XTIERRA INC.

ANNUAL INFORMATION FORM

FORM 51-102F2

For the fiscal year ended December 31, 2010

Dated as at March 25, 2011

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Corporate Structure

Xtierra Inc. ("Xtierra" or the "Company" or the "Corporation") is a Toronto-based and TSX Venture Exchange (TSXV) listed resource development company created in 2008 through the merger of Orca Minerals Limited ("Orca") with Antamena Capital Corp. ("Antamena").

Antamena was incorporated on March 28, 2007 under the *Business Corporations Act* (British Columbia) as a capital pool company created pursuant to TSXV Policy 2.4 Capital Pool Companies (the "CPC Policy"). Antamena completed its initial public offering on August 2, 2007 by issuing 2,000,000 common shares at a price of $0.10 per share, for gross proceeds of $200,000. On January 8, 2008 Antamena announced that it had entered into a Letter Agreement with Orca, a wholly-owned subsidiary of Minco plc ("Minco") whereby Antamena would acquire as its Qualifying Transaction 100% of the issued and outstanding shares and warrants of Orca by issuance of 30,000,003 post-consolidation common shares of Antamena to Minco and substituting warrants of Antamena for the issued and outstanding Orca warrants. Concurrent with closing of the Transaction, Antamena consolidated its 4,500,000 shares then outstanding on a basis of two old shares for every one new share and changed its name to Xtierra Inc. Following the transaction, Orca became a wholly-owned subsidiary of Xtierra.

On May 29, 2008, the Company entered into a merger agreement (the "Merger Agreement") with Antamena and 1770082 Ontario Limited ("Subco"), a wholly-owned subsidiary of Antamena, under which Orca effectively acquired Antamena in a reverse takeover transaction. The transactions contemplated in the Merger Agreement were entered into by Antamena as its Qualifying Transaction, in accordance with the CPC Policy. The merger was completed on August 29, 2008 and accepted by the TSXV as Antamena's Qualifying Transaction in an Exchange Bulletin dated September 2, 2008.

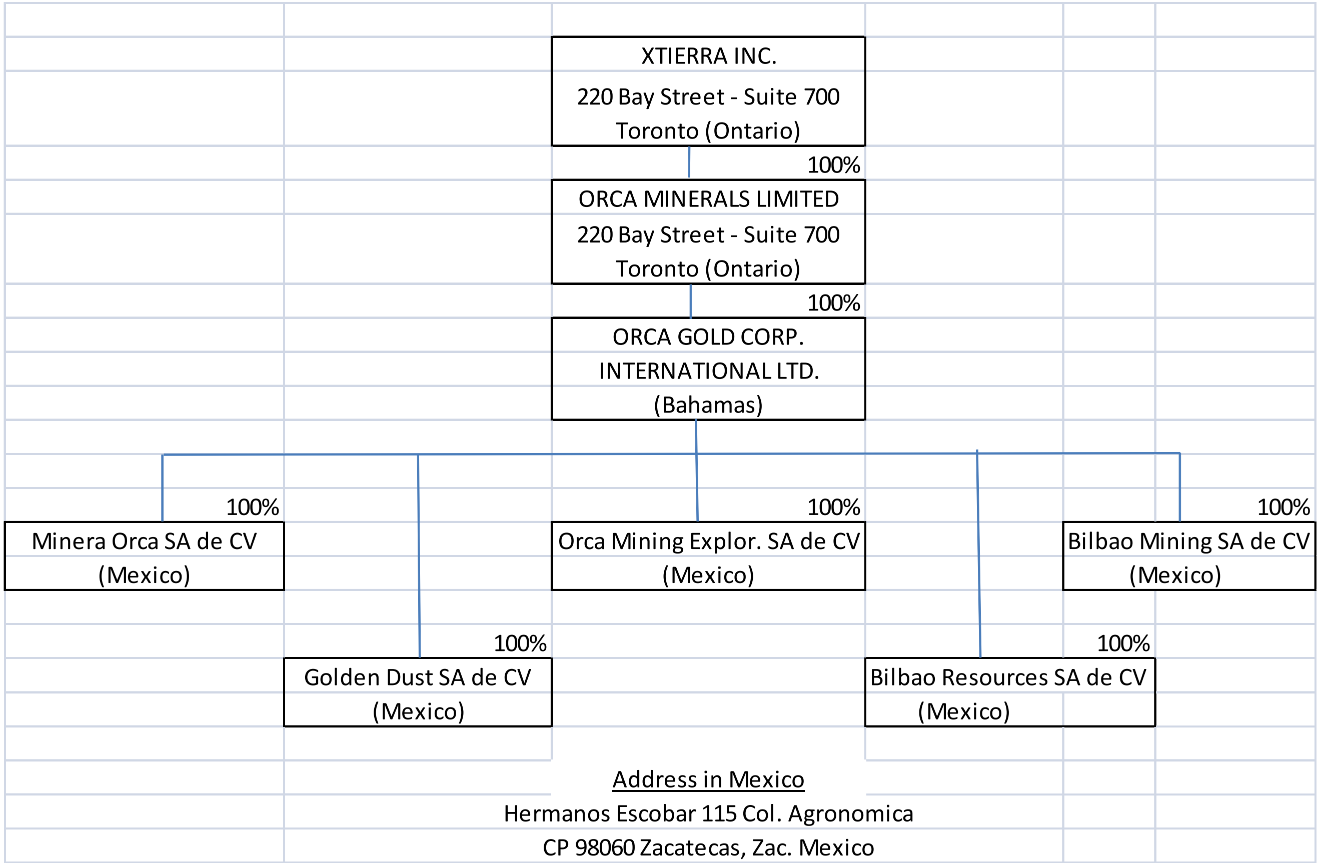
Pursuant to the Merger Agreement, Antamena changed its name to Xtierra Inc. In May 2008, the continuation of Xtierra under the laws of the Province of Ontario was authorized under the *Business Corporations Act* (Ontario).

The Company is a reporting issuer in the Provinces of Ontario, British Columbia and Alberta, and its common shares are listed on the TSX Venture Exchange under the symbol "XAG".

The Company's registered and head office address is: Suite 700, 220 Bay Street, Toronto, Ontario, Canada, M5J 2W4.

General Development of the Business

Through a series of wholly-owned subsidiaries, Xtierra holds interests in base and precious metals properties in Mexico. The corporate structure and interrelationships of the Company and its subsidiaries is illustrated by the following diagram:



Orca was initially incorporated as a subsidiary of Minco plc for the purpose of acquiring Orca Gold International Ltd. from Minco and thereby acquiring an interest in base and precious metal mineral deposits on properties located in the Central Mexican Silver Belt, in and around the State of Zacatecas, Mexico.

The Properties are sometimes collectively referred to as the “Zacatecas Projects” and are currently held by subsidiaries of Orca. They include certain properties referred to as the Bilbao, El Morro, Milagros, Galore and Laguna properties.

Financing Option

The Pacific Road Group of Funds ("Pacific Road") holds options negotiated in the terms of the Initial Agreement dated September 19, 2007, to provide financing of up to $15,000,000 and $17,500,000 directly to the Laguna and Bilbao projects, respectively, to obtain interests of up to 35% and 25% of the Company’s interests in such projects, respectively. Such project financings, if advanced, may be converted into common shares of the Company or a subsidiary of the Company based on the 30-day volume weighted average trading price at the time of conversion.

Currency

Unless otherwise indicated, all references to currency in this document are in United States Dollars (US$).

Three Year History:

2008

Xtierra achieved a public listing of its shares on the TSX Venture Exchange on August 29, 2008. During the period from September 2007 to April 2008, Orca had completed private placements of 17,612,000 Special Warrants at a price of Cdn$0.50 (Canadian) per Unit for proceeds of Cdn$8,806,000 (Canadian). Each special warrant entitled the holder to receive, without payment of any further consideration, one unit (a "Unit"). Each Unit was comprised of one common share and one-half of one common share purchase warrant exercisable as follows: (i) to the extent such whole share purchase warrant is exercised during the first 12-month period from the Liquidity Event, it entitles the holder to acquire one common share in the capital of the Company at Cdn$0.75 (Canadian) per common share, and (ii) to the extent such full share purchase warrant is exercised after the end of the first 12-month period from the Liquidity Event and on or before the end of the second 12-month period from the Liquidity Event, one common Share at Cdn$1.00 (Canadian) per share.

The Liquidity Event was defined as the completion by Orca of (i) a distribution to the public of Common Shares in Canada pursuant to a prospectus and the concurrent listing of the Common Shares for trading on a recognized Canadian exchange, or (ii) another transaction as a result of which all outstanding Common Shares, or the securities of another issuer issued in exchange for all such outstanding shares, were traded on such recognized exchange and are freely tradable (subject to control block restrictions). The Liquidity Event occurred upon completion of the RTO on August 29, 2008 and the Special Warrants were converted to 17,612,000 shares and 8,806,000 share purchase warrants of Xtierra.

In August 2008, the Company acquired the remaining 25% interest in the Bilbao silver-lead-zinc project that it did not already own. The Company already held a 75% interest acquired through a joint venture earn-in agreement with Shoshone Mexico, S.A. de C.V. ("Shoshone Mexico"), a subsidiary of Shoshone Silver Corporation of Wallace, Idaho. The 25% interest was acquired through the indirect purchase of all of the outstanding shares of Shoshone Mexico by Orca. Shoshone Mexico has been renamed Bilbao Resources S.A. de C.V. The consideration was $5 million, satisfied by payment of $2.5 million on the closing date, a further payment of $500,000 due in August 2009 and the balance to be paid in four equal annual payments of $500,000, commencing at the time of mine construction. The first such $500,000 annual payment will be made not less than six years after the closing date (August 2014) with the remaining balance to be paid no later than ten years after the closing date (August 2018).

2009

In April 2009, the Company and Pacific Road Group of Funds entered into an agreement whereby Pacific Road subscribed for an aggregate principal amount of $1,250,000 in non-interest bearing convertible notes issued by Orca Minerals Limited, a wholly-owned subsidiary of the Company. The proceeds of the financing were used to complete the first phase of a feasibility study on the Bilbao project.

In April 2009, the first phase of a two-phase Feasibility Study was started at Bilbao comprising Metallurgical Testing of sulphide and oxide mineralization, Resource Modeling, Engineering Studies, Rock Mechanics, Geotechnical Studies, Environmental Studies Hydrology and Infrastructure Design.

In September 2009, the Company entered into an option agreement with private Mexican interests whereby it may acquire a 100% interest in the El Dorado gold project within 2,890 hectares of mining claims located in the Pinos district of southeastern Zacatecas State, Mexico. The property is located within the Central Mexican Mineral Belt and has an existing small-scale underground gold mining operation developed on one level of the El Dorado vein. It is located close to Xtierra's existing Orca 3 property and some 80 kilometres southeast of the Bilbao silver-zinc-lead-copper development project.

2010

In March and April 2010, the Company completed a non-brokered private placement for gross proceeds of Cdn$5,155,000 ($4,992,000) consisting of 25,775,000 units ("Units") at Cdn$0.20 per Unit. Each Unit consisted of one common share and one-half a common share purchase warrant, each whole warrant entitling the holder to purchase one common share at Cdn$0.30 per share for one year. The Pacific Road Resources Fund group, a substantial shareholder in the Company, purchased an aggregate of 12,500,000 Units for gross proceeds of Cdn$2,500,000 ($2,421,000).

In April 2010, the Company through Golden Dust S.A. de C.V., ("Golden Dust") an indirect, wholly-owned subsidiary of Xtierra acquired the interest in the El Dorado property by staged payments (all US Dollar amounts). Two payments totaling $42,558 were previously made. With the election to purchase the property, Golden Dust has made a further payment of $83,023. The full purchase price will be satisfied by three additional equal payments of $268,217 due respectively on January 15 of 2014, 2015 and 2016, for a total consideration of $1 million. If Golden Dust completes a feasibility study and such study indicates a mineral reserve estimate containing between 250,001 and 500,000 ounces of gold, a bonus to the purchase price of $500,000 will be paid, or if such mineral reserve estimate is greater than 500,000 ounces of gold, a bonus purchase price of $1 million will be paid on the same staged basis as the three interim payments. The maximum purchase price to be paid is $2 million.

In July 2010, the Company retained Dowding, Reynard and Associates (DRA), a recognized leader in the field of mine design, mine engineering, mineral process design, project management and mine construction to oversee the Bilbao Feasibility Study. DRA has particular expertise in Process Plant Design, Metallurgical Process Engineering, and Metallurgical Consulting. DRA will be involved in oversight of all of the component parts of the feasibility study which was originally initiated by Xtierra as an in-house managed study. DRA will manage the preparation for and commissioning and operation of the pilot plant designed to test the recovery process for the near surface oxide ores at Bilbao. Xtierra also retained Golder Associates for tailings disposal design work related to the Bilbao development.

In December 2010 and on January 20, 2011, the Company completed a non-brokered private placement for gross proceeds of Cdn$4,013,000 ($3,962,000) consisting of 14,331,210 units ("Units") at Cdn$0.28 per Unit ($1,493,000 was deposited on January 20, 2010). Each Unit consisted of one common share and one common share purchase warrant, each warrant entitling the holder to purchase one common share at Cdn$0.40 per share for two years.

2011

Between January 1, 2011 and March 18, 2011, the Company issued 10,969,883 common shares as a result of the exercise of 10,969,883 warrants at a weighted average exercise price of $0.30 for gross proceeds of Cdn$3,291,000. At March 18, 2011, the Company held cash and cash equivalents in Canadian accounts totaling approximately $9,240,000. The Company is adequately financed to complete its stated goals for 2011; however, additional funding will be required to further advance the Bilbao deposit into production.

Description of the Business:

The Company's business is conducted through direct and indirect ownership of companies, joint ventures or other entities having beneficial ownership of or rights to explore and acquire mining and mineral exploration claims, concessions, leases, licenses or properties.

The Company was established to acquire various mineral claims and mining properties mainly located in the States of Zacatecas and San Luis Potosi, Mexico from Minco. The Company is a natural resource company with the primary business objective of exploring for and developing precious and base metal deposits on the

Properties located in the Central Silver Belt of Mexico in the States of Zacatecas and San Luis Potosi, Mexico with a view to undertaking a production feasibility study and, if warranted, the commencement of commercial production of ore from one or more mineral deposits located on the Properties at the earliest opportunity.

The Company holds mineral properties located in the Central Mineral Belt of Mexico, primarily in the State of Zacatecas but also in the adjoining State of San Luis Potosi. The Central Mexican Mineral Belt is a prolific mineralized belt that has historically generated the bulk of Mexico's silver production from the early colonial period to the present day and hosts many world class precious and base metal deposits.

Qualified Person

Terence N. McKillen, M.Sc., P.Geo., a director and Officer of the Company and Gerald J. Gauthier, P.Eng., an officer of the Company, act as the Company's Qualified Persons under Canadian National Instrument 43-101 and have reviewed this document.

Risk and Uncertainties

In conducting its business, the Company faces a number of risks common to the mining and exploration industry. These are summarized below. There are also certain specific risks including those listed below, associated with an investment in the Company and prospective investors should consider carefully these specific risk factors associated with an investment in the Company. The Company has no history of earnings and is currently in the exploration and development stage.

Title Risks

Title insurance is generally not available although the Company has exercised the usual due diligence with respect to determining title to and interests in the Properties, there is no guarantee that such title to or interests in the Properties will not be challenged or impugned. The Company's mineral property interests may be subject to prior unregistered agreements or transfers and title may be affected by, among other things, undetected defects. Until competing interests in the mineral lands have been determined, the Company can give no assurance as to the validity of title of the Company to those lands or the size of such mineral lands.

Exploration, Development and Operating Risk

Resource exploration and development is a speculative business, characterized by a number of significant risks including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but also from finding mineral deposits that, though present, are insufficient in quantity and quality to return a profit from production. The marketability of minerals acquired or discovered by the Company may be affected by numerous factors that are beyond the control of the Company and that cannot be accurately predicted, such as market fluctuations, the proximity and capacity of milling facilities, mineral markets and processing equipment, and such other factors as government regulations, including regulations relating to royalties, allowable production, importing and exporting minerals and environmental protection, the combination of which factors may result in the Company not receiving an adequate return of investment capital. Many of the claims to which the Company has a right to acquire an interest are in the exploration stage only and are without a known body of commercial ore. Development of the subject mineral properties would follow only if favourable exploration results are obtained and a positive feasibility study is completed.

The business of exploration for minerals and mining involves a high degree of risk. Few properties that are explored are ultimately developed into producing mines. There is no assurance that the Company's mineral exploration and development activities will result in any discoveries of commercial bodies of ore. The long-term profitability of the Company's operations will in part be directly related to the costs and success of its exploration and development programs, which may be affected by a number of factors.

Substantial expenditures are required to establish reserves through drilling and to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that funds required for development can be obtained on a timely basis.

No Assurance of Production

Mineral exploration is highly speculative in nature, involves many risks, and frequently does not lead to the discovery of commercial reserves of minerals. While the rewards can be substantial if commercial reserves of minerals are found, there can be no assurance that the Company's past or future exploration efforts will be successful, that any production therefrom will be obtained or continued, or that any such production which is attempted will be profitable.

The Company has limited experience in placing resource properties into production, and its ability to do so will be dependent upon using the services of appropriately experienced personnel or entering into agreements with other major resource companies that can provide such expertise. There can be no assurance that the Company will have available to it the necessary expertise when and if the Company places its resource properties into production and whether it will produce revenue, operate profitably or provide a return on investment in the future.

Factors beyond the Company's Control

The exploration and development of mineral properties and the marketability of any minerals contained in such properties will be affected by numerous factors beyond the control of the Company. These factors include government regulation, high levels of volatility in market prices, availability of markets, availability of adequate transportation and refining facilities and the imposition of new or amendments to existing taxes and royalties. The effect of these factors cannot be accurately predicted.

Failure to Obtain Additional Financing

The Company does not currently have all the financial resources necessary to undertake its currently planned activities and there can be no assurance that the Company will be successful in obtaining any additional required funding necessary to conduct additional exploration, if warranted, on the Company's exploration properties or to develop mineral resources on such properties, if commercially mineable quantities of such resources are located thereon. Failure to obtain additional financing on a timely basis could cause the Company to forfeit its interest in such properties. If additional financing is raised through the issuance of equity or convertible debt securities of the Company, the interests of shareholders in the net assets of the Company may be diluted.

Insurance and Uninsured Risks

The Company's business is subject to a number of risks and hazards generally, including adverse environmental conditions, industrial accidents, labour disputes, unusual or unexpected geological conditions, ground or slope failures, cave-ins, changes in regulatory environment and natural phenomena such as inclement weather conditions, floods and earthquakes. Such occurrences could result in damage to mineral properties or production facilities, personal injury or death, environmental damage to the Company's properties or properties of others, delays in development or mining, monetary losses and possible legal liability.

Although the Company will purchase insurance to protect against certain risks in such amounts as it considers reasonable, such insurance may not cover all the potential risks associated with a mining company's operations. The Company may also be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration and production is not generally available to the Company or to other companies in the mining industry on acceptable terms. The Company might also become subject to liability for pollution or other hazards which may not be insured against or which the Company may elect not to insure against because of premium costs or other reasons. Losses from these events may cause the Company to incur significant costs that could have a material adverse effect upon its financial performance and results of operations.

Environmental Risks and Hazards

The Company's operations may be subject to environmental regulations in the various jurisdictions in which it operates. Environmental legislation provides for restrictions and prohibitions on spills, releases or emissions of various substances produced in association with certain mining industry operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in the imposition of fines and penalties. In addition, certain types of operations require the submission and approval of environmental impact assessments. Environmental legislation is evolving in a manner that means standards are stricter, and enforcement, fines and penalties for non-compliance are more stringent. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce the profitability of operations. The Company intends to comply fully with all applicable environmental regulations.

Government Regulation and Permitting

The current or future operations of the Company, including development activities and commencement of production on its properties, require permits from various federal, state and local governmental authorities in Mexico, and such operations are and will be governed by laws and regulations governing prospecting, development, mining, production, exports, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, water use, environmental protection, land claims of local people, mine safety and other matters.

Mexico is considered among the desirable regions of the world for exploration and mining as a result of a combination of factors including a strong mining culture, excellent geology and favourable tax and permitting structures and over the past decade or longer, Mexico has evolved into a relatively stable democracy with a growing middle class. The key issues facing the government are elimination of corruption and gaining control of the security situation with respect to the drug cartels.

Such operations and exploration activities are also subject to substantial regulation under applicable laws by governmental agencies that will require the Company to obtain permits, licences and approvals from various governmental agencies. There can be no assurance, however, that all permits, licences and approvals that the

Company may require for its operations and exploration activities will be obtainable on reasonable terms or on a timely basis or that such laws and regulations will not have an adverse effect on any mining project which the Company might undertake.

Failure to comply with applicable 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 mining operations may be required to compensate those suffering loss or damage by reason of mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations and, in particular, environmental laws.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in exploration expenses, capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.

To the best of the Company's knowledge, it is operating in compliance with all applicable rules and regulations.

Lags

The Company is unable to predict the amount of time which may elapse between the date when any new mineral reserve may be discovered, the date upon which such discovery may be deemed to be economic pursuant to a feasibility study and the date when production will commence from any such discovery.

Infrastructure

Mining, processing, development and exploration activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important determinants which affect capital and operating costs. Unusual or infrequent weather phenomena, terrorism, sabotage, government or other interference in the maintenance or provision of such infrastructure could adversely affect the Company's operations, financial condition and results of operations.

Competition

The mining industry is intensely competitive in all its phases, and the Company competes with other mining companies in connection with the acquisition of properties producing or capable of producing, precious and base metals. Many of these companies have greater financial resources, operational experience and technical facilities than the Company. Competition could adversely affect the Company's ability to acquire suitable properties or prospects in the future. Consequently, the Company's revenue, operations and financial condition could be materially adversely affected.

Management

The success of the Company is currently largely dependent on the performance of its directors and officers. There is no assurance the Company can maintain the services of its directors and officers or other qualified personnel required to operate its business. The loss of the services of these persons could have a material adverse effect on the Company and its prospects. Some of the directors and officers also serve as directors and/or officers of other companies which are engaged and will continue to be engaged in the search for additional business opportunities on behalf of other companies, and situations may arise where these directors and officers will be in direct competition with the Company. Conflicts, if any, will be dealt with in accordance with the relevant provisions of applicable corporate and securities laws.

Ability to Attract and Retain Qualified Personnel

Recruiting and retaining qualified personnel is critical to the Company's success. The number of persons skilled in the acquisition, exploration and development of mining properties is limited and competition for such persons is intense. As the Company's business activity grows, additional key financial, administrative and mining personnel as well as additional operations staff will be required. Although the Company believes it will be successful in attracting, training and retaining qualified personnel, there can be no assurance of such success. If the Company is not successful in attracting, training and retaining qualified personnel, the efficiency of operations could be affected.

Price Volatility of Publicly Traded Securities

Securities of exploration companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and globally, and market perceptions of the relative attractiveness of particular industries. The Company's share price is also likely to be significantly affected by short-term changes in metal prices or in the Company's financial condition or results of operations as reflected in quarterly earnings reports. Other factors unrelated to the Company's performance that may have an effect on the price of the the Company Shares include the following:

- the extent of analytical coverage available to investors concerning the Company's business may be limited if investment banks with research capabilities do not follow its securities;

- the limited trading volume and general market interest in the Company's securities may affect an investor's ability to trade the Company Shares;

- the relatively small size of the publicly held shares will limit the ability of some institutions to invest in the Company's securities; and

- a substantial decline in the Company's share price that persists for a significant period of time could cause its securities to be delisted from any stock exchange upon which they are listed, further reducing market liquidity.

As a result of any of these factors, the market price of the Company Shares at any given point in time may not accurately reflect the Company's long-term value.

Fluctuating Mineral Prices

Factors beyond the control of the Company may affect the marketability of metals discovered, if any. Metal prices are subject to significant fluctuation and are affected by a number of factors which are beyond the control of the Company. The principal factors include: diminished demand which may arise if current rates of economic growth in North America, India and China are not sustained; supply interruptions due to changes in government policies in base and precious metals, war, or international trade embargos; increases in supply resulting from the alleviation of professional and skilled labour shortages experienced by the world's largest producers; and, increases in supply resulting from the discovery and the development of new sources of base and precious metals. The effect of these factors on the Company's operations cannot be predicted.

Foreign Currency Exchange

Exchange rate fluctuations may affect the costs that the Company incurs in its operations. The Company's financing activities have been denominated in Canadian Dollars, while the expenditures to be incurred by the Company on its mineral exploration projects in Mexico will be denominated in US Dollars or Mexican Pesos. The Company also has certain liabilities denominated in US Dollars. The appreciation of the US Dollar against the Canadian Dollar, if it occurs, would result in increased costs of the Company's activities in Mexico in Canadian Dollar terms, and currency movements may have a significant impact on the Company's financial position and results of operations in the future. Fluctuations in the exchange rates between the Canadian Dollar and the Mexican Peso or US Dollar may have an adverse or positive effect on the Company.

Dividends

The Company has not paid any dividends on its Shares since incorporation. The Company has a limited operating history and there can be no assurance of its ability to operate its projects profitably. Payment of any future dividends will be at the discretion of the Company's board of directors after taking into account many factors, including the Company's operating results, financial condition and current and anticipated cash needs.

Mineral Properties

The Company's Projects are all located in Mexico, in the States of Zacatecas and San Luis Potosi, and within the Central Mineral Belt, a prolific mineralized belt that has historically generated the bulk of Mexico's silver production from the early colonial period to the present day and hosts many world class silver and base metal deposits.

The Company's main projects are:

• **The Bilbao Project**, a polymetallic sulphide and oxide replacement deposit upon which the Company has delineated a NI 43-101 compliant resource of zinc-lead-silver-copper. The independent resource estimate is summarized in the table below (using a 3% zinc equivalent cut off - includes sulphide, oxide and mixed ore categories). It does not include results of a 6,000 metre drill program completed in Q4 2010 which resulted in the discovery of a high grade silver zone along the western flank of the deposit.

The Bilbao deposit still remains open to the northwest and to the southwest. Approximately one million tonnes of historic production was developed from three small pits and limited underground workings in the near surface oxide mineralization (early 20th century);

• **The La Laguna Pedernalillo (Laguna) Tailings Project** – a silver-gold-mercury tailings reprocessing project upon which Micon International completed a bankable feasibility study in 2006 and in February 2008 revised a NI 43-101 compliant reserve (Proven and Probable) of 6,799,000 tonnes at 57.92g/t silver, 0.31g/t gold and 328.92g/t mercury;

• **El Dorado Gold Exploration Project** – the El Dorado gold project comprises 2,890 hectares of mining claims located in the Pinos district of southeastern Zacatecas State, Mexico. The property has an existing small-scale underground gold mining operation developed on one level of the El Dorado vein. It is located close to Xtierra's existing Orca 3 property in the Pinos district and some 80 kilometres southeast of Xtierra's Bilbao silver-zinc-lead-copper development project. The Company completed an initial 1,385 metre underground and surface drill program on the property during January – March, 2010.

- **Exploration Properties** - approximately 12,267 hectares of Exploration Properties in three groupings identified as the Villa de Ramos, El Morro, Orca 3 property in the Pinos district and Milagros Properties in the Panfilo Natera Mining District of Zacatecas and neighbouring San Luis Potosi, in the general vicinity of the Bilbao Project.

The objective of Management is to advance the Bilbao project so that a production decision might be made by early 2012 subject to the satisfactory outcome of a Feasibility Study. The Company is conducting a Feasibility Study on the Bilbao Project to assess the economic viability of mining and selling oxide, mixed and sulphide concentrates from the Bilbao Property and to set out planned mining operations and infrastructure. Concurrently, The Company plans to conduct additional test work and engineering design on the Laguna project to confirm the choice of mining method, process methodology and tailings disposal methodology and specific site selection for the tailings containment area and prior to any production decision will update the economic evaluation.

The Company plans to continue exploring identified targets located on its El Dorado and other exploration claim holdings and will conduct such additional exploration as may be warranted to more adequately explore the potential of its exploration holdings. The Company will continue to evaluate other mining exploration and development opportunities as they arise.

1. Bilbao Project, Panfilo Natera Mining District, State of Zacatecas, Mexico

The Company's rights to the Property were acquired through an option-joint venture agreement between Minco plc and Shoshone Mexico S.A. de C.V., a subsidiary of Shoshone Silver Mining Company of Wallace, Idaho, U.S.A. signed on February 27, 2006. Under this agreement, Shoshone Silver was paid an initial payment of $100,000 and Minco committed to $500,000 of exploration expense during the first six months. Following this, Shoshone was paid an additional $300,000 and Minco was obligated to spend a further $500,000 on exploration during the twelve months ending August 2007. Minco made the two cash payments and completed approximately $2,500,000 in exploration drilling and other studies on the Property prior to June 2007 and thereby earned a 75% interest in the Property. Pursuant to an Assignment and Assumption Agreement dated November 1, 2007, Minco assigned its interest and rights in the Bilbao Joint Venture Agreement to a subsidiary of Orca Gold.

