% to 40% Pb, and 2% to 12% Zn. Mining at the nearby Saltillera, la Zorra, Socorro, and Refugio properties was reportedly carried out up to the 1960s, but detailed records of this production are not known to exist.

Excellon acquired the historic Platosa mine property from the Villalobos family in 1996, and staked the surrounding Excelmex and Poeta claims. At approximately the same time, Altiplano staked the Saltillera property. Both companies conducted reconnaissance mapping and sampling through 1997, after which time, Apex optioned the Platosa Property from Excellon.

Apex carried out mapping and geochemical sampling through 1998, and in 1999 embarked on diamond drilling programs at both Saltillera and Platosa. The drilling at Platosa discovered a sulphide body to the east of the old mine workings. In 1999, Apex carried out a Controlled Source Audio-Frequency Magnetotelluric ("CSAMT") survey and an orientation soil gas mercury sampling program and in 1999 carried out limited additional drilling at Platosa and Saltillera.

Excellon participated to some extent in the Apex exploration programs and then assumed control of the project in 2001 and continued the exploration work. Work conducted by Excellon is described under "Excellon Exploration" below. As described above, this exploration is no longer carried out under a joint venture as Excellon acquired a 100% interest by purchasing Golden Mineral Company's interest in November 2009.

## **Geological Setting**

## Regional Geology

The Platosa area is underlain by Mesozoic shelf and slope facies sedimentary rocks, which lie atop the Coahuila Platform. The Coahuila Platform is a fault-bounded uplifted basement block measuring approximately 100 km by 150 km. Surrounding the Coahuila Platform are Jurassic and Cretaceous sedimentary rocks of the Chihuahua Trough and Central Mexican Basin. Basement rocks are part of the Paleozoic Coahuila Terrane.

Northeast-southwest-oriented compression during the Cretaceous to early Tertiary Laramide Orogeny deformed the Mesozoic sedimentary rocks into a series of roughly parallel north-northwest trending folds and faults. Extension in the middle to late Tertiary reactivated and reopened these faults, including the structures bounding the Coahuila Platform, and developed further northwest-southeast oriented ground preparation. The mid-Tertiary extension event was accompanied by widespread magmatism, with the newly reopened faults acting as conduits allowing intrusion emplacement at shallow levels within the structurally prepared Mesozoic carbonate sequence. Most of the CRDs in Mexico were formed at this time, with the largest forming over the deep-seated, large-scale fault zones. Platosa lies near a major northwest fault structure on the western margin of the Coahuila Platform, along a northwest-trending line of major CRDs.

#### Property Geology

#### **Structure**

The current Platosa Mineral Resource is located near the intersection of the Platosa Structural Zone ("PSZ") with a northeasterly-trending fracture zone that also hosts mineralization further west. The Gypsum Fault, part of the PSZ, traverses the Platosa property just west of the historic mine workings and consists of a gypsum-filled shear zone that dips 70°E at surface, flattening to 60° down-dip. It has at least 60 m of normal offset. Other faults with lesser offsets are interpreted from the drilling and appear to have displaced stratigraphic contacts by up to 20 m. Post-mineralization faulting does not appear to be significant.

#### Stratigraphy

The Platosa Property is underlain by folded and faulted Mesozoic sedimentary rocks, locally intruded by dykes and sills of Laramide age. The lowermost in the stratigraphic sequence is the Lower Cretaceous Acatita Formation evaporite sequence. It is a gypsum-rich horizon that outcrops eight kilometres north of Platosa, and is thought to be the source for the abundant pore-filling gypsum observed throughout the property.

Overlying the Acatita Formation is the Treviño-Cuesta del Cura Formation, also Lower Cretaceous in age. This formation comprises a variety of platform and deeper marine facies calcareous sedimentary rocks that have been variously hornfelsed, dolomitized, and mineralized. At the top of this sequence is the Lower Limestone, which is strongly metamorphosed to marble.

The Lower Limestone is overlain by the Lower Hornfels, an altered and hornfelsed shale-sandstone of unknown thickness. Drilling has intersected a number of endoskarned dykes along with lead-zinc-molybdenum-bearing veinlets. Overlying the hornfels is a 50 m to 80 m thick sequence of shallow marine, thinly bedded to laminated, calcareous mudstone locally referred to as the Black Limestone. This is followed by a thin, black, organic-rich, pyritic sandstone called the Black Sandstone.

Overlying the Black Sandstone is the Fragmental Limestone, the principal host of mineralization at Platosa. The Fragmental Limestone is a variably dolomitized sedimentary breccia composed of angular limestone and dolomite fragments, ranging in size from <1 cm to >50 cm, in a sandy carbonate matrix. In the vicinity of the Platosa Mine, the unit is 50 m to 120 m thick, with an irregular basal contact and karsted upper contact. Northwest of the present mining area the contact with the overlying Upper Limestone is observed to be gradational over a few metres. Fragmental Limestone has been mapped on surface throughout the PSZ. The Fragmental Limestone was widely affected by post-lithification dolomitization thus creating a highly permeable rock susceptible to dissolution and mineralization.

The Fragmental Limestone is overlain by 200 m of thick- to medium-bedded calcareous mudstones called the Upper Limestone. This unit has been locally dolomitized between the mine and the Refugio area one kilometre to the west, and recrystallized to marble between Refugio and the la Zorra area three kilometres to the southwest. Upper Cretaceous shales, limey shales, and sandstones of the Indidura/Caracol Formation overlie the Upper Limestone. These rocks comprise basal shales, calcareous shales, calcarenites, and limestones, which grade upwards into siliceous shales, sandstones, and conglomerates.

#### **Intrusive Rocks**

Intrusive rocks are poorly exposed in the project area but have been intersected by drilling in the Saltillera-la Zorra area. A large magnetic anomaly, visible in both published and Excellon airborne magnetic surveys, and widespread thermal metamorphism of the Mesozoic sedimentary rocks suggest that intrusive rocks are more widespread than currently observed. The largest exposure of intrusive rocks in the western area is the Tertiary Pozo Porphyry, which is seen in a water well located southwest of the property, along the Bermejillo-Mapimi highway. The Pozo Porphyry is a medium-grained feldspar

porphyry thought to be a quartz monzonite. One- to three-metre thick felsic dykes occur in the la Zorra Mine and a multi-phase granite porphyry has been cut in drilling to the south.

At the Platosa Mine, one- to ten-metre wide altered and endoskarned felsic dykes with associated sulphide-bearing veinlets were intersected in the deep drillholes into the Lower Hornfels. Five kilometres northwest of Platosa at Cañon Colorado, a fine-grained neck or flow-dome of felsic intrusive is exposed. This intrusive is accompanied by minor gossan and ferruginous jasperoid that are anomalous in arsenic, zinc, silver, and lead.

#### Alteration

Secondary dolomitization of the host carbonate section is locally well developed, especially along the northeast flank of the range near the Platosa Mine. The secondary dolomitization was a pre-sulphide event caused by the passage of early Mg-rich brines along fractures and bedding planes in many limestone units. The process created secondary dolomite and significantly increased the porosity of the affected beds, many of which were later selectively mineralized by sulphides.

Silicification, occurring as weak to pervasive jasperoid and quartz veining, is found throughout the project area and is associated with both the northwest-southeast and northeast-southwest-trending fault structures. The intensity of the silicification is observed to be highest in zones of intersection of these two fracture trends but is only locally seen in the sulphide mantos.

Gypsum occurs as fairly late stage fracture-fillings and veins throughout the district. Collector-quality gypsum crystals have been extracted from open fractures in the historic Platosa mine. The gypsum commonly cuts across mantos and cements large areas of sulphide breccia. Crystalline gypsum containing extremely fine-grained inclusions of galena dust is often found tens of metres from these breccias and is a reliable indicator of proximity to coherent sulphides. Cross-cutting relationships and sulphur isotopic analyses indicate that the gypsum is probably not genetically related to the mineralizing event, but is most likely derived from the solution and reprecipitation of gypsum derived from the underlying Acatita Formation evaporates.

#### **Excellon Exploration**

Exploration work carried out on the Platosa Property by Excellon has included geological mapping, rock and soil geochemical sampling, biogeochemical sampling, soil gas mercury and hydrocarbon surveys, ground and airborne geophysical surveys, and diamond drilling with detailed core logging. In addition, samples have been taken for fluid inclusion and sulphur isotope studies. This work has been concentrated on the main Platosa deposit area, and regionally at Cañon Colorado, Crestoncitos, Saltillera, Socorro, Cerro Blanco, la Zorra, Refugio, and Dios da Bondad. Some of the work has been compiled into a digital database. In the Platosa Property Report Scott Wilson RPA describe in some detail most surface exploration work carried out by Excellon. The discussion below is limited to the main methods used for drillhole targeting. Further discussion of historic work is occasionally included to aid the reader understand the context of the description.

Most exploration work prior to early 2007 had been carried out under contract on behalf of Excellon by Compania Minera Cascabel S.A. de C.V., ("Cascabel") a well-known Mexican/American geological consulting group. In early 2007, Excellon began building its own exploration group, while still relying on Cascabel expertise in program planning, analysis of results and planning of subsequent programs.

## *Underground Exploration and Mining*

In 2003, Scott Wilson RPA prepared a mine plan and report on the Platosa Property. This report included a "Preliminary Assessment," as defined by NI 43-101 guidelines, and concluded that Platosa should be explored by underground methods. The mining and exploration plans were laid out to access all areas of the defined resources with the objective of converting these Mineral Resources to Mineral Reserves.

Underground mine development began in September 2004 and test-mining began in May 2005. With receipt of a permit to construct a mill and tailings management facility in September 2008, Platosa ceased to be a test-mining operation and became a mining operation as defined by Mexican regulations.

Ore is hauled to surface where it is crushed to approximately 1/8 inch. Until January 31, 2009 the Company sold this crushed ore to a unit of Penoles. In March of 2009 the Company began shipping its crushed ore to the mill owned by a Mexican subsidiary of SEG and located in the town of Miguel Auza 220 km south of Platosa. During the year ended December 31, 2010, the Company processed 64,462 tonnes of Platosa ore at Miguel Auza. Head grades were 814 g/t silver, 6.37% lead, 7.68% zinc and resulted in the production of 4,623 dry metric tonnes ("**DMT**") of silver-lead concentrate and 6,993 DMT of silver-zinc concentrate.

## Geological Mapping

Geological mapping has been done at a variety of scales in several areas of the property. Reconnaissance-scale mapping at 1:50,000 over most of the project area was done in 1998 and updated in 2006. More detailed reconnaissance mapping at 1:10,000 scale was completed in 1998 over the corridor from la Zorra to the historic Platosa Mine. In 2000 and 2006, 1:10,000 scale mapping was done over the Platosa structural zone as far north as Cañon Colorado. Detailed geological mapping at a scale of 1:5,000 has been carried out over several prospective areas including Zorra, Saltillera-Socorro, and Platosa.

In late 2010 and early 2011 a reconnaissance scale mapping and sampling program was carried out in the Refugio area located between Saltillera-la Zorra and the Platosa Mine. The area is known to host auriferous jasperoid occurrences, which may be part of a CRD system. Several gold-anomalous samples were found and the evaluation is ongoing.

## Soil Gas Mercury

Mercury was found to occur in the sulphides intersected in hole LP-05. Consequently, in 1999 Apex carried out an orientation soil gas mercury geochemistry survey over Platosa to determine if it was capable of detecting blind sulphide bodies at shallow depth. One hundred samples were taken along two orthogonal northeast-southwest and northwest-southeast lines that crossed at the collar of LP-05.

