

Monday, 13 December 2010

**Howard Humphreys**

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**Investment Outlook:** 

**Risk Assessment:** **High**

**Recommendation:** **Speculative Buy**

Note: see page 4 for more details.

### Capital Structure

Share Price	A\$0.25
Ordinary Shares	112.9m
Options	-
<b>Market Cap (fully-diluted)</b>	<b>A\$28.2m</b>
Cash	A\$0.5m
Debt	-
<b>Enterprise Value</b>	<b>A\$27.7m</b>

Source: Serena Resources Ltd

### Capital Structure (Pro-Forma)

Share Price	A\$0.25
Ordinary Shares*	172.9m
Options	-
<b>Market Cap (fully-diluted)</b>	<b>A\$43.2</b>
Cash	A\$15.5
Debt	-
<b>Enterprise Value</b>	<b>A\$27.7m</b>

Source: Serena Resources Ltd

\*Assuming the full amount of A\$15m is raised through the issue of 60m shares at A\$0.25/share.

### Board of Directors

Executive Chairman & CEO	Clive McKerr
Director & Chief Geologist	Jacob Rebek
Executive Director	Michael Gibbons
Executive Director	Ismail Kirgiz

### Top 5 Shareholders

Prosilion Pty Ltd (Prosilion Trust)	80.1%
Main Beach Developments Pty Ltd	6.0%
Damilblue Pty Ltd	1.3%
KR & MB Jones atf Jones Superfund	1.3%
Pageville Pty Ltd (superfund)	1.2%

Source: Serena Resources Ltd

## Serena Resources Ltd

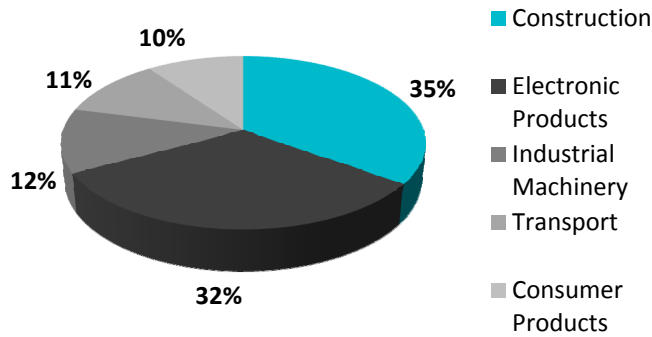
*Exploring for copper-molybdenum porphyry deposits in Chile*

- *Serena Resources Ltd's ('Serena') flagship project is the Trebolar Copper Project (75% Serena) located in the Chilean porphyry copper belt, ~500km north of Santiago.*
- *The project consists of 44 exploration concessions, containing a number of exploration targets; all of the targets are located within 40km of the Pan American Highway.*
- *Serena has engaged Dayton Way Financial Pty Ltd to raise up to A\$15.0m (60m shares at A\$0.25/share). The funds will be used for exploration and to increase Serena's interest in Trebolar to 80%.*
- *Serena's exploration team centres on two individuals, Jacob Rebek and Jose Izquierdo, with a vast wealth of relevant South American exploration experience.*
- *Jacob Rebek (Director and Chief Geologist) spent 31 years with CRA Exploration (later Rio Tinto) in Australia and across the world. Jacob was Rio Tinto's Exploration Director for South America.*
- *Jose Izquierdo (Consultant Geologist) is a Chilean geologist with 43 years experience. Started the exploration program that led to the discovery of the Escondida copper deposit.*
- *Within the Trebolar District there are characteristic features of porphyry copper mineralisation, including 'leached caps' (where copper has been leached into secondary enriched zones).*
- *Serena has conducted sampling over a number of exploration targets. The samples collected to date indicate that there are leached caps, which are potentially underlain by enriched zones.*
- *Serena plans to undertake a 17 hole, 2,500m reverse circulation ('RC') drilling program in late 2010, to test the first 3 targets where construction of access roads has been completed.*
- *The first hole has been drilled to a total depth of 210m. Visual inspection of the drill chips showed that it intersected disseminated sulphide mineralisation between 135m and 210m.*