In August 2008, Xtierra acquired the remaining 25% interest in the Bilbao property that it did not already own for a consideration of $5 million, satisfied by payment of $2.5 million on closing, a further payment of $500,000 in August 2009 and the balance to be paid in four equal annual payments of $500,000, commencing at the time of mine construction. The first such $500,000 annual payment will be made not less than six years after the closing date (August 2014), with the remaining balance to be paid no later than ten years (August 2018).

The Bilbao Property is subject to a 1.5% net smelter royalty in favour of Minera Portree, S.A. de C.V.

On November 3, 2008, Southampton Associates prepared a revised "*Technical Report of the Bilbao Project*" containing a NI 43-101 compliant resource estimate. The report was prepared by John L. Wahl, Ph.D., P.Geo. Consulting Geologist, Rick Parker, Bsc, MIMMM, C.Eng., FGS, Consulting Mining Geologist and David G. Wahl, P.Eng, P.Geo. Consulting Engineer, all of whom are Qualified Persons in accordance with National Instrument 43-101.

On February, 2010, Rick Parker, Bsc, MIMMM, C. Eng, FGS, Consulting Mining Geologist prepared a new independent report on the "*Geology and Mineral Resources of the Bilbao Project*". Mr. Parker is a Qualified Person in accordance with National Instrument 43-101.

The full reports are available on the Company's website or on SEDAR at www.sedar.com.

Some of the information in this section of a scientific or technical nature in respect of the Zacatecas Projects is based upon these Technical Reports.

Property Description and Location

The Property is located northwest of Mexico City in the State of Zacatecas and 50km east of the state capital, Zacatecas and consists of 1,406.7 hectares comprising nine (9) exploitation concessions. Additionally, five (5) small claims (La Blanca, Ampliación La Blanca, La Africana, Ampliación El Cabezon, and La Fe) are located inside the Property, but are not material to the project.

Name	Type	Title No.	Owner	Mining Fees US$/Semester	Area (ha)	Term	
						Start	End
Bilbao	Exploitation	222854	Bilbao Resources.	18	27.3444	09/09/2004	08/09/2054
Bilbao	Exploitation	214309	Bilbao Resources	1153	422.7656	06/09/2001	05/09/2051
Bilbao II	Exploitation	222638	Bilbao Resources.	570	870.0319	03/08/2004	02/08/2054
La Guera	Exploitation	198980	Bilbao Mining	86	9.0000	11/02/1994	10/02/2044
El Porvenir	Exploitation	177340	Bilbao Mining	240	25.0000	18/03/1986	17/03/2036
Mina Los Compadres	Exploitation	198978	Bilbao Mining	240	25.0000	11/02/1994	10/02/2044

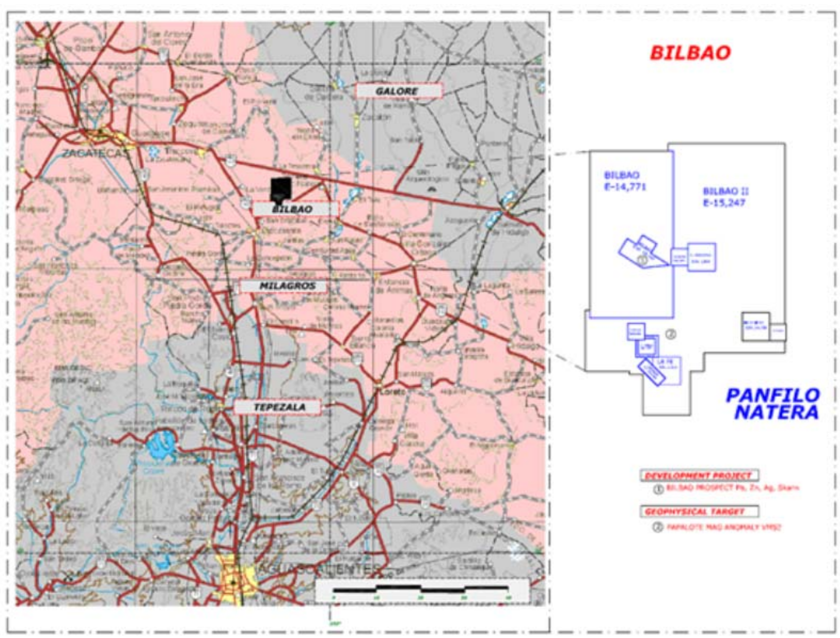
El Trinque	Exploitation	211940	Bilbao Resources	23	8.5434	28/07/2000	27/07/2050
Leonor	Exploitation	210484	Bilbao Mining	55	10.0000	08/10/1999	07/10/2049
El Milagro	Exploration	223126	Bilbao Mining	6	9.0000	19/10/2004	18/10/2054
Total Area				US$2,391.32	1,406.6853		

In addition to its original agreement with Shoshone Silver, Bilbao Mining purchased five concessions covering 59 hectares inside the wholly owned Bilbao II concession which are separate from the original Bilbao Joint Venture Agreement.

Surface rights in the area are owned by private land owners and by ejidos (local village communal lands). There are no known environmental liabilities to which the property is subject.

In order to develop a mine at Bilbao the Company will require the following permits: Manifiesto de Impacto Ambiental (Environmental Impact Study); Manifesto de Riesgo (Risk Assessment Study); Cambio de Uso de Suelo (Land Use permit) and an explosives permit.

Regional Property Location Map



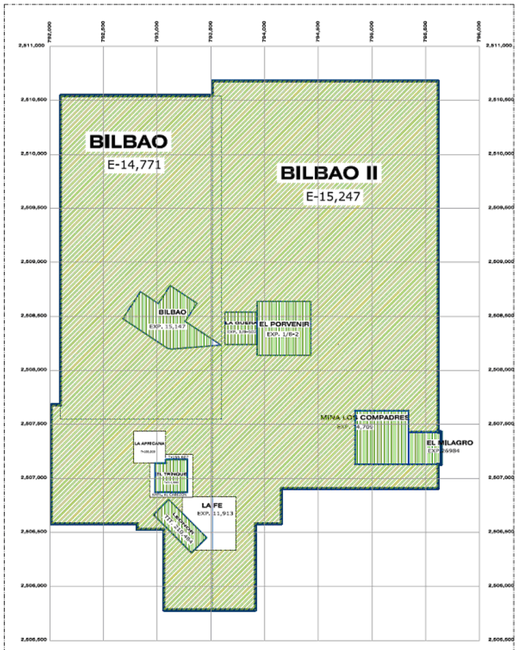


FIG # 4,3 THE BILBAO & BILBAO ADD ON CLAIMS

Accessibility, Climate, Local Resources, Infrastructure, Physiography, Fauna & Flora

Zacatecas has a well developed highway system including several Federal highways and well maintained primary and secondary roads. A branch of the Mexican National railroad system crosses the central part of the State through the city of Zacatecas connecting Mexico City with Ciudad Juárez. The city of Zacatecas is a large modern city with excellent facilities for business and a pool of experienced mining labour. The Zacatecas International airport is located 20km northeast of the capital with daily connections to Mexico City, Tijuana, Los Angeles, and Chicago and less frequent service to Oakland and Denver.

The Pánfilo Natera district is located in a developed area of Zacatecas with good infrastructure and services. There are no obvious impediments to mine development in the district. Mining and agriculture have co-existed since early colonial times.

Access to the Bilbao prospect and the Pánfilo Natera exploration area is excellent as a divided highway (Mexico National Route 49) linking Zacatecas with San Luis Potosí passes through the north-central part of the district. A paved road linking Pánfilo Natera with Ojo Caliente, (Zac 144), passes the entrance turn-off to the project area, which is only 2.1km by all-weather dirt road from the main road.

Virtually all the villages in the Pánfilo Natera district are interlinked by paved roads and there is access to most other areas via good farm roads. Most towns have garages capable of vehicle repairs. Bilbao is located about 27km away from the nearest rail head at Barriozabal near Ojo Caliente. There are two additional rail lines available at Salinas linking to San Luis Potosí at a distance of 43km.

Field work can be undertaken throughout the year without significant interruptions from inclement weather. In general the climate is dry having an average annual rainfall of 510mm of rainfall. The rainy season runs from May to September; however, there is a short rainy season in the months of January and February. Temperatures in the Pánfilo Natera district averages 16 degrees, which is lower than might be expected from its latitudinal position being ameliorated by its relatively high altitude (>2,000m/>6,500ft). The city of Zacatecas itself is at an altitude of over 2,500m (8,200ft). Prevailing winds are from the south-west.

Local Resources

Water

The local aquifers have been lowered over the past few years and groundwater is scarce. There are no perennial rivers and the few water courses that have developed only run in the wet season after heavy rains. The region derives its water, mainly for crop irrigation and livestock, from wells or from small dams which impound the seasonal rains. The lack of a large resource of water is a concern for any contemplated mineral development.

Additionally, there are several drilled wells in the vicinity and some of these can be purchased, together with their water rights, to provide the 100,000 cubic meters per year of process water needed for any proposed mine and mill operation.

There are also some large lakes in the Pánfilo Natera area, including El Tule lake located close to the Property; however, these are all strongly saline and are unsuitable for agriculture. Further investigation will be necessary to evaluate their salinity with respect to possible usage for mineral processing. The nearest large body of fresh water is at the Presa Presidente Calles dam, approximately 65km to the southwest of the prospect.

Electrical power and Communications

Electric power is available from the Comisión Federal de Electricidad (CFE) and land-line and cell phone telephone service is available from Telmex. The area is well supplied with electrical power with the main ultra-high tension national electricity power-line running north-south through the district at km138 of the Mexico 49 highway. This is less than 16km from the Bilbao shaft. On a more local level, the Pánfilo Natera electricity substation situated at 798.948/2510.675 is just 6km from the Bilbao shaft and has a capacity of 9.4MVA. It furnishes a 440volts output line which passes within 2km of the Bilbao shaft. A parallel line of 220volts is also available.

Industry

The Pánfilo Natera district does not have any heavy industry. The principal industrial activities are small-scale agriculture and some development of commercial-scale agriculture including hot-houses for tomato production for export and irrigated vegetable production at Ojo Caliente for canning by La Huerta. There is limited wine (Cachola) and grape production in the district.

There is a historic mining culture in and around the City of Zacatecas. Teck Cominco's San Nicolás deposit is 10km to the southeast of Bilbao. On the opposite side of a Basin and Range fault there are a number of mineral deposits-mines including the Real de Angeles deposit held by Minera Frisco and located 35km to the southeast of the Property, Capstone's recently re-opened Cozamin mine located 50km west of the Property, the Madero deposit is located 10km further to the west and Peñoles, Fresnillo deposit is located 80km northwest of the property.

There are also several medium sized quarries producing road aggregate close to Pánfilo Natera. Other mineral extraction is currently confined to unmechanised salt extraction at El Tule and commercial extraction of salt at Salinas. The San José mine located just to the north of Panfilo Natera town is closed but may be reopened in the medium term as it is currently under evaluation by Arian Silver Corporation.

Physiography

The Pánfilo Natera district is located in the Meseta Central, a high plateau area located between the Sierra Madre Occidental and the Sierra Madre Oriental. Its location between the two mountain ranges provides for a relatively dry area within the rain shadow of each. The general physiography is one of a high flat plain (Photo 1) interrupted by north-south trending hills and mountain belts. In many ways the physiography is similar to the basin-range terrain of Nevada (United States of America) in that horst and graben faults dominate the main topographical features. In the Pánfilo Natera district the north-northeast trending Aguascalientes graben dominates the lower lying valleys which often have associated saline lakes.

Most of the metallic minerals have been found in the mountainous horsts where outcrop is more common.

The highest peak in the region is Cerro de Aguila at 2,500m and the lowest elevation is at Salinas with 1,500m.

Environmental (Flora/Fauna)
An environmental study was prepared for Orca by an independent consultant in March 2006. This report concentrated on the fauna and flora found at, and climatic aspects of, the Bilbao area. It recognized six species of cactus which are afforded special protection. A preliminary avifauna study and species checklist has been started. The number of species found by casual observation currently stands at 65. The saline lakes within the Aguascalientes valley graben attract migrant birds and observations there would likely produce a larger bird count.

History
The earliest recorded ownership of Bilbao dates to 1928 when a North American investor who controlled the property was in default on a loan from the U.S. Government. Ing. Martin Sutti Sr. was placed in charge of Bilbao at that time. The loan was paid off in 1929 and the mine was sold to Companía Fresnillo shortly before the stock market crash, and the investor used the proceeds from the sale to create Minera Frisco, which is still in existence today. Ing. Sutti Sr. was involved with the property through the end of World War II and is credited with sinking the Tiro General (Main Shaft) and construction of a narrow gauge railway to the main line in Guadalupe. Tiro Azulaques, a vertical shaft to the 40 Level, and then inclined to the 76 Level, was sunk some time before 1900.

There are reports of "ore" being direct-shipped to a lead smelter in San Luis Potosi, but most of the estimated one million tons of historical production from Bilbao (near surface oxides) occurred during World War II and was direct-shipped to Asarco's smelter in El Paso, Texas when zinc prices were unusually high.

Companía Fresnillo (subsequently merged into Peñoles) held the property until it was dropped in 1986, in the belief that the deposit was a roof pendant, too small to be of significant value. No drilling appears to have ever been carried out at Bilbao.

In 1989, Martin Sutti Courtade (son of Ing. Sutti Sr.) acquired mineral exploration concessions over Bilbao and sold them to Minera Portree de Zacatecas, S.A. de C.V. Minera Portree commissioned Watts Griffith & McOuat to prepare a resource estimate of the remaining oxide mineralization using data collected by sampling the underground workings in 1992-93. This resource estimate was used by Kilborn Engineering to prepare a Prefeasibility Study of the property in 1995, which was updated in 1997. The results of those studies presented a case for open-pit mining with differing scenarios for metallurgical processing and metal recovery. The best alternative had an open-pit oxide mining resource of 2.44 million tons averaging 3.73% Zn and 0.30% Cu (lead and silver were unrecoverable in their proposed process plant).

Several companies subsequently optioned the Property and Minera Portree's other concessions in the district, between 1989 and 2004, including Cyprus/Phelps Dodge which mapped the district and ran geophysical and geochemical surveys across favorable targets, including Bilbao.

On July 23, 2004 Minera Portree sold the property back to Martin Sutti Courtade, retaining a 1.5% net smelter royalty, who then sold it to Shoshone Mexico, S.A. de C.V. on October 1, 2004. In May 2005, Shoshone commissioned a geological report on the project by René G. von Boek.

Minco optioned the Property from Shoshone on February 27, 2006 and pursuant to an Assignment and Assumption Agreement dated November 1, 2007 assigned its interest and rights thereto to Orca. In August 2008, Xtierra acquired 100% interest in the Property through the indirect accounting of all of the shares of Shoshone Mexico.

Geological Setting

Regional Geology of Mexico
Mexico is very mountainous, with over half of the territory higher than 900m above sea-level. There is evidence of past volcanic activity throughout most of the area. The most spectacular volcanic feature is the great Trans-Mexican Volcanic Belt, which crosses the entire country at about the latitude of Mexico City. Volcanism is continuing, with many active or dormant volcanoes. Earthquakes are common, mostly along the

Pacific coast and Gulf of California. They are also frequent in the Trans-Mexican Volcanic Belt. In contrast, the Zacatecas and Pánfilo Natera districts themselves are seismically inactive.

The regional geological setting to Central Mexico has been summarized by several authors including Nieto-Samaniego et al (2005), Chavez Martinez (1999) and Megaw (1999). This digest of the regional geology draws on these studies, is supplemented by other data in the public domain, and is enhanced by personal observations in the field.

Mesozoic and Tertiary rocks predominate in the Central Meseta of Mexico. The area is a distinct geographic province variously called the Altiplano, Mesa Central or Central Meseta. It sits between the east and western ranges of the Sierra Madre and comprises a high plateau exceeding 1,700m with individual peaks up to 2,600m. This geographical entity reflects the geological substrate in that the Guerrero Terrane rocks of the Meseta Central are bounded by these two mountain ranges to the east and west, and terminated by the Trans-Mexican Volcanic Belt to the south.

The crust of the Central Meseta is thinner (30km) compared with that beneath the Sierra Madre fold belts (40km) and is itself divided into two separate sub-zones of oceanic crust in the southwest and continental crust to the north-west. The junction of the oceanic and continental crust is marked by a crustal lineament, the San Luis Potosí-Tepehuanes Fault zone which is the focus for emplacement of many different types of mineral deposits in the area.

Mineralization is diverse both in time and type. Volcanogenic massive sulphide (VMS) deposits are the oldest in the district being restricted to the obducted marine (oceanic) volcanic dominated sequences, whereas mineralisation in the predominantly carbonate Mesozoic sequences is much younger and emplaced in structures caused by deformation during the Laramide orogeny between 80 and 40 million years ago. The age of the latter mineralisation is contemporaneous with the emplacement of Tertiary extrusives and intrusives, particularly granodiorites, in the period between 50 and 30Ma. The types of mineralisation developed in the region are diverse with VMS, Exhalative Sedimentary (Sedex) in the marine sequences and skarns, replacements, mantos, stockworks and epithermal veins in the continental rocks. Erosion of these rocks has resulted in development of minor, Pleistocene, tin and gold placers. Saline lakes occupy the deeper parts of the grabens and are exploited for salt, as at El Tule, just east of the Bilbao prospect and at Salinas some 40km to the east.

Basin and Range faulting, reflecting a change from a compressional to an extensional environment, followed the Tertiary mineralizing phase resulting in deep grabens (graben) which were filled by lacustrine and alluvial sediments during the Pleistocene. Prospective sequences are likely to occur at considerable depth within these sediment-filled grabens but mineralisation would be difficult to discover.

There are isolated basement outcrops of Paleozoic and Triassic rocks in central Mexico but these are much less common than Mesozoic and Tertiary sequences. Jurassic, and more commonly, Cretaceous calcareous sediments predominate with overlying Tertiary volcanics and plains filled with alluvial and lacustrine sediments of Pleistocene age.

The Lower Cretaceous Chilitos Formation is of importance in respect to prospectivity for VMS deposits. The Chilitos Formation rocks consist of andesitic and basaltic flows, sometimes pillowed, together with marine sediments including radiolarites, minor limestones, sandstones and some black shales. The common manifestation of the Chilitos Formation rocks in outcrop being purplish-green andesites which are often referred to colloquially as “greenstones”. The outcrops frequently show deformation principally as parallel low angle thrust faults being representative of the compressional obduction of these rocks over the continental part of the sequence.

Rock sequences prospective for skarnoid type mineralization are not so stratigraphically constrained but rather depend upon what rocks the mineralizing granodiorite intrusives cut. The granodiorites are seen as the source of the mineralizing fluids but emplacement of these is dependent upon favourable channel ways and host rocks. With respect to the host rocks, limestones adjacent to granitic intrusives are favoured for mineralization.

The development of late-stage high grade “bonanza” type silver-gold vein deposits depends primarily upon development of hydrothermal convection systems within subaerial acid volcanic sequences (such as the Tertiary/Cenozoic (Miocene/Pliocene) rhyolites found in central Mexico) and emplacement within fault structures at boiling zones within them.

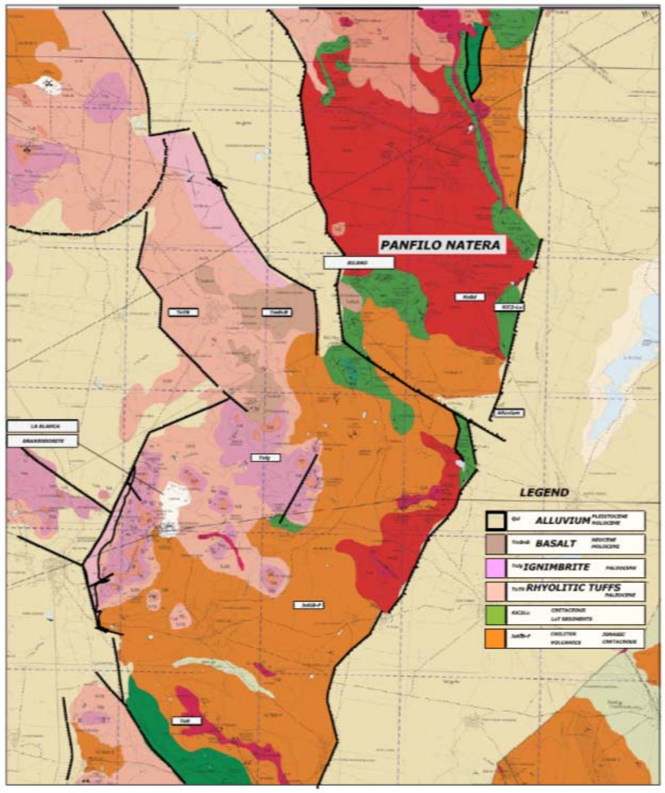
Regional structure may be the most important factor in the localization of mineral deposits in the Central Meseta. There is a very strong concentration of diverse mineral deposits along a NW-SE zone known as the “Faja de Plata” or Silver Belt. This belt extends for a distance of over 500km from Tepehuanes to Durango through Zacatecas to San Luis Potosí. The zone is marked by a series of parallel faults rather than a single structure. The concentration of mineralisation along the San Luis-Tepehuanes fault system (“STFZ”) is apparent in this figure. The coincidence of the STFZ with the subduction zone between the oceanic and continental deposition regime can also be seen. The position of the Bilbao property and Pánfilo Natera district as a whole with respect to the STFZ indicates its prospectivity for mineral exploration.

Although the Aguascalientes graben probably formed later than the emplacement of the mineralizing fluids there does seem to be a concentration of deposits at the junction of this feature with the STFZ. It may reflect a reactivation of an older structure. The Pánfilo Natera exploration area lies at the junction of these two crustal lineaments.

The naming of the Silver Belt, within which Bilbao and the Pánfilo Natera District lie, is appropriate because the Meseta Central has accounted for a large proportion of the silver production of Mexico which is the world’s largest silver producer. The mineralized belt would appear to be related to mineral fluid generation processes at the subduction zone interface and it is interesting to speculate whether original VMS sulphides have been remobilized to be redeposited again as carbonate replacement deposits (CRD’s) as suggested by Gallon (2006) at Bilbao, and first mooted as a possibility to be addressed regionally by Megaw (1988).

Geology of the Panfilo Natera District

The Pánfilo Natera Mining District occupies the central portion of a north-south elongated Tertiary granitic batholith (La Blanca), consisting mainly of monzonite and granodiorite that cuts into Jurassic and Cretaceous sedimentary rocks which are mostly massive marbled limestones of Jurassic age and medium to thin bedded limestones of Cretaceous age. Carbonaceous shales are inter-bedded with the Cretaceous limestone. Andesites and other volcanic facies underlie the Cretaceous limestones (Chilitos Formation). Large Tertiary rhyolite porphyry bodies and latite dykes are present, cutting the older rocks. Some of the dykes are emplaced along dominant northwest trending structures and may represent the late intrusive event. Most of the northwest trending structures are mineralized and have formed important vein systems that have been mined successfully in the past.



The Regional Geology of the Panfilo Natera District

The Regional Geology of the Panfilo Natera District
Most of the sedimentary rocks outcropping in the district are roof pendants over the intrusive body. They form a northeast trending anticline. In places skarn zones are present at the contact of the intrusive and sedimentary rocks. Wollastonite mineralization occurs within limestone in the vicinity of granitic intrusive-limestone contacts.

The mineralization that has filled the northwest trending structures was probably deposited during an igneous event associated with the emplacement of the rhyolite porphyry and latite dykes. Some of these can be seen at Bilbao and at El Cabezon usually in the footwall of vein structures. The veins in the district cross all major rock types, except the basalts and lithic tuffs that are of late Tertiary age. The granitic intrusive has been eroded to a gentle topography. It does not form any significant hills. The Tertiary rhyolite porphyry intrusive plugs form the largest and tallest hills in the district with the El Morro hill particularly prominent.

The dominant mineralization in the area is in the form of silver-lead-zinc fracture filling veins that cross both the intrusive bodies and the sedimentary rocks. There are some limestone replacement deposits such as the Bilbao deposit in which there is a combination of skarn mineralization and fracture filling mineralization as well as volcanogenic massive sulphide mineralization at the San Nicolás (Teck-Cominco) and Real des Angeles (Frisco) deposits. A more pervasive replacement of the sediments, fed by hydrothermal solutions that circulated through the fracture system, has deposited silver, lead, zinc and copper mineralization. The massive limestone is strongly silicified in the replacement zones. The primary “ore” minerals are galena, argentite and sphalerite; and their corresponding oxidized products.

The longest and strongest of these is the San José vein, 3.5km north of the town of Gral. Pánfilo Natera, which has been mined until recently by a subsidiary of Minera Fresnillo. It is now held under option by Arian Silver Corporation.

The wollastonite deposits are related to the skarn zones and are present in lenses within marbled limestones that are close to the sedimentary-igneous contact.

The structural setting of the Pánfilo Natera district is quite complex in detail. The area is cut by several long NW-trending vein systems which parallel the main mineralising fracture system of the Meseta Central. In particular the Santa Rita vein at Milagros is probably correlative with the main Tepehuanes-San Luis Potosí Fault zone. The Rancho Nuevo and San José vein systems also follow this same trend. The discovery of a gabbroic intrusive along the Santa Rita fault at Milagros is interesting as it may represent a mantle remnant squeezed into this crustal feature.

The central part of the Pánfilo Natera district is dominated by the outcrop of the La Blanca granodiorite batholithic intrusive which extends north-south between Ojo Caliente and El Cerro. This Tertiary intrusive cuts Jurassic and Cretaceous sedimentary sequences and is in turn overlain by extrusive rhyolitic tuffs and flows and then by Pleistocene basalts. The La Blanca granodiorite is an important font for the various mineralising events which are encountered in the district.

Several types of mineralization found within the district. They are typical of the mineralization usually encountered in the Meseta Central and include volcanogenic massive sulphides (VMS), carbonate replacement deposits (CRD's), disseminated replacement deposits, skarns and veins.

Most of the mineral occurrences/deposits discovered to date have surface expressions at outcrop. Soil geochemistry is likely to play an increasingly important role in finding new deposits in the Pánfilo Natera district because a large proportion of the district is covered by alluvial infill and soil overburden.

Geology of the Bilbao Property

Bilbao is located within the northwest trending Mexican Silver Belt, a 600km long linear structure, and the underlying source of several major deposits including San Martin, Fresnillo, Zacatecas, San Nicólas, Real de Angeles, etc. and extending at least from San Luis Potosi to Tepehuanes, Durango. Under favorable physio-chemical conditions, large quantities of base and precious metals, disseminated within the basement rocks through mega-shears such as the Mexican Silver Belt, were subsequently concentrated into vein, manto replacement, and skarn deposits by copious amounts of hydrothermal solutions emanating from the much younger Tertiary age intrusions. These deposits may occur along the primary geo-suture or, more commonly, along complementary structures associated with it. Mineralization at Bilbao occurs as skarn, and replacement of favorable limestone beds and andesites near the contact of the Chilitos Formation with the La Blanca granodiorite intrusive. The favorable host rocks and the La Blanca intrusive are locally overlain by later tuffs and Pleistocene age basalts.

In broad terms the mineralization at Bilbao occurs at the contact between the La Blanca granodiorite and Cretaceous aged limestones.

The geology is complex in that andesitic volcanics are interbedded within the limestone sequence; and forms the oldest rocks on the Property. It had been thought that these volcanics might have been the font of the whole mineralization but it now appears that, although they contain pyritic mineralization, they are overprinted by later mineralizing solutions emanating from the granite.

The La Blanca granodiorite intrudes the limestone and forms mineralised skarns. Mineralization is best developed at the contact and along three beds within the limestone strata. Such strata may have been preferentially replaced because of their more massive bedded nature. Endoskarn mineralization also occurs within the outer parts of the granodiorite. Typical skarn minerals such as garnets, diopsidic-pyroxenes are developed in the skarn zones and marbleized limestone also occurs. Wollastonite (and other skarn minerals) is best developed in the La Güera and El Porvenir claims some 600m to the east of the Bilbao shaft where they are sporadically worked for that mineral.

Overlying the granite and limestone are a series of airfall rhyolitic tuffs and flows which in turn, are overlain by Pleistocene amygdaloidal basalts. Bed-rock geology in the immediate area is obscured by recent alluvial sediment and calcrete/caliche cover, especially in the southern part of the Bilbao prospect.

The Bilbao prospect itself is dominated by the mineralised oxide outcrops surrounding Glory Hole 1 and it was these that were mined previously. These oxides comprise hematite and jarosite with green copper staining and yellow crystals of wulfenite ($PbMoO_4$). Several other oxidic zinc, lead and copper mineral species also occur in the iron oxide cap. The newly discovered sulphide body does not crop out and is a separate entity to those represented by the oxides in the gloryholes. Orca and others have surveyed the bedrock at Bilbao, which is mostly overlain by caliche, and so outcrop is sparse and extensive trenching, or short-hole drilling, would be required to significantly improve the detail of the surface mapping.