Anomalous values were obtained locally over the sulphide bodies, as well as in a number of other locations. The results were sufficiently encouraging to warrant an extended program comprising an additional 800 samples. The survey yielded anomalous values at several localities and Holes LP-23, -27, -28, and -29 were drilled to test some of these anomalies. The Manto 6 sulphide body was discovered in hole LP-23. The other three holes did not encounter significant sulphide mineralization. Excellon drilling of the Guadalupe Manto in 2005 and 2006 resulted in the recognition that the Guadalupe Manto coincides closely with the strongest soil gas mercury anomaly documented in the survey. Re-evaluation of the soil gas data revealed at least six anomalies. None of the five holes drilled in 2006 intersected mineralization.

## Soil Gas Hydrocarbons

Excellon carried out an orientation soil gas hydrocarbon survey over Apex's orientation soil gas mercury grid in 2001. Anomalies were found in proximity to both known sulphide bodies and mercury anomalies obtained in the Apex survey, however, the results were difficult to interpret since low values were also returned over known mineralization and soil gas hydrocarbon anomalies were obtained in areas with no mercury anomaly or sulphide bodies.

Holes EX-28, -29, -32, -34, and -37 were drilled to test soil gas hydrocarbon anomalies with coincident mercury anomalies. No significant sulphide mineralization was intersected and no further work has been done based on soil gas hydrocarbon results.

#### Mobile Metal Ions Survey

In 2006, an orientation Mobile Metal Ions ("MMI") survey was carried out over the immediate deposit area and an area extending approximately two kilometres to the north and one kilometre to the south. There were obvious concerns that surface disturbance since the commencement of test-mining at Platosa might influence results, however, the possibility of finding another useful exploration technique for the largely covered property outweighed these concerns.

Samples consistently anomalous in Ag-Zn-Pb were found above the known mantos and to the limit of the study grid northeast of the Guadalupe Manto. In early 2007, several holes tested the southeastern end of this area, but no positive results were encountered. Several copper anomalies were found along major strands of the Platosa Structural Zone, at the northern limit of the survey area, two kilometres from the mine. This area remains to be drill tested.

## **Biogeochemistry**

A reconnaissance biogeochemical survey was carried out in 2004 with the main objective to identify blind mineralization. Forty-three mesquite samples and four creosote samples were collected along the pediment north and south of the Platosa mantos. Five anomalies were identified with elevated silver and/or lead and/or zinc values. These anomalies coincided closely with known mineralization, so the survey was expanded to over 250 samples to cover a northwest-southeast elongate area roughly one kilometre wide and three kilometres long. Results for the combined surveys show several prominent spot anomalies and a northwest-elongate anomaly over 1,000 m long. This anomaly parallels a prominent anomaly seen in all five of the Natural Source Audio-Frequency Magnetotelluric ("NSAMT") lines that cross it. The coincident linear biogeochemical anomaly and NSAMT anomaly was tested with hole 132, which discovered the Guadalupe Manto, and later the Guadalupe South Manto. The combined anomaly trend continues over 800 m farther to the north and has seen only sporadic drilling to date.

## Geophysical Surveys

Apex carried out small-scale Induced Polarization ("IP") and Controlled Source Audio-Frequency Magnetotelluric ("CSAMT") surveys at Platosa in 1999. Excellon conducted a combined orientation ground magnetometer and gravity survey over Platosa in 2001. Since then Excellon has carried out other surveys as follows: In 2004 and 2005, NSAMT surveys; in February 2007, an airborne electromagnetic and magnetic ("AEM") survey over almost all of the property; in 2008, further IP, magnetic and gravity surveys on two grids, and borehole pulse electromagnetic ("BHPEM") surveys in two holes in the Platosa Mine area very near known massive sulphides. The purpose of these surveys was to evaluate the effectiveness of the various techniques in detecting sulphide bodies, geologic contacts, structures, and intrusive bodies in the area. IP is particularly effective in detecting bodies of disseminated sulphide mineralization, especially pyrite, and in defining zones of low or high resistivity. CSAMT and NSAMT are used for detecting conductive bodies or structures, and are useful in searching for massive sulphides and other conductors such as faults. Magnetometer surveys outline bodies containing magnetic minerals, such as pyrrhotite and magnetite, in addition to detecting intrusive bodies and contacts. Magnetometer surveys are especially effective at delineating features where rocks of contrasting magnetic susceptibility are in contact. Gravity surveys can detect bodies of significantly different specific gravity, such as sulphides, in a lower density medium, such as limestone. BHPEM surveys can detect conductive bodies in the vicinity of the drillhole being surveyed. The radius of coverage depends on many factors but can be 100 to 150 m.

## **Induced Polarization**

Apex carried out an IP survey, which comprised seven lines totalling 41 line-km. The survey was centred on hole LP-05, with one east-west line and six cross-lines oriented north-south and spaced at 75 m. The

survey employed a 50 m dipole-dipole array for the east-west line and a 75 m dipole-dipole configuration for the cross-lines. Chargeability and resistivity anomalies were detected, but follow-up was not recommended and Apex chose not to continue the IP surveying.

Excellon reviewed the IP data in late-2007/early-2008 and concluded that the IP survey had been effective, and in early March 2008 engaged Geofisica TMC S.A de C.V., geophysical contractors based in Mazatlan, Mexico, to carry out a line cutting, magnetometer and IP survey (n: 1 to 8 gradient array (87.0 line km) with pole-dipole (28.8 line km) follow-up of anomalous areas) over two grids. One was centred on the then test-mine area and the other covers a large portion of the corridor linking the Saltillera and la Zorra areas on the western portion of the property. The survey results showed numerous chargeability and resistivity responses but none that could be clearly recognized as related to sulphide mineralization.

In the spring of 2010 the Company carried out an 81.9 line km modified pole-dipole 3D IP/resistivity survey over a northwest-southeast oriented 5 km by 1 km grid centred on the Platosa Mine. Line spacing was 100 m. The survey outlined numerous anomalous areas. Several of these were drill tested in late 2010 and early 2011 and were explained by lightly pyritized hornfels and black limestone. Company geologists and our geophysical consultant continue to review the IP data.

## Natural Source Audio Magnetotellurics

NSAMT typically penetrates deeper than CSAMT and does not require a transmitter, which eliminates the need to keep the lines parallel to the transmitter antenna. This gives much greater layout flexibility and allows contouring of topography to minimize or eliminate false anomalies caused by elevation changes. The survey duplicated the CSAMT lines run previously but was expanded to over 40 line-km in several areas within the Sierra Bermejillo: Platosa Mine area (20 km), Dios da Bondad-Refugio area (6 km), Zorra (4 km), and Cañon Colorado/Uramex Dome area (10 km). Station spacing was 25 m for the lines in the Platosa Mine area and 50 m for the remaining areas.

The NSAMT was unsuccessful in detecting the known massive sulphide mineralization, but did reveal a number of very high contrast, near-vertical anomalies, several of which correspond with known mineralization. These appear on repeated parallel lines in a northwest-southeast linear array. Several of these are the same anomalies detected by the CSAMT survey, but are shown to greater depth and resolution. These were interpreted as reflecting buried structures that acted as mineralization fluid pathways (feeders). One of the strongest of the northwest-trending NSAMT anomalies was drilled in early 2005 (Holes 114, 116 and 117) and mineralization was found in all three holes.

Combining the NSAMT linear anomalies with parallel linear biogeochemical anomalies led to the interpretation that the biogeochemical anomalies reflect mineralization emplaced along the parallel structure. This exploration criterion led to the discovery of Guadalupe and Guadalupe South mantos as discussed above.

#### Magnetic Survey

In 2001, Excellon carried out an orientation ground magnetometer survey over the la Zorra and Platosa areas. Lines were broadly spaced and run over three geographically disparate target areas: the la Zorra Mine, the historic Platosa Mine, and the area along the Bermejillo-Mapimi highway. The purpose of the survey was to confirm the presence of a magnetic anomaly discovered in a Mexican Government survey run in 1997, and to determine if other structures in the Platosa area could be mapped with the magnetometer.

Three lines run over la Zorra returned magnetic lows over the range-bounding fault, and highs over the Upper Hornfels and the limestone-hornfels contact. Four lines run at Platosa detected anomalies to the

northwest of the Platosa Mine. Drillhole EX-38 intersected numerous altered dykes in Lower Hornfels through this section.

It was concluded that the magnetometer survey was successful in detecting intrusive bodies, faults, limestone-hornfels contacts, and other magnetic features, such as magnetite bodies. Additional magnetometer surveying was recommended and a heliborne AEM survey was flown in February 2007.

Additional ground magnetic surveying was carried out in 2008 in conjunction with the IP surveying discussed above. The results generally coincided with those of the airborne magnetic survey carried out in 2007.

## Gravity Survey

In 2001, Excellon contracted Cascabel to carry out an orientation gravimeter survey over known mineralization at the Platosa Mine. The survey was performed along two intersecting lines centred on drillhole LP-05. No significant anomalies were found over the known massive sulphide mineralization

These gravity data were modeled with more sophisticated software in early 2008 and gravity surveys were carried out on most of the two (IP) grids established in the spring of 2008. Interpretation was completed in the spring of 2009 and several anomalies were outlined. Drilling of an anomaly near the known manto deposits intersected massive sulphides, however, Company geologists believe that a horsted block of hornfels, which has a higher specific gravity that the surrounding limestones is likely responsible for the gravity anomaly.

In the spring and early summer of 2010 additional gravity surveying was carried out over the 3D IP grid and to fill in gaps in the 2008 survey. No significant new anomalies were found.

## Borehole Pulse Electromagnetic Surveys

In 2008, two drillholes, both containing sulphides in varying amounts and located within 75 m of significant known massive sulphides were surveyed. No conductivity was noted either in the holes or near them. The results confirmed that the Platosa mantos are formed of non-conductive sulphides and that electromagnetic survey methods are not appropriate for exploration for additional similar bodies.

## Airborne Electromagnetic Surveys

In February 2007, Aeroquest International Limited of Milton, Ontario, carried out a 1,530 line-km, heliborne AeroTEM II survey over almost all of the Platosa property. A strong northwest-elongate magnetic high along the southwest flank of the Sierra Bermejillo range was immediately evident. It lies beneath the Saltillera and la Zorra areas (four to five kilometres west of the Platosa manto deposits) where widespread marble, hornfels, silicification, skarn and local high-grade mineralization occur. Drilling in the Saltillera-la Zorra area and to some extent the immediate then test-mine area after mid-2007 was guided in part by the magnetic survey results.

Weak EM anomalies were also outlined in several areas by the survey. In 2007 several holes were drilled to test certain of these targets southeast of the mantos, however, no sulphide mineralization was intersected. Some of the anomalies are likely related to water-saturated alluvium and/or to sharp drop-offs in overburden thickness in the broad valleys both east and west of the Sierra Bermejillo.

In October 2010 Geotech Ltd. of Aurora, Ontario and world leader in airborne electromagnetic geophysical surveying techniques completed a 2,786 line km ZTEM survey at Platosa. The survey covered a large portion of the original Platosa block, almost all of a large concession acquired early in 2010 and a portion of the Sundance Option property. This relatively new type of survey has depth penetration beyond that of most airborne systems and is particularly effective at detecting structures at depth. Structural networks are fundamental controls on the style of CRD being exploited at Platosa and

may lead to their proximal source, which is the ultimate object of the Company's exploration. Final interpreted results of the survey were received in March 2011 at which time Company geologists began ground truthing ZTEM anomalies and planning a drilling campaign.