## The Copper Industry

### What is Copper Used For?

Figure 1: Uses of Copper (2009)



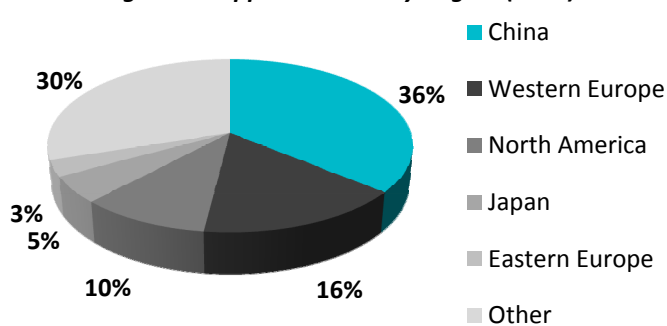
Source: Brook Hunt

Copper ('Cu') is an industrial metal with many applications, due to its properties of corrosion resistance and thermal and electrical conductivity. Around 67% of refined Cu consumed annually goes to the construction and electronics industries. While the remaining demand is almost evenly spread across industrial machinery, transport and consumer products.

**“Copper [has] many applications, due to its properties of corrosion resistance and thermal & electrical conductivity.”**

### Copper Demand Outlook

Figure 2: Copper Demand by Region (2009)



Source: Brook Hunt

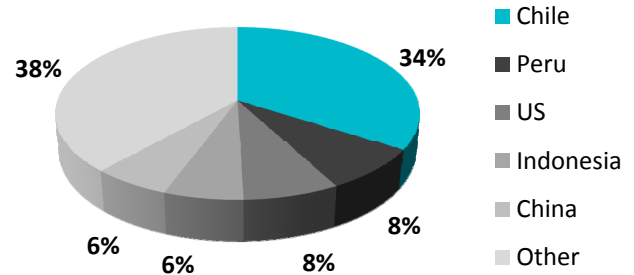
As the vast majority of copper demand is derived from industrial applications, the demand for copper is leveraged to economic growth. Thus the outlook for copper demand is determined by the extent to which high levels of economic growth in China and India can offset lower growth in Europe, Japan and the US. Using the IMF growth projections (of 4.8% in 2010 and 4.2% in 2011), Seismic Research holds that the demand for copper should remain robust in the coming years.

**“Using the IMF growth projections...copper should remain robust in the coming years.”**

### Mine Production of Copper

Primary copper production (mine production) is highly concentrated in the Americas, with Chile, Peru and the United States accounting for ~50% of the world's mine production in 2009 (in terms of contained copper, see Figure 3).

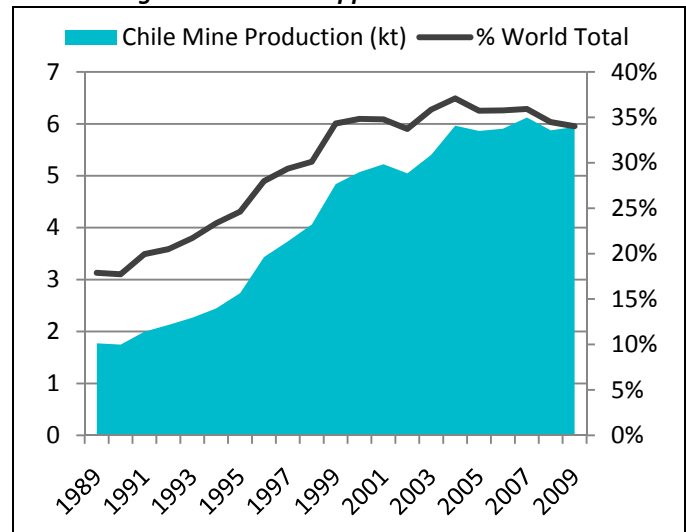
Figure 3: World Mine Production of Copper (2009)