Deposit Types

Mining has been undertaken in Mexico since antiquity especially at Chalchihuites in northern Zacatecas where over 800 pre-Hispanic mines have been discovered, mainly for ornamental turquoise. Larger scale mineral production began during the Spanish colonial times. Between 1546 and 1548 numerous silver deposits were discovered in Zacatecas, which swiftly grew to be the country's third largest city - surpassed only by the capital and Puebla. Mining booms later hit Guanajuato, San Luis Potosi, Pachuca, Tepezala, and Taxco. By the early 17th Century, Zacatecas was producing a third of Mexico's silver and a fifth of the total world supply.

During the War of Independence and its aftermath, mining activities declined until the late 1840s when international interest in the mineral potential of Zacatecas developed with German, English and French investment. This interest level continued until the time of the Mexican Revolution (1914) when almost all mining activity ceased.

Following the end of World War II, investment in new technologies permitted the development of lower grade deposits and led to the eventual discovery of new deposits in the Sombrerte area which achieved the highest volume of underground production in Mexico and the discovery of the richest silver deposit in the world at Real de Angeles and to the development of the deeper levels of the rich argentiferous veins in the Fresnillo mining district.

Following a simplification of the mining rules in Mexico in 1996 there has been strong influx of foreign exploration companies in search of opportunities. A brief summary of the main properties/deposits which are at an advanced stage is presented below.

The Central Meseta has a diverse range of mineral deposit types which can be grouped into four main types of current economic significance.

1 VMS & Sedex deposits.
2 Carbonate Replacement Deposits (CRD’s) including skarns.
3 Vein Systems including Low Sulfidation Epithermal Vein deposits (LSEVD’s) and hydrothermal types.
4 Intrusion related deposits IOCG/Stockworks.

There are other deposits such as iron-ore, manganese, tin veins and placers, phosphate/apatite, salt, lithium-potassium-bromine brines, perlite, agate, wollastonite, garnets, dimension stone, limestone, road aggregate, lithium and other industrial minerals which occur, or may occur, in the district but which are less attractive economic propositions at this time.

Apart from the larger Mexican companies such as Peñoles, there are many tens, if not hundreds, of junior exploration companies (mainly Canadian) exploring for mineral resources in Central Mexico. Five large diversified companies dominate the production of non-fuel minerals in Mexico, operating 40 mining units. The medium-sized mining sector operated 20 units and produced all of the celestite, feldspar, fluorspar, gypsum, and silica sand, and almost 90% of the graphite production of Mexico. The small-sized mining sector operated 170 units and produced 75% of the kaolin. In 2000, 504 international mining companies were exploring in Mexico, including 203 Canadian companies and 199 from the United States. Most of the junior companies are searching for silver-gold epithermal type deposits especially of bonanza type although larger silver-lead-zinc and VMS type targets are also widely sought.

Mineralization

Geologic Setting and Morphology of Mineralization at Bilbao

The outcropping iron-oxide capping at Bilbao do not themselves pass into sulphidic bodies in depth since they emanate from the main granodiorite contact above a level of between 130 and 150m and hence are completely within the oxidized zone. (Three main oxide zones are recognized although there are suggestions of two others.) Sandwiched between the oxides above, and the sulphides below, is a “mixed” sulphide-oxide zone of varying thickness, the latter may have important economic connotations.

Previous resource estimations have concentrated on the two main oxidic lenses in the sequence. Recent drill investigation by Orca has identified at least seven bodies which, dependent upon depth from surface, are oxidic, mixed or sulphidic; some bodies pass from sulphidic to mixed type dependent upon depth in the section. From base to top the seven bodies are:

Abbreviation	Name of Body	Type	Correlation
UOX	Upper Oxide	Oxide	
MOX	Middle Oxide	Oxide	
LOX	Lower Oxide	Oxide	
AGZ	Silver Zone	Mixed	
USZ	Upper Sulphide Zone	Sulphide	body 3
MSZ	Middle or Main Sulphide Zone	Sulphide	body 2
LSZ	Lower Sulphide Zone	Sulphide	

Classification of mineralised bodies at Bilbao

The morphology of the LSZ is as yet unclear since there are few drill hole intersections into it. It could be a contact skarn, since it is very close to the contact of the granodiorite, in which case it would follow the irregular contact of the granodiorite “fingers” rather than have a stratabound morphology.

The MSZ is the most important body, in terms of size, so far discovered at Bilbao; it does not outcrop but is well developed in Holes X10 and X13 in particular.

The USZ is narrower and of lower grade than the MSZ, overlies it, and passes into oxide facies at shallower depths towards Hole X6.

The AGZ is a thin zone which has high silver values in Hole X14 with intersections of up to 1,200gpt Ag between 143.0 and 144.0m in a zone of 3.00m averaging 676gpt Ag together with 5.82% Pb+Zn and its continuity in Hole B6B, between 177.46 and 181.1 6m, of 3.7m at 138gpt Ag with 6.37% Pb+Zn. The AGZ is predominantly of a mixed type, transitional between sulphidic and oxidic types. A similar silver-rich zone is found in the MSZ in Hole X10 at the base of the oxidized zone where it changes to a mixed type averaging 12m at a grade of 210gpt Ag with 6.30% Pb+Zn between 116.0 and 128.0m. These elevated silver grades in the mixed zone could have formed by supergene concentration at the palaeo-watertable. This hypothesis needs testing further, but the indications are that it has validity. If there is supergene silver enrichment it could impinge positively on the economics of the Bilbao prospect. Mineralogical testing of the high silver sample would reveal which silver minerals are involved, and whether they have re-precipitation textures which would signify that supergene enrichment has taken place.

The oxide bodies LOX, MOX and UOX are prolongations of the oxide “ores” seen at surface and in the gloryholes. They have been partially stoped out. There are indications that two further oxide zones are present in the sequence, these are cut by a granodiorite finger so that their correlation in depth is uncertain.

The number and morphology of the various mineralised bodies at Bilbao has become clearer following detailed inter-hole correlation of grades and lithologies but is, as yet, not entirely resolved. The reason for this difficulty in correlation is due to the sedimentary sequence being intruded by anatomizing fingers of the La Blanca granodiorite. A final resolution will have to wait closer spaced infill drilling. Nevertheless some considerable progress has been made in the recognition of seven (or nine) mineralised bodies most of which are tabular in form. The assignment of abbreviations for each body has assisted in correlation between drill hole sections so that the overall morphology of the mineralised package is now better understood. Identification of the AGZ body, with elevated silver grades, suggests that a supergeneenriched zone may exist at the oxide-sulphide interface as a mixed zone throughout the prospect. If that is substantiated by further work, then that would have positive implications for the economic viability of the project.

The identification of additional mineralised bodies, and extensions to others, means that some increase in the available tonnage is likely. Investigations are on-going in this regard.

The morphology of the La Blanca granodiorite intrusive is better understood than previously. It is a massive intrusive located to the north of the Bilbao mineralization which interfingers the limestone sediments hosting the main mineralization. The mineralization is skarnoid in marbleized limestones as is shown by the presence of hedenburgite (pyroxene) and other calc-silicates in the mineralogical make-up. The mineralized bodies are interpreted as being directly caused by metalliferous fluids emanating from the granodiorite. In light of the newly discovered brecciated silver-rich veins in Hole X26 at depth within the granodiorite it is tempting to view the veins as potential feeder zones to the mineralized bodies. In this regard an investigation is underway to determine which parts of the granodiorite might be the source(s) of the mineralizing fluids. Some parts have high zinc values which suggest that areas of the intrusive are more mineralized relative to others.

The mineralized bodies themselves are tabular and preferentially follow the bedding of the limestone. The occurrence of stacked lenses of mineralization at the Bilbao prospect in sediments close to the contact of the La Blanca granodiorite implies that similar bodies may occur along that contact elsewhere on the Property or district wide in similar geological context. It is likely that significant mineralization will only be developed when there is the presence of adequate thickness of limestones. The indications are that immediately east of the currently known bodies the limestone capping has limited thickness with the granodiorite being found at shallow depth, as demonstrated by outcrops in the La Guera and El Porvenir claims and the last two (BJ) holes drilled in that area. However to the southeast of the currently known mineralization, there is potential for finding thick development of limestone where grid drilling would be required. The present body remains open to the south and southwest and to depth where additional stacked lenses of replacement and feeder mineralization may add significantly to the mineral resources.

Several minerals have previously been extracted from the Property, these include:

1. Limestone
2. Wollastonite

<u>Mineralised Oxides of Zn/Cu/Pb/Ag</u>

All these operations are currently in abeyance, although the wollastonite was worked on a small scale to mid-2006. The grade of this wollastonite is roughly 50% mineral, which has to be hand-cobbed to produce a saleable product. The occurrence therefore suffers from competition from producers with grades up to 100%. However the underlying cause for the demise of this operation is that all producers are having difficulties in finding a market for their product. The wollastonite was worked by the Mendez family who live locally at Noria del Cerro.

There is a medium-sized limestone quarry on the Bilbao claim situated to the southwest of Panfilo Natera. Located at L794.904/P2508.659 it has dimensions of 85 x 65m. The quarry produced block limestone and road aggregate.

<u>Petrographic and Mineralogical Studies</u>

Petrographic and mineralogical studies were carried out on a series of samples provided by Orca by Dr. Maria del Carmen Ojeda of the Instituto de Metalurgia at the Autonomous University of San Luis Potosí. Dr. del Carmen Ojeda was asked to:

1. Make polished sections of those specimens with high sulphide components and identify the sulphide minerals. Make a study of how the sphalerite/galena/chalcopyrite/pyrite/pyrrhotite etc. are spatially related. Grain sizes and other mineralogical features to be recorded.
2. Make conventional thin sections for petrological microscope examination of the mixed carbonate-sulphide rock specimens to determine the grain relationships and textures between the various

minerals. Determine what the carbonate is – calcite/dolomite/siderite/ankerite. Ascertain what other mineral species are present—e.g. calc-silicates.

3. Ascertain the amount of iron in the sphalerite, and whether there are secondary zinc/lead minerals present, such as hemimorphite and cerussite.
4. Undertake a microprobe study to ascertain where the silver resides—either in galena or Ag-sulphosalts or both. Also comment on any other unusual elements which occur such as Au for example.
5. Ascertain if and where tin resides both in the oxide and sulphide phases.
6. Comment on any alteration minerals which may be associated with the mineralisation.
7. The main objectives of the study was to assist in the understanding the behaviour of the sulphidic mineralization in beneficiation/metallurgical tests that were being undertaken and secondly to determine the mineralogy of the mineralization.

The metal grades are more or less the same between the sulphide bodies and their oxide equivalents. Some results suggest a possible depletion of silver in the top sector of the oxides and an increase in the mixed zone relative to underlying sulphides.

The changes in mineralogy between the unaltered sulphides at depth and the oxidized fraction can be accounted for by oxidation of primary sulphide mainly to iron oxides, green secondary copper minerals and various sulphates and oxides resultant from the generation of dilute sulphuric acid solutions when rain water reacts with the primary sulphides which were mostly pyritic. Such weathering, and consequent natural sulphuric acid generation, would favour the development of sulphates and that is the reason why jarosite, $KFe_3(SO_4)2(OH)_6$, and anglesite, $PbSO_4$, are components of the oxide ingredients.

Other secondary minerals which have been identified and are important components include pyromorphite, $Pb_5(PO_4)3Cl$, and mimetite, $Pb_5Cl(AsO_4)3$. Zinc sulphate, goslarite, is very soluble whereas lead sulphate is insoluble; as a consequence the zinc minerals in the surface oxide are absorbed in complex Fe-Mn-Zn oxides or occur as carbonates such as smithsonite, $ZnCO_3$.

It is important to distinguish between these true oxide minerals formed by oxidation of the original sulphides and other oxide minerals and silicate minerals which are likely primary precipitants from the skarnification process. There are for example primary silicates such as willemite Zn_2SiO_4, hemimorphite $Zn4(Si_2O_7)(OH)2.H_2O$, rare larsenite $PbZnSiO_4$, quartz itself, present as pervasive silicification, and the oxides, and franklinite (Fe2+,Zn,Mn2+) $(Fe3+,Mn3+)2O_4$ and cassiterite, SnO_2, which although primary are resistant to weathering and alteration and persist within the oxide ore. Other resistates which can be found in the oxide zone albeit in small amounts are ilmenite $FeTiO_3$ and apatite $Ca_5(PO_4,CO_3)3(F,OH,Cl)$. Furthermore the existence of metallic oxides is noted for lead and arsenic (minium and realgar) and bismuthinite Bi_2S_3 in the sulphides might go to yellow bismite, Bi_2O_3.

The predominant iron oxide, as hematite Fe_2O_3, has a significant manganese component with manganese “trees” common on flat surfaces. The entire Property is geochemically anomalous in manganese (>1000ppm Mn) around the mineralized core.

The mineralogy of the oxide fraction of the Bilbao deposit is known in its general aspects but has not been studied in detail. A mineralogical study will be necessary on specifically chosen oxide samples to better describe the textures, grain-size, aggregation, associations and particularly the mineral species involved in the “economic” minerals of Pb, Cu, Zn/Cd, Ag and Sn. Moreover a study of the arsenic and mercury contents and problems involved in acid liquors emanating from wet jarosite waste would be valid so as to obviate any contamination problems involved in plant tailings disposal.

Exploration

The Pánfilo Natera mining district has a long history of exploitation. The earliest mining was carried out at Tepezala in 1574 followed closely by Ojo Caliente 1600, and Villa de Ramos in 1608. More recently the silver vein at San José has been mined and the oxide mineralization at Bilbao was mined before the Second World War. During the twentieth century the Real de Angeles and San Nicolás deposits were discovered, the former was one of the richest silver deposits in Mexico. The open-pit mine was closed in 2000.

Geology and Prospecting
Surface mapping has been completed over almost the entire Property, including areas away from the main mineralization. A full understanding of the underlying geology is hindered by extensive calcrete development at surface. Notwithstanding, the outcrop is sufficient to allow an appreciation of the overall geological setting.

Geophysics
An airborne survey (government magnetic/radiometric surveys) was carried out by the government in 1986 unfortunately; the survey line spacing makes it suitable only as reconnaissance tool.

During 2006, Orca conducted limited induced polarization (IP) and ground magnetic (MAG) surveys in the southern part of the Property. The objective of these surveys was to determine whether there were blind targets south of the currently known mineralization.

Since the mineralization at Bilbao has a significant magnetic component and it was hoped that the MAG survey over the Bilbao deposit would have been of diagnostic fingerprint, which could be used to locate mineralization at depth; unfortunately the MAG survey was of limited use. However, the NW-SE trending structures are considered as likely conduits for the mineralizing fluids and several bands paralleling this direction were discovered, which may be helpful in identifying future drill hole locations. Specifically there is a strongly negative magnetic anomaly in the far south of the Bilbao prospect at L793.501/P2507.230 which appears to be a valid target.

A study of geophysical data is being carried out in an attempt to determine the controls to mineralization at Bilbao.

Geochemistry
In 2001, Phelps Dodge completed a soil geochemical survey over the entire project area on a 200m by 50m grid. The results of this survey outlined a large Cu, Pb and Zn geochemical anomaly over the historic Bilbao workings. A recent soil geochemical survey completed by Orca over the southern part of the Property identified a large geochemical anomaly defining the contamination plume from the El Cabezon mine and mill complex, but did not detect other anomalies considered to reflect bedrock mineralization. The central parts of the Property, immediately south of the known mineralization are free of contamination and were sampled.

Underground Sampling and Surveying
Underground surveying and sampling have been undertaken both on the 40 and 76m levels. Geological mapping has been done on the 40m level to supplement older maps already on hand for the 76m level. Comprehensive sampling of the oxide zone has been completed for the glory holes and some sampling has been conducted on both underground levels.

Topographic mapping was undertaken at the same time as geological and geophysical surveys were being done on the Property. In particular, altitudes were taken on all sampling lines, farm roads and all cultural features, including fences, were mapped by GPS. This enabled a detailed working topographic to be made on which geological features were plotted.

Conventional land surveying was undertaken in the area of the main shaft which included spotting all drill-hole collar elevations, this to enable inter-drill hole correlation.

Drilling
Prior to the Company's involvement at Bilbao, no diamond drilling appears to have been carried out. Diamond drilling by the Company, has been completed in four phases. Phase I, completed between May 2006 and February 2007, comprised 31 holes totaling 7,222 metres drilled, mostly on a 70 metre grid, to an average depth of 258 metres and a maximum depth of 420 metres. An additional two holes (X17 and X22) totaling 600.85 metres were drilled outside of the Bilbao deposit. Phase II comprised a further 15 holes totaling 4,138 metres completed between January 2008 and March 2008 on a 50 metre grid infilling the earlier grid. The purpose of the infill diamond drilling was to assess the continuity of mineralization between holes and confirm the structural interpretation of the mineralized body, and to obtain sufficient density of

data to support an NI-43-101 compliant indicated resource. Phase III comprising seven holes totalling 1,900 metres completed between October and November 2008 was drilled as a step-out to investigate resource potential to the northwest of the defined deposit. It encountered isolated intersections that require more drilling to fully test the resource potential. Phase IV comprised 6,000 metres in 29 holes completed in August-September 2010. The drilling had four objectives: (1) step-out drilling to the south and southwest of the existing silver-zinc-lead-copper deposit to define additional sulfide resources and to follow up previously intersected high grade silver vein mineralization; (2) in-fill drilling within the current oxide resource to upgrade resource categorization and for geotechnical data; (3) condemnation drilling in the area of the proposed mine installations; and (4) initial exploration drilling at other identified prospects within the vicinity of Bilbao.

The Bilbao deposit has now been investigated by a total of 80 diamond core drill holes drilled on a 50-metre grid to a maximum depth of 420 metres, and for an aggregate of just under 20,000 metres. Core diameter was normally 46.7mm (NQ).

Core recovery was generally excellent within the sulphide zone, but in the oxide zone consistently poor core recovery (averaging 67% in 2007) was recorded caused by cavities and the friable nature of the oxide mineralization. A study of core recovery versus grade in the oxide zone showed no significant correlation which suggests that areas of only moderate core recovery provide adequate quality data to support Indicated Resources.

The Bilbao mineralization forms zones dipping at shallow angles ranging up to about 45 degrees. The intersection of these zones by vertical drill holes results in slight to moderate exaggeration relative to the true widths, but this effect is accounted for in the resource estimation methodology and has not resulted in a corresponding bias in the resource estimate.

A number of exaggerated intersection widths were recorded where high angle, high grade quartz-silver veins were intersected at a low angle by vertical holes, for example in DDH X26. Intersections of this type have not been used in the resource estimate.

The mineralization has been completely oxidized to a depth of 130m (limit defined on all drill sections) below the surface, below which there is an irregular zone of mixed oxide-sulphide mineralization reaching as deep as 230m in Hole X- 13. Faulting is the primary control for this oxidation, but Parker (2007) believes that, in some cases, it may also have progressed outward from the structure-hosted water courses, into the bedding-controlled sulphide mineralization.

The six classifications of mineralized bodies at Bilbao are noted on all sections.

Classification of mineralized bodies on the Property

Abbreviation	Name of Body	Type	Correlation
UOX	Upper Oxide	Oxide	
MOX	Middle Oxide	Oxide	
LOX	Lower Oxide	Oxide	
AGZ	Silver Zone	Mixed	
USZ	Upper Sulphide Zone	Sulphide	body 3
MSZ	Middle or Main Sulphide Zone	Sulphide	body 2
LSZ	Lower Sulphide Zone	Sulphide	

Zones of mineralization intersected are identified along with corresponding assay results on all sections.

BILBAO DRILL HOLE SUMMARY									
Hole Number	Easting	Northing	Elevation	Depth	Azimuth	Dip	Year Drilled	phase	Notes
B1	793285.73	2508749.99	2144.89	288.50	300	81	2006	I	
B2	793183.12	2508823.25	2148.57	178.05	0	90	2006	I	
B6	793256.65	2508708.58	2143.80	110.20	300	60	2006	I	
B6A	793256.65	2508708.58	2143.80	257.00	300	74	2006	I	
B6B	793256.65	2508708.58	2143.80	305.65	0	90	2006	I	
X1	793147.99	2508950.83	2139.57	167.15	0	90	2006	I	
X3	793097.15	2508898.74	2140.64	137.05	0	90	2006	I	
X4	793194.03	2508902.91	2145.06	164.15	0	90	2006	I	
X5	793295.52	2508896.49	2144.37	139.75	0	90	2006	I	
X6	793045.68	2508851.99	2137.54	215.90	0	90	2006	I	
X8	793256.46	2508848.18	2147.33	174.00	0	90	2006	I	
X8A	793256.46	2508848.18	2147.33	363.65	0	90	2006	I	
X10	793095.49	2508802.06	2140.74	229.95	0	90	2006	I	
X11	793192.14	2508798.37	2146.73	304.60	0	90	2006	I	
X12	793294.84	2508795.91	2145.46	94.65	0	90	2006	I	
X12A	793294.84	2508795.91	2145.46	323.35	0	90	2006	I	
X13	793143.17	2508752.22	2141.32	278.85	0	90	2006	I	
X14	793244.73	2508747.44	2144.77	278.70	0	90	2006	I	
X15	793198.01	2508703.61	2141.95	318.65	0	90	2006	I	
X16	793246.27	2508653.22	2142.66	274.55	0	90	2006	I	
X17	793505.36	2508516.85	2160.05	320.25	0	90	2006	I	Located off main prospect
X18	793147.68	2508652.54	2139.29	277.90	0	90	2006	I	
X19	793096.62	2508696.74	2137.31	307.55	0	90	2006	I	
X20	793045.95	2508753.16	2135.79	314.15	0	90	2006	I	
X21	793048.27	2508331.14	2136.67	327.00	0	90	2006	I	
X22	793440.29	2508331.14	2158.89	280.60	60	225	2006	I	Located off main prospect
X23	793097.59	2508600.08	2138.41	308.05	0	90	2006	I	
X24	793195.65	2508599.70	2140.87	293.65	0	90	2006	I	
X26	793996.29	2508603.52	2137.89	420.35	0	90	2006	I	
X27	792946.35	2508750.03	2133.03	369.20	0	90	2006	I	
X28	793046.22	2508803.99	2136.71	202.50	0	90	2008	II	infill
X29	793144.45	2508793.23	2144.06	193.15	0	90	2008	II	infill
X30	793259.69	2508800.16	2146.89	233.75	0	90	2008	II	infill
X31	792996.54	2508751.59	2133.74	306.50	0	90	2008	II	infill
X32	793094.87	2508751.93	2138.20	261.70	0	90	2008	II	infill
X33	793195.39	2508750.95	2143.91	276.70	0	90	2008	II	infill
X34	792997.14	2508698.96	2134.37	341.15	0	90	2008	II	infill
X35	793046.98	2508701.36	2135.86	279.50	0	90	2008	II	infill
X36	793146.28	2508702.85	2139.55	271.15	0	90	2008	II	infill
X37	792997.13	2508650.17	2136.34	365.25	0	90	2008	II	infill
X38	793094.46	2508650.28	2137.47	285.60	0	90	2008	II	infill
X39	793192.18	2508651.42	2140.69	242.90	0	90	2008	II	infill
X40	793050.04	2508601.56	2138.26	319.15	0	90	2008	II	infill
X41	793147.82	2508602.85	2139.49	273.40	0	90	2008	II	infill

X42	792947.61	2508874.99	2131.86	285.60	0	90	2008	II	infill
X43	792898.26	2508898.46	2129.72	246.15	0	90	2008	III	north-west step out
X45	792999.33	2508896.73	2133.84	264.50	0	90	2008	III	north-west step out
X47	792805.27	2508884.06	2127.96	357.70	0	90	2008	III	north-west step out
X47A	792805.27	2508884.06	2127.96	390.95	0	90	2008	III	north-west step out
X53	792996.86	2508850.81	2134.15	227.00	0	90	2008	III	north-west step out
X56	792898.58	2508977.20	2128.26	273.15	0	60	2008	III	north-west step out
X57	792560.00	2509280.00		140.60	315	60	2009	III	north-west step out
			total	**13,861.10**					

Results of the most recent drilling completed (September 2010) indicate that the Bilbao resource extends further to the south, west and northwest of the existing resource and importantly, remains open to the southwest. The additional mineralization discovered will add to the existing resource base. Of particular note are the higher grades of zinc and lead encountered in the southwest area and the discovery of high grade silver and gold mineralization along the western flank of the deposit. Drilling also confirmed the presence of thick zones of oxide mineralization near to surface and amenable to open-pit extraction in the northern part of the deposit.

The step-out drilling in September 2010 sought to identify extensions of the Bilbao mineralized body to the south and west of the existing resource. New mineralization was discovered resulting in extensions to the width and length of the body by at least 50 metres in both directions. The mineralization remains open at depth in a south-westerly direction. Of particular interest, are the prevailing high silver grades with a 20.00 m wide zone averaging 90g/t Ag intersected in drill hole X85. High silver grades have also been found in drill holes X81, X82 and X84B, the latter with 860g/t Ag, between 358.00 and 359.00 m as well as a further zone between 202.00 and 203.00 m grading 1.23g/t Au, together with 102g/t Ag, and 2.80% Pb. The data suggest the presence of at least two parallel zones with elevated precious metal values and confirms and complements the native silver and stromeyerite mineralization found previously in DDH X26. The silver-enriched zone is now known to extend over an area 350 x 100m in a north-south direction and appears to occupy a brecciated zone within the limestone sequence, the thickness of which is variable from about 4 to 20 metres. The high silver values demonstrate the presence of a precious metal-enriched fracture zone within the western part of the Bilbao deposit.

Drilling in September 2010 on the oxide resource area comprised three east-west sections across the Bilbao deposit to refine the morphology of the oxide part of the deposit and assist in the planning for open pit mining. Drill holes in the central sector have intersected very thick zones of oxide mineralization adding reassurance to the open-pit oxide resource in that area. Specifically X67 contained 89.00 m of 3.09% combined Pb+Zn, X68 had 121.00 m at 2.07% Pb+Zn and X69 displayed two zones, respectively of 25.78 m and 13.00 m, with 4.56% and 4.61% combined Pb+Zn. To the west of the old Main Shaft area, drill holes X73, X75 and X77 have demonstrated an extension to the previously known mineralized body in the northwestern sector which provides a connection with the exploration holes X42 and X43 where mineralization was found previously. In particular drill holes X73 and X77, which are spaced 75m apart, have shown strong mineralization with X77 containing a 4.60 m zone with 1.13% Cu, 2.62% Pb, 6.08% Zn and 139g/t Ag.

Drill hole X75A, located 50m further west, has encountered extremely high grades of silver in a thin zone between 252.30 and 253.00 m with 2,047g/t Ag, 10.4% Pb, 1.13% Cu and 5.51% Zn in oxidized limestone breccias. This zone is probably correlative with the silver-rich zones encountered in the step-out drilling to the southwest of the deposit.

Drilling confirmed the presence of thick mineralized oxides near to surface and amenable to open-pit extraction in the northern part of the body, it also affirms a continuity of mineralization towards the north-west of previously discovered mineralization, and also suggests that there is a silver-enriched fracture zone extending between DDHs X85 and X73, a distance of 320m.

The Company commenced a further round of drilling in March 2011 which is designed to investigate the zone of high grade silver mineralization encountered along the western margin of the deposit.

Density

The Company has determined the density of fourteen samples of sulphide mineralization. Measured densities are not closely correlated with base metal content and are probably largely dependent on pyrite content. Density measurements range from 3.23 to 3.99 g/cm3 and averaging 3.62 g/cm3. It is likely that the bulk density is somewhat lower than this average, due to the likely presence of voids and possible admixture of minor proportions of lower density oxide. A density of 3.60 g/cm3 has therefore been selected as a reasonable and conservative figure and has been used in the present resource estimate to determine the tonnage of each sulphide resource block.

The Company has determined the densities of nine samples of oxide mineralization, which range from 2.60 to 3.92 g/cm3 and average 3.00 g/cm3. It is likely that the bulk density is somewhat lower than this average, considering that the grade of some of the samples is higher than average and the reported abundance of voids in the oxide mineralization. A density of 2.7 g/cm3 has therefore been selected as a reasonable and conservative figure and has been used in the resource estimate to determine the tonnage of each oxide resource block. The same density (2.7 g/cm3) was used by WGM for the oxide resource estimate carried out in 1994.

The Company has determined the densities of four samples of mixed mineralization, which range from 3.0 to 3.4 g/cm3 and average 3.1 g/cm3. For mixed mineralization a density of 3.1 g/cm3 has therefore been used. This is also close to the mean of the assigned densities for sulphide and oxide.

Sampling Method and Approach

Core Handling Procedures

The Company has conducted various sampling programs on the Property including: (1) surface and underground sampling at various deposits and mineral occurrences, (2) soil geochemical sampling at various grid densities, and (3) diamond drilling.