#### Mineralization

Mineralization at Platosa forms a series of mantos and chimneys localized at the intersection of the Platosa Structural Zone (PSZ) with a northeast-striking lineament. As presently known, the bodies are found within an irregularly-shaped 785 m by 650 m area. Most mantos dip gently to the east and are often connected by chimney structures forming a stair-step pattern for a collective dip of 18° towards the east. Depth from surface ranges from 60 m in the west to over 315 m in the east. Sulphide mineralization is massive, banded, disseminated and fracture-filling, fine- to coarse-grained galena and sphalerite, with minor accessory pyrite. The primary silver mineral is acanthite, which occurs as coarse blebs and fine-grained intergrowths with galena. Native silver and proustite occur locally. Silver, lead, and zinc grades are often high, especially in the more massive sections. Silver grades in the thousands of grams per tonne are not uncommon. Lead and zinc sulphides can comprise over 80% of the rock mass in drill core. Drilling has also intersected anomalous copper and gold values but not with sufficient thickness or continuity to be considered part of the Mineral Resource. Gangue minerals include fine-grained calcite, coarse gypsum, quartz, and fluorescent purple fluorite.

In 2007 and 2008 NI 43-101 technical reports and the Platosa Property Report Scott Wilson RPA describe zones that have been mostly mined out, including the oxidized surface mineralization and mantos 1, 2, 3, 4, 5, and N1. Previous reports describe each contiguous sulphide body as a separate manto. Excellon's continued success discovering additional mantos makes a description on an individual basis unpractical. Instead, Scott Wilson RPA has grouped several of the sulphide bodies by area named after the primary manto within the area:

- The 6A/6B Manto area is made up of several northwest-trending elongate sulphide bodies located between Manto 5 and Guadalupe. The larger of mantos is 120 m long in the northwest-southeast direction, up to 40 m wide, and varies between 1.25 m and 6.5 m thick. Excellon accessed both ends of 6A/6B Manto through underground development from the main ramp and from workings at the northwest-end of the Guadalupe manto. Drilling during 2010 intersected additional massive sulphide mineralization to the northwest of that incorporated into the 2009 Mineral Resource estimate.
- The Guadalupe Area, including the Guadalupe Manto, is located 30 m to 50 m north of Manto 6. It is elongated in the northwest-southeast direction, along the PSZ, measuring roughly 360 m long by 100 m wide and ranges from 1.25 m to 10 m thick. Lead, zinc, and silver grades are often high, especially in the more massive sections. The majority of the mining carried out by Excellon at Platosa has been from the Guadalupe Manto.
- The Guadalupe South Area is located east of Manto 6, ranging from 110 m to 180 m below surface. Similar to Guadalupe, Guadalupe South is elongated along the PSZ. It measures 230 m long, 10 m to 70 m wide, and varies in thickness from 1.6 m to 10.0 m.
- The Rodilla Manto was discovered in late 2007, following the acquisition of additional surface rights immediately north of the mine. The Rodilla massive sulphide (and sulphide breccia) drill hole intercepts range from 1.0 m to 14 m thickness and consist largely of massive sphalerite with subordinate galena and 10% to 20% barite gangue.

- The NE-1 Manto mineralization was first found in 2005 with three holes that intersected sandy, fine-grained sulphides at 220 m depth. The actual manto was drilled in 2008 when following up on a high-resistivity NSAMT (Natural Source Audio-Frequency Magnetotelluric) anomaly about 120 m northwest from the 2005 holes. The current geometry of the manto is approximately 100 m by 80 m and divided into a shallower (west) part averaging 210 m in depth and a deeper (east) part averaging 310 m in depth. The explanation for the 100 m displacement has not yet been identified. The thickness of the manto varies from one metre to nine meters with grades somewhat lower than those of the Guadalupe Manto.
- The 623 Manto was discovered in July 2009 during drill testing of a gravity anomaly approximately 200 m south of the NE-1 Manto. It varies in depth from 125 m at the south-southwest near the Guadalupe South Manto to 240 m in the north-northeast, more or less at same depth as the western portion of the NE-1 Manto. As currently defined, the manto is an irregularly-shaped north-northeast–south-southwest trending body 200 m long by 45 m wide in the northern portion and 120 m wide in the southern portion. It has a clear northeast-southwest structural control. The estimated true thickness varies from 1.4 m to 7.1 m. Grades are similar to the Guadalupe South Manto.
- The Pierna Manto was discovered while following up weak mineralization intersected between the Rodilla and NE-1 mantos in October 2010. Seven holes returned high-grade silver, lead and zinc values over estimated true widths of 0.55 to 10.76 m. This manto remains open in several directions.

## Sulphide-Rich Breccias

Underground development has encountered several areas of lower grade, sulphide-rich breccias beneath and around many of the main sulphide bodies. These breccias are composed of coarse sulphide and wall rock fragments up to one metre in diameter, with interstices filled with loose to partially consolidated fine to coarse sulphide and dolomite sand. In many places the infilling shows the fine laminar bedding characteristic of cavern-fill sediments. These lower-grade zones may have formed through late intramineral to post-mineral dissolution of carbonate rocks around and below the mantos, with concurrent collapse of manto fragments and wall rocks into the voids, followed by later "washing" of finer-grained particles into the breccia voids by ground-water flow. Notably, the sand-sized fraction tends to be dominated by galena and/or acanthite and commonly yields high silver grades. In many places these breccias are cross-cut and cemented by later gypsum deposition. Core recovery is often poor in the unconsolidated, sandier portions of these breccias.

## Mineralization Proximal to Intrusive Systems

A wide range of thermally metamorphosed rocks are found throughout the property. These include hornfels, skarnoid, and marble-recrystallization of the carbonate host rocks. The heat source for the metamorphism is thought to be a polyphase intrusive body that may extend for several kilometres beneath the southwest flank of the Sierra Bermejillo. The extent of the body is revealed by regional aeromagnetic surveys flown by the Mexican Geological Survey and Excellon. Monzonite, granodiorite, granite, quartz-eye porphyry and andesite porphyry have been found in isolated outcrops and drill holes throughout this area. Deeper holes drilled in this area have encountered Cu-Mo-bearing veinlets and metasomatic skarn zones cutting the hornfels. Megaw (2002) postulated that these metamorphic and metasomatic fluids related to the deeper-seated portions of this intrusion were dammed below the relatively impermeable Lower Hornfels Formation and were only locally able to ascend into the upper carbonate units along faults and fractures.

In August 2007, hole EX07ST-50, drilled in the Saltillera area, intersected 85 m (estimated true thickness) of variably sulphide-mineralized proximal or near-source hornfels and skarns developed around two swarms of fine-grained felsite dykes. Galena, sphalerite and chalcopyrite were locally visible in the core, with the most strongly mineralized section grading 129 g/t Ag, 2.12% Pb, and 0.92% Zn over 1.1 m. The intercept was the first significant mineralization found in a series of holes designed to test specific zones around a magnetic anomaly revealed in the AEM survey.

In November 2007, hole EX07-LP422, drilled approximately 250 m northwest of the Guadalupe Manto, intersected marble and felsic intrusive material starting at a depth of 500 m. This was the first time intrusive material had been intersected in drilling on the eastern portion of the property. Excellon and its consultants believe the intrusive is similar to intrusive rocks associated with large-tonnage CRD deposits elsewhere in Mexico and therefore increases the potential to find a large-tonnage source for the Platosa mantos in proximity to the mine. Only limited follow-up drilling has been carried out since 2007 as Excellon concentrated on expanding the high-grade resource near the mine.

## **Drilling**

To December 31, 2010, a total of 251,214.21 m in 1,068 surface diamond drill holes had been completed at Platosa. Apex drilled 33 holes, totalling 4,660.05 m, and Excellon has drilled 246,554.16 m in 1,034 holes. The Excellon total includes 43 holes drilled to assist in underground grouting operations.

In April 2006, February 2007, and again in November 2009, Scott Wilson RPA was able to observe the drilling in progress at the Platosa site and notes that the work was being carried out in a competent fashion, using modern equipment that appeared to be in good repair and appropriate for the job.

Collar surveys are carried out by an Excellon surveyor using a transit. Prior to 2004, downhole orientation surveys were done with a single shot Sperry Sun instrument. Between 2004 and early 2007, detailed down-hole orientation survey data were collected by Cascabel personnel for most holes using an Icefield Tools Corporation MI3 survey instrument. This task was assumed by Excellon personnel in early 2007 and is now carried out using a company-owned Icefield MI5 instrument with the MI3 serving as a spare. Data points are generally collected every six drill rods or 18 m.

Since mid-2004, upon completion, holes have been cemented to approximately 10 m above the water table to prevent inflow into current or future mine workings, and collars are cemented to approximately a three-metre depth.

Scott Wilson RPA notes that core recovery is quite variable, particularly in the mineralized zones, and there is a wide range of competence of the rock mass. Core recovery has improved substantially over the history of the project due to the site-specific experience gained by the operating personnel. In some of the earlier holes, recoveries varied from 100% to as low as 15%, but are usually in the range of 80% to 100% in the more recent drilling.

Scott Wilson RPA notes that the sulphide mineralization intersected to date has not been completely closed off by drilling. Scott Wilson RPA further notes that the potential for finding additional manto and chimney bodies is very good, and that further exploration at Platosa could result in additional discoveries.

Four drills were in operation from January to August 2010 with a fifth operational from June to August. From mid-August to year end following a sudden water inflow into the mine one drill was operational. The vast majority of the drilling was in the general mine area and the remainder in the Saltillera-la Zorra area.

## Sampling, Analysis and Sample Security

#### Method

Core is moved from the drill site to a covered core handling facility located at the Platosa Mine. A geologist logs the core and marks sample intervals. Mineralized intersections are photographed. Hard-copy logs record: core recovery, Rock Quality Designation, sample intervals, and descriptive notes on porosity, colour, grain size, sedimentary structures, alteration, and lithology. These data are entered into a customized DHLogger database, which is used along with Downhole Explorer and other Datamine and Century Systems software.

The geologist selects sample intervals to reflect lithologic, structural, or mineralization boundaries. Sample identifiers are marked directly on the core and core box. Sample lengths are limited to a maximum of 1.5 m in mineralized sections and 3.0 m in wall rocks. Field assistants split the weakly mineralized core with a standard blade-type core splitter. Massive sulphide intersections are sawn at the field office in Bermejillo. The diamond saw is cooled and cleaned with a continuous flow of fresh water. Unconsolidated material is split with a spatula. The half-core samples are collected in plastic bags for shipment to the lab. The remaining half is retained and stored at the Platosa site warehouse for future reference. The appropriate number of standards and blanks are also inserted into the sample batches.

Groups of up to 45 samples are placed in sealed bags for shipping. A list of samples in each sealed bag is submitted to the laboratory along with the sample list inside each bag. The samples are ground transported to the SGS Mineral Services laboratory in Durango by Excellon personnel.

No other sample preparation is carried out by Excellon personnel. Scott Wilson RPA observes that the sampling protocols in use by Excellon personnel comply with standard industry practice and are appropriate for the deposit type.

Sampling procedures employed by Apex were not recorded, but it is evident from the remaining core and from the logs that their procedures were similar to Excellon's.

#### Sample Preparation and Analysis

Prior to April 2005, samples were shipped by bus to ALS Chemex Laboratories in Chihuahua, Mexico. Sample preparation involved drying, crushing, splitting, and pulverization. Splits of the pulverized and homogenized sample material were sent to ALS Chemex in Vancouver, Canada, for analysis. All samples were subjected to 36-element ICP analyses, and AA for silver and over-limit lead, zinc, and copper. Pulps from high silver-lead-zinc samples were sent to Acme Analytical Labs ("Acme"), also in Vancouver, for check assay. Both ALS Chemex and Acme employ standards and blanks routinely as part of their assay protocols.

Excellon reports that Apex used Barringer Laboratories for their assays, with some check assay work done at American Assay Laboratories. At that time, Apex discerned that a problem in reproducibility existed between the two labs. This was resolved by increasing the degree of homogenization applied to the samples to account for coarse sulphides.