Source: International Copper Study Group

Much of the growth in the output of copper over the past 20 years has been sourced from porphyry copper mines in Chile and Peru. Chile has experienced a surge in output from 1,774t of contained Cu in 1989 to 5,941t in 2009 (see Figure 2). But by 2015, 3 of the world's largest copper producers (Grasberg, Bingam Canyon, and Chuquicamata) will have to switch to underground production. As a result, production rates will fall.

Figure 2: Chilean Copper Mine Production



Source: International Copper Study Group

### Copper Supply Outlook

Mine head grades have been declining across the sector, from ~1.6% Cu in 1980 to ~1.1% Cu in 2010. Global reserves have an average grade of 0.94% Cu and global resources have an average grade of 0.71% Cu. These lower grades (in reserves and resources) will increase the cost of production and will put upward pressure on the price of copper.

**“Mine head grades have been declining across the sector, from ~1.6% Cu in 1980 to ~1.1% Cu in 2010.”**

## **Background**

Serena Resources Ltd's ('Serena's') flagship project is the Trebolar Copper Project (75% Serena) located in the Chilean porphyry copper belt, ~300km north of Santiago. The project consists of a block of 44 exploration concessions, over which Serena has identified 6 project areas. All of the exploration targets, in these project areas, are located within 40km of the Pan American Highway.

***"All of the exploration targets in these project areas are located within 40km of the Pan American Highway."***

## **Recent Developments**

Jose Izquierdo and Jacob Rebek (Serena's lead geologists) identified a number of leached cap targets and applied for concessions in 2006. But it took until late 2009 to arrange funding and commence the construction of access roads for further exploration and development. Much of the initial exploration program involved the construction of access roads in the Vaquita Project Area and sampling over the resulting uncovered area.

***"Much of the initial exploration program involved the construction of access roads in the Vaquita Project Area..."***

The Company has conducted surface sampling over the Alegre, Colorada and Bonita exploration targets. The assays of samples collected to date indicate that there is a leached cap that is potentially underlain by a supergene (secondary) sulphide zone. Serena plans to undertake a reverse circulation ('RC') drilling program in late 2010, to follow up targets identified by surface sampling. Serena plans to conduct a 17-hole RC drilling program, drilling ~2,500m in total.

***"Serena plans to conduct a 17-hole RC drilling program, drilling ~2,500m in total."***

The first hole has been drilled to a total depth of 210m. Visual inspection of the drill chips showed that the drill hole intersected disseminated sulphide mineralisation between 135m and the bottom of the hole (the depth of the hole was constrained to 210m by the drill rig). Samples have been dispatched for assay testing.

## **Capital Raising**

Serena has engaged Dayton Way Financial Pty Ltd (a specialist resources broker) to raise up to A\$15.0m (60m shares at A\$0.25/share) on a best efforts basis. The money raised will be used to further Serena's exploration program and to acquire an additional 5% of Serena's flagship project, the Trebolar Copper Project, for A\$2.06m. This will increase Serena's current interest (75%) to 80%.

***"The money raised will be used to...acquire an additional 5% of the Trebolar Copper Project..."***

## **Board of Directors**

### ***Clive McKerr – Executive Chairman and CEO***

Clive has over 20 years experience in the construction and development industry. He started his career in the late 1980's with the Gates Group, Melbourne. Some 5 years later moving to South East Queensland to work on several high profile construction projects. Since then Clive has been personally involved as the developer or project manager with projects worth A\$125m. His area of expertise are in procurement, marketing and vertical project management.