At the drill site, the drill core was extracted from the core barrel and was laid out by the drill contractor in four-compartment, 3m capacity plastic core boxes. Each core box was clearly marked by the drill assistant/helper with the hole number, the box number and the starting and ending meterages for each box. Blocks recording hole depth in metres were inserted at the termination of each 3.05 m drill core run. The core box remained covered all the time when not receiving the core. When the box was full, it was covered with a matching lid. All full core boxes were delivered to the core storage facility and stacked properly at the end of each shift.

The core boxes received at the core storage building were sorted by hole and stored in the building until required by the geologists. The boxes were transferred as complete holes to the core logging facility as requested by the logging geologists.

Following logging, the core trays containing the split half core saves were returned to the core storage facility for permanent storage on racks or stacked on pallets. Each core box bears the hole number, the range of the core within the box and the box number printed using an indelible marker pen.

Logging and Sampling Procedures
At the request of the core logging geologist, the core boxes for a complete hole were opened from the top of the hole and laid out on the logging tables 15 boxes at a time. The core was then checked to confirm that the entire core for the hole was present. If required, the core was cleaned with a brush and water prior to logging.

The descriptive core logging procedure begins with the recording of the overburden depth and identification of the stratigraphic units. The overall thickness, alteration, texture, colour and structural characteristics such as bedding thickness, banding and/or massive nature of the units, fault zones are all determined and described.

Rock Quality Designation ("RQD") logging is also done at the same time as the descriptive logging. RQD measurements are made for the entire length of the core. The core recovery percentage is measured and the core loss intervals are recorded. Once the contacts between the stratigraphic units are established, they are clearly marked and a tag is inserted delineating the unit contacts.

The core logging geologist then selects and marks the sampling intervals on the core and also places a tag showing the hole number, sample number, sample interval, the starting and ending depth, at the end of the sample interval in the core tray. Each stratigraphic unit is sampled separately with sample lengths varying from 0.5 to a maximum of 1 .5m. All units were sampled except barren granite. The sampling interval was based on the extent of the observed base metal sulphide or oxide mineralization. One part of the sample ticket is left in the core trays under the last piece of split core for each sample.

This procedure of selecting sample intervals is followed for the entire length of the hole. Each set of core trays is also digitally photographed by the logging geologist. The core is then sent for splitting and sampling.

All logging and sample descriptions are recorded on paper forms for later transfer to digital forms based on (Excel) spreadsheet.

The cores are split using a Target diamond/carbide bladed rock saw and the half core for assaying is placed in a plastic sample bag with a tag showing the hole number, sample number, sample interval, sample width and the required analysis. The sample bags are tied and stapled properly along with a tag showing the hole number, sample number and the sample interval.

Collected samples are placed in woven PVC sacks and shipped to the processing laboratory every 3 days under Xtierra's supervision in Xtierra's trucks and via Estrella Blanca courier service.

The split saved half of the core is placed on the original core tray, and the core trays are returned to the core storage building.

Historical Sampling
The historical record of work by Minera Portree and others includes descriptions of numerous samples collected from the Property. The analytical results from these historical samplings have been coded into a (Excel) spreadsheet and coordinates therefore digitized for plotting and comparative purposes.

Sample Preparation, Analysis and Security
Half core samples were submitted for sample preparation at SGS Mineral Services laboratories in Durango, Mexico. The laboratory is located at Aluminio y 2da. Calle Selenio, Cd. Industrial, C.P. 34208, Durango.

Core Sample preparation followed SGS PRP89 procedure, in which samples are dried at +-1000^{C} and then crushed to pass a 10mesh/2mm screen. The sample is then split via a riffle splitter to produce a 250g sub-sample for analysis with the remainder stored as a reject/back-up sample. The 250g split is pulverized to 85% passing 75µm /200mesh.

Pulp samples were then shipped by SGS to their laboratory in Vancouver, British Columbia, Canada. All samples were analyzed according to SGS ICP14B procedure in which a 0.25g pulp sample is digested in a mixture of nitric and hydrochloric acid (Aqua Regia). This digested sample is aspirated into the inductively coupled plasma Optical Emission Spectrometer (ICP-OES) where the atoms in the plasma emit light with characteristic wavelengths for each element. This light is recorded by optical spectrometers and when calibrated, against standards, provides a quantitative analysis for 33 elements.

For core samples reporting base metals at percentage level by this method, sample pulps were fused with sodium peroxide prior to analysis for copper, lead, zinc and silver by ICP-OES according to SGS procedure ICP90Q.

Many of the core samples were also analyzed for gold and silver by fire assay with gravimetric finish (SGS procedure FAG323). This demonstrated sporadic anomalous gold values that were generally insufficient to justify inclusion within the resource estimate.

Soil samples were dried and sieved (according to SGS code PS180) to 180 ⍰ (80#), digested in aqua regia and analyzed for 33 elements by the ICP method (SGS code ICP 70). Gold was determined by fire assay with AA/ICP finish (SGS code FA15) using a 15g sample (detection limit 5ppb).

These sample preparation and analytical procedures were developed by SGS Toronto and SGS Lakefield, Canada and they are accredited to ISO17025. The Durango laboratory has formally documented QA/QC and data acceptance systems contained in on-site quality manuals and procedures. SGS maintained standard QA/QC procedure involving calibration of the ICP-OES at the start of new work batch, and insertion of blank and reference material after every 46 samples and duplicates after every 12 samples. The quality systems in place are audited repeatedly by the Standards Council of Canada as part of the ISO/IEC 17025 accreditation.

A total of 6,728 samples were analyzed and the results entered into a database.

Preparation of Rock/Core Samples
Upon arrival in Durango, core and rock samples were prepared using SGS Code # PRP90 a 30 gramme sample was then shipped by SGS to their laboratory in Vancouver, British Columbia, Canada for analysis. A total of 5524 samples were submitted. Drill core samples numbered to 4945, including 83 second half core check samples. The remaining 496 samples comprise 312 underground and surface channel samples.

Data Verification
The Company's internal QA/QC for data input and verification is as follows:

The Company records the core sample analytical data by hand. These data are then manually entered into a (Excel) spreadsheet. On a regular basis, these spreadsheets are printed, and catalogued thereby serving as "assay certificates."

To assist with quality control, duplicate samples are collected at predetermined sites representing approximately 10% of the total number of samples collected. Analytical results from duplicate sampling and/or check sampling indicate very good correlation between the sample pairs.

SGS XRAL maintains its own internal quality control during the analytical process by inserting known standards into each sample batch. Reference to such analytical results indicates very good correlation between sample batches. Reference samples were sent to Inspectorate laboratory in Reno, Nevada, U.S.A.

It has been concluded from these tests that sample integrity and quality control has not been compromised and that the data falls within acceptable industry standards.

On an ongoing basis, the Company plans to incorporate blanks and standards as well as to continue with the current practice of one sample for every 20 routine split core samples be a duplicate sample in the form of second half core sample and this sample be sent for assay. This would have allowed for the total error associated with sampling, sample preparation and analysis to be estimated.

In order to ensure the validity of the analytical results from the SGS laboratory the Company submitted 80 pulp duplicates to the Inspectorate America Corporation laboratory at Sparks, Nevada, U.S.A, for check assays using similar analytical techniques. After excluding approximately 40 low grade samples (i.e. <50gt/ Ag , < 1% Pb and <1% Zn) the results showed reasonable correlation, but with a systematic bias for lead and zinc which averaged respectively 11.9% and 17.9% higher values in the check samples. No significant bias was recorded for silver (-0.46%). The reason for the bias is unknown and is being investigated by submission of more numerous samples to a third laboratory. The negative bias of the SGS assays relative to the Inspectorate assays suggests the possibility that the resource grades may be understated.

Mineral Resources and Reserves

In February 2010, R. Parker completed an independent technical report and resource update on the Bilbao deposit. The raw data incorporated in the resource estimate consisted of all diamond drilling data from drill progammes carried out between 2006 and 2009 and a limited amount of surface and undergound channel sample data. Parker reviewed and discussed the sample collection methodologies adopted by the Company and was satisfied that data collection methodologies are of a satisfactory standard.

At a cutoff of 3% Zneq, the **Indicated Resource**, for all ore types is as follows:

9.68 million Tonnes at 2.09% Pb, 0.21% Cu 2.43% Zn, 59.4% Ag (6.7% Zn Eq)

An **Inferred Resource** has been estimated using a 3% ZnEq cutoff as follows:

4.04 million Tonnes at 1.55% Pb, 0.17% Cu, 1.43% Zn, 53.64% Ag, (4.93% Zn Eq)

METAL EQUIVALENTS

For The purpose of determining resources at various cutoff grades, zinc equivalent values were determined, based on the average LME price during the months of October to December 2009, as shown in the table below.

Zinc Equivalents based on average prices for October to December 2009							
metal	price, US$	unit	price, US$	unit	price Basis	US$ value 1 g	%Zn equivalent
silver	17.64	ounce	0.567139	gram	kitco	0.567	0.0255
						value 1%	
lead	2283	tonne	1.035562	lb	lme, spot	22.83	1.0270
zinc	2223	tonne	1.008346	lb	lme, spot	22.23	1.0000
copper	6664	tonne	3.022771	lb	lme, spot	66.64	2.9978

The calculation of zinc equivalency was based on the formula: $Zneq = Zn + [(1.027 * Pb) + (3.00 * Cu) + (0.055 * Ag)]$ where zinc and lead are reported in percent and silver in parts per million. Parker believes that it would be premature to make any presumptions concerning relative recoveries in this formula. The calculated zinc equivalent values for each sample have been included in the assay database.

DATABASE

The Company compiled all assays relating to Bilbao drilling in a database consisting of a single Excel spreadsheet. Prior to use in the resource estimate the following general modifications were carried out:

Silver assays below detection (<3 and <0.1) have been replaced by '0.0'. Nineteen silver assays >10 have been replaced by '10.0'; since these are generally isolated samples devoid of support from other metals they are unlikely to impact on the resource. An additional 324 channel samples were collected from three 'glory hole' open pit workings and from approximately 150 metres of underground drift development.

Ore type has been added to the Xtierra data base as an additional attribute ('RTYP') for each sample interval, with determination of ore type according to the description in the Xtierra logs (sulphide=1.0, mixed= 2.0, oxide=3.0). In the absence of any mineralogical descriptions all surface and underground samples have been assumed to be oxide. This assumption is probably accurate in the case of the surface samples but may be less reliable for underground samples, some of which are located close to drill intersections of mixed ore (particularly in DDH X33).

DATA VALIDATION

The assay database supplied by Xtierra contains assays for 7197 diamond core samples, of which 6,924 were analysed for Pb, Cu, Zn and Ag. Spot checks carried out to ensure that the assay data has been accurately transcribed from the relevant assay certificates; no errors were detected.

INPUT DATA

The Excel spreadsheets for collars, survey, assay and geology were exported to text format to allow import into Datamine. Input data for estimation are outlined in the table below.

Bilbao Datamine Input Data													
Datamine File	Number of Records	Fields											
collars	180	BHID	XCOLLAR	YCOLLAR	ZCOLLAR			includes 131 channel sample strings					
survey	180	BHID	AT	BRG	DIP			includes 131 channel sample strings					
assay	7525	BHID	FROM	TO	LENGTH	AU	PB	CU	ZN	AG	SN	ZNEQ	RTYP
geology	353	BHID	FROM	TO	ROCK								
core recovery	4986	BHID	FROM	TO	REN	REC	CREC						

CLASSICAL STATISTICAL ANALYSIS

Descriptive statistical analysis of Bilbao assay data was undertaken in order to understand the characteristics of the assay population.

	Pb	Cu	Zn	Ag	ZNEQ
Number of Samples analysed	7240.00	7240.00	7240.00	7214.00	7240.00
Maximum	19.94	5.30	22.40	2327.00	62.11
Minimum	0.00	0.00	0.00	0.00	0.00
Mean	0.57	0.06	0.62	18.87	1.86
Variance	2.14	0.03038	2.45	3024.00	14.59
Standard Deviation	1.46	0.17	1.57	54.99	3.82
Standard Error	0.01719	0.00205	0.01840	0.64740	0.04489
Skewness	4.27	10.12	4.74	15.89	3.73
Kurtosis	24.19	208.50	31.22	510.70	22.20

WIREFRAME DOMAIN ANALYSIS

Mineralisation occurs in both limestone (as replacement and exoskarn) and granite (as endoskarn). The grade distribution shows a tendency to formation of higher grade lenses, especially within the limestone, however these lenses are too numerous and complex to define accurately by wireframe modeling. The vertical grade constraints are more appropriately modeled by adopting a minimal dimension (5m) to the vertical search ellipsoid. The majority of the higher grade lenses fall within the central part of the deposit, or 'Core Zone Domain'. Mineralisation beyond the Core Zone generally comprises lenses that are less continuous and defined by single intersections, or lower grade diffuse zones, here defined as the 'Outer Zone Domain'.

In order to model this distribution of mineralisation, a single wireframe has been constructed to define the Core Zone domain. This is surrounded by a second wireframe containing most of the mineralisation of the Outer Domain, (but excluding the narrow high grade vein silver mineralisation encountered in holes X26 and X47A). A third wireframe (Stope Wireframe) was constructed surrounding the three main stopes, as determined from the underground DTM survey. This wireframe was used to subtract mined-out material from the resource.

ASSAY COMPOSITES

Prior to statistical analysis and grade interpolation, a set of equal length sample composites of one-metre length was generated from the raw sample intervals. Since the majority of the original sample intervals were one metre, the compositing process resulted in relatively minor re-distribution of grade values.

VARIOGRAPHY

In order to measure the continuity of the mineralisation an attempt was made to calculate variograms in the three principal directions of the deposit, along strike, down dip and vertically. Although satisfactory results were not achieved due to the uneven sample population the resulting variograms helped in the selection of reasonable search ellipse ranges for the various Mineral Resource categories. Drill hole spacing was another important consideration in this regard.

BLOCK MODELLING

Empty Cell Block Model

An empty block model was created to cover the extents of the drilled grid at Bilbao. A parent block size of 10m × 10 m × 10 m was selected. This dimension was selected on the basis of the observed dimensions of the majority of mineralised lenses and in order to conform to the potential mining method and proposed open pit bench height. For thinner lenses this block size results in significant dilution relative to a smaller block size, but the overall resource (as reflected by total metal content) is not significantly altered. The dilution is considered to be appropriate to the potential mining method.

Dimension	**Axis**	**minimum**	**maximum**	**extent, metres**	**spacing**	**# of blocks**
Easting	X	792,700	793,400	700	10	70
Northing	Y	2,508,500	2,509,200	700	10	70
Elevation	Z	1,700	2,200	500	10	50
				total blocks		245,000

The Core Domain wireframe was then assigned to the block model file such that blocks falling inside the core domain were assigned to that domain. During the assigning of wireframes block sub-celling down to a minimum of 5 x 5 x 5 was undertaken to maintain the resolution of the mineralised bodies. The topographic DTM provided by the Company was used to constrain the block model at the surface.

The Outer Domain wireframe includes blocks within the Core Domain, which were subsequently subtracted in the resource calculation.

GRADE INTERPOLATION

In view of the unsatisfactory variograms generated, it was decided that Inverse Distance Squared ("ID^2"), rather than Kriging provided the most appropriate estimation technique. The "inverse distance" technique belongs to a distance-weighted interpolation class of methods where the grade of the block is interpolated from several composites within a defined distance of the block, using the inverse of the distance between a composite and the bock as the weighting factor. The search parameters and criteria for categorisation are presented in the table below:

BILBAO SEARCH ELLIPSOID PARAMETERS								
			search radius, metres			rotation, degrees		
Resource Category	Wireframe Domain	minimum samples for estimation	X axis	Y axis	Z axis	Y axis	Z axis	Xaxis
INDICATED	Corezone	3	40	40	5	-70	-30	20
INFERRED	Outerzone	2	50	50	5	-70	-30	20

The tabular nature of the mineralisation implies poor vertical continuity (short range) in contrast to strong horizontal continuity (long range) along strike and down dip, which has been accommodated by the use of appropriate axes of the search ellipsoid (ie 5m vertically and 40 or 50m horizontally). The search distances used are therefore in accord with the continuity of mineralisation observed in drillholes, derived from variograms, and with the 50m drill grid spacing.

Grade interpolation into block models was performed sequentially for each of the metals assayed (Pb, Zn, Ag and Cu) and for the calculated value for zinc equivalent (Zneq), in order to create a grade model for all metals. Interpolation was also performed for the assigned values for ore type ('RTYP') which was also included in the grade model.

GRADE MODEL VERIFICATION

Grade model plots were combined with drillhole plots and geological cross sections in order to enable comparison and visual verification of assigned block grades by confirming that the block grades in most areas are in close conformity to the geological interpretation and in particular to the extent and orientation of interpreted mineral zones. Comparison of composite grades listed alongside drillhole plots with interpolated grades confirmed that the grade interpolation is reasonable. In the deeper, southwestern part of the deposit (i.e., SW of section X* to X*) the orientation of higher grade zones as indicated by block grades, is not in accord with the geological interpretation which indicates relatively flat grades. However this area accounts for only a small proportion of the resource and should not impact significantly on the estimate.

Resource Categories

Indicated and Inferred Resource categories reflect different levels of confidence in the resource, as defined by the CIM Definition Standards, 2005, as follows:

> ***An '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.*

An 'Indicated Mineral Resource' *is 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.*

In Parker's opinion the 50 metre drill grid used at Bilbao is adequate for geological and grade continuity between intersections in adjacent drill holes to be reasonably assumed within the Core Domain. Blocks interpolated by the 40m search ellipsoid within the Core Domain are therefore considered to fulfill the criteria for Indicated Resources.

In areas outside the Core Domain, most mineral zones are defined by single drill intersections allowing geological and grade continuity to be assumed with a lower level of confidence. Blocks interpolated by the 50m search ellipsoid both within and outside the Core Domain are therefore considered to fulfill the criteria for Inferred Resources.

RESOURCE ESTIMATION

Prior to evaluating wireframes block models were filtered according to interpolated ore type, using the following filter ranges:

<1.5 = sulphide ore
1.5 to 2.5 = mixed ore
>2.5 = oxide ore

The block model was then filtered by ZnEq grade, using cutoffs ranging from 1% Zneq to 6% Zneq, and the resource within each wireframe was then estimated for the various ore types and cutoffs. Resources were estimated for each domain by evaluating the respective wireframes for the Core Domain (using Indicated Resource Parameters) and Outer Domain (using Inferred Resource Parameters). Since the Outer Domain overlaps the Core Domain, Core Indicated Resources were subtracted from total resources to arrive at Inferred Resources.

Mined out material was estimated from the Stope Wireframe and subtracted from the total indicated resource to arrive at net Indicated Resource. At a cutoff of 3% Zneq, the **Indicated Resource**, for all ore types is as follows:

9.68 million Tonnes at 2.09% Pb, 0.21% Cu 2.43% Zn, 59.4% Ag (6.7% Zn Eq)

An **Inferred Resource** has been estimated using a 3% ZnEq cutoff as follows:

4.04 million Tonnes at 1.55% Pb, 0.17% Cu, 1.43% Zn, 53.64% Ag, (4.93% Zn Eq)

The Inferred Resource lies predominantly within the Outer Domain that surrounds the Core Domain. However a proportion of the Inferred Resource comprises blocks that were interpolated by the 50m search ellipsoid lying within the Core Domain.

The Parker (2010) estimate records significantly higher tonnage but somewhat lower grades than previous resource estimates. This is due to a number of factors, principal of which are:

Lower cutoff grade, 3% ZnEq, versus 6% ZnEq for previous estimates
Inclusion of infill drilling after 2007
Inclusion of surface and underground channel samples after 2008
Larger cell size and associated greater dilution
Manual polygonal methods normally overestimate grade

Potential to Increase Resource

The potential to identify additional mineralized bodies is good. The occurrence of stacked lenses of mineralization in sediments close to the contact of the La Blanca granodiorite suggests that similar bodies may occur along that contact elsewhere on the property or district-wide in similar geological context. It is likely that significant mineralization will only be developed when there is the presence of adequate thickness of limestone. The indications are that immediately east of the currently known bodies the limestone capping has limited thickness with the granodiorite being found at shallow depth, as demonstrated by outcrops in the La Guera and El Porvenir claims and the last two (BJ) holes drilled in that area.

Potential to increase the Bilbao resource exists, particularly at depth to the south and southwest where drill hole X40, intersected 13.4 metres grading 6.8% Pb, 5.1% Zn and 79.5 g/t Ag. This hole lies on the southern boundary of the drill grid. Additional deep holes have been planned to ascertain if further sulphide resources persist south of DDH X40 and on the eastern side of the deposit.

Potential to increase the resource may also exist to the northwest where hole X42, collared more than 100 metres outside the drilled grid, intersected 8.75 metres of massive pyrite with only minor base metals from 149.25 metres to 157.00 metres. This hole intersected several low grade base metal zones and a higher grade intersection over 1.0 metre from 181.0 metres to 182.0 metres, assaying 7.32% Pb, 170g/t Ag. This latter intersection has not been included within the present resource estimate as it is located too far from intersections in adjacent holes for continuity to be assumed. The intersections in drill hole X42 occur beneath almost 50m of granite and indicate untested potential in this direction. Step-out drilling in this area has confirmed an extension of thin mineralization at the granitic contact.

Much of the oxide mineralisation outcropping in the vicinity of the Glory Holes in the northern part of the deposit (north of hole X29) has been classified as Inferred since infill drilling on the 50m drill grid was not completed in this area. An additional drilling programme is required to define the shallow oxide resource in these areas with sufficient confidence to elevate it to Indicated category.

In March 2011, the Company retained Mr. Parker to conduct a further review of the Bilbao resources based on all drilling completed to the end of December 2010.

Metallurgical Testing

The first reported study was carried out during 1994-1995, on behalf of Minera Portree by Lakefield Research as part of a consulting consortium consisting of Watts Griffis & McOuat ("WGM") and Kilborn Engineering. At that time Lakefield investigated gravity, flotation and leaching with thourea and cyanide without satisfactory recovery of lead or silver. It was then believed that the silver must be bound up in lead minerals occurring as cerussite and mimetite, or with unidentified silver minerals. Copper and zinc would be recovered by leaching with sulphuric acid and use of solvent extraction with electrolytic precipitation of copper and the zinc.

In 2006, Behre Dolbear suggested Minera Orca investigate the feasibility of using nitric and / or acetic acid to leach lead and silver, in addition to copper and zinc, from the oxide mineralization.

In March 2007, A. H. Summers, BSc, P.E, P.G., Consulting Engineer, prepared a prefeasibility study on the Bilbao Project, which includes the results of recent metallurgical studies. For the purpose of this study, ten (10) metallurgical samples were composited from 1/4 core samples. The geology grades (composite drill core assays) and the Metallurgical Head Grades have a large noise envelope; however, the results from three (3) samples (2 & 3) from hole X-10 and sample 8 from hole X-15 compare very well. A contributing factor to the noise envelope could be to the nature of the metallurgical sample, being a composite of drill cores over many geological sample intervals; whereas the geological assays are a weight average assay. Additionally, the oxide content of the individual samples would be a factor in the assays.

The theoretical metallurgical balance was also calculated, based on optimizing the flowsheet to maximize recovery from the mixed oxide-sulphide zone, in addition to achieving normal expected recoveries from the sulphide zone. A conventional flotation producing a silver/lead/copper concentrate and zinc concentrate. The metallurgical balance is based on preliminary metallurgical testing and metallurgical balances from similar operation in Mexico. In the preliminary testing only three (3) out of the eight (8) samples tested were representative of the sulphide mineralization and the sample from the upper portion of the deposit contained 20-30% oxidized zinc. In the sulphide zone (with >10% oxidation) the lead concentrate reports the lead/silver recoveries were excellent (80% and 70% respectively) and with reasonable (52.5%) lead concentrate grade. The gold also reports to the lead concentrate indicating a recovery of 50%. The zinc concentrate reports 80% zinc recovery yielding a concentrate grade of 49.8% Zn.

Additional metallurgical test work was carried out by Xtierra in 2008 at the Metallurgical Institute of the University of San Luis Potosí by Dr. Alejandro Lopéz Valdivieso and Dr. Shaoxian Song using a process of high intensity magnetic concentration (HIMC) on oxide mineralization considered to be of average deposit grade, resulted in a marked pre-concentration of silver, lead, zinc and copper with no significant loss of any of these metals. Recoveries in the pre-concentrate were 86% for silver, 95% for lead, 88% for zinc and 70% for copper with the percentage of iron being reduced from 22% to 7.2%.

With such a major reduction of iron oxide in the concentrate, the sulphuric acid consumption should be greatly reduced in the zinc and copper leaching process. The residue, containing 35% iron, may also be a marketable product to the cement industry.

	% wt	**Grade g/t**	**%**	**%**	**%**	**%**	**Distribution %**				
		Ag	**Pb**	**Zn**	**Cu**	**Fe**	**Ag**	**Pb**	**Zn**	**Cu**	**Fe**
Feed	100.00	80.50	3.74	1.96	0.27	22.28	100.00	100.00	100.00	100.00	100.00
Non-Magnetic Pre-Concentrate	45.12	153.00	7.87	3.82	0.42	7.23	85.70	94.94	87.94	70.19	14.64
Magnetic Residue	54.88	21.00	0.35	0.43	0.14	34.67	14.30	5.06	12.06	29.81	85.36

Pre-concentrate upgrade of Oxide Mineralization from Bilbao by High Intensity Magnetic Separation
(all analyses carried out at the University of San Luis Potosí)

Based on these initial metallurgical test results on the oxide mineralization the Company decided to commission an internal Prefeasibility Study or Phase 1 of a Feasibility Study since the project could potentially commence as an open pit operation.

Engineering

In April 2009, the Company initiated the first phase of a Feasibility Study on the Bilbao project which was comprised of additional metallurgical test work on the oxide, mixed and sulphide mineralization, geotechnical studies, hydrogeological studies, topographic surveys, conceptual mine planning and engineering studies, preliminary capital and operating costs and environmental and permitting studies.

Metallurgy

Oxides — Metallurgical test work was conducted from May 2009 and completed in January 2010. The results were as follows:

	Ag	Pb	Zn	Cu	Au	Acid Kg/t
% Recovery with WHIMS Pre-concentration	86%	61%	82%	83%	80%	
Metallurgical Recoveries-	67%	41%	61%	71%	55%	98
% Met. Rec. without WHIMS Pre-concentration	64%	30%	81%	16%	51%	300

Based on these results the decision was made to proceed with a Pilot Plant test program to provide the necessary engineering data to confirm the process flow sheet and enable the design of the industrial plant. The results that are shown were obtained with an open circuit bench scale laboratory test program. A closed circuit or locked cycle test program which is essentially a miniature pilot plant test program is now required to obtain essential engineering data to complete the design of the full scale pilot plant.

Four composite samples of 5 tonnes each (total 20 tonnes) were extracted from two underground levels and surface representing the majority of the oxide resource. A pilot plant sized crusher, ball mill and WHIMS (wet high intensity magnetic separator) were set up at the project site to prepare and produce a pre-concentrate for processing off site at a registered testing laboratory. Due to some difficulties and delays in obtaining equipment with related electrical/mechanical problems and availability of adequate laboratory facilities we have incurred a delay of approximately 6 months.

In July 2010, the Company retained DRA Americas, a consulting engineering firm with strength in processing engineering and project engineering/ construction to oversee metallurgical test work and will completion of a Definitive Feasibility Study once all the data is available.

An open circuit bench scale laboratory test program is currently being conducted at the SGS Laboratory in Durango Mexico. Once these and further tests are completed a closed circuit or locked cycle test program will be initiated. This will then be followed by the full scale Pilot Plant which will also be conducted at the SGS-Durango facility. Providing no further delays are incurred, the Pilot Plant test program will be completed by late Q2-2011.

Mixed and Sulphide ores — the test work on both materials have been completed and final reports from the Research Centre at the University of San Luis Potosi will be available during the Q2 2011.

Geotechnical Study

The Phase 1 program results and design were confirmed after an 8-hole geotechnical “in-the-hole” geophysical survey was completed. Ground conditions in general are good allowing for an overall slope angle of +45 degrees. The final report has been completed.

Hydrogeological Study

The Bilbao project area is located in the centre of three aquifers and Schlumberger have confirmed an adequate water supply to be present. Their final report will be available late April 2011. They will establish targeted water wells on our site and also water wells that could be purchased in close proximity to the project site. The next step will be to purchase water rights and possibly drill new wells on site.

Mining — Open Pit and Underground

The basic engineering has been completed for both open pit and underground areas with bench/ level plans and extracted volumes available. Capital and Operating costs are being finalized. Once the final resource model becomes available (early April 2011) a final level and bench plan review related to geometry and grades will be conducted and finalized. The final mine plans will be available by mid/late 2Q 2011.

Environmental Studies

SIICA, the consulting firm, have completed the Phase 1 baseline studies and further work is on hold until the final metallurgical process and related geochemical data as well as tailings management design have been completed. Permit applications will be completed once the final data is available.

Tailings Management Design

Golder Associates have completed their initial scoping study and concluded that we should consider a thickened tailing deposition system. Once tailings material is available from the Pilot Plant, it will be tested, and analyzed to confirm the preferential system of disposal and engineering design and capital cost estimates will be concluded.