Between April 2005 and June 2008, all samples were sent to SGS Mineral Services (SGS) in Durango for preparation and analysis for Ag, Au, Pb, Zn, and Cu. A portion of the pulps was then sent to the SGS laboratory in Toronto, Ontario, for multi-element ICP analysis. The Durango laboratory was upgraded in the summer of 2008 and since then all Excellon assaying has been carried out there. In the fall of 2009, the Durango laboratory received accreditation to ISO/IEC 17025. SGS is a reputable international laboratory that provides analytical services to the mining and mineral exploration industry worldwide.

Upon reception at SGS Durango, samples are sorted and checked against the sample submission form before entering the preparation laboratory. Samples are dried at 95°C for at least two hours, crushed to

90% passing 2 mm, split to 250 g, and pulverized to 90% passing 75 microns (200 mesh). The final pulp is submitted for analysis. A barren wash is used between samples.

SGS's internal Quality Assurance/Quality Control (QA/QC) protocol includes a preparation duplicate every 50 samples and pulp duplicates every 12 samples. The laboratory also submits method blanks, as well as a preparation blank at least once for each work order batch and inserts reference material every 25 samples. For each laboratory batch, a QC report is produced and submitted on request to Excellon's QA/QC manager for review.

Different analytic assaying packages are used depending on the purpose of the drill hole: whether it is for Mineral Resource definition drilling, with likely high grades, or exploration drilling, where low grades are still important.

Results are e-mailed to designated Excellon and Cascabel staff along with Excellon's QA/QC consultant and signed hardcopy certificates are couriered to Excellon at the Platosa Mine site. All remaining pulps and rejects are stored in Durango or at the Platosa site depending on the stage of Excellon's QAQC program.

In Scott Wilson RPA's opinion, the sampling, sample preparation, security, and analytical procedures are adequate for estimating Mineral Resources.

## Security of Samples

Drill core is stored in a locked warehouse in Bermejillo and within the fenced and access-controlled property perimeter in covered storage areas at the Platosa Mine site. The core boxes are labelled and depth markers have been placed at appropriate intervals. The drilling, sampling, and logging are carried out under the direct supervision of experienced geologists.

## Data Verification

Data verification of the drillhole database during the preparation of the October 31, 2009 Mineral Resource estimate included manual verification against hardcopy or original digital sources, a series of digital queries, and a minor amount of QA testing. Excellon also compares results from the laboratory against drillhole logs for gross inconsistencies. The drillhole database was verified by Scott Wilson RPA and is suitable for estimating Mineral Resources.

David Ross, P.Geo. Senior Consulting Geologist with Scott Wilson RPA and an independent QP, visited the property most recently in November 2009. During his site visit, he observed a diamond drill in operation, visited the core shack and examined drill core, visited the underground operation and held discussions with Excellon and Cascabel geological staff.

## Manual Database Verification

Drill hole database verification focused on the header and assay tables. Collar locations were verified visually and against a secondary database kept by Excellon staff. Drill whole traces were also checked in cross-section, level plan, and 3D. Several minor discrepancies were found and corrected.

Previous studies by Scott Wilson RPA included database verification for holes up to EXN-07-436. Holes drilled since the last resource update was verified for the current Mineral Resource estimate. Scott Wilson RPA received dozens of digital spreadsheets from Excellon and/or SGS Durango. Nearly 2,000 assay records were compiled and compared to the current drill whole database. No significant discrepancies were identified.

#### Assay Quality Assurance and Quality Control

In early 2007, Excellon engaged an independent consultant to review and improve the Platosa QA/QC program. In May 2007, as a result of the initial review and recommendations, Excellon began submitting one Certified Reference Material (CRM) sample and one blank with each batch of 30 to 45 samples or

less. Excellon plans to submit batches of coarse-crush replicates to the regular lab and a pulp duplicates to a secondary lab in 2011.

#### Certified Reference Material Protocol

Results from the regular submission of CRMs identify problems with specific sample batches and long-term biases associated with the regular assay lab. In general, QC failures occur when assays from two consecutive CRMs are greater than plus or minus two standard deviations from the expected value, or if an assay from a single CRM is greater than plus or minus three standard deviations from the expected value. Between early 2007 and the spring of 2008 Excellon used a CRM identified as GMB 303-01 that is manufactured by Gestates Pty Ltd, Australia. GMB 303-01 has grades appropriate for Platosa: 1,419.6 g/t Ag, 23.656% Pb and 2.88% Zn.

In mid-2007 Excellon began the process of preparing in-house CRMs using mineralized material gathered from underground workings at the Platosa Mine. Ultimately three standards, designed to cover the variation in grade found in sulphide mineralization being exploited at Platosa, were prepared by CDN Resource Laboratories Ltd. ("CDN") of Delta, British Columbia. In the late spring of 2008, these CRMs were put into use for all drilling on the property.

In late 2010 Excellon contracted CDN to prepare a new, lower-grade CRM for Platosa. This work should be complete in the spring of 20111.

#### **Mineral Resources and Reserves**

Scott Wilson RPA prepared an updated Mineral Resource estimate for the Platosa Property based on production and drill hole data current to October 31, 2009. Prior to this update, the last estimate was current to February 3, 2008.

Scott Wilson RPA employed a block model constrained by wireframes, with an inverse-distance method of grade interpolation. Block size was 5 m by 5 m by 2 m, and an initial search ellipsoid was spherical with a radius of 25 m followed by a second search with a radius of 50 m. The influence of high grade composites was constricted to 25 m. The sample database comprised drill whole samples composited to two-metre down-hole lengths. The minimum width for the mineralization used in construction of the wireframe models was 1.5 m and an NSR incremental cut-off cost of US\$86/t was used.

Wireframe models were updated to incorporate mining and drilling information. For the purpose of reporting, the Platosa deposit has been sub-divided into six areas. Each area is made up of several maknots and chimneys. The updated estimate of Mineral Resources is provided in following table.

# MINERAL RESOURCE ESTIMATE BY AREA AS OF OCTOBER 31, 2009 EXCELLON RESOURCES INC. – PLATOSA PROPERTY

	Tonnes	Ag	Pb	Zn
		(g/t)	(%)	(%)
INDICATED				
Manto 6	58,000	1,417	11.35	12.69
Guadalupe	178,000	887	10.56	11.28
Guadalupe South	85,000	1,143	8.34	12.79
Rodale	84,000	692	7.02	10.51
NE1	110,000	503	7.01	7.46
623	62,000	1,183	10.27	8.52
Total Indicated	579,000	909	9.09	10.51
INFERRED				
Manto 6	1,000	1,852	12.46	10.40
Guadalupe	36,000	741	10.10	9.83
Guadalupe South	13,000	948	9.15	9.02
Rodale	24,000	754	5.97	7.57
NE1	46,000	432	6.02	5.05
623	40,000	956	6.96	7.91
Total Inferred	160,000	731	7.44	7.57

- Notes
- 2. CIM definitions were followed for the classification of Mineral Resources.
- 3. Mineral Resources are estimated at an incremental cut-off cost of US\$86 per tonne.
- 4. A minimum mining width of 1.5 m was used.
- 5. NSR metal price assumptions: Ag \$16.00/oz, Pb \$0.80/lb, Zn \$1.00/lb.
- 6. Based on production and drill whole data current as of October 31, 2009.

## Mining

Excellon accessed the first manto (Manto 4C) by underground trackless ramp and lateral development methods starting in May 2005. From then until January 31, 2009 crushed Platosa ore was sold and shipped to a unit of Penoles. In March of 2009 the Company began shipping crushed ore to the mill owned by a Mexican subsidiary of SEG and located in the town of Miguel Auza 220 km south of Platosa.

From May 2005 to January 31, 2009, a total of 156,784 wet tonnes (152,840 dry tonnes, on which basis payment was made) of ore were produced and shipped to Penoles. Between February and December 31, 2009 a total of 57,184 wet tonnes of ore were produced and starting in mid - March shipped to Miguel Auza for processing. During the year ended December 31, 2010 an additional 63,040 wet tonnes of ore were produced. Most of this production was shipped to Miguel Auza, however, a small amount remains underground and on the surface stockpile at any given time. An overall summary by manto is presented in the following table:

# MINERAL PRODUCTION TO DECEMBER 31, 2010 Excellon Resources Inc. – Platosa Property

Manto	Wet	Ag	Pb	Zn
	Tonnes	(g/t)	(%)	(%)
4A	1,429	755	6.57	18.50
4B	10,944	1,006	10.14	25.19
4C	16,686	1,386	11.38	10.69
5A	22,421	2,719	18.49	10.28
N-1	12,552	1,147	8.60	7.66
6A	33,483	839	7.02	6.95
Guadalupe Breccia	3,896	1,420	15.14	4.49
Guadalupe	164,511	1,034	10.07	10.95
Guadalupe South	11,086	1,250	9.75	8.13
Total (wet tonnes)	277,008	1,185	10.44	10.65

The grades shown in the table above are estimates obtained using a NITON portable X-Ray fluorescence instrument used by Excellon for grade-control purposes. They therefore differ from the grades obtained from ore samples sent to commercial analytical laboratories for analysis and/or from those obtained from actual processing results. Scott Wilson RPA recommends that Excellon conducts a comparison of NITON results against analytical results from SGS. The test program should include at least 50 duplicate pairs. NITON measurements for the test program should be taken in a typical operational environment.

Of the original December 10, 2003 mine plan, Mantos 4A, 4B, 4C, and 5 have been mined out, and Manto 6A/6B has been accessed and partially mined. Manto N-1, which was discovered in 2005, has also been mined out. The Guadalupe and Guadalupe South mantos, also discovered after the original mine plan was developed, have been accessed and partially mined.

The mine operates an average 26 days per month. Between May 2005 and December 31, 2010 (68 months), Excellon mined approximately 4,074 wet tonnes per month (tpm). Until the end of January 2009 production was limited by the amount of material Penoles was willing to purchase in any given period. Since then production has increased and production averaged 6,000 tpm for several months during 2010. Projected production for 2011 is approximately 4,750 tpm. The main risk to the production rate is excessive groundwater inflow and related flooding. The mine has suffered several water inflow incidents that occur when mining encounters water-filled faults. These incidents can disrupt production and one did so in August 2010. Excellon has worked with several hydrological and water-control consultants and the Company began a more intensive grouting program in the late summer of 2010. An underground diamond drill is dedicated to drilling 25- to 50-metre long sub-horizontal grout cover holes in advance of certain production and development headings to seal off the faults. The Company is acquiring additional pumps and has upgraded electrical infrastructure as it continues to enhance the Platosa water management program.

Once a manto has been accessed, mineralized material is mined by a "Pilot and Slash" mining method, using jacklegs. In areas where the width and thickness of the mineralization allows, development and slashing is completed with a single boom jumbo. Depending on the shape and orientation of the manto, the pilot heading can be inclined, declined or flat, to remain in mineralization. Back slashing (breasting), wall slashing, or floor slashing (benching) from the pilot heading may be required to extract all mineralized material. When larger openings are developed, rock bolting has been carried out or a pillar

left for support until mining of the area has been completed. Mining to date indicates that the mantos are very irregular in shape and orientation, and are in many cases connected.

The ground has been very competent and, in general, very little ground support is required. There has been no problem extracting all the mineralized material (in the mined-out areas). Scott Wilson RPA estimates that dilution is in the order of 10%.

Future mine development will require development to progress deeper. Ongoing exploration suggests that this development will progress to the northeast and to depths in excess of 300 m. The current interpretation of the mine geology, hydrology, and main structural features indicates that the occurrence of open faults, solution channels, and caverns that have delayed and complicated some of the mining to date will decrease as development progresses to the northeast and deeper. It is believed that the historic variation in the water table in the area and the hydrologic features that these structures have created will diminish with depth.