### ***Jacob Rebek – Director and Chief Geologist***

Jacob is an Australian geologist with forty years experience in exploration. From 1970 to 2003 he worked for CRA and Rio Tinto in various parts of Australia and overseas. His roles included that of exploration manager for Papua New Guinea in 1970s, South Australia and Northern Territory from 1981 to 1984, Eastern Australia from 1987 to 1993 and Exploration Director for South America from 1997 to 2000. He led teams which discovered new zinc, copper and gold deposits. Since 2003 he worked for emerging companies, generating new projects. He started working for Hudson as Chief Geologist in 2006 and led the small team that discovered ABZ's bauxite deposits in Eastern Australia.

### ***Michael Gibbons – Executive Director***

Michael has extensive experience in corporate accounting and taxation. He has filled senior roles with tier one firms, such as Ernst and Young, started his own boutique accounting practice where he was one of the Managing Partners. Originally from Western Australia, Michael gained foundation experience in the petrochemical industry working for organisations such as ICI Manchester and BP Kwinana Oil in Western Australia.

### ***Ismail Kirgiz – Executive Director***

Ismail brings over 17 years experience to the Serena's Board; 17 years in law enforcement and over 9 years in construction-related fields. During his law enforcement career, he has gained extensive experience in planning and coordinating major operations involving large numbers of personnel and liaising with numerous government agencies and private enterprise. Ismail also holds a law degree.

## Investment Outlook, Serena Resources

**Investment Outlook:** 

**Risk Assessment:** **High**

**Recommendation:** **Speculative Buy**

Seismic Research has determined that the 5 most important investment factors, in determining the investment outlook for Serena Resources are: its exploration team, the exploration potential of the Company's assets, mining and processing cost, water access and regulatory risk in Chile.

### 1. Exploration Team

Serena's exploration team centres on two individuals, Jacob Rebek and Jose Izquierdo, with a vast wealth of relevant South American exploration experience.

- **Jacob Rebek (Director and Chief Geologist):** 31 years continuous experience with CRA Exploration (later Rio Tinto) in Australia and across the world. Jacob was Rio Tinto's Exploration Director for South America.
- **Jose Izquierdo (Consultant Geologist):** Chilean geologist with 43 years experience. Started the exploration program that led to the discovery of the Escondida copper deposit, now one of the world's largest copper mines.

From 2004 to 2006, Jacob and Jose worked together in Chile at Mineral Securities Ltd, identifying new porphyry copper-gold targets and a zinc-lead-silver deposit. Since 2008, Jacob and Jose have worked in Chile, identifying new porphyry copper exploration targets.

### 2. Exploration Potential







Within the Trebolar Copper District there are targets with characteristic features of porphyry copper mineralisation, including 'leached caps' (where copper sulphide mineralisation has been leached by weathering and potentially deposited in a secondary enriched zone). Serena expects that enriched supergene (secondary) zones exist beneath these leached caps, but drilling is required to confirm this expectation and assess the grade of the enriched zone.

***"Within the Trebolar Copper District there are characteristic features of porphyry copper mineralisation..."***

Current small-scale mining in the region shows the potential for economic deposits of copper mineralisation. In 2005 local mining entrepreneurs constructed access roads into the Trebolar Copper District and have since developed several small-scale mines. Two mines, Verde and Esperanza, were able to produce ore with a high enough Cu grade, to warrant transport to the Dos Amigos leach plant (located ~70km away). These mines are still operating.

***"In 2005 local mining entrepreneurs constructed access roads into...and have since developed several small-scale mines."***

**Table 3: Key Investment Factors**

Investment Factor	Our Rating (/5)	Outlook
<b>Overall Investment Outlook</b>		<b>Very Good</b>
1. Exploration Team		<b>Excellent</b>
2. Exploration Potential		<b>Very Good</b>
3. Mining & Processing Cost		<b>Good</b>
4. Water Access		<b>Good</b>
5. Regulatory Risk		<b>Very Good</b>

### 3. Mining & Processing Cost

Serena estimates that the processing cost will be low as the copper in sulphide zones is located in closely-spaced fractures so the copper is easily liberated by crushing and coarse grinding. Copper in the oxide zones is amenable to heap leach (SXEW) extraction. Furthermore, all of the exploration targets are located on relatively low and stable terrain, within 40km of the Pan American Highway. Therefore, the logistical issues for mining and exploration are minimised (logistics are often a problem for porphyry copper projects in South America).