Completion of a definitive Feasibility Study by DRA is contingent on completing the oxide mineralization pilot plant which is anticipated in late Q2 2011. This will provide the engineering data to confirm the flow sheet and allow the design, CAPEX and operating costs for the processing plant. The acquired engineering data will also allow completion of the tailings management design and environmental report and permit applications. Therefore, considering the aforementioned, DRA generated DFFS should be completed by late Q3 2011.

2. La Laguna Pedernalillo ("Laguna") Tailings Project, State of Zacatecas

The Company's rights to the Property are held through its subsidiary company Minera Orca, S.A. de C.V. in which the Company holds an indirect 100% interest.

Micon International Limited ("Micon") was retained to prepare an independent technical report on the Laguna Project, within the meaning of National Instrument 43-101 (NI-43-101). Information in this section of a scientific or technical nature in respect of the Laguna project is based upon the technical report entitled "*Technical Report of the Pedernalillo (Laguna) Project*" dated March, 2008, prepared by Jonathan Steedman, M.Sc., MAusIMM, Reno Pressacco, M.Sc. (A), P.Geo., Ian Ward, P.Eng. and Sam J. Shoemaker, Jr., MAusIMM of Micon. All of the authors are "Qualified Persons" as such term is defined in NI 43-101 and are independent of the Company. The full report is available on SEDAR at www.sedar.com.

Introduction

In 2004, Minco Plc (Minco) commissioned Micon to undertake a pre-feasibility study for the Pedernalillo tailings deposit based on a proposed extraction rate of 1 million tonnes per year. The study showed robust economics and further drilling was conducted until the end of 2004 in order to improve the mineral resource classification. In 2005, Minco commissioned Micon to update the resource model and cost estimate, and to conduct a feasibility study for the project, which was completed in January 2006. In October 2007, Orca commissioned Micon to complete a Technical Report on the project compliant with the requirements of NI-43-101 with updated mineral resource/mineral reserve estimates, evaluation of project economics and a revised plant site location.

In February 2008, Micon International completed a revised Technical Report on the project compliant with the requirements of NI 43-101 with updated mineral resource/mineral reserve estimates, evaluation of project economics and a revised plant site location. The mineral reserve, as estimated by Micon, totals 6,799,000 tonnes containing an average of 57.92 g/t silver, 0.31 g/t gold and 328.92 g/t mercury. This reserve includes only that material which is classified in either the proven or probable categories. A volume comprising approximately 10% of the mineral reserve is present within the outline of the 20 g/t Ag domain model that is classified as Inferred Mineral Resources, and would be mined together with the mineral reserves. Micon have estimated total direct cost of $17.537 million together with indirect and owner's cost of $7.743 million. An additional $8.923 million is estimated for pre-production cost for the tailings area.

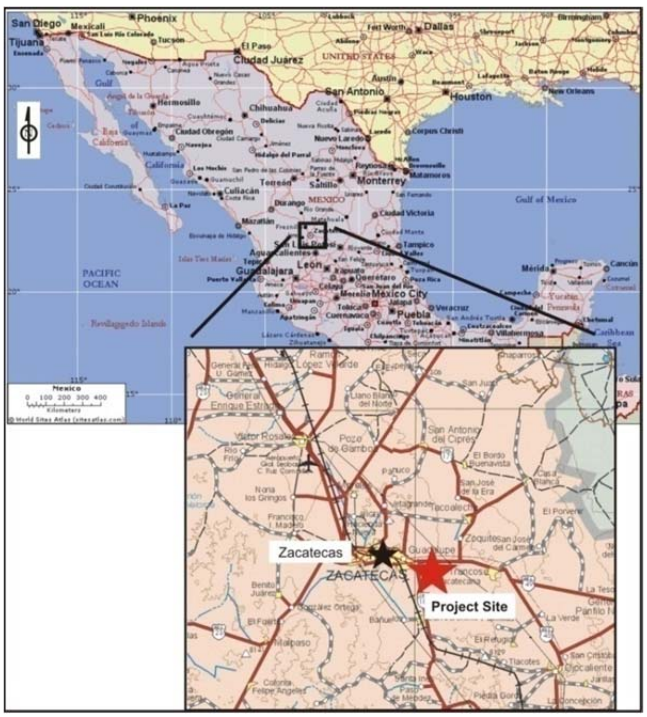
Minera Orca has an extraction licence for the silver-rich Laguna tailings deposit located near the city of Zacatecas in Mexico.

The Laguna tailings deposit accumulated over several centuries in a natural depression which also receives several streams. In 1836 a dam was constructed to retain water in the depression for agricultural use, and since that time the tailings have been largely below the water level. The depth of water above the tailings is typically 0.5 to 2 m. In 2004, the reservoir was filled with water. During the last two years, due to a local drought, the water level has dropped considerably though most of the deposit remains water-logged. Several previous studies estimated the resource to be in the range of 6 to 9 million tonnes of solids containing in the order of 85 to 100 g/t of silver, plus gold and mercury. The extraction licence granted by Conagua, the Mexican authority responsible for water resources, limits the extraction essentially to the deposit, within a defined artificial boundary but somewhat close to the lake's normal level, shown in this report as the "Concession Boundary" and referred to as the Conagua concession. Parts of the deposit outside this boundary are overlain by land which is owned by private landowners or cooperatives (ejidos) and is used for agricultural purposes.

Several prior studies have examined the resource and potential processing methods, but only incomplete data have been available to Minco from the previous work, thus necessitating the 2004 drilling program and metallurgical testing. The project site was visited by representatives of Micon and Golder Associates Ltd. (Golder) in March 2004 in order to collect data and commence a feasibility study of the project. Mr. Ian Ward of Micon visited the property on March 22 to 26, 2004, in order to review existing site conditions and infrastructure, and to observe operation of a local vat-leaching processing plant treating land-based tailings material. Mr. Reno Pressacco of Micon visited the property on March 22 to 26, 2004, May 13 to 17, 2004 and August 26 and 27, 2004 when the general site conditions were observed, the drilling progress was reviewed, and the sampling procedures were observed. Mr. Sam Shoemaker, retained by Micon, visited the property on November 19, 2007 when the general conditions of the proposed plant site and alternate plant site were reviewed, the current level of the lake was examined and the merits of the various mining methods were discussed with Orca staff.

Property Description and Location

The deposit is located in central Mexico some 5 km east of the state capital Zacatecas, in Zacatecas State, at an elevation of 2,200 m. The UTM co-ordinates of the deposit are X 760250 and Y 2516250 in Zone 13Q.

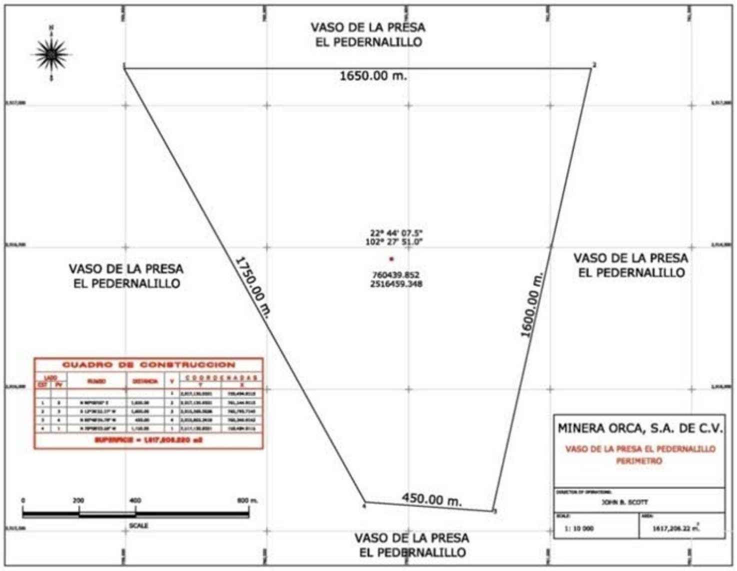


Location of the Laguna Project

Minera Orca has been granted a concession dated December 10, 2003 by the Comision Nacional del Agua (Conagua) Title No. 07ZAC200659/37FBGE03 dated December 10, 2003 relating to the extraction of 6 million cubic metres (m^3) of tailings material from the Presa El Pedernalillo, La Zacatecana, Guadalupe, Zacatecas. The mining concession comprises 2,030,000 square metres (m^2) that are located within a quadrangle defined within the mineral concession document. The centre of the quadrangle is located at approximately 22˚ 44' 07.5" North Latitude, 102˚ 27' 51.0" West Longitude.

No royalties or back in rights are attached to this concession, however a fee in the amount of MXN11.00/m^3 (about US$1.00/$m^3$) of tailings extracted is payable to Conagua.

Boundary of Mineral Concession



Accessibility, Climate, Local Resources, Infrastructure and Physiography

Refer to the similar named section of the Bilbao Property.

The subject property is accessed easily by motor vehicle by means of several paved highways and local dirt tracks. Sources of power and water are readily had due to the projects' close proximity to the city of Zacatecas, and skilled mining personnel are available both locally and in the region, as a number of mining operations are present.

History

The Laguna tailings project has been evaluated by a number of Mexican and foreign companies over the past 25 years. Significant studies were undertaken by the Comision de Fomento Minera (CFM), Asiamerica Capital Ltd., Pan American Minerals Corp. (PAM)/Pan American Silver Corporation (PAS) and Minco plc.

The deposit has been studied and sampled by several Mexican groups and more recently by Pan American Silver. In the 1980s, work by CFM and others had shown that silver-bearing material was located in two areas within the project area. The first area was located northwest of the lake at Laguna Zacatecana, and the second was submerged in the bed of the lake itself.

Previous exploration activities in 1985 used a vibratory sonic drill rig. For drilling of the submerged areas, the rig was supported on a custom-built raft. In 1984, CFM completed a reserve and resource estimate and in 1988, Asiamerica Capital retained Wright Engineering to prepare a Process and Feasibility Study Review.

In the early 1990s, PAM conducted an extensive drilling campaign, sampling, assaying and metallurgical testing. It developed resource estimates and commissioned Kilborn Engineering to complete a Pre-feasibility Study on the tailings project in 1994.

The project was acquired during the mid to late 1990s by local Mexican interests represented by Sr. Martin Sutti who completed additional drilling on parts of the lake bed during a season of low or absent water levels. Sr. Sutti introduced the project to Orca Gold International prior to that company's reverse takeover of Minco plc in 2003.

The results of the work carried out by PAS, Asiamerica Capital and Sr. Sutti are generally not available for review as they constitute proprietary information and the drilling logs have not been located. However, Minco was able to obtain for review some of the previous studies for the deposit which were conducted during the last 25 years.

In 2004, Minco commissioned Micon to undertake a pre-feasibility study for the deposit based on a proposed extraction rate of one million tonnes per year. This study showed robust economics for the project, and further drilling was conducted until the end of 2004 in order to improve the identified mineral resource.

In 2005, Minco commissioned Micon to update the resource model and estimate, and to conduct a full feasibility study for the project, which was completed in January, 2006.

During 2006, Minco considered a number of alternatives to the mining and process methods suggested by Micon, the approach to tailings disposal as well as alternative locations for plant and tailings disposal with a view to reducing the estimated capital expenditure.

The Company will seek to advance the Laguna Project through additional metallurgical testing or permitting, either directly or through other farm-out or joint venture arrangements.

Geological Setting

Refer to the Regional Geology section of the Bilbao Project for the general geological setting.

The Zacatecas area of central Mexico has had a long history of silver production, starting soon after the arrival of the Spanish colonists in the early 1500s. Since 1546, and until the early 1800s, silver has been produced from mining of a large number of quartz veins and extraction of contained silver by means of the Patio process that used fine crushing and mercury amalgamation. The tailings from this process were typically discharged into a local river known as Rio Plata which flowed eastwards through Zacatecas and down to the flat valley floor located approximately 5 km to the east. The Patio process did not achieve a high metallurgical recovery and the tailings that were discharged into the Rio Plata contained a significant amount of silver, gold and mercury. These tailings washed downstream for distances of tens of kilometres, accumulating in a number of locales. One such area was near the present small village of Zacatecana where they accumulated in a natural depression near the confluence of two streams, which subsequently was dammed to form the present lake, Laguna Zacatecana. Most of the mines ceased operation after Mexican Independence, and the Patio process is no longer used. Thus, no further sediment is being introduced into the lake.

The Pedernalillo deposit is made up of tailings from historic mining and processing. It has no direct relationship with the underlying rocks and geological structures.

Mineralization

The distribution of silver and subsidiary mineralization in the depression, now a lake, was controlled by the direction of inflows of tailings in the Rio Plata, and by the presence of topographic depressions upstream of the dam. In general terms, the Rio Plata has entered from the northwestern sector of the lake, and is the main source of silver-bearing sediment. An additional influence is the presence of a minor stream that flows through the area in a northerly direction. The water retention dam was located immediately downstream of the confluence of these two drainage systems. Topographic depressions can be anticipated along the respective valleys of the two drainage systems and at their confluence. Sediment can be expected to accumulate initially at the lowest topographic point, and continue to accumulate along the shallow valleys of the stream channels.

As the level of sediment increases, the additional incoming sediment will be deposited at higher elevations and over wider areas along the lake bottom. The confluence area of the two drainages and the individual drainage channels are favourable sites for the thickest accumulations of silver- gold- and mercury-bearing sediments.

Various types of silver-bearing sediment were encountered during the course of the drilling program, including sand, silt, clay, regolith (the original topsoil layer located beneath the silver-bearing sediment), vegetable matter and topsoil.

Exploration

Very little public domain information is available in regards to the exploration history of this deposit. From verbal accounts from local knowledgeable mining industry personnel, the deposit has been studied and sampled by several Mexican groups and more recently by Pan American Minerals and Pan American Silver from 1985. PAS conducted an extensive drilling campaign, sampling, assaying and metallurgical testing. PAS developed resource estimates, but this work and specifically the drill logs and hole locations were not available to either Minco or Orca Minerals and could not be incorporated into the present modelling and mineral resource estimate.

Previous work had shown that silver-bearing material was located in two areas within the project area. The first area was located northwest of the lake at Laguna Zacatecana, and the second was submerged in the bed of the lake itself.

Previous exploration activities in 1985 used a vibratory sonic drill rig. For drilling of the submerged areas, the drill rig was supported on a custom-built raft. With the success that was achieved using this method of drilling, the same method was selected for the 2004 campaign to recover core samples from both the bottom of the lake and from the land-based mineralized material.

Drilling

The 2004 drilling was carried out by MPI Drilling Limited, Picton, Ontario, Canada, who commenced drilling on May 14, 2004. The drilling method uses standard sized drill rods and modified casing shoes to recover the core sample.

The method relies upon the vibration that is caused by an eccentrically mounted drive head to displace material at the bit face and allow the drill rods to descend into the unconsolidated material. Drill cores of HQ, NQ, and BQ diameters were recovered. The program comprised 408 drill holes that totalled 2,810.69 m in length that were completed between May and December 2004. The maximum depth of penetration was in drill hole 401 that achieved a depth of 16.2 m. The location of drill hole collars relative to the outlines of the concessions and limit of the lake outline as of the fall of 2004 are presented below.

Reno Pressacco, P.Geo., who held the position of Senior Geologist with Micon at the time of the drilling program, developed the drilling, sampling and Quality Assurance and Quality Control (QA/QC) program, supervised it during a portion of the drilling campaign, and visited the site during drilling activities in May and August of 2004. The drilling and sampling protocols were established according to the principles presented in the Exploration Best Practices Guidelines as presented by CIM.

The drill collar elevations for those holes located in the lake were taken as the elevation of the water level as of June 2004. This elevation was determined by a topographical survey that was based upon the elevations of several national survey monuments located nearby and from survey pins installed during the 2004 drilling program. The elevations of the land-based drill holes were determined by an elevation survey that was conducted following the completion of the drill holes. The execution of the drilling program was completed under the supervision of contract staff employed by Minera Orca. The locations of the drill holes were determined using a Garmin 12 hand-held GPS unit and were marked using pickets that were driven into the bed of the lake. The NAD27 (Mexico) Universal Transverse Mercator (Zone 13Q) co-ordinate system was adopted for this drilling program. This grid system was tied into a total of nine permanent topographic control points consisting of steel rods hammered into the ground, national survey monuments, and cut crosses that were established in the area. The accuracy of the GPS unit was determined to be 1 m by reproducing the co-ordinates of a given point in the field on a number of occasions.

The original survey, as observed by Micon, gave an elevation value of 2,222.05 m for the lake surface. This was later revised by Dr. Aucott of Mining Exploration and Geosystem Associates (MEGA). During Dr. Aucott's work, an error in one of the base station reference points was discovered. As a result, all elevation data were revised to give a lake elevation of 2,203.05 m. Micon has relied on this later survey information.

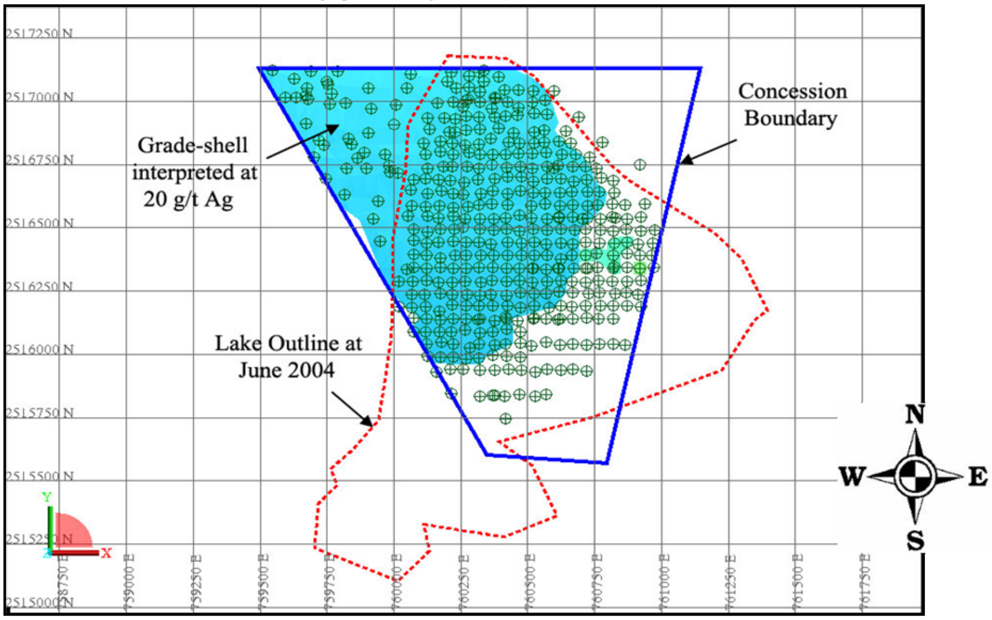
The maximum water depth encountered during the drilling program was 3.5 m.

The drill core samples were placed into plastic gutters in nominal 1.5-m increments, with the depths being marked on wooden blocks that were placed at the appropriate intervals. The core was then transported to a location along the shore line for subsequent logging and sampling.

View of Sonic Drill Rig, 2004 Drilling Program

Micon examined the drilling procedures that were utilized for the collection of drill core samples and is satisfied that they have been carried out accurately.

Locations of Drill Hole Collars, Pedernalillo 2004 Drilling Program
(Drill hole collars shown by green symbol)



Scale: each grid square 250 m by 250 m.

Sampling Method and Approach

The various types of sediments recovered in the drill holes were first recorded on paper drill hole records, and subsequently transcribed into a (Excel) spreadsheet. Samples were selected for assay according to sediment type. Sampling extents were governed by a change in the type of material and the sample lengths were limited to a maximum of 1 m.

The drill core was split in half by staff in the employ of Minera Orca which held title to the mineral concessions at the time of the drilling program. The core was split using a hand-held machete and each half of the core was placed in sequentially numbered sample bags. One half of the drill core was sent to the assay laboratory, while the second half was retained in a local garage for reference and future use.

In terms of the sample quality, the material contained in recovered cores appeared to provide a representative sample of the different types of sediment that could be expected to be present in the bottom of the lake, as well as providing an adequate representation of the particle size distribution that could be present. In some cases the length of the recovered core was shorter than indicated from the depth markers placed in the core trays by the drilling contractor. As a result of a number of conversations with the drilling contractor, it is believed that this apparent loss of core was due either to compaction of the sample column from loss of pore water due to vibration of the in-situ material during the drilling activity or from a loss due to grinding of the core or losses from the core sample slipping through the drill bit upon retrieval from the drill hole. Micon believes that these instances of incomplete recovery will not present a material impact upon the mineral resource estimate.

A tabulation of the significant mineralized intersections contained within the 20 g/t Ag mineralization domain (described in more detail below) is presented below. Data pertain to drill holes within the Conagua concession boundary.

Sample Preparation, Analyses And Security

A total of 1,239 drill core samples were sent to the preparation laboratories of either SGS Limited located in Tampico, Mexico or BSI Laboratories located in Durango, Mexico. At the SGS preparation laboratory the samples were dried in an oven at a nominal 100 °C. The samples were then disaggregated until all of the sample material passed through a 10 mesh screen and were split using a Jones riffle to produce a 250-g sub-sample. The sub-sample was forwarded to the SGS-XRAL facilities in Toronto, Ontario and was then milled in a ring-and-puck pulverizer until the sample was 85% minus 200 mesh in size.

The silver contents were determined by means of an aqua regia preparation followed by atomic absorption spectroscopy (AAS) using a 10-g aliquot. The gold contents were determined by means of a fire assay fusion preparation and AAS using a one assay ton aliquot. The mercury contents were determined using an inductively coupled plasma method.

A program of blind check sampling was implemented throughout the drilling campaign. This program consisted of inserting a blank sample, a duplicate sample and a reference sample after every 20 samples had been taken. The material for the blank sample was chosen from locally available sand that was unlikely to contain silver, gold or mercury. The purpose of inserting blank samples is to monitor for any contamination that may occur during sample preparation or analysis. The duplicate samples consisted of the second half of the drill cores and their purpose is to monitor the precision or natural variation that can occur during the sampling and assaying program. The reference sample consisted of certified reference standard number OX-14 that was prepared and certified by Rocklabs of New Zealand. The purpose of inserting a certified reference standard is to monitor the accuracy of the assaying process. In addition to these blind check samples, SGS-XRAL conducts a program of internal check sampling whereby replicate assays are determined on a periodic basis and are reported to the client. The purpose of these replicate samples is to monitor the precision that the laboratory is achieving during the analysis. The duplicate values for both silver and gold assays display a good correlation, with no significant bias.

Examination of the silver values shows that the reported value is consistently below the recommended value for the reference material. Discussions with representatives of both SGS-XRAL and Rocklabs suggested that perhaps the analytical method being used to determine the silver content was the source of the discrepancy. This possibility was addressed by the assay for silver of a small number of samples by SGS-XRAL using a fire assay/atomic absorption method. The recommended reference silver value of 10.5 g/t ± 0.32 g/t was derived from an average value from 22 analytical laboratories that included SGS-XRAL. The values reported ranged from a minimum of 9.2 g/t silver to a maximum of 12.0 g/t silver. The remaining possibility is that SGS-XRAL was one of the laboratories that reported the lower silver values.

In Micon's opinion, the sample preparation, security and analytical procedures were adequate and appropriate to the task at hand.

Data Verification

Data verification conducted by Micon included supervision of the establishment of the topographic control system used to locate the drill hole locations, establishment and supervision of the core logging and sampling protocols, and establishment of the Quality Assurance/Quality Control (QA/QC) procedures that were employed during the analysis of the drill cores. Micon then reviewed the QA/QC results from the 2004 drilling program on a regular basis, as well as validating the drill hole database against the survey co-ordinates, drill logs and assay certificates on a regular basis to ensure that no transcription errors occurred. Details of the results of these activities have been presented in Section 13, above.

Mineral Processing And Metallurgical Testing

Metallurgical testing with samples from the Laguna Zacatecana deposit has been conducted during 2004-2005. Samples for the metallurgical testing program were obtained using drill cores recovered during the 2004 drilling program.

PRA 2004 program

During the 2004 drilling program, metallurgical samples were selected from the recovered cores from different areas of the deposit. It was expected during logging of the core that these would represent three distinct types of the deposit, so they were combined to form three initial composites.

Metallurgical testing was conducted by the Process Research Associates (PRA) laboratory in Vancouver, Canada, under supervision by Ian Ward, P.Eng., an author of this report. After initial tests with the three separate composites, it was determined that they were quite similar in respect to particle size distribution and metal extraction, and the remaining work was conducted with a mixture of the three.

PRA's initial work included sample characterization. The samples showed the particles to be extremely fine, with generally 70-80% of the material particles, and contained metals, passing 37 microns (µm) (400 mesh). The leaching tests commenced with the use of ammonium thiosulphate leachant, as this had been used successfully in a previous program by PRA during testwork on Laguna Zacatecana samples for studies of the deposit conducted in 1996. Subsequently, PRA showed that improved silver and mercury recovery was obtained with a leachant containing calcium thiosulphate, as is presently used by the local vat leaching plants. After optimizing extraction, later tests were conducted to determine minimum reagent dosage and optimum leach time. PRA also evaluated cyanide leaching with preliminary tests and found it to be ineffective for mercury dissolution.

Residue samples were tested for filtering and thickening characteristics. Due to the fine particle size distribution, filtering rates were poor. Thickening tests using preliminary flocculant selection also showed low solids settling rates and terminal densities equivalent to 37% solids by weight. Further work was expected to be required to select the optimum dewatering characteristics, including evaluation of high-rate thickening, flocculant scoping and pressure filter testing.

MRP 2005 program

Further testing was conducted in 2005 by Minera Reina del Pacifico (MRP) in a laboratory of the University of San Luis Potosi, using new composite samples from the same 2004 drilling campaign. The program consisted of scoping tests followed by detailed leaching, thickening and filtration tests, intended to provide metallurgical design data.

In summary, the MRP work showed that improved metal extraction (compared with the PRA results) could be obtained by using the ammonium-based thiosulphate leachant. A blend of ammonium thiosulphite, ammonium sulphite and ammonium hydroxide was employed with copper sulphate catalyst. The consumption rate was determined by a series of tests with recycled solution carrying residual reagent, although it was not possible to measure directly the chemical content. Following the test program, prices were obtained for supply in Mexico of the required reagents, which indicated that the ammonium-based leachants would cost significantly more than the calcium-based leachants already proven by PRA, although the ammonium-based system would yield higher silver dissolution. The final stage of testing was conducted to optimize reagent consumption, and this work is summarized in the report "Reporte Complementario para optimizar el Consumo de Reactivos", retained by Orca Minerals.

Following scoping tests a large leach test was conducted to provide optimum conditions and samples for thickening and filtration. Thickening tests showed an optimum selection of flocculant and ability to thicken the slurry to a maximum density of approximately 40% solids, and extraction by counter-current processing was studied.

Filtration tests were conducted by both Eimco and Larox. Eimco tests with a filter press unit provided the best results, yielding filter cake moistures of approximately 34% in the best tests. Results were used by Eimco to size equipment for a full scale plant design and to provide budget pricing. The tests with a Larox filter unit were not successful due to blinding of the filter cloth during the pressing cycle. Results of the thickening and filtration testing are contained in the MRP report "Pruebas de Lavado en Contracorriente, Tratamiento de Solución Estéril, Filtrado de Pulpa al 40% de Sólidos", which is retained by Orca Minerals.

In order to optimize the metal extraction level and leaching costs, PRA conducted a further program in 2005, using a composite sample similar to the one tested by MRP in Mexico. PRA confirmed the metal extractions obtained in the 2004 program, and was able to demonstrate reduced reagent (calcium thiosulphate) consumption, compared with the 2004 levels. The calcium-based reagent is considerably cheaper than purchased ammonium-based reagents, so the calcium-based reagent scheme was selected for plant design despite the somewhat reduced metal extraction. Predicted metal extractions averaged from the 2004-2005 tests are as stated below. The optimum calcium thiosulphate addition rate is predicted as 11.1 kg/t, together with sulphur dioxide at 4.8 kg/t.

Metallurgical Testing

Subsequent testing by Outokumpu Technology (now Outotec) in Canada, using products from the PRA program, showed that a high rate thickening process with a reasonable flocculant addition could yield slurry densities of above 50% solids by weight. Flocculant testing was also conducted by CIBA to select the optimum flocculant type and dosage, but no report was completed.

Mineral Resource and Mineral Reserve Estimates

Summary

The La Laguna project in central Mexico is based upon the proposed extraction of the mineralized sediments, located in and around the lake known as Laguna Zacatecana, which comprise the accumulation of tailings material resulting from historical mining in the area. The deposit contains silver, gold and mercury mineralization. Part of the mineralization was submerged at the time of the drilling program in 2004, with land based mineralized sediments in the northwest of the project area.

A total of 408 holes were drilled in the project area during the second half of 2004 and within the boundary of the Conagua concession area. A 3D dimensional model of the mineralized sediments was constructed, with a block model for the estimation of the contained metals. The estimated Mineral Resource contained within the confines of the Conagua concession is presented in the table below.