Scott Wilson RPA cautions that Excellon may encounter excessive groundwater inflows that could delay the ongoing mining operation.

Mineral Processing and Metallurgical Testwork

There is currently no mineral processing carried out at the Platosa site. Excellon crushes the mineralized material to 1/8 inch in a two-stage crushing plant on site and ships it to the beneficially-owned Miguel Auza mill 220 km to the south for processing.

In April 2008 the Excellon Board of Directors approved the construction of an on-site 350 tonne per day flotation concentrator for the production of both silver-lead and silver-zinc concentrates. Final metallurgical testwork and major equipment acquisition were undertaken and largely completed by mid-October. All Mexican government permits required to allow the building of the concentrator and tailings impoundment area were issued in late September and construction began in mid-October. Construction was suspended indefinitely in mid-December 2008 and the suspension remains in effect.

#### **Risk Factors**

An investment in the Common Shares of the Company involves a high degree of risk and must be considered speculative due to the many risk factors facing companies in the mining industry that could materially affect the Company. Certain of such risks are:

Mining Industry is Intensely Competitive

The Company's business is the acquisition, exploration, development, and exploitation of mineral properties. The mining industry is intensely competitive and the Company competes with other companies that have far greater resources.

Resource Exploration and Development is a Speculative Business

Resource exploration and development is a speculative business and involves a high degree of risk, including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but from finding mineral deposits which, though present, are insufficient in size to return a profit from production. The marketability of natural resources that may be acquired or discovered by the Company will be affected by numerous factors beyond the control of the Company. These factors include market fluctuations, the proximity and capacity of natural resource markets, and government regulations, including regulations relating to prices, taxes, royalties, land use, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Company not receiving an adequate return on invested

capital. The majority of exploration projects do not result in the discovery of commercially mineable deposits of ore.

## Fluctuation of Metal Prices

Even if commercial quantities of mineral deposits are discovered, there is no guarantee that a profitable market will exist for the sale of the metals produced. Factors beyond the control of the Company may affect the marketability of any substances discovered. The prices of various metals have experienced significant movement over short periods of time, and are affected by numerous factors beyond the control of the Company, including international economic and political trends, expectations of inflation, currency exchange fluctuations, interest rates and global or regional consumption patterns, speculative activities and increased production due to improved mining and production methods. The supply of and demand for metals are affected by various factors, including political events, economic conditions and production costs in major producing regions. There can be no assurance that the price of any minerals contained in a deposit will be such that the Company's properties can be mined at a profit.

#### Permits and Licenses

The operations of the Company require licenses and permits from various governmental authorities. The Company currently has all permits and licences that it believes are necessary to carry out its current exploration, development and mining operations at its projects including, without limitation, the permits required to construct and operate a mill at Platosa. The Company may require additional licences or permits in the future and there can be no assurance that the Company will be able to obtain all such additional licenses and permits. In addition, there can be no assurance that any existing licences and permits will be renewable if and when required or that such existing licences and permits will not be revoked.

#### Failure to Achieve Production Estimate

Estimates of future production from the Platosa Mine operations as a whole are derived from the original mine plan prepared in fiscal 2004, as subsequently reviewed/revised by management with input from Scott Wilson RPA. These estimates are subject to change. The Company cannot give any assurance that it will achieve its production estimates. The failure to achieve the anticipated production estimates could have a material and adverse effect on any or all of the Company's future cash flows, results of operation and financial condition. The mine plan has been developed based on, among other things, mining experience, Mineral Resource estimates, assumptions regarding ground conditions and physical characteristics of the Platosa mineralization [such as hardness, specific gravity and presence or absence of certain metallurgical characteristics] and estimated rates and costs of production.

Actual production may vary from estimates for a variety of reasons, including risks and hazards of the types discussed above, and as set out below:

- ♦ actual ore mined varying from estimates in grade, tonnage and metallurgical recoveries and other characteristics;
- ♦ mining dilution;
- excessive water encountered during mine development and production;
- ♦ ramp wall failures or cave-ins;
- ♦ ventilation and adverse temperature levels underground;
- ♦ industrial accidents;
- equipment failures;
- ♦ natural phenomena such as inclement weather conditions, floods, blizzards, droughts, rock slides and earthquakes;

- encountering unusual or unexpected geological conditions;
- ♦ changes in power costs and potential power shortages;
- ♦ shortages of principal supplies needed for operation, including explosives, fuels, chemical reagents, water, equipment parts and lubricants;
- ♦ restrictions imposed by government agencies; and
- inability to find and retain qualified personnel.

Such occurrences could result in damage to mineral properties, interruptions in production, injury or death to persons, damage to the Company's property or the property of others, monetary losses and legal liabilities. These factors may cause a mineral deposit that has been mined profitably in the past to become unprofitable.

## No Assurance of Profitability

The Company has a limited history of earnings and due to the nature of its business there can be no assurance that the Company will be profitable. The Company has not paid dividends on its shares since incorporation and does not anticipate doing so in the foreseeable future. The only present source of funds available to the Company is from the anticipated cash flow generated by the Company's mining activities at the Platosa Mine or through the sale of its equity shares, short-term high-cost borrowing or the sale or optioning of a portion of its interest in its mineral properties. Even if the results of exploration are encouraging, the Company may not have sufficient funds to conduct the further exploration that may be necessary to determine whether or not a commercially mineable deposit exists. While the Company may generate additional working capital through cash flow from mining operations, further equity offerings, short-term borrowing or through the sale or possible syndication of its properties, there is no assurance that any such funds will be available on favourable terms, or at all. At present, it is impossible to determine what amounts of additional funds, if any, may be required. Failure to raise such additional capital could put the continued viability of the Company at risk.

#### *Uncertainty of Resource/Reserve Estimates*

The Mineral Resource estimates in respect of the Platosa property are based on limited information acquired through drilling and, in some cases, through underground exploration and mining. No assurance can be given that the anticipated tonnages and grades will be achieved or that the indicated level of recovery will be realized. The grade of mineralization actually recovered may differ materially and adversely from the estimated average grades in the resource estimate. Future production could differ dramatically from resource estimates for, among others, the following reasons:

- 1. mineralization or formations could be different from those predicted by drilling, sampling and similar examinations;
- 2. increases in operating mining costs and processing costs could adversely affect Mineral Resources;
- 3. the grade of the Mineral Resources may vary significantly from time to time and there is no assurance that any particular level of silver, lead or zinc may be recovered from the Mineral Resources; and
- 4. declines in the market price of silver, lead or zinc may render the mining of some or all of the Mineral Resources uneconomic.

Any of these factors may require the Company to reduce its resource estimates or increase its cost estimates. Short-term factors, such as the need for the additional development of a deposit or the

processing of new different grades, may impair the Company's profitability. Should the market price of metals fall, the Company could be required to materially write down its investment in mining properties or delay or discontinue production or the development of new projects.

#### Mineral Reserves

The Company has not defined any Mineral Reserves on its claims and there can be no assurance that any of the mineral claims under exploration contain commercial quantities of any minerals. Even if commercial quantities of minerals are identified, there can be no assurance that the Company will be able to exploit the resources or, if the Company is able to exploit them, that it will do so on a profitable basis. Substantial expenditures may be required to locate and establish Mineral Reserves, to develop metallurgical processes and to construct mining and processing facilities at a particular site, and substantial additional financing may be required. It is impossible to ensure that the exploration or development programs planned by the Company will result in a profitable commercial mining operation. The decision as to whether a particular property contains a commercial mineral deposit and should be brought into production will depend on the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified engineers and geologists. Several significant factors will be considered, including, but not limited to: (i) the particular attributes of the deposit, such as size, grade and proximity to infrastructure; (ii) metal prices, which are highly cyclical; (iii) government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection; (iv) ongoing costs of production; and (v) availability and cost of additional funding. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Company not receiving an adequate return on invested capital.

#### Uninsured or Uninsurable Risks

In the course of exploration, development and production of mineral properties, several risks and, in particular, unexpected or unusual geological or operating conditions, may occur. It is not always possible to fully insure against such risks, and the Company may decide not to take out insurance against such risks as a result of high premiums or other reasons. Should such liabilities arise they could reduce or eliminate any future profitability and result in an increase in costs and a decline in value of the Common Shares.

As of the date of this annual information form, the Company is not insured against environmental risks. Insurance against environmental risks (including potential liability for pollution or other hazards as a result of the disposal of waste products occurring from exploration and production) has not been generally available to companies within the industry. Without such insurance, and if the Company becomes subject to environmental liabilities, the payment of such liabilities would reduce or eliminate its available funds or could exceed the funds the Company has to pay such liabilities and result in bankruptcy. Should the Company be unable to fund fully the remedial cost of an environmental problem it might be required to enter into interim compliance measures pending completion of the required remedy.

#### Government Regulation

Any exploration, development or mining operations carried on by the Company will be subject to government legislation, policies and controls relating to prospecting, development, production, environmental protection, mining taxes and labour standards. As indicated above, the Company requires licenses and permits from a variety of governmental authorities. The Company cannot predict the extent to which future legislation and regulation could cause additional expense, capital expenditures, restrictions, and delays in the development of its properties, including those with respect to unpatented mining claims.

#### **Environmental Matters**

Existing and possible future environmental legislation, regulations and actions could cause significant expense, capital expenditures, restrictions and delays in the activities of the Company, the extent of which cannot be predicted and which may well be beyond the capacity of the Company to fund. The Company's right to exploit the mining properties is subject to various reporting requirements and to obtaining certain government approvals and there is no assurance that such approvals, including environmental approvals, will be obtained without inordinate delay or at all.

Failure to comply with applicable environmental laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties engaged in the exploration or development of exploration properties may be required to compensate those suffering loss or damage by reason of such parties' activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

## Foreign Countries and Regulatory Requirement

The Company's projects are located in Mexico where mineral exploration and mining activities may be affected in varying degrees by political instability, expropriation or nationalization of property and changes in government regulations such as tax laws, business laws, environmental laws and mining laws, affecting the Company's business in that country. Any changes in regulations or shifts in political conditions are beyond the control of the Company and may adversely affect its business, or if significant enough, may make it impossible to continue to operate in the country. Operations may be affected in varying degrees by government regulations with respect to restrictions on production, price controls, foreign exchange restrictions, export controls, income taxes, expropriation of property, environmental legislation and mine safety.

# Dependence Upon Others and Key Personnel

The success of the Company's operations will depend upon numerous factors, many of which are beyond the Company's control, including [i] the ability to produce minerals; [ii] the ability to attract and retain additional key personnel in sales, marketing, technical support and finance; and [iii] the ability and the operating resources to develop and maintain the properties held by the Company. These and other factors will require the use of outside suppliers as well as the talents and efforts of personnel and consultants hired or retained by the Company. There can be no assurance of success with any or all of these factors on which the Company's operations will depend.

#### Currency Fluctuations

The Company maintains its accounts in Canadian and US dollars and Mexican pesos. The Company's operations in Mexico and its many of its payment commitments and exploration expenditures under the various agreements governing its rights to the Platosa and Miguel Auza properties are denominated in US dollars, making these rights subject to foreign currency fluctuations. Such fluctuations may materially affect the Company's financial position and results. The Company does not currently engage in any hedging or price protection programs to manage such risk.

## Price Fluctuations and Share Price Volatility

In recent years, the securities markets in the United States and Canada have experienced a high level of price and volume volatility, and the market price of securities of many companies, particularly those considered development stage companies, have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that continual severe fluctuations in price will not occur.