***"All of the exploration targets are in located on relatively low & stable terrain, within 40km of the Pan American Highway."***

### 4. Water Access

Access to water is, more often than not, an important factor when it comes to mining porphyry copper deposits in Chile. Early indications are that Serena will have access to underground water sources at most of its exploration targets, with the water table coming to surface in a number of areas. But exact quantities and flow rates have yet to be confirmed.

***"Early indications are that Serena will have access to underground sources at most of its exploration targets..."***

### 5. Regulatory Risk

Chile is generally viewed by the mining industry as a safe and stable country, with minimal regulatory risk. The Fraser Institute's Survey of Mining Companies ranked Chile 7<sup>th</sup> in the world on the Policy Potential Index (with a score of 79.1/100). The Policy Potential Index measures the attractiveness of a country's policies from the perspective of a mining company (in 2009-10 it surveyed 670 companies). In this survey, Chile was not only ranked above all other South American countries, but also above all Australian states.

***"The Fraser Institute's Survey of Mining Companies ranked Chile 7<sup>th</sup> in the world on the Policy Potential Index..."***

## Serena's Exploration Team

### **Jacob Rebek, Senior Geologist (and Director)**

Jacob trained at the Mining and Metallurgy Faculty of the University of Ljubljana, Slovenia, graduating as a Geological Engineer. Soon after graduating, Jacob joined CRA Exploration (later Rio Tinto) and had more than 31 years of continuous experience with the company in Australia and across the world. Throughout his career with Rio Tinto, Jacob made several commercial discoveries that resulted in operational mines.

***"Jacob joined CRA Exploration (later Rio Tinto) and had more than 31 years of continuous experience with the company..."***

In 1998, Jacob was appointed the Rio Tinto Exploration Director for South America. Based in Santiago de Chile, he led teams responsible for the discovery of several copper deposits. From 2001 to 2004, Jacob was responsible for new project generation based on field work in Western Australia, Eastern Australia, Brazil, Peru, Argentina, Chile, China, Mongolia, Iran and Russia. Jacob is currently also the Chief Geologist for Australian Bauxite Ltd (ASX: ABZ).

***"In 1998, Jacob was appointed the Rio Tinto Exploration Director for South America."***

### **Jose Izquierdo, Consultant Geologist**

Jose is a Chilean geologist with 43 years experience. In 1967, Jose graduated as a Geologist at the University of Chile, in Santiago. He started his career as a Mine Geologist at Compania Minera Santa Fe, an iron ore mining company, famous for the El Laco magnetite deposit. In 1970, Jose was promoted to Mine Manager, where he was responsible for 3,000 workers.

***"Jose is a Chilean geologist with 43 years experience. In 1967, Jose graduated as a Geologist at the University of Chile."***

In 1973, Jose worked with miners from local communities in the mountains inland from La Serena. Working together, they discovered the gold deposit El Indio, which has since been developed into a major gold mine. During this period, Jose also started the exploration program that led to the discovery of the Escondida copper deposit – now one of the world's largest copper mines.

***"...Jose also started the exploration program that led to the discovery of the Escondida copper deposit..."***

### **Joint Collaborations**

From 2004 to 2006, Jacob and Jose worked together in Chile at Mineral Securities Ltd, identifying new porphyry copper-gold targets and a zinc-lead-silver deposit. Since 2008, Jacob and Jose have worked in Chile, identifying new porphyry copper exploration targets.