Summary of La Laguna Mineral Resource Estimate

Measured					
Tonnes	Silver (g/t)	Contained Silver (kg)	Gold (g/t)	Contained Gold (kg)	Mercury (g/t)
529,000	55.12	29,158	0.29	153	351.04
Indicated					
Tonnes	Silver (g/t)	Contained Silver (kg)	Gold (g/t)	Contained Gold (kg)	Mercury (g/t)
6,270,000	58.16	364,663	0.31	1,944	327.05
Total, Measured and Indicated					
Tonnes	Silver (g/t)	Contained Silver (kg)	Gold (g/t)	Contained Gold (kg)	Mercury (g/t)
6,799,000	57.92	393,821	0.31	2,097	328.92

Inferred					
Tonnes	Silver (g/t)	Contained Silver (kg)	Gold (g/t)	Contained Gold (kg)	Mercury (g/t)
498,000	71.87	35,791	0.38	189	261.26

Summary of Previous Mineral Resource Estimates
The interim estimate made by Mineral Exploration and Geosystem Associates (MEGA) during the course of the 2004 drilling program is presented below.

Interim Resource Estimate October, 2004 by MEGA

Classification	Tonnes ('000)	Silver			Gold			Tonnes ('000)	Mercury	
		Grade (g/t)	Metal (kg)	Metal (M oz)	Grade (g/t)	Metal (kg)	Metal (M oz)		Grade (g/t)	Metal (t)
Measured plus Indicated	6,452	69.14	446,101	13.88	0.39	2,501	0.078	4,711	290.3	1.367
Total Resources	7,611	67.53	513,937	15.99	0.37	2,849	0.089	5,688	267.8	1.523

Mineral Resource Estimate

Introduction

The Micon mineral resource estimate reported herein represents an update of the interim resource estimate prepared by MEGA. As noted above, the interim estimate was prepared by MEGA prior to completion of the 2004 drill program. The Micon mineral resource estimate utilizes data from the completed drill program at the Pedernalillo La Laguna project and within the constraint of the Concession boundary granted by Conagua which limits extraction of the deposit.

The Micon estimation methodology uses a 3D wireframe model of the mineralized sediments constructed from interpretation of the drill hole data made in cross section. The 3D wireframe is imposed on a 3D block model into which silver, gold and mercury values are interpolated from drill hole data using the inverse distance weighting method. The 3D wireframe constrains the interpolation. The 3D mineral resource block model forms the basis of the mine planning study that will determine the portion of the mineral resource model that will be extracted during mining operations and, hence, the La Laguna project mineral reserve.

Database Audit

As part of the resource estimate procedure, an audit of the database is conducted. The audit was completed in two parts.

For the first part of the audit a total of 28 drill logs were selected, representing approximately 10% of the drill holes that had been completed up to September 12, 2004. The collar and assay information contained in the drill logs was compared to that entered in the project database.

A number of discrepancies were discovered in the collar location information. In addition, a number of instances were found where only a portion of the lithologies recovered by a drill hole were included in the database. Micon recommends that a separate table be created in the database to capture all lithological information obtained from this drilling program. At that time, Micon recommended that verification of all of the collar locations be completed, which has since been carried out.

For the second part of the audit, prior to the resource estimation, a detailed check was made of the assay database compiled between September and December, 2004. An initial concern prompted a complete check of samples in the database numbered 10618 to 11075 inclusive against the assay certificates.

Having completed its review of the assay data supplied by Minco, Micon is satisfied that the data presented are accurate and can be relied upon in the preparation of a mineral resource estimate.

The data upon which the mineral resource estimate is based result from the completed 2004 drill program. The data remain current as of the effective date of the Micon mineral resource estimate since no further drilling, sampling or assaying have been completed.

Construction of resource model

In that mining, milling, and general and administrative costs could not be estimated to a reasonable degree of accuracy for the project at the time of the modelling, a break even cut-off grade derived from economic parameters could not be justified. Initial metallurgical testwork demonstrated, however, that the residual silver content of metallurgical extraction tests can be expected to be in the order of 20 g/t. Consequently, a cut-off grade of 20 g/t silver was used in the construction of the grade shell that represents the distribution of the silver bearing sediments.

The method used by Micon for construction of the grade shell is described below:

Interpretation was made on 24 vertical sections spaced at approximately 50 m in an east-west orientation. This is illustrated by the lines within the grade shell (in blue) shown in the figure below. All assay information in the drill hole database was used in this process.

Within the mineralized sediments a cut-off grade of 20 g/t silver was applied in determining the upper and lower limits of the mineralization in each drill hole. Points in the section shapes were snapped to drill hole intersections to give the exact 3D shape, shown in the figure below. The method used was varied for the two different areas of mineralized sediments, namely those submerged and those on land lying to the northwest of the lake.

In the lake area the submerged mineralized sediments contain material of less than 20 g/t silver as a discontinuous layer above sediments containing higher silver grades. As selective extraction of the submerged mineralized sediments is unlikely, this lower grade material will be mined along with the higher grade material below. Consequently, this layer of lower grade material has been included in the interpreted shape as unavoidable mining dilution.

In the land based portion of the project area the mineralized sediments also contain material of less than 20 g/t silver as a discontinuous layer above sediments containing higher silver grades. Selective extraction is anticipated in this area and, as a result, this layer of lower grade material has been excluded from the interpreted shape.

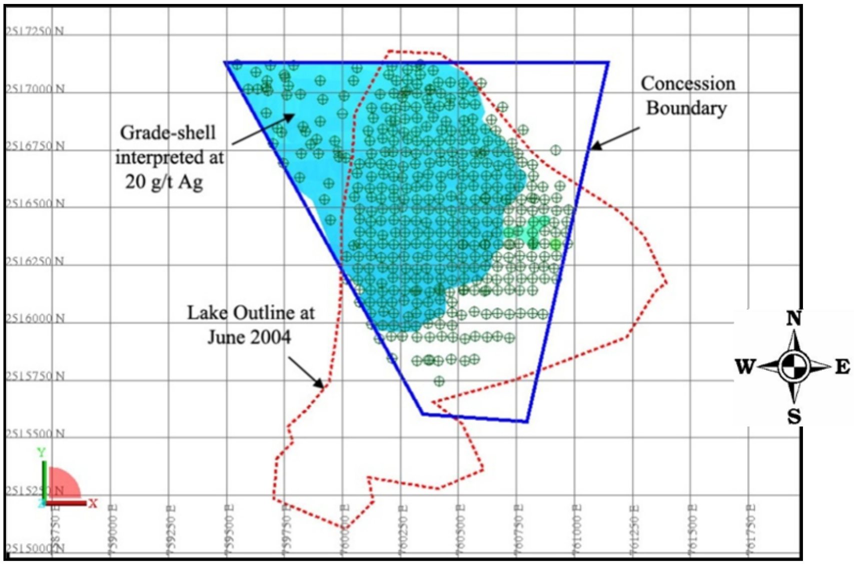
The lateral limit of the interpreted shape is taken as half way between drill holes.

Where drill holes are not present to limit the interpretation, the interpretation has been extended approximately 50 m on section. For the northern limit in the land based portion of the mineralized sediments the last interpreted shape has been extrapolated 50 m.

A wireframe model of the grade shell was created from the shapes interpreted in vertical section.

The proprietary geological modelling software Surpac Vision version 5.0K was used for this and all other modelling work.

Plan View Showing Location of 20 g/t Silver Grade Shell and Drill Holes



Scale: each grid square 250 m by 250 m.

Micon notes that in the northern area of the submerged section of the deposit, holes end within mineralized sediments as the limit of the drilling method is reached.

<u>Statistical Analysis of Sample Data</u>

Assays

The raw assay samples lying within the grade shell were analyzed. The frequency distribution of the samples is presented for silver, gold and for mercury. The histogram for silver shows a fairly even distribution with a rapid fall off of high grade values, as would be anticipated. The small amount of material below 20 g/t silver present is the result of inclusion of lower grade material that will necessarily be mined. The histogram for gold shows a distribution with a slight negative skew and declining high grade values. The histogram for mercury shows a wide spread of values, with higher values once again declining.

The cumulative frequency distributions of sample populations were also examined to identify the presence of high grade populations or extreme values resulting from sampling errors. In either case, these samples can exert an undue influence during block grade interpolation. They can result in over-estimation of block grades and lead to poor reconciliation of expected and actual metal production. No high grade populations or extreme values were identified for any of the elements analyzed.

Sample Composites

Raw assay samples lying within the grade shell were composited for silver, gold and mercury using 3-m lengths. Three metres was chosen because of the wide range of sampling intervals present in the data set. Almost 90% of samples are 3 m or less. An assay interval of at least 25% of the composite length was required in order for a composite value to be created.

Top Cutting High Value Assays

Examination of the log probability plots shows that no high grade populations or extreme value samples are present and thus no top cutting was applied.

Variography

Variography is a means of establishing and quantifying the spatial continuity of grade values. The variogram calculation ($\delta_{(h)}$) provides an estimate of the mean squared difference of sample data pairs separated by a fixed distance (h). Where spatial correlation exists between sample data points the $\delta_{(h)}$ value would be expected to be lower for closely spaced samples and increase in value as the distance between sample pairs (h) increases. Where the mineralization or sampling pattern indicates continuity along a preferred orientation directional variograms are calculated to determine $\delta_{(h)}$ along degrees of azimuth in order to identify the direction of highest spatial correlation.

Directional semi-variograms ($½\delta_{(h)}$) were calculated for the sample composites in an east-west and north-south direction reflecting the shape of the sampling grid. The average sample spacing of some 50 m means that at short distances, the shape of the variogram is poorly defined. From these results, Micon concluded that whilst some correlation between samples exists, there are insufficient data at short distances to model the nugget effect. The studies showed that the nugget effect was likely to be more than 50% of the variance. The implication is that the observed variability of silver values cannot be predicted with a high degree of confidence for the La Laguna model. Micon concluded from the variogram studies that the data density was insufficient for the use of interpolation methods such as Ordinary Kriging in the estimation of silver, gold or mercury values.

Moisture Content

The moisture content was determined for a total of 61 samples of drill core from a variety of material types recovered during the drilling program. The moisture contents were measured at the SGS preparation laboratory located in Tampico, Mexico, by measuring the weight of the wet sample, drying the sample at 100°C for several days until dry, and measuring the dry weight of the sample. The average moisture content of these 61 samples was determined to be 30%.

Bulk Density Determination

The bulk density of the silver-bearing materials encountered during the drilling program is required in order to derive an estimate of the tonnages. In order to derive meaningful bulk density values for these unconsolidated materials, the measurement method must take into account that there is a variation in the specific gravity of the individual particles, and that a void space is present between particles.

The SGS-XRAL facility in Toronto, Ontario determined the bulk density of 41 samples of drill core by determining the dry weight of a sample and then determining its volume by placing it into a graduated cylinder. The samples comprised a variety of the silver-bearing sediments, including clays, silts, and sands. The sample was placed into the cylinder in several increments and was tamped and packed into place after each increment was added. The volume of the sample was measured after the last increment of sample was added to the cylinder and packed into place. In such a manner, the in-situ packing conditions of the sediment at the bottom of the lake are believed to have been reproduced to a reasonable degree of accuracy. The average bulk density of 41 samples was determined to be 1.40 grams per cubic centimetre (g/cm^3).

Block Modelling and Estimation Methodology

A block model is a 3D framework of blocks of regular dimensions commonly used for estimation of grade and tonnage.

The dimensions and limits of the model created for La Laguna are shown in the table below. The co-ordinates given are in UTM Zone 13Q. The block size of 25 m in the Northing and Easting directions represents approximately half the average sample spacing. The block size of 3 m in elevation is equal to the composite sample spacing.

Block Model Dimensions and Limits

The first stage in generating the mineral resource estimate was to impose the block model on the wireframe model (grade shell) that represents the mineralized zone. The purpose of this stage is to generate a block model that accurately represents the 3D volume of the wireframe models. Clearly, the extents of the 25 m x 25 m x 3 m blocks within the limits described above will extend outside of the wireframe model in one or more directions, so an approach must be adopted in order identify only that part of a block that fits inside the wireframe model. In software modelling terms this is achieved by sub-blocking, that is, sub-division of the initially defined parent blocks into smaller sub-blocks. As the sub-blocks become smaller, the sub-blocks represent the 3D wireframe volume more accurately. The size of sub-blocks was chosen to be able to model the waste material above the mineralized zone in the area to the northwest of the lake. The difference in volume derived from the block and wireframe models was less than 1%.

The second stage is the estimation of the silver, gold and mercury values in each block using the composited sample values. Silver and gold values were estimated in three phases as described below. Mercury was estimated in a single separate phase due to the lower density of samples. Inverse Distance Weighting to the power of two was used for the estimates. The confidence assigned to each block estimate is reflected by the amount of data available in close proximity to any particular block for estimating its respective metal grades. This confidence in the estimate is used as a guide in the resource classification.

In each phase of grade interpolation, the search ellipsoid was horizontal, but restricted in elevation as Micon believes that due to the mode of deposition of the mineralized zone there is little vertical relationship between samples.

Phase 1 grade interpolation for the silver and gold values was designed to estimate a value for every block in the model, and is assigned to the lowest category of confidence.

Phase 2 grade interpolation for the silver and gold values utilized a maximum search distance of 75 m derived from the variography studies and from the sample spacing. A greater degree of confidence was attributed to these estimates. A maximum of ten composites were utilized in order to minimize the smoothing effect that occurs when too many samples are used in the estimate of the block grades.

Phase 3 grade interpolation for the silver and gold values also used a maximum search distance of 75 m, but used a minimum of five informing samples as compared to the maximum of ten samples allowed in the Phase 2 interpolation pass.

The interpolation of mercury grades into individual blocks was designed to estimate a value for every block in the model. In that this estimate uses a lower number of samples, as compared with silver and gold, confidence in the estimation of mercury value is lower than that for silver and gold.

Mineral Resource Estimate

The silver, gold and mercury values of the mineralized zone were estimated and the volume estimated. Block tonnage is determined by multiplication of the block volume by the average bulk density of 1.40 to arrive at an estimate of the tonnage contained within the mineralized domain model.

Summary of Mineral Resource Estimate

All material within the mineralized zone is considered to be part of the mineral resource and thus no internal reporting block cut-off was applied. The Resource Estimate for the mineralized zone as at February 2008 is presented in the table below.

Summary of Laguna Mineral Resource

Measured					
Tonnes	Silver (g/t)	Contained Silver (kg)	Gold (g/t)	Contained Gold (kg)	Mercury (g/t)
529,000	55.12	29,158	0.29	153	351.04
Indicated					
Tonnes	Silver (g/t)	Contained Silver (kg)	Gold (g/t)	Contained Gold (kg)	Mercury (g/t)
6,270,000	58.16	364,663	0.31	1,944	327.05
Total, Measured and Indicated					
Tonnes	Silver (g/t)	Contained Silver (kg)	Gold (g/t)	Contained Gold (kg)	Mercury g/t)
6,799,000	57.92	393,821	0.31	2,097	328.92
Inferred					
Tonnes	Silver (g/t)	Contained Silver (kg)	Gold (g/t)	Contained Gold (kg)	Mercury (g/t)
498,000	71.87	35,791	0.38	189	261.26

Classification of the Mineral Resource Estimate

The mineral resources in this report were estimated in accordance with the definitions contained in CIM Standards on Mineral Resources and Reserves Definitions and Guidelines that were prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council on December 11, 2005.

Micon has interpreted the definitions using the following methodology.

Inferred Resources

Inferred Resources are those where the geological continuity of the mineralized zone is assumed, but with the least confidence in the estimation of contained metals.

Inferred Resources include those blocks in the mineralized zone that are estimated only in Phase 1 of the estimation process. These blocks lie furthest from the informing samples being at least 75 m distant, and may be estimated by only two samples. These blocks generally lie in areas where fewer holes were drilled due to access difficulties.

Indicated Resources

Indicated Resources include those blocks where the geological continuity of the mineralized zone is assumed, with greater confidence in the estimation of contained metals. Further sampling of the mineralized zone in these areas would be expected to improve the estimate of volume and contained metals.

Indicated Resources include those blocks in the mineralized zone that are estimated in Phase 2 of the estimation process. These blocks lie nearer than 75 m from a minimum of three informing sample points.

Measured Resources

Measured Resources include those blocks where the geological continuity of the mineralized zone is assumed, with the greatest confidence in the estimation of contained metals. Further sampling of the mineralized zone in these areas would not be expected to significantly improve the estimate of volume and contained metals.
Measured Resources include those blocks in the mineralized zone that are estimated in Phase 3 of the estimation process. These blocks lie nearer than 75 m from a minimum of five informing sample points, and at least one sample point must lie within the block itself.

Mineral Resource Estimate Validation

Validation of a mineral resource model can be conducted with confidence when reliable production reconciliation data are available. Where mining has not commenced, other techniques must be employed. Micon conducted a validation of the mineral resource estimate using two methods as described below.

The first method uses a comparison of the univariate statistics for the informing composite samples with the univariate statistics for the values estimated into the blocks within the mineralized zone. The statistics show that the average estimated block grades for silver, gold and mercury are slightly lower than the average silver, gold and mercury grades of the informing samples, and the variance of the estimated values is less than that of the informing samples. The method of grade estimation employed is known from experience to "smooth" the variation in grade observed in the informing samples, and thus the lower variance in the block grade statistics is as anticipated. The difference in the mean between the estimated block grade and the informing samples is due to the influence of the estimated values in the lower confidence Inferred blocks. Further analysis of the statistics by Resource Category shows a better correlation between estimated block grades and informing sample values for both the Measured and Indicated category blocks. This relationship is further illustrated in the second method used to validate the estimate.

For the second validation method, correlation plots are prepared between pairs of estimated block grade values and informing samples that fall within the same block. The results by resource category for silver are presented below. These figures illustrate the better correlation between estimated block grade and informing sample values for the Measured and Indicated categories. The distribution shows a good general correlation between estimated block grade and informing samples. A small proportion of the blocks show an under-estimation of high values and an over-estimation of lower values. The results for gold demonstrate a similar relationship as those determined for silver.

The model for the mineral resource estimate was prepared by Jonathan Steedman, MAusIMM, Mineral Resource Geologist with Micon. The mineral resource estimate and classification of the mineral resources have been prepared by Reno Pressacco, P.Geo., Senior Associate Geologist with Micon.

Comparison with Previous Mineral Resource Estimates

The resources presented in the table above, present an interim estimate of the mineral resources for the project, completed by MEGA in October 2004. The estimate presented herein differs from that of MEGA, both in tonnage and estimated grade.

These differences can be explained by reference to the increase in amount of drill hole data as compared with that available for the MEGA interim estimate, and to the differences in the method of modelling.

The completed drill program increased the density of drilling within the mineralized sediments. For MEGA's estimate the north-south drill hole spacing was 100 m. For the present estimate the north-south spacing was reduced to 50 m, and drilling was extended to the south, east and to the northwest.

The increase in data extended the limit of mineralization to the east, southeast, and northwest, thereby increasing the tonnage. In addition, Micon's estimate is constrained by a 3D model of the mineralized sediments. This interpretive method allows for continuity of the mineralization in areas where data density is lower. By contrast, MEGA's estimate was constrained only by the mathematical grade interpolation process. In areas of lower density of data, this method could result in fewer blocks receiving values during interpolation, thereby decreasing tonnage.

The introduction of more detailed data changed the informing sample populations, reducing the average grade for both silver and gold, but increasing the average grade for mercury. This change is reflected in the estimated grades for Micon's resource estimate.

The two estimates also used different methods of block classification. MEGA chose to classify its estimate based on the interpretation of variography studies.

Micon prepared an estimate of the mineral resources for the Pedernalillo deposit in September 2005. It can be seen that the tonnages of the Measured, Indicated and Inferred categories contained in the 2005 estimate differ from the current estimate in that the total tonnages are greater. This is attributable to inclusion of material that was located outside the limits of the mineral concession issued by Conagua and was in accordance with the results of the then-current discussions with the local ejido.

Summary of the Laguna Mineral Resource Estimate as of September, 2005

Measured						
Tonnage (t)	Grade Ag (g/t)	Contained Silver (kg)	Grade Au (g/t)	Contained Gold (kg)	Grade Hg (g/t)	Contained Mercury (kg)
558,583	54.56	30,474	0.29	161	341.07	190,515
Indicated						
Tonnage (t)	Grade Ag (g/t)	Contained Silver (kg)	Grade Au (g/t)	Contained Gold (kg)	Grade Hg (g/t)	Contained Mercury (kg)
7,371,074	59.08	435,482	0.31	2,289	315.97	2,329,071
Total Measured and Indicated						
Tonnage (t)	Grade Ag (g/t)	Contained Silver (kg)	Grade Au (g/t)	Contained Gold (kg)	Grade Hg (g/t)	Contained Mercury (kg)
7,929,657	58.76	465,956	0.31	2,450	317.74	2,519,586

Inferred						
Tonnage (t)	Grade Ag (g/t)	Contained Silver (kg)	Grade Au (g/t)	Contained Gold (kg)	Grade Hg (g/t)	Contained Mercury (kg)
1,246,558	66.67	83,111	0.34	430	261.45	325,912

Mineral Reserve Estimate

On the basis of the Measured and Indicated Resources suitable for mining presented in the table "Summary of Pedernalillo Mineral Resource", and the positive economics demonstrated to a level of pre-feasibility study for this material, Micon considers that the resources can be converted to Mineral Reserves as summarized in the table below.

The mineral reserve is estimated as a total of 6,799,000 t, containing an average of 57.92 g/t silver, 0.31 g/t gold and 328.92 g/t mercury. This reserve includes only that material that is classified in either the proven or probable categories. A volume comprising approximately 10% of the mineral reserve is present within the outline of the 20 g/t Ag domain model that is classified as Inferred Mineral Resources, and would be mined together with the mineral reserves. While this material contains silver mineralization, it has not been included as feedstock in either the mine schedule or the estimate of the project economics.

Mineral Reserve Estimate of Laguna as at February, 2008

Category	Tonnes	Silver (g/t)	Gold (g/t)	Mercury (g/t)
Proven	529,000	55.12	0.29	351.04
Probable	6,270,000	58.16	0.31	327.05
Proven plus Probable	6,799,000	57.92	0.31	328.92

The mineral reserve estimate was prepared by Sam J. Shoemaker, Jr., MAusIMM, Senior Mining Engineer, Shoemaker Mining Services. The estimate has an effective date of February, 2008.

Mining and Mineral Reserves

The Micon mineral resource model represents the basis for the preliminary mine schedule presented herein. The model shows that part of the resource is located under the lake area, with a smaller land based portion on the northwest side of the lake. The selection of the mining methods must take into consideration that the mineral resources are located in these two distinct and diverse settings.

Micon understands that the principal constraints pertaining to mining from the floor of the lake include the maintenance of an adequate supply of agricultural water to the down-stream users, and the maintenance of an acceptable degree of water quality in Laguna Zacatecana.

Mining Methods

A number of extraction methods have been considered for the extraction of the lake-based resources including cutter-head dredges, hydraulic monitoring using either coffer dams or caissons, conventional shovel-and-truck, and a floating clam shell with sheet-pile divider arrangement. The dredging method was selected as the principal mining method for the lake-based resources, and will be extended to the land-based resources as these will become accessible for dredging as the dredge progresses from the present lake area towards the shore.

Mine Scheduling

The production scheduling presented herein is preliminary and is based on gradual movement of a dredge from the higher grade to lower grade areas of the deposit, mining to a depth of 12 m. All material including the blocks classified as Inferred Resources will be extracted within the outline of the deposit and within the concession boundary.

Initial production is to begin in the highest grade portions to the north and northwest of the lake area in order to provide the best material early in the mine life. This sequence has the advantage of providing the best operating conditions and alleviates the requirement of addressing water management during open pit operation.

The outlines of the mineralized zone in the lake area are better defined by a greater density of exploration drilling as compared with the land based area. The lake area contains mineral resources that are dominantly in either the Measured or Indicated categories while the land based area contains a proportion of Inferred material. With the lake material being mined first, time becomes available for further drilling in the land based area to upgrade these resources to higher categories during exploitation.

The MineSched scheduling software was used to create the production schedules presented herein. MineSched is a mining scheduler developed using Surpac Vision software, and allows the scheduling of the resource block model created in Surpac with or without a mine design or geotechnical data.

Scheduling Parameters

An anticipated ore mining rate of 1,300,000 t/y has been selected to ensure that the processing plant receives a sufficient supply of material to operate without interruption.

This mining rate was used as the target mining rate within MineSched, scheduling the first year in quarters, with subsequent annual periods.

A maximum mining depth of 12 m was applied, which represents the maximum mining depth of the dredging machines.

Mining dilution was considered to be negligible largely due to the fact that the bulk of the drill holes ended in mineralization. Dilution calculations, based upon areas where drilling had revealed areas of waste grades, found that dilution would be between 0.5% and 1% of the total mining volume. Therefore, for the purposes of the scheduling, mining dilution was not considered.

Scheduling Sequence
The scheduling process is controlled by large polygons which show the order of mining sequence. The mining direction in the large polygons was the direction of face advance and was chosen as either north or south.

During the scheduling calculation, the resource block model is constrained by each of the large polygons. All material inside each polygon is 'mined' according to the chosen sequence and direction and is assigned to the mining periods according to the target quantities.

Scheduling Results
The resulting schedule is given in the following tables showing production mass and average grades for each scheduling period, i.e., each year of operation.

Year	**Mass (tonnes)**	**Grade**		
		Silver	**Gold**	**Mercury**
		(g/t)	**(g/t)**	**(g/t)**
1	1,239,000	74.47	0.41	420.96
2	938,000	81.07	0.41	257.42
3	1,258,000	58.34	0.33	374.61
4	1,274,000	53.97	0.30	349.15
5	1,296,000	40.92	0.20	298.25
6	794,000	38.17	0.17	214.93
Totals	6,799,000	57.92	0.31	328.92

The scheduling results clearly reflect the scheduling targets, with a minimal amount of inferred material being mined in the first year of production, and also the highest grade silver material being mined in the first three years of production.

The mining schedule plan is illustrated in the following table. Note that the total tonnes and mercury content are very slightly different, but not significantly, from the respective values used as the reserve for economic calculations.

Mining Schedule by Material Category

Year	Measured				Indicated				Total Measured andIndicated			
	Mass (tonnes)	Grade			Mass (tonnes)	Grade			Mass (tonnes)	Grade		
		Ag (g/t)	Au (g/t)	Hg (g/t)		Ag (g/t)	Au (g/t)	Hg (g/t)		Ag (g/t)	Au (g/t)	Hg (g/t)
1	115,000	75.98	0.43	450.49	1,124,000	74.32	0.41	417.93	1,239,000	74.47	0.41	420.96
2	8,000	88.59	0.41	228.56	930,000	81.01	0.41	257.67	938,000	81.07	0.41	257.42
3	101,000	61.37	0.34	428.49	1,157,000	58.08	0.32	369.90	1,258,000	58.34	0.33	374.61
4	86,000	55.05	0.31	330.09	1,188,000	53.89	0.30	350.53	1,274,000	53.97	0.30	349.15
5	135,000	40.25	0.20	311.35	1,161,000	41.00	0.20	296.73	1,296,000	40.92	0.20	298.25
6	84,000	39.60	0.18	218.20	710,000	38.00	0.17	214.54	794,000	38.17	0.17	214.93
Totals	529,000	55.12	0.29	351.04	6,270,000	58.16	0.31	327.05	6,799,000	57.92	0.31	328.92

On the basis of the Measured and Indicated Resources suitable for mining and the positive economics demonstrated to a level of pre-feasibility study for this material, Micon considers that the resources can be converted to Mineral Reserves as summarized in the table below.

The mineral reserve is estimated as a total of 6,799,000 t, containing an average of 57.92 g/t silver, 0.31 g/t gold and 328.92 g/t mercury. This reserve includes only that material that is classified in either the proven or probable categories. A volume comprising approximately 10% of the mineral reserves is present within the outline of the 20 g/t silver domain model that is classified as Inferred Mineral Resources, and would be mined together with the mineral reserves. While this material contains silver mineralization, it has not been included as feedstock in either the mine schedule or the estimate of the project economics.

Process Design

From the proposed treatment rate, test results and evaluation of local vat leaching plants, the process design criteria were established for equipment sizing and costing.

Process Description

The proposed processing plant will be located adjacent to the Laguna property. Slurry recovered by the dredge will be collected onshore at a pump station then pumped overland through a high-density polyethylene piping system to the plant site. Suitable drain points and retaining excavations will be provided at the low points.

A surge tank located at the plant site will receive slurry pumped from the mining area to buffer the fluctuating feed rate from the dredging operation. From the tank, slurry will be pumped to a ball mill to grind any coarse particles and then flow to a high-rate thickener to dewater the slurry, yielding a slurry underflow at 50% solids. Overflow solution will be returned to the lake together with excess water from the tailings area after treatment.