## Surface Rights and Access

Although the Company acquires the rights to some or all of the minerals in the ground subject to the mineral tenures that it acquires, or has a right to acquire, in most cases it does not thereby acquire any rights to, or ownership of, the surface to the areas covered by its mineral tenures. In such cases, applicable mining laws usually provide for rights of access to the surface for the purpose of carrying on mining activities, however, the enforcement of such rights can be costly and time consuming. It is necessary to negotiate surface access or to purchase the surface rights if long-term access is required. There can be no guarantee that, despite having the right at law to access the surface and carry on mining activities, the Company will be able to negotiate satisfactory agreements with any such existing landowners/occupiers for such access or purchase of such surface rights, and therefore it may be unable to carry out planned mining activities. In addition, in circumstances where such access is denied, or no agreement can be reached, the Company may need to rely on the assistance of local officials or the courts in such jurisdiction the outcomes of which cannot be predicted with any certainty. The inability of the Company to secure surface access or purchase required surface rights could materially and adversely affect the timing, cost or overall ability of the Company to develop any mineral deposits it may locate.

## Conflicts of Interest

Certain directors and officers are directors and/or officers of other mineral exploration companies and as such may, in certain circumstances, have a conflict of interest, if any, which arise will be subject to and governed by procedures prescribed by the company's governing corporate law statute which requires a director of a corporation who is a party to, or is a director or an officer of, or has some martial interest in any person who is a party to, a material contract or proposed material contract with the company to disclose his or her interest and, in the case of directors, to refrain from voting on any matter in respect of such contract unless otherwise permitted under such legislation.

#### **DIVIDENDS**

The Company currently intends to retain future earnings, if any, to finance the growth and development of its business. During the last three fiscal years ended December 31, 2010, the Company did not pay any dividends. The Company does not intend to pay dividends in the foreseeable future.

#### DESCRIPTION OF CAPITAL STRUCTURE

The Company's authorized share capital consists of an unlimited number of Common Shares without par value carrying one vote per share. The following summary of certain terms of the Company's Common Shares does not purport to be complete and is subject to, and is qualified in its entirety by reference to, all of the provisions of the Company articles and applicable law. Copies of the Company's articles are available on SEDAR at www.sedar.com.

*Dividends*. Holders of Excellon Common Shares are entitled to receive dividends when, as and if declared by the board of directors of Excellon. The BCBCA provides that a corporation may not declare or pay a dividend if there are reasonable grounds for believing that the corporation is, or would after the payment of the dividend, be unable to pay its debts as they become due in the ordinary course of business.

*Liquidation*. In the event of the dissolution, liquidation, or winding up of Excellon, holders of Excellon Common Shares are entitled to share rateably in any assets remaining after the satisfaction in full of the prior rights of creditors, including holders of Excellon's indebtedness.

*Voting*. Holders of Excellon Common Shares are entitled to one vote for each share on all matters voted on by shareholders, including the election of directors.

The Excellon Common Shares do not by their terms carry any pre-emptive, subscription, redemption or conversion rights.

## MARKET FOR SECURITIES

The Company's Common Shares are listed and posted for trading on the TSX under the symbol "EXN".

The table set out below present the high and low sale prices for the Common Shares and trading volume, on a monthly basis on the TSX during the fiscal periods ended December 31, 2009 and December 31, 2010.

Month and Year	<b>High (\$)</b>	Low (\$)	Volume
Dec -10	1.39	0.89	661,427
Nov -10	0.94	0.76	623,709
Oct -10	0.96	0.75	485,291
Sep -10	0.90	0.72	517,185
Aug-10	0.85	0.66	297,254
Jul - 10	0.87	0.71	192,741
Jun -10	0.98	0.79	215,258
May-10	1.11	0.81	339,307
Apr -10	1.20	0.92	254,157
Mar -10	1.25	0.71	581,607
Feb -10	0.74	0.62	285,963
Jan -10	0.90	0.56	615,815
Dec -09	0.69	0.52	411,746
Nov -09	0.69	0.51	409,997
Oct -09	0.66	0.34	772,495
Sep -09	0.44	0.33	590,604
Aug -09	0.38	0.32	359,071

## **DIRECTORS AND OFFICERS**

The names, provinces and country of residence, period during which each has served as a director where applicable, positions held with the Company and principal occupation for the past five years of the directors and executive officers are as set out below. The term of office of each current director will expire at the next annual meeting or when his or her successor is duly elected or appointed. The directors who are members of the Company's Audit Committee and Nominating and Corporate Governance, Compensation Committee and Health, Safety and Environmental Committee are noted below.

Name, Province and Country of Residence and Position with the Company	Became a Director	Principal occupation
PETER A. CROSSGROVE Chairman, Director and Chief Executive Officer Ontario, Canada	January 25, 2005	Businessman; Member, Order of Canada; Chief Executive Officer of the Company since April, 2008; Previously, non-executive Chairman and director of Masonite International Corporation, an international door producer, 1989 to 2005; Director of Barrick Gold Corporation, Lake Shore, Detour, and QLT Inc.; Trustee of Dundee Real Estate Investment Trust; Chairman of the Canadian Association of Provincial Cancer Agencies.
ANDRÉ Y. FORTIER (1)(2)(3)(4) Director Quebec, Canada	March 16, 2005	Corporate Director, President & Chief Executive Officer, Campbell Resources Inc. until December 2009.
ALAN R. McFarland (1)(2)(3)(4) Director New York, USA	November 23, 2006	Businessman; Managing Member of McFarland Dewey & Co. (investment banking firm) since 1989.
TIMOTHY J. RYAN (1)(2)(3)(4) Director British Columbia, Canada	March 27, 2006	Businessman; President of First General Securities Inc. (private venture fund management firm) since 1982.
WAYNE J. O'CONNOR(1) Director Ontario, Canada	March 4, 2010	Businessman; Former Chairman of West Timmins and CEO of Band-Ore Resources.
JOHN R. SULLIVAN Vice President, Exploration Ontario, Canada	N/A	Vice President, Exploration of the Company since January 2007. From March 2003 to December 2006, Senior Geologist with Watts, Griffis and McOuat Limited
ROBERT WHITTALL Chief Financial Officer Ontario, Canada	N/A	Chief Financial Officer of the Company since July, 2010. From June 2009 until June 2010, Mr. Whittall was a corporate director. Prior to June 2009, he was Chief Financial Officer of Volta Resources Inc.
ROB MOORE Vice President, Operations NWT, Canada	N/A	Vice President, Operations of the Company since June 2009. June 2007 to June 2009, Mine Manager, Silver Eagle Mines Inc. March 2006 to June 2007, Mine Superintendent, North American Palladium. March 2004 to June 2005, Mine Superintendent, De Beers Canada Mining Inc.

# Notes:

- Member of the Audit Committee
   Member of the Nominating and Corporate Governance Committee
- (3) Member of the Compensation Committee
- (4) Member of the Health, Safety and Environmental Committee

As at December 31, 2010, the directors and executive officers beneficially owned in the aggregate, directly or indirectly, or over which control or direction was exercised 3,622,867 issued and outstanding Common Shares or 1.5% of the Common Shares issued and outstanding.

## **Company Cease Trade Orders and Bankruptcies**

Except as disclosed below, to the best knowledge of the Company, no director or officer or principal shareholder of the Company is, as at the date hereof or has been within the last ten years prior to the date hereof, (a) subject to a cease trade order, an order similar to a cease trade order or an order that denied a company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days that was issued while the director or officer of the Company was acting in the capacity as director, chief executive officer or chief financial officer of that company; (b) subject to a cease trade order, an order similar to a cease trade order or an order that denied a company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days that was issued after the director or officer ceased to be a director, chief executive officer or chief financial officer of that company and which resulted from an event that occurred while that person was acting in such capacity; (c) a director or executive officer of any company that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (d) became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or became subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold his assets, except as follows. André Fortier is the President and Chief Executive Officer of Campbell Resources Inc., which made application under the Companies' Creditors Arrangements Act in January 2009. Mr. Fortier is also President of Campbell's subsidiary Meston Resources Inc., which made a petition for bankruptcy in October 2009.

#### **Penalties and Sanctions**

None of the directors or executive officer of the Company or, to the Company's best knowledge, shareholders holding sufficient Common Shares to materially affect the control of the Company has been subject to:

- (i) any penalties or sanctions proposed by a court relating to securities legislation or by a securities regulatory authority or have entered into a settlement agreement with a securities regulatory authority, or
- (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

#### **Conflicts of Interest**

To the knowledge of the Company, no director or officer of the Company has an existing or potential conflict of interest with the Company or any of its subsidiaries except to the extent that certain officers and directors of the Company also act as officers and directors of other corporations active in mining and exploration, which may compete with the Company for business opportunities. Such directors are required by law, however, to act honestly and in good faith with a view to the best interests of the Company and its shareholders and to disclose any personal interest which they may have in any material transaction which is proposed to be entered into with the Company and to abstain from voting as a director for the approval of any such transaction.

#### **Audit Committee**

Audit Committee's Charter

A copy of the Company's Audit Committee Charter is attached as Schedule "A" [and is available on the Company's website at www.excellonresources.com].

Composition of the Audit Committee

The members of the Audit Committee are Timothy J. Ryan, Andre Y. Fortier, Alan R. McFarland and Wayne J O'Connor All current members of the Audit Committee meet the independence criteria set out in Multilateral Instrument 52-110 – Audit Committees ("MI 52-110").

Financial Literacy

Based on information provided by each director, the Board determined that all members of the Audit Committee are "financially literate" as that term is defined in MI 52-110.

The education and experience of each member of the Audit Committee that is relevant to the performance of Audit Committee responsibilities is described below:

<u>Timothy J. Ryan:</u> Mr. Ryan holds an undergraduate degree in Commerce and an MBA from The University of Western Ontario and, since 1982, has been founder and president of First General Securities Inc., a private venture capital investment and advisory firm. In addition, he is the former chairman of Discovery Enterprises Inc., a British Columbia Crown Corporation formed to apply capital and advisory resources to early stage innovative enterprises. In those capacities, and as a director and chair of audit committees in other public companies (including publicly traded mining companies), Mr. Ryan has had extensive experience in analyzing and evaluating financial statements and in the general application of applicable accounting standards and principles.

Andre Y. Fortier: Andre Fortier is the President and Chief Executive Officer of Campbell Resources Inc., a public mining company. Prior to that, he was Chairman and Chief Executive Officer of MSV Resources Inc. and GeoNova Explorations Inc. and a director of Mazarin Mining Corporation and Southern Africa Corporation, all of which are public mining companies. In his position as such, he has gained extensive experience with understanding the accounting principles used by mining and exploration companies in their financial statements, as well as analyzing and evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues likely to be raised by the Company's financial statements. In his capacity as Chairman and Chief Executive Officer, he has also had significant experience in understanding internal controls and procedures for financial reporting.

Alan R. McFarland: Mr. McFarland has over 35 years experience in the field of investment banking. His work has covered a range of investment banking activities including general corporate advisory work on financial strategies, mergers, acquisitions and divestitures, public and private financings, venture capital, tax shelters, securities analysis, and corporate restructurings. He was a director of Placer Dome, Inc. and Masonite International Corporation. In the course of his work, he has gained extensive experience in evaluating financial statements, including those of companies in the mining industry, that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues likely to be raised by the Company's financial statements.

Wayne J O'Connor: Mr. O'Connor has over 20 years experience in the mining industry with mergers, acquisitions and capital markets experience

## Reliance on Certain Exemptions

Since the commencement of the Company's most recently completed financial year, the Company has not relied on the exemptions provided in any of sections 2.4 (*De Minimis Non-Audit Services*), 3.2 (*Initial Public Offerings*), 3.4 (*Events Outside Control of Member*), 3.5 (*Death, Disability or Resignation of Audit Committee Member*), 3.2(2) (*Controlled Companies*), 3.6 (*Temporary Exemption for Limited and Exceptional Circumstances*) or 3.8 (*Acquisition of Financial Literacy*) of MI 52-110 or an exemption from the requirements of MI 52-110, in whole or in part, granted by a securities regulator under Part 8 of MI 52-110.

