

SUMMARY REPORT ON MINERA IRL S.A.:
PROJECTS, PERSONNEL AND POTENTIAL

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Introduction

I have been asked to report my observations concerning different aspects of Minera IRL S.A. activities: the quality of projects, personnel, and potential. This request arose from a period from January 24 to February 5, 2011, during which I (1) attended a Minera IRL staff workshop in Peru at which I presented technical talks and interacted extensively with Minera IRL exploration staff; (2) reviewed data on the Ollachea project and visited it in the field, then examined drill core and discussed it with staff; (3) heard presentations on other projects and participated in discussions on progress and plans; (4) visited projects in the Deseado Massif of Patagonia, Argentina, including field examination, inspection of drill core and extensive discussions. During this period I had full access to data and had vigorous discussions with staff from management to junior geologist level.

Specific comments on projects visited are made in summary form below; full detailed comments on the Patagonia projects visited are presented in a separate report.

Overview

Minera IRL is a young company that commenced its activities as a privately-funded company in 2002, and was listed in London in 2007. It has achieved a key goal of companies in the mining industry of having a pipeline of projects ranging from production (Corihuarmi, Peru), advanced projects (Ollachea, Peru, and Don Nicolas, Argentina, which itself includes two advanced projects) to brownfields and greenfields projects in Peru and Argentina, with additional projects under consideration. The Corihuarmi gold mine is a small low-grade operation with a limited mine life. The two advanced projects are focused on establishing mineable resources to allow development; both show high promise of providing larger production and longer mine life that is envisaged in current development plans (see comments below).

To handle these projects Mineral IRL has built a small team of highly motivated and professional staff and consultants covering the spectrum required for such a range of projects. Based on my discussions and observations, I believe this team compares favourably with exploration teams from much larger companies operating anywhere. Morale and motivation are clearly very high, and there was plenty to indicate that these are people who *think* about what they are doing. On one occasion while the managers held a meeting to discuss some operational matters I was left to look at core from Ollachea, stored in an outstanding facility in Julianca. All the time I was there I was bombarded with questions from the core-logging staff (“What does this mean?” “How can we interpret this?” – up to mega-questions like “Where does the gold come from?” “How was it transported?” “What controlled deposition here?”). This spontaneous vigorous discussion is a clear indication that these are very engaged and thoughtful people who are seeking answers that bear on every scale of the project: it reflects very favourably on both the team and the individuals.

The professionalism of this group was clearly on display. The core storage facility at Julianca is the best I have seen anywhere, including huge refrigerated storages for ore samples so they do not deteriorate before metallurgical testing. Drilling at Ollachea is on very steep slopes: all

waste water from the drilling is contained and processed to remove potentially hazardous contaminants before being released into the local drainage. In a less professional environment these steps would have been by-passed; this is exploration conducted at the best international standards.

As noted above, at both Ollachea and Don Nicholas there are clear indications of potential for larger resources than are currently being proven up for development. The following notes enlarge on this.

Ollachea Project, Peru

The style of gold deposit at Ollachea goes by a variety of names: orogenic gold deposit, slate-belt gold deposit, and others. This is a style of gold deposit that can be both very large and very rich. Important examples around the globe include Muruntau in Uzbekistan, Sukhoi Log in Russia, Ballarat and Bendigo in Australia; there are many others. The ore typically contains irregular quartz veins of multiple generations hosted in fine-grained clastic sedimentary rocks that are strongly deformed with pronounced competency contrast between different sedimentary layers. Hydrothermal alteration is present but is difficult to detect. The most obvious associated features are carbonate spotting and an association of gold with arsenic.

The Ollachea deposit is typical of its type. It is hosted in a sequence dominated by slates and minor metasilstones. Metamorphic grade varies, with local knotted andalusite and cordierite slates. The host slate contains finely disseminated pyrrhotite and carbonate; the associated quartz veins are milky white. In general where pyrite occurs, gold is absent. Free gold is seen in core, both in quartz veins and in the host rocks where it appears disseminated, though where seen in host rocks it is generally close to small quartz veins.

Artisanal mining is active along the zone, and clearly shows that there are two zones carrying gold, though they appear to merge in both directions along strike. Drilling to date has been limited to areas accessible for the drills. An adit being driven from the other side of the hill will enable underground drilling, giving much better access to the ore zones, allowing further testing along strike and down plunge. It will also allow bulk sampling to determine the grade more accurately than can be done with drilling, and will assist in determining controls on the ore. In deposits of this type it is common to have local zones of spectacular high grade; assay results have been cut in assessing grade, and it is likely that the realised grade on mining will be higher than estimated from drill intersections.