Thickener underflow will be pumped at a controlled density and rate, together with leach solution, to a series of three agitated leach tanks, each 9.5 m in diameter, providing a total of 6 hours of residence time. The leached slurry then will flow to a series of three counter current (CCD) thickeners, each 43 m in diameter, to effect separation of the metal-rich solution from the solids. The resulting slurry will be pumped to the tailings storage area at the maximum slurry density, approximately 40% solids. Solution draining from the tailings will be recycled to the process and the excess treated, to attain regulatory standards, prior to returning to the lake.

The metal-rich (pregnant) solution will be clarified by sand filters and de-aerated prior to contacting the solution with copper powder to precipitate the dissolved metals. Depleted or barren solution will be recycled to the process for dilution of the feed material. The solution with the precipitated metals will be pumped to a filter press to recover the precipitate and the resulting (barren) solution will flow to the barren solution surge tank. Periodically, the precipitate will be removed from the filter. Copper will first be removed by acid treatment of the precipitate and recovery of the residual metals in a second filter. The copper-rich solution will be stored and returned to the leach circuit as a catalyst, and excess solution evaporated to recover excess copper sulphate for sale. The remaining precipitate, containing predominantly silver, gold and mercury, will be retorted to remove and recover mercury for sale. The retort residue will be melted in a furnace with flux to recover gold and silver as doré bars for sale.

Excess solution draining from the impounded tailings area will be collected and treated, to remove residual thiosulphate. As the thiosulphate reagent is fairly unstable, agitation in a tank with lime addition and aeration is sufficient to precipitate contaminants as gypsum and associated metals. The precipitate will be collected in a sump for periodic discharge to the tailings area. Treated solution will be pumped through overland pipeline, together with excess water from the primary thickener, to be returned to the lake.

The thiosulphate leaching reagent is prepared on site from lime slurry and sulphur dioxide generated by a sulphur burner. The historic local vat leaching projects, of which one or two remain in operation, used this same method. Raw materials are solid sulphur and lime.

Copper sulphate is a necessary catalyst for the leach reaction, and the demand will be satisfied by dissolution of copper from metal during the precipitation stage. A flocculant mixing system is provided to dissolve, dilute and deliver flocculant solution to the thickeners.

Metal Production

The metal production is calculated from the average mining rate and the life-of-mine average metal content of the deposit, according to the mineral reserve estimate.

Metal recoveries are estimated from the results of testwork described above. The predicted metals recovered quantities (rounded) are as shown in the following table.

Metal	Total (kg)	Total (oz/flasks)
Silver	291,200	9,362,000
Gold	816	26,000
Mercury	1,891,000	54,800

Infrastructure

A short, approximately 0.5-km long, access road is required between the existing highway and the plant area.

Power will be supplied at 13.8 kV from the main sub-station serving the Zacatecas district, which is located about 8 km from the plant site, via a new powerline. A local sub-station, isolating switch and transformer are required for servicing the project. The total connected load is approximately 2,000 kVA, including the power consumed by the slurry pumping operation at the lake which will be supplied from the local power system.

Water supply to the process will be from the lake, mainly in the form of water used for slurrying, much of which is recycled from the plant. Potable water will be supplied from the local municipal system.

Project buildings will be limited to the general office, stores, change facilities and the enclosed refinery building. All other process facilities and equipment are installed outdoors. All personnel are expected to live in Zacatecas or neighbouring communities.

Tailings Management System

The design for a tailings disposal system as considered in the feasibility study was conducted by Golder Associates Ltd. (Golder), based on the approximately 8.6 million tonnes of total solids to be stored. The new site and reduced amount of tailings to be stored under the present plan (resulting from the lower total tonnage of material mined and processed) will require a new design for an impoundment structure. However the cost of the new structure is considered to be similar, within an accuracy required of a pre-feasibility study, to that of the previously estimated structure. The new area will require permitting approval. Detailed design of the tailings area will be completed during the phase of detailed engineering.

Environment

The Mexican consulting group, COREVI, has prepared an environmental baseline study and impact assessment for the project according to Mexican requirements. The study has been approved by regulatory authorities, and was followed by issuance of an operating permit to Minera Orca. Critical components of the studies are:

- The identification of the effects of the project on the existing population and agriculture.
- The identification of baseline mercury levels in the existing water and solids in and around the lake.
- Prediction of improvements to the lake environment after removal of the tailings.
- Prediction of water quality and volume returned to the lake.
- Mitigation of the effects of the tailings storage system.

Environmental studies for the area of the plant site and tailings area will be required as the project is further developed. As the new site is barren or former agricultural land it is likely that studies and permitting should be routine.

MRP prepared a project closure plan based on the previous design for filtered tailings disposal. This closure plan will be updated to reflect the wet tailings concept during the detailed engineering program.

Operating Costs

Operating costs for the project have been estimated from assessments of the operating labour requirements, consumption of reagents and materials, power consumption and general expense items. All costs are in United States dollars. The exchange rate employed in these costs is MXN11.0 = US$1.00. While these unit costs were gathered in late 2005 for the previous study, escalation factors averaging 10% for labour and 15% for consumables have been applied to update the costs to February 2008 values. Micon have estimated the total operating cost for the project as US$10.50/t processed or US$5.11/oz of silver produced (silver plus gold and mercury credits). Prior to any production decision, Orca plans to update the economic evaluation.

Capital Costs

The capital cost estimate has been based on budgetary quotations from suppliers or in-house data. All costs are in United States dollars. An exchange rate of Cdn$1.00 = US$0.803 was defined by the Micon project team to convert prices to United States dollars when quotations were received in Canadian dollars, in late 2005. The detailed cost estimate has been updated to February, 2008 values, compared with the details expressed below, by applying factors of 1.20 to equipment, 1.15 to freight and 1.10 to the labour costs and local materials. Some unit costs were estimated using local cost tables provided by MRP. Labour rate was built-up based on the local trade’s rates which are based on 48 hours per week and include basic wages, mandated benefits, small tools, supervision, construction equipment, overhead and profit. The productivity factor applied to North American man hours is 3.0.

The estimated total direct cost is $17,537,000 and the indirect plus owners cost is $ 7,743,000. The additional pre-production cost for the tailings area is $2,651,000.

Prior to any production decision, Orca plans to update the economic inputs and evaluation.

Project Schedule

A detailed project development and construction schedule has not been prepared. The construction period, after project commitment, is estimated to require approximately twelve months. Delivery times of certain major equipment items may be as long as ten to twelve months from date of order. A lead time of two to three months for initial engineering and equipment purchase, prior to construction start, should be allowed. This assumes new equipment is purchased throughout. The identification and purchase of certain items as used equipment could significantly improve the schedule.

Financial Evaluation

The 2007 Prices case, with significantly higher gold and silver prices than in the base case, indicates a very attractive project, with total pre-tax cash flow of $67.59 million, and payback being achieved during the third year of production. The NPV at a discount rate of 8% per year is $44.7 million and the IRR is 63.7%. Prior to any production decision, Orca plans to update the economic evaluation.

	Base Case	2007
Silver	US$10.75/oz.	US$13.65/oz.
Gold	US$581.00/oz	US$717. /oz.
Mercury	US$625.00/flask	US$625/flask

Recommendations

Micon recommends that the project be advanced to detailed engineering and construction. Tasks that Minera Orca should authorize immediately to ensure a timely start to production include:

- A short pilot plant testing program with a fresh sample, to confirm process reagent consumptions under recycling solution conditions and to provide engineering data.
- Negotiation for purchase or lease of the identified land at the new site 8 km from the deposit and for easement along the projected route of the overland pipelines.
- Negotiation for permanent project power supply.
- Selection of engineering consultant for EPCM role.
- Selection and ordering of long delivery equipment or identification and securing of used equipment.
- Ongoing discussion with local authorities and landowners to ensure that expectations and plans for water use from the lake are accommodated in the development work.
- Completion of environmental studies and permitting.
- Design of a storage structure to accommodate 7.3 million t of process tailings
- Topographic and geotechnical investigations prior to design of foundations for the new plant site and process tailings storage facility.
- Updating of the closure plan.

Work completed at Laguna since the date of the Micon Report

Since completion of the Micon Report, the Company has carried out further optimization studies on the mining method and tailings disposal and additional leach test work has been carried out at the University of San Luis Potosi with respect to evaluating a static vat leach process rather than recommended agitated vat leach process with a view reducing required capital expenditure. The static leach process would also use calcium thiosulphate to recover silver, gold and mercury. Results of such static leach test work were positive with silver, gold and mercury recoveries of approximately 67%, 30% and 72% respectively were achieved. Pilot Plant test work is recommended in order to confirm reagent consumption and metal recoveries in a locked cycle or recycling process test program. It is anticipated that approximately 10,000 T of material would be required to complete such a program.

The Company will seek to advance the Laguna Project by undertaking a program of community consultation with a view to securing agreement with the Ejido Pedernalillo, a community located adjacent to the Laguna Project Area. Once an agreement is in place, the extraction of a bulk sample for the Pilot Plant metallurgical test work will be initiated. It is anticipated that the Pilot Plant test work on the static vat leach process will be undertaken during 2011. The Company also plans to update the feasibility study economic inputs and evaluate different tailings disposal options.

3. El Dorado Project, State of Zacatecas, Mexico

Project Description and Location

In September 2009, the Company entered into an option agreement with private Mexican interests whereby it could acquire a 100% interest in the El Dorado gold project within 2,890 hectares of mining claims located in the Pinos district of southeastern Zacatecas State, Mexico. The property is located within the Central Mexican Mineral Belt and has an existing small-scale underground gold mining operation developed on one level of the El Dorado vein. It is located close to Xtierra's existing Orca 3 property and some 80 kilometres southeast of the Bilbao silver-zinc-lead-copper development project.

Pursuant to the agreement, Golden Dust S.A. de C.V., ("Golden Dust") an indirect, wholly-owned subsidiary of Xtierra acquired the interest in the El Dorado property by staged payments. Two payments totaling $42,558 were made. With the election to purchase the property, Golden Dust made a further payment of $83,023. The full purchase price will be satisfied by three additional equal payments of $268,217 due respectively on January 15 of 2014, 2015 and 2016, for a total consideration of $1 million. If Golden Dust completes a feasibility study and such study indicates a mineral reserve estimate containing between 250,001 and 500,000 ounces of gold, a bonus to the purchase price of $500,000 will be paid, or if such mineral reserve estimate is greater than 500,000 ounces of gold, a bonus purchase price of $1 million will be paid on the same staged basis as the three interim payments. The maximum purchase price to be paid is $2 million.

The El Dorado prospect is located in the south-east of the state of Zacatecas, Mexico; some 68km east of the state capital Zacatecas with NAD27 coordinates of 239137/2469.788 at an altitude of 2628 m above sea level. It lies close to the town of Pinos in remote mountain land roughly 6km northeast of the town at $22^0 18' 56''$N and $101^0 31' 58''$W. Pinos has a population of about 3,500 and is an historic centre for gold mining operations in the area.

Claim Name	Title #	Recorded Owner	Area Ha's	Valid to
El Dorado-T179576	196291	Leonel Salazar Mendoza	80.0000	15 Jul 2043
El Centario	233149	Daniel Coronado Contreras	499.9839	11 Dec 2058
Santa Patricia	233734	Daniel Coronado Contreras	2309.160	7 Apr 2059

History

The mining district in and around Pinos was worked for gold by the Spanish from 1546 until 1810 and is reputedly one of only three bonanza gold districts discovered by them in Mexico. Later, from the turn of the twentieth century, Cornish miners undertook mining to depths exceeding 330m intimating that there is a depth extension to the mineralisation. Other known mineralisation in the immediate vicinity of the El Dorado claim block includes two tin, Sn, occurrences, one to the north and Huizache to the south-east. There are also two Ag-Au vein occurrences some two kilometres south of the El Dorado claim, at an un-named location and at Veta Grande. None of these occurrences is presently worked. The only known worked mineral deposit in the region is for kaolin in altered tuffaceous sediments.

Gold mineralization at El Dorado occurs as veins and in quartz stockworks related to late stage extensional faulting developed within an intrusive quartz-eye rhyolite. The El Dorado vein trends north-northwest and dips steeply to the west. It comprises one main and several parallel veins of quartz-hematite. Mineralization noted within the single level adit driven 134 metres on the vein is native gold within a matrix of hematite. Lower grade gold mineralization has been found in altered wall rocks. The current mining operation on the El Dorado vein structure produces only small tonnages each day by selectively hand mining higher grade vein material which is directly shipped to the Peñoles smelter, 400 km to the north, at Torreon.

Work completed by Xtierra during preliminary due diligence resulted in the discovery of an extensive gold-bearing stockwork encompassing the El Dorado vein and several other parallel structures. Soil and rock geochemistry have demonstrated that this stockwork, formed at the edge of a linear gold soil anomaly over 1km in strike length, is open-ended to the north-east and trends directly into a second, newly identified stockwork body, located over 300 metres away from the El Dorado vein. Preliminary work completed by Xtierra confirms the high grade nature of the El Dorado vein with channel sampling returning values ranging from 0.5 to 57.0 g/t gold over widths of 0.10 to 1.0 metre with individual grab samples as high as 1,760 g/t gold and 3,590 g/t silver. Such grades indicate the potential for bonanza deposition zone development within an epithermal boiling zone. The El Dorado vein and surrounding stockworks do not appear to have been tested by drilling.

Geology

A description of the various components of the stratigraphy is given below in the order oldest to youngest.

Cretaceous Limestones

Whilst not apparent at outcrop, some of the ferruginous, brecciated, veined, "stockworks", in the northern stream section are probably weathered remnants of carbonaceous limestones found at depth in drill-holes ED-3 & ED-6. Within the drill-holes these brecciated limestones are markedly anomalous for mercury and where vein structures cut them they could be prospective for gold accumulations.

Palaeogene Sediments

The next oldest rocks exposed within the El Dorado claim are a sequence of interbedded, yellow sandstones and polymict, matrix-supported sharpstone-conglomerates. These are found in the central and south-eastern sectors of the claim outcropping frequently within the stream valleys. As a rule these dip towards north-east at roughly 20^0. These rudaceous rocks are very immature with angular clasts (up to cobble, >64mm,size) of various lithologies including Cretaceous limestone, black chert and Peñon Blanco (50.9Ma) white rhyolite set within a sandstone matrix. Clearly the enclosed clasts set limits on the age of these sediments which by observation must be post-Cretaceous. Cross-stratification and braiding are occasionally displayed in the sediments. They are likely to be early Tertiary, i.e. Palaeogene in age. The lithology, clast angularity and interdigitation of these sediments suggest that their source must be proximal and likely to represent mass flow debris flows off fault scarps on nearby graben structures.

Quartz-eye Rhyolite Intrusives (QER)

Rhyolitic rocks occur in several areas of the El Dorado claim. The main area is as a large mass in the north-western part of the map, and it is there where they host the El Dorado vein set. The rhyolites occupy the tops of the mountains. There are further rhyolitic outcrops, one centred on 239.572/2469.574 at "Horse Hill", one just outside the claim in the south-eastern corner and more pertinent, with respect to the mineralisation, are several-dyke like apophyses close to the mineral claim beacon. The recent drilling programme suggests that the rhyolitic intrusive may have a sill-like morphology rather than being dome shaped. In many places, especially adjacent to the El Dorado mine the rhyolite has strong disseminations of sulphides of 4-5% and sometimes higher. In other places notably around L2469.900/P239.150 there is a pervasive development of quartz stockwork. The stockwork extends over a distance of about 600m x 250m and is sparsely mineralised in gold, above a 0.1g/tAu level, where there is prominent quartz development.

There are textural and composition variations within the quartz-eye rhyolite (QER) itself such that sometimes quartz-eyes are absent and porphyritic textures developed. There is evidence that the porphyritic rhyolite can be distinguished within the overall QER. Aranda-Gómez et.al. (2007) give an age of between 28.3 and 29.6Ma for this intrusive which they also say has trachytic affinities. Such a date equates to an Upper Oligocene age. That may appear somewhat theoretical to our aspirations but is in fact of great importance since the extensional tectonic regime which gave rise to the fractures and subsequent north-south faults which host the El Dorado vein set are dated as about 12Ma, or Middle Miocene.

Hornfels & Metamorphic Effects

The rhyolites are intrusive into the Palaeogene rudaceous sequence and thermally metamorphose these at the contact. The evidence for this is clearly seen at several locations. In places along the main NE-SW contact the sediments have been enclosed as xenoliths whilst a halleflintas/hornfels is developed along the contact itself for a distance of some 30m. The metamorphic aureole is also typified by bleaching of the sediments and also development of iron-staining of purple and red-brown coloration.

Mineralisation Phase

The mineralisation occurs as two types: veins and minor quartz stockworks. These relate to a late stage extensional fault regime which developed after the consolidation of the main rhyolitic intrusives. It appears that the gold-bearing veins and stockworks represents the end stage of concentration of mineralised fluids such that faults zones and fractures serve as the main hosts to any formation of Au mineralisation. The veins themselves are quite thin in the range 0.15-0.3m [but sometimes coalesce into zones of up to 6m] and are composed principally of hematite and quartz. In places calcite veins are developed although at this stage it is unclear what the relationship between these and the gold mineralisation may be. The grades and thickness of the El Dorado vein are presented later in this report.

Tertiary Fanglomerate Terrace

A Tertiary fanglomerate terrace occurs on either side of the main stream valley. The fanglomerate lies unconformably upon all the older sequences and is particularly well preserved close to drainages. It dips in opposite directions either side of the main stream such that in the south-east of the claim it dips towards NW at a shallow angle of 08^0 to 14^0 whilst it dips in the opposite direction on the other side of the stream. The composition of the fanglomerate varies from a jumbled mass of huge boulders to bedded angular rudite. Given the composition and structure it is likely to have a very local provenance.

Recent Head Gravels & Stream Sediments

The youngest “rocks” are cemented gravels at stream sappings heads. These are consolidated boulder screes with a matrix of yellowish-grey clays which resemble the Palaeogene sediments. Most recent of all are stream sediments within the drainages. Since the drainage pattern is juvenile these are only sporadically developed.

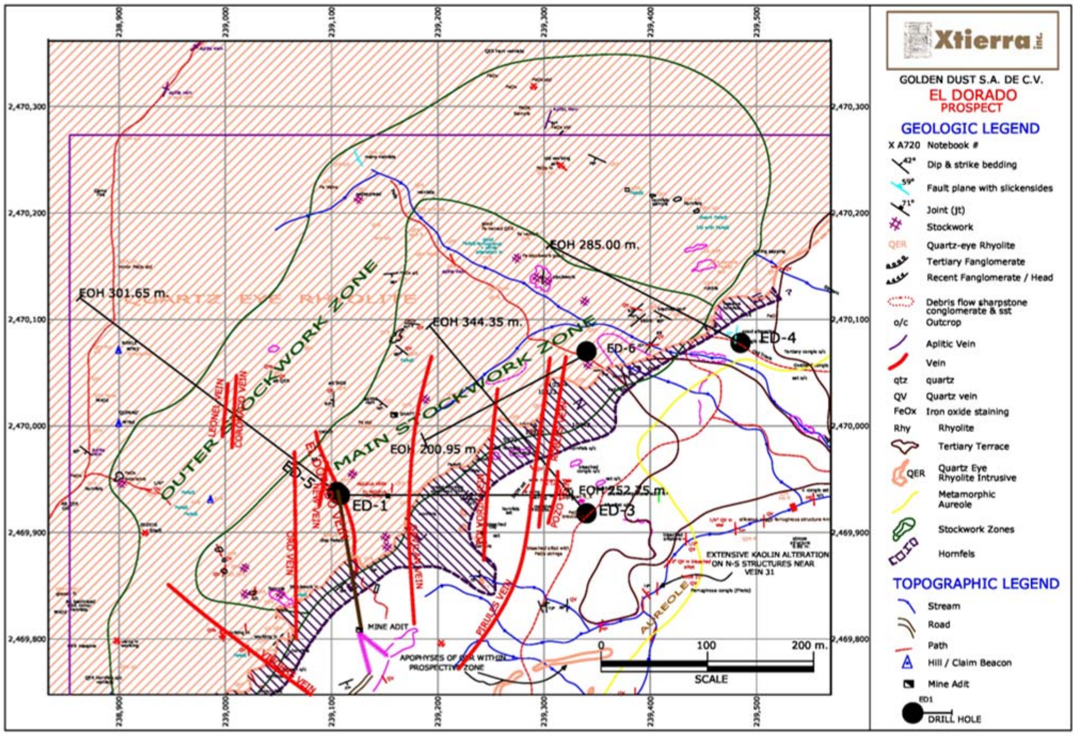


FIGURE 1. LOCATION OF DRILL HOLES WRT GEOLOGICAL SETTING

Soil Sampling

Soil samples were taken over the north-western part of the El Dorado claim on seven lines separated by 100m with samples each 25 metres. These samples were analysed by ICP-MS for 36 elements (by Acme Laboratory in Vancouver, Canada). The objective of the study was to determine the overall geochemical soil pattern in relation to the known structures and ascertain whether there were other mineralised areas on the claim. The exercise served to demonstrate the elemental associations of the various elements and their distribution relative to the geological substrate and veins. The following section records the soil responses given by the various elements and includes comments on the significance thereof.

Gold

The 50ppb contour defines a strong gold anomaly trending NE-SW throughout the north-west central part of the El Dorado claim. The core of the anomaly it typified by >200ppb Au which is extremely anomalous.

Silver

The silver contours mimic that for gold. The silver in soils anomaly is evident but not particularly strong with >0.3g/t Ag defining the anomaly and in excess of 1g/t Ag over the centre.

Mercury

Three exceptionally high mercury anomalies occur; the cores of which have values in excess of 1ppm Hg. Two of these anomalies have been trenched and cinnabar (HgS) mineralization located; these are not associated with the Au-Ag anomaly. The other mercury anomaly is correlative with the NE-SW gold anomaly and was encountered at depth in drill-holes ED-3 and ED-4 where carbonaceous limestones are anomalous for mercury over large widths. For example a 35.10m zone in ED-4 averaged 9.90g/t Hg. The significance of the anomalous mercury is not yet understood although it probably relates to late stage mineralisation connected to the epithermal fluid cell which deposited the precious metals.

Antimony

Antimony in soils is very anomalous with values in excess of 2ppm Sb outlining an anomaly which directly mirrors that of the gold distribution. This coincidence is important because the elemental association of antimony with gold is typical of an epithermal style of mineralisation.

Arsenic

The arsenic soil anomaly parallels the gold anomaly but is slightly offset to the south. It correlates exactly with the contact of the quartz-eye rhyolite intrusive against the hornfels tuffaceous sediments. Again the anomaly trends NE-SW and is encompassed by a contour in excess of 70ppm As. The eye has values over 100ppm As.

Copper

The copper response is extremely low. Background values of copper in soils are about 7ppm Cu.

Molybdenum

Molybdenum is barely anomalous on the soil grid with maxima in the >3ppm Mo range grouping in the far north-west of the grid. Whilst very slightly anomalous, these Mo values do not appear to follow any particular geological or structural feature although broadly they correlate with the strong mercury anomaly in the same sector of the grid.

Lead

Lead is strongly anomalous in the north-western part of the grid. Within a general background of less than 20ppm Pb there are two parallel anomalies in the north-western part of the claim of >40ppm Pb within which are eyes of over 100ppm Pb.

Zinc

Zinc is barely anomalous in soils at El Dorado. There is hardly a recognisable geochemical pattern to it and the values themselves are quite low. However, intersections in some of the drill-holes exceeded 1000ppm Zn.

Drilling

In January 2010, the Company commenced a preliminary drill programme which was completed in early March 2010. The objective was to investigate gold in vein structures and as stockwork disseminations found during a geological mapping exercise undertaken previously in 2009.

Five diamond drill-holes were completed during the programme for a total of 1,384.55 metres. Each of the drill-holes was sited at different locales in order to investigate various aspects and styles of mineralisation. The table below summarises the details of the drilling programme.

DDH	Northing	Easting	Azimuth Magnetic	Inclination	Depth m
ED-1	2469.935	239.108	083	-30	252.75
ED-2	Not Drilled				0.00
ED-3	2469.917	239.337	312	-45	344.25
ED-4	2470.080	239.481	305	-45	285.00
ED-5	2469.936	239.103	300	-30	301.60
ED-6	2470.068	239.341	244	-35	200.95
Total					**1,384.55**

A summary of the main intersections for each borehole is given below:

DDH ED-1 - This drill-hole was drilled underground within the El Dorado adit towards the east. It successfully intersected several vein structures and an associated weakly mineralised stockwork between these veins. The stockwork is principally emplaced within an intrusive rhyolite and is less well developed in the surrounding bedded tuffs. The significance of this drill-hole is that it confirmed the presence of mineralisation within the stockwork, albeit at relatively low grades. Notwithstanding, there is a zone in excess of 40m in this drill-hole with an overall grade in excess of 1g/t Au. That is important as it demonstrates that a considerable thickness of mineralised rhyolite occurs east of the El Dorado vein.

The best intersections in this hole were 0.80m at 14.50g/t Au between 49.20 and 50.00m and 11.50g/t Au between 55.00 and 56.00m. The most significant being a zone of 7.80m at 4.72g/t Au within an overall 41.15m stockwork averaging 1.33g/tAu. It should also be noted that significant amounts of Hg accompany the precious metal mineralisation.

DDH ED-3 - This hole was drilled to investigate the main NE-SW structure as defined by the principal geochemical anomaly. It was collared in altered iron stained bedded tuffs and remained therein until 219m after which it entered carbonaceous limestone. As many as 24 thin veinlets were encountered in the hole. No rhyolite was intersected. Given the strong NE-SW geochemical anomaly target it was anticipated that this hole might have had stronger mineralisation.

The best intersection in this hole was 0.70m at 22.20g/t Au between 97.00 and 97.70m. The most significant being a zone of 1.20m at 13.04g/t Au with 73.33 g/t Ag (but note that this grade is heavily influenced by the very high 22.20g/t Au intersection).

DDH ED-4 - This hole was drilled to investigate the large stockwork behind the faulted main NE-SW structure. The drill-hole remained in tuffs for most of the hole. In the event the drill hole intersected a silicified fault breccia, beneath the rhyolite, rather than the stockwork that had been expected. This fault breccia, even though associated with extensive alteration and elevated Hg, did not contain anomalous gold. It now appears that the mapped stockwork in the stream is an uplifted fault block of silicified breccia and that the rhyolite intrusive dips away to the northwest at a shallow angle. The drill-hole entered carbonaceous limestone at a depth of 230.40m. Both these intersections impinge on the interpretation of the morphology of the rhyolite intrusive which now appears to be sill like.

DDH ED-5 - This hole was drilled from the same underground location as was ED-1 except towards a different azimuth. The objective of this hole was to interrogate the Pb-Hg anomaly in the north-western sector of the El Dorado claim. The hole had to be stopped at 301.60m because of technical difficulties. It would have been better to have continued this hole to at least 350m as the entire Pb-Hg soil anomaly was not examined.

Nevertheless this hole proved important with respect to other aspects of the overall interpretation of the project. In particular it resulted in the discovery of at least five previously unknown vein structures in the rhyolite between the El Dorado vein and the targeted Pb-Hg soil anomaly. This was an important development.

The best intersection in this hole was 1.00m at 44.70g/t Au between 55.00 and 56.00m. The most significant being a zone of 4.00m at 11.55g/t Au (influenced by a very anomalous 44.70g/t Au intersection).

DDH ED-6 - This drill interrogated the continuation of the stockwork encountered in ED-1. In the event, it intersected the rhyolite between surface and 91.90m and then passed into hornfels tuffs until it was stopped at 200.95m in brecciated bedded tuffs. It intersected several veins/veinlets cutting both rhyolite and tuffaceous sediments. The fact that the drill-hole passed out of rhyolite at a shallow depth further supports the mushroom shaped morphology of the intrusive.

Sample Preparation, Analysis and Security

Half core samples were submitted for sample preparation at the StewartGroup Eco Tech Laboratory in Zacatecas for onward shipment and analyses at the StewardGroup Eco Tech Laboratory in Kamloops, British Columbia.

Core Sample preparation followed normal procedures in which samples are dried at +-1000^{C} and then crushed to pass a 10mesh/2mm screen. The sample is then split via a riffle splitter to produce a 250g sub-sample for analysis with the remainder stored as a reject/back-up sample. The 250g split is pulverized to 85% passing 75µm /200mesh.

Samples were initially analyzed for 38 element content using ICP-MS (inductively coupled plasma – mass spectrometry). Values exceeding the limits of detection are automatically re-analyzed by Fire Assay or Atomic absorption spectrometry (AAS) methods respectively. Standards and blanks were used regularly for quality control.

Data Verification

The Company's internal QA/QC for data input and verification is as follows:

Quality control was undertaken via internal checks on analytical results including QC data via repeat samples and internal standards. In addition, Xtierra incorporated its own internal granite and basalt standards with each batch of samples to enable checks on repeatability to be undertaken. As an additional precaution a proportion of samples from each borehole was sent to SGS laboratories in Durango for comparative purposes. No significant discrepancies are apparent in any of these checks.

