

- **Bilbao Silver-Lead-Zinc Project - Preliminary Economic Assessment**

Toronto, April 28, 2014, Xtierra Inc. (TSXV – XAG) (“Xtierra” or the “Company”), reports that it has received an updated NI 43-101 compliant resource estimate and a Preliminary Economic Assessment (PEA) on the Bilbao Project, both prepared by RungePincockMinarco (Canada) Limited (RPM).

The Bilbao Project is a polymetallic sulphide and oxide replacement silver-lead-zinc-copper deposit located approximately 500km northwest of Mexico City in the southeastern part of the State of Zacatecas.

RPM updated the previous resource model taking into account additional drilling completed in both 2012 and 2013 and coordinated and supervised various third party independent consultants to carry out various studies including: Nordmin Engineering Ltd. developed a mine design and production schedule; DRA Americas Inc. analyzed metallurgical testing and recovery methods and designed a process plant; Golder Associates carried out various environmental studies including the design of a tailings disposal facility; and Micon International Limited carried out a high level review of metal markets.

*The following disclosure is based on and/or derived from the PEA. The PEA is preliminary in nature in that it includes in part inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that the results projected by the PEA will be realized with further work and actual results may vary substantially. Because inferred resources are speculative, the modifying factors that are applied to assess the potential economic viability of the project are also speculative.*

### Exploration and Drilling

RPM, after reviewing the extensive work previously completed and the large amount of information generated, recommended extending the scope of the previously completed infill drilling program by a minimum of four holes and assaying historical core in strategic locations.

Six infill holes were drilled in June 2013, completing an additional drilling campaign in the southern part of the silver-zinc-lead project. This drilling followed a 10 hole, 2032 metre infill drilling campaign during the third quarter of 2012.

Since 2006, Xtierra has drilled 113 diamond drill-holes in the Bilbao deposit. All of the drill-holes are diamond NQ-HQ core holes with most (104) being vertical. The drill campaigns defined a general grid of 50 m by 50 m and a tighter drilling grid of 26 holes defining a 35 m by 35 m in the high grade core. The drilled zone extends over an area of 530m along north-south axis and 580m along east-west axis.

### Mineral Resource Estimates

The new Zn/Pb/Ag/Cu resource estimation of the Bilbao deposit was prepared by RPM to incorporate new drilling information acquired during 2011-2013. The geological model was generated using 113 holes (all the logged drill holes). The block resource model was estimated using 105 holes which had assays. A lithology model was built and Indicator and Ordinary Kriging (OK) were used to estimate Zn, Pb, Ag and Cu resources. Density measurements were updated using 224 new density determinations completed since the last 2010 model was constructed. The previous 2011 model was based on the average of 14 measurements and assigned a density of 3.6g/cc to sulphide blocks while the new 2013 model established a mean density of 3.3 g/cc for the sulphide zone.

RPM used three year trailing average prices of US\$0.94 lb/Zn, US\$1.01 lb/Pb and US\$30.24 oz/Ag for purposes of determining cutoff grades and Zn equivalent values. Metallurgical recoveries were applied in the equivalent equation as 76.7%, 90.6% and 73.4% for Zn, Pb, and Ag, respectively. The Zn equivalent equation used is as follows:  $Zneq = Zn + 0.969 * Pb + 0.09947 * Ag$ .

The total resources by mineral type at 3% Zn equivalent cut-off, excluding approximately 1 million tonnes of previously mined out ore, estimated by RPM and reported in April 2014 are shown in the following table:

Ore Type	Zn equiv. (%)	Indicated Tonnes	Inferred Tonnes	Total Tonnes	Zn (%)	Pb (%)	Ag (ppm)	Cu (%)
Oxide	6.50	791,082	3,069,582	3,860,664	1.70	2.33	42	0.17
Mixed	7.10	778,336	238,923	1,017,259	2.06	2.17	52	0.18
Sulphide	6.88	4,555,809	1,201,032	5,756,841	2.03	1.40	69	0.17
Total	6.76	6,125,227	4,509,537	10,634,764	1.91	1.81	58	0.17

The previous resource estimation was originally carried out by Richard Parker Consulting Geologist in 2011 and included 84 drill holes. The resources reported in 2011 (including both oxide and sulphide) were 10,617,891 tonnes @ 6.48% Zneq in the Indicated category and 430,000 tonnes @ 5.19% Zneq in the Inferred category. (Technical Report dated April, 2011 entitled “*Geology and revised Minerals resources of the Bilbao Silver-Lead-Zinc Deposit – State of Zacatecas, Mexico*” by RTG Parker, Consulting Geologist).