The zone where current exploration is focused is only part of an extensive mineralised zone (as apparent from artisanal workings). Potential for extending the ore zone in both directions, and down plunge, is excellent. Deposits of this type typically have strong down-plunge continuity. In addition, the further extensions of the mineralised zone through the district have not yet been explored; the likelihood of adding substantially to the resource is excellent. This will receive attention when a mineable reserve has been established to allow the first stage of mine development.

In my opinion this is an excellent project with potential to be much bigger than is currently indicated. It is likely that this mine, once established, will go through multiple stages of expansion as additional resources are defined.

Patagonia Projects, Argentina

Minera IRL has acquired extensive ground holdings in the Deseado Massif in Patagonia, Argentina. The Deseado Massif hosts a Large Igneous Province of Jurassic age, dominated by andesitic volcanic rocks at the base, and thick subaerial felsic volcanic and volcanoclastic rocks at the top. This province is unique in containing very extensive and widespread epithermal veins, to an extent not seen in similar provinces elsewhere. Minera IRL's large ground holdings, apart from containing many known epithermal prospects and deposits, offer potential to discover many previously unknown deposits.

The terrain of the Deseado Massif is generally flat, with local relief seldom exceeding 50 metres. Access is generally very good with most places accessible by 4 wheel drive vehicles. In many places outcrop is very good allowing simple surface exploration for outcropping veins. However, there are also extensive areas covered by thin (<5 m) Tertiary basalt that hides the prospective geology, and extensive alluvial flats with no outcrop and thin transported cover, also hiding prospective geology.

Exploration of new terrains invariably focuses on easy targets in the early stages; outcropping veins are readily found in areas of good outcrop, and so most previous exploration examined those. The possibility (indeed, certainty) that 'blind' veins (i.e., ones that do not reach the present surface) occur is generally ignored. More difficult areas such as those covered by basalt and alluvial flats are also neglected in early stage exploration, and must wait for more persistent explorers, or ones able to apply more sophisticated exploration strategies. Minera IRL's large land holding gives it an excellent opportunity to explore parts of this highly prospective region that have not been effectively explored before.

Specific exploration strategies and tools that can be applied in this region are discussed fully in a separate report. Suitable tools are available that will allow the previously unexplored (or ineffectively explored) parts to be explored effectively using a combination of tools that have been widely applied elsewhere, and which can be applied here at modest cost. Suffice to say that there are tools that will allow areas lacking outcrop to be explored for hidden orebodies, and outcropping areas to be reassessed for blind mineralisation.

Another important characteristic of epithermal deposits is that they show characteristic zoning in mineralogy, textures and chemistry that allow the exposed level of the system to be assessed. Systems exposed by erosion down to deep levels are likely to show relatively strong geochemical signatures for gold, but the vertical extent available to explore is limited. By contrast, shallow levels of the systems are likely to show poor surface geochemical results, but may occur above extensive strongly mineralised zones that remain preserved, awaiting discovery. With only two exceptions, the many prospects and veins that I visited showed clear evidence for exposure at shallow levels. Whilst the vein is largely preserved, gold

grades this high in the system are typically depressed. The implication is that drilling below outcrop has a good chance of finding better results.

This observation includes the Sulfuro vein in the La Paloma area of the Don Nicolas Project, which has been drilled to assess the resource there for inclusion in a potential new mine. Drilling on this property has defined a resource that is open in both directions along strike, but which appears to be weakening at depth below very shallowly-plunging shoots. Both outcrop and drill core show vein textures that appear to have formed at shallow levels in the hydrothermal system. The deepest drill holes only test the structure to a depth of less than 200 m (most to <150 m). Based on the shallow character of the veins, it is likely that deeper drilling will find additional mineralisation and potentially add to the resource there.

Conclusions

1. Minera IRL has developed a portfolio of excellent gold projects in South America, with a well-developed pipeline from greenfields to advanced projects, development projects and operating mines;
2. The company's practices are of the highest standard both technically and operationally;
3. The company has developed a small but technically and operationally excellent team of geoscientific staff that are working with high morale and commitment;
4. The company's projects (in particular Ollachea and in Patagonia) are exceptionally good and are expected to deliver new mining operations, and in addition show potential for continuing expansion and growth as the very prospective areas are explored;
5. The company's very strong land position in the Deseado Massif, Patagonia, is likely to lead to multiple discoveries (in addition to prospects already known and under investigation) as a variety of effective exploration tools are applied to finding new orebodies that are blind or hidden under shallow cover;
6. Most prospects in the Deseado Massif properties are exposed at shallow levels, implying that the associated mineralisation is fully preserved below;
7. The company has top quality management, a well-developed corporate strategy and excellent staff working on high-quality projects; its future is bright.



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