## Audit Committee Oversight

Since the commencement of the Company's most recently completed financial year, there has not been a recommendation of the Audit Committee to nominate or compensate an external auditor which was not adopted by the Company's Board of Directors.

## Pre-Approval Policies and Procedures

The Audit Committee has a practice of pre-approving audit and non-audit services provided by the independent auditor. The Committee has delegated to its Chair, the authority, to be exercised between regularly scheduled meetings of the Audit Committee, to pre-approve audit and non-audit services provided by the independent auditor. All such pre-approvals shall be reported by the Chair at the meeting of the Audit Committee next following the pre-approval.

#### External Auditor Service Fees

The fees billed by the Company's auditor in each of the last two fiscal years are as follows:

	Year ended (actual) December 31, 2010	Period ended (actual) July 31, 2009	Year ended (actual) July 31, 2009
Audit Fees <sup>(1)</sup>	145,000	160,000	300,000
Audit Related Fees <sup>(2)</sup>	4,500	3,000	20,000
Tax Fees <sup>(3)</sup>	2,760	-	-
All Other Fees <sup>(4)</sup>	15,000	-	-
Total	167,260	163,000	320,000

#### Notes:

The aggregate audit fees billed.

The aggregate fees billed for assurance and related services that are reasonably related to the performance of the audits or reviewing the Corporation's financial statements and are not included under "Audit Fees".

The aggregate fees billed for services related to tax compliance, tax advice and tax planning. The services performed for the fees paid under this category may briefly be described as tax return preparation fees.

<sup>(4)</sup> The aggregate fees billed for services other than those reported above. The services performed for the fees paid under this category may briefly be described as flow-through accounting services.

### Audit Fees

Audit fees include services that are provided by the independent auditor in connection with statutory and regulatory filings, principally for the audit of the annual financial statements prepared in accordance with Canadian GAAP.

### LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Management is not aware of any material litigation matters involving the Company outstanding as of the date hereof.

During the fiscal year ended December 31, 2010, the Company was not subject to:

- (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority;
- (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision; or
- (c) any settlement agreements entered into with a court relating to securities legislation or with a securities regulatory authority.

### INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No directors or executive officers of the Company, and no person or company that is the direct or indirect beneficial owner of, or who exercises control or direction over, more than 10% of the Company's issued and outstanding Common Shares or any of their respective associates or affiliates, has or has had a material interest, direct or indirect, in any material transaction, whether proposed or concluded, which had, or may have, a material effect on the Company or its subsidiaries within the three most recently completed financial years or during the current financial year.

### TRANSFER AGENTS AND REGISTRARS

The Company's transfer agent and register for its Common Shares in Canada is Computershare Investor Services Inc. The register of transfers of the Company is at its offices in Vancouver, British Columbia.

## **MATERIAL CONTRACTS**

Other than contracts entered into in the ordinary course of business the Company did not enter into material contracts during the year ended December 31, 2010 or subsequent to this date.

### **INTERESTS OF EXPERTS**

The auditors of the Company are PricewaterhouseCoopers, Toronto, Ontario. To the knowledge of the Company, the auditor and its designated experts beneficially own, directly and indirectly, an aggregate of less than 1% of the outstanding Common Shares.

The Platosa Property Report was prepared for the Company by Scott Wilson Roscoe Postle Associates Inc. To the knowledge of the Company, Scott Wilson Roscoe Postle Associates Inc. and its designated professionals beneficially own, directly and indirectly, an aggregate of less than 1% of the outstanding Common Shares.

#### ADDITIONAL INFORMATION

Additional information relating to the Company may be found on SEDAR at www.sedar.com.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's Common Shares and the Common Shares authorized for issuance under the Company's stock option plan, if applicable, is contained in the Company's management information circular dated November 14, 2009 for its most recent annual general and special meeting of shareholders held on December 11, 2009 where the Company's directors were elected.

Additional financial information is provided in the Company's consolidated financial statements and management's discussion and analysis for its financial year ended December 31, 2010.

### GLOSSARY OF TECHNICAL TERM AND ABBREVIATIONS

The following is a glossary of technical terms and abbreviations that appear in this annual information form:

**AEM** acronym for Airborne Electromagnetics, a geophysical survey method for detecting electrically conductive features or bodies on or beneath the earth's surface from the air. Often combined with an airborne magnetic survey for detecting magnetic bodies on or beneath the earth's surface.

**Ag** is the elemental symbol for silver.

**Alteration** Any physical or chemical change in a rock or mineral subsequent to its formation; milder and more localized than metamorphism.

**Altiplano** Exploraciones del Altiplano, S.A. de C.V., private Mexican company from whom Excellon optioned the large claim package in the western part of the Platosa project area that encompasses the historic Zorra and Saltillera mines/areas.

AMT Audio Magneto Tellurics is a geophysical technique that measures the resistivity of a particular volume of rock to a combination of magnetic and telluric currents present naturally Natural Source Audio Magneto Tellurics (NSAMT), or proactively transmitted into the earth's crust Controlled Source Audio Magneto Tellurics (CSAMT). The technique delineates horizontal and vertical resistivity contrasts allowing discernment of features of interest including intrusions, rock-type contrasts and bedding, alteration, and mineralization. CSAMT uses currents generated and artificially transmitted into the rocks under controlled conditions and frequencies. NSAMT uses natural currents stemming from cosmic radiation. CSAMT typically has finer resolution whereas NSAMT has deeper penetration.

**Anomalous** refers to a sample or location in which either (i) the concentration of elements or (ii) geophysical or geochemical measurement is significantly different from the average background values in an area.

**Anomaly** refers to (i) an abnormal find or result or (ii) the geographical area corresponding to anomalous geophysical or geochemical values.

**Apex** refers to Apex Silver Mines Limited, AMEX-listed company with whom Excellon is in Joint Venture for claims on the eastern part of the project area.

**Assay** is an analysis to determine the quantity of one or more elemental components.

**Au** is the elemental symbol for gold.

**Bedrock** unweathered rock below the soil; solid rock.

**Biogeochemistry** is a geochemical exploration technique that focuses on sampling leaves and twigs of specific, typically deeply-rooted plant species. Based on a plant's uptake of groundwater containing dissolved elements of interest derived from the soil surrounding its roots, with concentration of these elements by evaporation from the twigs and leaves.

**Breccia** a coarse grained rock composed of angular broken rock fragments held together by a mineral cement or fine-grained matrix.

**Chimney** (also called a "pipe") a high-angle tubular elongate or semi-cylindrical orebody. Chimneys commonly cut across bedding at steep angles.

**cm** centimetres

**Common shares** refers to the common shares in the capital of the Company.

**Company** refers to Excellon Resources Inc.

**Concentrate** a product in which valuable minerals have been enriched (concentrated) through mineral processing.

**CRD** Carbonate Replacement Deposit an economically important type of mineral deposit found worldwide and believed to form through a chemical reaction whereby mineral-bearing fluids dissolve carbonate minerals and immediately precipitate sulphide minerals in their place. This replacement process often faithfully preserves delicate textures seen in the original rocks. Mineralized fluids in CRDs often follow structures for long distances creating elongate deposits called "chimneys" when standing at high angles and "mantos" when flat-lying.

Cu is the elemental symbol for copper.

**Decline** is access to underground via a downward incline or sloping roadway. Often called a ramp.

**Deposit** is a volume of rock containing valuable mineralization that has been defined in three dimensions. May be classified into Mineral Resource categories.

**Dike (or dyke)** is a sheet-like body of igneous rock cutting across bedding planes of rock.

**Dip** direction or angle that the plane of a rock formation makes with the horizontal.

**Diamond drilling** is drilling with the use of a type of rotary drill in which the cutting is done by abrasion rather than percussion. The cutting bit is set with diamonds and is attached to the end of long hollow rods through which water is pumped to the cutting face. The drill cuts a core of rock which is recovered in long cylindrical sections, generally three centimetres or more in diameter.

**Dilution** is the effect of grade reduction that occurs when material adjacent to a defined Mineral Resource and of significantly lower grade than the defined Mineral Resource is mined and sent to the mill along with material comprising the defined Mineral Resource.

**Dip** is the degree of inclination of a tilted bed or other 2-dimensional plane, taken perpendicular to its strike. Also refers to the angle of inclination of a drill hole.

**Discount rate** is an arbitrary rate selected to apply to a stream of costs and benefits for the calculation of Net Present Value. The discount rate allows for the time value of money to be factored into the calculation of Net Present Value. Discount rates can also be used to make an assessment of projects of different risk levels by assigning a higher discount rate to projects of higher risk.

**Disseminated** in a mineral deposit, whereby the minerals (metals) occur as scattered particles in the rock, but in sufficient quantity to make the deposit a worthwhile ore.

**EM** is an abbreviation for electromagnetic.

**Epithermal** vein deposit formed within about a kilometre of the Earth's surface by hot ascending solutions; low temperature-low pressure mineralization style.

Excellon 100%/Apex Royalty Area (also called the Core or Excellon Exclusive Area) is a 417.19 hectare area, roughly centred on the Platosa Mine where Excellon is sole owner and operator. Subject to obligations to Apex Silver Mines Ltd.

**Fault** is a fracture in a rock across which there has been displacement.

**Feasibility study** means a comprehensive study of a mineral deposit during which all of the geological, engineering, operating, environmental and economic factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the project for mineral production. The feasibility study considers defined Mineral Resources, mining methods, potential production profile, and economic assumptions including metals prices and recoveries. The feasibility study also considers the environmental, permitting, and sociological issues associated with the development of the mine. The study is usually completed by an independent engineering firm and has cost estimates defined to +/-15% or better.

**Fire Assay** an analytical smelting procedure for determining the precious metal content in rock and mine products.

**Fracture** is a break in a rock, usually along flat surfaces.

**Galena** is lead sulphide (PbS) and the principal primary economic lead mineral.

**Geophysics** is the study of the interaction and response of earth materials to a range of electrical or magnetic radiation or impulses and gravity.

Gossan rocks in which metal (usually iron)-bearing sulphide minerals have been oxidized by air and water.

g/t refers to grams per tonne (metric ton or 1000kg ((2,204.6 pounds)). Also referred to as "gpt".

**Grade** is the concentration of an valuable metal in a rock sample, given either as weight percent for base metals (e.g., Pb, Zn, Cu) or in g/t or ounces per short ton (oz/t or opt) for precious metals (e.g., Ag, Au, Pt).

ha hectare

**Hectare** is an area totalling 10,000 square metres or 100 metres by 100 meters.

**Hoist** the machine used for raising and lowering the cage or other conveyance in a mine shaft.

**Hornfels** - sometimes called contact metamorphic rocks, a hornfels is formed when certain rocks are exposed to the intense heat and chemical fluids given out by a nearby igneous intrusion.

**Hydrothermal** heated or superheated fluid or water from depth in the earth's crust.

**Igneous rock** rock formed by crystallization or solidification of magma.

**Indicated Mineral Resource** that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

**Inferred Mineral Resource** is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

**Intercept** (or intersection) is a cut made a drill hole through a mineralized body or other feature of geologic interest.

**Intrusive** is a rock mass formed below the earth's surface from molten magma which was intruded into a pre-existing rock mass and cooled to a solid.

**Joint venture** is an unincorporated business agreement between two (occasionally more) parties where their interests and business objectives are pooled and aligned. A joint venture is usually governed by a management committee composed of representatives of all of the parties. One of the parties is nominated as the operator and is responsible for the day-to-day operation of the joint venture and reporting to the management committee. Commonly the joint venture is governed by a vote of management committee where the votes cast are a proportion of their percentage interest in the joint venture. Joint ventures also usually provide for the dilution, or reduction in interest, of one of the parties should it elect not to contribute to the ongoing business of the joint venture.