### Net Smelter Return Cut-off Value

The Net Smelter Return (NSR) cutoff value of US\$45.21 per tonne of ore used for the Bilbao Project stope tonnes and grade determination is based on direct mining, processing and G&A costs.

### Potentially Mineable Resource

The potentially mineable underground resource is estimated by RPM to be 5.2M tonnes at grades of 2.10 % Zn, 1.40 % Pb and 63.96 grams Ag per tonne. The tonnes and grade include an average dilution of 10 percent, at zero grade, as well as mining losses of 5%. The RPM PEA relies on Indicated Mineral Resources (approximately 75 percent of the total resource tonnes) as well as Inferred Mineral Resources (approximately 25 percent of the total resource tonnes).

### Mine Design and Production Planning

The current mine plan incorporated in the PEA targets the extraction of the sulphide zone only given the results of the metallurgical test work on the oxide and transition zones completed to date.

The mine production schedule is based on a production rate of 2,000 tpd of potentially economic mineralization, or 720,000 tonnes per year. This provides for a mine life of approximately 8 years, mining out the resources available.

Underground mining methods will be used to access the sulphide zone located approximately 50 meters below surface, and accessed via a portal and ramp system. The main access to the underground mine will be via a main ramp from surface to the 1860 Level.

The main proposed mining method is Longhole Open Stopping using downholes, while near the top of the deposit Longhole Open Stopping using upholes will be employed. Longhole stopes will be backfilled with a cemented rock fill.

Based on the selected mining method a dilution factor of 10% is applied which allows for dilution from hanging and footwall wall exposures and cemented backfill dilution which results from blasting against backfilled stopes. Mining recovery of 95% is assumed for this deposit.

## Recovery Methods

The mineral processing plant described is for the treatment of a silver-lead-zinc sulfide ore at a design throughput rate of 2,000 t/d. The mineral processing plant will produce lead-silver and zinc concentrates which will be transported off-site.

The process flow sheet selected for the Bilbao process plant comprises two stages of crushing, two stages of grinding, lead rougher flotation, lead regrind, lead cleaner and lead concentrate and dewatering stages, zinc rougher flotation, zinc regrind, zinc cleaner flotation and zinc concentrate and dewatering stages.

The plant will be capable of processing 720,000 tonnes per year with an average grade of 2.1%, 1.4% and 63.96 g/t of zinc, lead and silver respectively. The plant has an operating regime of 360 days per year, 7 days per week, 24 hours per day and a plant utilization of 92%, resulting in an average nominal throughput of 91 tonnes per hour.

The plant will produce, on average, 16,913 dry tonnes per year of silver-rich lead concentrate, and 26,966 dry tonnes per year of zinc concentrate. Plant recovery is estimated to be 76.7% for zinc, 90.6% for lead and 73.4% for silver over the life of the mine.

## Capital and Operating Costs

Project capital costs, as of April 2014, are estimated by RPM to be US\$99.5 million including an allowance for contingencies of US\$8.7 million, equivalent to 8.8% of total capital expenditure. The capital cost outlines total pre-production capital of US\$91.2 million and remaining other capital and sustaining capital costs of US\$8.3 million for the eight year production life, including acquisition to replace mine equipment fleet, plant and infrastructure.

The operating expenditure is based on all development work in waste being performed by contractors, and stope development by Xtierra personnel and equipment fleets. The strategy was determined as the most cost effective for the operation and ensures sustainability of a skilled labor force. The average total unit operating cost over the life of the project is US\$66.90/t of ore, including mining, processing, general and administration, freight and insurance, smelting, refining and penalty costs.

## Economic Analysis

The economic analysis was completed by RPM for a 720,000 tonne per year processing plant capacity and is based on the potentially mineable underground resource of 5.2 million tonnes at grades of 2.10 % Zn, 1.40 % Pb and 63.96 grams Ag per tonne.

At the request of Xtierra, RPM has based its economic analysis of the Bilbao project on three-year average metal prices. For the three-year period ending 31 October, 2013, the rolling average prices based on LME cash buyer quotes for zinc and lead, and as reported by Kitco on [www.kitco.com](http://www.kitco.com) for silver are as follows: Zinc US\$0.92/lb; Lead US\$1.00/lb; and Silver US\$30.38/oz.

Total revenue for the project is based on 720,000 tonnes per year production to be reached in production year 2 and continuing for the life of the project average US\$73.6 million per year (gross revenue). The current plan estimates 11,000 tonnes of zinc concentrate and 7,000 tonnes of lead concentrate in the first production year.