## The Trebolar Copper Project

The Trebolar Copper Project (75% Serena) is located in the Chilean porphyry copper belt, ~300km north of Santiago and ~140km northeast of La Serena, along the Pan America Highway. La Serena is a regional capital and offers a large range of support services for the mining industry.

***"The Trebolar Copper Project is located in the Chilean porphyry copper belt, ~300km north of Santiago..."***

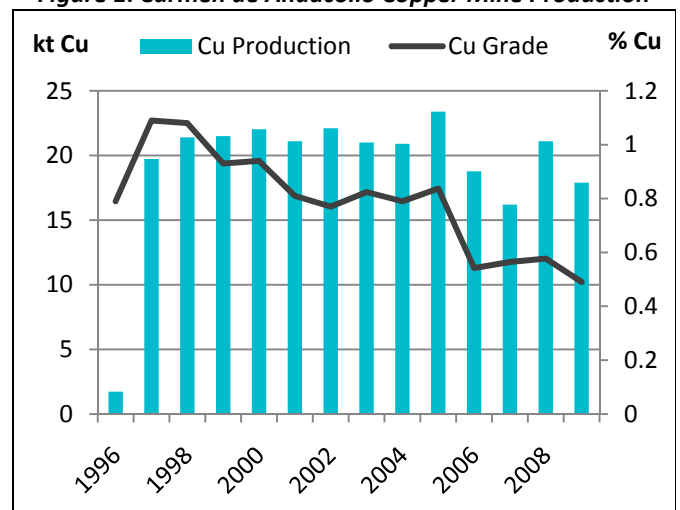
Within the project there are 44 exploration concessions, over which Serena has identified 6 exploration project areas. All of the exploration targets are located within 40km of the Pan American Highway. Furthermore, the targets are located in relatively low and stable terrain, resulting in less logistical difficulties; many copper porphyry deposits in South America occur at high altitude or under barren post-mineral cover.

***"All of the exploration targets are located within 40km of the Pan American Highway."***

## Nearby Copper Mines and Projects

- **Dos Amigos Copper Mine:** located ~70km north of Trebolar. Started operating in 1997 by heap leaching secondary (supergene) sulphides at 5,000t Cu p.a. Based on a successful start-up the plant was subsequently expanded to 10,000t Cu p.a.
- **Puquios Copper Project:** located ~15km southwest of Trebolar. Natasa Mining Ltd defined a JORC-compliant resource of 21.8mt at 0.67% Cu (146,300t Cu), but this development has been put on hold. They are now exploring more of the surrounding area.
- **Carmen de Andacollo Copper Mine:** located ~150km southwest of Trebolar. Andacollo achieved average annual production, from secondary (supergene) sulphides, of 20,549t Cu at an average grade of 0.8% Cu between 1997 and 2009 (see Figure 1).

**Figure 1: Carmen de Andacollo Copper Mine Production**



Source: Company Announcements

## ***The Carmen de Andacollo Copper Mine***

The Carmen de Andacollo mine is currently transitioning from copper production from the supergene (secondary) deposit, to the hypogene (primary) deposit (hence the recent reduction in copper production). The Carmen de Andacollo concentrator was commissioned during late 2009 and early 2010 and is currently ramping up to full production. The new plant is expected to produce 80,000t of copper and 55,000ozs of gold in concentrate annually over the first 10 years of operation.

***“The new [Andacollo] plant is expected to produce 80,000t of copper and 55,000ozs of gold in concentrate p.a.”***

## **Previous Exploration and Development**

Prior to 2005, due to the lack of access roads, neither small-scale local miners nor larger companies made much progress in terms of exploration and development of the Qda Pedernal catchment, which includes the Trebolar Copper District. Within the Trebolar Copper District only one diamond hole has drilled to date; on the northern periphery of Bonita (a small rig was transported by animals).