**Joint Venture Area** is the area lying largely on the northeast flanks of the Sierra Bermejillo where Excellon was co-exploring with Apex Silver Mines Ltd. on the basis of a 51%:49% Joint Venture Agreement.

km kilometre

m metres

**Ma** a million years.

Magma molten rock material formed within the earth's crust.

**Manto** (Spanish for mantle, blanket or cloak) is a tabular to ribbon-shaped, relatively flat-lying CRD mineral deposit that tends to lie within a particular rock bed or series of beds.

**Massive sulphide** is a descriptive term applied to mineralization composed dominantly of sulphide minerals. Not to be confused with the genetic term Volcanogenic Massive Sulphide (VMS), which is a mineral deposit composed of massive sulphides deposited in a specific volcanic environment.

**Metamorphism** The processes by which changes are brought about in rocks within the Earth's crust through heat, pressure and chemically active fluids.

Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

**Mesquite** is a deep-rooted tree characteristic of arid regions of the western hemisphere. Mesquites are "phreatophytes" meaning they sink their roots deeply enough to tap into the standing saturated (phreatic) water table. Often suitable for biogeochemical surveying.

**Mill (or concentrator)** is an industrial installation assembled to allow separation and recovery of mineral particles of interest from bulk mineralization and waste material. Typically includes equipment for crushing and grinding, selective particle recovery and production of a concentrate from which the contained metals can be refined to marketable purity.

**Mineral** a naturally occurring inorganic substance typically with a crystalline structure.

**Mineralization** minerals of value occurring in rocks.

**Mineral Reserve** the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined. Are classified as Probable or Proven.

**Mineral Resource** is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

**Mo** is the elemental symbol for molybdenum

**Naica Mine** is a mine located in central Chihuahua State, Mexico belonging to Industrias Penoles. Naica exploits a zoned skarn-replacement CRD.

**NI 43-101** National Instrument 43-101. A regulation with the force of law prepared by the Canadian Securities Administrators and governing the standards of disclosure for mineral projects.

**Net present value** or "NPV" is a future stream of benefits and costs converted into equivalent values today. This is done by assigning monetary values to the benefits and costs discounting future benefits and costs using an appropriate discount rate and subtracting a sum total of discounted costs from the total of discounted benefits.

**NSR** is an abbreviation for Net Smelter Return or Net Smelter Royalty.

**Operating costs** (OPEX) are the costs of operating a mine, usually including all onsite costs of mining, milling, environmental compliance, tailings disposal, storing concentrate, and administration. Typically quoted in US dollars/tonne. Major sustaining capital items such as mill expansion, large underground development or high-value items of fixed or mobile mining or milling equipment during the life of a project are excluded.

**Ore** is a natural occurrence of one or more minerals that may be mined and sold at a profit, or from which some part may be profitably separated. The word ore should only be used to refer to defined Mineral Reserves, preferably related to a mine in the development or production phase or to a historical mineral deposit that was economically exploited.

**Ore body** a mass of ore with defined geometry.

**Outcrop** refers to an exposure of rock at the earth's surface.

**Overburden** is any material covering or obscuring rocks from view.

**Pb** is the elemental symbol for lead

**Peñoles** refers to Industrias Penoles S.A. de C.V. a major Mexican mining company and operator of (among others) the Naica Mine and Torreon smelters.

**Porphyry** a medium- to coarse-grained intrusive (generally felsic) igneous rock that contains conspicuous mineral crystals that are coarser-grained than the groundmass.

**Pyrite** is an iron sulfide mineral (FeS<sub>2</sub>).

**Qualified Person** means an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project; and is a member or licensee in good standing of a professional association ("professional association" means a self-regulatory organization of engineers, geoscientists or both engineers and geoscientists that is recognized under the terms of NI 43-101).

**Recovery** is the percentage of valuable minerals that are recovered during milling and/or other forms of processing and captured for potential payment after shipment to the smelter.

**Saltillera Properties** refers to western parts of the Platosa project area, largely optioned from Altiplano. Includes the area of the Saltillera and Soccoro Mines proper, but also encompasses the historic Zorra, Dios da Bondad and Refugio mines/areas.

**Scott Wilson Roscoe Postle Associates Inc.** independent geological and mining consultants based in Toronto, Ontario. Now Roscoe Postle Associates Inc. or RPA.

**SEDAR** (System for Electronic Document Analysis and Retrieval) is a filing system developed for the Canadian Securities Administrators to:

- facilitate the electronic filing of securities information as required by the securities regulatory agencies in Canada;
- allow for the public dissemination of Canadian securities information collected in the securities filing process; and
- provide electronic communication between electronic filers, agents and the Canadian securities regulatory agencies.

**Shaft** or "mine shaft" is a vertical or inclined excavation in rock or consolidated material for the purpose of providing access to a mineral deposit. Usually equipped with a hoist at the top.

**Shear zone** - where a fault affects a width of rock rather than being a single clean break, the width of affected rock is referred to as the shear zone. The term implies movement, i.e., shearing.

**Sill** a sheet-like body of igneous rock which conforms to bedding planes of rock.

**Skarn** refers to an alteration assemblage dominated by calcium and magnesium silicate minerals (dominantly garnets, pyroxenes and amphiboles). Skarns form by reaction between silica-bearing fluids and carbonate rocks, converting original carbonate minerals to silicate minerals. Mineralized Skarns contain economically attractive amounts of certain metals and are classified on the basis of the dominant metal (cf. Copper skarn or Lead-Zinc skarn). Skarns typically form in close proximity to intrusive bodies and may have massive sulphide replacement mineralization on their distal sides.

**Smelter** is an industrial installation where sulphide minerals are reduced to metals through roasting at high temperature.

**Sphalerite** is a zinc sulphide mineral (ZnS).

**Stock** refers to an intrusive body with less than 25 km<sup>2</sup> in surface area.

**Stockwork deposit** a deposit characterized by the occurrence of ore-bearing minerals on closely-spaced fractures or veinlets of random orientation.

**Strike** horizontal level direction or bearing of an inclined rock bed, structure, vein or stratum surface. The direction is perpendicular to the direction of dip.

**Sulphide** a mineral in which the element sulphur is in combination with one or more metallic elements

**Sustaining capital** is the capital expenditures incurred after start-up and during the production phase of a mining operation.

**Tailings** the waste products resulting from the processing of mineralized material.

**True thickness** is the calculated thickness of a geological feature (often a mineral deposit or an intersection of valuable mineralization in a drill hole) taking into account the spatial attitude or orientation

of the drilled feature and the angle of its intersection in drill core or mine workings. Depending on the amount and quality of data available, true thickness is often referred to as "estimated true thickness".

**Veinlet** a narrow, fine stringer or filament of mineral (metal) that occurs in a discontinuous pattern in the host rock.

**Warrants** a security that entitles the holder to buy stock of the company that issued it at a specified price, which is usually higher than the stock price at time of issue.

**Zn** is the elemental symbol for zinc.

# Schedule "A" to Annual Information Form for the year ended December 31, 2010

#### **EXCELLON RESOURCES INC.**

#### **Audit Committee Charter**

## (Adopted by the Board on December 14, 2004)

### **Overall Purpose / Objectives**

The Audit Committee will assist the board of directors (the "Board") in fulfilling its responsibilities. The Audit Committee will review the financial reporting process, the system of internal control and management of financial risks, the audit process, and the Company's process for monitoring compliance with laws and regulations and its own code of business conduct. In performing its duties, the committee will maintain effective working relationships with the Board of Directors, management, and the external auditors and monitor the independence of those auditors. To perform his or her role effectively, each committee member will obtain an understanding of the responsibilities of committee membership as well as the Company's business, operations and risks.

## Authority

The Board authorizes the audit committee, within the scope of its responsibilities, to seek any information it requires from any employee and from external parties, to obtain outside legal or professional advice and to ensure the attendance of Company officers at meetings as appropriate.

## **Organization**

## <u>Membership</u>

The Audit Committee will be comprised of at least three members, a majority of which are not officers or employees of the Company.

The chairman of the Audit Committee will be nominated by the committee from time to time.

A quorum for any meeting will be two members.

The secretary of the Audit Committee will be the Secretary of the Company, or other such person as may be nominated by the Chairman of, and approved by, the Audit Committee.

## Attendance at Meetings

The Audit Committee may invite such other persons (e.g. the President or Chief Financial Officer) to its meetings, as it deems appropriate.

Meetings shall be held not less than four times a year. Special meetings shall be convened as required. External auditors may convene a meeting of the Audit Committee if they consider that it is necessary.

The proceedings of all meetings will be minuted.

## **Roles and Responsibilities**

The Audit Committee will:

Gain an understanding of whether internal control recommendations made by external auditors have been implemented by management.

Gain an understanding of the current areas of greatest financial risk and whether management is managing these effectively.

Review significant accounting and reporting issues, including recent professional and regulatory pronouncements, and understand their impact on the financial statements.

Review any legal matters which could significantly impact the financial statements as reported on by the Company's counsel and meet with outside independent counsel whenever deemed appropriate.

Review the annual and quarterly financial statements including Management's Discussion and Analysis with respect thereto, and all annual and interim earnings press releases, prior to public dissemination, including any certification, report, opinion or review rendered by the external auditors and determine whether they are complete and consistent with the information known to committee members; determine that the auditors are satisfied that the financial statements have been prepared in accordance with generally accepted accounting principles.

Pay particular attention to complex and/or unusual transactions such as those involving derivative instruments and consider the adequacy of disclosure thereof.

Focus on judgmental areas, for example those involving valuation of assets and liabilities and other commitments and contingencies.

Review audit issues related to the Company's material associated and affiliated companies that may have a significant impact on the Company's equity investment.

Meet with management and the external auditors to review the annual financial statements and the results of the audit.

Evaluate the fairness of the interim financial statements and related disclosures including the associated Management's Discussion and Analysis, and obtain explanations from management on whether:

- (a) actual financial results for the interim period varied significantly from budgeted or projected results;
- (b) generally accepted accounting principles have been consistently applied;
- (c) there are any actual or proposed changes in accounting or financial reporting practices; or
- (d) there are any significant or unusual events or transactions which require disclosure and, if so, consider the adequacy of that disclosure.

Review the external auditors' proposed audit scope and approach and ensure no unjustifiable restriction or limitations have been placed on the scope.

Review the performance of the external auditors and approve in advance provision of services other than auditing. Consider the independence of the external auditors, including reviewing the range of services

provided in the context of all consulting services bought by the company. The Board authorizes the Chairman of the Audit Committee to approve any non-audit or additional audit work which the Chairman deems as necessary and to notify the other members of the Audit Committee of such non-audit or additional work.

Make recommendations to the Board regarding the reappointment of the external auditors and the compensation to be paid to the external auditor.

Review any significant disagreement among management and the external auditors in connection with the preparation of the financial statements.

Review and approve the Company's hiring policies regarding partners, employers and former partners and employees of the present and former external auditors of the Company.

## Establish a procedure for:

- (a) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters; and
- (b) the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters.

Meet separately with the external auditors to discuss any matters that the committee or auditors believe should be discussed privately in the absence of management.

Endeavour to cause the receipt and discussion on a timely basis of any significant findings and recommendations made by the external auditors.

Ensure that the Board is aware of matters which may significantly impact the financial condition or affairs of the business.

Perform other functions as requested by the full Board.

If necessary, institute special investigations and, if appropriate, hire special counsel or experts to assist, and set the compensation to be paid to such special counsel or other experts.

Review and recommend updates to the charter; receive approval of changes from the Board.

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