## Cash Flow

Pre-tax earnings total US\$59.9 million over the eight year mining plan to extract the Indicated and Inferred potentially minable resource. Economic results of the Bilbao Project pre-tax cash flow model indicate an Internal Rate of Return (IRR) of 13.2% and a Net Present Value (NPV) of US\$11.0 million at a 10% discount rate and a NPV of US\$18.7 million at an 8% discount rate. RPM considered the ten percent discount rate appropriate for this evaluation as the overall project risks

are considered to be relatively low in terms of total capital committed, geological risk and market risk.

This preliminary economic assessment is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.

After-tax net cash flow totals US\$32.6 million over the eight year mine plan. Economic results of the Project after-tax cash flow model indicate an IRR of 8.1% and an after-tax NPV of negative US\$5.8 million at a 10% discount rate and a NPV of US\$359,000 at an 8% discount rate.

RPM also developed a sensitivity analysis to the Project's IRR and NPV to +/- 15 percent changes to key assumptions in the cash flow model based on variations in key project elements of metal price, operating and capital costs. The Bilbao Project was found to be most sensitive to changes in operating costs where a 15% reduction in operating costs would result in pre-tax NPV of US\$45.0 million and a pre-tax IRR of 22.0%. RPM noted that there may be opportunity to reduce operating costs significantly (~US\$5/t to US\$6/t) by reducing the number of stopes filled with backfill. With regard to changes in metal prices, the Bilbao Project was found to be most sensitive to movements in the price of silver.

### Recommendations by RPM

Recommendations have been made by RPM in the PEA identifying various opportunities to increase the mineable resource and reduce operating costs through additional exploration and engineering, improving the overall economics of the project. RPM recommendations include:

- Additional definition drilling targeted at the Bilbao transition and sulphide zones could lead to re-classification of inferred resources to indicated resources, potentially contributing to the total mineable resource studied at the pre-feasibility level;
- The potential to increase level spacing and correspondingly reduce level development, through use of cable bolts, may lead to lower mine development costs and should be further assessed;
- Further analysis of hydraulic and sand backfilling options, in terms of preparation and distribution, may further reduce overall operating costs;
- There may also be opportunity to reduce operating costs significantly (~US\$5/t to US\$6/t) by reducing the number of stopes filled with backfill all together. Further geotechnical study would need to be carried out for this scenario to better understand possible ore losses with pillars left in place, and possible recovery of these pillars through caving activity. Potential also exists for deferral of ramp and associated development;
- Inclusion of transition zone material in the mine plan should be investigated (requiring additional metallurgical testwork) to extend the life of mine and/or potentially increase the mining rate per year;
- Further optimization of stope sequencing could lead to improved cash flow and should be studied;
- Exploration drilling at the Bilbao 2 area, approximately 1.5 km south of Bilbao, has potential to offer additional mineral resources to the project due to the fact that current trenching, sampling and resulting soil geochemistry information identifies similarities between the two areas. An additional source of feed to the designed plant could lengthen the overall life of the mine, increase the daily production rate, or result in a combination of the two, improving the NPV and IRR of the project.

RPM noted that the Bilbao deposit contains a reasonable quantity of mineral resources between the oxide, transition, and sulphide mineral zones; however, the lack of metallurgical test data available for the transition zone and identified recovery challenges for the oxide zone currently limit the scope of this PEA to the total mineable sulphide resources to offset the capital costs associated with the project.

A Technical Report in compliance with NI 43-101 has been filed on SEDAR.

### **Future Plans**

Having now received the completed Preliminary Economic Analysis for the Bilbao Project from RPM, the Company's focus going forward is to seek alternatives to maximize the value of Bilbao including seeking to develop Bilbao either alone or in joint venture with a partner or through corporate transactions.

RPM have made numerous recommendations throughout the PEA identifying various opportunities to increase the mineable resource and reduce operating costs through additional exploration and engineering, improving the overall economics of the Bilbao project.

Further metallurgical test work on the oxide ore to optimize economic metal recoveries, including the recovery of lead by means of gravity separation, has shown some promise and further metallurgical test-work on the oxide ore should be undertaken.

The continuing operations of the Company are dependent upon its ability to raise adequate financing and additional funding will be required for working capital, optimisation and feasibility studies, further exploration and for financing in the longer term to develop the Bilbao project.

### **Cautionary Notes:**

*This press release may contain "forward-looking information" within the meaning of applicable Canadian securities legislation. The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of the content of this release.*

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