***“Within the Trebolar Copper District only one diamond hole has drilled to date...”***

In 2005 local mining entrepreneurs constructed access roads into the Trebolar Copper District and have since developed several small-scale mines. Two mines, Verde and Esperanza, were able to produce ore with a high enough Cu grade, to warrant transport to the Dos Amigos leach plant (located ~70km away). These mines are still operating.

***“In 2005 local mining entrepreneurs constructed access roads into...and have since developed several small-scale mines.”***

## **Porphyry Copper-Molybdenum Targets**

Copper porphyry systems are created by a process called supergene enrichment, where prolonged weathering generates sulphuric acid by the oxidation of sulphide mineralisation. These acidic fluids then leach the copper sulphide mineralisation, which leaves behind a ‘leached cap’ of very low-grade mineralisation. The leached sulphides then migrate deeper to create a supergene (or secondary) layer of enriched copper mineralisation.

***“The leached sulphides then migrate deeper to create...[an] enriched copper mineralisation”***

These mineralised systems are often identified by their ‘leached cap’; the targets are mainly mountains with outcrops of hydrothermally-altered, fractured and oxidised rocks. Sometimes the supergene (enriched) layer is exposed at surface; these, often small, areas of Andesitic volcanic rocks (grey rocks) are often exploited by local miners.

***“These mineralised systems are often identified by their ‘leached cap’...”***

## **Exploration Targets**

So far, Serena has identified 6 Project Areas (Vaquita, Sparta, Soledad, Jordan, Francisca and Gordita) that each contain a number of exploration targets. Most of the exploration targets in the Vaquita Project Area are priorities due to their size and accessibility. Most of the targets identified by Serena have large tonnage potential and even distribution of mineralisation (so that large resources can be defined by few drill holes).

***“The exploration targets in the Vaquita Project Area are priorities due to their size and accessibility.”***

Within the Trebolar Copper District there are characteristic features of porphyry copper mineralisation, including leached caps. Serena expects that enriched supergene (secondary) zones exist beneath these leached caps, but further exploration work is required to confirm this expectation and whether the mineralisation is economic.

***“Serena expects that enriched supergene (secondary) zones exist beneath these leached caps...”***

## **Exploration Targets, Vaquita Project Area**

Serena has identified 7 exploration targets in the Vaquita Project Area, including Alegre, Bonita and Estrella Roja. The Company has conducted surface sampling over these 3 exploration targets. The assays of samples collected to date indicate that there is a leached cap that is potentially underlain by a supergene (secondary) sulphide zone. Serena believes that drill testing is warranted to intersect the supergene sulphide zone, to see if the copper (‘Cu’) and Molybdenum (‘Mo’) levels at depth are economic.

## **Interpreting the Sampling Results**

**Low average copper levels:** assays of below normal Cu levels (<100ppm Cu) in most sampled rocks indicates that the Cu mineralisation has been removed by leaching.

**Samples with high copper levels:** when some samples return in elevated (>100ppm) values, this indicates the potential for attractive Cu mineralisation at depth. In the case of Escondida, surface samples of the leached cap reportedly returned ~200ppm Cu and ~50ppm Mo.

**Samples with high Mo levels:** Mo is less susceptible than Cu to leaching and most values are elevated at surface (threshold ~2ppm), indicating potentially high mineralisation at depth.

**Abnormally low levels of silver and zinc:** indicate that the mineralised rocks have been strongly leached by acid fluids.

**Elevated levels of arsenic and iron:** are indicative of past oxidation of iron sulphides, including pyrite (iron sulphide) and chalcopyrite (copper-arsenic-iron sulphide). These iron sulphides would have created the acid fluids to leach the copper mineralisation.