Mineralisation

The El Dorado Vein

The objective of the drill programme was to investigate veins and surrounding stockworks additional to the El Dorado vein itself. As such the main El Dorado vein was not intersected during this phase of activities. However the El Dorado vein is a very important and rich structure. During the excavation of the drill station for ED-1/ED-5 a new, thin, but very rich vein (189g/tAu-sample#10772) was discovered in the hanging wall. This, together with adjacent mineralised portions, resulted in increasing the mineable width of the El Dorado vein itself to about 6m. It is projected from geological mapping that there still exists 70m (maybe 170m) of strike extension to the El Dorado vein which has not yet been mined and remains in front of the present mine adit heading. Also the vein has been mined only to the 2630m level.

The Morphology of the Rhyolite Intrusive

It had been expected that the morphology of the rhyolite would be that of a steep mushroom shaped intrusive. It was a surprise then that drill-holes ED-3 & ED-4 did not intersect the intrusive. The rhyolite itself is the main host of the stockwork mineralisation and so that was a disappointment. The morphology of the rhyolite intrusive is therefore a very shallow mushroom or even approximates to a sill-like morphology. In order to fully explore the whole intrusive we would have to access the mountain top and drill from there.

Mercury Occurrence

The whole of the El Dorado prospect is typified by high Hg values culminating of course in the discovery of cinnabar mineralisation in trenches in the NW of the claim. This Hg mineralisation was the in-depth target of the ED-5 drill hole. In the event this anomaly was not fully examined as mechanical difficulties meant a premature abandonment of the hole. It is perhaps noteworthy that that last sample in the hole at 301.60m had 0.55g/t Au with an accompanying Ag signature. The target depth was 350m+.

Future Plans

It is evident that the El Dorado prospect contains a vein set with a gold grade that may support a small underground mine. The current operation consists of hand mining part of the El Dorado vein. The Company's work has discovered several additional veins that were previously unknown. As a consequence of this, the potential to increase the available tonnage has improved. The recent drilling programme undertaken at the El Dorado prospect has shown that there are at least twelve auriferous vein structures set within a sparsely mineralised stockwork. There are indications that some of these structures could be thicker than originally anticipated with widths of between 4 and 8m on the Gavilan, El Dorado and El Oro veins in particular.

The overall objective of any future work programme should be to demonstrate that the veins comprising the entire set could support a high grade underground gold-vein operation. The following programme is recommended.

Confirmation of grade and thickness

To address the uncertainty associated with grades and thickness of the vein sets, it will be necessary to take bulk samples. This can only be done by taking large samples from underground. However this needs to be done on the thicker veins of Gavilan in particular and possibly on veins in the hanging wall of the El Dorado vein. This could be achieved by revamping the old Gavilan shaft and driving south within the Gavilan vein itself for 37 metres and then cross-cutting westwards to the El Dorado vein. Additionally, if this methodology was successful in demonstrating the economic viability of these veins, then there is always the potential of continuing this cross-cut drive further to the west to intersect the hanging wall and the El Oro vein structures.

Determination of the continuity in depth of the veins

Initially this can be undertaken by drilling three holes from within the adit. It would also be judicious to drill an overhand drill hole from the same location at $+30^0$ to intersect the El Oro structure within the overlying rhyolite. Two further holes could be drilled at the already prepared underground site to parallel DDH ED-1 and ED-5 and so allow a continuity and tonnage estimate to be made.

Drilling the El Dorado Vein

The El Dorado vein has not yet been examined in any detail. The El Dorado adit is driven on the vein itself and is known to be strongly auriferous above the adit level of 2628m. Because the adit follows the vein it is not possible to investigate this by underground drilling. Moreover it is impractical to drill from surface because of topographic constraints. If a cross-cut were continued westwards to the El Oro vein and drives then made to the north and south on that structure, it would facilitate drilling not only the El Dorado Vein but also the Gavilan vein both in depth and along strike.

Investigation of the Hg-Pb anomaly

This anomaly has not been fully examined. Drillhole ED-5 had to be abandoned prematurely before intersecting the main soil anomaly. Intriguingly the very last sample in this hole was a fracture which returned 0.55g/t Au with 6.74g/t Ag showing that there is some gold mineralisation in this new zone. Two holes, each 250 metres, angled 45^0 towards due east should be considered.

Cost Estimate

		USD$
1.	Rehabilitation of the Gavilan shaft	50,000
2.	Driving on Gavilan Vein 4x4m for 37 m at $1500/m	55,500
3.	Cross-cut to El Dorado vein 4x4m for 67m at $1500/m	100,500
4.	Cross-cut to El Oro vein 4x4m for 27m at $1500/m	40,500
5.	Driving on El Oro vein for 100 metres	150,000
6.	Strike Drilling of El Dorado vein from El Oro 10 holes for 2500m	250,000
7.	Continuity drill holes , 5 for 1500m at USD$ 140/m	210,000
8.	Water (Truck & Water)	25,000
9.	Exploration: analysis 500 soil samples at USD$13	6,500
10.	Vein sample analysis 100m x 5m for 500 samples at USD $25	12,500
11.	Metallurgical Testwork 37 samples at USD$100	3,700
12.	Man power (2 geologists and management for 6 months)	150,000
13.	**TOTAL**	**1,054,200**

4. Exploration Properties, States of Zacatecas and San Luis Potosi, Mexico

The Company holds approximately 12,267 hectares of mineral claims in the general Panfilo Natera area, adjacent to and for significant distances to the north and south of the Bilbao project area. Over the past three years, the Company's Mexican subsidiaries have conducted only preliminary exploration activities over parts of these claims which has included preliminary geological mapping, geophysical surveys, geochemical soil surveys and trenching and resampling of historic workings.

A number of targets have been identified which indicate the potential for skarn-type mineralisation (as at Bilbao), epithermal gold and silver vein mineralisation and volcanogenic massive sulphide (VMS) mineralisation.

The Company initiated preliminary drilling on the San Francisco epithermal gold-silver vein system on the Galore claims during September 2008. A total of 1,934 metres were drilled (7 holes). All four holes drilled through the San Francisco vein intersected low grade gold mineralization over widths up to 4 metres. Additional parallel auriferous vein structures were demonstrated in the hanging wall of the San Francisco vein system. The vein structure has been traced for over 1.5km in length.

Once the Bilbao Feasibility Study is completed, the Company will reconsider conducting additional exploration work on these properties.

Dividends

No dividends on the Common Shares have been paid by the Company to date. The Company anticipates that it will retain all future earnings and cash resources for the future operation and development of its business and the Company does not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends will be at the discretion of the Company's board of directors after taking into account many factors, including the Company's operating results, financial condition and current and anticipated cash needs.

Description of Capital Structure

The Company has unlimited authorized share capital of a single class of common shares of which, at December 31, 2010, 84,867,003 common shares were issued and outstanding. Each common share entitles the holder to one vote at all shareholders' meetings. The common shares rank equally for dividends and for all distributions upon dissolution or wind up.

At December 31, 2010, the Company had 22,009,500 share purchase warrants outstanding and 4,830,000 stock options issued pursuant to the Company's Stock Option Plan. The options are exercisable over a period of five years. The outstanding warrants as of December 31, 2010 are presented in the table below.

Warrants	Exercise Price	Expiry Date
9,888,000	Cdn$0.30	March 1, 2011
122,000	Cdn$0.20	March 1, 2011
1,250,000	Cdn$0.30	March 31, 2011
1,750,000	Cdn$0.30	April 14, 2011
9,000,000	Cdn$0.40	December 23, 2012

The warrants outstanding as of March 18, 2011 are presented in the table below.

Warrants	Exercise Price	Expiry Date
1,250,000	Cdn$0.30	March 31, 2011
1,750,000	Cdn$0.30	April 14, 2011
9,000,000	Cdn$0.40	December 23, 2012

Subsequent to year-end, on January 20, 2011, the Company completed a non-brokered private placement by issuing 5,331,210 Units for gross proceeds of Cdn$1,493,000 ($1,481,000) at Cdn$0.28 per Unit. Each Unit consisted of one common share of Xtierra (a "Common Share") and one Common Share purchase warrant (a "Warrant"), each Warrant entitling the holder to purchase one common share at $0.40 per share for two years.

Between January 1, 2011 and March 18, 2011, the Company issued 10,969,883 common shares as a result of the exercise of 10,969,883 warrants at a weighted average exercise price of $0.30 for gross proceeds of Cdn$3,290,000.

As at March 18, 2011, the Company had 101,349,780 shares and 16,370,827 share purchase warrants outstanding.

Pacific Road Holdings NV, Pacific Road Capital A Pty Ltd. and Pacific Road Capital B Pty Ltd. (collectively the "**Pacific Road Funds**") held 23,740,000 Xtierra shares (28.0%) at December 31, 2010. On January 20, 2011, Pacific Road Funds acquired 5,331,210 additional Xtierra shares, and on February 28, 2011, Pacific Road Funds exercised 6,250,000 warrants into Xtierra shares, for a total of 35,321,210 Xtierra shares (34.9%). On April 14, 2009, the Company and Pacific Road entered into an agreement, whereby Pacific Road subscribed for an aggregate principal amount of $1,250,000 in non-interest bearing notes (the "Notes") issued by Orca Minerals Limited ("Orca Minerals"), a subsidiary of the Company. Upon conversion of the convertible notes, additional shares of the Company could be issued.

The Notes have a term of five years and are convertible, at the holders' option, into a number of common shares of Orca Minerals which will equal ten percent (10%) of the issued shares of Orca Minerals on a fully diluted basis. Pacific Road also has a put right, exercisable at its option at any time prior to maturity to require Xtierra to purchase the Notes for a number of common shares equal to the principal amount of the Notes divided by the volume weighted average trading price of Xtierra's common shares during the 30 day period prior to the exercise of such right.

Market for Securities

The shares of the Company are listed for trading on the TSX Venture Exchange under the symbol "XAG". The following table sets forth the high and low trading prices for each month and the total volume traded each month for the last financial year.

Month	Monthly Low ($)	Monthly High ($)	Monthly Volume
January 2010	0.17	0.22	817,300
February 2010	0.17	0.26	738,320
March 2010	0.16	0.23	532,500
April 2010	0.13	0.18	992,149
May 2010	0.10	0.17	468,982
June 2010	0.11	0.14	242,931
July 2010	0.10	0.12	278,420
August 2010	0.10	0.12	322,538
September 2010	0.11	0.15	687,041
October 2010	0.14	0.20	572,032
November 2010	0.18	0.27	2,702,885
December 2010	0.24	0.46	3,981,359

Source: TSX Venture Exchange

Escrowed Securities

As of March 18, 2011, there are 1,263,169 escrowed securities.

Designation of Class	Number of Securities held in escrow	Percentage of Class
Common	1,263,169	1.24%

The depository for escrowed shares is Equity Financial Trust Company, 200 University Avenue, Suite 400, Toronto, Ontario, M5H 4H1. The terms and conditions of release are as follows:

25% released upon date of Exchange Bulletin
25% released 6 months after Bulletin
25% released 12 months after Bulletin
25% released 18 months after Bulletin

As of the date hereof, 50% of the original escrowed shares have been released.

Directors and Officers

Name and Municipality of Residence	Offices with the Corporation	Principal Occupation	Director/Officer Since	Shares held Directly or Indirectly or over which control or direction is exercised
John F. Kearney(1) (3) Toronto, Ontario	Chairman and Director	Mining Executive Chairman of Canadian Zinc Corporation, Anglesey Mining plc and Labrador Iron Mines Holdings Limited	August 14, 2008	Nil
Terence N. McKillen(1) Mississauga, Ontario	President, Chief Executive Officer and Director	Geologist and Mining Executive Vice President Labrador Iron Mines Holdings Limited; President and Chief Executive Officer of Conquest Resources Limited; Chief Executive Officer of Minco plc	August 14, 2008	Nil
Neil J.F. Steenberg Toronto, Ontario	Secretary and Director	Barrister & Solicitor Self employed	August 14, 2008	Nil
Lee A. Graber(2) (3) San Francisco, California	Director	Mining Executive Investment Director, Pacific Road Capital Management	August 14, 2008	Nil
Tim Gallagher(3) Toronto, Ontario	Director	Financial Executive, President Inflection Capital Inc.	August 14, 2008	544,487
Gerald Gauthier	Chief Operating Officer	Chief Operating Officer	N/A	33,000
Danesh Varma	Chief Financial Officer	Chartered Accountant	N/A	Nil

Notes:

(1) Messrs Kearney and McKillen are directors and/or officers and shareholders of Minco plc which holds 30,000,003 Xtierra Shares (30%);
(2) Mr. Graber is an investment director with Pacific Road Capital Management Pty. Limited which acts as investment adviser to the Pacific Road Funds which hold 35,321,210 Xtierra Shares (35%), and.
(3) Member of the audit committee.

The following sets out details respecting the directors, officers and management of Xtierra, each of whom has been engaged for more than five years in his or her present principal occupation.

John F. Kearney, Age 60, *Chairman, and Director*. Mr. Kearney has 38 years experience in the mining industry. He is currently the Chairman of Labrador Iron Mines Holdings Limited, Canadian Zinc Corporation, Conquest Resources Limited, Anglesey Mining plc. and Minco plc. In addition, Mr. Kearney is a director of Avnel Gold Mining Limited. Previously, he was Chairman, President and Chief Executive Officer of Northgate Exploration

Limited, Campbell Resources Inc. and Sonora Gold Corp. and more recently Chairman and Director of Scandinavian Minerals Limited and President of Sulliden Exploration Inc. He also currently serves as a director of the Mining Association of Canada. Mr. Kearney holds degrees in law and economics from University College Dublin and an M.B.A. degree from Trinity College Dublin. He qualified as a solicitor in Ireland and as a chartered secretary with the Institute of Chartered Secretaries and Administrators in London. Mr. Kearney is also a member of the Canadian Institute of Mining and Metallurgy, the Prospectors and Developers Association of Canada and the Law Society of Ireland.

Terence N. McKillen, Age 64, *President, Chief Executive Officer and Director*. Mr. McKillen is a professional geologist and has 40 years of experience in the mining industry. He holds degrees in geology from the University of Dublin (Trinity College) and a Masters degree in mining geology and mineral exploration from the University of Leicester. He is a registered Professional Geoscientist in the Provinces of Ontario, Quebec and Newfoundland and Labrador. Mr. McKillen is currently Director and Executive Vice President of Labrador Iron Mines Holdings Limited, Director, President and CEO of Conquest Resources Limited and Chief Executive Officer for Minco plc. He was formerly Vice-President Exploration of Northgate Exploration Limited and Vice President Exploration and Development of Campbell Resources Inc.

Neil J. F. Steenberg, Age 61, *Secretary and Director*. Mr. Steenberg has over 34 years experience in the practice of corporate finance, securities and mining law. Mr. Steenberg currently operates an independent business law practise. Prior to November 1, 2003, Mr. Steenberg was a partner in the law firm of Gowling Lafleur Henderson LLP where he served as Chair of the firm's national corporate finance and securities practice group.

Lee Graber, Age 64, *Director*. Mr. Graber is a mining industry executive with over 30 years experience in the mining industry. He is currently Investment Director with Pacific Road Capital Management, based in San Francisco. Mr. Graber spent 23 years with Homestake Mining Company where as Vice President responsible for Corporate Development, he initiated, managed and closed major acquisition and divestment transactions. Subsequent to Homestake, Mr. Graber was Managing Director, Mergers and Acquisitions for Endeavour Financial Ltd. in Vancouver advising junior resource companies on financings, mergers and acquisitions and project development and is, a director of a number of public resource companies including AuEx Ventures, Inc., Timmins Gold Corp., Far West Mining Ltd and First Bauxite Corporation.

Tim Gallagher, Age 50, *Director*. A graduate in commerce from McMaster University, Mr. Gallagher holds a Master of Business Administration from York University and is a Chartered Financial Analyst. He is currently Chairman of Excalibur Resources Ltd., and a Director of Xmet Inc. He has been a director or senior officer of a number of public and private companies including Inflection Capital Inc., Schneider Power Inc., Eminence Capital I Inc. and Biorem Inc. Previously he was in institutional sales for Loewen Ondaatje McCutcheon and Union Bank of Switzerland (Canada). Mr. Gallagher has assisted a number of companies implement their growth plans primarily through the TSXV's Capital Pool Program since 1997.

Gerry J. Gauthier, Age 64, *Chief Operating Officer*. Mr. Gauthier is a registered Professional Engineer in Ontario and has over 37 years international experience in the mining industry building and operating open pit and underground mines in Canada, USA, Mexico, Central America and West Africa. Mr. Gauthier was previously Chief Operating Officer at Nevsun Resources Ltd. and previously Vice-President Operations at Glencairn Gold Corp. He is a graduate of Queen's University in Mining Engineering. He is currently a director of Labrador Iron Mines Holdings Limited, Conquest Resources Limited and Gold World Resources Ltd. Mr. Gauthier was formerly General Manager of the Page-Williams gold mine at Hemlo, Ontario and Senior Vice President North American Operations for Lac Minerals Ltd.

Danesh K. Varma, Age 61, *Chief Financial Officer*. Danesh Varma (FCA, ATII) has over 30 years experience in the international finance and mining sectors. Mr. Varma is currently CFO of Xtierra Inc. and a director and CFO of Minco plc as well as a director and CFO of Anglesey Mining plc, Conquest Resources Limited and Corporate Finance Partner in Beer & Partners Limited. Mr. Varma was formerly President and Managing Director of American Resource Corporation Limited, Dundee Bancorp, Dundee Investment Management and Research Ltd. and Dundee Mutual Funds India in addition to holding the post of director and Vice President of the Dundee Bank Cayman. He was formerly a director of Northgate Exploration Limited and Westfield Minerals Limited.

Messrs. Kearney, Graber and Gallagher are members of the Audit Committee, the majority of the Committee are independent and financially literate.

Corporate Cease Trade Orders or Bankruptcies

No director, officer, promoter or other member of management of Xtierra is, or within the ten years prior to the date hereof has been, a director, officer, promoter or other member of management of any other issuer that, while that person was acting in the capacity of a director, officer, promoter or other member of management of that issuer, was the subject of a cease trade order or similar order or an order that denied the issuer access to any statutory exemptions for a period of more than thirty consecutive days or was declared bankrupt or made a voluntary assignment in bankruptcy, made a proposal under any legislation relating to bankruptcy or insolvency or has been subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets except as follows:

Mr. Kearney served as a non-executive director of McCarthy Corporation plc, from July 2000 to March 2003. In June 2003, McCarthy Corporation plc proposed a voluntary arrangement with its creditors pursuant to the legislation of the United Kingdom.

Mr. Varma, Chief Financial Officer, was President and Managing Director of American Resource Corporation Limited in respect of which a cease trade order was issued in June 2004 for failure to file its financial statements. The cease trade order is still currently in effect.

Mr. Steenberg was a director of Tagish Lake Gold Corp. (“Tagish”) which obtained an order for protection from its creditors under the Companies Creditors Arrangement Act on April 9, 2010. This order was lifted and a plan of arrangement was implemented on October 27, 2010 pursuant to which all of the creditors of Tagish were paid in full.

Penalties or Sanctions

No proposed director, officer, Insider, promoter or Control Person of Xtierra has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority or has been subject to any other penalties or sanctions imposed by a court or regulatory body or self-regulatory authority that would be likely to be considered important to a reasonable security holder making a decision about the Amalgamation.

Personal Bankruptcies

No proposed director, officer, Insider, promoter or Control Person of Xtierra, or a personal holding company of any such persons, has within the 10 years preceding the date of this Annual Information Form, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or been subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of the individual.

Conflicts of Interest

The transactions in which directors, senior officers, promoters or principal holders of Xtierra's securities have had an interest in are described under the headings "Interest of Management and Others in Material Transactions", "Options to Purchase Securities" and "Executive Compensation". Other than as described under these headings, there are no material transactions with or involving the directors, senior officers, promoters or principal holders of securities of Xtierra that have occurred since incorporation. Certain of Xtierra's directors and officers also serve as directors and/or officers of companies which may enter into contracts with Xtierra in the future. In the event that this occurs, a conflict of interest will exist. Directors in a conflict of interest position are required to disclose such conflicts to Xtierra.

The directors of Xtierra are required by law to act honestly and in good faith with a view to the best interests of Xtierra and to disclose any interests that they may have in any material contract or material transaction. If a conflict of interest arises at a meeting of the board of directors, any director in a conflict is required to disclose his interest and abstain from voting on such matter.

The directors and officers of Xtierra are aware of the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosures by directors of conflicts of interest in respect of Xtierra and are required to comply with such laws in respect of any directors' and officers' conflicts of interest or in respect of any breaches of duty by any of its directors or officers.

Promoters

Minco plc, having taken the initiative in founding and organizing Orca and in the development of the Zacatecas Projects, is considered a promoter of Orca and, consequently, Xtierra within the meaning of applicable securities laws. Minco directly owns 30,000,003 common shares or approximately 30% of the issued and outstanding common shares of Xtierra.

In consideration for all of the issued shares of Orca Gold Corporation International Ltd., Minco plc was issued 30,000,000 common shares of Orca on August 23, 2007, having a capital value of $13,586,000 and Orca thereby acquired the interest of Minco plc in the base and precious metal mineral properties comprising the Zacatecas Projects. The capital value of the 30,000,003 was based upon Minco plc.'s aggregate costs of acquisition and cumulative expenditures on such properties. Effective August 26, 2008, Minco plc exchanged all of its shares of Orca for 30,000,003 common shares of Xtierra.

Legal Proceedings

The Company is not involved in any legal proceedings.

Interest of Management and Others in Material Transactions

Except as detailed below, no director, executive officer, shareholder beneficially owning (directly or indirectly) or exercising control or direction over more than 10% of the Common Shares, or proposed nominee for election as a director of the Corporation, and no associate or affiliate of the foregoing persons has or has had any material interest, direct or indirect, in any transaction since the beginning of the Corporation's last completed fiscal year or in any proposed transaction which, in either such case, has materially affected or will materially affect the Corporation.

No director, executive officer, shareholder beneficially owning (directly or indirectly) or exercising control or direction over more than 10% of the Common Shares, or proposed nominee for election as a director of the Corporation, and no associate or affiliate of the foregoing persons has or has had any material interest, direct or indirect, in any transaction since the beginning of the Corporation's last completed fiscal year or in any proposed transaction which, in either such case, has materially affected or will materially affect the

Corporation, other than,

- Messrs. Kearney, McKillen and Varma who are directors and/or officers and shareholders of Minco plc which holds 30,000,003 Xtierra shares (30%); and
- Pacific Road Holdings NV, Pacific Road Capital A Pty Ltd. and Pacific Road Capital B Pty Ltd. (collectively the "**Pacific Road Funds**") held 23,740,000 Xtierra shares (28.0%) at December 31, 2010. On January 20, 2011, Pacific Road Funds acquired 5,331,210 additional Xtierra shares, and on February 28, 2011, Pacific Road Funds exercised 6,250,000 warrants into Xtierra shares, for a total of 35,321,210 Xtierra shares (34.9%). On April 14, 2009, the Company and Pacific Road entered into an agreement, whereby Pacific Road subscribed for an aggregate principal amount of $1,250,000 in non-interest bearing notes (the "Notes") issued by Orca Minerals Limited ("Orca Minerals"), a subsidiary of the Company. The Notes have a term of five years and are convertible, at the holders' option, into a number of common shares of Orca Minerals which will equal ten percent (10%) of the issued shares of Orca Minerals on a fully diluted basis. Pacific Road also has a put right, exercisable at its option at any time prior to maturity to require Xtierra to purchase the Notes for a number of common shares equal to the principal amount of the Notes divided by the volume weighted average trading price of Xtierra's common shares during the 30 day period prior to the exercise of such right.

Transfer Agent and Registrars

The Company's Transfer Agent and Registrar is Equity Financial Trust Company whose offices are located at 200 University Avenue, Suite 400, Toronto ON M5H 4H1.

Material Contracts

The only material contracts entered into by the Company other than in the normal course of business are as follows:

1. Option Agreement with Pacific Road Funds dated September 8, 2008; and
2. Note Purchase Agreement with Pacific Road Funds dated April 14, 2009

Interest of Experts

There are no individuals or companies who have prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made under National Instrument 51-102 by the Company during, or relating to, the Company's most recently completed financial year; and whose profession or business gives authority to the statement, report or valuation made by the person or company.

The following persons or companies have prepared or certified a statement, report or valuation during the past five years, described or included in a filing, or referred to in a filing, made under National Instrument 43-101 by the Company and whose profession or business gives authority to the statement, report or valuation made by the person or company:

Terence N. McKillen, M.A., M.Sc., P.Geo. and Mr. Gerald J. Gauthier, P.Eng. are the Company's Qualified Persons as defined in National Instrument 43-101 and have prepared, supervised the preparation of or reviewed, the parts of this Annual Information Form that are of a scientific or technical nature.

The Technical Reports provide an independent review of the mineral resources, reserves and development of the Properties. The Panfilo Natera Exploration Property Technical Report was prepared by Dr. J.L.Wahl, P.Geo. and Mr. D. Wahl, P.Eng., P.Geo., of Southampton Associates Inc., the Bilbao Property Technical Report was prepared by Dr. J.L.Wahl, P.Geo., Mr. R.T.G. Parker, B.Sc., Eur. Geol, M.C.I.M.M., C.Eng, F.G.S. and Mr. D. Wahl, P.Eng., P.Geo., of Southampton Associates Inc., the Pedernalillo Laguna Technical Report was prepared by J. Steedman, M.Sc., MAusIMM, R. Pressacco, M.Sc (A), P.Geo., I. Ward, P.Eng. and S.J. Shoemaker, Jr., MAusIMM, and the Bilbao Resource Report of Februaruy 2010 was prepared by Mr. R.T.G. Parker, B.Sc., Eur. Geol, M.C.I.M.M., C.Eng, F.G.S., all of whom are "Qualified Persons" as such term is defined in NI 43-101. Each of the authors of the Technical Reports is independent of Xtierra within the meaning of NI 43-101. A copy of these reports can be found on Xtierra's disclosure page on www.sedar.com. Messrs. J Wahl, D. Wahl, R.T.G. Parker, J. Steedman, R. Pressacco, I. Ward and S.J. Shoemaker, Jr. do not have any interest in the Properties and do not own any securities of Xtierra.

Additional Information

Additional information about the Company is available under the Company's profile on SEDAR at www.sedar.com and on the Company's website.

Additional financial information is contained in the Company's audited financial statements and MD&A for the fiscal year ended December 31, 2010 which may be found on SEDAR at www.sedar.com.

Additional information, including Directors' and Officers' remuneration and indebtedness, principal holders of the Company's securities, options to purchase securities and interests of insiders in material transactions and information relating to the Company's Audit Committee, where applicable, are contained in the Company's Information Circular dated May 3, 2010 for its Annual and Special Meeting of Shareholders held on June 1, 2010 which may be found on SEDAR.

Cautionary Note – Forward Looking Statements

This Annual Information Form may contain forward-looking statements, such as estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Words such as "believes", "anticipates", "expects", "estimates", "may", "could", "would", "will", or "plan", or similar expressions, are intended to identify forward-looking statements. Such forward-looking statements are made pursuant to the safe harbour provisions of the United States Private Securities Litigation Reform Act of 1995.

Since forward-looking statements are based on assumptions and address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results relating to, among other things, mineral reserves, mineral resources, results of exploration, reclamation and other post-closure costs, capital costs, mine production costs, the timing of exploration, development and mining activities and the Company's financial condition and prospects, could differ materially from those currently anticipated in such statements by reason of factors such as changes in general economic conditions and conditions in the financial markets, changes in demand and prices for the minerals the Company expects to produce, delays in obtaining permits, litigation, legislative, environmental and other judicial, regulatory, political and competitive developments in areas in which the Company operates, technological and operational difficulties encountered in connection with the Company's activities, labour relations matters, costs and changing foreign exchange rates and other matters discussed under "Risk Factors" herein and under "Management's Discussion and Analysis for the year ended December 31, 2008 - Liquidity and Capital Resources and Review of Financial Results".

Other delays in factors that may cause actual results to vary materially include, but are not limited to, the receipt of permits or approvals, changes in commodity and power prices, changes in interest and currency exchange rates, geological and metallurgical assumptions (including with respect to the size, grade and recoverability of mineral resources), unanticipated operational difficulties (including failure with plant, equipment or processes to operate in accordance with specifications or expectations), cost escalation, unavailability of materials and equipment, industrial disturbances or other job action, and unanticipated events related to health, safety and environmental matters, political risk, social unrest, and changes in general economic conditions or conditions in the financial markets.

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Inferred mineral resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that mineral resources will be converted into mineral reserves.

This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements. These and other factors should be considered carefully and readers should not place undue reliance on the Company's forward-

looking statements. Further information regarding these and other factors which may cause results to differ materially from those projected in forward-looking statements are included in the filings by the Company with securities regulatory authorities. The Company does not undertake to update any forward-looking statements that may be made from time to time by the Company or on its behalf, except in accordance with applicable securities laws.

XTIERRA INC.

TORONTO, ONTARIO, CANADA

Website: www.xtierra.ca

TSX Venture Exchange **“XAG”**