## Sampling Results, Vaquita Project Area

**Table 4: Estrella Roja Exploration Target, Selected Sampling Results**

Sample	Copper	Molybdenum	Silver	Zinc	Arsenic	Iron
VQC107	152ppm	14ppm	1.1ppm	5ppm	1,640ppm	18.9%
VQC109	39ppm	662ppm	<0.2ppm	4ppm	1,960ppm	6.2%
VQC113	86ppm	570ppm	<0.2ppm	6ppm	2,740ppm	13.4%
WP43A	127ppm	36ppm	<0.2ppm	6ppm	170ppm	10.5%
WP43B	384ppm	4ppm	<0.2ppm	14ppm	49ppm	23.0%

Source: Serena Resources

**Table 5: Bonita Exploration Target, Selected Sampling Results**

Sample	Copper	Molybdenum	Arsenic	Silver	Zinc	Iron
VQB105	123ppm	7ppm	88ppm	<0.2ppm	12ppm	16.7%
VQB107	396ppm	4ppm	<2ppm	<0.2ppm	17ppm	1.7%
VQB115	273ppm	6ppm	40ppm	<0.2ppm	3ppm	17.5%
WP32	99ppm	21ppm	292ppm	<0.2ppm	69ppm	17.8%
WP46D	199ppm	350ppm	103ppm	<0.2ppm	12ppm	11.5%

Source: Serena Resources

**Table 6: Alegre Exploration Target, Selected Sampling Results**

Sample	Copper	Molybdenum	Arsenic	Silver	Zinc	Iron
VQ04	260ppm	14ppm	229ppm	<0.3ppm	8ppm	19.0%
VQA101	>10,000ppm	17ppm	11ppm	1.1ppm	68ppm	3.7%
VQA102	293ppm	25ppm	171ppm	<0.2ppm	16ppm	30.5%
VQA124	883ppm	40ppm	97ppm	<0.2ppm	29ppm	37.1%
VQA133	116ppm	7ppm	69ppm	<0.2ppm	9ppm	25.1%

Source: Serena Resources

### Planned Exploration Program

There are 4 phases of Serena's initial exploration program for each target:

1. **Construction of access roads:** making the target more accessible for further exploration.
2. **Exposing the mineralised rocks:** access road construction and clearing exposes the mineralised rocks for sampling.
3. **Surface sampling:** geochemical surface sampling of the exposed mineralised rocks helps to define drill targets.
4. **Reverse Circulation ('RC') drill testing:** RC drilling of the best targets (as determined by surveying and sampling).

Jose Izquierdo and Jacob Rebek identified a number of leached cap targets and applied for concessions in 2006. But it took until late 2009 to arrange funding and to commence the construction of access roads. Much of the initial exploration program involved the construction of access roads in the Vaquita Project Area and sampling over the resulting uncovered area.

***"Much of the initial exploration program involved the construction of access roads in the Vaquita Project Area..."***

### RC Drilling Program

To date, access roads have been constructed to the top of the Alegre (9.8km), Estrella Roja (3.6km) and Bonita (2.5km) exploration targets in the Vaquita Project Area. Serena plans to undertake a 17-hole, 2,500m RC drilling program on Bonita and Estrella Roja in late 2010. The first hole has been drilled to a total depth of 210m. Visual inspection of the drill chips showed that the drill hole intersected disseminated sulphide mineralisation between 135m and the bottom of the hole.

***"Visual inspection...showed that the drill hole intersected disseminated...mineralisation between 135m and 210m"***

### Access Road Construction

An additional 1.5km of road is to be constructed to reach Cerro Rojo, north of Alegre (in the Vaquita Project Area). After completion of the access road to Cerro Rojo, Serena will construct an access road to the Soledad Project Area to provide access and drilling platforms.

***"After completion of the access road to Cerro Rojo, Serena will construct an access road to the Soledad Project Area..."***

Soil sampling and ground magnetic surveys will be undertaken to define the extent of the Ivone target in the Soledad Project Area. But early exploration drilling could commence by late 2010 on the central part of the target, where copper oxide mineralisation is exposed at surface. Other targets will be drilled progressively through 2011 and 2012.

## ***The Author of this Report***

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## ***Seismic Research***

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